December 16, 2011

REPORT ON

Baker Creek Reach 7 Overflow Fish Monitoring Program

Submitted to:
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Attention: Robert Girvan, Project Manager,
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REPORT

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1.0 INTRODUCTION

1.1 Background

In May 2011, icing in upper Baker Creek caused changes to the normal flow path of the creek near Giant Mine (the Mine). The normal flow path of Baker Creek is from upper Baker Creek into Baker Pond, through the lower portion of Baker Creek and then into Yellowknife Bay. The mouth of Baker Creek is located approximately three kilometres north of the City of Yellowknife.

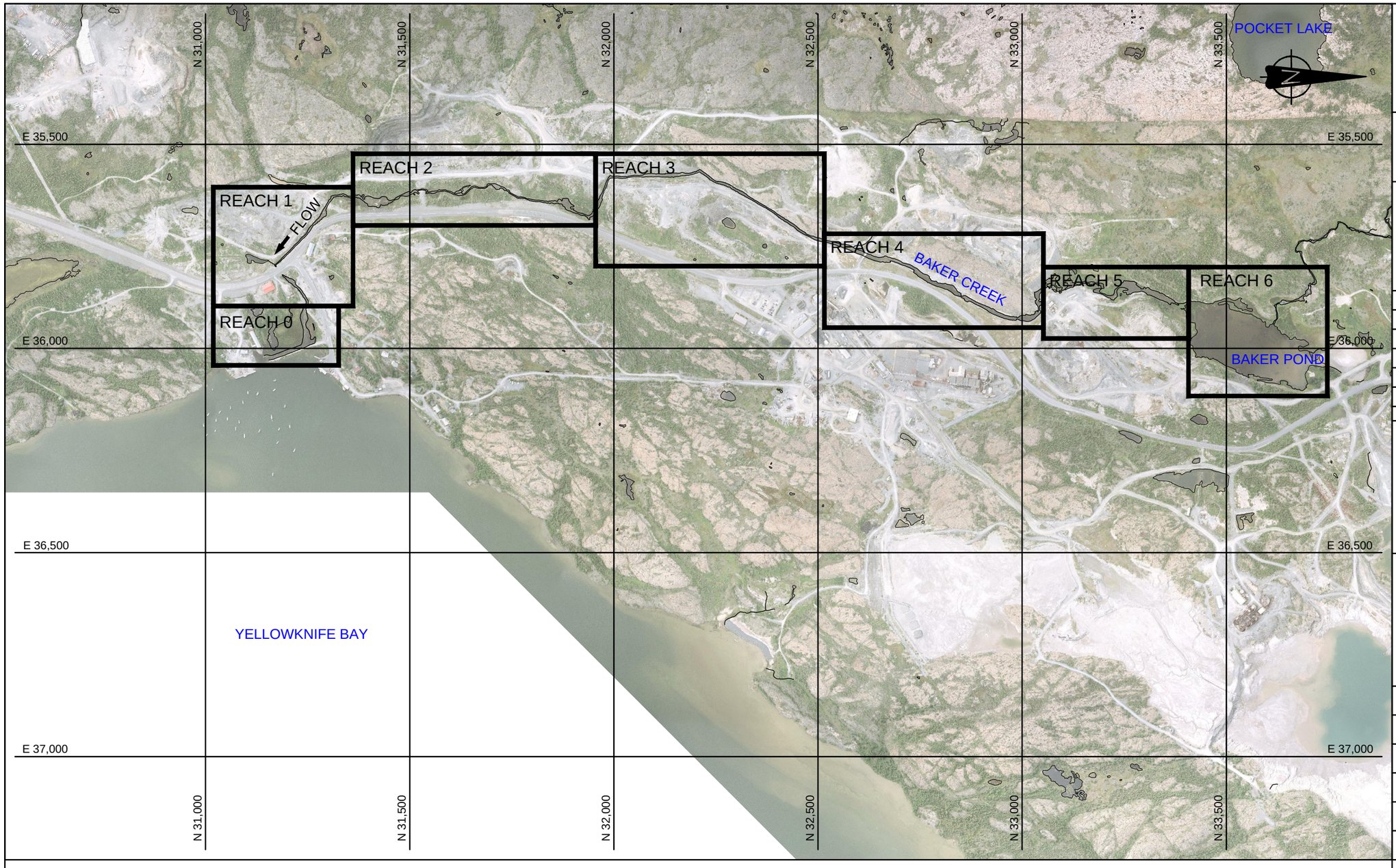
Upper Baker Creek typically flows from Martin Lake to Baker Pond through a series of wetlands and a waterfall upstream of the pond. However, over the winter of 2010/2011, ice built up over a distance of approximately one kilometre upstream of Baker Pond, causing spring runoff from Martin Lake to flow northeast around the ice jam instead of the usual flow path through the ice. This change in flow path will herein be referred to as "the overflow event". The diverted flow eroded an old mine road and entered historic Jo Jo Lake where sediments have been impacted by mine tailings during the early years of mining (SRK 2009). The flow of water through Jo Jo Lake resulted in re-suspension and transport of tailings impacted sediments through lower Baker Creek to Yellowknife Bay. Sediment quality in Jo Jo Lake has been characterized by elevated concentrations of metals and metalloids (*e.g.,* arsenic, cadmium, aluminum and chromium) (Jacques-Whitford-Axys 2006).

Golder Associates Ltd. (Golder) was retained by Public Works Government Services of Canada (PWGSC) through AECOM Engineering to conduct a fish monitoring program in Baker Creek on the Giant Mine site (Reaches 0-6; Figure 1) following the overflow event. The information provided in this report is a summary of the findings of this monitoring program. A separate report contains results of water monitoring in relation to the sediment release.

1.2 Event Timeline

The event timeline for the sediment release and subsequent monitoring was as follows:

- May 14, 2011 – Spring flows from Martin Lake deviated from the normal flow path and entered historic Jo Jo Lake; regulatory consultation initiated.
- May 16, 2011 – Acute toxicity and water quality sampling of creek initiated.
- May 17, 2011 – Continued sampling and mobilization of response team.
- May 18, 2011 – Project engineers diverted overflow back to the original channel; coarse fill laid in the tailings area of Reach 6 prevented flows from circulating upstream.
- May 18 onwards – Continued sampling in Baker Creek and Yellowknife Bay and subsequent data analysis.
- July 2011 – Completed fish monitoring.
- September 2011 – Sediment sampling in creek (reported under separate cover).
- November 2011 – Construction of rock cap to cover surface tailings commenced.



0 100 200 300 400 500

SCALE IN METRES

REFERENCES

1. GIANT MINE - AERIAL PHOTO - LOW QUALITY GMPR

CHECK PRINT

Public Works and Government Services Canada / Travaux publics et Services gouvernementaux Canada

REAL PROPERTY SERVICES
Western Region
SERVICES IMMOBILIERS
Région de l'ouest

PRELIMINARY
NOT FOR CONSTRUCTION

Revision/ Révision	Description/Description	Date/Date

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PUBLIC WORKS GOVERNMENT SERVICES CANADA

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GIANT MINE REMEDIATION PROJECT YELLOWKNIFE N.W.T.

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Drawn by/Dessiné par
RH

PWGSC Project Manager/Administrateur de Projets TPSGC

PWGSC, Architectural and Engineering Resources Manager/ Ressources Architectural et de Directeur d'ingénierie, TPSGC

Client/client
PWGSC

Drawing title/Titre du dessin

FISH MONITORING STUDY AREA

Project No./No. du projet	Sheet/Feuille	Revision no./ La Révision no.
09-1427-0006	FIGURE 1 OF 1	A

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09-1427-0006-26000-26200_02

1.3 Study Objectives

The main objective of the Baker Creek fish monitoring program was to determine the state of the fish community and use of fish habitat in Baker Creek following the overflow event. Specifically, fish monitoring in Baker Creek was initiated to address the following key questions:

1) Did fish enter Baker Creek following the release of contaminated sediment?

2) Were migratory and resident fish present in Baker Creek on the Giant Mine site (Reaches 0-6) and which reaches were used for which life stage?

3) Did fish spawn in Baker Creek in late spring 2011 and, if so, where did spawning occur?

4) On the basis of the examination of eggs and observations of hatched fish, was spawning successful?

5) What were the survival, relative densities and timing of outmigration of young-of-year Arctic Grayling?

6) Were plankton present and available as a food source for fish within Baker Creek?

7) Were there any changes to the Reach 4 constructed channel, and known spawning riffles, from sediment deposition?

8) What were the environmental conditions of Baker Creek from late May to mid-July?

1.4 Report Organization

This report is organized into five sections and one appendix as follows:

- Section 1 – Introduction;
- Section 2 – Methods;
- Section 3 –Key Questions;
- Section 4 – Summary;
- Section 5 – References; and
- Appendix A – Detailed Fish Monitoring Data.

2.0 METHODS

2.1 Study Timing and Locations

Preliminary inspections of the stream were carried out by Fisheries and Oceans Canada between May 17 and May 29, 2011 to determine the status of the overflow and sediment in the creek as well as fish presence in the creek. Fish surveys at Baker Creek commenced on May 27, 2011 and continued until July 12, 2011; surveys were completed by Fisheries and Oceans Canada and Golder Associates. During this period, the stream was visited almost daily to determine fish presence/absence and habitat use. Sampling was undertaken in Reach 1, 2, 3, 4, 5, and 6 and in the lower section of Baker Creek (Reach 0) downstream of the Ingraham Trail (Highway 4) culvert (Figure 1). Reach 3 was difficult to access due to extensive instream icing.

2.2 Field Methods

Fishing occurred in Reach 0, 1, 2, 4, 5 and 6 with the largest effort occurring in Reach 1, downstream of the Ingraham Trail culvert where out-migrating fish can be caught most efficiently. Fish were collected according to the detailed methods in Golder's Technical Procedure 8.1-3: *Fish Inventory Methods* (unpublished file information). Fish were identified, counted, measured, and released live back into Baker Creek; every effort to minimize incidental mortality was made. A subset of fish was archived for possible future tissue analysis. Age structures were archived. If a Floy tag was noted on a fish, the tag number was recorded.

A variety of methods were used to capture fish during the monitoring program, including:

- Backpack electrofishing;
- Angling;
- Seine netting;
- Block stationary seine netting; and
- Gill netting.

Shore-based visual observations were made in Reach 0 to 6 to document the presence and activities of adult fish. To accomplish this, two observers walked upstream in tandem, both positioned on the same side of the channel, and recorded the number of adult fish observed. Snorkelling and underwater photography were not used because of cloudy water conditions.

In addition, kick netting was used to determine the presence of fish eggs and assess larval stages in Baker Creek. Egg deposition sites were located based on the observations of the adult spawning and by examining each 'glide' area in the reaches. The eggs were photographed using a Nikon D200 digital camera with a Nikkor 105-mm VR Micro lens. Following enumeration, measurement and species identification, eggs were returned to the original collection sites.

Invertebrates were sampled in the water column (zooplankton) to collect a limited 'snapshot' of the food resources in the stream for adult and YOY Grayling after the overflow event. Two plankton samples were collected: one at the outlet of Reach 4 and one at the outlet of Reach 6. The samples were collected using a 76 µm Nitex® mesh plankton net with a detachable sampling bucket. The solid-frame net was anchored in the stream and suspended horizontally by the current with the opening facing upstream; the set duration was approximately 15 minutes for each sample. The net was placed at a depth which allowed coverage of the entire water column. Samples were transferred into a single 250-mL white Nalgene® bottle (composite sample) and preserved in 10% buffered formalin. The sample was kept cool, but not frozen, and sent to EcoAnalysts in Idaho, United States for taxonomic analysis (species identification to lowest taxonomic level possible) and estimation of abundance.

Field water quality measurements were taken daily during the fish monitoring program to provide information on the environmental conditions within Baker Creek. The following variables were measured with a multi-probe YSI 600QS meter:

- Dissolved oxygen;
- Water temperature;
- pH; and
- Specific conductivity.

2.3 Data Analysis

Catch-per-unit-effort (CPUE) was calculated for all fish captured during the fish monitoring program. CPUE provides an estimate of relative abundance by standardizing the catch data according to the fishing effort.

3.0 RESULTS

3.1 Did Fish Enter Baker Creek Following the Release of Contaminated Sediment?

Yes, fish entered Baker Creek following the release of contaminated sediment. The number of fish captured, observed and archived for possible future metals analysis is described below.

Fish Captured

A total of 402 fish of eight different species were captured between May 27, 2011 and July 12, 2011 (Table 1; Appendix Table A1)). The most common species captured were Arctic Grayling (*Thymallus arcticus*), Ninespine Stickleback (*Pungitius pungitius*), Longnose Sucker (*Catostomus catostomus*), and Lake Whitefish (*Coregonus clupeaformis*).

Fishing effort occurred multiple times each week. The creek was sampled for fish and eggs a total of 40 times; details are listed in Appendix A Table 2. Each reach was fished a number of times; however, fishing effort was focussed on Reach 1, where outmigration of fish from the upper reaches can be done effectively as migrants must pass through the culvert under Ingraham Trail. Fishing was largely ineffective in late May due to the presence of ice in the stream. Reach 3 was not fished due to difficult access to the area, and the presence of ice during the spring.

Table 1: Total Fish Captured by Species in Baker Creek, May 17 to July 11, 2011

Species	Number Captured
Arctic Grayling	173
Cisco	3
Lake Whitefish	35
Longnose Sucker	69
Northern Pike	16
Ninespine Stickleback	94
Trout Perch	8
Slimy Sculpin	4
Species Combined	402

The majority of fish were captured in Reach 1 of Baker Creek immediately downstream of the culvert at the Ingraham Trail. A number of fish were also captured in Reach 6 (Baker Pond) (Table 2). The majority of fish were captured in late June, during outmigration from upper reaches of Baker Creek as they passed through Reach 1 to Yellowknife Bay.

