

Map 9 C: Mobile survey for Arctic grayling, mountain whitefish, rainbow trout and walleye (September 16-17, 2009)

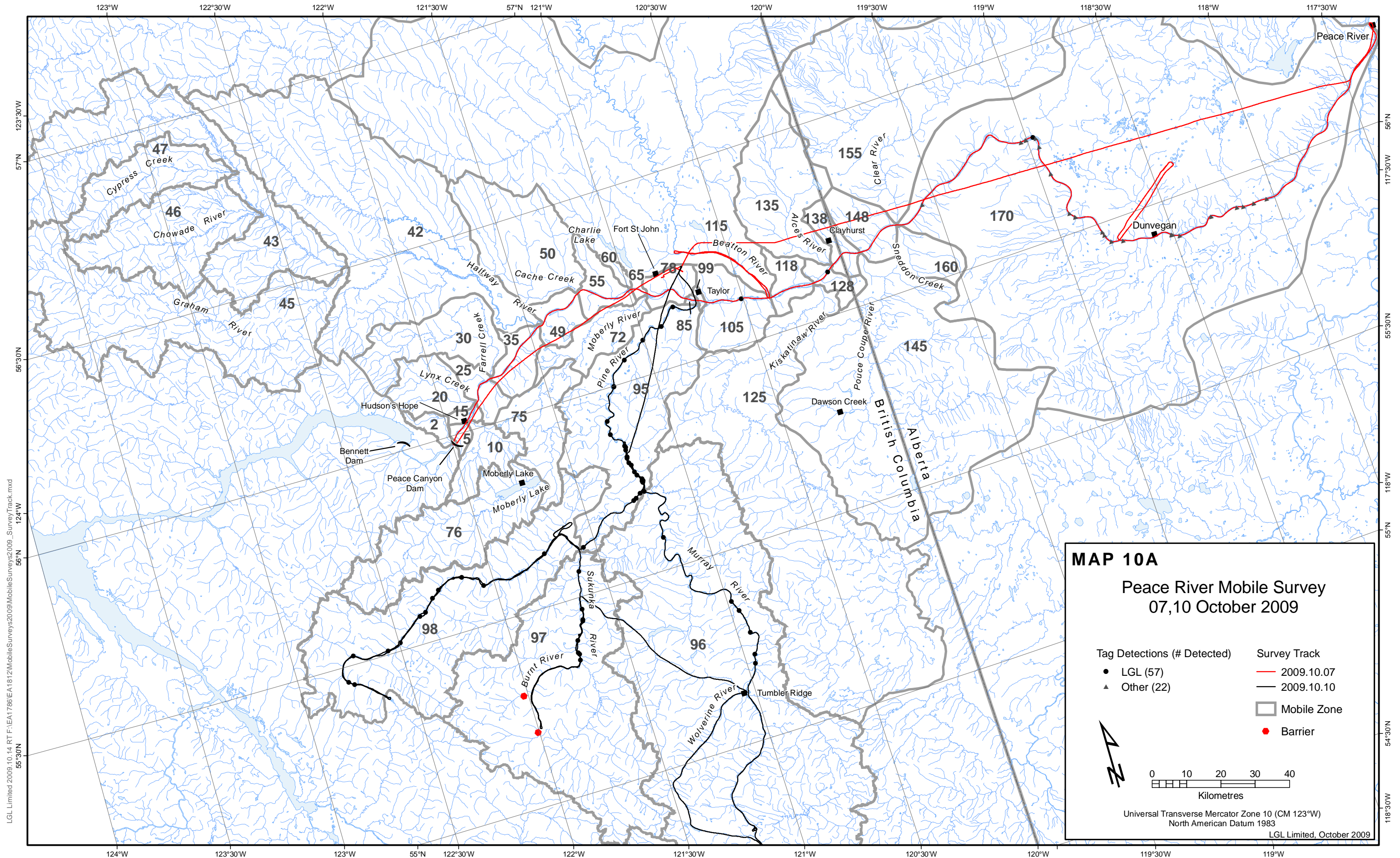
October Track, 7, 10 October (Map 10)

As in the September survey, coverage during this survey included all areas surveyed during the March/April track to ensure detection of any possible outliers.

Due to increasing decay of battery life in the transmitters over time, the numbers of fish detected were markedly fewer between the first and last survey: detections declined by 49%, 41%, and 19% for bull trout, rainbow trout, and Arctic grayling, respectively. The marked reduction in detections, particularly for bull trout and rainbow trout, may have had some effect on the observed distribution of fish detections as tag decay may not have occurred randomly amongst the tagged populations.

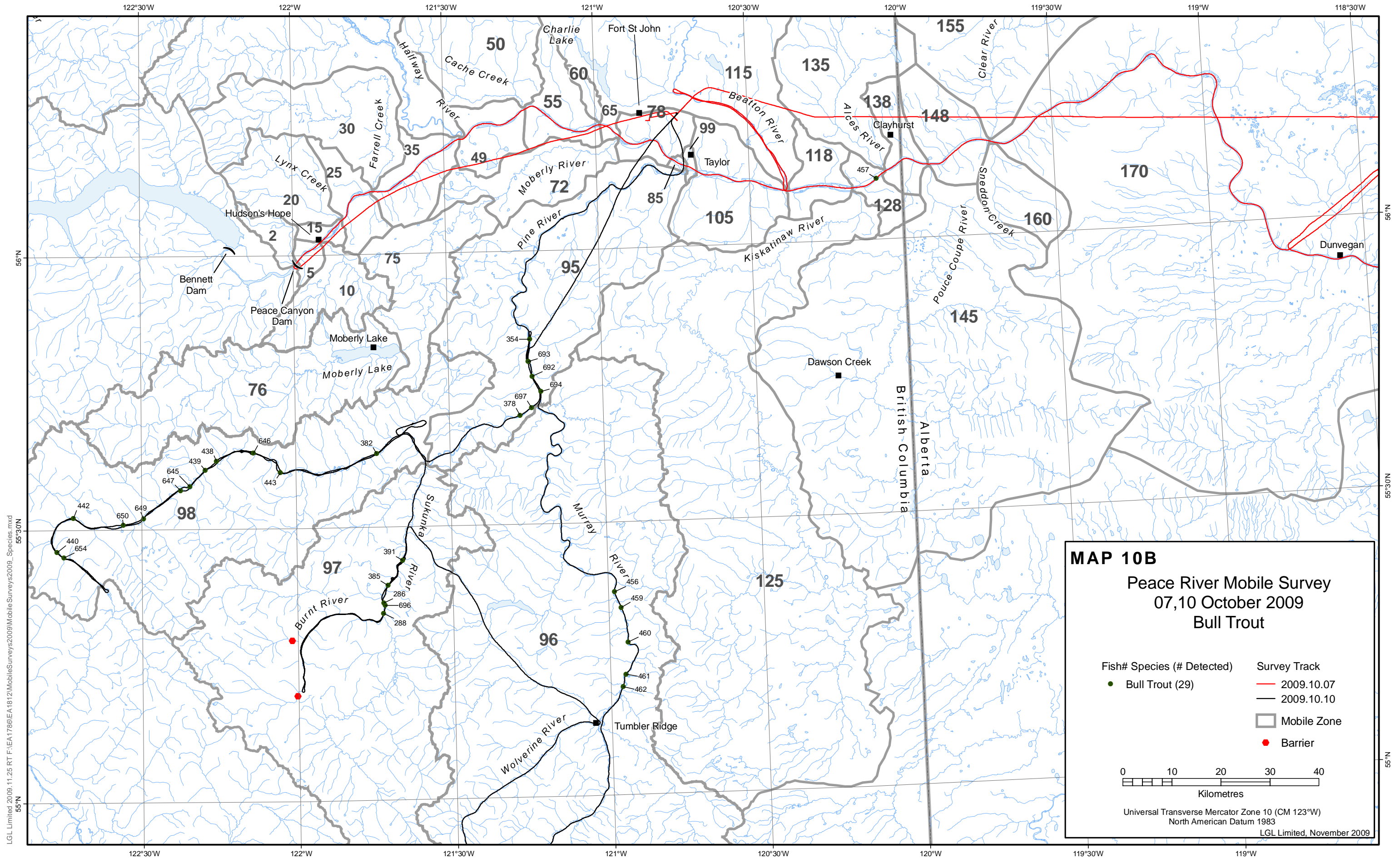
The most marked change in distribution among the 29 bull trout detected in this survey was that one fish (tag 457) made an exceptionally long-distance movement within less than a month. This fish was detected in the lower Wolverine River during the 16-17 September survey, and on 7 October it was detected in the Peace River mainstem near the mouth of the Alces River, at which it was previously detected on 15 July in 2009. Of the remaining bull trout detected during the October survey, 18% were in each of the Murray River and Burnt/Sukunka drainage, 22% in the lower Pine mainstem, and 42% in the upper Pine mainstem.

The distributions of rainbow trout and Arctic grayling were essentially unchanged from those of the previous survey. Of the 10 rainbow trout detected, the majority (60%, 6) was in the lower Pine mainstem, three were in the Sukunka, and one was in the Peace mainstem. Most (88%, 15) of the Arctic grayling detected (17) were in the lower Pine mainstem, a pattern that persisted for the whole of the 2009 tracking period.

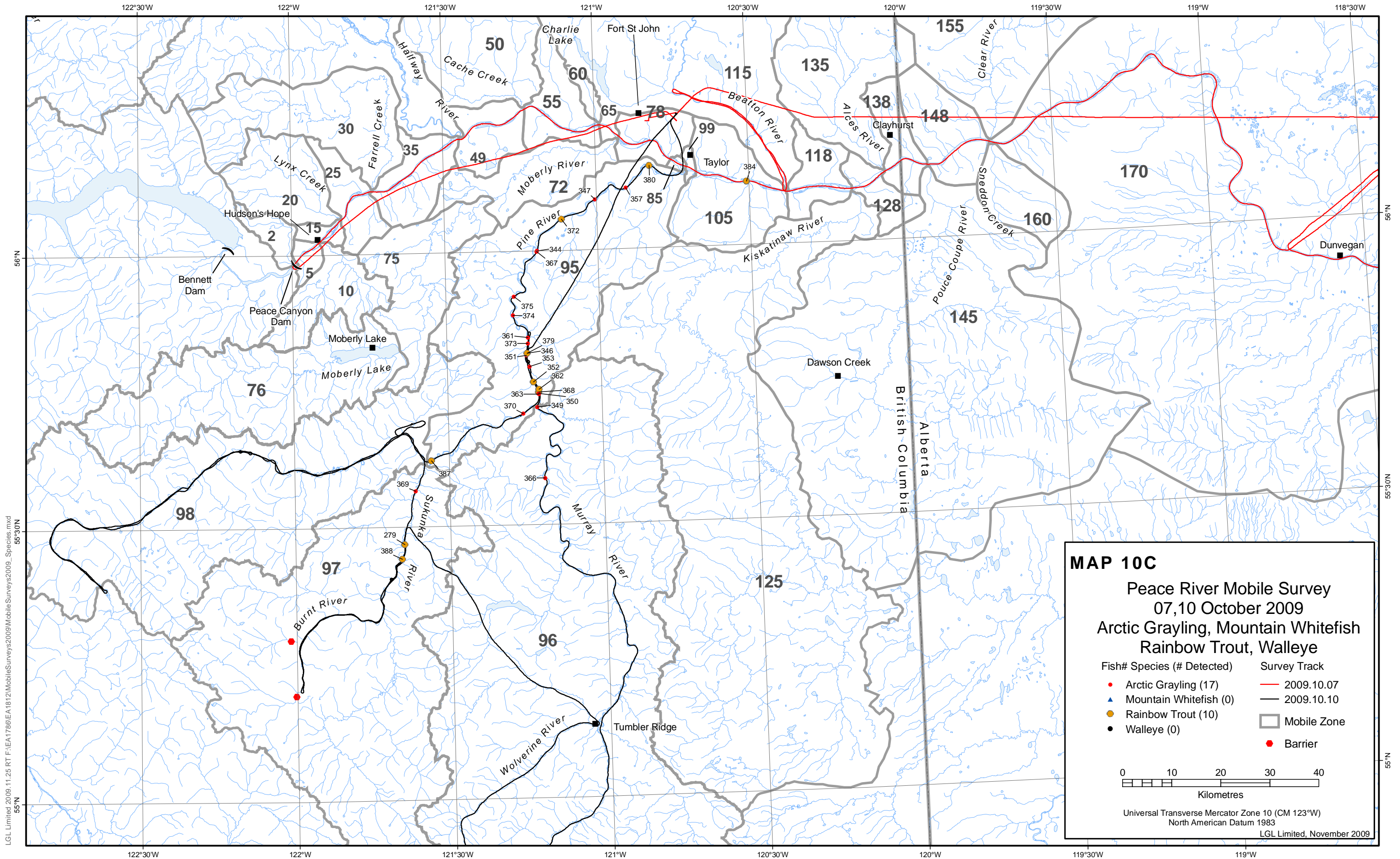


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Map 10 A: Peace River mobile survey track (October 7, 10, 2009)



Map 10 B: Mobile survey for bull trout (October 7, 10, 2009)



Map 10 C: Mobile survey for Arctic grayling, mountain whitefish, rainbow trout and walleye (October 7, 10, 2009)

3.2.1.3 Mobile and Fixed-Station Tracking Detection Assessment

This section provides an overview assessment of tag detections for bull trout, rainbow trout, and Arctic grayling, with brief comment for a few walleye that were infrequently detected, for the period March-October 2009 (refer to Maps 1-10 for detections). General observations:

- Arctic grayling were not detected outside of the Pine River watershed.
- With the exception of two rainbow trout that moved into the Peace River mainstem (one upstream and one downstream of the Pine River mouth), the species was not detected outside of the Pine River watershed.
- Similarly, with the exception of two bull trout that were detected in the Peace River mainstem, bull trout were not detected outside of the Pine River watershed.
- Of the few walleye that were occasionally detected, their locations in the Peace River mainstem and tributaries (Beaton and Pine rivers) were consistent with those observed in previous years (2006, 2007 and 2008).

The movements of each fish of all three species released in the Pine River watershed (2006-2008) that were detected during the 2006-2009 tracking period are shown in Appendix B (Figures B1 to B103); a few individuals were only detected once. Below are representative examples of movements of bull trout, rainbow trout, and Arctic grayling that were tracked from their respective release sites in the Pine River watershed to the locations of their last detection within the Peace River study area. For all rainbow trout and Arctic grayling examples chosen, the period tracked was two years (2008 and 2009), for bull trout it varied from two (2008-2009) or more (2006-2009) years.

Two bull trout, fish 694 and 457, both tracked over a two-year period (2008-2009), show very contrasting movement patterns. Fish 694, did a short-distance movement (Figure 18), typical of fish that did not exit the Pine, whereas fish 457 did a long-distance movement more typical of fish that exit the Pine (Figure 19). Fish 694 was released in the Pine mainstem at the Murray River confluence 23 July 2008, and remained within the vicinity for a full year before it moved up the Murray River (~45 km) in early August 2009; subsequently, it headed back downstream and was last detected at the release site on 10 October 2009.

In contrast to the above short-distance movement, fish 457 moved extensively over a relatively short-time period (Figure 19). This fish, released in the lower Wolverine River 28 August 2008, was detected upstream approximately 30 km on 9 September, and subsequently made a long-

distance migration downstream into the Murray, the Pine, and the Peace mainstem to near the Alces River near the Alberta border, where it was repeatedly detected (25 September, 9 and 27 October 2008, 31 March and 23 April 2009), indicative of overwintering in this locale. This fish 'milled-about' between here and the Beaton River until mid-July 2009, after which it migrated up the Peace, into the Pine, up the Murray and to the release site in the Wolverine (detected here on 26 August and 17 September 2009). It then rapidly migrated downstream all the way back to its preferred overwintering site in the Peace mainstem near the Alces River; during this migration, it was sequentially detected at the Murray/Pine confluence on 20 September, the Pine/Peace confluence on 22 September, the Beaton River mouth on 22 September, and finally at the Alces site on 7 October 2009. The timing of the movements of this fish suggests spawning occurs in the lower Wolverine, and overwintering/feeding occur in the Peace mainstem near the Alberta border.

Fish 339 is an example of movement of a bull trout tracked over a three-year period (2007-2009) that did not exit the Pine River watershed (Figure 20). This fish, released in the lower Wolverine River on 1 September 2007, moved downstream in the Murray River some 85 km and was repeatedly detected in this locale from 19 September 2007 through 3 June 2009, after which it was detected on three occasions (from 24 June-6 August) progressively moving up the Murray to the Wolverine/Murray confluence, where it was last detected (6 August).

Fish 288 is an example of a bull trout tracked over a four-year period (2006-2009) that did not exit the Pine, but made annual forays between the Burnt/Sukunka drainage and the Pine mainstem (Figure 21). This fish spent the late summer-autumn period in the Burnt/Sukunka drainage and the winter-summer period in the Pine mainstem below the Murray River. These forays are probably related to spawning and overwintering/foraging.

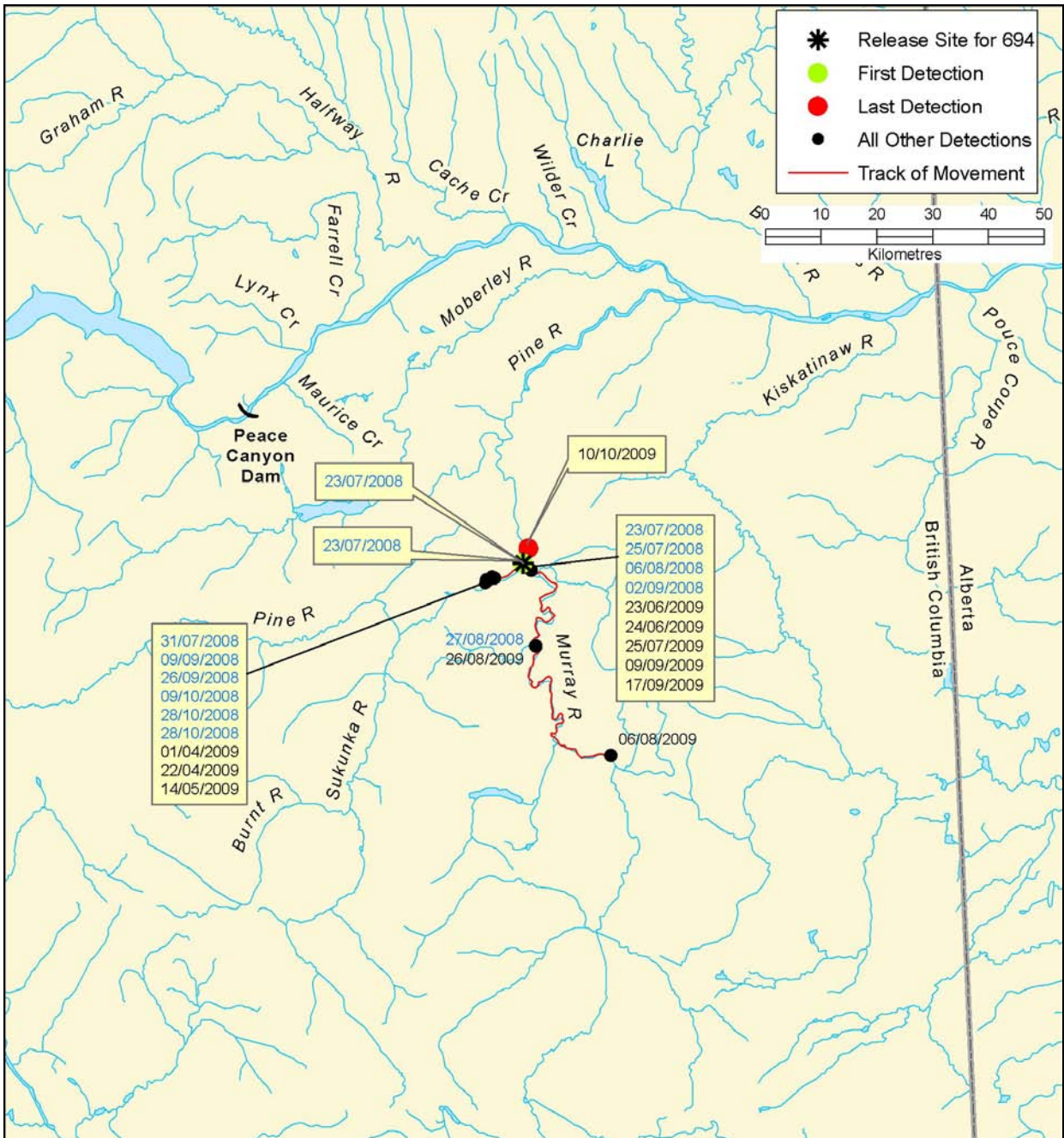


Figure 18: Individual track of a bull trout (tag 694), total distance tracked 237 km

