

Joyce Lake Direct Shipping Iron Ore Project

CENTURY IRON MINES CORP. - Fish and Fish Habitat Baseline Study -

Stream Crossings CR15 and CR16

Sources:
 Base: CanVec, 1/50 000, RNCan, 2010
 Orthophoto: Mosaïque photo XEOS

Mapping and inventory: GENIVAR 2012
 File: 121-18002-00_F34_FAQ_CR15-CR16_130619.mxd

Scale 1:4 000
 0 30 60 90 m
 UTM, zone 19, NAD83

Figure 34
 November 2013

GENIVAR

CR16

CR16 also discharges into Mike Lake and its lowermost part was characterized from the ground up to the first fish barrier. Upstream, the water runs underground which prevent fish passage (Figure 34; Appendix H). The revised road layout crosses the stream approximately 150 m upstream from its mouth. In this area, the stream bed can be seen on the high-resolution aerial photograph. Only parts of the stream are underground.

The revised crossing probably presents similar characteristics to segments AM-S1 and AV-S1 (Appendix H; Photos 81 to 83, Appendix D). These two segments are narrow (0.5 to 0.8 m) and water depths ranged from 0.17 to 0.81 m during field work. The main type of habitat is riffle/run with flow velocities of 0.2 to 1.0 m/s. The substrate was composed of organic material, including fallen trees, and no aquatic vegetation was observed. The riparian vegetation provides dense cover (80 to 95 %). The uppermost part of segment AM-S1 was coming from underground and was determined to act as a barrier to fish passage. There is probably no fish beyond this point and therefore there is no fish habitat in the area of the revised road layout.

The lowermost part of CR16 connecting to Mike Lake is approximately 1.3 m wide and reaches about 2.5 m near the lake (Appendix H). The main type of habitat is flat, the mean water depth was 0.23 m and the mean flow velocity was 0.3 m/s. This part of the stream is not representative of the characteristics found upstream. The substrate is composed of organic material, and aquatic vegetation covered approximately 30 % of the stream bed.

No electrofishing was conducted in CR16 but it is assumed that the species found in CR15 (lake chub, longnose sucker and brook trout) could be present in this stream up to the underground part. During field work, dissolved oxygen was 8.90 mg/L, pH was 7.47 and conductivity was 153.7 $\mu\text{S}/\text{cm}$ (Table 8).

CR17 and CR17A

CR17 corresponds to a section of the Gilling River and the revised stream crossing is located in segment AM-S1 (Figure 35; Photo 84, Appendix D). AM-S1 is a linear channel of approximately 21.0 m wide and with water depths of 0.41 to 0.51 m and flow velocities of 0.3-0.4 m/s during the field work. The substrate is predominantly sand (90 %) with some organic material. Aquatic vegetation covered approximately 60 % of the substrate.

AV-S2 is the lowermost part of the river that was characterized from the ground (Photo 86, Appendix D). This segment had a mean width of 10.0 m and water depths ranged from 0.35 to 0.59 m (Appendix H). The main type of habitat is rapid and the flow velocities were 1.4 to 1.7 m/s. The substrate was predominantly rubble (60 %), with some cobble (20 %) boulders (19 %), gravel (5 %) and bedrock (5 %). AV-S1 is a shorter segment with a mean width of 15.0 m (Photo 85, Appendix D). The main type of habitat is flat and flow velocities were 0.7-0.8 m/s. The substrate was composed of rubble (70 %) and cobble (30 %). Aquatic vegetation was found on approximately 5 % of the river bed.

No fish sampling was conducted in this river but considering it is connected to Astray Lake, which connects to Petitsikapau Lake, several fish species could be

found in Gilling River: brook trout, lake chub, longnose sucker, burbot, mottled sculpin, and northern pike. During field work, dissolved oxygen was 9.38 mg/L, pH was 7.79 and conductivity was 81.2 μ S/cm (Table 8).

CR17A is an additional stream crossing identified on the high-resolution aerial photograph (Figure 35). This small stream discharges into Gilling River, but no information is available concerning the type of habitat found in the crossing area. The stream is too small and the vegetation cover is too dense for photo-interpretation.

CR18

CR18 no longer exists as the rail spur layout was changed to avoid crossing this stream (Figure 2). Information on this stream reach can be found in Appendices G and H.

CR19

CR19 is a small stream that discharges into a small shallow pond (Figure 2) and was identified as a potential stream crossing. During the summer of 2012, the northern part of this stream, as shown on the 1:50,000 topographic map, was visited, but no stream could be found. Only pockets of water were observed. Based on the high-resolution aerial photographs and on the vegetation photo-interpretation, the stream that discharges into a small lake does not take its source from the vast wetlands located to the north (Figure 2). The revised road footprint does not cross any streams but passes through several patches of bog where small ponds are present. These small ponds are not considered as fish habitat.

CR22

CR22 was selected as a potential stream crossing in the event the road layout was changed (Figure 2). However, CR22 no longer exists as the access road footprint was relocated completely away from this stream much further west. Information on this stream reach can be found in Appendix H.

CR23

The revised road footprint was relocated much more upstream in an area only characterized from the helicopter (Figure 36). The information collected for segments AM-S1 to AV-S2 are given in Appendix H. The revised crossing was characterized using the aerial photographs and photos taken during the field work from the helicopter.

The revised crossing is located in the upper part of a small watershed, and the stream runs through a fen. The type of habitat found there is steady/flat. The stream width is approximately 5.0 m and the substrate is fine (most likely made of organic material). Aquatic vegetation is found in this area (pond-lilies) in small patches scattered here and there.



Proposed Stream Crossing

Project Components

— Revised project layout (May 2013)

Segmentation

— Stream segment

Type of habitat

— Moderate water
 — Fast water

AV-S1 G-C

— Substrate
 — Segment number

Substrate

R Bedrock
 B Boulder (250 to 1,000 mm)
 G Rubble (140 to 250 mm)
 C Cobble (30 to 140 mm)
 V Gravel (2 to 30 mm)
 S Sand (0.006 to 2 mm)
 MO Organic material

Habitat Characteristics

— Water physico-chemistry
 — Flow direction



Joyce Lake Direct Shipping
 Iron Ore Project

- Fish and Fish Habitat Baseline Study -

Stream Crossing CR17

Sources:
 Base: CanVec, 1/50 000, RNCAN, 2010
 Orthophoto: Mosaïque photo XEOS

Mapping and inventory: GENIVAR 2012
 File: 121-18002-00_F35_FAQ_CR17_130619.mxd

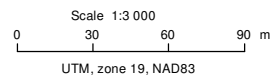
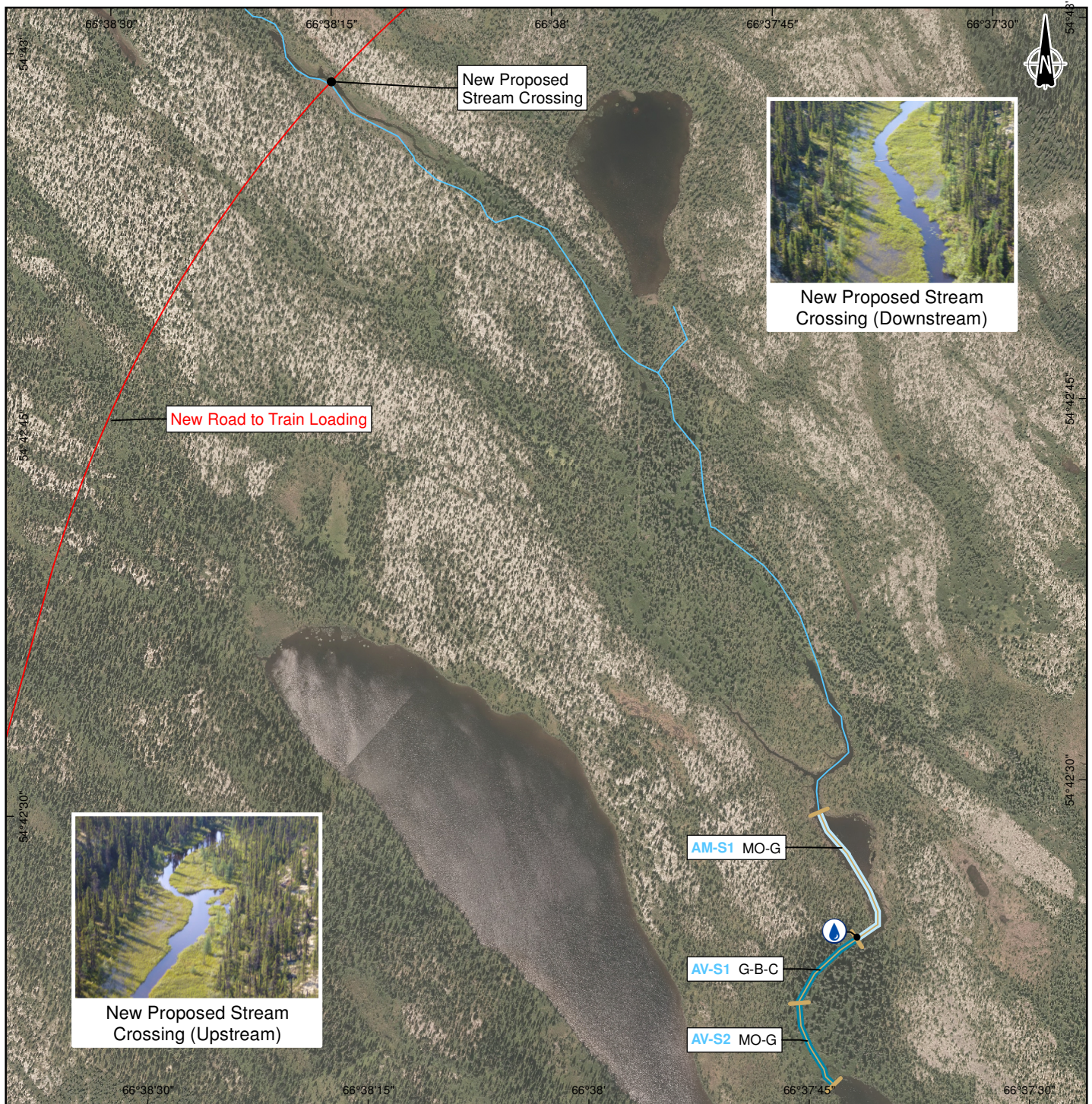


Figure 35

November 2013





Project Components

— Revised project layout (May 2013)

Segmentation

— Stream segment

Type of habitat

— Slow water
— Moderate water

AV-S1 G-B-C

— Substrate
— Segment number

Substrate

B Boulder (250 to 1,000 mm)
G Rubble (140 to 250 mm)
C Cobble (30 to 140 mm)
MO Organic material

Habitat Characteristics

— Water physico-chemistry
— Flow direction



Joyce Lake Direct Shipping Iron Ore Project

- Fish and Fish Habitat Baseline Study -

Stream Crossing CR23

Sources:
Base: CanVec, 1/50 000, RNCan, 2010
Orthophoto: Mosaïque photo XEOS
Mapping and inventory: GENIVAR 2012
File: 121-18002-00_F36_FAQ_CR23_130619.mxd

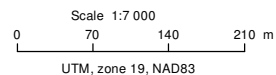


Figure 36

November 2013



No electrofishing was conducted in the lowermost part of the stream but several young-of-the-year (not identified) were observed near the small pond. During field work, dissolved oxygen was 8.58 mg/L, pH was 6.55 and conductivity was 24.9 $\mu\text{S}/\text{cm}$ (Table 8). Photos 87 to 89 present the stream sections characterized in 2012 (Appendix D).