Table 2: Total Fish Captured in each Reach of Baker Creek, May 17 to July 11, 2011

Date	Reach	Total Captured
27-May-11	1	1
9-Jun-11	1	92
24-Jun-11	6 (Baker Pond)	46
28-Jun-11	1	117
29-Jun-11	1	1
30-Jun-11	1	84
7-Jul-11	1	44
11-Jul-11	1 and 0	8
12-Jul-11	0	1
12-Jul-11	1	8
Reaches Combined		**402**

Fish Observed

In addition to the fish that were captured, fish were observed in Baker Creek from the shore during daily inspections; a total of 76 inspections of the creek were made during the monitoring program. Approximately 2400 fish were observed in Baker Creek in the weeks following the overflow event (Appendix Table A3). Observations of fish eggs in spawning locations were also made (Appendix A Table A3).

Fish were first observed in Baker Creek on May 17, 2011, three days after the overflow was observed. On the basis of shoreline observations, it appeared as if there were fewer spawning adult fish in Baker Creek in 2011 than in previous years (Appendix A Table A3). However, turbid water, low flows and the presence of ice throughout much of the stream reduced the effectiveness of observations during the early stages of the overflow event.

Fish Archived

All fish captured in Reach 6 (Baker Pond) (N = 72) which included Lake Whitefish, Northern Pike (*Esox lucius*) and Cisco (*Coregonus artedi*)), were archived for possible future metal analysis (Appendix Table A4). Twenty-five Arctic Grayling and two Northern Pike were archived from Reach 1, and a single Northern Pike was archived from Reach 0.

3.2 Were Migratory and Resident Fish Present in Baker Creek on the Giant Mine Site (Reaches 0- 6) and which Reaches were used for Which Life Stage?

Yes, migratory and resident fish were present in Baker Creek after the release of contaminated sediment.

In spring and early summer 2011, fish were observed throughout Baker Creek (Appendix Table A2). The migratory fish that were present included Arctic Grayling, Longnose Sucker, Ninespine Stickleback, shiners, Trout Perch, Cisco, Lake Whitefish as well as some unidentified 'minnows' (likely a cyprinid/shiner species). DFO personnel observed Northern Pike swimming up the culvert. On the basis of life history characteristics and past studies in Baker Creek, two species of fish are suspected to reside year-round in Baker Creek: Slimy Sculpin (Reach 0 and Reach 1) and Northern Pike (all reaches); both species of fish were observed and captured in Baker Creek in 2011. Lake Whitefish and Cisco were captured in spring 2011 and in winter 2010 (Golder 2011a). It is possible that these fish are also residents of Baker Creek for much of the year but additional sampling would be required to confirm this. Observations on fish life stage or behaviour in the various reaches in Baker Creek are summarized in Table 3.

Table 3: Summary of Fish Use in Baker Creek (by reach), May 17 to July 11, 2011

Date	Reach 0	Reach 1	Reach 2	Reach 3	Reach 4	Reach 5	Reach 6
Arctic Grayling	S,R,F,O	S,R,F,O	S,R,O	S R,F,O	S,R,F,O	S,R,F,O	S,R,F,O
Cisco							F?
Lake Whitefish							F?
Longnose Sucker	S,R,O	S,R,O	S,R,O		S,R,F,O		S,R,O
Northern Pike	S,R,O, F	S,R,O, F	S,R,O, F		S,R,O	S,R,O	S,R,O
Ninespine Stickleback	F	F					F[2]
Trout Perch		F?					
Slimy Sculpin	F, presumed S, O	F, presumed S, O					
Shiner (minnow) species	F?						

F= Feeding (?, presumed); S= spawning; R= rearing; O= out-migration; [1] Arctic Grayling were observed spawning in Reach 3 on one day; [2] Observed at the confluence of Baker Creek and Trapper Creek in Reach 6.

The observations confirm the presence of both migratory and resident fish within Baker Creek following the overflow event. Young-of-the-year Slimy Sculpin, a likely resident of Reach 0 and Reach 1, were not observed in the study. Young were not observed in the previous year during a separate study (Golder 2011b); this will be the subject of a follow-up program under the direction of the Environment Canada Environment Effects Monitoring Program in 2012. It is possible that Slimy Sculpin spawn under ice in Reach 0 and Reach 0 and then the young-of-the-year outmigrate following hatching, but this is unconfirmed.

3.3 Did Fish Spawn in Baker Creek in Late Spring 2011, and if so, where did Spawning Occur?

Yes, fish spawned in Baker Creek following the overflow event. Arctic Grayling and Longnose Sucker spawned in Reach 0, Reach 1, Reach 2, Reach 3, Reach 4, Reach 5 and Reach 6 (Table 3). It is likely Northern Pike spawned in Reach 6 and Reach 2 based on the capture of young-of-year downstream of these areas and observation of spawning behaviour in Reach 2.

Ninespine Stickleback and Slimy Sculpin are thought to spawn in Reach 0/Reach 1 of Baker Creek but young-of-the-year fish were not observed during the sampling events; as such, spawning in 2011 cannot be confirmed. Shiners (species not confirmed) are also thought to spawn and rear in Reach 0 of Baker Creek; schools of shiners were observed on two occasions during the study (Appendix A, Table 3), but it is not known if spawning occurred in 2011.

3.4 On the Basis of the Examination of Eggs and Observations of Hatched Fish, was Spawning Successful?

Yes, spawning was successful based on observations of eggs and emergence. Following deposition, it appeared that eggs were viable and developing normally (i.e., no diseased or cloudy eggs were observed). Eggs hatched approximately two weeks after being laid, which is consistent with previous timing (Golder 2010); adults were observed as early as May 20, 2011 (Appendix A, Table 3). Spawning behaviour was observed on May 30, 2011 and the first eggs were located on June 1, 2011. The distribution of eggs appeared to be more wide-spread than in previous years. The presence of ice in the creek and lower water levels (see below for details) may have altered the size and availability of suitable spawning habitat, resulting in more disparate egg-laying.

3.5 What were the Survival, Relative Densities and Timing of Outmigration of Young-of-Year Arctic Grayling?

The survival of out-migrating Arctic Grayling and Longnose Sucker fish appeared to be high. Stranded fish and unusual behaviour (e.g., disoriented swimming patterns) were not observed. No obvious signs of fungal disease were noted and fish mortalities were not observed during the shore-based survey. No obvious distress in fish was observed. Fish of all species appeared to be holding or feeding during the period of observations. Further examination of the sublethal toxicity of the sediment release was not examined in this study.

Fishing was conducted four times to determine if out-migration was occurring (Appendix A, Table 2). Fish were captured from June 28 to July 11, 2011 with maximum catch rates on June 28, 2011. CPUE of fish ranged from 0 fish per minute to approximately 0.26 fish per minute. Based on trends in CPUE, a measure of relative abundance, it is apparent that the peak of the outmigration from Baker Creek (all species) occurred in late June.

The out-migration of fish from Baker Creek was also examined in 2009 (Golder 2009). The peak out-migration of fish from Baker Creek in spring 2009 (Golder 2009) was in late June, which is similar to 2011, despite the late commencement of spawning in 2011. A total of 248 fish were captured out-migrating from Baker Creek based on sampling results from one location. This number is lower than in 2009, when over 758 fish were captured from two sampling stations. The CPUE of fish in 2009 was higher, peaking at 6 fish per minute. The reasons for the lower catch rates in 2011 are not fully understood but it is possible there were fewer Arctic Grayling and Longnose Sucker spawners in Baker Creek in 2011.

3.6 Were Plankton, a Food Source for Fish, Present in Baker Creek?

Yes, plankton were observed and captured in Baker Creek after the release of contaminated sediment.

Individual samples were collected from Reach 4 and Reach 6; detailed community composition data are presented in Appendix Table A5. Copepoda (copepods) were the dominant taxa in both reaches. The overall abundance of copepods was almost five times greater in the sample from Reach 4; however, copepods accounted for a higher relative abundance in Reach 6 (Table 4). This difference was a reflection of the lower proportion of Cladocera (cladocerans) in the Reach 6 sample. Copepod nauplii were more abundant in Reach 6 (0.17 per m^3) compared to Reach 4 (0.05 per m^3), but copepodites (a developmental stage between nauplii and adult) were ten times more abundant in Reach 4 (39.71 per m^3) compared to Reach 6 (3.88 per m^3) (Table 4). Cladocerans were more abundant in Reach 4 (22.21 per m^3) compared to Reach 6 (1.65 per m^3), exhibiting an approximate 13 fold difference in abundance between areas and two-fold difference in relative abundance of the community composition. Rotifera (rotifers) composed a small proportion of the plankton community in both areas.

Table 4: Summary of Plankton Community Composition in Baker Creek on June 23, 2011

Sample	Location	Major Taxonomic Group	Abundance (#/m³)	Relative Abundance (%)
1	Reach 4 Outlet	Copepoda	114.47	83.5
		Cladocera	22.21	16.2
		Rotifera	0.49	0.4
2	Reach 6 Outlet	Copepoda	23.37	92.3
		Cladocera	1.65	6.5
		Rotifera	0.29	1.2

Notes: #/m^3 = number of organisms per cubic metre.

While sampling of the plankton community was limited to a single occasion, it confirms that plankton were present and of a composition that could be used by fish as a food source. Differences in community composition existed between the two sampling locations. Habitat differences exist between the two locations: the outlet of Reach 4 is 'flowing stream habitat' and the outlet of Reach 6 is 'slow-moving pond habitat'.

3.7 Were there any Changes to the Reach 4 Constructed Channel and Known Spawning Riffles from Sediment Deposition?

An inspection of Reach 4 of Baker Creek was completed on June 29, 2011. The purpose of the inspection was to determine if the 'riffle' habitat constructed in 2006 remained in place in 2011 after the icing in Reach 4, and to document any visible alterations to the structures. Changes in the availability and quality of fish habitat can occur over time, or be due to a catastrophic event such as occurred in 2011. In 2009, Golder Associates noted that one riffle ('Riffle 7") was no longer intact.

On the basis of the inspection in 2011, no substantial alteration of constructed fish habitat occurred during the previous year in response to the icing in the creek and the sediment remobilization. Slumping was noted on the right upstream facing bank presumably due to damage from ice scour or from some aspect of the original construction. It appears as if some of the cobble/gravel substrate was redistributed in the reach but this was difficult to quantify because of the very low water levels in 2011 which exposed more extensive areas of streambed than in previous years. It is recommended that sediment sampling be carried out in the reach in fall 2011 to determine if the sediment contains elevated levels of metals due to the remobilization of the streambed. It is recommended that the creek habitat be monitored annually by site staff to detect any possible changes, particularly due to permafrost melting.

3.8 What were the Environmental Conditions of Baker Creek from Late May to Mid-July?

Water Quality

Detailed water quality and water toxicity for this period were reported under separate cover (Golder 2011c). The creek was characterized as having elevated levels of metals and suspended solids for approximately two weeks and then conditions returned closer to background. The water was turbid (cloudy) in spring due to the sediment release; cloudy water is usually avoided by Arctic Grayling.

Field Measurements

A summary of *in situ* (field) water quality measurements for temperature, dissolved oxygen, specific conductivity and pH are provided in Appendix A Table A6.

Water temperatures exhibited seasonal trends, with warmer temperatures occurring later in the monitoring program. However, of note is the very cool water temperature recorded in early May (approximately 1 degree Celsius); this was likely due to the presence of ice in the stream at the time. Arctic Grayling were observed in the stream when water temperatures were very low (1-3 degree Celsius). Subsequently, water temperatures appeared to increase very rapidly. Water temperatures were higher in Reach 5 and Reach 6 than other reaches that had more shoreline ice.

Specific conductivity values were relatively low throughout Baker Creek and are reflective of a typical fresh water environment. Conductivity was approximately 130 microSeimens per centimetre, which is consistent with values recorded during freshet conditions in previous years (Golder 2010). The pH values were consistently near neutral to slightly alkaline, which is typical of the pre-discharge water quality in previous years.

Dissolved oxygen concentrations were variable over time and in various reaches in Baker Creek. The Canadian Council of Ministers for the Environment (CCME) minimum guideline of 9.5 mg/L dissolved oxygen for the protection of early fish life stages was met in Reach 0, and on most occasions in Reach 1 (Appendix A Table A6). Lower dissolved oxygen values were documented in the other reaches, but these concentrations still exceeded the CCME minimum guideline of 6.5 mg/L for the protection of other aquatic life stages (CCME 1999 with updates).

Water Discharge

Water levels and water discharge were not recorded in this study. However, data on these parameters adds to the understanding of the fish monitoring results. On the basis of the water level data and discharge data from an Environment Canada station at the outlet of Martin Lake entering Baker Creek (07SB013), it appears as if the water levels and discharge in Baker Creek in 2011 were very low (Environment Canada 2011), which may have affected fish migration patterns and spawning recruitment in the area.

4.0 SUMMARY

The fish community of Baker Creek in spring 2011 was similar to that documented in previous years. Both migratory and resident fish were present in Baker Creek following the overflow event. Low water temperatures and in-stream icing may have delayed spawning timing by approximately one week. Food for fish appeared to be present in the stream despite the elevated turbidity and metal levels in the creek. The release of contaminated sediment did not appear to alter use of habitat in Baker Creek between May and July 2011. Low water temperatures, in-stream icing, low water levels and the presence of turbid waters may have reduced the number of spawning adults in Baker Creek.

The effect of the chemical constituents of contaminated sediment release on fish body burdens was not evaluated in this study. A sediment study of Baker Creek, which will include fish tissue analysis, was initiated in fall 2011; the results and will be reported under separate cover.

5.0 CLOSURE

We trust this report presents the information required by PWGSC for the Giant Mine to fulfill the requirements of monitoring the fish community in Baker Creek following the overflow event. Should any portion of this report require clarification, please contact the undersigned.