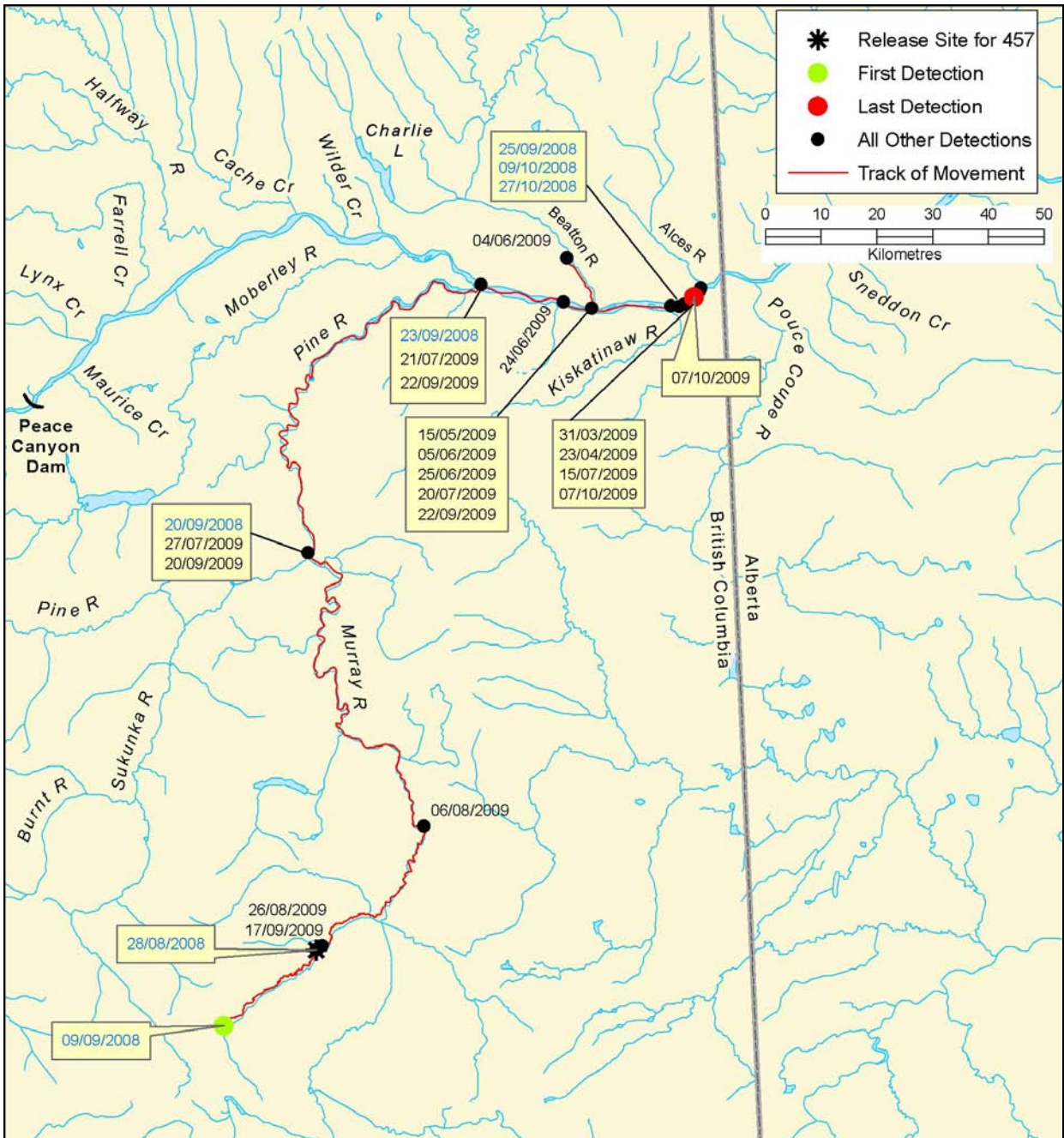


Figure 19: Individual track of a bull trout (tag 457), total distance tracked 932 km

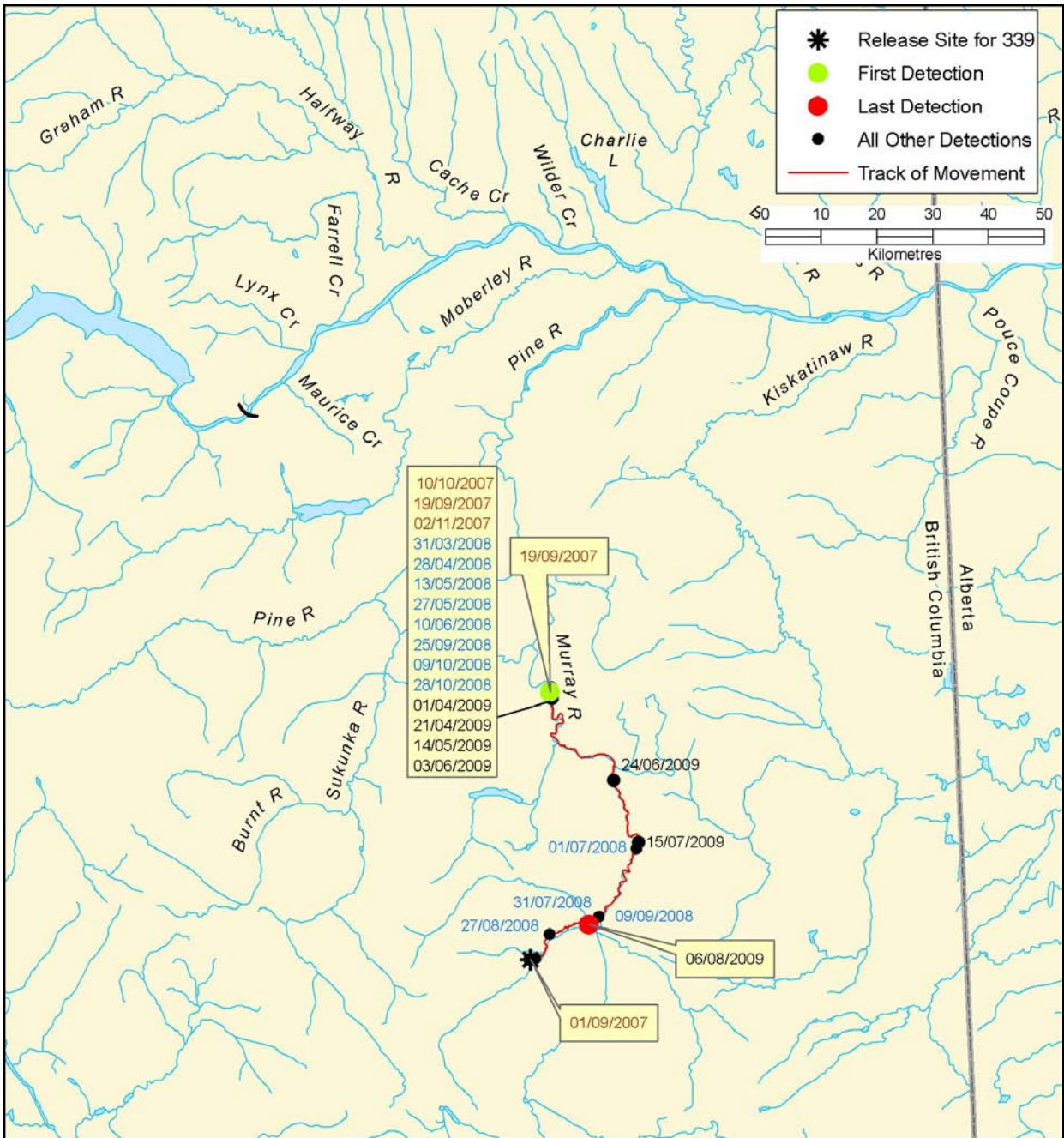


Figure 20: Individual track of a bull trout (tag 339), total distance tracked 330 km

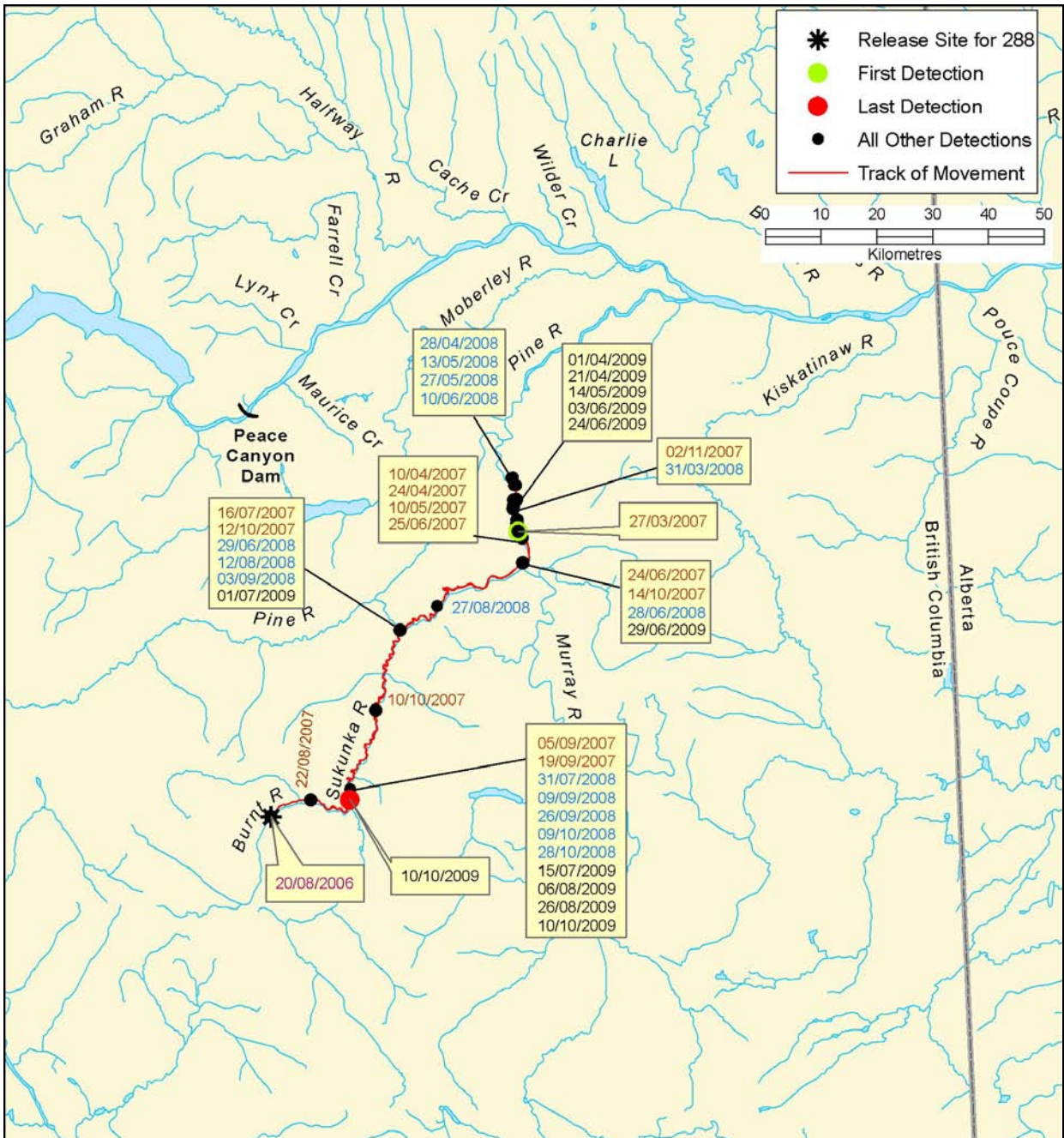


Figure 21: Individual track of a bull trout (tag 288), total distance tracked 716 km

Representative examples of movements of rainbow trout comprised minor (Figure 22), moderate (Figure 23), and extensive (Figure 24) movers; only the extensive mover exited the Pine. From release to site of last detection, fish 383 moved progressively upstream from the Pine mainstem at the Murray, whereas fish 380 moved downstream from the Pine mainstem at the Sukunka to near the mouth of the Pine. In contrast, fish 384 showed a more complex

movement: this fish exited the Pine 10 days after release (27 June 2008) in the upper Sukunka, moved up the Peace mainstem past the Moberly where it remained till late May 2009. Subsequently, it re-entered the Pine, moved up to the Sukunka mouth by early July, then rapidly descended and exited the Pine and moved down the Peace mainstem to near the Beatton mouth, where it was detected on multiple occasions from mid July to end of the 2009 tracking session.

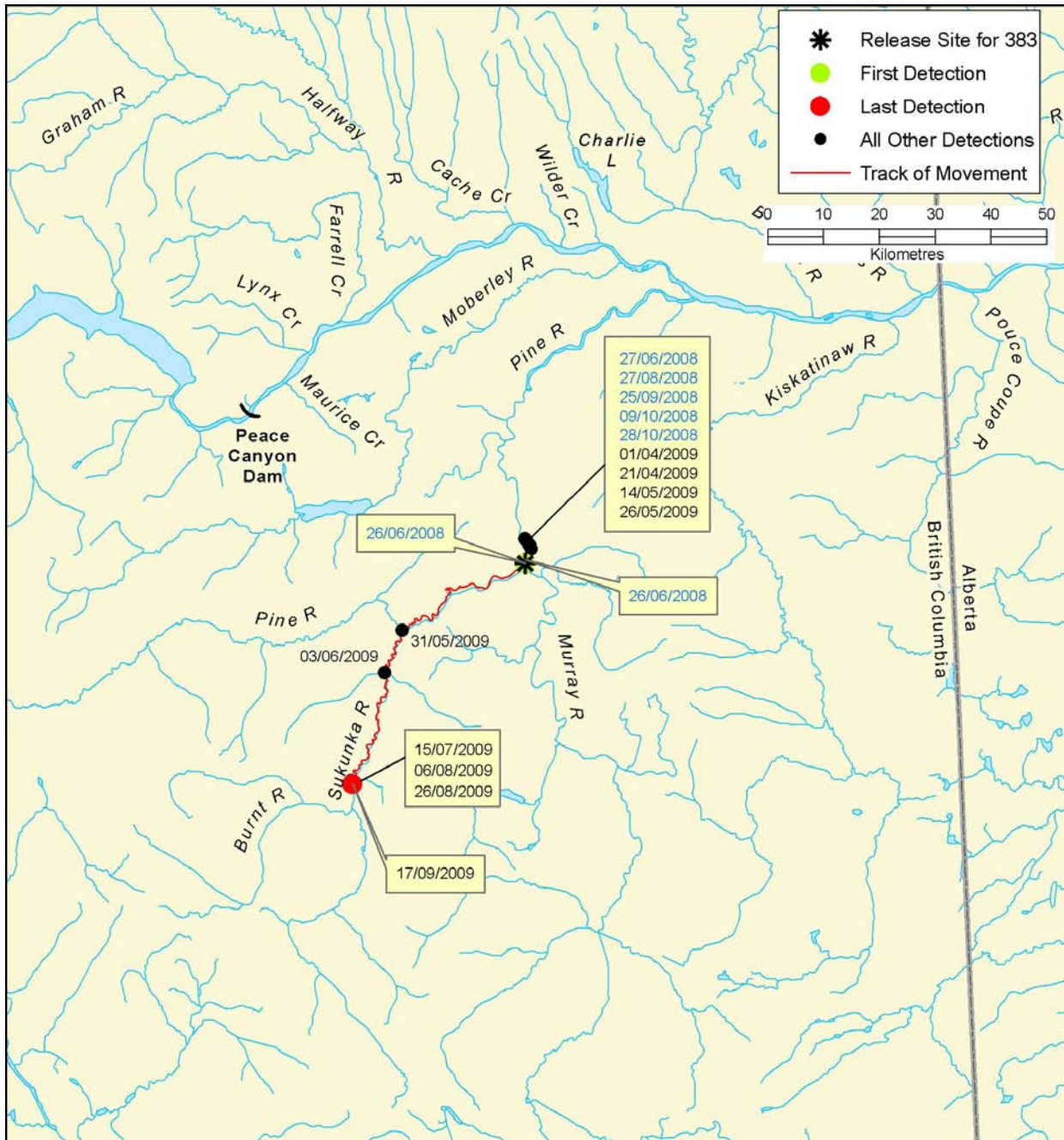


Figure 22: Individual track of a rainbow trout (tag 383), total distance tracked 92 km

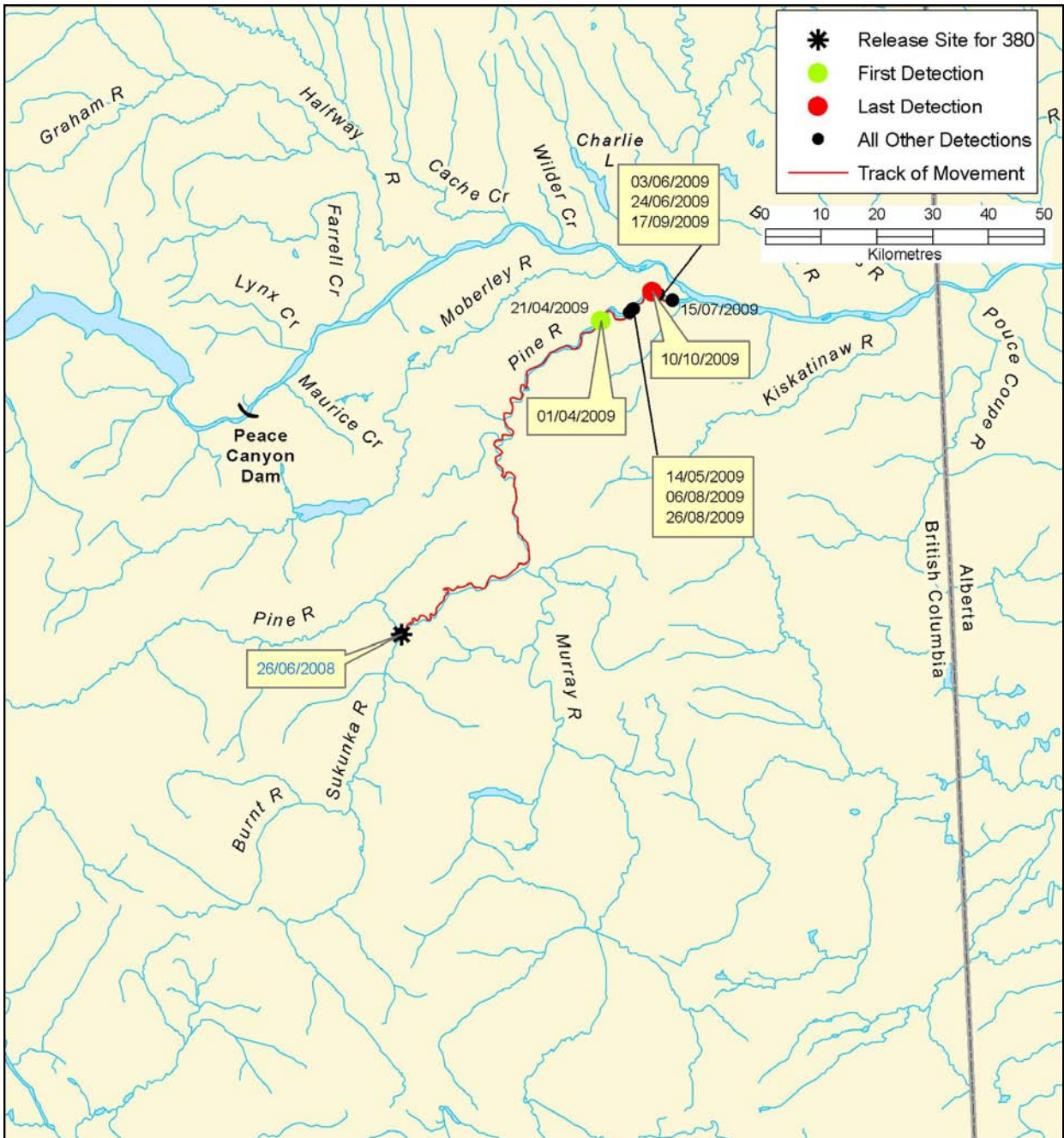


Figure 23: Individual track of a rainbow trout (tag 380), total distance tracked 142 km

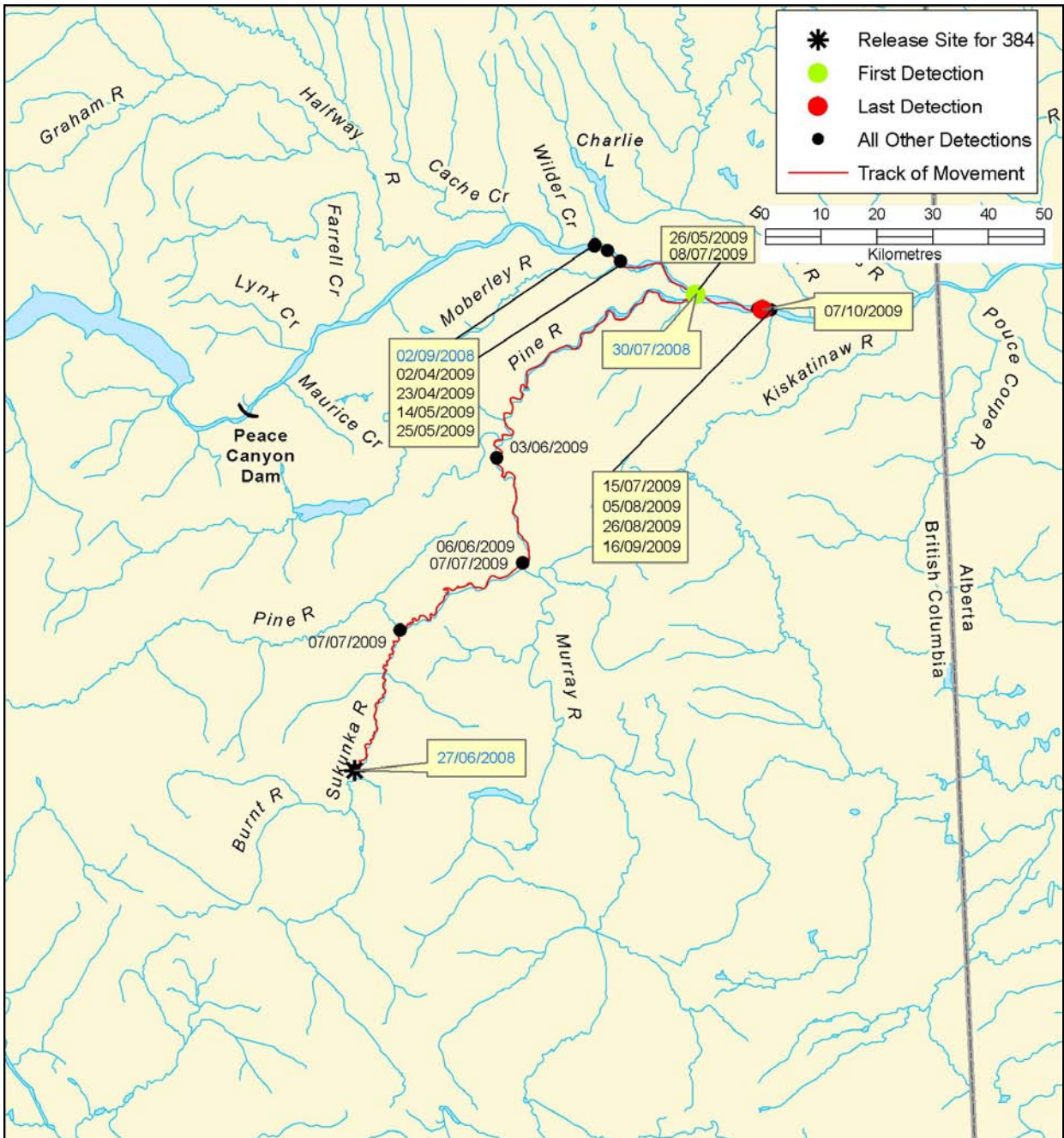


Figure 24: Individual track of a rainbow trout (tag 384), total distance tracked 484 km

Arctic grayling in the Pine River watershed were all minor movers, with the movements of the majority confined to the Pine mainstream below the Murray. Examples are conveyed in Figure 25 and Figure 26, which in both instances, the movement was progressively downstream from release to site of last detection.