6 SUMMARY AND CLOSURE

The specific objectives of the Fish and Fish Habitat Baseline Study were to determine the fish species found within the Study Area and describe their habitat. The field campaign was conducted from July 22 to August 10, 2012. The main results of the study are summarized below.

Lakes, Ponds and Connecting Streams

- Joyce Lake is a small 37-ha waterbody with a maximum depth of 23 m. Morphometric characteristics, Secchi depth, conductivity and fish sampling results indicate that Joyce Lake has a low biological productivity. Only pearl dace were caught in minnow traps, while no fish were caught with gillnets. Despite a low fishing effort, the probability of finding other fish species remains low. Nevertheless, additional fish sampling should be conducted to confirm the absence of any other fish species, especially in deep water. No stream connecting to Joyce Lake was found. The outlet seems to flow underground since no stream bed could be found. The closest pockets of water were observed 500 m downstream from Joyce Lake.
- Lake E is a small waterbody (26.9 ha) characterized by the presence of three deep basins; the deepest being found in its eastern part (19 m). Some morphometric characteristics and water physico-chemical parameters indicate the lake has good productivity potential while others indicate low productivity potential. Fish sampling results confirmed that the productivity of Lake E is relatively good. The three most abundant fish species were longnose sucker, white sucker and pearl dace. The other species found included lake trout, brook trout, burbot and mottled sculpin. The deepest area of the lake, below 10 m, could be unsuitable for some species or some fish life stage due to the low dissolved oxygen concentrations. Lake E discharges into HO-T02, a tributary of Hollinger Lake. In the lowermost part of Lake E outlet, a suitable brook trout spawning habitat was found.
- Lake F is a small and shallow 3.8-ha lake. This small lake could freeze to the bottom during winter due to the low water depth; mean water depth being only 0.48 m or anoxic condition could develop under ice-cover. Three fish species were found in Lake F (longnose sucker, white sucker, and brook trout) and the CPUE was relatively high. Two small connecting stream were found; one flowing in and one flowing out into Iron Arm. The link between Lake F and Iron Arm probably explain the presence of fish in this waterbody even if the morphometric characteristics of the lake are not favourable to fish.
- Attikamagen Lake is a fairly productive waterbody surrounding Joyce Lake Peninsula. Two areas were characterized: Iron Arm and Bay 2. Many patches of bur-reed were found near the shores as well as several rush and sedge marshes. One suitable brook trout spawning habitat was identified on the eastern shore of Iron Arm near Lake F. In the non-littoral zone the substrate is predominantly silt, with sand and clay in similar proportions. A total of seven fish species was found in Attikamagen Lake; round whitefish and lake trout being the two most abundant. The other species found were: longnose sucker, white sucker, pearl dace, mottled sculpin, and threespine stickleback.

- Ponds A, B, C, and D are fishless waterbodies located near Joyce Lake. They are not connected to any other waterbody and no connecting stream was found. These four ponds were not considered fish habitat.
- AT-T01 is a potentially intermittent stream found on Joyce Lake Peninsula that discharges into Attikamagen Lake. During the field campaign, it was dry and no stream bed was observed. Only small pockets of water have been observed. This stream is not considered a fish habitat.
- HO-T02 is a long stream meandering through a fen that discharges into Hollinger Lake. There is no direct connection between this stream and Joyce Lake. White sucker and brook trout were found in this stream.

Stream Crossings

During the field campaign, 23 stream sections identified as stream crossings or potential stream crossings were characterized. These were identified based on the initial project layout available at that time. During the preparation of the Baseline Study report, a new (revised) project infrastructure layout was produced. Some stream crossings were relocated, while an additional one was identified.

- Three crossings were actually characterized from the ground at the intercept point: CR10A, CR17 and CR20.
 - In CR10A the presence of brook trout was confirmed and the stream provides good habitat for juveniles (pond habitat).
 - CR17 is a section of the Gilling River, with good habitat for northern pike (dense aquatic vegetation), but several species could be found in the river due to the proximity of Astray Lake.
 - CR20 is slow/moderate type of habitat with a dense cover of aquatic vegetation (bur-reed). This part of the stream provides good habitats for northern pike, whose presence was confirmed.
- For many streams, the stream crossing was relocated: CR07, CR10, CR11, CR12, CR14, CR15, CR16, CR21, and CR23.
 - CR07 was relocated few metres from downstream where the stream was flowing underground during the field campaign. Since there is a pond located downstream, it is unclear if the area where the road crosses is a fish habitat or not.
 - CR10 was relocated few metres downstream. The crossing is located in a meandering section of the stream, where aquatic vegetation is dense and provides good habitats for northern pike.
 - CR11 was not characterized at the crossing location due to accessibility. Little information is available in the crossing area but this part of the stream could be inaccessible to northern pike due to many cascades located downstream. The area at the stream crossing could provide good habitat for brook trout.
 - CR12 was relocated upstream in a linear stretch of the stream located in a mature forest area. The stream offers good habitats for brook trout.

- CR14 was relocated upstream and is a meandering channel running through a fen. No fish was found in the stream but it is considered a fish habitat.
 - CR15 was relocated upstream. The stream presents swift waters and a good potential for brook trout. Many suitable spawning habitats were identified, but none of them are allocated in the area of the crossing.
 - CR16 was relocated few metres upstream in a part where the stream was running underground during the field campaign. It is unclear whether the area of the crossing is a fish habitat or not.
 - CR21 was relocated upstream, but only small pockets of water have been observed during the field campaign. It was not considered as a fish habitat.
 - CR23 was relocated far upstream and information was collected from the high-resolution aerial photographs. The stream in the area of the proposed crossing runs through a fen where aquatic vegetation is present. The area presents good potential habitats for northern pike.
- One additional stream crossing (CR17A) was identified based on the high-resolution aerial photograph, but no information can be obtained since the stream is too small and the vegetation cover is too dense to observe the stream bed.
 - CR01, CR02, CR06, CR09 and CR19 are no longer stream crossings even if the road layout remained at the same location. In the area of the identified crossings, no streams were found during the field campaign and there is no sign of any stream bed based on the high-resolution aerial photographs. There is no fish habitat in these areas.
 - The following stream crossings no longer exist: CR03, CR04, CR05, CR08, CR10B, CR13, CR18, and CR22.

7 REFERENCES

- ANDERSON, R. O. and A. S. WEITHMAN. 1978. *The concept of balance for coolwater fish populations*. Am. Fish. Soc. Spec. Publ. 11: 371-381.
- BRADBURY, C., A. S. POWER and M. M. ROBERGE. 2001. *Standard Methods Guide for the Classification/Quantification of Lacustrine Habitat in Newfoundland and Labrador*. Fisheries and Oceans, St. John's, NF. 60 p.
- BRADBURY, C., M. M. ROBERGE and C. K. MINNS. 1999. *Life History Characteristics of Freshwater Fishes Occurring in Newfoundland and Labrador, with Major Emphasis on Lake Habitat Characteristics*. Can. MS Rep. Fish. Aquat. Sci. 2485: 150 p.
- DEPARTMENT OF FISHERIES AND OCEANS (DFO NL). 2012. *Standard Methods Guide for the Classification and Quantification of Fish Habitat in Rivers of Newfoundland and Labrador for the Determination of Harmful Alteration, Disruption or Destruction of Fish Habitat*. Draft version, January 2012. 21 p. + Appendix.
- GENIVAR. 2013. *Joyce Lake Direct Shipping Iron Ore Project. Water and Sediment Quality Baseline Study*. Report prepared for Labec Century Iron Ore. 31 p. and appendices
- GRANT, C. G. J. and E. M. LEE. 2004. *Life History Characteristics of Freshwater Fishes Occurring in Newfoundland and Labrador, with Major Emphasis on Riverine Habitat Requirements*. Can. Manuscr. Rep. Fish. Aquat. Sci. 2672: 262 p.
- MINISTERE DE L'ENVIRONNEMENT ET DE LA FAUNE (MEF). 1994. *Guide de normalisation des methods utilises en faune aquatique au MEF. Direction de la faune et des habitats*. Directions régionales. Québec. 37 p. + Appendices.
- NIKOLSKY, G. V. 1963. *The ecology of fishes*. Academic Press. London and New York. 352 p.
- NML. 2009. *Elross Lake Area iron Ore Mine*. Environmental Impact Statement Submitted to Government of Newfoundland and Labrador. New Millenium Capital Corp. 554 p. + Appendices.
- RICKER, W. E. 1980. *Calcul et interprétation des statistiques biologiques des populations de poissons*. Bull. Fish. Res. Board Can. 191 F: 409 p.
- TURGEON, Y. 1985. *Information – oxygène dissous*. Ministère du Loisir, de la Chasse et de la Pêche du Québec, Service de l'aquaculture, norme 3-68-2010. 26 p.
- WETZEL, R. G. 2001. *Limnology. Lakes and River Ecosystems*, 3rd edition. Elsevier, Academic Press. San Diego, California. 1006 p.