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APPENDIX A

Fish Monitoring Data

Table A1: Raw Data on Captured Fish in Reach 0 to Reach 6, Baker Creek, 2011

Sample ID	Date	Species	Total Length (mm)	Fork Length (mm)	Weight (g)	Life Stage	Sex	Maturity Code	Capture Method	Reach	Comment
1a	27-May-11	NRPK	-	350	-	Adult	unknown	unknown	Active seining	1	released without measuring weight due to time constraint
8	9-Jun-11	LNSC	78	75	3.9	Juvenile	unknown	unknown	Backpack Electrofishing II	1	released live
39	9-Jun-11	LNSC	108	100	11.0	Juvenile	unknown	unknown	Backpack Electrofishing II	1	released live
2	9-Jun-11	NNST	50	-	0.9	Adult	unknown	unknown	Backpack Electrofishing II	1	released live
3	9-Jun-11	NNST	42	-	0.4	Adult	unknown	unknown	Backpack Electrofishing II	1	released live
4	9-Jun-11	NNST	41	-	0.3	Adult	unknown	unknown	Backpack Electrofishing II	1	released live
5	9-Jun-11	NNST	45	-	0.8	Adult	unknown	unknown	Backpack Electrofishing II	1	released live
6	9-Jun-11	NNST	54	-	1.1	Adult	unknown	unknown	Backpack Electrofishing II	1	released live
7	9-Jun-11	NNST	53	-	0.9	Adult	unknown	unknown	Backpack Electrofishing II	1	released live
9	9-Jun-11	NNST	49	-	0.6	Adult	unknown	unknown	Backpack Electrofishing II	1	released live
10	9-Jun-11	NNST	50	-	0.7	Adult	unknown	unknown	Backpack Electrofishing II	1	released live
11	9-Jun-11	NNST	49	-	0.1	Adult	unknown	unknown	Backpack Electrofishing II	1	released live
12	9-Jun-11	NNST	52	-	0.9	Adult	unknown	unknown	Backpack Electrofishing II	1	released live
13	9-Jun-11	NNST	46	-	0.5	Adult	unknown	unknown	Backpack Electrofishing I	1	released live
14	9-Jun-11	NNST	42	-	0.5	Adult	unknown	unknown	Backpack Electrofishing I	1	released live
16	9-Jun-11	NNST	57	-	1.0	Adult	unknown	unknown	Backpack Electrofishing I	1	released live
19	9-Jun-11	NNST	41	-	0.5	Adult	unknown	unknown	Backpack Electrofishing I	1	released live
22	9-Jun-11	NNST	46	-	0.6	Adult	unknown	unknown	Backpack Electrofishing I	1	released live
23	9-Jun-11	NNST	47	-	0.6	Adult	unknown	unknown	Backpack Electrofishing I	1	released live
24	9-Jun-11	NNST	52	-	0.8	Adult	unknown	unknown	Backpack Electrofishing I	1	released live
25	9-Jun-11	NNST	48	-	0.6	Adult	unknown	unknown	Backpack Electrofishing I	1	released live
26	9-Jun-11	NNST	54	-	0.8	Adult	unknown	unknown	Backpack Electrofishing I	1	released live
27	9-Jun-11	NNST	40	-	0.3	Adult	unknown	unknown	Backpack Electrofishing I	1	released live
28	9-Jun-11	NNST	51	-	0.7	Adult	unknown	unknown	Backpack Electrofishing I	1	released live
29	9-Jun-11	NNST	52	-	1.0	Adult	unknown	unknown	Backpack Electrofishing I	1	released live
30	9-Jun-11	NNST	55	-	1.1	Adult	unknown	unknown	Backpack Electrofishing I	1	released live
31	9-Jun-11	NNST	45	-	0.6	Adult	unknown	unknown	Backpack Electrofishing I	1	released live
32	9-Jun-11	NNST	55	-	0.9	Adult	unknown	unknown	Backpack Electrofishing I	1	released live
33	9-Jun-11	NNST	53	-	0.9	Adult	unknown	unknown	Backpack Electrofishing I	1	released live
34	9-Jun-11	NNST	42	-	0.5	Adult	unknown	unknown	Backpack Electrofishing I	1	released live
36	9-Jun-11	NNST	49	-	0.7	Adult	unknown	unknown	Backpack Electrofishing I	1	released live
37	9-Jun-11	NNST	58	-	1.2	Adult	unknown	unknown	Backpack Electrofishing I	1	released live
42	9-Jun-11	NNST	43	-	0.5	Adult	unknown	unknown	Backpack Electrofishing I	1	released live
43	9-Jun-11	NNST	40	-	0.4	Adult	unknown	unknown	Backpack Electrofishing I	1	released live
44	9-Jun-11	NNST	49	-	0.8	Adult	unknown	unknown	Backpack Electrofishing I	1	released live
45 to 99	9-Jun-11	NNST	-	-	-	-	-	-	Backpack Electrofishing I	1	48 fish captured and released and not measurec
1	9-Jun-11	NRPK	135	128	-	Juvenile	unknown	unknown	Backpack Electrofishing I	1	released without measuring weight due to time constraint
17	9-Jun-11	SLSC	52	-	1.4	YOY/Juvenile	unknown	unknown	Backpack Electrofishing I	1	released live
41	9-Jun-11	SLSC	40	-	0.7	YOY/Juvenile	unknown	unknown	Backpack Electrofishing I	1	released live
15	9-Jun-11	TRPR	94	86	6.3	Adult	unknown	unknown	Backpack Electrofishing I	1	released live
18	9-Jun-11	TRPR	85	79	4.6	Juvenile	unknown	unknown	Backpack Electrofishing I	1	released live
20	9-Jun-11	TRPR	96	85	6.1	Adult	unknown	unknown	Backpack Electrofishing I	1	released live
21	9-Jun-11	TRPR	89	80	5.2	Adult	unknown	unknown	Backpack Electrofishing I	1	released live
35	9-Jun-11	TRPR	75	67	3.1	Adult	unknown	unknown	Backpack Electrofishing I	1	released live
38	9-Jun-11	TRPR	76	70	2.9	Adult	unknown	unknown	Backpack Electrofishing I	1	released live
40	9-Jun-11	TRPR	71	69	3.7	Adult	unknown	unknown	Backpack Electrofishing I	1	released live
113	24-Jun-11	CISC	-	295	439.0	unknown	unknown	unknown	Gill Net I	6, Baker Pond	**WB Frozen Archive**
129	24-Jun-11	CISC	-	295	432.0	unknown	unknown	unknown	Gill Net II	6, Baker Pond	**WB Frozen Archive**
131	24-Jun-11	CISC	-	268	307.0	unknown	unknown	unknown	Gill Net II	6, Baker Pond	**WB Frozen Archive**
107	24-Jun-11	LKWH	-	412	1129.0	unknown	unknown	unknown	Gill Net I	6, Baker Pond	**WB Frozen Archive**
108	24-Jun-11	LKWH	-	409	1131.0	unknown	unknown	unknown	Gill Net I	6, Baker Pond	**WB Frozen Archive**
109	24-Jun-11	LKWH	-	397	817.0	unknown	unknown	unknown	Gill Net I	6, Baker Pond	**WB Frozen Archive**
110	24-Jun-11	LKWH	-	468	1405.0	unknown	unknown	unknown	Gill Net I	6, Baker Pond	**WB Frozen Archive**
111	24-Jun-11	LKWH	-	445	1143.0	unknown	unknown	unknown	Gill Net I	6, Baker Pond	**WB Frozen Archive**
112	24-Jun-11	LKWH	-	348	587.0	unknown	unknown	unknown	Gill Net I	6, Baker Pond	**WB Frozen Archive**
114	24-Jun-11	LKWH	-	238	155.0	unknown	unknown	unknown	Gill Net I	6, Baker Pond	**WB Frozen Archive**
115	24-Jun-11	LKWH	-	246	155.0	unknown	unknown	unknown	Gill Net I	6, Baker Pond	**WB Frozen Archive**
116	24-Jun-11	LKWH	-	248	178.0	unknown	unknown	unknown	Gill Net I	6, Baker Pond	**WB Frozen Archive**
117	24-Jun-11	LKWH	-	234	143.0	unknown	unknown	unknown	Gill Net I	6, Baker Pond	**WB Frozen Archive**
118	24-Jun-11	LKWH	-	218	102.0	unknown	unknown	unknown	Gill Net I	6, Baker Pond	**WB Frozen Archive**
119	24-Jun-11	LKWH	-	226	100.0	unknown	unknown	unknown	Gill Net I	6, Baker Pond	**WB Frozen Archive**
120	24-Jun-11	LKWH	-	220	97.0	unknown	unknown	unknown	Gill Net I	6, Baker Pond	**WB Frozen Archive**
121	24-Jun-11	LKWH	-	220	112.0	unknown	unknown	unknown	Gill Net I	6, Baker Pond	**WB Frozen Archive**
122	24-Jun-11	LKWH	-	225	102.0	unknown	unknown	unknown	Gill Net I	6, Baker Pond	**WB Frozen Archive**
123	24-Jun-11	LKWH	-	224	142.0	unknown	unknown	unknown	Gill Net I	6, Baker Pond	**WB Frozen Archive**
124	24-Jun-11	LKWH	-	398	965.0	unknown	unknown	unknown	Gill Net II	6, Baker Pond	**WB Frozen Archive**
125	24-Jun-11	LKWH	-	333	584.0	unknown	unknown	unknown	Gill Net II	6, Baker Pond	**WB Frozen Archive**
126	24-Jun-11	LKWH	-	342	649.0	unknown	unknown	unknown	Gill Net II	6, Baker Pond	**WB Frozen Archive**
127	24-Jun-11	LKWH	-	391	923.0	unknown	unknown	unknown	Gill Net II	6, Baker Pond	**WB Frozen Archive**
128	24-Jun-11	LKWH	-	343	603.0	unknown	unknown	unknown	Gill Net II	6, Baker Pond	**WB Frozen Archive**
130	24-Jun-11	LKWH	-	248	202.0	unknown	unknown	unknown	Gill Net II	6, Baker Pond	**WB Frozen Archive**
132	24-Jun-11	LKWH	-	221	134.0	unknown	unknown	unknown	Gill Net II	6, Baker Pond	**WB Frozen Archive**
133	24-Jun-11	LKWH	-	242	174.0	unknown	unknown	unknown	Gill Net II	6, Baker Pond	**WB Frozen Archive**
134	24-Jun-11	LKWH	-	216	111.0	unknown	unknown	unknown	Gill Net II	6, Baker Pond	**WB Frozen Archive**
135	24-Jun-11	LKWH	-	356	688.0	unknown	unknown	unknown	Gill Net II	6, Baker Pond	**WB Frozen Archive**
136	24-Jun-11	LKWH	-	201	120.0	unknown	unknown	unknown	Gill Net II	6, Baker Pond	**WB Frozen Archive**
137	24-Jun-11	LKWH	-	196	112.0	unknown	unknown	unknown	Gill Net II	6, Baker Pond	**WB Frozen Archive**