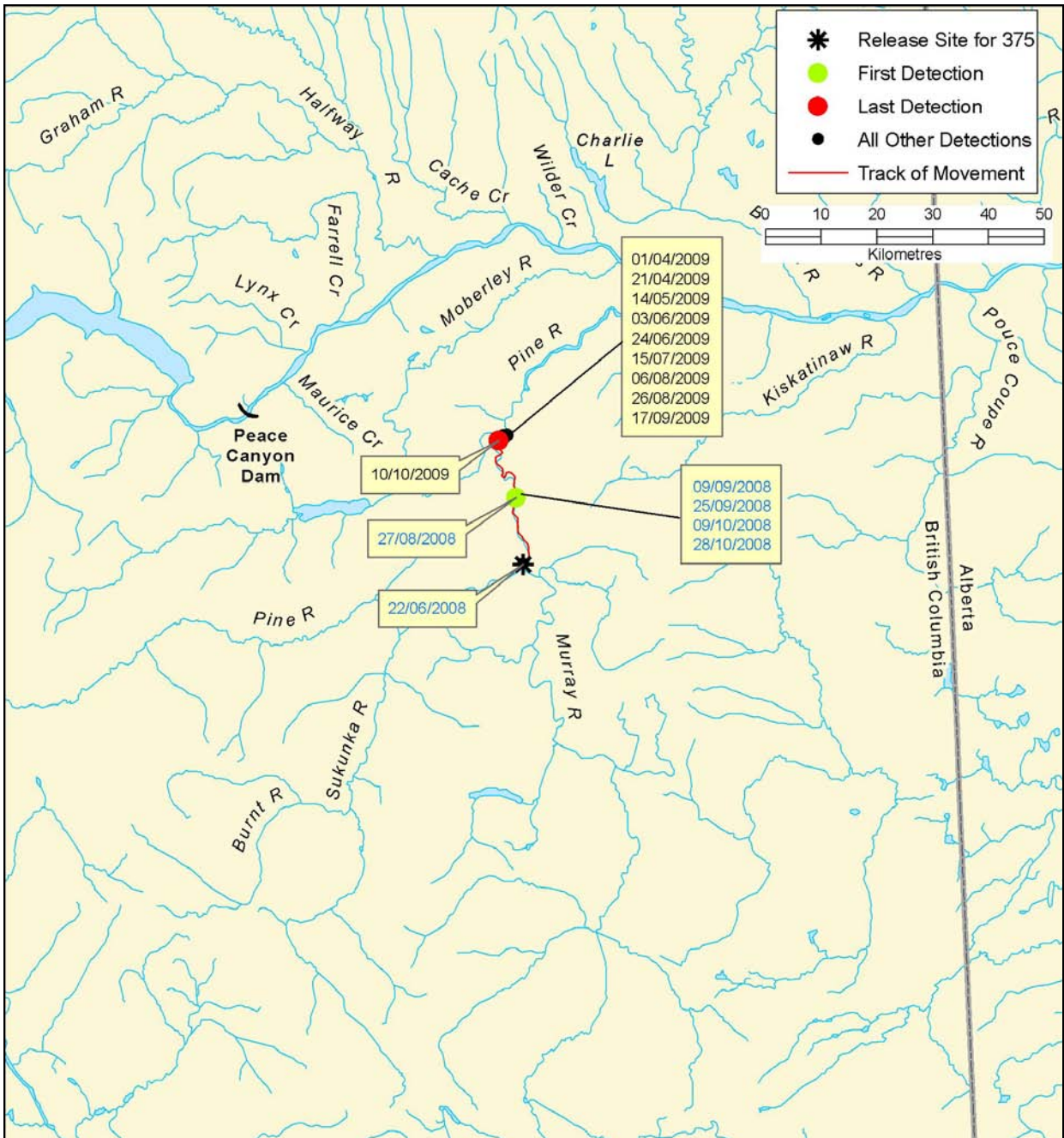


Figure 25: Individual track of an Arctic grayling (tag 375), total distance tracked 44 km

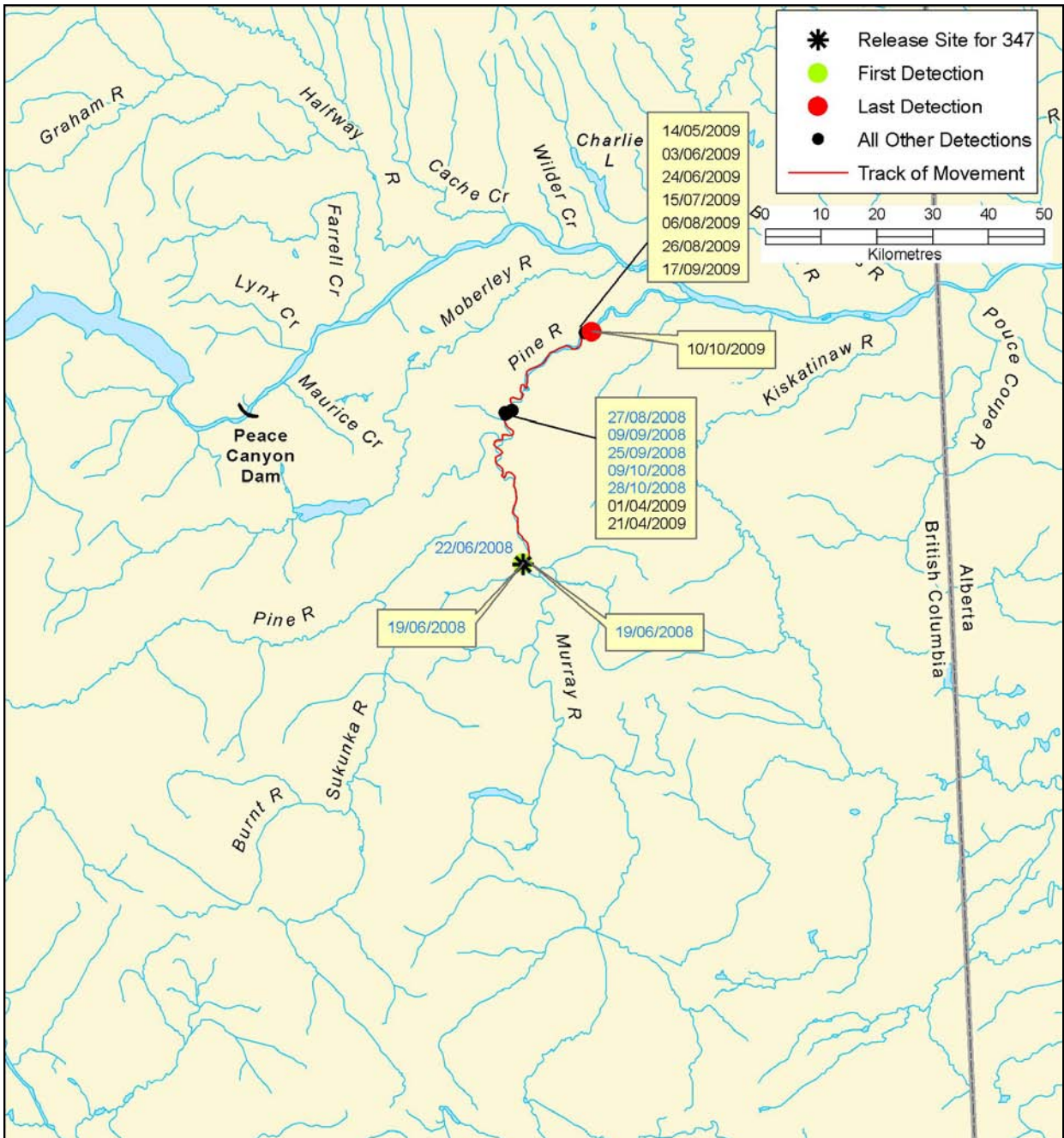


Figure 26: Individual track of an Arctic grayling (tag 347), total distance tracked 71 km

3.2.1.4 Further Assessment of Bull Trout Movement

Bull trout tag detections were further assessed to summarize seasonal movements within and between watersheds of the Peace River system. For this investigation, the study area was divided into four divisions:

- 1) Pine River mainstem;
- 2) Sukunka/Burnt river drainage;
- 3) Murray/Wolverine river drainage; and
- 4) Peace River mainstem and its other tributaries.

Figure 27 shows the relative proportions of bull trout that were detected in these four locations by month during tracking conducted in 2009.

In all months, the majority (51-64%) of bull trout were detected in the Pine River mainstem. The concentrations of bull trout that were in the Sukunka/Burnt river drainage (18-30%), and in the Murray/Wolverine river drainage (18-24%) were relatively stable over time. Few bull trout were observed in the Peace River mainstem, and none were seen during July through September.

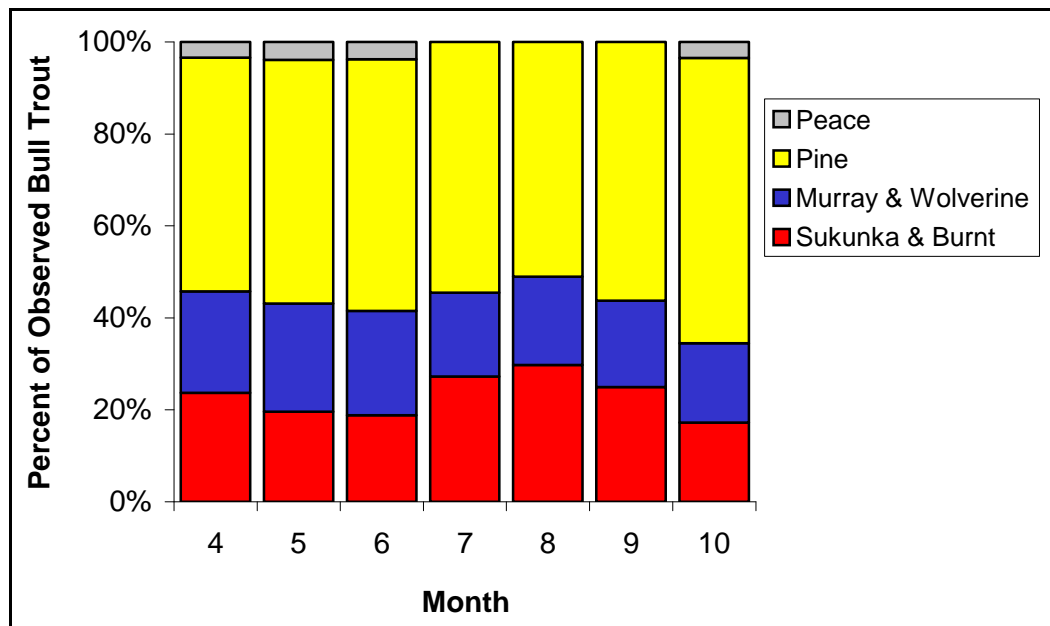


Figure 27: Seasonal pattern in the distribution of bull trout, 2009.

3.2.2 Magnitude, Direction and Seasonal Variability of Movement by Species

3.2.2.1 Overwinter Movement

With the tributaries still frozen-over in late March, the first track of the year indicated the winter distribution of the radio-tagged fish populations in the Peace River study area. The distribution of radio-tagged fish during this first track is shown in Figure 28.

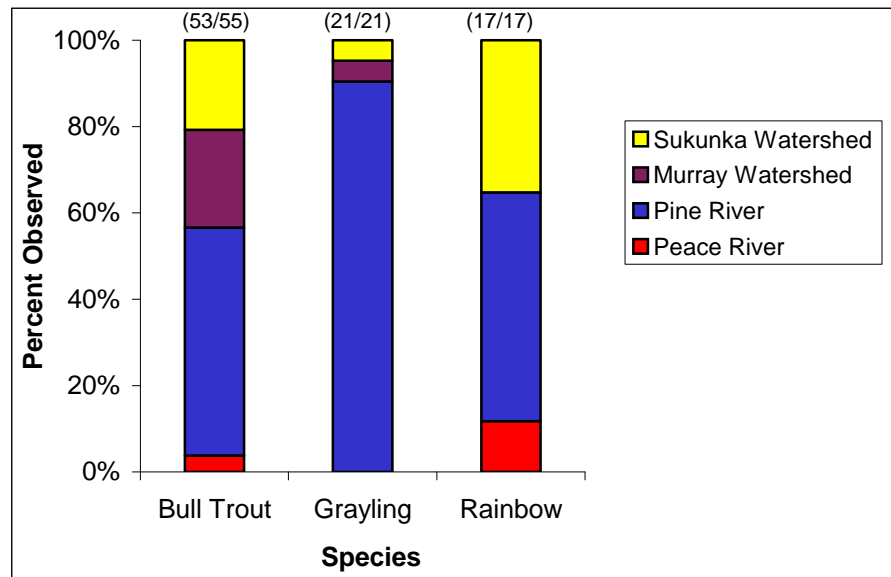


Figure 28: Distribution by watershed for bull trout, Arctic grayling and rainbow trout during a late winter track (March/April 2009)

Arctic grayling were found in the Pine, Murray and Sukunka rivers between 0.1 and 39 km from their last detection in 2008 (see Figure 29). The majority of Arctic grayling (16 of 21, or 76%) moved less than 1 km, and only one fish (5%) moved more than 20 km. The single long distance mover travelled 39 km downstream within the lower Pine River between 28 October 2008 and 1 March 2009.

Rainbow trout that were detected during fall 2008 were in similar positions in late winter 2009. Overwinter movements were typically less than 1 km (for 10 of the 17 tagged rainbow trout; or 59%). The longest mover, Fish 380, was never detected in 2008, but had been released in June 2008 in the Sukunka River and was relocated in the lower Pine River on 1 March 2009, 104 km downstream of the release site (Figure 29).

Most of the late winter bull trout detections were in the same vicinity of the late fall detections: 48 of 53 fish were in the same detection zone (91%). In all, 22 of 53 (42%) fish moved less than 1 km (Figure 29). Five fish moved more than 10 km: Fish 288 moved downstream 88 km from the Sukunka (28 October 2008) to the Lower Pine (1 April 2009); Fish 696 moved downstream 34 km within the Sukunka River (28 October 2008 to 1 March 2009); Fish 460 moved downstream 24 km within the Murray River (26 September 2008 to 1 March 2009); Fish 443 moved 22 km downstream within the upper Pine River (28 October 2008 to 1 March 2009); and Fish 648 moved 12.5 km downstream within the upper Pine River (28 October 2008 to 1 March 2009).

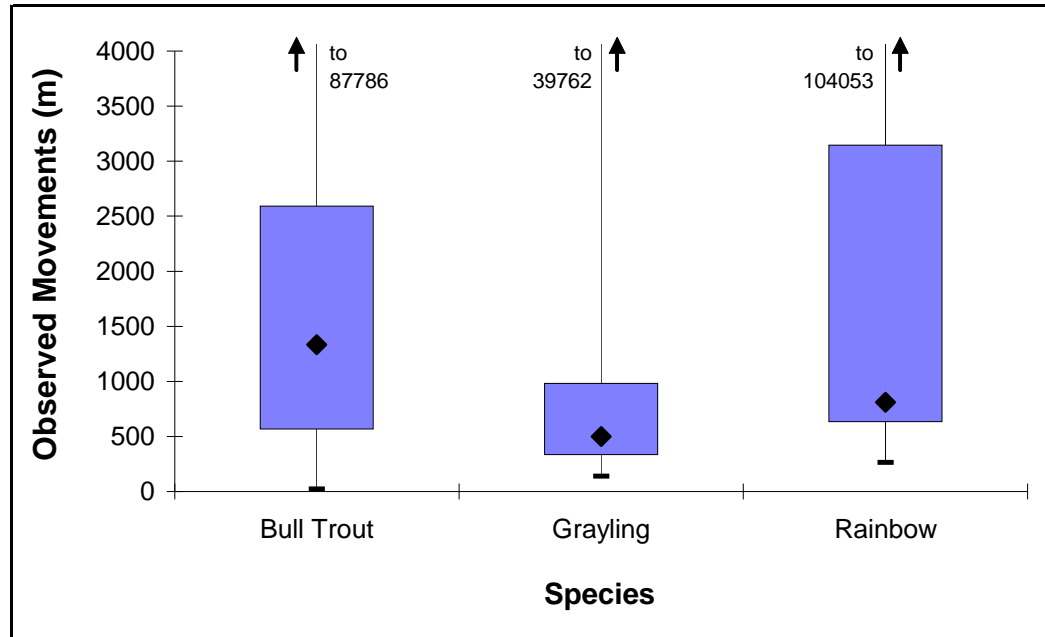


Figure 29: Distribution of observed overwinter (last detection in 2008 to March 2009) movements, by species. Diamonds indicate medians, boxes enclose the 25th to 75th percentiles, bars extend to the min and max observed values. Arrows and numbers indicate the maximum values.

3.2.2.2 Displacement during the Monitoring Period

The relationships between displacement and time at large are shown for all species and years in Figure 30. A fully-factorial ANCOVA (with displacement as the dependent variable; species and time at large as predictor variables) showed that the slope of the relationship between displacement and time at large varied significantly among species (species \times time at large interaction: $F_{3,829} = 4.1$; $P = 0.007$). Similar results were found in prior years (AMEC & LGL 2009).

In 2009, the slopes of the relationships between displacement and time at large were statistically significant for Arctic grayling and bull trout, but not for the other species (Figure 30). Arctic grayling showed negative slopes in all four study years, three of which were statistically significant. Similarly, bull trout showed negative slopes in all three of its study years, two of which were statistically significant. For mountain whitefish and rainbow trout, slopes were never statistically significant in any of the four study years. Walleye slopes were statistically significant in the first three study years (there were few data in 2009), but in 2006 and 2007 the slopes were significantly negative (downstream), whereas in 2008 the slope was significantly positive

(upstream). Two long-distance overwinter displacements likely contributed strongly to the positive slope in 2008 (Figure 30).

For most species in most years, median displacements showed significant variation among months (Table 6). In 2009, differences among months were not significant for any of the species (Table 6). Arctic grayling displacements in 2009 were highly variable, but downstream displacement was most common in July (

Figure 31). In prior years, Arctic grayling were more sedentary, with downstream movements mostly in July 2006, March 2007, and June 2008. In 2009, rainbow trout showed striking upstream displacements in June and downstream displacements in July. A similar temporal pattern of displacements was not observed in prior years (

Figure 31). In 2009, median bull trout displacements tended to be in the upstream direction in July and August, and in the downstream direction in September. This pattern was similar to that observed in 2007 and 2008 (

Figure 31). Very few walleye and no mountain whitefish were tracked in 2009.