***Appendix A:
Information on Fishing Effort and Number of
Fish Caught in Lakes***

Legend

Station ID

XX-00, where XX is the type of fishing gear and 00 the station number

Fishing Gear

BO: Minnow trap
FE: Gillnet
VV: Fyke net
SE: Seine net

Fish Species

LT: Lake trout
WS: White sucker
LNS: Longnose sucker
PD: Pearl dace
BT: Brook trout
B: Burbot
MS: Mottled sculpin
TSS: Threespine stickleback

Appendix A. Information on Fishing Effort and Number of Fish Caught in Lakes and Ponds

Waterbody	Station ID	Latitude (ddmmss.s)	Longitude (ddmmss.s)	Date (set)	Hour (set)	Date (retrieve)	Hour (retrieve)	Max depth (m)	Temperature (°C)	Small mesh nearshore	RWF	LT	WS	LNS	PD	BT	B	MS	TSS	Notes
Lake E	BO-03	54 52 50.0	66 30 54.6	2012-08-04	10:36	2012-08-05	09:56	0.40	15.6	-										No catch
Lake E	BO-04	54 52 54.0	66 31 17.5	2012-08-04	10:41	2012-08-05	09:59	0.50	15.5	-					2					
Lake E	FE-01	54 52 43.7	66 30 42.9	2012-08-04	10:04	2012-08-05	09:00	1.7	15.6	No		3	13	25	9	1	1			
Lake E	FE-02	54 52 41.4	66 30 29.7	2012-08-04	10:15	2012-08-05	09:40	2.2	15.5	Yes		5	18	31	7	1				
Lake E	VV-01	54 52 43.4	66 30 25.7	2012-08-04	11:11	2012-08-05	10:15	1.0	15.7	-			14	31	17	14	2	1		
Lake F	BO-01	54 51 38.4	66 30 55.2	2012-08-08	09:07	2012-08-09	09:35	0.30	13.0	-										No catch
Lake F	BO-02	54 51 40.8	66 31 10.7	2012-08-08	09:10	2012-08-09	09:43	0.40	13.0	-										No catch
Lake F	FE-01	54 51 35.5	66 30 59.3	2012-08-08	09:00	2012-08-09	09:20	0.80	12.8	Yes			22	17		2				

***Appendix B:
Information Collected on Fish Caught in Lakes
and Streams***

Legend

Station ID

XX-00, where XX is the type of fishing gear and 00 the station number

Fishing Gear

BO: Minnow trap
FE: Gillnet
VV: Fyke net
SE: Seine net

Fish Species

LT: Lake trout
WS: White sucker
LNS: Longnose sucker
PD: Pearl dace
BT: Brook trout
B: Burbot
MS: Mottled sculpin
TSS: Threespine stickleback

Sex

M: Male
F: Female
X: Juvenile

Stage of Gonad Development (Nikolsky, 1963)

1: Immaturity
2: Resting Stage
3: Maturation
4: Maturity
5: Reproduction
6: Spent

Appendix B. Information Collected on Fish Caught in Lakes and Streams

Fish ID	Waterbody/ Stream	Station ID	Date (retrieve)	Species	Length (total; mm)	Weight (g)	Scale	Otolithe	Sex	Gonad development	Notes
1	Iron Arm	BO-07	2012-07-29	TSS	64						Released
2	Iron Arm	BO-07	2012-07-29	TSS	61						Released
3	Iron Arm	BO-07	2012-07-29	PD	100						Released
4	Iron Arm	BO-07	2012-07-29	PD	76						Released
5	Iron Arm	BO-07	2012-07-29	PD	82						Released
6	Iron Arm	BO-07	2012-07-29	PD	81						Released
7	Iron Arm	BO-07	2012-07-29	PD	80						Released
8	Iron Arm	BO-07	2012-07-29	WS	101						Released
9	Iron Arm	BO-07	2012-07-29	WS	104						Released
10	Iron Arm	FE-05	2012-07-29	RWF	229	78.7		X	F	3	
11	Iron Arm	FE-05	2012-07-29	RWF	233	96.8		X	M	2	
12	Iron Arm	FE-05	2012-07-29	RWF	196	56.7		X	M	2	
13	Iron Arm	FE-05	2012-07-29	RWF	236	98.1		X	F	3	
14	Iron Arm	FE-05	2012-07-29	RWF	240	103.4		X	M	3	
15	Iron Arm	FE-05	2012-07-29	RWF	222	62.8		X	M	2	
16	Iron Arm	FE-05	2012-07-29	RWF	167	35.3		X	M	2	
17	Iron Arm	FE-05	2012-07-29	RWF	201	56.9		X	M	2	
18	Iron Arm	FE-05	2012-07-29	LT	270	136.2	X	X	M	2	
19	Iron Arm	FE-05	2012-07-29	LT	280	172.5	X	X	M	3	
20	Iron Arm	FE-05	2012-07-29	LT	376	427.8	X	X	M	2	
21	Iron Arm	FE-01	2012-07-29	RWF	242	114.4		X	M	2	
22	Iron Arm	FE-01	2012-07-29	RWF	234	86.4		X	M	2	
23	Iron Arm	FE-01	2012-07-29	RWF	234	92.3		X	M	2	
24	Iron Arm	FE-01	2012-07-29	RWF	225	78.6		X	M	1	
25	Iron Arm	FE-01	2012-07-29	RWF	241	101.4		X	M	2	
26	Iron Arm	FE-01	2012-07-29	RWF	235	93.1		X	M	2	
27	Iron Arm	FE-01	2012-07-29	RWF	212	75.4		X	M	4	
28	Iron Arm	FE-01	2012-07-29	RWF	230	90.2		X	M	3	
29	Iron Arm	FE-01	2012-07-29	RWF	206	64.7		X	M	4	
30	Iron Arm	FE-01	2012-07-29	RWF	200	65.1		X	M	4	
31	Iron Arm	FE-01	2012-07-29	RWF	185	47.3		X	M	2	
32	Iron Arm	FE-01	2012-07-29	RWF	210	75.5		X	M	4	
33	Iron Arm	FE-01	2012-07-29	RWF	282	156.9		X	M	3	
34	Iron Arm	FE-01	2012-07-29	RWF	289	189.9	X	X	M	3	
35	Iron Arm	FE-01	2012-07-29	RWF	203	58.8		X	M	4	
36	Iron Arm	FE-01	2012-07-29	RWF	259	123.6		X	M	2	
37	Iron Arm	FE-01	2012-07-29	RWF	233	92.3		X	M	2	
38	Iron Arm	FE-01	2012-07-29	RWF	231	95.2		X	M	2	
39	Iron Arm	FE-01	2012-07-29	RWF	233	98.4		X	M	4	
40	Iron Arm	FE-01	2012-07-29	RWF	141	21.2		X	X	1	
41	Iron Arm	FE-01	2012-07-29	RWF	250	117.6	X	X	F	4	
42	Iron Arm	FE-01	2012-07-29	RWF	256	128.6		X	M	3	
43	Iron Arm	FE-01	2012-07-29	RWF	232	95.9		X	M	2	
44	Iron Arm	FE-01	2012-07-29	RWF	301	204.3		X	M	3	
45	Iron Arm	FE-01	2012-07-29	RWF	232	91.1		X	M	2	
46	Iron Arm	FE-01	2012-07-29	RWF	235	95.5		X	M	2	
47	Iron Arm	FE-01	2012-07-29	RWF	217	78.2		X	M	2	
48	Iron Arm	FE-01	2012-07-29	RWF	213	74.6		X	M	2	

Appendix B. Information Collected on Fish Caught in Lakes and Streams

Fish ID	Waterbody/ Stream	Station ID	Date (retrieve)	Species	Length (total; mm)	Weight (g)	Scale	Otolithe	Sex	Gonad development	Notes
49	Iron Arm	FE-01	2012-07-29	RWF	281	168.5	X	X	M	3	
50	Iron Arm	FE-01	2012-07-29	RWF	190	53.3		X	M	1	
51	Iron Arm	FE-01	2012-07-29	RWF	205	61.0		X	M	1	
52	Iron Arm	FE-01	2012-07-29	RWF	192	56.8		X	M	2	
53	Iron Arm	FE-01	2012-07-29	RWF	163	34.6		X	X	1	
54	Iron Arm	FE-01	2012-07-29	RWF	152	29.6		X	X	1	
55	Iron Arm	FE-01	2012-07-29	RWF	149	24.1		X	X	1	
56	Iron Arm	FE-01	2012-07-29	RWF	206	69.1		X	M	2	
57	Iron Arm	FE-01	2012-07-29	RWF							No head
58	Iron Arm	FE-01	2012-07-29	RWF							No head
59	Iron Arm	FE-01	2012-07-29	RWF							No head
60	Iron Arm	FE-01	2012-07-29	RWF							No head
61	Iron Arm	FE-01	2012-07-29	RWF							No head
62	Iron Arm	FE-01	2012-07-29	RWF							No head
63	Iron Arm	FE-01	2012-07-29	LT	519	1106.6	X	X	F	4	
64	Iron Arm	FE-04	2012-07-29	RWF	280	158.2		X	M	4	
65	Iron Arm	FE-04	2012-07-29	RWF	240	111.1		X	M	4	
66	Iron Arm	FE-04	2012-07-29	RWF	255	119.8		X	M	3	
67	Iron Arm	FE-04	2012-07-29	RWF	247	109.6		X	M	2	
68	Iron Arm	FE-04	2012-07-29	RWF	231	90.7		X	M	3	
69	Iron Arm	FE-04	2012-07-29	RWF	196	60.0		X	M	3	
70	Iron Arm	FE-04	2012-07-29	RWF	208	66.9			M	3	
71	Iron Arm	FE-04	2012-07-29	RWF	212	67.2			M	3	
72	Iron Arm	FE-04	2012-07-29	RWF	145	20.8			X	1	
74	Iron Arm	FE-04	2012-07-29	RWF	154	26.8			X	1	
75	Iron Arm	FE-04	2012-07-29	RWF	202	56.4			M	3	
76	Iron Arm	FE-04	2012-07-29	RWF	155	28.5			X	1	
78	Iron Arm	FE-04	2012-07-29	RWF	207	65.3			M	4	
79	Iron Arm	FE-04	2012-07-29	RWF	204	65.1			M	3	
80	Iron Arm	FE-04	2012-07-29	RWF	197	55.4			M	2	
81	Iron Arm	FE-04	2012-07-29	RWF	153	26.4			M	2	
82	Iron Arm	FE-04	2012-07-29	RWF	155	28.6			X	1	
83	Iron Arm	FE-04	2012-07-29	RWF	136	17.5			X	1	
84	Iron Arm	FE-04	2012-07-29	RWF	136	19.2			X	1	
85	Iron Arm	FE-04	2012-07-29	RWF	149	21.3			X	1	
86	Iron Arm	FE-04	2012-07-29	RWF	145	20.0			X	1	
87	Iron Arm	FE-04	2012-07-29	RWF	140	19.4			X	1	
88	Iron Arm	FE-04	2012-07-29	RWF	141	16.9			X	1	
89	Iron Arm	FE-04	2012-07-29	PD	125	14.9					
90	Iron Arm	FE-04	2012-07-29	PD	124	15.0					
100	Iron Arm	FE-04	2012-07-29	PD	124	14.9					
101	Iron Arm	FE-04	2012-07-29	PD	123	15.3					
102	Iron Arm	FE-04	2012-07-29	WS	170	52.1					
103	Iron Arm	FE-04	2012-07-29	LT	323	312.2	X	X	M	4	
104	Iron Arm	FE-04	2012-07-29	LT	594	1766.5	X	X	M	4	
105	Iron Arm	FE-06	2012-07-29	RWF	273	146.8			M	3	
106	Iron Arm	FE-06	2012-07-29	RWF	201	65.1			M	4	
107	Iron Arm	FE-06	2012-07-29	RWF	237	94.4			F	4	