138	24-Jun-11	LKWH	-	227	174.0	unknown	unknown	unknown	Gill Net II	6, Baker Pond	**WB Frozen Archive**
139	24-Jun-11	LKWH	-	247	213.0	unknown	unknown	unknown	Gill Net II	6, Baker Pond	**WB Frozen Archive**
140	24-Jun-11	LKWH	-	228	176.0	unknown	unknown	unknown	Gill Net II	6, Baker Pond	**WB Frozen Archive**
141	24-Jun-11	LKWH	-	225	168.0	unknown	unknown	unknown	Gill Net II	6, Baker Pond	**WB Frozen Archive**
142	24-Jun-11	LKWH	-	211	130.0	unknown	unknown	unknown	Gill Net II	6, Baker Pond	**WB Frozen Archive**
143	24-Jun-11	LKWH	-	140	56.0	unknown	unknown	unknown	Gill Net II	6, Baker Pond	**WB Frozen Archive**
144	24-Jun-11	LKWH	-	151	58.0	unknown	unknown	unknown	Gill Net II	6, Baker Pond	**WB Frozen Archive**
100	24-Jun-11	NRPK	46	628	1545.0	Adult	F	RS	Gill Net II	6, Baker Pond	**Samples collected: Dorsal tissue x 2 (Frozen), Liver (Frozen), gonad (Frozen), OT, CL, FR.**
101	24-Jun-11	NRPK	-	668	2201.0	Adult	F	RS	Gill Net II	6, Baker Pond	**Samples collected: Dorsal tissue x 2 (Frozen), Liver (Frozen), gonad (Frozen), OT, CL, FR.**
102	24-Jun-11	NRPK	-	438	615.0	Adult	M	RS	Gill Net I	6, Baker Pond	**Samples collected: Dorsal tissue x 2 (Frozen), Liver (Frozen), gonad (Frozen), OT, CL, FR.**
103	24-Jun-11	NRPK	-	570	1185.0	Adult	M	RS	Gill Net II	6, Baker Pond	**Samples collected: Dorsal tissue x 2 (Frozen), Liver (Frozen), gonad (Frozen), OT, CL, FR.**
104	24-Jun-11	NRPK	-	418	487.0	Adult	unknown	unknown	Gill Net I	6, Baker Pond	**Samples collected: Dorsal tissue x 2 (Frozen), Liver (Frozen), gonad (Frozen), OT, CL, FR.**
105	24-Jun-11	NRPK	-	310	224.0	Juvenile	M	MA	Gill Net I	6, Baker Pond	**Samples collected: Dorsal tissue x 2 (Frozen), Liver (Frozen), gonad (Frozen), OT, CL, FR.**
106	24-Jun-11	NRPK	-	325	254.0	Juvenile	F	MA	Gill Net I	6, Baker Pond	**Samples collected: Dorsal tissue x 2 (Frozen), Liver (Frozen), gonad (Frozen), OT, CL, FR.**
145	24-Jun-11	NRPK	-	-	-	unknown	unknown	unknown	Gill Net II	6, Baker Pond	Escaped from net, not measured
145	28-Jun-11	ARGR	-	26	-	YOY	unknown	IM	Block Seine Net I	1	live released
146	28-Jun-11	ARGR	-	27		YOY	unknown	IM	Block Seine Net I	1	live released
147	28-Jun-11	ARGR	-	25	-	YOY	unknown	IM	Block Seine Net I	1	live released
148	28-Jun-11	ARGR	-	34	-	YOY	unknown	IM	Block Seine Net I	1	live released
149	28-Jun-11	ARGR	-	33	-	YOY	unknown	IM	Block Seine Net I	1	live released
150	28-Jun-11	ARGR	-	28	-	YOY	unknown	IM	Block Seine Net I	1	live released
151	28-Jun-11	ARGR	-	30	-	YOY	unknown	IM	Block Seine Net I	1	live released
152	28-Jun-11	ARGR	-	31	-	YOY	unknown	IM	Block Seine Net I	1	live released
153	28-Jun-11	ARGR	-	33	-	YOY	unknown	IM	Block Seine Net I	1	live released
154	28-Jun-11	ARGR	-	25	-	YOY	unknown	IM	Block Seine Net I	1	live released
155	28-Jun-11	ARGR	-	23	-	YOY	unknown	IM	Block Seine Net I	1	live released
156	28-Jun-11	ARGR	-	28	-	YOY	unknown	IM	Block Seine Net I	1	live released
157	28-Jun-11	ARGR	-	26	-	YOY	unknown	IM	Block Seine Net I	1	live released
158	28-Jun-11	ARGR	-	32	-	YOY	unknown	IM	Block Seine Net I	1	live released
159	28-Jun-11	ARGR	-	27	-	YOY	unknown	IM	Block Seine Net I	1	live released
160	28-Jun-11	ARGR	-	25	-	YOY	unknown	IM	Block Seine Net I	1	live released
161	28-Jun-11	ARGR	-	26	-	YOY	unknown	IM	Block Seine Net I	1	live released
162	28-Jun-11	ARGR	-	26	-	YOY	unknown	IM	Block Seine Net I	1	live released
163	28-Jun-11	ARGR	-	52	-	YOY	unknown	IM	Block Seine Net I	1	live released
164	28-Jun-11	ARGR	-	31	-	YOY	unknown	IM	Block Seine Net I	1	live released
165	28-Jun-11	ARGR	-	24	-	YOY	unknown	IM	Block Seine Net I	1	live released
166	28-Jun-11	ARGR	-	32	0.2	YOY	unknown	IM	Block Seine Net I	1	**WB Frozen Archive**
167	28-Jun-11	ARGR	-	27	0.1	YOY	unknown	IM	Block Seine Net I	1	**WB Frozen Archive**
168	28-Jun-11	ARGR	-	28	0.2	YOY	unknown	IM	Block Seine Net I	1	**WB Frozen Archive**
169	28-Jun-11	ARGR	-	26.5	0.2	YOY	unknown	IM	Block Seine Net I	1	**WB Frozen Archive**
170	28-Jun-11	ARGR	-	27.5	0.1	YOY	unknown	IM	Block Seine Net I	1	**WB Frozen Archive**
171	28-Jun-11	ARGR	-	27.5	0.2	YOY	unknown	IM	Block Seine Net I	1	**WB Frozen Archive**
172	28-Jun-11	ARGR	-	26	0.1	YOY	unknown	IM	Block Seine Net I	1	**WB Frozen Archive**
173	28-Jun-11	ARGR	-	25	0.1	YOY	unknown	IM	Block Seine Net I	1	**WB Frozen Archive**
174	28-Jun-11	ARGR	-	28.5	0.2	YOY	unknown	IM	Block Seine Net I	1	**WB Frozen Archive**
175	28-Jun-11	ARGR	-	27	0.1	YOY	unknown	IM	Block Seine Net I	1	**WB Frozen Archive**
176	28-Jun-11	ARGR	-	25	0.1	YOY	unknown	IM	Block Seine Net I	1	**WB Frozen Archive**
177	28-Jun-11	ARGR	-	30	0.2	YOY	unknown	IM	Block Seine Net I	1	**WB Frozen Archive**
178	28-Jun-11	ARGR	-	28	0.2	YOY	unknown	IM	Block Seine Net I	1	**WB Frozen Archive**
179	28-Jun-11	ARGR	-	28	0.2	YOY	unknown	IM	Block Seine Net I	1	**WB Frozen Archive**
180	28-Jun-11	ARGR	-	27	-	YOY	unknown	IM	Block Seine Net II	1	live released
181	28-Jun-11	ARGR	-	26	-	YOY	unknown	IM	Block Seine Net II	1	live released
182	28-Jun-11	ARGR	-	29	-	YOY	unknown	IM	Block Seine Net II	1	live released
183	28-Jun-11	ARGR	-	24	-	YOY	unknown	IM	Block Seine Net II	1	live released
184	28-Jun-11	ARGR	-	31	-	YOY	unknown	IM	Block Seine Net II	1	live released
185	28-Jun-11	ARGR	-	25	-	YOY	unknown	IM	Block Seine Net II	1	live released
186	28-Jun-11	ARGR	-	21	-	YOY	unknown	IM	Block Seine Net II	1	live released
187	28-Jun-11	ARGR	-	30	-	YOY	unknown	IM	Block Seine Net II	1	live released
188	28-Jun-11	ARGR	-	25	-	YOY	unknown	IM	Block Seine Net II	1	live released
189	28-Jun-11	ARGR	-	28	-	YOY	unknown	IM	Block Seine Net II	1	live released
190	28-Jun-11	ARGR	-	27	-	YOY	unknown	IM	Block Seine Net II	1	live released
191	28-Jun-11	ARGR	-	31	-	YOY	unknown	IM	Block Seine Net II	1	live released
192	28-Jun-11	ARGR	-	25	-	YOY	unknown	IM	Block Seine Net II	1	live released
193	28-Jun-11	ARGR	-	28	-	YOY	unknown	IM	Block Seine Net II	1	live released
194	28-Jun-11	ARGR	-	27	-	YOY	unknown	IM	Block Seine Net II	1	live released
195	28-Jun-11	ARGR	-	28	-	YOY	unknown	IM	Block Seine Net II	1	live released
196	28-Jun-11	ARGR	-	26	-	YOY	unknown	IM	Block Seine Net II	1	live released
197	28-Jun-11	ARGR	-	29	-	YOY	unknown	IM	Block Seine Net II	1	live released
198	28-Jun-11	ARGR	-	25	-	YOY	unknown	IM	Block Seine Net II	1	live released
199	28-Jun-11	ARGR	-	25	-	YOY	unknown	IM	Block Seine Net II	1	live released
200	28-Jun-11	ARGR	-	27	-	YOY	unknown	IM	Block Seine Net II	1	live released
201	28-Jun-11	ARGR	-	26	-	YOY	unknown	IM	Block Seine Net II	1	live released
202	28-Jun-11	ARGR	-	26	-	YOY	unknown	IM	Block Seine Net II	1	live released
203	28-Jun-11	ARGR	-	23	-	YOY	unknown	IM	Block Seine Net II	1	live released
211	28-Jun-11	ARGR	-	28	51.0	YOY	unknown	IM	Block Seine Net III	1	live released
212	28-Jun-11	ARGR	-	22	-	YOY	unknown	IM	Block Seine Net III	1	live released
213	28-Jun-11	ARGR	-	22	-	YOY	unknown	IM	Block Seine Net III	1	live released
214	28-Jun-11	ARGR	-	26	-	YOY	unknown	IM	Block Seine Net III	1	live released
215	28-Jun-11	ARGR	-	28	-	YOY	unknown	IM	Block Seine Net III	1	live released, deformed
216	28-Jun-11	ARGR	-	34	-	YOY	unknown	IM	Block Seine Net III	1	live released
217	28-Jun-11	ARGR	-	30	-	YOY	unknown	IM	Block Seine Net III	1	live released
218	28-Jun-11	ARGR	-	27	-	YOY	unknown	IM	Block Seine Net III	1	live released
219	28-Jun-11	ARGR	-	32	-	YOY	unknown	IM	Block Seine Net III	1	live released
220	28-Jun-11	ARGR	-	29	-	YOY	unknown	IM	Block Seine Net III	1	live released
221	28-Jun-11	ARGR	-	28	-	YOY	unknown	IM	Block Seine Net III	1	live released
222	28-Jun-11	ARGR	-	26	-	YOY	unknown	IM	Block Seine Net III	1	live released
223	28-Jun-11	ARGR	-	25	-	YOY	unknown	IM	Block Seine Net III	1	live released
224	28-Jun-11	ARGR	-	28	-	YOY	unknown	IM	Block Seine Net III	1	live released
225	28-Jun-11	ARGR	-	33	-	YOY	unknown	IM	Block Seine Net III	1	live released