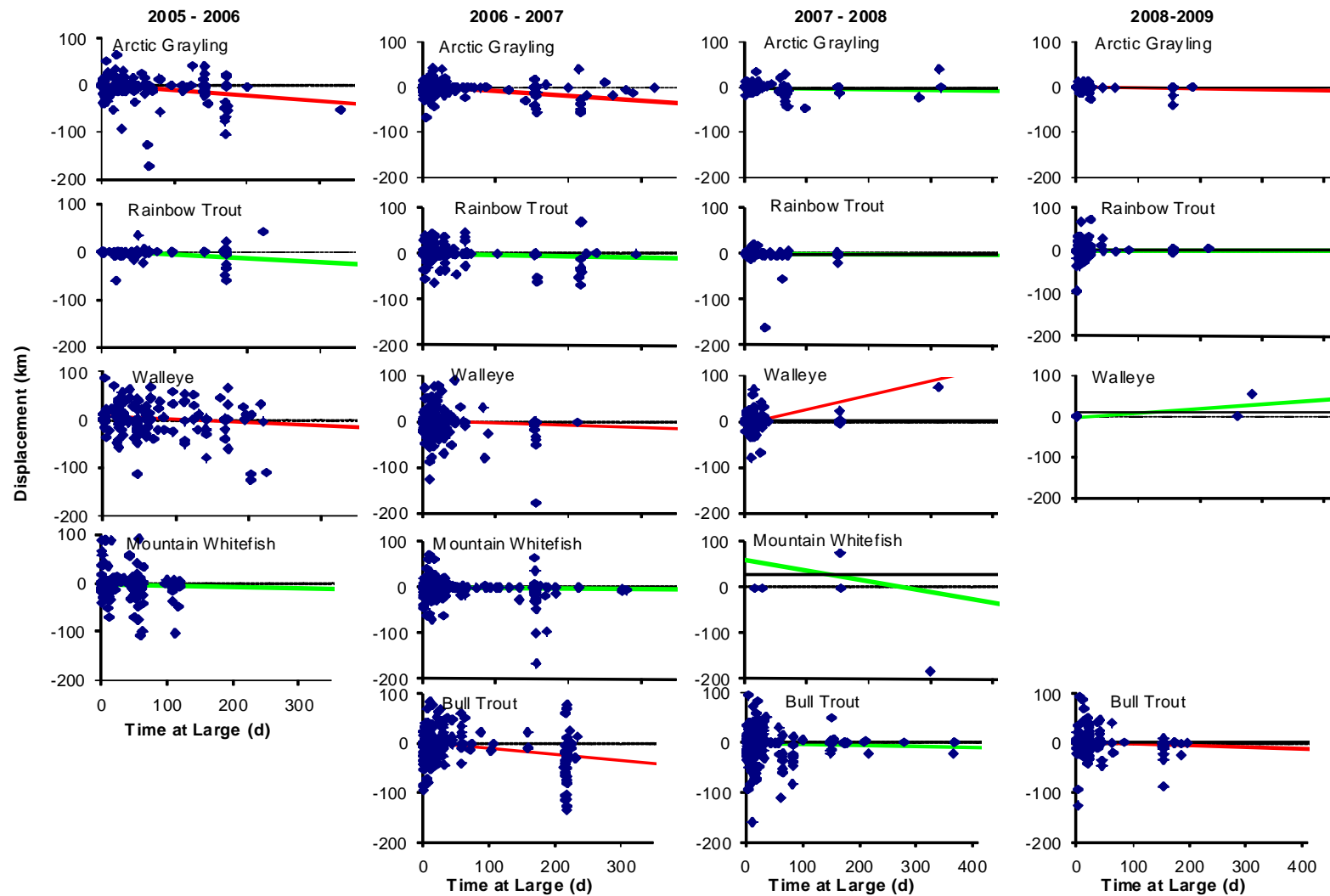


Figure 30: Displacements (km) as a function of time at large (d=day), by species and year. Overwinter movements are included in the plots. Slopes are shown with solid bold red (statistically significant) or green (not significant) lines. A dotted horizontal line at displacement = 0 shows the break between upstream and downstream movements. The solid horizontal lines show mean displacements

Table 6: Median displacement rates (meter/day) by species, month and year

Year	Month	Median displacement (meter/day)				
		Bull trout	Arctic grayling	Mountain whitefish	Rainbow trout	Walleye
2006	Feb		-23		x	1
	Mar		-15		-8	3
	Apr		51		-49	262
	May		-10		-25	505
	Jun		15	-3555	-4	-68
	Jul		-3710	-2527	x	1289
	Aug		2	-138	4	75
	Sep		x	x	x	x
	Oct		-9	2	3	5
	2007	Feb				
Mar		-91	-5	-1	-4	-2
Apr		-10	5	0	6	0
May		1	-3	6	14	1117
Jun		13	-3	-4	11	1
Jul		32	-1	3	6	23
Aug		9	-2	-8	-2	-59
Sep		0	-3	-1	-8	8
Oct		-9	-6	-2	-1	1
2008		Feb				
	Mar	2	x	x	2	x
	Apr	2	x	x	-15	-13
	May	5	4	x	5	313
	Jun	0	-800	x	-19	6
	Jul	12	23	x	-2	35
	Aug	-8	-157	x	-10	-2
	Sep	-14	-4	x	0	50
	Oct	-28	-3	x	-6	37
	2009	Feb				
Mar		x	x	x	x	x
Apr		5	4	x	-5	x
May		-4	-7	x	27	x
Jun		-1	1	x	6	x
Jul		13	-23	x	-50	x
Aug		5	4	x	9	x
Sep		-19	3	x	5	x
Oct		11	-3	x	-6	x
		<i>P</i> (2006)		<0.0001	<0.0001	0.03
	<i>P</i> (2007)	<0.0001	0.19	0.06	0.02	<0.0001
	<i>P</i> (2008)	<0.0001	<0.0001		0.23	0.30
	<i>P</i> (2009)	0.07	0.11	-	0.58	-

Note: Overwinter movements are included; *P* values are from Kruskal-Wallis tests of the effects of month on displacement; Cells with *n* < 10 have been excluded and are marked with "x".

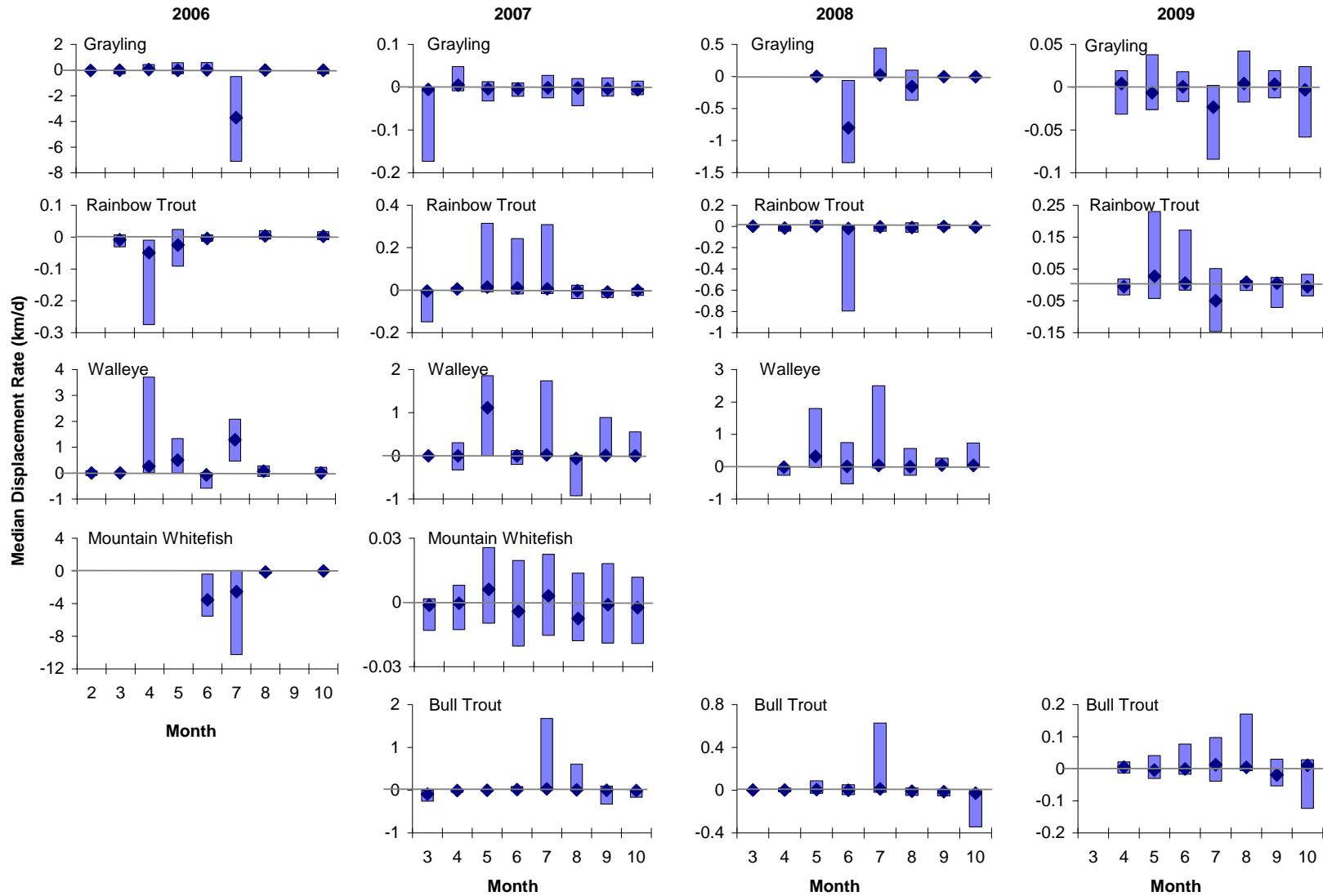


Figure 31: Distribution of observed median individual displacement rates (km/d) by species, month and year. Note the variable Y axes. Overwinter movements have been included in the plots. Diamonds indicate medians, boxes enclose the 25th to 75th percentiles. Distributions with $n < 10$ have been excluded.

Displacement rates varied among species and years (Figure 32). In 2009, variation among species was not statistically significant ($H_2 = 2.6$; $P = 0.27$), but in prior years, some differences were significant (AMEC & LGL 2009). Over the four-year study period, differences among years in median displacement were statistically significant for Arctic grayling ($H_3 = 12.0$; $P = 0.007$) and mountain whitefish ($H_1 = 19.6$; $P < 0.0001$), bull trout ($H_2 = 11.5$; $P = 0.003$), and rainbow trout ($H_3 = 8.7$; $P = 0.03$), but not for walleye ($H_3 = 2.4$; $P = 0.3$). Walleye was the only species to have median displacement rates in the upstream direction in all years (14.2, 24, and 13.4 m/d in 2006, 2007, and 2008, respectively). Arctic grayling, mountain whitefish and rainbow trout had median displacement rates in the downstream direction in all years (Arctic grayling: -7.0, -3.1, -20 and -4 m/d in 2006, 2007, 2008 and 2009, respectively; mountain whitefish: -69.1 and -2.6 m/d in 2006 and 2007; rainbow trout: -4.5, -2.7, -12 and -0.8 m/d in 2006, 2007, 2008 and 2009).

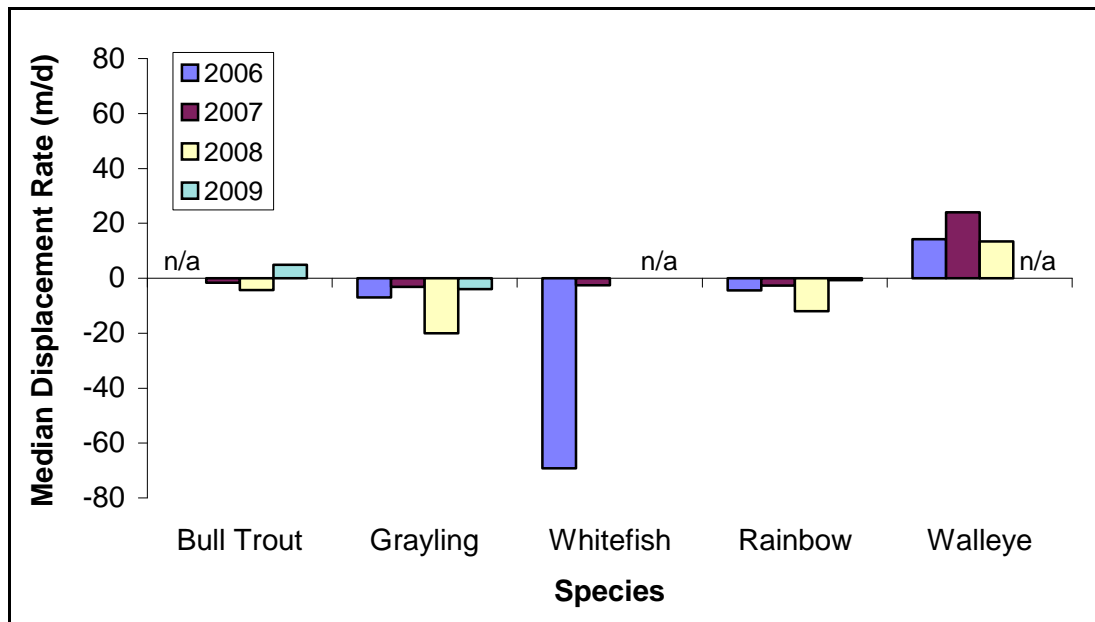


Figure 32: Median displacement rates (m/d) by species and year

3.2.2.3 Distances Moved During Monitoring Periods

In 2009, distances moved did not vary significantly among species (Figure 33; $H_2 = 3.9$; $P = 0.14$). Median distances for bull trout, Arctic grayling and rainbow trout in 2009 were 11.5 km, 7.4 km, and 6.9 km, respectively.

In 2006, the median distance moved by Arctic grayling (45.4 km) was significantly greater than all other species except walleye. There were no significant differences in the distances moved between the remaining species (mountain whitefish: 20.3 km; rainbow trout: 8.9 km) in 2006. In 2007, the

median distance moved by bull trout (51.2 km) was significantly greater than all other species except walleye. There were no significant differences in the distances moved between the remaining species (Arctic grayling: 8.9 km; mountain whitefish: 6.3 km; rainbow trout: 7.4 km) in 2007. There were no significant differences in the distances moved among species in 2008 (Figure 33). In all years, the median distance moved by walleye (2006: 80.1 km; 2007: 117.7 km; 2008: 61.1 km) was longer than that of any other species (differences were statistically significant in 2006 and 2007).

Among year differences in median distance moved were statistically significant for bull trout (2007: 51.2 km; 2008: 26.6 km; 2009: 11.5 km; $H_2 = 11.7$, $P = 0.003$), Arctic grayling (2006: 45.4 km; 2007: 8.9 km; 2008: 14.2 km; 2009: 7.4; $H_3 = 22.8$, $P < 0.0001$), and mountain whitefish (2006: 20.3 km; 2007: 6.3 km; $H_1 = 14.0$, $P = 0.0002$). The differences among years for walleye was large, but not statistically significant ($H_2 = 5.2$, $P = 0.08$) due to the large variance in distances observed within each year. The differences among years for rainbow trout (8.9 km, 7.4 km, 7.8 km and 6.9 km in 2006, 2007, 2008 and 2009, respectively) was negligible ($H_3 = 2.0$, $P = 0.57$).

Temporal patterns in movements varied among years and among species (Figure 34). In 2009, bull trout movements peaked in mid-summer, whereas in prior years longest movements appeared later in the year. Rainbow trout movements peaked from May to August in 2008 and 2009, whereas their movements were more variable in prior years. Arctic grayling movements showed very little seasonal pattern in 2009, as opposed to that which was observed in prior years.

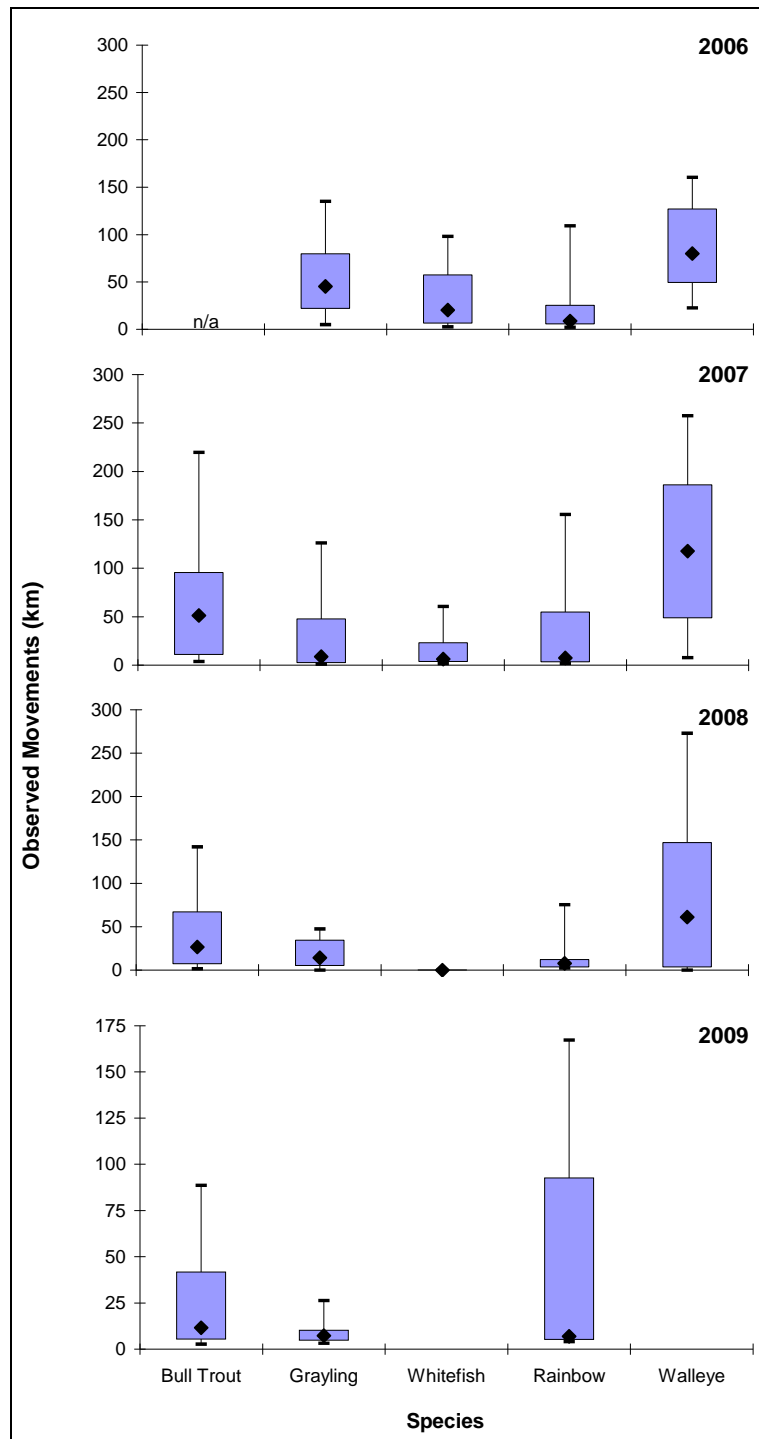


Figure 33: Frequency distribution of observed movements (km) for each species and year. Each box-plot shows the range of observed 'total movement' values for individuals of a given species within a given year. The 'total movement' for each individual was calculated by summing all observed movements for that individual over the study period. Diamonds indicate medians, boxes enclose the 25th to 75th percentiles, bars extend to the 10th and 90th percentiles.

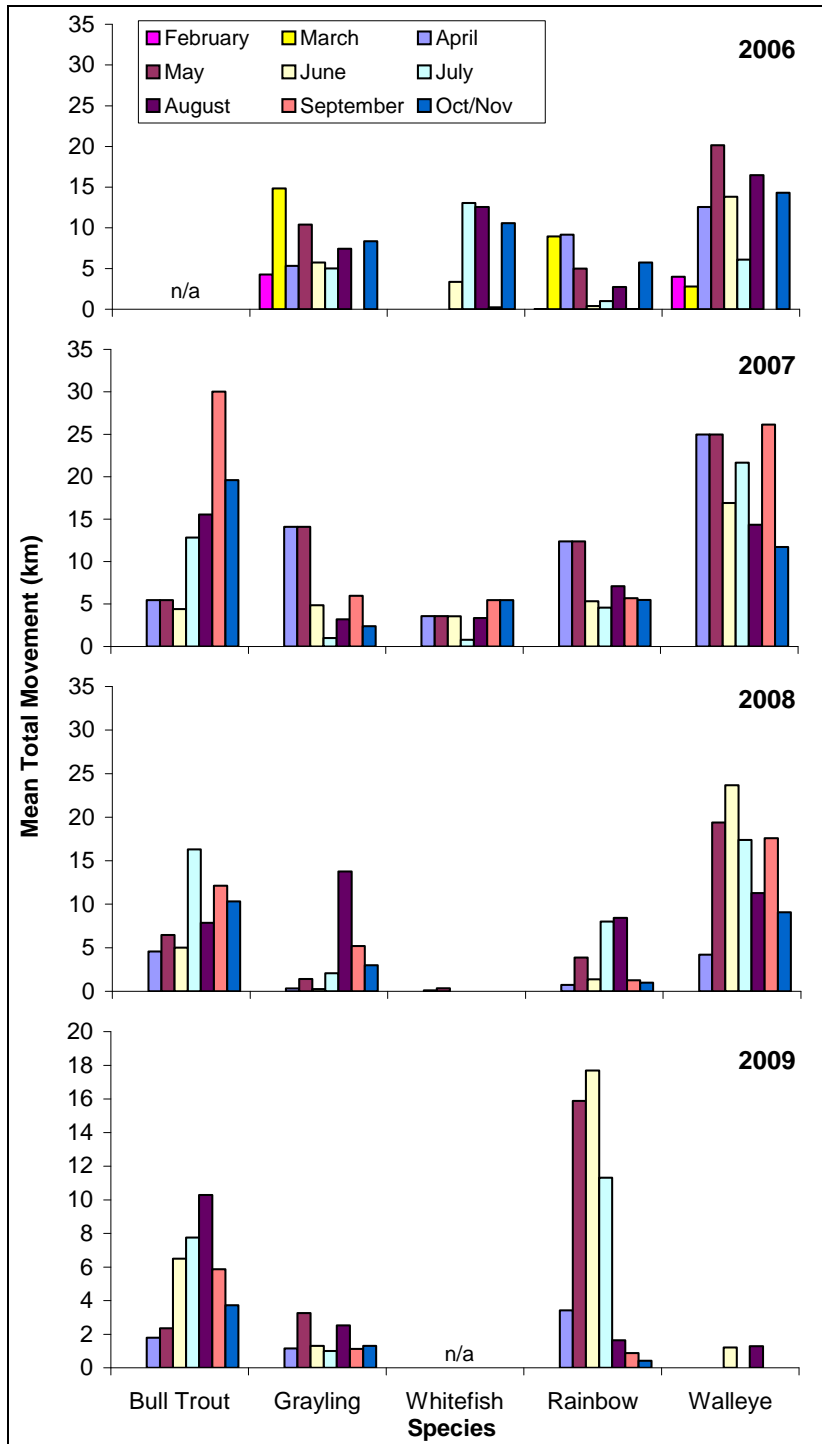


Figure 34: Mean total distance moved (km), calculated by summing the total distance moved by each individual and dividing by the total number of individuals, and plotted for each month, species and year

3.2.3 Magnitude and Seasonal Variability of Fish Movement Past Site C

In 2006, the percentage of Arctic grayling (72%; 33 fish) that passed the potential Site C dam location was significantly greater than that of all three other study species (Figure 35), probably largely because of the proximity of the dam site to the Moberly River, the main spawning stream for Arctic grayling and the location of their original release (see Figures 5 and 6). The percentage of mountain whitefish (29%; 32 fish) that passed the potential Site C Dam location was significantly greater than that of walleye (6.0%; 3 fish), but not statistically different from that of rainbow trout (15%; 4 fish). Rainbow trout were not significantly different from walleye in their propensity to pass the Site C dam location.