Appendix B. Information Collected on Fish Caught in Lakes and Streams

Fish ID	Waterbody/ Stream	Station ID	Date (retrieve)	Species	Length (total; mm)	Weight (g)	Scale	Otolithe	Sex	Gonad development	Notes
108	Iron Arm	FE-06	2012-07-29	RWF	235	93.8			F	4	
109	Iron Arm	FE-06	2012-07-29	RWF	261	128.5			F	4	
110	Iron Arm	FE-06	2012-07-29	WS	121	14.1					
111	Iron Arm	FE-06	2012-07-29	WS	132	19.7					
112	Iron Arm	FE-06	2012-07-29	WS	124	13.3					
113	Iron Arm	FE-06	2012-07-29	LT	384	395.3	X	X	F	3	
115	Iron Arm	FE-03	2012-07-29	RWF	159	28.8			X	1	
116	Iron Arm	FE-03	2012-07-29	RWF	246	103.2			M	2	
117	Iron Arm	FE-03	2012-07-29	RWF	246	116.0			M	3	
118	Iron Arm	FE-03	2012-07-29	RWF	246	110.1			F	4	
119	Iron Arm	FE-03	2012-07-29	RWF	256	122.1			F	4	
120	Iron Arm	FE-03	2012-07-29	RWF	250	118.4			M	4	
121	Iron Arm	FE-03	2012-07-29	RWF	266	137.0			M	2	
122	Iron Arm	FE-03	2012-07-29	RWF	246	103.7			M	2	
123	Iron Arm	FE-03	2012-07-29	RWF	200	62.9			X	1	
124	Iron Arm	FE-03	2012-07-29	RWF	193	51.6			M	2	
125	Iron Arm	FE-03	2012-07-29	RWF	161	32.2			X	1	
126	Iron Arm	FE-03	2012-07-29	RWF	235	92.0			M	4	
127	Iron Arm	FE-03	2012-07-29	RWF	187				M	2	
128	Iron Arm	FE-03	2012-07-29	RWF					X	1	No head
129	Iron Arm	FE-03	2012-07-29	LT	387	505.0	X	X	M	4	
130	Iron Arm	FE-03	2012-07-29	LT	602	1773.4	X	X	M	3	
131	Iron Arm	FE-03	2012-07-29	LT	717	3450.0	X	X	M	4	
132	Bay #2	VV-01	2012-07-30	TSS	71	3.0					
133	Bay #2	VV-01	2012-07-30	TSS	51	1.1					
134	Bay #2	VV-01	2012-07-30	MS	53	1.7					
135	Bay #2	VV-01	2012-07-30	MS	56	1.9					
136	Bay #2	VV-01	2012-07-30	PD	86	6.7					
137	Bay #2	VV-01	2012-07-30	PD	35	0.6					
138	Bay #2	VV-01	2012-07-30	PD	39	0.5					
139	Bay #2	VV-01	2012-07-30	PD	37	0.4					
140	Bay #2	VV-01	2012-07-30	RWF	72	2.6			X	1	
141	Bay #2	BO-10	2012-07-30	TSS	61						
142	Bay #2	BO-10	2012-07-30	RWF	235	89.9			F	4	
143	Bay #2	FE-07	2012-07-30	RWF	240	90.8			F	4	
144	Bay #2	FE-07	2012-07-30	RWF	227	79.5			F	4	
145	Bay #2	FE-07	2012-07-30	RWF	192	52.8			M	4	
146	Bay #2	FE-07	2012-07-30	LT	665	2500.0	X	X	M	4	
147	Bay #2	FE-10	2012-07-30	LNS	516	1509.5					
148	Bay #2	FE-10	2012-07-30	RWF	186	43.5			X	1	
149	Bay #2	FE-10	2012-07-30	LT	657	2150.0	X	X	M	4	
150	Bay #2	FE-10	2012-07-30	LT	627	1644.3	X	X	M	3	
151	Bay #2	FE-08	2012-07-30	LT	588	1925.0	X	X	F	4	
152	Bay #2	FE-08	2012-07-30	LT	647	2225.0	X	X	M	4	
153	Bay #2	FE-08	2012-07-30	LT	565	1648.6	X	X	M	4	
154	Bay #2	FE-08	2012-07-30	LT	508	1140.6	X	X	M	3	
155	Bay #2	FE-08	2012-07-30	RWF	168	36.0			X	1	
156	Bay #2	FE-08	2012-07-30	RWF	192	50.8			M	2	

Appendix B. Information Collected on Fish Caught in Lakes and Streams

Fish ID	Waterbody/ Stream	Station ID	Date (retrieve)	Species	Length (total; mm)	Weight (g)	Scale	Otolithe	Sex	Gonad development	Notes
157	Bay #2	FE-08	2012-07-30	RWF	206	60.3			F	4	
158	Bay #2	FE-08	2012-07-30	RWF	248	119.4			M	4	
159	Bay #2	FE-08	2012-07-30	RWF	256	125.4			F	4	
160	Bay #2	FE-08	2012-07-30	RWF					X	1	No head
161	Bay #2	FE-08	2012-07-30	LNS	171	50.4					
162	Bay #2	FE-08	2012-07-30	LNS	143	27.8					
163	Bay #2	FE-08	2012-07-30	LNS	147	27.2					
164	Bay #2	FE-08	2012-07-30	LNS	149	27.4					
165	Bay #2	FE-08	2012-07-30	LNS	152	31.5					
166	Bay #2	FE-08	2012-07-30	LNS	170	43.3					
167	Bay #2	FE-08	2012-07-30	LNS	146	29.3					
168	Bay #2	FE-08	2012-07-30	LNS	146	29.0					
169	Bay #2	FE-08	2012-07-30	LNS	196	65.6					
170	Bay #2	FE-09	2012-07-30	RWF	241	95.1			M	4	
171	Bay #2	FE-09	2012-07-30	RWF	279	176.9			M	4	
172	Bay #2	FE-09	2012-07-30	LT	527	1247.6	X	X	F	3	
173	Bay #2	FE-12	2012-07-31	LT	132	270.7	X	X	M	3	
174	Bay #2	FE-12	2012-07-31	LT	615	1811.1	X	X	F	4	
175	Bay #2	FE-12	2012-07-31	RWF	200	58.1			M	2	
176	Bay #2	FE-12	2012-07-31	RWF	232	88.8			M	3	
177	Bay #2	FE-12	2012-07-31	RWF	239	105.6			M	4	
178	Bay #2	FE-12	2012-07-31	RWF	237	98.7			M	2	
179	Bay #2	FE-12	2012-07-31	RWF	225	83.1			M	3	
180	Bay #2	FE-12	2012-07-31	RWF	233	93.2			M	1	
182	Bay #2	FE-12	2012-07-31	RWF	168	34.2			M	2	
183	Bay #2	FE-12	2012-07-31	RWF	182	41.1			M	3	
184	Bay #2	FE-12	2012-07-31	RWF	205	57.4			M	2	
185	Bay #2	FE-12	2012-07-31	RWF	235	88.9			F	4	
186	Bay #2	FE-12	2012-07-31	RWF	226	82.7			F	4	
187	Bay #2	FE-12	2012-07-31	RWF	245	122.0			M	3	
188	Bay #2	FE-12	2012-07-31	RWF	197	56.5			M	2	
189	Bay #2	FE-11	2012-07-31	RWF	218	79.4			M	3	
190	Bay #2	FE-11	2012-07-31	RWF	279	144.6			F	2	
191	Bay #2	FE-11	2012-07-31	RWF	269	149.4			M	3	
192	Bay #2	FE-11	2012-07-31	RWF	276	148.4			M	2	
193	Bay #2	FE-11	2012-07-31	RWF	260	129.9			M	2	
194	Bay #2	FE-11	2012-07-31	RWF	240	105.4			M	2	
195	Bay #2	FE-11	2012-07-31	RWF	220	83.6			M	3	
196	Bay #2	FE-11	2012-07-31	RWF	191	52.7			M	2	
197	Bay #2	FE-11	2012-07-31	RWF	210	67.6			M	3	
198	Bay #2	FE-11	2012-07-31	RWF	169	39.5			M	2	
199	Bay #2	FE-11	2012-07-31	RWF	213	65.6			F	4	
200	Bay #2	FE-11	2012-07-31	RWF	219	72.6			F	4	
201	Bay #2	FE-11	2012-07-31	RWF	187	45.5			M	3	
202	Bay #2	FE-11	2012-07-31	RWF	218	71.0			M	4	
203	Bay #2	FE-11	2012-07-31	RWF	214	64.6			F	4	
204	Bay #2	FE-11	2012-07-31	RWF	263	128.5			M	4	
205	Bay #2	FE-11	2012-07-31	RWF	274	154.3			M	3	