Sample ID	Date	Species	Total Length (mm)	Fork Length (mm)	Weight (g)	Life Stage	Sex	Maturity Code	Capture Method	Reach	Comment
226	28-Jun-11	ARGR	-	30	-	YOY	unknown	IM	Block Seine Net III	1	live released
227	28-Jun-11	ARGR	-	30	-	YOY	unknown	IM	Block Seine Net III	1	live released
228	28-Jun-11	ARGR	-	27	-	YOY	unknown	IM	Block Seine Net III	1	live released
229	28-Jun-11	ARGR	-	26	-	YOY	unknown	IM	Block Seine Net III	1	live released
230	28-Jun-11	ARGR	-	25	-	YOY	unknown	IM	Block Seine Net III	1	live released
231	28-Jun-11	ARGR	-	28	-	YOY	unknown	IM	Block Seine Net III	1	live released
232	28-Jun-11	ARGR	-	29	-	YOY	unknown	IM	Block Seine Net III	1	live released
236	28-Jun-11	ARGR	-	30	-	YOY	unknown	IM	Block Seine Net III	1	live released
255	28-Jun-11	ARGR	-	26.5	0.2	YOY	unknown	IM	Block Seine Net III	1	**WB Frozen Archive**
256	28-Jun-11	ARGR	-	26	0.1	YOY	unknown	IM	Block Seine Net III	1	**WB Frozen Archive**
257	28-Jun-11	ARGR	-	28	0.2	YOY	unknown	IM	Block Seine Net III	1	**WB Frozen Archive**
258	28-Jun-11	ARGR	-	26	0.1	YOY	unknown	IM	Block Seine Net III	1	**WB Frozen Archive**
259	28-Jun-11	ARGR	-	28.5	0.2	YOY	unknown	IM	Block Seine Net III	1	**WB Frozen Archive**
260	28-Jun-11	ARGR	-	28	0.2	YOY	unknown	IM	Block Seine Net III	1	**WB Frozen Archive**
261	28-Jun-11	ARGR	-	28	0.2	YOY	unknown	IM	Block Seine Net III	1	**WB Frozen Archive**
207	28-Jun-11	LNSC	-	16	-	YOY	unknown	IM	Block Seine Net II	1	live released
208	28-Jun-11	LNSC	-	15	-	YOY	unknown	IM	Block Seine Net II	1	live released
209	28-Jun-11	LNSC	-	15	-	YOY	unknown	IM	Block Seine Net II	1	live released
210	28-Jun-11	LNSC	-	15	-	YOY	unknown	IM	Block Seine Net II	1	live released
235	28-Jun-11	LNSC	-	67	-	YOY/Juvenile	unknown	unknown	Block Seine Net III	1	live released
237	28-Jun-11	LNSC	-	13	-	YOY	unknown	IM	Block Seine Net III	1	live released
238	28-Jun-11	LNSC	-	14	-	YOY	unknown	IM	Block Seine Net III	1	live released
239	28-Jun-11	LNSC	-	14	-	YOY	unknown	IM	Block Seine Net III	1	live released
240	28-Jun-11	LNSC	-	14	-	YOY	unknown	IM	Block Seine Net III	1	live released
241	28-Jun-11	LNSC	-	15	-	YOY	unknown	IM	Block Seine Net III	1	live released
242	28-Jun-11	LNSC	-	15	-	YOY	unknown	IM	Block Seine Net III	1	live released
243	28-Jun-11	LNSC	-	13	-	YOY	unknown	IM	Block Seine Net III	1	live released
244	28-Jun-11	LNSC	-	14	-	YOY	unknown	IM	Block Seine Net III	1	live released
245	28-Jun-11	LNSC	-	14	-	YOY	unknown	IM	Block Seine Net III	1	live released
246	28-Jun-11	LNSC	-	13	-	YOY	unknown	IM	Block Seine Net III	1	live released
247	28-Jun-11	LNSC	-	15	-	YOY	unknown	IM	Block Seine Net III	1	live released
248	28-Jun-11	LNSC	-	12	-	YOY	unknown	IM	Block Seine Net III	1	live released
249	28-Jun-11	LNSC	-	13	-	YOY	unknown	IM	Block Seine Net III	1	live released
250	28-Jun-11	LNSC	-	12	-	YOY	unknown	IM	Block Seine Net III	1	live released
251	28-Jun-11	LNSC	-	14	-	YOY	unknown	IM	Block Seine Net III	1	live released
252	28-Jun-11	LNSC	-	14	-	YOY	unknown	IM	Block Seine Net III	1	live released
253	28-Jun-11	LNSC	-	16	-	YOY	unknown	IM	Block Seine Net III	1	live released
254	28-Jun-11	LNSC	-	13	-	YOY	unknown	IM	Block Seine Net III	1	live released
204	28-Jun-11	NNST	41	-	-	Adult	unknown	unknown	Block Seine Net II	1	live released
205	28-Jun-11	NNST	44	-	-	Adult	unknown	unknown	Block Seine Net II	1	live released
206	28-Jun-11	NNST	52	-	-	Adult	unknown	unknown	Block Seine Net II	1	live released
234	28-Jun-11	NNST	44	-	-	Adult	unknown	unknown	Block Seine Net III	1	live released
233	28-Jun-11	NRPK	-	21		YOY	unknown	IM	Block Seine Net III	1	live released
262	29-Jun-11	NRPK	-	473	813.0	Adult	M	RS	Angling I	1	**Samples collected: Dorsal tissue x 2 (Frozen), Liver (Frozen), gonad (Frozen), OT, CL, FR.**
264	30-Jun-11	ARGR	-	32	-	YOY	unknown	IM	Block Seine Net I	1	live released
265	30-Jun-11	ARGR	-	32	-	YOY	unknown	IM	Block Seine Net I	1	live released
266	30-Jun-11	ARGR	-	31	-	YOY	unknown	IM	Block Seine Net I	1	live released
267	30-Jun-11	ARGR	-	29	-	YOY	unknown	IM	Block Seine Net I	1	live released
268	30-Jun-11	ARGR	-	33	-	YOY	unknown	IM	Block Seine Net I	1	live released
269	30-Jun-11	ARGR	-	34	-	YOY	unknown	IM	Block Seine Net I	1	live released
270	30-Jun-11	ARGR	-	28	-	YOY	unknown	IM	Block Seine Net I	1	live released
271	30-Jun-11	ARGR	-	32	-	YOY	unknown	IM	Block Seine Net I	1	live released
272	30-Jun-11	ARGR	-	29	-	YOY	unknown	IM	Block Seine Net I	1	live released
273	30-Jun-11	ARGR	-	29	-	YOY	unknown	IM	Block Seine Net I	1	live released
274	30-Jun-11	ARGR	-	33	-	YOY	unknown	IM	Block Seine Net I	1	live released
275	30-Jun-11	ARGR	--	30	-	YOY	unknown	IM	Block Seine Net I	1	live released
276	30-Jun-11	ARGR	-	32	-	YOY	unknown	IM	Block Seine Net I	1	live released
281	30-Jun-11	ARGR	-	28	-	YOY	unknown	IM	Block Seine Net I	1	live released
283	30-Jun-11	ARGR	-	31.5	0.3	YOY	unknown	IM	Block Seine Net I	1	**WB Frozen Archive**
284	30-Jun-11	ARGR	-	27	0.2	YOY	unknown	IM	Block Seine Net I	1	**WB Frozen Archive**
285	30-Jun-11	ARGR	-	31	0.2	YOY	unknown	IM	Block Seine Net I	1	**WB Frozen Archive**
289	30-Jun-11	ARGR	-	29	-	YOY	unknown	IM	Block Seine Net II	1	live released
290	30-Jun-11	ARGR	-	28	-	YOY	unknown	IM	Block Seine Net II	1	live released
291	30-Jun-11	ARGR	-	32	-	YOY	unknown	IM	Block Seine Net II	1	live released
292	30-Jun-11	ARGR	-	31	-	YOY	unknown	IM	Block Seine Net II	1	live released
293	30-Jun-11	ARGR	-	35	-	YOY	unknown	IM	Block Seine Net II	1	live released
294	30-Jun-11	ARGR	-	24	-	YOY	unknown	IM	Block Seine Net II	1	live released
308	30-Jun-11	ARGR	-	27	-	YOY	unknown	IM	Block Seine Net III	1	live released
309	30-Jun-11	ARGR	-	31	-	YOY	unknown	IM	Block Seine Net III	1	live released
310	30-Jun-11	ARGR	-	32	-	YOY	unknown	IM	Block Seine Net III	1	live released
311	30-Jun-11	ARGR	-	30	-	YOY	unknown	IM	Block Seine Net III	1	live released
312	30-Jun-11	ARGR	-	30	-	YOY	unknown	IM	Block Seine Net III	1	live released
313	30-Jun-11	ARGR	-	29	-	YOY	unknown	IM	Block Seine Net III	1	live released
314	30-Jun-11	ARGR	-	31	-	YOY	unknown	IM	Block Seine Net III	1	live released
315	30-Jun-11	ARGR	-	30	-	YOY	unknown	IM	Block Seine Net III	1	live released
316	30-Jun-11	ARGR	-	28	-	YOY	unknown	IM	Block Seine Net III	1	live released
317	30-Jun-11	ARGR	-	34	-	YOY	unknown	IM	Block Seine Net III	1	live released
318	30-Jun-11	ARGR	-	31	-	YOY	unknown	IM	Block Seine Net III	1	live released
319	30-Jun-11	ARGR	-	35	-	YOY	unknown	IM	Block Seine Net III	1	live released
320	30-Jun-11	ARGR	-	32	-	YOY	unknown	IM	Block Seine Net III	1	live released
321	30-Jun-11	ARGR	-	31	-	YOY	unknown	IM	Block Seine Net III	1	live released
322	30-Jun-11	ARGR	-	33	-	YOY	unknown	IM	Block Seine Net III	1	live released
323	30-Jun-11	ARGR	-	29	-	YOY	unknown	IM	Block Seine Net III	1	live released
324	30-Jun-11	ARGR	-	31	-	YOY	unknown	IM	Block Seine Net III	1	live released
325	30-Jun-11	ARGR	-	31	-	YOY	unknown	IM	Block Seine Net III	1	live released
326	30-Jun-11	ARGR	-	25	-	YOY	unknown	IM	Block Seine Net III	1	live released
327	30-Jun-11	ARGR	-	31	-	YOY	unknown	IM	Block Seine Net III	1	live released
328	30-Jun-11	ARGR	-	32	-	YOY	unknown	IM	Block Seine Net III	1	live released
263	30-Jun-11	LNSC	-	19	-	YOY	unknown	IM	Block Seine Net I	1	live released
278	30-Jun-11	LNSC	-	17	-	YOY	unknown	IM	Block Seine Net I	1	live released
279	30-Jun-11	LNSC	-	18	-	YOY	unknown	IM	Block Seine Net I	1	live released
280	30-Jun-11	LNSC	-	17	-	YOY	unknown	IM	Block Seine Net I	1	live released
282	30-Jun-11	LNSC	-	17	-	YOY	unknown	IM	Block Seine Net I	1	live released
286	30-Jun-11	LNSC	-	18	-	YOY	unknown	IM	Block Seine Net II	1	live released
287	30-Jun-11	LNSC	-	18	-	YOY	unknown	IM	Block Seine Net II	1	live released
288	30-Jun-11	LNSC	-	17	-	YOY	unknown	IM	Block Seine Net II	1	live released
295	30-Jun-11	LNSC	-	17	-	YOY	unknown	IM	Block Seine Net II	1	live released
296	30-Jun-11	LNSC	-	17	-	YOY	unknown	IM	Block Seine Net II	1	live released
297	30-Jun-11	LNSC	-	15	-	YOY	unknown	IM	Block Seine Net II	1	live released
298	30-Jun-11	LNSC	-	15	-	YOY	unknown	IM	Block Seine Net II	1	live released
299	30-Jun-11	LNSC	-	16	-	YOY	unknown	IM	Block Seine Net II	1	live released
300	30-Jun-11	LNSC	-	17	-	YOY	unknown	IM	Block Seine Net II	1	live released
301	30-Jun-11	LNSC	-	19	-	YOY	unknown	IM	Block Seine Net II	1	live released
302	30-Jun-11	LNSC	-	18	-	YOY	unknown	IM	Block Seine Net II	1	live released
303	30-Jun-11	LNSC	-	16	-	YOY	unknown	IM	Block Seine Net II	1	live released
304	30-Jun-11	LNSC	-	15	-	YOY	unknown	IM	Block Seine Net II	1	live released
305	30-Jun-11	LNSC	-	15	-	YOY	unknown	IM	Block Seine Net II	1	live released
306	30-Jun-11	LNSC	-	15	-	YOY	unknown	IM	Block Seine Net II	1	live released
307	30-Jun-11	LNSC	-	14	-	YOY	unknown	IM	Block Seine Net II	1	live released
331	30-Jun-11	LNSC	-	16	-	YOY	unknown	IM	Block Seine Net III	1	live released
332	30-Jun-11	LNSC	-	14	-	YOY	unknown	IM	Block Seine Net III	1	live released
333	30-Jun-11	LNSC	-	15	-	YOY	unknown	IM	Block Seine Net III	1	live released
334	30-Jun-11	LNSC	-	18	-	YOY	unknown	IM	Block Seine Net III	1	live released
335	30-Jun-11	LNSC	-	17	-	YOY	unknown	IM	Block Seine Net III	1	live released
336	30-Jun-11	LNSC	-	15	-	YOY	unknown	IM	Block Seine Net III	1	live released
337	30-Jun-11	LNSC	-	16	-	YOY	unknown	IM	Block Seine Net III	1	live released
338	30-Jun-11	LNSC	-	15	-	YOY	unknown	IM	Block Seine Net III	1	live released
339	30-Jun-11	LNSC	-	16	-	YOY	unknown	IM	Block Seine Net III	1	live released
340	30-Jun-11	LNSC	-	15	-	YOY	unknown	IM	Block Seine Net III	1	live released
341	30-Jun-11	LNSC	-	18	-	YOY	unknown	IM	Block Seine Net III	1	live released
342	30-Jun-11	LNSC	-	17	-	YOY	unknown	IM	Block Seine Net III	1	live released
343	30-Jun-11	LNSC	-	17	-	YOY	unknown	IM	Block Seine Net III	1	live released
344	30-Jun-11	LNSC	-	17	-	YOY	unknown	IM	Block Seine Net III	1	live released
345	30-Jun-11	LNSC	-	15	-	YOY	unknown	IM	Block Seine Net III	1	live released
346	30-Jun-11	LNSC	-	16	-	YOY	unknown	IM	Block Seine Net III	1	live released
277	30-Jun-11	NNST	42	-	-	YOY	unknown	IM	Block Seine Net I	1	live released
329	30-Jun-11	NNST	58	-	-	Adult	unknown	unknown	Block Seine Net III	1	live released
330	30-Jun-11	NNST	47	-	-	Adult	unknown	unknown	Block Seine Net III	1	live released
352	7-Jul-11	ARGR	-	38	-	YOY	unknown	unknown	Block Seine Net III	1	live released
353	7-Jul-11	ARGR	-	42	-	YOY	unknown	unknown	Block Seine Net III	1	live released
354	7-Jul-11	ARGR	-	38	-	YOY	unknown	unknown	Block Seine Net III	1	live released
355	7-Jul-11	ARGR	-	41	-	YOY	unknown	unknown	Block Seine Net III	1	live released
356	7-Jul-11	ARGR	-	45	-	YOY	unknown	unknown	Block Seine Net III	1	live released
357	7-Jul-11	ARGR	-	41	-	YOY	unknown	unknown	Block Seine Net III	1	live released
358	7-Jul-11	ARGR	-	43	-	YOY	unknown	unknown	Block Seine Net III	1	live released
359	7-Jul-11	ARGR	-	38	-	YOY	unknown	unknown	Block Seine Net III	1	live released
360	7-Jul-11	ARGR	-	36	-	YOY	unknown	unknown	Block Seine Net III	1	live released
361	7-Jul-11	ARGR	-	38	-	YOY	unknown	unknown	Block Seine Net III	1	live released
362	7-Jul-11	ARGR	-	34	-	YOY	unknown	unknown	Block Seine Net III	1	live released
363	7-Jul-11	ARGR	-	42	-	YOY	unknown	unknown	Block Seine Net III	1	live released
364	7-Jul-11	ARGR	-	44	-	YOY	unknown	unknown	Block Seine Net III	1	live released
366	7-Jul-11	ARGR	-	41	-	YOY	unknown	unknown	Block Seine Net V	1	live released
367	7-Jul-11	ARGR	-	44	-	YOY	unknown	unknown	Block Seine Net V	1	live released
368	7-Jul-11	ARGR	-	47	-	YOY	unknown	unknown	Block Seine Net V	1	live released
369	7-Jul-11	ARGR	-	35	-	YOY	unknown	unknown	Block Seine Net V	1	live released
370	7-Jul-11	ARGR	-	28	-	YOY	unknown	unknown	Block Seine Net V	1	live released
371	7-Jul-11	ARGR	-	30	-	YOY	unknown	unknown	Block Seine Net V	1	live released
372	7-Jul-11	ARGR	-	38	-	YOY	unknown	unknown	Block Seine Net V	1	live released
373	7-Jul-11	ARGR	-	41	-	YOY	unknown	unknown	Block Seine Net V	1	live released
374	7-Jul-11	ARGR	-	36	-	YOY	unknown	unknown	Block Seine Net V	1	live released
375	7-Jul-11	ARGR	-	44	-	YOY	unknown	unknown	Block Seine Net V	1	live released
376	7-Jul-11	ARGR	-	38	-	YOY	unknown	unknown	Block Seine Net V	1	live released
377	7-Jul-11	ARGR	-	36	-	YOY	unknown	unknown	Block Seine Net V	1	live released
378	7-Jul-11	ARGR	-	34	-	YOY	unknown	unknown	Block Seine Net V	1	live released
379	7-Jul-11	ARGR	-	37	-	YOY	unknown	unknown	Block Seine Net V	1	live released
380	7-Jul-11	ARGR	-	38	-	YOY	unknown	unknown	Block Seine Net V	1	live released
381	7-Jul-11	ARGR	-	44	-	YOY	unknown	unknown	Block Seine Net V	1	live released
382	7-Jul-11	ARGR	-	40	-	YOY	unknown	unknown	Block Seine Net V	1	live released
383	7-Jul-11	ARGR	-	44	-	YOY	unknown	unknown	Block Seine Net V	1	live released
384	7-Jul-11	ARGR	-	43	-	YOY	unknown	unknown	Block Seine Net V	1	live released
385	7-Jul-11	ARGR	-	42	-	YOY	unknown	unknown	Block Seine Net V	1	live released
386	7-Jul-11	ARGR	-	36	-	YOY	unknown	unknown	Block Seine Net V	1	live released
387	7-Jul-11	ARGR	-	32	-	YOY	unknown	unknown	Block Seine Net V	1	live released
388	7-Jul-11	ARGR	-	40	-	YOY	unknown	unknown	Block Seine Net V	1	live released
389	7-Jul-11	ARGR	-	38	-	YOY	unknown	unknown	Block Seine Net V	1	live released
348	7-Jul-11	LNSC	-	22	-	YOY	unknown	unknown	Block Seine Net II	1	live released
349	7-Jul-11	LNSC	-	20	-	YOY	unknown	unknown	Block Seine Net II	1	live released
350	7-Jul-11	LNSC	-	22	-	YOY	unknown	unknown	Block Seine Net II	1	live released
351	7-Jul-11	LNSC	-	21	-	YOY	unknown	unknown	Block Seine Net II	1	live released
365	7-Jul-11	NNST	48	-	-	Adult	unknown	unknown	Block Seine Net IV	1	live released
347	7-Jul-11	NRPK	-	499	846.0	Adult	M	RS	Angling I	1	**Samples collected: Dorsal tissue x 2 (Frozen), Liver (Frozen), gonad (Frozen), OT, CL, FR.**
390	7-Jul-11	NRPK	-	30	-	YOY	unknown	unknown	Block Seine Net V	1	live released
394	11-Jul-11	ARGR	-	39	-	YOY	unknown	unknown	Block Seine Net IV	1	live released
396	11-Jul-11	ARGR	-	43	-	YOY	unknown	unknown	Kicknet I	1	live released
392	11-Jul-11	LNSC	-	22	-	YOY	unknown	unknown	Block Seine Net II	1	live released
397	11-Jul-11	LNSC	-	74	-	Juvenile	unknown	unknown	Kicknet I	1	live released
393	11-Jul-11	NNST	45	-	-	Adult	unknown	unknown	Block Seine Net II	1	live released
395	11-Jul-11	NNST	44	-	-	Adult	unknown	unknown	Kicknet I	1	live released
398	11-Jul-11	NRPK	-	47	-	YOY	unknown	unknown	Kicknet I	1	live released
391	11-Jul-11	SLSC	-	45	1.1	Juvenile/Adult	unknown	unknown	Block Seine Net I	1	live released
401	12-Jul-11	ARGR	-	39	-	YOY	unknown	unknown	Electrofishing I	1	live released
407	12-Jul-11	LNSC	-	63	-	Juvenile	unknown	unknown	Electrofishing II	1	live released
402	12-Jul-11	NNST	49	-	-	Adult	unknown	unknown	Electrofishing I	1	live released
403	12-Jul-11	NNST	44	-	-	Adult	unknown	unknown	Electrofishing I	1	live released
404	12-Jul-11	NNST	40	-	-	Adult	unknown	unknown	Electrofishing I	1	live released
406	12-Jul-11	NNST	48	-	-	Adult	unknown	unknown	Electrofishing II	1	live released
399	12-Jul-11	NRPK	-	508	779.0	Adult	M	RS	Angling I	0	**Samples collected: Dorsal tissue x 2 (Frozen), Liver (Frozen), gonad (Frozen), OT, CL, FR.**
405	12-Jul-11	SLSC	59	-	-	Adult	unknown	unknown	Electrofishing I	1	live released
400	12-Jul-11	TRPR	-	78	4.2	Adult	unknown	unknown	Electrofishing I	1	live released