In 2007, significantly smaller proportions of radio-tagged fish passed the Site C dam location, compared to 2006 (Figure 35). Nevertheless, the relative pattern of differences among species in 2007 was similar to that in 2006. In 2006 and 2007, Arctic grayling was the species most likely to pass the Site C dam location. In 2007, 24% of the radio-tagged Arctic grayling (10 fish) passed the Site C dam location. Only 29% of Peace River-tagged Arctic grayling moved past Site C, while none of the Pine River-tagged Arctic grayling left the Pine River watershed. The proportion of tagged Arctic grayling that passed Site C in 2007 was significantly less than the proportion that passed in 2006, and significantly higher than that observed for all other species in 2007, with the exception of walleye, which was not significantly different. The proportion of bull trout that passed the Site C dam location in 2007 was <10% (5 fish). Only one (of 35) radio-tagged rainbow trout passed Site C in 2007, and this was one of the 20 rainbow trout that had been radio-tagged in the Peace River mainstem.

In 2008, only four tagged fish passed the Site C dam location; all of them were Pine River-tagged fish. One bull trout (Fish 273) passed this location four times, once in May, once in July, and twice in August. A second bull trout (Fish 274) passed the Site C dam location going upstream in June and downstream in July. A third bull trout (Fish 334), located upstream of the Site C dam location at the beginning of the year, passed downstream of this location in June before moving into the Pine River drainage. One rainbow trout passed the Site C dam location in August and stayed near the fixed-station receiver at the mouth of the Moberly River until September, but was not detected after this time (Figure 35).

None of the fish tagged from the Peace River passed the Site C dam location in 2008, which included active tags for 20 Arctic grayling, 4 mountain whitefish, 6 rainbow trout, and 15 walleye. One rainbow trout and three bull

trout initially tagged from the Pine River passed the Site C dam location, which included active tags for 84 bull trout, 10 Arctic grayling, and 18 rainbow trout.

In 2009, a single radio-tagged fish passed the potential Site C dam location (Figure 35). Fish 384, a rainbow trout, started out in the Peace River near Cache Creek (23 May), moved downstream, was detected on the fixed station near the Moberly (i.e., near Site C) from 15 to 25 May (Figure 35), and then continued downstream into the Pine watershed (starting 3 June). No other individuals were detected passing Site C in 2009.

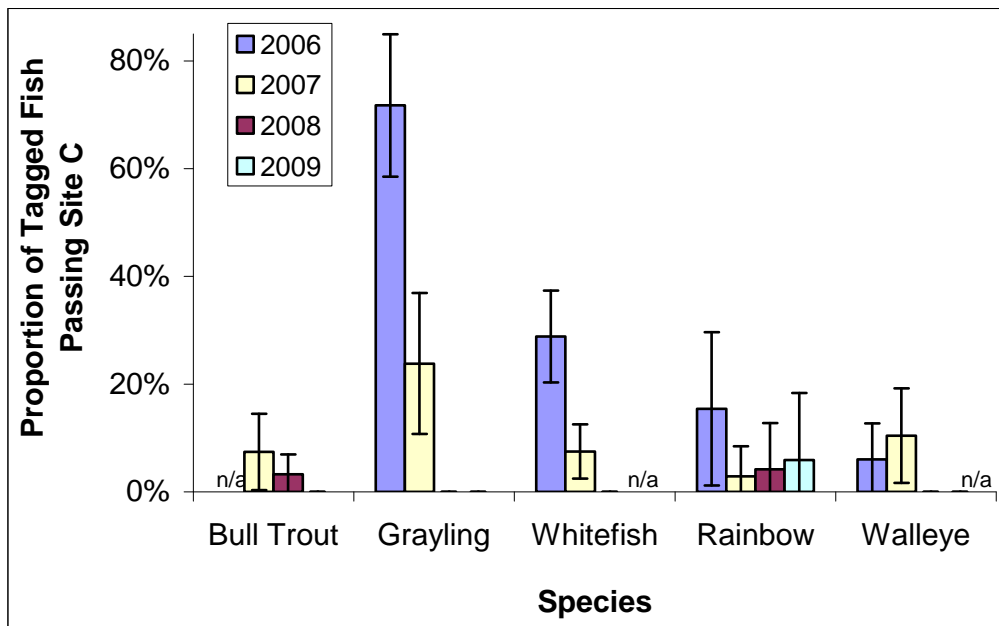


Figure 35: Proportion of radio-tagged fish that moved past Site C, by species and year. Error bars reflect confidence intervals associated with the mean, and are not related to the non-parametric statistical test used.

In 2006 and 2007, passage events across the proposed Site C dam location occurred throughout the year, and some species showed seasonal passage patterns (Figure 36). For example, Arctic grayling passage peaked in April and May in 2006 and 2007, with lower proportions of fish passing in June 2006 and 2007, July 2006, and March 2007. Mountain whitefish passage peaked in June and July 2006, but was relatively constant throughout 2007. The lack of pre-June 2006 mountain whitefish detections is an artefact of the sampling program since mountain whitefish were not tagged before June 2006. In 2008 and 2009, too few fish passed Site C to assess seasonal effects.

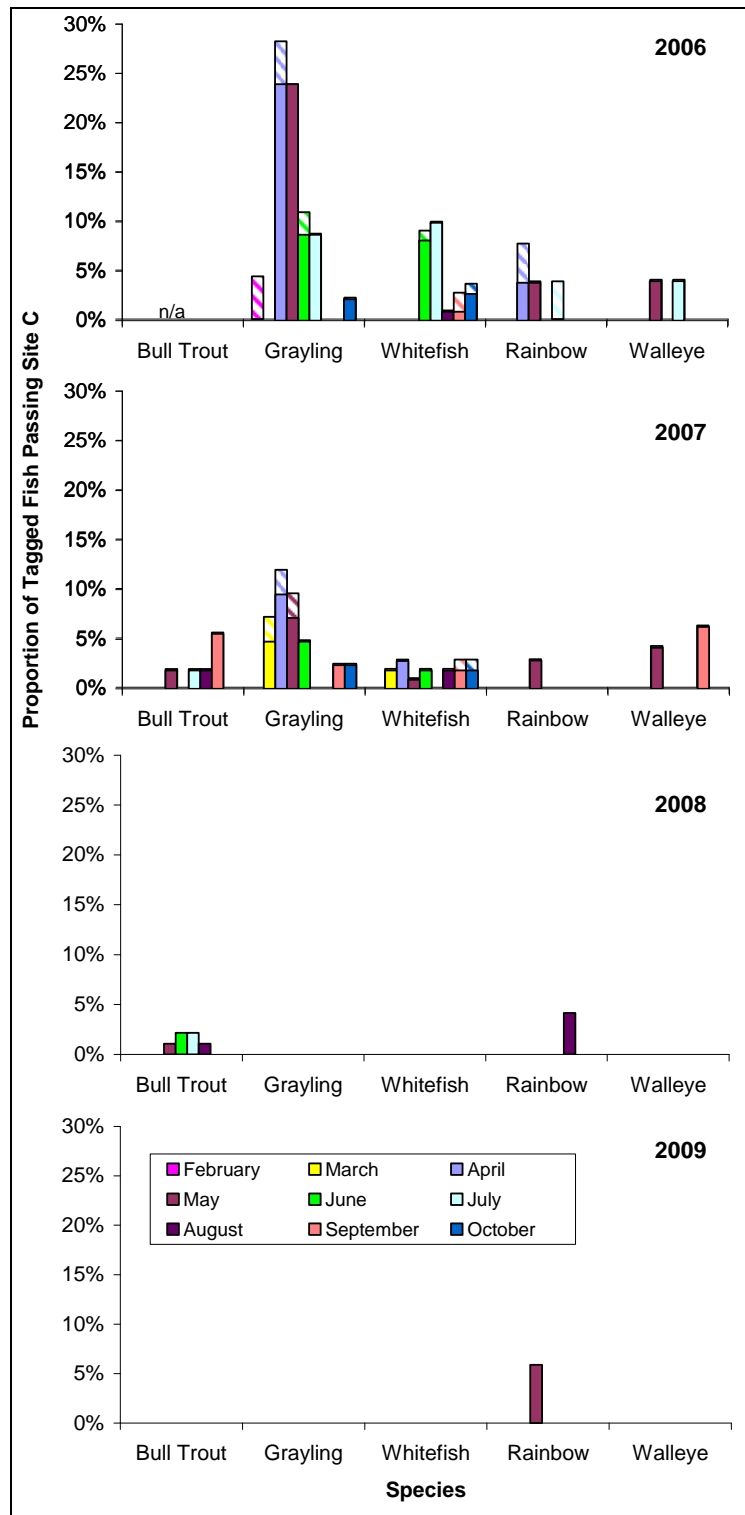


Figure 36: Proportion of radio-tagged fish that moved past Site C, by month species and year. Hatched area represents movement inferred from mobile detections for fish not detected at Site C fixed-station

4.0 DISCUSSION

The emphasis in this discussion will be on the movements of radio-tagged bull trout, rainbow trout and Arctic grayling that were released in the Pine River watershed between 2006 and 2008 and tracked in the Peace River Site C study area to October 2009. Relevant comparisons will be made of the findings in the present study with those of earlier reports on movements of these sportfish species in the Peace River mainstem and tributaries by AMEC & LGL (2008b, 2008c, 2009, 2010) and others (e.g., Mainstream 2009a, 2009b, 2010). In addition, the movements of two other sportfish species (walleye and mountain whitefish) that were mainly documented in earlier reports by AMEC & LGL (2008b, 2008c, 2009) will be summarized and compared with the findings of the present study, and others, where relevant.

4.1 Fish Movements in the Peace River

4.1.1 Bull Trout

Three years of tracking of the movements of bull trout released in the Pine River watershed provide a fairly substantive database with which to assess their movements in time and space and to compare with that of other relevant studies. A comparison of the key findings of the distribution of bull trout in the Pine River watershed over these years indicates differences existed among years. In 2007 and 2008, the distribution of detections changed seasonally (AMEC & LGL 2008c, 2009):

- From March through June, the majority of bull trout were in the Pine River mainstem;
- The largest concentrations of bull trout in the Burnt/Sukunka rivers occurred from July through October, the period during which the numbers of bull trout in the Pine River mainstem decreased;
- The largest concentrations of bull trout in the Murray/Wolverine rivers occurred from August to October; however, this is mainly the result of tagging and release of fish in this area in autumn in these years.

In contrast to the above, in 2009, the distribution of bull trout in the Pine River watershed was relatively stable over time:

- In all months, the majority (51-64%) of the fish detected was in the Pine mainstem ;
- The proportion of bull trout detected was similar in the Burnt/Sukunka (18-30%) and Murray/Wolverine (18-24%) drainages.

The differences observed in the distribution of bull trout detections among years in the Pine River watershed may have been largely due to the 'inflationary effect' of additional tagging of fish in specific areas in 2007 and 2008 (for release locations see Figure 7). This effect may have limited our ability to observe naturally-occurring seasonal differences in fish distribution.

During the three-year tracking period, the median distance moved by Pine-tagged bull trout became progressively shorter over time; 51, 27 and 12 km in 2007, 2008 and 2009, respectively. A major difference among these three years is that fewer long-distance movements by bull trout that exited the Pine occurred in 2008 and 2009, than in 2007. In 2008, the detections of bull trout outside of the Pine River watershed were restricted to four fish in the Peace River mainstem, which were distributed upstream as far as Cache Creek to downstream near the Alces River. In 2009, only two bull trout exited the Pine watershed, one of which moved very little, and the other made a long-distance migration between the Wolverine River and the Peace mainstem (near the Alberta border). In contrast to 2008 and 2009, in 2007, five bull trout exited the Pine, two of which made long-distance movements to the upper Halfway River watershed during the bull trout spawning period and returned after the spawning period. Possible explanations for fewer long-distance movements between the Pine and Halfway drainages in the last two year of study are:

- Only a minor proportion (perhaps <5%) of bull trout present in the Pine River watershed are migratory with the majority being resident fish that complete their life cycle within the watershed;
- Very few migratory bull trout were tagged in all years (2006-2008); and,
- Some migratory bull trout may have been captured by anglers since 2007.

In 2008, additional tagging was conducted throughout the Pine River watershed to provide better representation of the overall distribution of bull trout in the Pine River. However, none of these fish moved to the Halfway River in 2009. It is likely that angling has a limited impact on the proportion of migratory bull trout observed in the Pine River. Although recent creel surveys show that angler catch of bull trout in the Pine River watershed is considerable (Robichaud et al. 2008, 2009), the species is protected in this watershed, and data from raw interviews of anglers show that no more than 5% of the fish caught are kept (D. Robichaud, pers. comm., LGL Ltd., Sydney, BC). In all likelihood, the proportion (perhaps <5%) of Pine River bull trout moving out of the Pine to complete their life cycle is probably reasonably well represented in our telemetry study

Migratory bull trout, although rare in the Pine River watershed, appear to consist of two life history types: one that spawns in the upper Pine River and forages and overwinters in the Peace River mainstem, and another that spawns in the upper Halfway River watershed and forages and overwinters in the Pine River. Verification of the existence of these two life history types requires confirmation through genetic analysis and is beyond the scope of our radio telemetry study (see Section 4.2.1.1).

Most bull trout tagged in the Pine River watershed moved relatively little (<1 km) during the winter period in all three years. In 2008, for example, 60% (28) and 89% (42) of the fish detected were within 1 km and 4 km, respectively, of their last known position in November 2007. A small proportion (11%, 5) of tagged bull trout showed longer-distance overwinter movement, the most extensive being that of a fish that had moved 49 km from the Peace River (near Cache Creek) to the Pine River during the period November 2007 to March 2008. Some longer-distance overwinter movements were also observed for bull trout in 2009, with five fish moving more than 10 km, the longest being a fish that moved 88 km from the Sukunka to the lower Pine mainstem.

The seasonal movement patterns of bull trout in the Pine River were similar between years, with downstream movements generally occurring from September to March and upstream movements from June to August. A similar pattern of seasonal movements was observed for bull trout in the Halfway River (AMEC & LGL 2010).

Within the Pine River watershed, several important spawning areas have recently been identified by MOE by radio-tagging adult bull trout in various parts of the watershed in the pre-spawning period and locating the fish during spawning. Important spawning areas include the Wolverine River (a tributary of the lower Murray River), Burnt River, and various drainages (Callazon Creek, Fellers Creek) in the upper Pine River (Goddard 2009; M. Macullo, pers. com., Ministry of Environment, Fort St. John, BC).

Like in the Pine River, bull trout in the Halfway River appear to consist of resident and migratory fish. However, in contrast to that in the Pine River, migratory bull trout is probably the dominant life history type in the Halfway River. This is evident from radio-tracking studies conducted by MOE in the late 1990s in which considerable numbers of bull trout were released in headwater drainages of the Halfway River to determine their movements within and between tributaries and the Peace River mainstem (Burrows et al. 2001). In the recent updated analysis of the MOE late 1990's radio-telemetry database (AMEC & LGL 2010), 64% of the bull trout released in the Halfway

River made at least one foray into the Peace mainstem, whereas 36% did not exit the river. The timing of these forays (downstream in September-October, and upstream in May-July) suggests they are related to bull trout feeding and overwintering in the Peace mainstem and spawning in the Halfway River. These movements parallel those reported by McPhail (2007) for bull trout pre-spawning migrations from larger mainstem rivers into tributary streams.

There is also some circumstantial evidence that bull trout move seasonally between the Halfway River and Peace River mainstem. In June 2008, approximately 50 large bull trout were observed holding in the lower Halfway River (~4 km upstream from the Highway bridge), and several others were captured by electrofishing within the vicinity on four occasions between mid-May and early June (Mainstream 2009a). Similar findings for large bull trout holding in the lower Halfway were observed in June 2009 (Mainstream 2010). The timing of the occurrence of these large fish in the river coincides with that reported for the upstream movement of radio-tagged bull trout from the Peace River into the Halfway River from May through July (AMEC & LGL 2010).

Bull trout are known to spawn in several headwater tributaries of the Halfway River, including the Graham River, Chowade River, Cypress Creek, and upper Halfway River (Burrows et al. 2001; AMEC & LGL 2010). Recent analysis of the MOE 1996-1999 radio telemetry database shows that bull trout move from the Peace River into these headwater drainages from May through July and a high proportion of them exit in September-October and return to the Peace mainstem (AMEC & LGL 2010). The timing of these movements corresponds with pre-spawning and post-spawning periods for bull trout.

The median distance moved by bull trout in the Pine River became progressively shorter each year (range 51-12 km, from 2007-2009). The median distance moved by bull trout released in the Halfway River (183 km; AMEC & LGL 2010) is considerably greater than that recorded for bull trout in the Pine River. Mean monthly movements for bull trout in the Pine River were low from March through June in 2007 and 2008, but considerably higher in June in 2009. In most years, increased movements were observed from July through October.

The percentage of Pine River-tagged bull trout moving past the proposed Site C dam location was less in 2008 (3%: 3 of 92) than in 2007 (7%: 4 of 54) and in both years occurred mostly in September. In 2007, the percentage of the tagged bull trout population that passed Site C was not significantly different

from that of mountain whitefish, rainbow trout and walleye, but was significantly lower than that of the Arctic grayling mainstem population. No bull trout moved past Site C in 2009 (0 of 61). Among the Halfway River-tagged population, 21% (15 of 71) of bull trout moved past the potential Site C Dam between 1996 and 1999 (AMEC & LGL 2010).

4.1.2 Rainbow Trout

Rainbow trout tagged in the Peace River mainstem between 2005 and 2006 amounted to 32 fish in all, and probably represented a minor proportion of the overall population. The 2008 and 2009 tracking surveys did not provide any new information on movements of these fish as the tags were no longer active. Briefly, the movements of mainstem-tagged rainbow trout from the 2006 and 2007 tracking surveys, reported previously (AMEC & LGL 2008b, 2008c), were as follows:

- Rainbow trout in the Peace River mainstem were distributed mainly between the Peace Canyon Dam and Cache Creek area;
- Rainbow trout in the Peace River mainstem made minor movements throughout the tracking periods, with most movements occurring during the spawning season (May through June);
- They spawned in tributaries closer to the Peace Canyon Dam area (Maurice, Lynx, and Farrell creeks) in spring, and returned to the Peace mainstem to feed and overwinter. The importance of Maurice Creek for rainbow trout spawning has been confirmed in recent surveys (Mainstream 2009a);
- They moved past the potential Site C dam location in 2006 more frequently (15%) than walleye (6%), but less frequently than mountain whitefish (29%) and Arctic grayling (72%); in 2007, rainbow trout passage past Site C (3%) was surpassed by all other species.

The main findings of the movements of the Pine River-tagged rainbow trout from tracking surveys conducted in 2008 were summarized in earlier reports (AMEC & LGL 2009) and are reiterated here for comparative purposes:

- The majority of rainbow trout remained in the Pine River drainage year-round; only two fish exited the river;
- The fish were distributed mainly in the Burnt/Sukunka rivers and Pine River mainstem near the mouth of the Murray River;
- Their movement distances were short (average ~7 km);

- Only two fish exited the Pine River, and neither moved >10 km from the mouth.

The results of the 2009 tracking surveys are not greatly dissimilar from that reported for the 2008 surveys, other than that some greater movement distances were recorded for a few fish. The main findings in 2009 were as follows:

- During all months (April-October), approximately 50% of the rainbow trout were in the lower Pine River mainstem, the other half of the tagged population was mostly in the Burnt/Sukunka drainage;
- Movement distances were variable, consisting of minor, moderate and extensive distances travelled (median 6.9 km);
- Very few fish exited the Pine River, and of those that did, all but one did not move far from the mouth of the Pine – one fish moved upstream ~10 km past the Moberly River, then moved to within the vicinity of the Beatton River, and returned to the Pine River.

Rainbow trout median distances were similar among years (9, 7, 8 and 7 km in 2006, 2007, 2008 and 2009, respectively), and similar to that of Arctic grayling (9 km) and mountain whitefish (6 km) in 2007, but not in 2006. Overwinter movement was typically less than 1 km, with the longest movement being 104 km downstream of the release site in the Pine River.

Documentation of rainbow trout spawning movements into the tributaries was only observed once during the Peace River mainstem tracking surveys in 2006 and 2007; none was observed in the Pine River watershed from 2007 through 2009. Despite biweekly aerial tracking during spring in 2006 and 2007, only one rainbow trout was detected in Maurice Creek. . However, since the distance to travel from the Peace River mainstem to spawn in the smaller tributaries is short (<5 km), some movement into these tributaries may have gone undetected. Moreover, spawning in the Pine River system may largely occur within the vicinity in which they reside, and the movements may be subtle and not readily detected from aerial survey data.

Other surveys provide indirect evidence of rainbow trout spawning in the tributaries. Adult rainbow trout were captured in hoopnets moving upstream in Maurice, Lynx and Farrell creeks during spring in 2006 (AMEC & LGL 2008b); however, no young of year fish were captured by electrofishing in these streams during summer (AMEC & LGL 2008b), which may be because they had moved out before sampling was conducted due to exceedingly low, summer flows in the tributaries in 2006. Recent catches in upstream fish traps in the tributaries in spring (Mainstream 2009a) indicate that Maurice

Creek is probably the most important spawning area for rainbow trout. This finding is supported by high catches of young of year fish by electrofishing in Maurice Creek, as well as some in Lynx and Farrell creeks, during summer (Mainstream 2009b).