Appendix B. Information Collected on Fish Caught in Lakes and Streams

Fish ID	Waterbody/ Stream	Station ID	Date (retrieve)	Species	Length (total; mm)	Weight (g)	Scale	Otolithe	Sex	Gonad development	Notes
206	Bay #2	FE-11	2012-07-31	RWF	257	139.5			M	2	
207	Bay #2	FE-11	2012-07-31	LT	720	3725.0	X	X	M	4	
208	Joyce	BO-01	2012-08-01	PD	72						
209	Joyce	BO-01	2012-08-01	PD	74						
210	Joyce	BO-01	2012-08-01	PD	76						
211	Joyce	BO-01	2012-08-01	PD	80						
212	Joyce	BO-01	2012-08-01	PD	64						
213	Joyce	BO-01	2012-08-01	PD	91						
214	Joyce	BO-01	2012-08-01	PD	83						
215	Joyce	BO-01	2012-08-01	PD	72						
216	Joyce	BO-01	2012-08-01	PD	69						
217	Joyce	BO-01	2012-08-01	PD	71						
218	Joyce	BO-01	2012-08-01	PD	76						
219	Joyce	BO-01	2012-08-01	PD	76						
220	Joyce	BO-01	2012-08-01	PD	71						
221	Joyce	BO-01	2012-08-01	PD	66						
222	Joyce	BO-01	2012-08-01	PD	73						
223	Joyce	BO-02	2012-08-01	PD	71						
224	Joyce	BO-02	2012-08-01	PD	89						
225	Joyce	BO-02	2012-08-01	PD	77						
226	Joyce	BO-02	2012-08-01	PD	60						
227	Joyce	BO-02	2012-08-01	PD	61						
228	Joyce	BO-02	2012-08-01	PD	72						
229	Joyce	BO-02	2012-08-01	PD	84						
230	Joyce	BO-02	2012-08-01	PD	79						
231	Joyce	BO-02	2012-08-01	PD	67						
232	Joyce	BO-02	2012-08-01	PD	78						
233	Joyce	BO-02	2012-08-01	PD	71						
234	Joyce	BO-02	2012-08-01	PD	72						
235	Joyce	BO-02	2012-08-01	PD	93						
236	Joyce	BO-02	2012-08-01	PD	72						
237	Joyce	BO-02	2012-08-01	PD	75						
238	Joyce	BO-02	2012-08-01	PD	73						
239	Joyce	BO-02	2012-08-01	PD	72						
240	Joyce	BO-02	2012-08-01	PD	72						
241	Joyce	BO-02	2012-08-01	PD	77						
242	Joyce	BO-02	2012-08-01	PD	82						
243	Joyce	BO-02	2012-08-01	PD	79						
244	Joyce	BO-02	2012-08-01	PD	66						
245	Joyce	BO-02	2012-08-01	PD	68						
246	Joyce	BO-02	2012-08-01	PD	70						
247	Joyce	BO-02	2012-08-01	PD	80						
248	Joyce	BO-02	2012-08-01	PD	82						
249	Joyce	BO-02	2012-08-01	PD	70						
250	Joyce	BO-02	2012-08-01	PD	84						
251	Joyce	BO-02	2012-08-01	PD	63						
252	Joyce	BO-02	2012-08-01	PD	80						
253	Joyce	BO-02	2012-08-01	PD	77						

Appendix B. Information Collected on Fish Caught in Lakes and Streams

Fish ID	Waterbody/ Stream	Station ID	Date (retrieve)	Species	Length (total; mm)	Weight (g)	Scale	Otolithe	Sex	Gonad development	Notes
254	Joyce	BO-02	2012-08-01	PD	74						
255	Joyce	BO-02	2012-08-01	PD	77						
256	Joyce	BO-02	2012-08-01	PD	72						
257	Joyce	BO-02	2012-08-01	PD	81						
258	Joyce	BO-02	2012-08-01	PD	72						
259	Joyce	BO-02	2012-08-01	PD	53						
260	Joyce	BO-02	2012-08-01	PD	52						
261	Joyce	BO-02	2012-08-01	PD	53						
262	Joyce	BO-02	2012-08-01	PD	64						
263	Joyce	BO-02	2012-08-01	PD	60						
264	Joyce	BO-02	2012-08-01	PD	70						
265	Joyce	BO-03	2012-08-01	PD	72						
266	Joyce	BO-03	2012-08-01	PD	82						
267	Joyce	BO-03	2012-08-01	PD	63						
268	Joyce	BO-03	2012-08-01	PD	72						
269	Joyce	BO-03	2012-08-01	PD	92						
270	Joyce	BO-03	2012-08-01	PD	62						
271	Joyce	BO-03	2012-08-01	PD	73						
272	Joyce	BO-03	2012-08-01	PD	70						
273	Joyce	BO-03	2012-08-01	PD	74						
274	Joyce	BO-03	2012-08-01	PD	58						
275	Joyce	BO-03	2012-08-01	PD	80						
276	Joyce	BO-03	2012-08-01	PD	64						
277	Joyce	BO-03	2012-08-01	PD	72						
278	Joyce	BO-04	2012-08-01	PD	83						
279	Joyce	BO-04	2012-08-01	PD	82						
280	Joyce	BO-04	2012-08-01	PD	82						
281	Joyce	BO-04	2012-08-01	PD	84						
282	Joyce	BO-04	2012-08-01	PD	78						
283	Joyce	BO-04	2012-08-01	PD	78						
284	Joyce	BO-04	2012-08-01	PD	99						
285	Joyce	BO-04	2012-08-01	PD	78						
286	Joyce	BO-04	2012-08-01	PD	73						
287	Joyce	BO-04	2012-08-01	PD	90						
288	Joyce	BO-04	2012-08-01	PD	77						
289	Joyce	BO-04	2012-08-01	PD	56						
290	Joyce	BO-04	2012-08-01	PD	63						
291	Joyce	BO-06	2012-08-01	PD	51						
292	Joyce	BO-06	2012-08-01	PD	77						
293	Joyce	BO-08	2012-08-01	PD	101						
294	Joyce	BO-08	2012-08-01	PD	79						
295	Joyce	BO-08	2012-08-01	PD	82						
296	Joyce	BO-08	2012-08-01	PD	77						
297	Joyce	BO-08	2012-08-01	PD	70						
298	Joyce	BO-08	2012-08-01	PD	69						
299	Joyce	BO-08	2012-08-01	PD	88						
300	Joyce	BO-08	2012-08-01	PD	72						
301	Joyce	BO-08	2012-08-01	PD	62						

Appendix B. Information Collected on Fish Caught in Lakes and Streams

Fish ID	Waterbody/ Stream	Station ID	Date (retrieve)	Species	Length (total; mm)	Weight (g)	Scale	Otolithe	Sex	Gonad development	Notes
302	Joyce	BO-08	2012-08-01	PD	59						
303	Joyce	BO-08	2012-08-01	PD	73						
304	Joyce	BO-08	2012-08-01	PD	88						
305	Joyce	BO-08	2012-08-01	PD	82						
306	Joyce	BO-08	2012-08-01	PD	80						
307	Joyce	BO-08	2012-08-01	PD	81						
308	Joyce	BO-08	2012-08-01	PD	83						
309	Joyce	BO-08	2012-08-01	PD	79						
310	Joyce	BO-08	2012-08-01	PD	76						
311	Joyce	BO-08	2012-08-01	PD	78						
312	Joyce	BO-08	2012-08-01	PD	62						
313	Joyce	BO-08	2012-08-01	PD	64						
314	Joyce	BO-08	2012-08-01	PD	83						
315	Joyce	BO-08	2012-08-01	PD	64						
316	Joyce	BO-08	2012-08-01	PD	63						
317	Joyce	BO-08	2012-08-01	PD	72						
318	Joyce	BO-08	2012-08-01	PD	72						
319	Joyce	BO-08	2012-08-01	PD	70						
320	Joyce	BO-08	2012-08-01	PD	63						
321	Joyce	BO-08	2012-08-01	PD	69						
322	Joyce	BO-08	2012-08-01	PD	62						
323	Joyce	BO-08	2012-08-01	PD	62						
324	Joyce	BO-08	2012-08-01	PD	73						
325	Joyce	BO-08	2012-08-01	PD	72						
326	Joyce	BO-08	2012-08-01	PD	70						
327	E	FE-01	2012-08-05	LT	513	1036.8	X	X	F	4	
328	E	FE-01	2012-08-05	LT	530	1226.2	X	X	M	4	
329	E	FE-01	2012-08-05	LT	564	1647.3	X	X	F	4	
330	E	FE-01	2012-08-05	BT	122	17.1	X	X	X	1	
331	E	FE-01	2012-08-05	WS	163				X	1	
332	E	FE-01	2012-08-05	WS	385	697.1			F	4	
333	E	FE-01	2012-08-05	WS	288	289.4			M	3	
334	E	FE-01	2012-08-05	WS	243	140.4			X	1	
335	E	FE-01	2012-08-05	WS	235	149.5			M	3	
336	E	FE-01	2012-08-05	WS	240	152.5			M	3	
337	E	FE-01	2012-08-05	WS	187	59.1			X	1	
338	E	FE-01	2012-08-05	WS	191	62.5			X	1	
339	E	FE-01	2012-08-05	WS	191	70.3			X	1	
340	E	FE-01	2012-08-05	WS	163	32.2			X	1	
341	E	FE-01	2012-08-05	WS	172	52.2			M	4	
342	E	FE-01	2012-08-05	WS	182	63.6			X	1	
343	E	FE-01	2012-08-05	WS	138	26.0			X	1	
344	E	FE-01	2012-08-05	B	155	20.8					
345	E	FE-01	2012-08-05	LNS	296	269.8			X	1	
346	E	FE-01	2012-08-05	LNS	235	152.2			X	1	
347	E	FE-01	2012-08-05	LNS	240	130.2			X	1	
348	E	FE-01	2012-08-05	LNS	177	54.3			X	1	
349	E	FE-01	2012-08-05	LNS	213	90.3			X	1	