Note: This table only includes fish captured in 2011 and not fish observation

g=grams; mm=millimeters; YOY= young-of-the-year; OT = Otolith; FR - Fin Ray; CL = Cleithra; F = Female; M = Male; RS = Resting; MA = Maturing.

Species codes:
ARGR = Arctic Grayling
SLSC = Slimy Sculpin
NNST – Ninespine Stickleback
NRPK = Northern Pike
LNSC = Longnose Sucker
LKWH = Lake Whitefish
CISC = Cisco

Table A2: Total Catch Per Unit Effort of Fish Captured in Reach 0 to Reach 6, Baker Creek, 2011

Date	Effort#	Reach Fished	Effort	Number of Fish Captured	Number of Eggs Captured	CPUE	Unit
27-May-11	Active seining I	1	-	1	-	not valid	-
27-May-11	Active seining II	1	-	0	-	not valid	-
29-Jun-11	Angling I	1	45 min x 1 person	1	-	1.33	per hour
7-Jul-11	Angling I	0	66 min	1	-	0.91	per hour
9-Jun-11	Backpack Electrofishing I	1	742 sec	80	0	0.11	per second
28-Jun-11	Backpack Electrofishing I	5	47 sec	0	-	0.00	per second
9-Jun-11	Backpack Electrofishing II	1	239 sec	12	0	0.05	per second
28-Jun-11	Block Seine Net I	1	200 sec	35	-	0.18	per second
30-Jun-11	Block Seine Net I	1	200 sec	23	-	0.12	per second
7-Jul-11	Block Seine Net I	1	200 sec	0	-	0.00	per second
11-Jul-11	Block Seine Net I	1	200 sec	1	-	0.01	per second
28-Jun-11	Block Seine Net II	1	200 sec	31	-	0.16	per second
30-Jun-11	Block Seine Net II	1	200 sec	22	-	0.11	per second
7-Jul-11	Block Seine Net II	1	200 sec	4	-	0.02	per second
11-Jul-11	Block Seine Net II	1	200 sec	2	-	0.01	per second
28-Jun-11	Block Seine Net III	1	200 sec	51	-	0.26	per second
30-Jun-11	Block Seine Net III	1	200 sec	39	-	0.20	per second
7-Jul-11	Block Seine Net III	1	200 sec	13	-	0.07	per second
11-Jul-11	Block Seine Net III	1	200 sec	0	-	0.00	per second
7-Jul-11	Block Seine Net IV	1	200 sec	1	-	0.01	per second
11-Jul-11	Block Seine Net IV	1	200 sec	1	-	0.01	per second
7-Jul-11	Block Seine Net V	1	200 sec	25	-	0.13	per second
12-Jul-11	Electrofishing 1	1	88 sec	6	-	0.07	per second
12-Jul-11	Electrofishing 2	0	117 sec	1	-	0.01	per second
12-Jul-11	Electrofishing 3	1	145 sec	2	-	0.01	per second
23-Jun-11 to 24-Jun-11	Gill net I	6	19h 13 min	21	-	1.08	per hour
23-Jun-11 to 24-Jun-11	Gill Net II	6	19 h	25	-	1.32	per hour
1-Jun-11	Kick net I	6	-	-	~6	not valid	-
3-Jun-11	Kick net I	2	-	-	20	not valid	-
3-Jun-11	Kick net I	4	-	-	20	not valid	-
3-Jun-11	Kick net I	6	-	-	12	not valid	-
10-Jun-11	Kick net I	1	-	-	70	not valid	-
10-Jun-11	Kick net I	2	-	-	34	not valid	-
10-Jun-11	Kick net I	4	-	-	12	not valid	-
10-Jun-11	Kick net I	5	-	-	6	not valid	-
11-Jul-11	Kick net I	0-1	60 sec	4	-	0.07	per meter
1-Jun-11	Kick net II	5	-	-	~6	not valid	-
3-Jun-11	Kick net II	4	-	-	30	not valid	-
3-Jun-11	Kick net II	6	-	-	6	not valid	-
10-Jun-11	Kick net II	1	-	-	18	not valid	-
10-Jun-11	Kick net II	2	-	-	24	not valid	-
1-Jun-11	Kick net III	2	-	-	~4	not valid	-

CPUE = catch-per-unit-effort; n/a = not applicable; m^2 = meters squared; sec= second; min= minute
Note: Catches in Reach 6 were below the main waterfall.

Table A3: Summary of Shoreline Observations in Baker Creek, May and June 2011

Date	Reach	Species Observed	Number Observed	Comment
17-May-11	0	UNK	2	Fish observed at mouth of Baker Creek, but not within lower Reach (
20-May-11	1	ARGR	8	Observed 2 adult ARGR in riffle in Lower Reach 1 and 6 adult ARGR in lower portion of Culvert Poc
20-May-11	1	NRPK	1	Observed 1 adult NRPKat Reach 0/1 interface
22-May-11	1	NRPK	3	1 dult NRPK observed at first riffle below culvert and 2 adult NRPK holding immediately below the culvert
24-May-11	Trapper Creek	NNST	2	2 NNST observed in Trapper Creek adjacent to the exposed tailings in Baker Pond
25-May-11	1	NRPK	1	1 adult NRPK observed swimming down the culver
28-May-11	4	ARGR	6	Observed ARGR in glide lower portion of Giant Pool-spawning behaviou
28-May-11	4	ARGR	6	Observed ARGR in upper Reach 4
28-May-11	4	ARGR	16	Observed ARGR upstream of Wintering Hole Pool in glide
29-May-11	4	ARGR	5	Observed ARGR in glide in lower Giant Pool
30-May-11	4	ARGR	8	Observed ARGR in First Riffle Run - spawning behaviou
30-May-11	4	ARGR	3	Observed ARGR in First Riffle (Reach 4/5 intersection)
30-May-11	4	ARGR	5	Observed ARGR in glide in lower portion of Giant Pool - spawning behaviou
30-May-11	4	ARGR	6	Observed ARGR in Spawning Hole - spawning behaviou
30-May-11	4	ARGR	6	Observed ARGR in third Riffle Below Spawning Run - spawning behaviou
30-May-11	4	ARGR	2	Observed ARGR in The Glide Above Long Run - spawning behaviou
30-May-11	4	ARGR	5	Observed ARGR in the End of Long Run - spawning behaviou
30-May-11	3	ARGR	5	Observed 2 ARGR in riffles downstreamof 90 degree bend in lower Reach 3 - spawning behaviou
30-May-11	2	ARGR	3	Observed adult ARGR holding upstream of riffles at Collapsed Culver
30-May-11	4	NRPK	2	Observed in Spawning Run area of mid Reach 4 - migrating througl
30-May-11	2	NRPK	9	Observed adult NRPK in pool/marsh area u/s of collapsed culvert - spawning behaviour observe
1-Jun-11	6	ARGR	1	Observed ARGR below Great Falls in Reach 6.
1-Jun-11	4	ARGR	>6	All fish observed were adult spawners (Upper Reach 4)
1-Jun-11	5	ARGR	1	Observed 1 adult ARGR in middle of Reach 5
1-Jun-11	2	ARGR	1	Observed one adult ARGR
1-Jun-11	1	ARGR	1	Observed 1 adult ARGR in lower Reach 1
1-Jun-11	6	ARGR eggs	~6	Kick netted eggs throughout reach 6, photographed by DFC
1-Jun-11	5	ARGR eggs	~6	Found several ARGR eggs in Riffle at Beaver Dam site in mid Reach 5
1-Jun-11	2	ARGR eggs	4	Found ARGR eggs in a wide range of areas - eggs were found in riffles and not glide
1-Jun-11	2	LNSC	8	-
1-Jun-11	3	ARGR eggs	numerous	sampled numerous eggs in reach
1-Jun-11	6	NRPK	3	Observed in Giant Falls in Reach 6
3-Jun-11	6	ARGR	1	Observed adult male ARGR below Great Falls
3-Jun-11	6	ARGR eggs	~12	Found eggs at 4 different sites below falls - eggs were both ARGR and LNSC
3-Jun-11	4	ARGR eggs	~20	Found eggs at various sites throughout Reach 4
3-Jun-11	6	LNSC eggs	~6	Found eggs at 4 different sites below falls - eggs were both ARGR and LNSC
3-Jun-11	4	LNSC eggs	~30	-
3-Jun-11	2	LNSC eggs	~20	-
3-Jun-11	6	NRPK	1	
8-Jun-11	4	LNSC	10	Observed in last riffle at Last Rapids (lower Reach 4)
8-Jun-11	5	NRPK	1	Observed one adult NRPK close to the Beaver Dam in mid Reach 5
8-Jun-11	4	NRPK	4	Observed in last riffle before the bridge in lower Reach 4
8-Jun-11	0	UNK	2	Surface activity of unknown fish species observed near the Houseboat in lower Reach 0
9-Jun-11	1	NNST	>800	Observed large groups of ninespine stickleback schooling in Reach 1 in Culvert Pool. Several other fish species were captured and released by electrofishing - refer to Tables A1, A2, A3, and A4 for catch numbers
10-Jun-11	4	ARGR eggs	~12	Found ARGR eggs at several sites. Some "eyed" but several developmental stages observed. All healthy with moving embryos
10-Jun-11	5	ARGR eggs	6	Found ARGR eggs at Beaver Dam site in mid Reach 5
10-Jun-11	2	ARGR eggs	~24	All eggs looked good, many photos taken showing both LNSC and ARGR eggs togethe
10-Jun-11	1	ARGR eggs	8	Found eggs above the culvert in Reach 1. All appeared healthy
10-Jun-11	1	ARGR eggs	14	Found below the culvert in Reach 1 in the run. All appeared healthy
10-Jun-11	2	LNSC eggs	~35	All eggs looked good, many photos taken showing both LNSC and ARGR eggs togethe
10-Jun-11	1	LNSC eggs	62	Found LNSC eggs above the culvert in Reach 1. All appeared healthy
10-Jun-11	1	LNSC eggs	4	Found LNSC eggs below the culvert in Reach 1 in the run. All appeared health
13-Jun-11	5	ARGR	1	Adult male ARGR observed surface feeding in lower Reach 5
13-Jun-11	1	LNSC eggs	~50	Found many LNSC eggs incubating
13-Jun-11	0 to 1	NNST	300-500	Ninespine stickleback are widespread between Reach 0 and Reach 1 up to the culve
13-Jun-11	0	UNK minnows	300-500	No ARGR eggs present anywhere below the culvert - assume they hatched, but no YOY ARGR were observed in the area
13-Jun-11	5	UNK protolarvae	4	Protolarvae present along the shoreline near the Beaver Dam in mid Reach 5
15-Jun-11	4	ARGR YOY	690	Observed YOY ARGR hiding along edges of shoreline, observed 100-150 YOY in small area (2m x 2m) inside of pool below giant pool riffle in Reach 4. Walked along road side of stream from bottom to top of Giant Pool in Reach 4 and counted 690 YOY ARGR.