Other studies have found rainbow trout present in these Peace River tributaries. Approximately 90% of the rainbow trout captured in fisheries investigations in the Peace River study area during autumn 2005 were from Lynx and Maurice creeks (AMEC & LGL 2008a). Spawning out rainbow trout were captured in Maurice and Lynx creeks during spring 1989, and large numbers of young of year fish were caught in these streams in autumn of that year (ARL 1991b).

Passage past the proposed Site C dam location for rainbow trout from the Peace River mainstem was sporadic in all years. In both 2006 (15%; 4 fish) and 2007 (3%; 1 fish), rainbow trout passage occurred in April and May. In 2008, one fish (4%) moved past the Site C dam location in August. In 2009, the only fish to move past the Site C location was a rainbow trout (representing 6% of active tags) in May.

4.1.3 Arctic Grayling

The movements of Arctic grayling in the Pine River watershed are compared with those from our earlier studies on Arctic grayling in the Peace River mainstem and of the MOE studies in the late 1990s in the Halfway River and Sukunka River. None of the Arctic grayling tagged in the Peace River mainstem in 2005 and 2006 were detected in our 2008 tracking surveys as the tags were no longer functional. From the results of the 2006 and 2007 surveys (AMEC & LGL 2008b, 2008c) and some additional information from findings by others (e.g., R.L.&L. 1991a, 1991b; Mainstream 2004, 2005, 2006 and 2007), it was summarized in our 2008 report (AMEC & LGL 2009) that Arctic grayling in the Peace River mainstem:

- Occur primarily between the Halfway River and Beatton River confluences;
- Migrate into specific tributaries (mainly the Moberly River, and occasionally the lower Halfway River) in early spring to spawn, and subsequently return to the mainstem to feed and overwinter (some may overwinter in the lower Halfway River);
- Move moderate distances, though variable between years (median 45 and 9 km in 2006 and 2007, respectively);

- Use the smaller tributaries sparingly, or not at all, upstream of the potential Site C dam location (Maurice, Lynx, Farrell, and Cache creeks) for spawning and rearing; and
- Pass the potential Site C dam location more frequently than any other sportfish species in the study area.

In the Peace River mainstem, it appears that the Moberly River is the main contributor to annual juvenile recruitment of Arctic grayling within the Site C study area (AMEC & LGL 2008b, 2008c). From April to May, several Arctic grayling from the Peace River mainstem were detected well upstream in the Moberly River, and by June they had retreated back to the mainstem. These results are consistent with those of other studies, which reported finding more Arctic grayling in the Moberly River than in any other tributary (ARL 1991b; Mainstream 2009a).

Supporting evidence for the Moberly River as an important spawning and rearing area for Arctic grayling comes from the spring hoop-netting and summer electrofishing surveys conducted in 2006 (AMEC & LGL 2008b). Adult and ripe Arctic grayling were captured while moving up the Moberly River, and small numbers of young-of-the-year were found in the lower Moberly River suggestive of spawning upstream. In 2008, adult Arctic grayling were captured by electrofishing and trapping in the Moberly River in spring (Mainstream 2009a) and young of year fish were recorded in upper and lower sections of the river in summer in the same year (Mainstream 2009b).

The extent of the distribution of Arctic grayling spawning and rearing in the Moberly River is not precisely known. Based on the locations of tagged grayling in the spring, spawning appears to occur both downstream and upstream of the potential zone of inundation of the Site C Dam (AMEC & LGL 2008b). In May 2007, radio-tagged Arctic grayling were detected as far as 50 km from the mouth of the Moberly River (AMEC & LGL 2008c). Arctic grayling young-of-the-year were found as far upstream as 69 km and 75 km from the mouth of the Moberly River in 1977 (RRCS 1978) and 1989 (ARL 1991b,), respectively.

Some inter-annual variation in timing of Arctic grayling migration from the Peace River mainstem to the Moberly River has been observed during our tracking studies, probably largely due to variability in the arrival of spring. Arctic grayling are early spring spawners, and typically move into tributary streams during or immediately after ice break-up to spawn (Tripp and McCart 1974). Fewer fish were detected in the Moberly River in 2006 (2; 10%) than

in 2007 (7, 25%), likely because our aerial surveys were not well timed for an early spring and movement up river was detected in 2007 with a fixed station in the Moberly River, which was not installed in 2006.

Based on results to date, the smaller tributaries upstream of the potential Site C dam location are probably of limited importance for Arctic grayling spawning and rearing. Tracking surveys conducted in 2006 and 2007 did not detect Arctic grayling in Maurice, Lynx, Farrell, and Cache creeks (AMEC & LGL 2008b, 2008c). In addition, neither adults nor young-of-the-year were captured during instream surveys in the smaller tributaries in 2005 and 2006 (AMEC & LGL 2008a, 2008b). Consistent with these observations, no adult or juvenile Arctic grayling were captured in these tributaries in spring and summer surveys in 2008 (Mainstream 2009a, 2009b). Contrary to these findings, minor upstream movements of Arctic grayling were recorded in Farrell, Lynx, and Maurice creeks in an earlier study (RRCS 1978); these minor differences between studies may be partly due to the change in Arctic grayling distribution in these drainages over time.

In regards to the tributaries downstream of the Site C dam location, some spawning by Arctic grayling likely occurs in the Beatton River. Several fish were captured and radio-tagged within the vicinity of the Beatton River confluence in September 2005 (AMEC & LGL 2008a), and subsequently several fish were detected within the Beatton River mouth area in most months between spring and autumn 2006 and 2007 (AMEC & LGL 2008b, 2008c). In addition, one fish was detected approximately 20 km upstream from the mouth of the Beatton River in May 2007, which may have been related to spawning (AMEC & LGL, 2008c).

From the results of three years of tracking (2007-2009) of Arctic grayling released in the Pine River watershed (2006 and 2008) the main findings are as follows:

- None of these fish exited the Pine River, which is consistent with that of the MOE 1996-1999 study of Arctic grayling movements in this watershed (AMEC & LGL 2010);
- The majority were in the areas in which they were released: in 2007, they were mainly in the Burnt/Sukunka drainage to downstream in the Pine River mainstem at the Murray River; in 2008, they were primarily in the Pine River mainstem below the Murray River confluence;
- Their distances moved were short (median, 14 and 7 km in 2008 and 2009, respectively) and invariably downstream;
- These fish are not likely to pass the potential Site C dam location.

Like in the Pine River, Arctic grayling in the Halfway River appear to be resident fish; during three years of tracking by MOE of considerable numbers of radio-tagged fish in this watershed, only one fish moved into the Peace River (AMEC & LGL 2010). The distances moved among Arctic grayling in the Halfway River watershed varied considerably (from <100 to >200 km) and generally were much longer (median 127 km) than those recorded for Arctic grayling in the Pine River watershed (median 79 km in the MOE 1996-1999 study; 14 and 7 km in our 2008 and 2009 studies).

Arctic grayling spawning areas in the Pine and Halfway rivers have not been specifically identified, but probably occur to quite an extent in the areas of importance for bull trout spawning mentioned earlier. There is some evidence of Arctic grayling moving relatively short distances from the Halfway River mainstem into side streams during spring, which may be spawning related (see movement maps for individual fish in AMEC & LGL 2010). Important spawning areas likely include headwater streams like the Burnt/Sukunka in the Pine and the Graham, Chowade, and Cypress in the Halfway.

Overall, the results indicate that overwinter displacement is typically minimal for Arctic grayling in the Peace River mainstem and Pine River. The majority moved <1 km from where they were last detected in autumn in the previous year, although a few moved much more, the longest being 39 km downstream in the lower Pine River.

4.1.4 Walleye

There was very little new information on walleye movements acquired during the 2009 tracking period. Of the 58 fish tagged in 2005, only two fish were detected in all in 2009, due to battery end-of-life amongst the tagged population. The locations of these few detections in the Peace River mainstem and tributaries (Beatton and Pine rivers) were consistent with those observed in previous years (2006, 2007 and 2008).

The median distance moved by walleye was greater than that of all other species studied in 2006 and 2007. The mean monthly distance moved by walleye was variable, but generally highest April through May and in September. A major proportion of the fish that moved up the Beatton River in spring were those that overwintered (October through April) within the vicinity of the Beatton River mouth. In contrast, fish that did not move up the Beatton River remained mostly downstream of the Beatton River in the Peace River mainstem, widely distributed, with some as far as Peace River, Alberta. Of

these, some individuals moved long distances, with one fish moving over 600 km from the release site in 2005 to where it was captured by an angler in 2007.

The proportion of potential Beatton River spawners observed was similar among years: 50% (25 fish) in 2006, 54% (26 fish) in 2007, and 53% (8 fish) in 2008. Overall, the movements of these fish were consistent among years. Most of them exited the Beatton River in the post-spawning period, moved up the Peace River, turned into the Pine River and moved upstream variable distances, exited the Pine later in the season, and by late October were congregated at the Beatton River mouth to overwinter.

The walleye population within the Site C study area appears to make virtually no use of the tributaries upstream of the Pine River. Walleye were not captured in any of these tributaries during autumn in 2005 (AMEC & LGL 2008a), or during spring and summer in 2006 or 2008 (AMEC & LGL 2008b; Mainstream 2009a, 2009b). Similar findings have been reported by others (Hildebrand 1990; R.L.&L. 1991a, 1991b, 2001; P & E 2002, 2003). An exception is that two spawned-out walleye were captured/observed in Farrell Creek during spring 1989; the spawning location for this pair was not determined (ARL 1991a).

Based on the overall tracking results for the 2006-2008 period (AMEC & LGL (2008b, 2008c, 2009), it is concluded that the walleye population in the Site C area utilizes an extensive range within the Peace River mainstem and specific major tributaries, but only a small proportion of the population is likely to move upstream past Site C.

4.1.5 Mountain Whitefish

No new movement was acquired for mountain whitefish in 2009 as the radio tag batteries of the 2006-tagged population were exhausted by this time. Likewise, little new movement information was acquired for this species during 2008 tracking; no fish were detected at the fixed-station receivers and only two fish (one was considered dead) were detected during the first three aerial surveys (31 March-14 May period).

As there is no new information to add to this species from the current year of study, a summary of our main conclusions for mountain whitefish in our 2008 report, based mostly on our 2006 and 2007 tracking surveys, and some relevant findings from research in the area by others, follows:

- Mountain whitefish are widely distributed in the Peace River mainstem from the Peace Canyon Dam downstream to the Alberta border;
- Generally, they do not move great distances (median 6 km in 2007); and,
- Mean monthly movement is slightly greater during September through October, probably largely due to increased movement between the Peace mainstem and tributaries during the spawning period.

Typically, mountain whitefish numbers are quite low within the tributaries (e.g., Halfway River), but increase during August through October (the most was 12% of the total number detected in the Peace River study area in fall 2007), probably in relation to spawning. A potential spawning area may include the Beaton River headwaters, but this is speculative as it is based on the detection of one mountain whitefish in this location at the end of March 2008. Radio-tagged fish have been detected in the upper and lower reaches of the Halfway River and lower Pine River. In addition, the upstream catch during autumn in the Moberly River (fish trap) and Halfway River (boat electrofisher) was dominated by mountain whitefish in spawning condition (Mainstream 2009a). Also, large numbers of spawning mountain whitefish were observed in the lower Halfway River during autumn 1989, with the highest numbers of larval mountain whitefish recorded in the Peace River mainstem downstream of the Halfway River in the following spring and summer (R.L.&L. 1991a, 1991b).

Additional supporting evidence of spawning in the tributaries comes from catches of young of the year mountain whitefish in the lower reaches of the Moberly River and Maurice, Lynx, Farrell, and Cache creeks in summer 2006; they were most abundant in Lynx and Maurice creeks (AMEC & LGL 2008b). In addition to originating from spawning that occurred in these tributaries, some of these juvenile fish may have come from the Peace River mainstem. Although risk of eggs freezing in the smaller drainages (Maurice, Lynx, Farrell, Cache) is a possibility, adult mountain whitefish were the most common large-bodied fish in these drainages in autumn 2005 (AMEC & LGL 2008a), with similar findings reported by others (RRCS 1978; ARL 1991a), suggesting that some groundwater-inflows may occur in these drainages.

In regards to the limited movements of mountain whitefish in the potential Site C study area reported by AMEC and LGL (2008b, 2008c), the findings may not be wholly representative of naturally-occurring movements of the species between the Peace mainstem and tributaries (e.g., Halfway and Moberly rivers). Possible reasons for this are that water temperatures during much of the tagging period in summer 2006 were unseasonably high, which, in conjunction with handling effects, may have been stressful to the fish, and the

total number of fish tagged (116) may have been proportionally small compared to the size of the overall population (refer to Mainstream Aquatics Ltd reports, Fish Community Indexing Program; e.g., Mainstream 2004, 2005, 2006).

The proportionally small numbers of fish tagged relative to the size of the population overall may account for the low numbers detected moving into the tributaries. Recently reported (Mainstream 2009a) recaptures of considerable numbers of Peace River mainstem-tagged mountain whitefish (from Hudson's Hope to the mouth of the Pine River) in spawning condition in the Halfway and Moberly rivers in autumn is evidence of the movement of spawners from the Peace River mainstem into the tributaries.

The median distance moved by mountain whitefish was 20 km in 2006 and 6 km in 2007 (AMEC & LGL 2008b, 2008c); their displacement in 2006 was mostly in a downstream direction and at a much higher rate (69 m/d) than in 2007 (3 m/d). The higher displacement in 2006 may have been largely due to insufficient time allowed for recovery and dispersal, prior to tracking; their movements in 2007 (median distance 6 km) may be more representative of the movements of the untagged population. Similar movement distances (average 8 km upstream, 10 km downstream) from tag returns have been reported for mountain whitefish in the Peace River mainstem (R.L.&L. 1991b).

The percentage of mountain whitefish passage events at the proposed Site C Dam location in 2006 (29%) and 2007 (8%) was slightly higher than that for rainbow trout in both years (15% and 3%), but significantly lower than for Arctic grayling (72% and 24%). Mountain whitefish passage past Site C peaked (~10%) in June/July 2006, but was fairly constant (<5%) in all months in 2007; the summer peak in 2006 was probably related to the relatively high proportion of downstream displacement (~3-4 km/d) immediately after tagging.

4.2 Limitations of the Study

A number of assumptions and limitations related to the methods used in this study are discussed in the following sections so that their potential impact on the study conclusions can be evaluated.

4.2.1 Environmental Conditions

Water temperature and discharge data included in the present report are based on the best available information to provide an indication of the

environmental conditions experienced during these studies. All 2009 discharge data included in this report are preliminary and subject to change upon final calibration by the Water Survey of Canada.

4.2.2 Radio Telemetry

In previous reports (AMEC & LGL 2008c, 2009), several limitations and assumptions inherent in the use of radio telemetry for tracking fish movements were listed. Most of these are reiterated here (with some modification where appropriate) as they remain applicable to the 2009 study, which is a continuation of the telemetry program started in 2005. It is therefore assumed that:

- The small number of tagged fish adequately represents the movements of the entire population.
- Tagged fish behave similar to that of untagged fish (i.e., capture, tag implantation, and holding procedures impart only a short-term [one week to one month] behavioural change); the minimum time for recovery before tracking is likely to vary with species.
- The potentially confounding effects of noise from other sources of radio waves (e.g., hydroelectric facilities, telecommunication towers, other tagged wildlife) can be filtered and any false records existing in the receiver files can be removed through consistent application of appropriate noise-filtering criteria.
- Mortalities or potentially dead fish can be detected over time through application of minimum movement threshold criteria applicable to the species tracked and removed from the data set to avoid biasing data interpretation.
- Species tagged actually make movements of sufficient magnitude and duration to be detected on the spatial and temporal scales deployed in the tracking program.

As stated previously, the effects of most assumptions and limitations of radio telemetry on data quality and interpretation can be minimized by having clear objectives, well thought-out study design, and rigorous data quality control and assurance protocol. We maintain that all of these factors have been adequately addressed for the Peace River radio telemetry study from its inception in 2005 to the present. To reiterate, for the Peace River study, the objectives of the radio telemetry program formulated in 2005 were:

- Determine the timing, direction, distance traveled, and relative magnitude of migrations of rainbow trout, Arctic grayling, mountain whitefish, and

walleye in the Peace River study area. Bull trout, rainbow trout, and Arctic grayling tagged and released in the Pine River system were added to the study program during the 2006-2008 period;

- Determine if any of these species move into Peace River tributaries at any time during the year; and
- Determine if any migrations involve obligatory movements past the proposed Site C dam site.

The study design criteria to meet these objectives and reduce the effects of the above listed limitations and assumptions included:

- Tagging and tracking the five sportfish species most likely to make migrations in the Peace River past Site C dam (including fish in the Pine River);
- Maximizing the number of tags implanted on each of the five species in approximate proportion to the species' abundance in the river;
- Distributing tags in approximate proportion to the natural distribution of the population of each fish species in the study area;
- Tagging fish when river conditions (e.g., favourable water temperatures) maximized survival rates; unfortunately, this was not satisfactorily achieved in tagging mountain whitefish in the Peace River mainstem in summer 2006, due to sudden arrival of a 'heat wave' and rapid rise in water temperatures during the tagging period – the additional stress endured by the fish under these conditions may partly account for the prevailing downstream movement, particularly in the year (2006) of release;
- Using only highly experienced personnel for tag implantation;
- Holding tagged fish for a minimum of 20 minutes before release; and
- Combining aerial tracks of the Peace River and its major tributaries from Peace Canyon Dam to Dunvegan, Alberta, with data collected from strategically placed fixed-station receivers on the Peace River and specific tributaries to monitor spatial and temporal movements of radio-tagged fish. Since the Peace River system is rarely >4 m deep, radio-tags were determined appropriate for use in this study.

Quality control and assurance measures used during the study included biweekly (or every third week in 2009) downloading of fixed-station receivers and rigorous data filtering for noise giving bogus hits and mortalities using LGL's proven *Telemetry Manager* software. Filtering noise recorded by the receivers and assessing mortality were rigorously carried out on all datasets. The application of a well defined minimum movement threshold for all five

species that were tracked was effective in providing a realistic assessment of mortality in 2007; the suitability of the minimum movement threshold identified for assessment of mortality of all five species was re-addressed in 2008 and 2009 and found to be satisfactory. The declining detection rates in the final stages of 2007 and throughout the 2008 tracking periods for those species tagged in 2005 and 2006 was unavoidable due to an increasing proportion of the batteries in the radio transmitters going dead as time progressed. In the 2009 tracking period, the declining detection rates became increasingly pronounced over time for all three species tagged in the Pine River watershed, but particularly so for bull trout and rainbow trout. The declining detections may have had some effect on the distribution of fish detections as the failing transmitters may not have been randomly distributed.

Despite all steps taken to ensure that assumptions were met (see above), the following limitations are still possible:

1. For all species, with the possible exceptions of mountain whitefish tagged in the Peace River mainstem and bull trout, rainbow trout, and Arctic grayling tagged in the Pine River in 2008, the movements in all four years of tracking are assumed to be representative of the movements of untagged fish as they had ample time to recover from tagging before being tracked. Mountain whitefish may not have been allowed sufficient time for recovery before being tracked in 2006. The median distance moved by mountain whitefish was significantly greater in 2006 than in 2007, with most of it being in the downstream direction. For this reason, the 2007 movement data for mountain whitefish are considered more likely to be representative of untagged fish. Similarly, the movements of the 2008-tagged bull trout, rainbow trout, and Arctic grayling in the Pine River watershed tracked in 2008 may not be representative of the untagged populations as sufficient time for recovery may not have been allowed before tracking. For these tagged fish, the 2009 tracking is more likely to be representative of the untagged population, although the increase in radio tag battery exhaustion over time was a limitation during the latter stages of the tracking period.
2. Small localized movements may have been missed if they occurred between mobile tracking events and between fixed-station receivers. The effect of this limitation on assessing movements past Site C was eliminated by having a fixed-station at the mouth of the Moberly River, approximately 500 m upstream from the proposed dam site (the average detection efficiency of the fixed-station receiver over the four-year period

was 85%); in addition, a fixed station receiver was deployed at the mouth of the Pine River which would detect fish downstream of Site C.

3. One limitation that still prevails in understanding the movements of some of the species studied is that of their genetic identity. This is of particular importance toward a more definitive understanding of the movements of bull trout overall in the Site C study area. We still do not know if bull trout in the Halfway and Pine rivers are distinctly different populations genetically, or if they are a blend of both. The movements of the majority of these fish in either river suggest they are distinct populations. However, among these, there is a small proportion that move between these two watersheds at times of the year that suggest the movements are related to spawning, foraging and overwintering. Tissue samples for DNA analysis from bull trout on the primary spawning grounds in the Halfway and Pine rivers are required to determine if they are distinct populations. Such information is vital for assessment of potential impacts to these fish.

The calculated median displacement rates for each species are considered reasonable estimates of their overall movement in either upstream or downstream directions.

While the possibility exists that some of these limitations and assumptions may have affected our interpretation of the results of the 2006-2009 data analyses, it is our view that no important results drawn from the study to date are erroneous or biased. The movements of the Peace River mainstem Arctic grayling, walleye, rainbow trout, and mountain whitefish populations are considered to be reasonably well documented and the conclusions drawn from these are within the bounds of the known movements of these populations by others. With the completion of tracking of the movements of the Pine River bull trout, Arctic grayling, and rainbow trout populations in 2009, the results are now considered to be well documented and the conclusions drawn are within the known bounds of the movements of these populations. To this end, the recent updated report (AMEC & LGL 2010) on the MOE 1996-1999 study on bull trout and Arctic grayling movements provided valuable comparative and affirmative information on the movements of these fish species in the Peace River study area.