Appendix B. Information Collected on Fish Caught in Lakes and Streams

Fish ID	Waterbody/ Stream	Station ID	Date (retrieve)	Species	Length (total; mm)	Weight (g)	Scale	Otolithe	Sex	Gonad development	Notes
350	E	FE-01	2012-08-05	LNS	176	52.0			X	1	
351	E	FE-01	2012-08-05	LNS	200	75.5			X	1	
352	E	FE-01	2012-08-05	LNS	187	65.8			X	1	
353	E	FE-01	2012-08-05	LNS	166	44.5			X	1	
354	E	FE-01	2012-08-05	LNS	178	57.2			X	1	
355	E	FE-01	2012-08-05	LNS	157	36.4			X	1	
356	E	FE-01	2012-08-05	LNS	182	58.8			X	1	
357	E	FE-01	2012-08-05	LNS	118	17.5			X	1	
358	E	FE-01	2012-08-05	LNS	162	42.4			X	1	
359	E	FE-01	2012-08-05	LNS	152	32.6			X	1	
360	E	FE-01	2012-08-05	LNS	146	28.4			X	1	
361	E	FE-01	2012-08-05	LNS	153	33.6			X	1	
362	E	FE-01	2012-08-05	LNS	170	49.5			X	1	
363	E	FE-01	2012-08-05	LNS	145	30.4			X	1	
364	E	FE-01	2012-08-05	LNS	122	16.0			X	1	
365	E	FE-01	2012-08-05	LNS	117	15.7			X	1	
366	E	FE-01	2012-08-05	LNS	116	13.8			X	1	
368	E	FE-01	2012-08-05	LNS	196	81.0			X	1	
369	E	FE-01	2012-08-05	LNS	180	53.9			X	1	
370	E	FE-01	2012-08-05	LNS					X	1	No head
371	E	FE-01	2012-08-05	PD	107	13.4					
372	E	FE-01	2012-08-05	PD	120	15.5					
373	E	FE-01	2012-08-05	PD	115	13.7					
374	E	FE-01	2012-08-05	PD	131	25.5					
375	E	FE-01	2012-08-05	PD	133	21.3					
376	E	FE-01	2012-08-05	PD	123	16.8					
377	E	FE-01	2012-08-05	PD	115	15.7					
378	E	FE-01	2012-08-05	PD	126	19.9					
379	E	FE-01	2012-08-05	PD	116	16.1					
380	E	FE-02	2012-08-05	LT	552	1267.9	X	X	F	4	
381	E	FE-02	2012-08-05	LT	518	1157.4	X	X	M	4	
382	E	FE-02	2012-08-05	LT	619	2050.0	X	X	M	4	
383	E	FE-02	2012-08-05	LT	537	1200.3	X	X	F	4	
384	E	FE-02	2012-08-05	LT	465	734.2	X	X	F	4	
385	E	FE-02	2012-08-05	BT	269	220.0	X	X	M	4	
386	E	FE-02	2012-08-05	WS	244	142.6			X	1	
387	E	FE-02	2012-08-05	WS	305	339.2			X	1	
388	E	FE-02	2012-08-05	WS	300	343.3			X	1	
389	E	FE-02	2012-08-05	WS	382	613.2			F	2	
390	E	FE-02	2012-08-05	WS	191	66.1			X	1	
391	E	FE-02	2012-08-05	WS	158	42.7			X	1	
392	E	FE-02	2012-08-05	WS	160	36.4			X	1	
393	E	FE-02	2012-08-05	WS	227	135.5			X	1	
394	E	FE-02	2012-08-05	WS	215	106.5			X	1	
395	E	FE-02	2012-08-05	WS	241	163.4			X	1	
396	E	FE-02	2012-08-05	WS	187	74.2			X	1	
397	E	FE-02	2012-08-05	WS	183	61.8			X	1	
398	E	FE-02	2012-08-05	WS	190	66.9			X	1	

Appendix B. Information Collected on Fish Caught in Lakes and Streams

Fish ID	Waterbody/ Stream	Station ID	Date (retrieve)	Species	Length (total; mm)	Weight (g)	Scale	Otolithe	Sex	Gonad development	Notes
399	E	FE-02	2012-08-05	WS	145	29.2			X	1	
400	E	FE-02	2012-08-05	WS	174	50.6			X	1	
401	E	FE-02	2012-08-05	WS	195	73.9			X	1	
402	E	FE-02	2012-08-05	WS	181	61.1			X	1	
403	E	FE-02	2012-08-05	WS	148	32.4			X	1	
404	E	FE-02	2012-08-05	LNS	150	30.7			X	1	
405	E	FE-02	2012-08-05	LNS	160	32.3			X	1	
406	E	FE-02	2012-08-05	LNS	163	39.9			X	1	
407	E	FE-02	2012-08-05	LNS	111	14.1			X	1	
408	E	FE-02	2012-08-05	LNS	107	11.1			X	1	
409	E	FE-02	2012-08-05	LNS	155	31.7			X	1	
410	E	FE-02	2012-08-05	LNS	149	29.7			X	1	
411	E	FE-02	2012-08-05	LNS	184	61.4			X	1	
412	E	FE-02	2012-08-05	LNS	185	67.4			X	1	
413	E	FE-02	2012-08-05	LNS	155	34.3			X	1	
414	E	FE-02	2012-08-05	LNS	152	28.9			X	1	
415	E	FE-02	2012-08-05	LNS	146	26.3			X	1	
416	E	FE-02	2012-08-05	LNS	176	48.3			X	1	
417	E	FE-02	2012-08-05	LNS	171	49.9			X	1	
418	E	FE-02	2012-08-05	LNS	162	38.2			X	1	
419	E	FE-02	2012-08-05	LNS	194	67.4			X	1	
420	E	FE-02	2012-08-05	LNS	177	53.1			X	1	
421	E	FE-02	2012-08-05	LNS	166	34.7			X	1	
422	E	FE-02	2012-08-05	LNS	159	34.7			X	1	
423	E	FE-02	2012-08-05	LNS	155	33.3			X	1	
424	E	FE-02	2012-08-05	LNS	123	16.5			X	1	
425	E	FE-02	2012-08-05	LNS	123	15.1			X	1	
426	E	FE-02	2012-08-05	LNS	162	30.7			X	1	
427	E	FE-02	2012-08-05	LNS	153	34.2			X	1	
428	E	FE-02	2012-08-05	LNS	180	54.8			X	1	
429	E	FE-02	2012-08-05	LNS	193	65.3			X	1	
430	E	FE-02	2012-08-05	LNS	176	49.5			X	1	
431	E	FE-02	2012-08-05	LNS	228	113.3			X	1	
432	E	FE-02	2012-08-05	LNS	241	139.9			X	1	
433	E	FE-02	2012-08-05	LNS	203	81.3			X	1	
434	E	FE-02	2012-08-05	LNS	382	576.6			M	3	
435	E	FE-02	2012-08-05	PD	124	15.2					
436	E	FE-02	2012-08-05	PD	121	15.9					
437	E	FE-02	2012-08-05	PD	124	16.1					
438	E	FE-02	2012-08-05	PD	122	15.1					
439	E	FE-02	2012-08-05	PD	122	18.6					
440	E	FE-02	2012-08-05	PD	124	16.9					
441	E	FE-02	2012-08-05	PD	141	28.8					
442	E	BO-04	2012-08-05	PD	84						Released
443	E	BO-04	2012-08-05	PD	65						Released
444	E	VV-01	2012-08-05	LNS	112						Released
445	E	VV-01	2012-08-05	LNS	112						Released
446	E	VV-01	2012-08-05	LNS	120						Released

Appendix B. Information Collected on Fish Caught in Lakes and Streams

Fish ID	Waterbody/ Stream	Station ID	Date (retrieve)	Species	Length (total; mm)	Weight (g)	Scale	Otolithe	Sex	Gonad development	Notes
447	E	VV-01	2012-08-05	LNS	122						Released
448	E	VV-01	2012-08-05	LNS	117						Released
449	E	VV-01	2012-08-05	LNS	138						Released
450	E	VV-01	2012-08-05	LNS	123						Released
451	E	VV-01	2012-08-05	LNS	140						Released
452	E	VV-01	2012-08-05	LNS	143						Released
453	E	VV-01	2012-08-05	LNS	132						Released
454	E	VV-01	2012-08-05	LNS	117						Released
455	E	VV-01	2012-08-05	LNS	138						Released
456	E	VV-01	2012-08-05	LNS	140						Released
457	E	VV-01	2012-08-05	LNS	156						Released
458	E	VV-01	2012-08-05	LNS	171						Released
459	E	VV-01	2012-08-05	LNS	182						Released
460	E	VV-01	2012-08-05	LNS	154						Released
461	E	VV-01	2012-08-05	LNS	161						Released
462	E	VV-01	2012-08-05	LNS	161						Released
463	E	VV-01	2012-08-05	LNS	150						Released
464	E	VV-01	2012-08-05	LNS	151						Released
465	E	VV-01	2012-08-05	LNS	157						Released
466	E	VV-01	2012-08-05	LNS	222						Released
467	E	VV-01	2012-08-05	LNS	217						Released
468	E	VV-01	2012-08-05	LNS	214						Released
469	E	VV-01	2012-08-05	LNS	182						Released
470	E	VV-01	2012-08-05	LNS	141						Released
471	E	VV-01	2012-08-05	LNS	222						Released
472	E	VV-01	2012-08-05	LNS	235						Released
473	E	VV-01	2012-08-05	LNS	144						Released
474	E	VV-01	2012-08-05	LNS	162						Released
475	E	VV-01	2012-08-05	BT	130						Released
476	E	VV-01	2012-08-05	BT	140						Released
477	E	VV-01	2012-08-05	MS	60						Released
478	E	VV-01	2012-08-05	WS	173						Released
479	E	VV-01	2012-08-05	WS	282						Released
480	E	VV-01	2012-08-05	WS	181						Released
481	E	VV-01	2012-08-05	WS	179						Released
482	E	VV-01	2012-08-05	WS	118						Released
483	E	VV-01	2012-08-05	WS	159						Released
484	E	VV-01	2012-08-05	WS	171						Released
485	E	VV-01	2012-08-05	WS	132						Released
486	E	VV-01	2012-08-05	WS	143						Released
487	E	VV-01	2012-08-05	WS	159						Released
488	E	VV-01	2012-08-05	WS	118						Released
489	E	VV-01	2012-08-05	WS	153						Released
490	E	VV-01	2012-08-05	WS	137						Released
491	E	VV-01	2012-08-05	WS	142						Released
492	E	VV-01	2012-08-05	PD	124						Released
493	E	VV-01	2012-08-05	PD	92						Released
494	E	VV-01	2012-08-05	PD	98						Released