Table A4: List of Fish Collected and Archived from Baker Creek, 2011[A]

Fish Number*	Date	Location	Species	Fork length (mm)	Weight (g) [B]	Archive status	Life Stage	Maturity Code	Sex	Carcass Wt (g)
100	24-Jun-11	Reach 6, Baker Pond	NRPK	628	1545	**Samples collected: Dorsal tissue x 2 (Frozen), Liver (Frozen), gonad (Frozen), OT, CL, FR.**	Adult	RS	F	1257
101	24-Jun-11	Reach 6, Baker Pond	NRPK	668	2201	**Samples collected: Dorsal tissue x 2 (Frozen), Liver (Frozen), gonad (Frozen), OT, CL, FR.**	Adult	RS	F	2005
102	24-Jun-11	Reach 6, Baker Pond	NRPK	438	615	**Samples collected: Dorsal tissue x 2 (Frozen), Liver (Frozen), gonad (Frozen), OT, CL, FR.**	Adult	RS	M	610
103	24-Jun-11	Reach 6, Baker Pond	NRPK	570	1185	**Samples collected: Dorsal tissue x 2 (Frozen), Liver (Frozen), gonad (Frozen), OT, CL, FR.**	Adult	RS	M	-
104	24-Jun-11	Reach 6, Baker Pond	NRPK	418	487	**Samples collected: Dorsal tissue x 2 (Frozen), Liver (Frozen), gonad (Frozen), OT, CL, FR.**	Adult	unknown	unknown	-
105	24-Jun-11	Reach 6, Baker Pond	NRPK	310	224	**Samples collected: Dorsal tissue x 2 (Frozen), Liver (Frozen), gonad (Frozen), OT, CL, FR.**	Juvenile	MA	M	200
106	24-Jun-11	Reach 6, Baker Pond	NRPK	325	254	**Samples collected: Dorsal tissue x 2 (Frozen), Liver (Frozen), gonad (Frozen), OT, CL, FR.**	Juvenile	MA	F	211
107	24-Jun-11	Reach 6, Baker Pond	LKWH	412	1129	**WB Frozen Archive**	unknown	unknown	unknown	-
108	24-Jun-11	Reach 6, Baker Pond	LKWH	409	1131	**WB Frozen Archive**	unknown	unknown	unknown	-
109	24-Jun-11	Reach 6, Baker Pond	LKWH	397	817	**WB Frozen Archive**	unknown	unknown	unknown	-
110	24-Jun-11	Reach 6, Baker Pond	LKWH	468	1405	**WB Frozen Archive**	unknown	unknown	unknown	-
111	24-Jun-11	Reach 6, Baker Pond	LKWH	445	1143	**WB Frozen Archive**	unknown	unknown	unknown	-
112	24-Jun-11	Reach 6, Baker Pond	LKWH	348	587	**WB Frozen Archive**	unknown	unknown	unknown	-
113	24-Jun-11	Reach 6, Baker Pond	CISC	295	439	**WB Frozen Archive**	unknown	unknown	unknown	-
114	24-Jun-11	Reach 6, Baker Pond	LKWH	238	155	**WB Frozen Archive**	unknown	unknown	unknown	-
115	24-Jun-11	Reach 6, Baker Pond	LKWH	246	155	**WB Frozen Archive**	unknown	unknown	unknown	-
116	24-Jun-11	Reach 6, Baker Pond	LKWH	248	178	**WB Frozen Archive**	unknown	unknown	unknown	-
117	24-Jun-11	Reach 6, Baker Pond	LKWH	234	143	**WB Frozen Archive**	unknown	unknown	unknown	-
118	24-Jun-11	Reach 6, Baker Pond	LKWH	218	102	**WB Frozen Archive**	unknown	unknown	unknown	-
119	24-Jun-11	Reach 6, Baker Pond	LKWH	226	100	**WB Frozen Archive**	unknown	unknown	unknown	-
120	24-Jun-11	Reach 6, Baker Pond	LKWH	220	97	**WB Frozen Archive**	unknown	unknown	unknown	-
121	24-Jun-11	Reach 6, Baker Pond	LKWH	220	112	**WB Frozen Archive**	unknown	unknown	unknown	-
122	24-Jun-11	Reach 6, Baker Pond	LKWH	225	102	**WB Frozen Archive**	unknown	unknown	unknown	-
123	24-Jun-11	Reach 6, Baker Pond	LKWH	224	142	**WB Frozen Archive**	unknown	unknown	unknown	-
124	24-Jun-11	Reach 6, Baker Pond	LKWH	398	965	**WB Frozen Archive**	unknown	unknown	unknown	-
125	24-Jun-11	Reach 6, Baker Pond	LKWH	333	584	**WB Frozen Archive**	unknown	unknown	unknown	-
126	24-Jun-11	Reach 6, Baker Pond	LKWH	342	649	**WB Frozen Archive**	unknown	unknown	unknown	-
127	24-Jun-11	Reach 6, Baker Pond	LKWH	391	923	**WB Frozen Archive**	unknown	unknown	unknown	-
128	24-Jun-11	Reach 6, Baker Pond	LKWH	343	603	**WB Frozen Archive**	unknown	unknown	unknown	-
129	24-Jun-11	Reach 6, Baker Pond	CISC	295	432	**WB Frozen Archive**	unknown	unknown	unknown	-
130	24-Jun-11	Reach 6, Baker Pond	LKWH	248	202	**WB Frozen Archive**	unknown	unknown	unknown	-
131	24-Jun-11	Reach 6, Baker Pond	CISC	268	307	**WB Frozen Archive**	unknown	unknown	unknown	-
132	24-Jun-11	Reach 6, Baker Pond	LKWH	221	134	**WB Frozen Archive**	unknown	unknown	unknown	-
133	24-Jun-11	Reach 6, Baker Pond	LKWH	242	174	**WB Frozen Archive**	unknown	unknown	unknown	-
134	24-Jun-11	Reach 6, Baker Pond	LKWH	216	111	**WB Frozen Archive**	unknown	unknown	unknown	-
135	24-Jun-11	Reach 6, Baker Pond	LKWH	356	688	**WB Frozen Archive**	unknown	unknown	unknown	-
136	24-Jun-11	Reach 6, Baker Pond	LKWH	201	120	**WB Frozen Archive**	unknown	unknown	unknown	-
137	24-Jun-11	Reach 6, Baker Pond	LKWH	196	112	**WB Frozen Archive**	unknown	unknown	unknown	-
138	24-Jun-11	Reach 6, Baker Pond	LKWH	227	174	**WB Frozen Archive**	unknown	unknown	unknown	-
139	24-Jun-11	Reach 6, Baker Pond	LKWH	247	213	**WB Frozen Archive**	unknown	unknown	unknown	-
140	24-Jun-11	Reach 6, Baker Pond	LKWH	228	176	**WB Frozen Archive**	unknown	unknown	unknown	-
141	24-Jun-11	Reach 6, Baker Pond	LKWH	225	168	**WB Frozen Archive**	unknown	unknown	unknown	-
142	24-Jun-11	Reach 6, Baker Pond	LKWH	211	130	**WB Frozen Archive**	unknown	unknown	unknown	-
143	24-Jun-11	Reach 6, Baker Pond	LKWH	140	56	**WB Frozen Archive**	unknown	unknown	unknown	-
144	24-Jun-11	Reach 6, Baker Pond	LKWH	151	58	**WB Frozen Archive**	unknown	unknown	unknown	-
166	28-Jun-11	Reach 1, below culver	ARGR	32	0.2240	**WB Frozen Archive**	YOY	IM	unknown	-
167	28-Jun-11	Reach 1, below culver	ARGR	27	0.1370	**WB Frozen Archive**	YOY	IM	unknown	-
168	28-Jun-11	Reach 1, below culver	ARGR	28	0.1730	**WB Frozen Archive**	YOY	IM	unknown	-
169	28-Jun-11	Reach 1, below culver	ARGR	26.5	0.2	**WB Frozen Archive**	YOY	IM	unknown	-
170	28-Jun-11	Reach 1, below culver	ARGR	27.5	0.1460	**WB Frozen Archive**	YOY	IM	unknown	-
171	28-Jun-11	Reach 1, below culver	ARGR	27.5	0.1580	**WB Frozen Archive**	YOY	IM	unknown	-
172	28-Jun-11	Reach 1, below culver	ARGR	26	0.1300	**WB Frozen Archive**	YOY	IM	unknown	-
173	28-Jun-11	Reach 1, below culver	ARGR	25	0.1280	**WB Frozen Archive**	YOY	IM	unknown	-
174	28-Jun-11	Reach 1, below culver	ARGR	28.5	0.2060	**WB Frozen Archive**	YOY	IM	unknown	-
175	28-Jun-11	Reach 1, below culver	ARGR	27	0.1480	**WB Frozen Archive**	YOY	IM	unknown	-
176	28-Jun-11	Reach 1, below culver	ARGR	25	0.112	**WB Frozen Archive**	YOY	IM	unknown	-
177	28-Jun-11	Reach 1, below culver	ARGR	30	0.221	**WB Frozen Archive**	YOY	IM	unknown	-
178	28-Jun-11	Reach 1, below culver	ARGR	28	0.174	**WB Frozen Archive**	YOY	IM	unknown	-
179	28-Jun-11	Reach 1, below culver	ARGR	28	0.169	**WB Frozen Archive**	YOY	IM	unknown	-
255	28-Jun-11	Reach 1, below culver	ARGR	26.5	0.1580	**WB Frozen Archive**	YOY	IM	unknown	-
256	28-Jun-11	Reach 1, below culver	ARGR	26	0.1480	**WB Frozen Archive**	YOY	IM	unknown	-
257	28-Jun-11	Reach 1, below culver	ARGR	28	0.1910	**WB Frozen Archive**	YOY	IM	unknown	-
258	28-Jun-11	Reach 1, below culver	ARGR	26	0.1490	**WB Frozen Archive**	YOY	IM	unknown	-
259	28-Jun-11	Reach 1, below culver	ARGR	28.5	0.1960	**WB Frozen Archive**	YOY	IM	unknown	-
260	28-Jun-11	Reach 1, below culver	ARGR	28	0.1830	**WB Frozen Archive**	YOY	IM	unknown	-
261	28-Jun-11	Reach 1, below culver	ARGR	28	0.1880	**WB Frozen Archive**	YOY	IM	unknown	-
262	29-Jun-11	Reach 1, below culvert	NRPK	473	813	**Samples collected: Dorsal tissue x 2 (Frozen), Liver (Frozen), gonad (Frozen), OT, CL, FR.**	Adult	RS	M	695
283	30-Jun-11	Reach 1, below culver	ARGR	31.5	0.273	**WB Frozen Archive**	YOY	IM	unknown	-
284	30-Jun-11	Reach 1, below culver	ARGR	27	0.168	**WB Frozen Archive**	YOY	IM	unknown	-
285	30-Jun-11	Reach 1, below culver	ARGR	31	0.246	**WB Frozen Archive**	YOY	IM	unknown	-
347	7-Jul-11	Reach 1, below culvert	NRPK	499	846	**Samples collected: Dorsal tissue x 2 (Frozen), Liver (Frozen), gonad (Frozen), OT, CL, FR.**	Adult	RS	M	778
399	12-Jul-11	Upper Reach 0	NRPK	508	779	**Samples collected: Dorsal tissue x 2 (Frozen), Liver (Frozen), gonad (Frozen), OT, CL, FR.**	Adult	RS	M	722

[A]: Excludes slimy sculpin frozen and archived during Giant Mine Environmental Effects Monitoring Program on Baker Creek and the Yellowknife Ri
[B]: Fish with weight weighed to four decimal places were weighed on a digital hook/hang sc

mm= millimeter; g= gram; A= adult;J= juvenile;UN= unknown;YOY=Young-of-the-year;RS=resting;MA=maturing;IM- immature;M= male; F= fen
* Corresponds to fish number in Table A