5.0 CONCLUSIONS

From the overall results of the 2005-2009 tracking studies (AMEC & LGL 2008b, 2008c, 2009, and present study), and recent upgrade of the analysis

and reporting of the MOE 1996-1999 study on movements of bull trout and Arctic grayling (AMEC & LGL 2010), and reports by others (e.g., Mainstream 2009a, 2009b), more conclusive statements can now be drawn regarding the movements of sportfish species within the upper Peace River watershed. These are as follows:

1. It is highly likely that both resident and migratory bull trout occur in the Halfway River watershed, with the migratory form being numerically dominant.
2. Similarly, it is likely that both resident and migratory bull trout occur in the Pine River watershed, but in this watershed the resident form is numerically dominant and the migratory form probably represents a small proportion (perhaps <5%) of the overall population.
3. Bull trout that exit the Halfway River move extensively both upstream and downstream in the Peace River mainstem, most probably related to foraging and overwintering stages.
4. Bull trout that exit the Pine River appear to be of two life history types: one that spawns in the Pine River watershed and forages and overwinters in the Peace River mainstem, and another that forages and overwinters in the Pine River and spawns in the Halfway River.
5. Arctic grayling in the headwaters of the Halfway and Pine rivers are most likely resident fish populations; of the radio-tagged fish released in these watersheds during the MOE 1996-1999 study, only one Arctic grayling exited the Halfway River and none exited the Pine River; likewise, no radio-tagged Arctic grayling exited the Pine River during the 2007-2009 period of study.
6. Arctic grayling of the Peace River mainstem population are moderate movers (median movement was as high as 45 km in 2006), they occur primarily between the Halfway and Beatton rivers; spawning occurs in spring (April-May) in specific tributaries (mainly the Moberly River, and to a minor extent in the lower Halfway River and possibly the Beatton River), subsequently, most return to the Peace mainstem to forage and overwinter (some overwintering may occur in the lower Halfway River).
7. Rainbow trout in the Pine River watershed move relatively little and most are probably resident fish (median varied from a high of 8.9 km in 2006 to a low of 6.9 km in 2009); however, some may conduct longer migrations (two fish that exited the Pine River moved as far as 20 km from the mouth in the Peace River mainstem).

8. Rainbow trout of the Peace River mainstem population are short-distance movers (average 9 km), they occur mainly from the Peace Canyon Dam to the vicinity of the Halfway River; spawning occurs in spring (May-June) primarily in the smaller streams (Maurice Creek, and possibly to a minor extent in Lynx and Farrell creeks), and adults return to the Peace mainstem to forage and overwinter.
9. Mountain whitefish movements can be minor (median 6.3 km in 2007), the fish are widely distributed in the Peace River mainstem from the Peace Canyon Dam downstream to the Alberta border; spawning occurs in autumn and appears to be widespread including Peace River mainstem and lower reaches of tributaries in the Site C study area (especially the Halfway River).
10. Walleye move extensively (annual medians varied from 61 to 118 km) within and between the Peace River mainstem and major tributaries (Beatton and Pine rivers); spawning occurs in spring in the Beatton River, with extensive movements during the post-spawning period from the Beatton to the Pine (presumably foraging related) and back to within the vicinity of the Beatton mouth in late autumn to overwinter; the non-Beatton River spawners (~50%) are typically widely scattered in the Peace River mainstem downstream from the Beatton to within the vicinity of Dunvegan, Alberta.
11. Arctic grayling of the Peace River mainstem population are likely to move past Site C more frequently than any of the other four sportfish species studied: in 2006 and 2007, passage by grayling (72%, 24%) was greater than that of mountain whitefish (29%, 8%), rainbow trout (15%, 3%), walleye (6%, 10%) and bull trout (7% in 2007); passage by species in 2008 and 2009 is not comparable due to variable decay of battery life among the earlier-tagged fish.
12. A low proportion of Pine River rainbow trout, bull trout and Arctic grayling moved upstream past Site C.

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Data analysis was conducted by: Dave Robichaud, Gordon Glova, Shawn Tyerman, Tony Mochizuki, and Rachel Keeler. Robin Tamasi and Lucia Ferreira of LGL provided GIS support and analysis.

This report was prepared by Gordon Glova, Dave Robichaud, and Rachel Keeler. Carol Lavis of AMEC formatted and prepared the document.

7.0 CLOSURE

Recommendations presented herein are based on an evaluation of the findings of the fish and aquatic investigations described. If conditions other than those reported are noted during subsequent phases of the study, AMEC and/or LGL Ltd. should be notified and given the opportunity to review and revise the current recommendations, if necessary.

This report has been prepared for the exclusive use of BC Hydro for specific application to the area within this report. Any use which a third party makes of this report, or any reliance on or decisions made based on it, are the responsibility of such third parties. AMEC and LGL Ltd. accept no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report. It has been prepared in accordance with generally accepted practices. No other warranty, expressed or implied, is made.

AMEC and LGL Ltd. appreciate the opportunity to assist BC Hydro with this project. If you have any questions, or require further assistance, please do not hesitate to contact the undersigned.

Respectfully Submitted,

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APPENDIX A
Environmental Data

Table A 1: Hydrometric data for the Peace, Halfway, Moberly, Pine and Beatton rivers (2005-2009; 2009 data not calibrated; WSC 2008, 2009)

Date	Daily Discharge (m ³ /s)																			
	Peace River				Halfway River				Moberly River				Pine River				Beatton River			
	2006	2007	2008	2009	2006	2007	2008	2009	2006	2007	2008	2009	2006	2007	2008	2009	2006	2007	2008	2009
1/1	1320	1520	1910	1557	14	10	16	90	1.8	0.3	2.1		60	24	40	580	1.0	1.8	1.4	16.2
1/2	1350	1460	1940	1558	14	9	16	89	1.9	0.3	2.1		59	24	40	488	1.0	1.7	1.4	16.4
1/3	1580	1400	1970	1507	14	9	16	89	1.9	0.3	2.1		58	24	40	471	1.0	1.7	1.4	16.4
1/4	1640	1490	1970	1533	14	9	16	89	1.9	0.3	2.1		57	23	39	465	1.0	1.6	1.3	16.5
1/5	1510	1500	1930	1562	14	9	16	88	2.0	0.3	2.0		56	23	39	456	1.0	1.5	1.3	16.1
1/6	1560	1540	1740	1512	13	9	16	88	2.0	0.3	2.0		56	23	39	412	1.0	1.5	1.2	16.0
1/7	1500	1540	1560	1490	13	8	16	87	2.0	0.3	2.0		55	23	39	380	1.0	1.5	1.2	16.8
1/8	1530	1530	1550	1485	12	8	16	88	1.9	0.3	2.0		55	23	39	353	1.0	1.4	1.2	17.4
1/9	1560	1550	1640	1486	12	8	16	88	1.9	0.3	2.0		54	22	39	330	1.0	1.4	1.2	17.8
1/10	1630	1590	1690	1592	12	8	16	88	1.9	0.3	2.0		54	22	39	299	1.0	1.4	1.2	17.8
1/11	1610	1520	1580	1659	11	8	16	88	1.9	0.3	2.0		54	22	38	284	1.0	1.4	1.2	16.9
1/12	1340	1510	1530	1794	11	8	16	88	1.8	0.3	2.0		54	22	38	284	0.9	1.5	1.2	16.3
1/13	1390	1570	1540	1858	11	8	16	88	1.8	0.3	2.0		53	22	38	286	0.9	1.5	1.2	17.4
1/14	1280	1640	1530	1790	11	8	16	83	1.7	0.3	2.0		52	22	37	277	0.9	1.5	1.2	18.0
1/15	1000	1720	1520	1793	11	8	16	81	1.7	0.3	2.0	11.9	51	22	37	278	0.9	1.6	1.2	18.0
1/16	1100	1540	1530	1810	11	8	16	80	1.6	0.3	2.0	12.0	51	22	37	277	0.9	1.6	1.2	18.0
1/17	1460	1550	1540	1784	11	9	15	81	1.6	0.3	2.0	12.3	50	22	37	271	0.9	1.6	1.2	17.3
1/18	1390	1610	1520	1790	11	9	15	81	1.5	0.3	2.0	12.5	50	22	36	258	0.9	1.6	1.1	16.3
1/19	1480	1590	1530	1780	12	9	15	80	1.5	0.3	2.0	12.6	50	22	36	247	0.9	1.6	1.1	17.4
1/20	1610	1560	1520	1785	12	9	15	80	1.5	0.3	2.0	12.8	50	22	36	236	0.9	1.5	1.1	18.2
1/21	1590	1560	1530	1785	12	9	15	80	1.6	0.3	2.0	13.0	50	22	36	228	1.0	1.5	1.1	18.1
1/22	1450	1560	1530	1789	12	9	15	80	1.6	0.3	2.0	13.2	50	22	35	218	1.0	1.5	1.1	17.0
1/23	1480	1550	1540	1767	12	9	15	80	1.7	0.3	1.9	13.5	49	22	35	206	1.0	1.5	1.1	16.6
1/24	1510	1470	1530	1687	12	9	15	76	1.6	0.3	1.9	13.8	48	22	35	191	1.1	1.5	1.1	16.7
1/25	1540	1560	1510	1686	12	9	15	76	1.6	0.3	1.9	14.0	48	22	34	177	1.1	1.5	1.1	15.7
1/26	1610	1550	1450	1667	12	9	14	73	1.6	0.3	1.9	14.9	46	21	34	167	1.0	1.4	1.1	15.9
1/27	1630	1580	1660	1796	11	9	14	72	1.5	0.3	1.9	15.0	46	21	33	172	1.0	1.4	1.1	18.1
1/28	1570	1560	1680	1826	11	9	14	73	1.5	0.3	1.8	14.7	44	21	33	193	0.9	1.4	1.0	19.5
1/29	1580	1560	1810	1771	11	9	14	73	1.4	0.3	1.8	14.4	44	21	32	204	0.9	1.3	1.0	19.4
1/30	1560	1680	1550	1840	11	9	14	79	1.4	0.3	1.8	14.3	42	21	32	213	0.9	1.3	1.0	19.5
1/31	1410	1730	1410	1760	12	9	14	468	1.5	0.3	1.8	14.2	42	21	31	221	0.9	1.3	1.0	19.6
2/1	1410	1770	1430	1748	12	9	13	682	1.5	0.3	1.8	14.7	42	21	31	226	0.9	1.2	1.0	19.7
2/2	1400	1830	1610	1807	12	9	13	466	1.5	0.3	1.8	15.9	42	21	31	225	0.9	1.2	1.0	18.8
2/3	1370	1800	1580	1768	12	8	13	505	1.5	0.3	1.8	16.6	42	21	30	221	0.9	1.2	1.0	17.9
2/4	1140	1790	1760	1778	12	8	12	541	1.5	0.3	1.7	16.7	42	21	30	221	0.9	1.2	1.0	17.7
2/5	1120	1790	2010	1809	12	8	12	390	1.4	0.3	1.7	17.3	42	21	30	217	0.8	1.2	1.0	17.7
2/6	1160	1610	2040	1804	12	8	12	490	1.4	0.3	1.8	17.9	41	21	29	211	0.8	1.2	1.0	16.4
2/7	1150	1640	1920	1830	12	8	12	485	1.4	0.3	1.8	26.7	40	21	29	200	0.8	1.2	1.0	16.4
2/8	1170	1620	2050	1817	12	8	11	448	1.4	0.3	1.8	20.8	40	21	29	189	0.8	1.2	1.0	17.1
2/9	1170	1530	1710	1835	13	8	11	427	1.4	0.3	1.8	26.8	38	21	29	187	0.9	1.2	1.0	17.3
2/10	1350	1700	1540	1837	13	8	11	465	1.4	0.3	1.8	29.2	38	21	29	181	0.9	1.2	1.0	17.6
2/11	1430	1640	1930	1825	13	8	11	496	1.5	0.3	1.8	31.3	36	21	29	175	0.9	1.2	1.0	16.5
2/12	1350	1630	1970	1824	13	8	11	410	1.5	0.3	1.8	31.2	36	21	29	160	0.9	1.2	1.0	15.1
2/13	1430	1690	1910	1828	12	8	11	265	1.4	0.3	1.8	31.1	36	21	28	152	0.8	1.2	1.0	13.2

Date	Daily Discharge (m ³ /s)																			
	Peace River				Halfway River				Moberly River				Pine River				Beatton River			
	2006	2007	2008	2009	2006	2007	2008	2009	2006	2007	2008	2009	2006	2007	2008	2009	2006	2007	2008	2009
2/14	1450	1800	1950	1825	12	8	11	263	1.3	0.3	1.8	30.9	36	21	28	153	0.8	1.2	1.0	12.5
2/15	1430	1810	1970	1810	12	8	11	258	1.3	0.3	1.8	29.9	36	21	28	145	0.8	1.2	1.0	12.9
2/16	1390	1780	1740	1863	11	9	11	259	1.3	0.3	1.8	29.8	36	21	28	126	0.7	1.2	1.0	13.1
2/17	1470	1760	1460	1635	11	9	11	381	1.3	0.3	1.8	28.6	36	21	28	115	0.7	1.2	1.0	14.6
2/18	1430	1420	1690	1628	12	9	11		1.3	0.3	1.8	27.7	36	21	28	119	0.7	1.2	1.0	15.2
2/19	1400	1580	1940	1608	12	8	11		1.3	0.3	1.8	27.4	36	21	28	137	0.7	1.1	1.0	15.4
2/20	1430	1730	1870	1644	12	8	11		1.3	0.3	1.9	28.4	36	21	28	138	0.8	1.1	1.0	15.8
2/21	1400	1710	1920	1643	11	8	11		1.3	0.3	1.9	29.3	35	21	28	135	0.8	1.1	1.0	15.8
2/22	1410	1680	1970	1647	11	8	11		1.3	0.3	1.9	29.6	34	21	28	131	0.8	1.1	1.0	16.4
2/23	1390	1700	1720	1635	11	8	11		1.2	0.3	1.9	29.3	34	21	28	129	0.7	1.1	1.0	17.2
2/24	1360	1710	1550	1774	10	8	11		1.2	0.3	2.0	29.7	34	21	28	123	0.7	1.1	1.0	17.1
2/25	1270	1730	1580	1765	10	8	11		1.2	0.3	2.0	29.2	33	21	28	116	0.7	1.1	1.0	17.6
2/26	1360	1700	1910	1817	10	8	11		1.1	0.3	2.1	29.3	32	20	28	111	0.6	1.1	1.0	18.4
2/27	1370	1650	1910	1879	10	8	11		1.1	0.3	2.1	28.6	32	20	28	101	0.6	1.1	1.0	20.7
2/28	1380	1740	1860	1811	10	8	10		1.1	0.3	2.2	26.4	32	20	28	96	0.6	1.1	1.0	22.4
3/1	1160	1740	1770	1811	10	8	10		1.1	0.3	2.2	26.0	31	20	28	100	0.6	1.0	1.0	22.7
3/2	1100	1700	1670	1795	10	8	10		1.2	0.3	2.2	25.2	31	20	28	112	0.6	1.0	1.0	22.6
3/3	1100	1700	1680	1784	10	8	10		1.2	0.3	2.2	25.0	32	20	28	142	0.6	1.0	1.0	23.0
3/4	1100	1480	1780	1629	10	8	9		1.2	0.3	2.3	29.2	32	20	28	167	0.6	1.0	1.0	23.2
3/5	1080	1470	1780	1632	11	8	9		1.2	0.3	2.3	31.8	32	20	28	175	0.6	1.0	1.0	23.3
3/6	1090	1610	1760	1646	11	8	9		1.2	0.3	2.3	32.7	32	20	28	168	0.6	1.0	1.0	23.2
3/7	1100	1620	1740	1637	11	8	10		1.1	0.3	2.3	32.0	31	21	28	161	0.6	1.0	1.0	23.6
3/8	1100	1590	1730	1587	11	8	10		1.1	0.3	2.3	29.7	31	21	28	153	0.6	1.0	1.0	23.7
3/9	1080	1600	1730	1614	11	8	10		1.1	0.3	2.4	20.9	30	21	28	151	0.6	1.0	1.0	23.2
3/10	1100	1470	1770	1623	10	8	10		1.1	0.3	2.4	8.1	30	21	28	146	0.6	1.0	1.0	21.9
3/11	1080	1530	1720	1630	10	8	10	87	1.0	0.3	2.4	18.4	29	21	27	140	0.5	1.0	1.0	22.1
3/12	1100	1530	1770	1604	10	7	10	92	1.0	0.3	2.4	24.5	29	21	27	416	0.5	1.0	1.0	23.8
3/13	1100	1390	1770	1600	9	7	10	92	1.0	0.4	2.4	18.4	29	21	27	364	0.5	1.0	1.0	24.1
3/14	1080	1400	1790	1614	9	7	10	73	0.9	0.4	2.4	14.4	29	22	27	248	0.5	0.9	1.0	24.4
3/15	1080	1410	1710	1605	9	7	10	70	0.9	0.4	2.4	10.7	29	22	27	313	0.5	0.9	1.0	25.2
3/16	1010	1540	1450	1559	9	7	10	67	0.9	0.4	2.5	13.7	29	22	27	278	0.5	0.9	1.0	25.3
3/17	1060	1260	1580	1464	8	7	10	65	0.9	0.4	2.5	27.1	30	23	27	318	0.6	0.9	1.0	25.3
3/18	1070	964	1740	1418	8	7	10	70	0.9	0.4	2.5	31.5	30	23	27	254	0.6	0.9	1.0	25.4
3/19	1090	1120	1540	1382	8	7	9	73	0.9	0.5	2.5	32.3	30	24	27	313	0.6	1.0	1.0	25.1
3/20	1100	1190	1710	1428	8	7	9	74	0.9	0.5	2.5	32.1	30	24	27	433	0.6	1.0	1.0	24.8
3/21	1080	1320	1740	1628	8	7	9	71	0.9	0.5	2.5	29.6	30	26	27	1371	0.7	0.9	1.0	25.4
3/22	1080	1260	1770	1775	8	7	9	75	0.9	0.6	2.5	27.8	30	28	26	3444	0.7	0.9	1.0	25.8
3/23	1090	1140	1710	1703	8	7	9	79	1.0	0.6	2.5	23.9	30	29	26	3435	0.8	0.9	1.0	25.6
3/24	1110	1110	1740	1757	8	7	9	80	1.0	0.6	2.5	22.6	30	30	26	2170	0.8	0.9	1.0	25.3
3/25	1100	944	1730	1638	8	7	9	73	1.0	0.7	2.5	26.5	30	32	26	340	0.9	0.9	1.0	24.7
3/26	1100	1140	1720	1502	8	7	9	75	1.1	0.7	2.5	30.4	30	33	26	383	1.0	0.9	1.0	25.7
3/27	1120	1230	1720	1359	9	7	9	82	1.1	0.7	2.5	33.9	30	34	26	341	1.2	0.9	1.0	24.4
3/28	1110	1200	1680	1425	9	7	9	77	1.2	0.7	2.5	35.6	30	35	26	343	1.4	0.9	1.0	24.3
3/29	1120	1110	1690	1210	9	8	9	75	1.3	0.7	2.5	35.7	31	36	26	311	1.6	0.9	1.1	25.1
3/30	1120	1090	1740	1473	9	8	9	78	1.4	0.8	2.5	35.9	31	36	26	331	1.9	0.9	1.1	26.4
3/31	1180	1080	1770	1589	10	7	9	74	1.4	0.8	2.5	35.1	31	37	26	239	2.2	0.9	1.1	27.2