Appendix B. Information Collected on Fish Caught in Lakes and Streams

Fish ID	Waterbody/ Stream	Station ID	Date (retrieve)	Species	Length (total; mm)	Weight (g)	Scale	Otolithe	Sex	Gonad development	Notes
495	E	VV-01	2012-08-05	PD	123						Released
496	E	VV-01	2012-08-05	PD	132						Released
497	E	VV-01	2012-08-05	PD	134						Released
498	E	VV-01	2012-08-05	PD	133						Released
499	E	VV-01	2012-08-05	PD	138						Released
500	E	VV-01	2012-08-05	PD	114						Released
501	E	VV-01	2012-08-05	PD	116						Released
502	E	VV-01	2012-08-05	PD	123						Released
503	E	VV-01	2012-08-05	PD	114						Released
504	E	VV-01	2012-08-05	PD	117						Released
505	E	VV-01	2012-08-05	PD	90						Released
506	E	VV-01	2012-08-05	PD	102						Released
507	E	VV-01	2012-08-05	PD	120						Released
508	E	VV-01	2012-08-05	PD	118						Released
509	E	VV-01	2012-08-05	B	152						Released
510	E	VV-01	2012-08-05	B	61						Released
511	F	FE-01	2012-08-09	BT	169	39.5	X	X	X	1	
512	F	FE-01	2012-08-09	BT	286	250.4	X	X	F	3	
513	F	FE-01	2012-08-09	WS	186	67.1			M	3	
514	F	FE-01	2012-08-09	WS	184	59.7			X	1	
515	F	FE-01	2012-08-09	WS	186	67.6			M	3	
516	F	FE-01	2012-08-09	WS	150	32.7			X	1	
517	F	FE-01	2012-08-09	WS	180	65.0			X	1	
518	F	FE-01	2012-08-09	WS	170	47.7			M	2	
519	F	FE-01	2012-08-09	WS	190	72.4			X	1	
520	F	FE-01	2012-08-09	WS	191	70.3			M	3	
521	F	FE-01	2012-08-09	WS	162	42.7			M	3	
522	F	FE-01	2012-08-09	WS	173	51.5			M	1	
523	F	FE-01	2012-08-09	WS	150	35.3			X	1	
524	F	FE-01	2012-08-09	WS	147	31.4			X	1	
525	F	FE-01	2012-08-09	WS	135	23.9			X	1	
526	F	FE-01	2012-08-09	WS	150	34.6			X	1	
527	F	FE-01	2012-08-09	WS	178	58.3			X	1	
528	F	FE-01	2012-08-09	WS	176	54.3			X	1	
529	F	FE-01	2012-08-09	WS	148	34.0			X	1	
530	F	FE-01	2012-08-09	WS	183	61.4			X	1	
531	F	FE-01	2012-08-09	WS	146	39.1			X	1	
532	F	FE-01	2012-08-09	WS	147	34.0			X	1	
533	F	FE-01	2012-08-09	WS	125	16.4			X	1	
534	F	FE-01	2012-08-09	WS	145	27.7			X	1	
535	F	FE-01	2012-08-09	LNS	150	31.3			X	1	
536	F	FE-01	2012-08-09	LNS	116	14.9			X	1	
537	F	FE-01	2012-08-09	LNS	119	15.5			X	1	
538	F	FE-01	2012-08-09	LNS	120	17.4			X	1	
539	F	FE-01	2012-08-09	LNS	158	34.9			X	1	
540	F	FE-01	2012-08-09	LNS	119	16.8			X	1	
541	F	FE-01	2012-08-09	LNS	112	15.0			X	1	
542	F	FE-01	2012-08-09	LNS	121	17.5			X	1	

Appendix B. Information Collected on Fish Caught in Lakes and Streams

Fish ID	Waterbody/ Stream	Station ID	Date (retrieve)	Species	Length (total; mm)	Weight (g)	Scale	Otolithe	Sex	Gonad development	Notes
543	F	FE-01	2012-08-09	LNS	117	16.4			X	1	
544	F	FE-01	2012-08-09	LNS	111	15.4			X	1	
545	F	FE-01	2012-08-09	LNS	111	13.0			X	1	
546	F	FE-01	2012-08-09	LNS	139	25.2			X	1	
547	F	FE-01	2012-08-09	LNS	114	15.5			X	1	
548	F	FE-01	2012-08-09	LNS	117	15.6			X	1	
549	F	FE-01	2012-08-09	LNS	121	19.2			X	1	
550	F	FE-01	2012-08-09	LNS	125	20.2			X	1	
551	F	FE-01	2012-08-09	LNS	187	62.8			X	1	
552	PE-T01	PE-14	2012-08-10	LC	58						Released
553	PE-T01	PE-14	2012-08-10	LNS	67						Released
554	PE-T01	PE-14	2012-08-10	LNS	59						Released
555	PE-T01	PE-14	2012-08-10	LNS	54						Released
556	PE-T01	PE-14	2012-08-10	LNS	44						Released
557	PE-T01	PE-14	2012-08-10	LNS	64						Released
558	PE-T01	PE-14	2012-08-10	LNS	43						Released
559	PE-T01	PE-14	2012-08-10	LNS	41						Released
560	PE-T01	PE-14	2012-08-10	LNS	37						Released
561	PE-T01	PE-14	2012-08-10	LNS	39						Released
562	PE-T01	PE-14	2012-08-10	LNS	43						Released
563	PE-T01	PE-14	2012-08-10	LNS	41						Released
564	PE-T01	PE-14	2012-08-10	LNS	40						Released
565	PE-T01	PE-14	2012-08-10	LNS	43						Released
566	PE-T01	PE-14	2012-08-10	LNS	37						Released
567	PE-T01	PE-14	2012-08-10	LNS	40						Released
568	CR-14	PE-03	2012-08-07	BT	139						Released
569	CR-14	PE-03	2012-08-07	BT	109						Released
570	CR-15	PE-02	2012-08-07	LNS	164						Released
571	CR-15	PE-02	2012-08-07	LNS	120						Released
572	CR-15	PE-02	2012-08-07	LC	83						Released
573	CR-15	PE-02	2012-08-07	LC	67						Released
574	CR-15	PE-02	2012-08-07	LC	91						Released
575	CR-15	PE-02	2012-08-07	LC	89						Released
576	CR-15	PE-02	2012-08-07	LC	81						Released
577	CR-15	PE-02	2012-08-07	LC	87						Released
578	CR-15	PE-02	2012-08-07	BT	84						Released
579	CR-15	PE-11	2012-08-08	LC	79						Released
580	CR-15	PE-11	2012-08-08	LC	88						Released
581	CR-15	PE-11	2012-08-08	LC	61						Released
582	CR-15	PE-11	2012-08-08	LC	62						Released
583	CR-18	PE-01	2012-08-07	LNS	157						Released
584	CR-18	PE-01	2012-08-07	LC	62						Released
585	CR-18	PE-01	2012-08-07	BT	59						Released
586	CR-18	PE-01	2012-08-07	BT	97						Released
587	CR-18	PE-01	2012-08-07	LNS	90						Released
588	CR-18	PE-01	2012-08-07	BT	111						Released
589	CR-18	PE-01	2012-08-07	LNS	91						Released
590	CR-18	PE-01	2012-08-07	BT	65						Released

Appendix B. Information Collected on Fish Caught in Lakes and Streams

Fish ID	Waterbody/ Stream	Station ID	Date (retrieve)	Species	Length (total; mm)	Weight (g)	Scale	Otolithe	Sex	Gonad development	Notes
591	CR-18	PE-01	2012-08-07	MS	90						Released
592	CR-18	PE-01	2012-08-07	LNS	56						Released
593	CR-18	PE-01	2012-08-07	LC	67						Released
594	CR-18	PE-01	2012-08-07	MS	72						Released
595	CR-18	PE-01	2012-08-07	LC	60						Released
596	CR-18	PE-01	2012-08-07	B	79						Released
597	CR-18	PE-01	2012-08-07	MS	60						Released
598	CR-18	PE-01	2012-08-07	INDE	47						Released
599	CR-18	PE-01	2012-08-07	MS	79						Released
600	CR-18	PE-01	2012-08-07	BT	71						Released
601	CR-18	PE-01	2012-08-07	LC	65						Released
602	CR-18	PE-01	2012-08-07	LC	72						Released
603	CR-18	PE-01	2012-08-07	BT	59						Released
604	LE-T05	PE-09	2012-08-08	LNS	110						Released
605	LE-T05	PE-09	2012-08-08	BT	68						Released
606	LE-T05	PE-09	2012-08-08	BT	106						Released
607	LE-T05	PE-09	2012-08-08	BT	65						Released
608	LE-T05	PE-09	2012-08-08	MS	74						Released
609	HO-T02	PE-10	2012-08-08	WS	239						Released
610	HO-T02	PE-10	2012-08-08	WS	119						Released

***Appendix C:
Lake Shoreline Characteristics***

Legend

Substrate

L:	Silt and Clay
S:	Sand
V:	Gravel
C:	Cobble
G:	Rubble
B:	Boulder
R:	Bedrock
MO:	Organic Material/Muck