Table A5: Plankton Taxonomy and Abundanc Results, Baker Creek, 2011

Sample #	Reach	Collection Date	Lab ID	Sorting Fraction	Initial Whole Sample Weight (g)	Final Remaining Sample Weight (g)	% of Sample Counted (based on weight)	Major Taxonomic Group	Taxon Name	Abundance	Abundance Per m³ (Collection Volume = 12.1095 m³)	Taxonomy Notes	axis	mm1	mm2	mm3	mm4	mm5	mm6	mm7	mm8	mm9	mm10	mm11	mm12	mm13	mm14	mm15
1	Reach 4 Outlet	6/23/2011	5772.1-1	Coarse	72.29	63.42	12.27%	Copepoda	*Heterocope septentrionalis*	31	20.86		Length	3.24	3.04	3.36	3.00	2.96	2.88	3.28	3.28	3.00	3.20	3.04	2.96	3.04	3.00	3.08
1	Reach 4 Outlet	6/23/2011	5772.1-1	Coarse	72.29	63.42	12.27%	Copepoda	*Macrocyclops albidus*	5	3.37		Length	1.41	1.49	1.17	1.59	1.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1	Reach 4 Outlet	6/23/2011	5772.1-1	Coarse	72.29	63.42	12.27%	Copepoda	Cyclopoida - copepodites	59	39.71		Length	0.70	0.56	0.41	0.51	0.60	0.63	0.51	0.59	0.60	0.61	0.46	0.60	0.48	0.63	0.58
1	Reach 4 Outlet	6/23/2011	5772.1-1	Coarse	72.29	63.42	12.27%	Copepoda	*Paracyclops chiltoni*	12	8.08	1 damaged, length estimated	Length	0.79	0.81	0.83	0.88	0.80	0.76	0.90	0.78	0.84	0.90	0.79	0.76	0.00	0.00	0.00
1	Reach 4 Outlet	6/23/2011	5772.1-1	Coarse	72.29	63.42	12.27%	Copepoda	*Cyclops* sp.	14	9.42	indeterminate	Length	1.29	1.29	1.13	1.14	1.08	1.13	1.32	1.32	1.32	1.25	0.97	1.13	1.13	1.02	0.00
1	Reach 4 Outlet	6/23/2011	5772.1-1	Coarse	72.29	63.42	12.27%	Copepoda	Cyclopidae	49	32.98	males, indeterminate	Length	1.21	0.92	0.75	0.70	0.97	0.76	0.75	0.84	1.30	0.73	0.95	0.83	0.78	0.81	0.81
1	Reach 4 Outlet	6/23/2011	5772.1-1	Coarse	72.29	71.07	1.69%	Copepoda	Copepoda - nauplii	46	0.05		Length	0.21	0.11	0.13	0.24	0.24	0.25	0.14	0.16	0.14	0.13	0.18	0.20	0.19	0.13	0.14
1	Reach 4 Outlet	6/23/2011	5772.1-1	Coarse	72.29	63.42	12.27%	Cladocera	*Simocephalus* sp.	5	3.37		Length	2.23	1.08	1.03	0.78	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1	Reach 4 Outlet	6/23/2011	5772.1-1	Coarse	72.29	63.42	12.27%	Cladocera	*Eurycercus* sp.	8	5.38		Length	1.78	1.40	1.30	1.08	0.88	0.70	0.63	0.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1	Reach 4 Outlet	6/23/2011	5772.1-1	Coarse	72.29	63.42	12.27%	Cladocera	*Moina micrura*	7	4.71		Length	0.45	0.51	0.43	0.60	0.54	0.34	0.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1	Reach 4 Outlet	6/23/2011	5772.1-1	Coarse	72.29	63.42	12.27%	Cladocera	*Ceriodaphnia* sp.	8	5.38		Length	0.39	0.43	0.41	0.31	0.30	0.33	0.41	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1	Reach 4 Outlet	6/23/2011	5772.1-1	Coarse	72.29	63.42	12.27%	Cladocera	*Chydorus sphaericus*	1	0.67		Length	0.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1	Reach 4 Outlet	6/23/2011	5772.1-1	Coarse	72.29	63.42	12.27%	Cladocera	Chydoridae	1	0.67	indeterminate	Length	0.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1	Reach 4 Outlet	6/23/2011	5772.1-1	Coarse	72.29	63.42	12.27%	Cladocera	*Daphnia ambigua*	1	0.67		Length	0.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1	Reach 4 Outlet	6/23/2011	5772.1-1	Coarse	72.29	63.42	12.27%	Cladocera	*Bosmina longirostris*	2	1.35		Length	0.36	0.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1	Reach 4 Outlet	6/23/2011	5772.1-1	Coarse	72.29	71.07	1.69%	Rotifera	*Euchlanis* sp.	109	0.13		Length	0.28	0.39	0.19	0.31	0.31	0.40	0.26	0.28	0.23	0.28	0.33	0.26	0.21	0.31	0.33
													Height	0.18	0.24	0.14	0.18	0.14	0.23	0.21	0.24	0.14	0.19	0.16	0.20	0.14	0.20	0.18
													Width	0.26	0.28	0.18	0.25	0.20	0.25	0.24	0.26	0.16	0.23	0.25	0.19	0.16	0.26	0.23
1	Reach 4 Outlet	6/23/2011	5772.1-1	Coarse	72.29	71.07	1.69%	Rotifera	*Notholca acuminata*	117	0.14		Length	0.20	0.26	0.29	0.20	0.21	0.23	0.24	0.23	0.24	0.23	0.24	0.23	0.25	0.24	0.23
													Height	0.03	0.03	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
													Width	0.13	0.11	0.10	0.13	0.13	0.13	0.13	0.11	0.14	0.14	0.13	0.13	0.14	0.13	0.13
1	Reach 4 Outlet	6/23/2011	5772.1-1	Coarse	72.29	71.07	1.69%	Rotifera	Conochilidae	145	0.17		Length	0.26	0.28	0.21	0.15	0.20	0.19	0.20	0.21	0.31	0.21	0.23	0.19	0.21	0.20	0.25
													Height	0.08	0.09	0.09	0.06	0.08	0.09	0.08	0.08	0.11	0.06	0.09	0.08	0.09	0.08	0.08
													Width	0.09	0.08	0.08	0.08	0.08	0.06	0.09	0.08	0.09	0.06	0.08	0.06	0.08	0.08	0.09
1	Reach 4 Outlet	6/23/2011	5772.1-1	Coarse	72.29	71.07	1.69%	Rotifera	*Lecane luna*	12	0.01		Length	0.13	0.13	0.15	0.10	0.14	0.11	0.14	0.13	0.11	0.13	0.13	0.14	0.00	0.00	0.00
													Height	0.08	0.08	0.09	0.06	0.08	0.08	0.08	0.08	0.06	0.08	0.08	0.08	0.00	0.00	0.00
													Width	0.13	0.14	0.13	0.13	0.14	0.13	0.15	0.14	0.14	0.13	0.15	0.13	0.00	0.00	0.00
1	Reach 4 Outlet	6/23/2011	5772.1-1	Coarse	72.29	71.07	1.69%	Rotifera	*Monostyla stenroosi*	6	0.01		Length	0.10	0.10	0.11	0.10	0.10	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
													Height	0.06	0.05	0.06	0.06	0.08	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
													Width	0.10	0.09	0.10	0.09	0.10	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1	Reach 4 Outlet	6/23/2011	5772.1-1	Coarse	72.29	71.07	1.69%	Rotifera	*Notholca laurentiae*	16	0.02		Length	0.13	0.13	0.11	0.14	0.13	0.13	0.13	0.13	0.10	0.14	0.14	0.11	0.13	0.11	0.14
													Height	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.03	0.04	0.04	0.04	0.03	0.04	0.04
													Width	0.13	0.11	0.13	0.13	0.13	0.11	0.13	0.13	0.11	0.11	0.13	0.13	0.13	0.14	0.13
1	Reach 4 Outlet	6/23/2011	5772.1-1	Coarse	72.29	71.07	1.69%	Rotifera	*Testudinella* sp.	7	0.01		Length	0.19	0.23	0.15	0.16	0.18	0.19	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
													Height	0.04	0.06	0.04	0.04	0.04	0.04	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
													Width	0.14	0.23	0.14	0.15	0.19	0.16	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1	Reach 4 Outlet	6/23/2011	5772.1-1	Coarse	72.29	71.07	1.69%	Rotifera	*Trichotria tetractis*	5	0.01		Length	0.18	0.14	0.20	0.19	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
													Height	0.08	0.08	0.11	0.09	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
													Width	0.09	0.10	0.10	0.10	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1	Reach 4 Outlet	6/23/2011	5772.1-1	Coarse	72.29	71.07	1.69%	Rotifera	*Monostyla bulla*	1	0.001		Length	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
													Width	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
													Height	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	Reach 6 Outlet	6/23/2011	5772.1-2	Coarse	88.79	0.00	100.00%	Copepoda	*Heterocope septentrionalis*	36	2.97		Length	0.88	0.94	0.91	1.01	0.89	0.93	0.94	0.88	0.99	0.93	0.93	0.91	1.00	0.99	1.01
2	Reach 6 Outlet	6/23/2011	5772.1-2	Coarse	88.79	0.00	100.00%	Copepoda	*Macrocyclops albidus*	2	0.17		Length	1.68	1.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	Reach 6 Outlet	6/23/2011	5772.1-2	Coarse	88.79	0.00	100.00%	Copepoda	*Cyclops* sp.	29	2.39		Length	1.38	1.44	1.37	1.05	1.30	1.21	1.33	1.08	1.29	1.29	1.27	1.29	1.21	1.30	1.25
2	Reach 6 Outlet	6/23/2011	5772.1-2	Coarse	88.79	0.00	100.00%	Copepoda	*Paracyclops chiltoni*	31	2.56		Length	0.65	0.89	0.84	0.93	0.91	0.79	0.89	0.93	0.81	0.95	0.94	0.86	0.94	0.90	0.85
2	Reach 6 Outlet	6/23/2011	5772.1-2	Coarse	88.79	0.00	100.00%	Copepoda	Cyclopoida - copepodites	47	3.88		Length	0.91	1.04	0.99	1.01	0.79	0.81	0.86	0.81	0.79	0.83	0.80	0.86	0.89	0.83	0.79
2	Reach 6 Outlet	6/23/2011	5772.1-2	Coarse	88.79	0.00	100.00%	Copepoda	Cyclopidae	136	11.23	males, indeterminate	Length	0.81	0.65	0.68	0.68	0.70	0.79	0.87	0.78	0.90	0.65	0.70	0.60	0.67	0.54	0.51
2	Reach 6 Outlet	6/23/2011	5772.1-2	Fine	88.79	77.86	12.31%	Copepoda	Copepoda - nauplii	160	0.17		Length	0.20	0.18	0.19	0.21	0.15	0.16	0.19	0.16	0.18	0.20	0.10	0.16	0.16	0.14	0.18
2	Reach 6 Outlet	6/23/2011	5772.1-2	Coarse	88.79	0.00	100.00%	Cladocera	*Simocephalus* sp.	4	0.33		Length	2.38	0.65	0.95	0.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	Reach 6 Outlet	6/23/2011	5772.1-2	Coarse	88.79	0.00	100.00%	Cladocera	*Ceriodaphnia* sp.	3	0.25		Length	0.54	0.45	0.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	Reach 6 Outlet	6/23/2011	5772.1-2	Coarse	88.79	0.00	100.00%	Cladocera	*Eurycercus* sp.	5	0.41		Length	1.15	0.71	0.79	0.96	0.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	Reach 6 Outlet	6/23/2011	5772.1-2	Coarse	88.79	0.00	100.00%	Cladocera	*Acroperus harpae*	1	0.08		Length	0.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	Reach 6 Outlet	6/23/2011	5772.1-2	Coarse	88.79	0.00	100.00%	Cladocera	Chydoridae	2	0.17		Length	0.39	0.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	Reach 6 Outlet	6/23/2011	5772.1-2	Coarse	88.79	0.00	100.00%	Cladocera	*Daphnia magna*	1	0.08		Length	1.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	Reach 6 Outlet	6/23/2011	5772.1-2	Coarse	88.79	0.00	100.00%	Cladocera	*Chydorus sphaericus*	1	0.08		Length	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	Reach 6 Outlet	6/23/2011	5772.1-2	Coarse	88.79	0.00	100.00%	Cladocera	*Bosmina longirostris*	3	0.25		Length	0.29	0.40	0.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	Reach 6 Outlet	6/23/2011	5772.1-2	Fine	88.79	77.86	12.31%	Rotifera	*Euchlanis* sp.	63	0.07		Length	0.16	0.19	0.19	0.34	0.30	0.19	0.19	0.15	0.21	0.34	0.26	0.19	0.26	0.28	0.19
													Height	0.11	0.20	0.13	0.21	0.19	0.13	0.10	0.13	0.15	0.21	0.20	0.14	0.21	0.15	0.15
													Width	0.13	0.15	0.15	0.24	0.25	0.15	0.15	0.13	0.19	0.25	0.19	0.18	0.24	0.21	0.16
2	Reach 6 Outlet	6/23/2011	5772.1-2	Fine	88.79	77.86	12.31%	Rotifera	*Notholca acuminata*	44	0.05		Length	0.26	0.28	0.28	0.26	0.23	0.26	0.29	0.29	0.25	0.28	0.24	0.24	0.21	0.23	0.26
													Height	0.03	0.03	0.04	0.05	0.03	0.03	0.04	0.04	0.04	0.05	0.03	0.04	0.03	0.03	0.04
													Width	0.13	0.13	0.11	0.11	0.11	0.11	0.10	0.11	0.13	0.13	0.14	0.13	0.13	0.13	0.14
2	Reach 6 Outlet	6/23/2011	5772.1-2	Fine	88.79	77.86	12.31%	Rotifera	Conochilidae	123	0.13		Length	0.24	0.23	0.31	0.28	0.21	0.15	0.20	0.19	0.23	0.21	0.19	0.20	0.21	0.23	0.26
													Height	0.08	0.09	0.06	0.09	0.09	0.06	0.08	0.09	0.09	0.09	0.09	0.08	0.08	0.08	0.09
													Width	0.09	0.08	0.08	0.08	0.08	0.08	0.08	0.06	0.09	0.08	0.08	0.08	0.06	0.09	0.09
2	Reach 6 Outlet	6/23/2011	5772.1-2	Fine	88.79	77.86	12.31%	Rotifera	*Notholca laurentiae*	28	0.03		Length	0.14	0.13	0.13	0.13	0.13	0.14	0.14	0.11	0.13	0.11	0.14	0.13	0.13	0.13	0.11
													Height	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.04	0.04	0.04	0.04	0.04
													Width	0.11	0.11	0.13	0.11	0.13	0.11	0.13	0.13	0.13	0.13	0.13	0.13	0.11	0.13	0.13
2	Reach 6 Outlet	6/23/2011	5772.1-2	Fine	88.79	77.86	12.31%	Rotifera	*Lecane luna*	8	0.01		Length	0.11	0.14	0.15	0.14	0.11	0.13	0.13	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
													Height	0.06	0.08	0.09	0.08	0.08	0.08	0.06	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00
													Width	0.10	0.14	0.13	0.14	0.13	0.14	0.11	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	Reach 6 Outlet	6/23/2011	5772.1-2	Fine	88.79	77.86	12.31%	Rotifera	*Monostyla bulla*	2	0.00		Length	0.14	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
													Height	0.08	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
													Width	0.09	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	Reach 6 Outlet	6/23/2011	5772.1-2	Fine	88.79	77.86	12.31%	Rotifera	*Trichotria tetractis*	6	0.01		Length	0.11	0.16	0.13	0.19	0.19	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
													Height	0.06	0.05	0.06	0.09	0.10	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
													Width	0.08	0.09	0.09	0.10	0.10	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	Reach 6 Outlet	6/23/2011	5772.1-2	Fine	88.79	77.86	12.31%	Rotifera	*Monostyla stenroosi*	1	0.001		Length	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
													Height	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
													Width	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Notes: g = grams; % = percent; m³ = cubic metres; mm = millimetres.

Table A6: Supporting Water Quality Measurements of Lower Baker Creek, 2011

Reach	Date	Temperature (°C)	Specific Conductivity (µS/cm)	Dissolved Oxygen (mg/L)	pH
0	17-May-11	0.9	176	12.3	7.6
	8-Jun-11	11.4	136	10.4	7.6
	13-Jun-11	15.0	128	9.7	7.6
1	27-May-11	2.8	140	11.1	7.4
	1-Jun-11	12.8	151	9.4	7.5
	9-Jun-11	11.7	116	10.5	7.7
	10-Jun-11	14.5	123	10.2	7.7
	13-Jun-11	16.2	127	9.6	7.6
	28-Jun-11	18.0	134	9.3	7.8
	29-Jun-11	no data collected			
	30-Jun-11	16.5	132	9.3	7.7
	7-Jul-11	no data collected			
	12-Jul-11	no data collected			
0/1	11-Jul-11	no data collected			
2	1-Jun-11	13.2	147	9.1	7.5
	3-Jun-11	8.2	157	10.8	7.5
	10-Jun-11	14.4	119	10.4	7.7
	15-Jun-11	19.7	120	9.2	7.6
	17-Jun-11	17.6	120	8.3	7.6
4	28-May-11	6.2	127	9.3	7.3
	29-May-11	8.9	122	9.3	7.2
	1-Jun-11	13.6	129	8.9	7.4
	3-Jun-11	8.5	142	10.8	7.5
	8-Jun-11	11.3	112	10.0	7.5
	10-Jun-11	13.9	104	10.3	7.5
	15-Jun-11	19.3	115	8.2	7.4
	17-Jun-11	18.0	113	8.3	7.5
	23-Jun-11	22.9	117	7.4	7.4
	30-Jun-11	16.5	114	8.0	7.4
5	1-Jun-11	12.5	143	7.3	7.3
	8-Jun-11	11.3	115	9.4	7.5
	10-Jun-11	13.1	120	9.2	7.5
	13-Jun-11	15.5	103	9.8	7.5
	15-Jun-11	18.9	115	8.2	7.4
	28-Jun-11	16.7	91	8.2	7.4
6	3-Jun-11	8.8	94	11.7	7.6
	15-Jun-11	17.8	96	9.7	7.7
	23-Jun-11	23.2	110	8.5	7.8
	24-Jun-11	21.0	113	8.3	7.7

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