Appendix C. Lake Shoreline Characteristics

Lake and Segment ID				Substrate							Aquatic Vegetation			Shoreline			Notes		
Lake	Segment ID	Date	Length (m)	Grain Size (%)							Vegetation Zone	Type of vegetation	Dimensions of the zone (m)	Slope	Vegetation percent coverage				
				L	S	V	C	G	B	R					MO	Arborescent		Shrubby	Herbaceous
Iron Arm	S1	2012-07-27	1626			5	35	45	5		10	VE-1	Sparganium sp.	5 x 1	Low	60	35	0	
Iron Arm	S2	2012-07-27	309		15		35				50	VE-2	Sparganium sp.; Juncus sp.	100 x 25	Low	50	40	5	
Iron Arm	S3	2012-07-27	540		30		20				50	VE-3	Juncus sp.	100 x 2	-	-	-	-	
				VE-4	Sparganium sp.	60 x 4													
				VE-5	Sparganium sp.	30 x 10													
Iron Arm	S4	2012-07-27	8787				35	45	10	5	5	-	-	-	Low	80	20	0	
Iron Arm	S5	2012-07-27	448				40	50	5		5	-	-	-	Low	80	20	0	
Iron Arm	S6	2012-07-27	311		25		65	5			5	-	-	-	Low	80	20	0	
Iron Arm	S7	2012-07-27	560		5		30	45	15		5	-	-	-	Low	80	20	0	
Iron Arm	S8	2012-07-27	194		5		35	50	5		5	-	-	-	Mod.	85	15	0	
Iron Arm	S9	2012-07-27	837		5	5	30	50	5		5	-	-	-	Low	85	15	0	
Iron Arm	S10	2012-07-27	707			5	45	40	5		5	VE-6	Sparganium sp.	6 x 2.5	Low	50	40	0	
Iron Arm	S11	2012-07-27	107				15	30	35	15	5	-	-	-	Low	0	100	0	Terns were sighted on the island
Iron Arm	S12	2012-07-28	179				10	30	10	45	5	-	-	-	Low	80	20	0	
Iron Arm	S13	2012-07-28	421					15	5		80	VE-7	Juncus sp.; Carex sp.	240 x 3	Low	40	20	40	
Iron Arm	S14	2012-07-28	596				10	35	30	20	5	-	-	-	Low	80	20	0	
Iron Arm	S15	2012-07-28	567				20	60	10	5	5	VE-8	Carex sp.	115 x 5	Low	0	100	0	
Iron Arm	S16	2012-07-28	399				10	15	70	5		-	-	-	Low	60	40	0	
Iron Arm	S17	2012-07-28	865				30	60	5	5		-	-	-	Low	80	20	0	
Iron Arm	S18	2012-07-28	90				10	30			60	VE-9	Sparganium sp.	50 x 5	Low	70	25	5	
Iron Arm	S19	2012-07-28	4091			5	35	50	5		5	VE-10	Sparganium sp.; Carex sp.	45 x 15	Low	85	15	0	
Iron Arm	S20	2012-07-28	597		20		45	20			15	-	-	-	Low	85	15	0	Suitable spawning ground (BT)
Iron Arm	S21	2012-07-28	1093		10		30	55			5	-	-	-	Low	50	50	0	
Iron Arm	S22	2012-07-28	525		20		60	15			5	VE-11	Sparganium sp.	30 x 20	Low	80	20	0	
Iron Arm	S23	2012-07-28	441		20		5	40	30		5	-	-	-	Low	85	15	0	
Iron Arm	S24	2012-07-28	774		15		15	25	40		5	VE-12	Sparganium sp.	75 x 30	Low	70	20	10	
				VE-13	Carex sp.; Juncus sp.	115 x 7													
Iron Arm	S25	2012-07-28	454		20		40	30	5		5	VE-14	Carex sp.	90 x 4	Low	80	20	0	
Iron Arm	S26	2012-07-28	27		10	80	10					-	-	-	Low	0	90	0	
Iron Arm	S27	2012-07-28	42			5	90	5				-	-	-	Low	0	90	0	
Iron Arm	S28	2012-07-28	797			5	80	10			5	-	-	-	Low	40	60	0	
Iron Arm	S29	2012-07-28	92				5	25	50	20		-	-	-	Low	20	80	0	
Iron Arm	S30	2012-07-28	251				40	50	5		5	-	-	-	Low	80	20	0	
Iron Arm	S31	2012-07-28	939		10		25	50	10		5	-	-	-	Low	80	20	0	
Iron Arm	S32	2012-07-28	213		30	5	35	25			5	-	-	-	Low	80	20	0	
Iron Arm	S33	2012-07-28	280				20	55	20		5	VE-15	Sparganium sp.	30 x 15	Low	80	20	0	
Bay 2	S1	2012-07-31	251		10		20	40	15		15	VE-1	Sparganium sp.	85 x 20	Low	80	20	0	
Bay 2	S2	2012-07-31	345		40		10				50	-	-	-	Low	80	20	0	
Bay 2	S3	2012-07-31	534		30		15	5	5		45	-	-	-	Low	80	20	0	
Bay 2	S4	2012-07-31	708		25		15	40	15		5	-	-	-	Low	80	20	0	
Bay 2	S5	2012-07-31	1465									VE-2	Carex sp.	15 x 2.5	Low	80	20	0	
				VE-3	Sparganium sp.	25 x 8													
				VE-4	Sparganium sp.; Carex sp.; Juncus sp.	90 x 30													
				VE-5	Sparganium sp.	20 x 10													
Joyce	S1	2012-07-21	272				35	60	5			-	-	-	Mod.	25	75	0	
Joyce	S2	2012-07-21	253				50	45	5			-	-	-	Mod.	30	70	0	
Joyce	S3	2012-07-21	539				55	40	5			-	-	-	Low	30	70	0	
Joyce	S4	2012-07-21	178		90						10	-	-	-	Low	40	60	0	
Joyce	S5	2012-07-21	512				30	60	5	5		-	-	-	Low	20	80	0	
Joyce	S6	2012-07-21	997		5	5	50	25	5		10	-	-	-	Low	20	80	0	
Joyce	S7	2012-07-21	359				20	40	40			-	-	-	Steep	20	80	0	
A	S1	2012-08-02	69				20	10			70	-	-	-	Low	0	0	100	
A	S2	2012-08-02	103				30	60			10	-	-	-	Low	0	0	100	
B	S1	2012-08-02	566				25	60	10		5	-	-	-	Low	85	15	0	
B	S2	2012-08-02	64					10			90	-	-	-	Low	85	15	0	
B	S3	2012-08-02	176				35	50	10		5	-	-	-	Mod.	85	15	0	
B	S4	2012-08-02	52		35		25	25	15			-	-	-	Low	85	15	0	
C	S1	2012-08-02	267								100	-	-	-	Low	5	30	65	
D	S1	2012-08-04	657				10	65	20		5	-	-	-	Low to mod.	25	75	0	
E	S1	2012-08-05	149				65	30			5	-	-	-	Low	70	30	0	
E	S2	2012-08-05	413				30	50	15		5	-	-	-	Low	50	50	0	
E	S3	2012-08-05	343				70	25			5	VE-1	Sparganium sp.	20 x 7	Low	70	30	0	
E	S4	2012-08-05	145				5	25	65		5	-	-	-	Steep	75	25	0	
E	S5	2012-08-05	286		10	5	50	20	5		10	-	-	-	Low	80	20	0	
E	S6	2012-08-05	127				5	40	50		5	-	-	-	Low	80	20	0	
E	S7	2012-08-05	770			5	60	25	5		5	-	-	-	Low	85	15	0	
E	S8	2012-08-05	570				5	30	60		5	-	-	-	Mod.	85	15	0	
E	S9	2012-08-05	301		15		70	5	5		5	-	-	-	Low	80	20	0	
E	S10	2012-08-05	946				10	35	50		5	-	-	-	Mod.	40	60	0	Beaver lodge
F	S1	2012-08-08	959					5	10		85	VE-1	Nuphar sp.	150 x 10	Low	85	15	0	
				VE-2	Sparganium sp.	150 x 25													
Petitsikapau	S1	2012-08-09	111				10	60	30			-	-	-	Steep	0	0	0	*Presence of Northern pike and Lake trout confirmed in Petitsikapau Lake.
Petitsikapau	S2	2012-08-09	129				40	50	10			-	-	-	Mod.	0	10	0	
Petitsikapau	S3	2012-08-09	74				5	5	10	80		-	-	-	Steep	0	5	0	
Petitsikapau	S4	2012-08-09	40					50	10	40		-	-	-	Steep	0	5	0	
Petitsikapau	S5	2012-08-09	81				45	45	10			-	-	-	Low	0	0	0	
Petitsikapau	S6	2012-08-09	22				5	10	5	80		-	-	-	Steep	0	0	0	
Petitsikapau	S7	2012-08-09	58				10	30	60			-	-	-	Mod.	0	0	0	
Petitsikapau	S8	2012-08-09	92				60	20	10	10		-	-	-	Low	0	0	0	
Petitsikapau	S9	2012-08-09	354		5	75	10	10				-	-	-	Low	0	10	0	
Petitsikapau	S10	2012-08-09	103		5	10	20	60	5			-	-	-	Low	0	0	0	
Petitsikapau	S11	2012-08-09	52		10	50	10	30				-	-	-	Low	0	0	0	
Petitsikapau	S12	2012-08-09	227				5	10	50	35		-	-	-	Mod.	0	0	0	
Petitsikapau	S13	2012-08-09	226		10	30	10	50				-	-	-	Low	0	0	0	
Petitsikapau	S14	2012-08-09	178		30		45	10	15			-	-	-	Low	0	0	0	
Petitsikapau	S15	2012-08-09	164			25	40	20	5	10		-	-	-	Low	0	0	0	
Petitsikapau	S16	2012-08-09	98				5	10	70	15		-	-	-	Low	0	0	0	
Petitsikapau	S17	2012-08-09	186				5	10	60	25		-	-	-	Low	0	0	0	
Petitsikapau	S18	2012-08-09	548				5	20	60	15		-	-	-	Low	0	0	0	
Petitsikapau	S19	2012-08-09	485				5	30	60	5		-	-	-	Low	0	0	0	
Petitsikapau	S20	2012-08-09	1446				5	15	70	10		-	-	-	Low	0	0	0	
Petitsikapau	S21	2012-08-09	991		5	10	30	50	5			-	-	-	Mod.	0	0	0	
Petitsikapau	S22	2012-08-09	230		5	70	10	10	5			-	-	-	Low	0	0	0	
Petitsikapau	S23	2012-08-09	1560		5	5	10	60	20			-	-	-	Low	0	0	0	

***Appendix D:
Photographs***