Date	Daily Discharge (m ³ /s)																			
	Peace River				Halfway River				Moberly River				Pine River				Beatton River			
	2006	2007	2008	2009	2006	2007	2008	2009	2006	2007	2008	2009	2006	2007	2008	2009	2006	2007	2008	2009
4/1	1170	1120	1790	1580	10	7	9	74	1.6	0.8	2.5	34.2	31	38	26	467	2.6	0.9	1.2	27.8
4/2	1140	1220	1710	1619	10	7	9	77	1.7	0.8	2.5	35.7	31	39	26	160	3.1	0.9	1.2	29.3
4/3	1250	1340	1700	1617	10	7	9	77	1.8	0.9	2.5	36.0	32	40	26	428	3.8	0.9	1.2	27.0
4/4	1350	1160	1690	1551	10	7	9	76	2.0	0.9	2.5	35.2	32	41	26	219	5.4	0.9	1.2	26.0
4/5	1240	1280	1670	1482	10	7	9	80	2.1	1.0	2.5	36.0	33	42	26	180	9.5	0.9	1.2	25.9
4/6	1120	1200	1490	1539	11	7	9	75	2.2	1.0	2.5	37.4	34	43	25	352	16.0	0.9	1.2	28.9
4/7	1260	1070	1600	1543	11	7	9	70	2.2	1.0	2.5	38.4	36	44	25	310	20.0	1.0	1.2	30.4
4/8	1080	1190	1590	1264	11	7	9	69	2.2	1.2	2.5	38.9	37	45	26	396	22.0	1.7	1.2	30.9
4/9	1050	1340	1560	1478	12	7	9	71	2.3	1.3	2.6	40.2	38	46	26	1450	24.9	2.2	1.2	33.8
4/10	1180	1400	1580	1393	12	7	9	71	2.3	1.4	2.6	40.5	40	48	26	588	27.0	2.7	1.2	37.7
4/11	1280	1360	1600	1276	13	8	9	64	2.4	1.5	2.6	44.4	43	50	26	498	26.8	3.4	1.2	40.1
4/12	1190	1410	1570	1432	14	8	9		2.4	1.6	2.6	44.6	45	52	27	651	26.0	4.1	1.2	37.4
4/13	1130	1550	1470	1521	15	9	9		2.4	1.7	2.6	40.8	48	54	27	684	25.0	5.2	1.2	36.2
4/14	1170	1140	1490	1566	16	10	9		2.4	1.8	2.6	40.1	50	56	27	394	23.5	6.5	1.2	35.0
4/15	949	828	1570	1609	18	11	9		2.5	1.8	2.6	39.2	54	58	28	305	22.0	8.3	1.1	41.2
4/16	1020	489	1630	1461	19	12	9		2.5	1.9	2.6	37.8	56	63	29	240	20.0	11.5	1.1	58.5
4/17	1090	495	1620	1465	20	13	9		2.6	2.1	2.6	34.8	60	69	30	238	18.5	16.0	1.1	33.9
4/18	1180	503	1530	1499	20	15	9		2.6	2.3	2.6	32.7	63	74	31	244	17.2	22.0	1.1	23.0
4/19	1200	976	1540	1459	21	17	9		2.7	2.4	2.6	30.4	66	80	32	258	16.6	36.0	1.1	25.3
4/20	1020	1090	1550	1319	21	19	10		2.7	2.6	2.6	28.7	72	85	34	266	16.8	50.0	1.2	25.5
4/21	1120	1010	1590	1361	22	21	10		2.8	2.9	2.7	27.5	76	104	36	275	17.0	74.0	1.2	26.7
4/22	1210	763	1590	1287	23	24	11		2.8	3.1	2.7	25.2	81	123	40	302	20.0	110.0	1.3	52.0
4/23	1000	1420	1560	1350	24	37	14		2.8	3.6	2.7	24.8	85	142	42	417	26.0	174.0	1.6	35.8
4/24	940	1420	1510	1609	27	50	18	96	2.7	3.8	2.7	24.5	95	174	45	909	44.0	238.0	2.0	35.0
4/25	986	1460	1520	1459	28	66	22	110	2.6	4.2	2.8	24.8	134	230	49	1074	67.5	322.0	2.7	25.6
4/26	1020	1580	1570	1085	30	71	22		2.5	4.8	2.9	25.4	148	277	56	278	85.0	401.0	5.1	22.4
4/27	1090	1730	1470	1359	31	77	23		2.6	5.3	3.1	24.4	172	305	60	214	95.1	414.0	9.0	17.8
4/28	940	1680	1490	1158	30	82	26		2.7	5.8	3.3	23.2	177	332	67	186	91.0	422.0	102.0	15.7
4/29	898	1440	1500	1145	31	79	35		2.8	6.5	3.6	20.5	272	323	87	152	81.0	416.0	125.0	18.5
4/30	990	1300	1620	1118	31	76	93		2.9	6.8	5.3	18.3	381	298	131	132	67.5	393.0	167.0	95.8
5/1	1030	1370	1850	1120	31	73	181		3.0	7.4	8.6	15.8	321	279	173	121	61.0	370.0	421.0	128.6
5/2	1020	1360	1910	1080	29	71	173	52	3.4	8.3	10.6	9.7	266	273	179	134	57.0	340.0	495.0	157.4
5/3	897	1400	1860	1136	26	79	188	69	3.7	11.6	12.0	5.7	228	344	186	187	52.0	327.0	448.0	228.0
5/4	776	1620	1690	1263	25	196	198	79	4.1	20.4	13.6	6.4	207	498	216	279	44.0	345.0	487.0	298.0
5/5	661	1960	1580	1368	25	306	174	81	4.4	24.9	14.5	7.0	210	542	246	314	39.0	505.0	520.0	353.7
5/6	685	1670	1670	1370	26	235	156	78	4.7	30.0	16.3	8.2	259	509	262	307	33.0	705.0	489.0	358.4
5/7	1040	1640	1630	1404	29	193	170	81	5.1	33.2	17.0	8.9	313	542	296	326	28.0	682.0	477.0	343.6
5/8	1180	1800	1650	1476	30	165	190	101	5.9	34.5	19.1	9.5	323	608	324	356	23.5	618.0	551.0	321.7
5/9	1270	1840	1590	1499	30	141	161	100	6.9	36.0	21.1	12.7	296	631	328	381	19.2	551.0	568.0	334.9
5/10	1200	1820	1160	1461	28	129	137	95	7.1	38.1	22.4	14.3	261	575	322	426	17.5	480.0	492.0	
5/11	1130	1750	1050	1496	26	119	125	90	7.5	39.0	23.2	16.0	246	566	327	464	16.0	421.0	412.0	
5/12	1150	1660	1160	1607	27	109	118	91	7.7	39.6	23.9	18.5	248	561	349	491	14.8	376.0	359.0	237.5
5/13	1190	1650	1490	1617	29	100	115	86	8.0	40.1	24.9	20.8	256	557	392	456	26.0	335.0	316.0	220.4
5/14	884	1610	1490	1554	55	92	116	80	8.2	40.2	26.2	22.8	242	548	462	396	61.0	300.0	285.0	199.0
5/15	1090	1680	1550	1505	65	88	110	76	8.2	40.4	28.0	23.9	233	572	528	353	169.0	267.0	260.0	176.0
5/16	1290	1710	1800	1450	51	88	121	75	8.2	40.6	29.9	24.7	247	642	935	331	180.0	239.0	235.0	

Date	Daily Discharge (m ³ /s)																			
	Peace River				Halfway River				Moberly River				Pine River				Beatton River			
	2006	2007	2008	2009	2006	2007	2008	2009	2006	2007	2008	2009	2006	2007	2008	2009	2006	2007	2008	2009
5/17	1380	1840	2060	1404	43	96	164	75	8.2	41.9	33.3	26.1	356	766	1230	363	134.0	216.0	213.0	
5/18	1520	1970	1930	1388	41	109	190	71	8.6	43.9	39.3	26.6	567	783	1380	466	108.0	199.0	194.0	155.3
5/19	1450	1910	2050	1555	47	115	212	65	9.4	46.6	45.1	26.7	618	701	1440	458	92.0	186.0	178.0	136.0
5/20	1370	1820	2190	1533	57	117	206	61	10.7	49.1	50.5	26.8	650	686	1230	391	79.4	179.0	164.0	
5/21	1200	1860	2010	1463	86	118	229	66	12.6	52.3	54.2	27.1	676	707	1190	365	68.5	184.0	153.0	135.0
5/22	1360	1870	1820	1475	113	114	233	80	14.7	52.9	56.1	28.3	659	698	1140	381	61.9	178.0	164.0	141.2
5/23	1140	1780	1730	1254	112	111	215	81	16.6	53.1	57.0	29.3	629	673	1100	414	67.0	172.0	213.0	139.0
5/24	1310	1790	1680	1241	133	108	200	81	18.5	52.4	59.2	30.1	784	631	1150	510	98.9	158.0	239.0	
5/25	1470	1790	1740	1418	159	107	189	85	20.5	51.1	61.9	31.0	741	632	1170	592	175.0	152.0	217.0	125.7
5/26	1370	1800	1650	1662	174	116	183	94	22.2	50.1	64.5	32.6	692	718	1070	684	227.0	135.0	193.0	122.1
5/27	1480	1910	1690	1867	195	142	192	129	24.1	50.8	66.4	35.3	673	842	1060	826	199.0	124.0	168.0	122.3
5/28	1280	2130	1760	2044	198	173	205	223	25.9	52.5	65.1	38.5	613	970	1110	781	169.0	116.0	148.0	182.5
5/29	1200	2260	1780	2078	198	196	229	223	26.9	55.0	66.7	39.6	574	958	1230	652	144.0	113.0	133.0	321.7
5/30	1450	2290	1900		215	211	262	187	27.6	57.7	71.3	40.6	554	995	1280	694	128.0	114.0	125.0	
5/31	1260	2430	1910		215	233	277	176	28.2	60.0	75.5	41.3	532	1140	1230	767	116.0	113.0	123.0	
6/1	1440	2620	1820		200	267	269	165	28.3	63.3	76.2	41.1	530	1270	1120	685	102.0	105.0	114.0	
6/2	1260	2500	1770		192	298	252	151	28.4	66.9	74.7	41.3	552	1340	1070	652	90.9	94.9	105.0	
6/3	1210	2480	1720		189	321	236	150	28.7	71.2	69.9	41.2	638	1440	1090	701	81.1	82.2	97.2	
6/4	1260	2950	1720	1720	189	356	229	167	29.3	75.7	68.0	41.8	644	1710	1120	849	74.5	72.7	89.7	
6/5	1170	3350	1660	1720	171	442	222	203	28.8	81.6	66.2	43.2	551	2070	1000	1043	74.4	70.6	82.3	
6/6	1060	3240	1510		160	617	210	233	28.1	89.8	63.5	45.8	480	2070	854	1017	70.0	66.5	76.4	
6/7	980	3200	1360		151	691	205	217	27.2	102.0	60.4	47.2	428	1880	738	805	66.3	59.5	71.4	
6/8	933	2990	1300		144	573	195	198	26.4	113.0	57.1	47.0	388	1370	682	714	66.9	51.1	68.8	
6/9	884	2370	1200	1483	136	468	185	193	25.5	119.0	53.9	46.2	390	1110	619	687	65.6	52.1	72.1	
6/10	890	2120	1390	1473	132	413	171	194	24.6	115.0	50.4	45.4	412	1120	543	702	62.0	49.7	70.1	
6/11	890	2350	1120	1549	135	443	157	196	23.8	109.0	47.9	44.6	398	1170	503	748	57.3	46.8	65.5	
6/12	873	2160	996	1608	134	436	144	204	22.8	107.0	44.9	44.1	380	1050	496	886	51.8	44.3	58.6	
6/13	981	1920	1110	1580	135	381	138		22.1	103.0	42.7	44.6	358	902	536	989	47.0	40.6	51.5	
6/14	892	1760	1090	1695	128	331	160		21.6	96.7	40.3	45.4	335	829	584	962	42.5	39.8	46.3	
6/15	819	1730	1110	1528	133	305	298		21.2	89.9	38.2	45.5	355	830	539	865	39.8	44.0	42.6	
6/16	835	1730	1140	1530	140	302	289		20.5	82.2	36.4	45.2	368	827	506	794	37.4	44.0	179.0	
6/17	836	1790	1100	1391	142	305	261	33	19.8	76.3	34.7	44.0	333	860	499	781	35.3	43.7	209.0	
6/18	796	2040	1110	1300	127	293	251	169	19.0	71.5	33.2	42.9	294	853	488	737	33.1	50.2	143.0	
6/19	747	2240	1190	1279	115	312	239	161	17.7	68.0	32.0	41.5	259	806	473	669	31.4	79.4	129.0	
6/20	931	2240	1260	1200	106	360	223	150	17.0	62.8	30.3	39.8	236	693	448	600	30.8	96.5	123.0	
6/21	1180	2120	1200	1080	100	339	206	144	16.2	58.7	28.9	38.2	218	608	434	550	31.2	101.0	106.0	
6/22	1170	2080	922	934	94	391	200	138	15.5	55.1	27.7	36.0	202	630	440	462	30.4	105.0	89.4	
6/23	1230	2140	950	969	88	380	220	123	14.5	51.8	27.2	34.1	187	635	470	401	28.9	123.0	75.3	
6/24	1090	2060	965	949	82	334	220	112	13.6	51.3	25.4	32.2	171	614	432	375	27.4	181.0	79.4	
6/25	1020	1950	875	923	76	316	195	108	12.9	48.5	24.5	30.3	160	561	379	379	25.7	159.0	135.0	
6/26	1160	1970	802	789	71	285	176	114	12.0	46.8	23.4	28.8	155	522	346	411	23.9	155.0	111.0	
6/27	1180	1940	753	1007	68	255	162	123	11.5	44.9	22.1	27.1	157	510	325	425	22.7	165.0	87.3	
6/28	991	1860	712	1218	67	243	147	118	10.8	43.7	21.0	25.7	163	522	312	358	20.9	130.0	71.9	
6/29	1120	2020	701	1186	66	243	140	107	10.3	43.7	20.0	24.5	160	548	359	356	18.3	118.0	60.0	
6/30	1100	1790	773	1238	63	238	147	98	9.6	42.0	19.0	22.9	148	570	395	326	16.3	115.0	50.6	
7/1	1040	1760	956	1211	58	231	137	94	8.6	40.7	18.0	21.4	132	559	387	289	15.1	185.0	42.3	

Date	Daily Discharge (m ³ /s)																			
	Peace River				Halfway River				Moberly River				Pine River			Beatton River				
	2006	2007	2008	2009	2006	2007	2008	2009	2006	2007	2008	2009	2006	2007	2008	2009	2006	2007	2008	2009
7/2	1120	1930	760	1136	54	232	129	91	8.1	38.6	17.2	20.4	123	519	370	264	13.8	400.0	36.0	
7/3	1220	1920	737	1121	52	218	129	91	7.5	36.8	16.7	19.2	119	480	366	254	13.0	476.0	30.5	
7/4	1200	2020	870	922	51	198	133	93	7.1	35.3	16.2	18.3	118	459	358	247	11.6	396.0	27.4	
7/5	857	2020	852	773	51	184	136	97	6.8	33.7	15.6	17.4	120	447	363	246	10.9	327.0	25.4	
7/6	658	1970	1010	1026	50	174	138	101	6.5	32.6	14.9	17.3	129	438	339	275	10.4	270.0	25.8	
7/7	622	1900	1330	1335	52	164	134	118	6.2	31.0	14.6	19.1	148	410	328	998	10.2	213.0	35.2	
7/8	633	1830	1550	2988	56	152	125	240	6.4	29.3	13.8	28.9	154	365	283	2225	10.1	174.0	47.1	
7/9	569	1760	1660	2920	62	143	116	230	5.7	28.2	13.0	42.9	137	331	240	1663	10.5	145.0	54.4	
7/10	753	1680	1700	2520	60	133	107	214	5.4	26.9	12.5	54.2	130	305	224	1191	15.9	133.0	57.2	
7/11	606	1670	1730	2318	58	127	98	200	5.6	25.5	11.5	58.1	160	308	206	1117	17.1	123.0	51.2	
7/12	557	1680	1700	2365	58	124	90	192	5.4	24.1	10.9	58.4	174	335	180	1022	19.7	112.0	42.8	
7/13	566	1530	1500	2146	59	123	84	194	5.1	23.0	10.6	57.0	152	338	165	843	25.3	99.7	36.5	
7/14	586	1630	1510	2070	57	121	83	190	5.1	22.0	10.0	55.5	146	326	165	760	30.2	84.7	32.3	
7/15	626	1630	1530	2002	56	120	83	175	4.9	21.2	9.5	52.8	145	327	169	640	40.1	74.8	31.4	
7/16	563	1680	1500	1896	54	119	83	156	4.7	20.2	9.0	49.6	134	319	163	533	38.1	65.8	43.6	
7/17	646	1730	1410	1861	50	112	84	142	4.3	19.4	8.8	46.0	124	296	158	460	33.9	60.7	56.5	
7/18	926	1690	1360	1701	48	104	83	133	3.9	18.6	8.5	42.7	115	264	155	415	31.3	56.9	61.1	
7/19	781	1650	1380	1582	49	99	81	126	3.8	17.8	8.2	39.7	109	278	151	389	29.3	53.7	58.4	
7/20	839	1650	1390	1696	46	101	78	117	3.6	17.3	8.2	36.5	101	280	143	360	27.9	49.5	54.9	
7/21	1000	1570	1340	1486	43	101	75	108	3.6	16.5	7.6	33.7	94	281	143	323	27.4	46.4	46.8	
7/22	1100	1470	1300	1422	40	92	72	100	3.5	15.5	7.5	31.0	91	264	164	294	25.8	44.3	39.4	
7/23	1060	1510	1320	1366	39	85	70	93	3.3	14.7	6.7	28.7	93	243	165	272	23.6	40.0	33.6	
7/24	1040	1530	1350	1397	38	80	65	87	3.1	14.1	6.4	26.4	96	234	143	252	21.3	34.1	28.5	
7/25	1180	1320	1510	1340	37	75	61	82	3.0	13.6	6.1	24.5	96	227	126	233	19.1	30.6	24.6	
7/26	1060	1520	1600	1311	36	70	57	78	2.9	12.3	5.7	22.5	92	208	116	220	17.3	28.1	21.4	
7/27	1120	1490	1600	1291	35	66	56	74	2.8	11.6	5.5	20.9	86	184	111	211	15.8	26.6	18.7	
7/28	980	1410	1600	1275	35	63	54	70	2.7	11.1	5.4	19.5	82	166	110	199	15.5	25.4	16.5	
7/29	797	1440	1480	1263	36	60	52	67	2.6	10.6	5.1	17.9	80	159	108	188	15.2	26.7	15.2	
7/30	541	1520	1500	1275	38	58	50	65	2.6	10.3	4.8	16.3	115	157	105	184	16.0	24.1	14.3	
7/31	581	1530	1500	1220	38	56	47	65	2.6	10.1	5.0	15.4	196	155	104	177	16.4	21.1	13.7	
8/1	676	1520	1430	1184	38	54	47	64	2.6	9.2	4.7	14.5	163	146	99	167	16.9	20.4	13.5	
8/2	1110	1480	1260	1323	36	52	46	62	2.6	8.5	4.2	13.7	138	133	93	159	18.2	19.1	13.5	
8/3	1070	1470	1150	1307	37	51	45	72	2.5	8.1	4.0	13.6	123	122	88	182	21.1	17.8	13.3	
8/4	777	1450	1280	1405	36	51	43	127	2.3	7.9	3.8	14.3	111	121	83	196	29.8	19.3	13.3	
8/5	733	1400	1440	1475	35	51	41	132	2.1	7.6	3.6	14.2	100	126	79	174	59.8	20.3	13.1	
8/6	599	1490	1390	1395	35	50	40	116	2.0	7.1	3.4	13.9	93	133	78	153	79.6	21.4	12.8	
8/7	539	1440	1490	1249	34	51	39	104	2.0	7.1	3.3	13.4	86	135	76	136	72.4	26.0	11.7	
8/8	645	1460	1500	1140	32	51	38	93	1.9	6.9	3.1	12.9	81	129	76	123	62.1	33.3	10.5	
8/9	907	1290	1350	1264	31	51	37	85	1.8	6.2	3.2	12.4	78	130	78	113	53.1	32.8	9.4	
8/10	1130	1300	1180	1353	29	52	52	80	1.7	5.9	3.2	11.9	76	127	83	107	46.0	31.6	8.7	
8/11	1120	1500	1300	1238	28	52	346	76	1.8	5.8	3.8	11.3	75	115	96	105	40.0	29.8	8.9	
8/12	816	1380	1870	1147	28	54	448	72	1.6	6.1	4.5	11.1	71	136	142	112	35.4	29.0	105.0	
8/13	528	1490	1800	1227	27	58	299	72	1.5	6.6	4.1	10.2	66	268	158	107	32.7	26.4	265.0	
8/14	524	1570	1770	1222	26	61	227	69	1.5	8.2	4.2	9.7	63	273	128	99	30.4	25.0	183.0	
8/15	740	1630	1750	1145	26	59	187	66	1.6	10.4	4.1	9.4	62	220	109	92	28.6	24.5	125.0	
8/16	564	1640	1610	1078	26	55	160	62	1.6	11.2	3.9	9.1	64	185	101	88	26.6	21.3	93.5	

Date	Daily Discharge (m ³ /s)																			
	Peace River				Halfway River				Moberly River				Pine River				Beatton River			
	2006	2007	2008	2009	2006	2007	2008	2009	2006	2007	2008	2009	2006	2007	2008	2009	2006	2007	2008	2009
8/17	484	1630	1680	958	25	53	142	59	1.4	11.9	3.8	8.7	62	165	97	82	25.5	19.9	72.4	
8/18	494	1620	1260	1171	24	53	126	55	1.3	12.6	3.7	8.7	58	195	94	77	24.1	19.8	58.1	
8/19	491	1680	1270	1187	24	57	113	52	1.3	13.0	3.7	8.1	56	219	89	77	23.0	18.9	46.7	
8/20	478	1670	1330	1258	23	64	119	50	1.3	14.1	3.8	7.6	55	196	97	80	21.9	17.5	41.9	
8/21	536	1360	1050	1230	23	76	179	51	1.2	15.0	3.8	7.5	53	181	105	80	20.0	17.9	34.1	
8/22	675	1340	1440	1152	22	83	180	51	1.1	15.2	3.8	7.3	51	168	130	78	18.3	17.6	28.1	
8/23	527	1300	1650	1086	21	87	147	50	1.1	15.2	3.9	7.2	49	154	141	79	16.8	22.2	25.2	
8/24	676	1260	1490	1088	21	84	126	48	1.1	15.2	3.9	6.8	48	145	119	78	15.5	35.9	23.0	4.0
8/25	727	1260	1400	1098	20	92	113	47	1.0	15.2	3.9	6.4	48	139	105	72	14.2	52.5	21.3	3.9
8/26	514	1120	1380	1101	20	127	103	45	0.9	15.3	4.1	6.1	47	140	128	67	13.2	88.7	19.7	4.7
8/27	479	1080	1150	1139	20	170	96	44	0.9	15.0	4.1	5.9	47	157	134	63	11.5	378.0	17.5	8.3
8/28	603	1390	1220	1192	19	158	88	43	0.9	14.8	3.8	5.6	46	150	119	59	10.0	373.0	15.8	12.2
8/29	895	1250	1280	1282	19	141	82	42	0.8	14.6	3.8	5.4	46	137	157	55	9.0	280.0	14.3	
8/30	615	1370	1610	1042	19	133	83	40	0.8	14.4	3.8	5.2	46	129	183	53	8.0	217.0	13.6	
8/31	659	1540	1560	1139	20	129	87	39	0.8	14.1	3.8	5.0	46	135	175	51	7.4	184.0	12.6	
9/1	666	1410	1140	1216	19	122	86	38	0.7	13.7	3.7	4.8	46	164	166	51	6.5	159.0	11.7	
9/2	706	1210	1300	1298	19	112	83	37	0.7	13.3	3.8	4.7	45	161	145	51	5.8	137.0	11.8	
9/3	473	1410	1430	1295	19	102	78	37	0.8	12.8	3.7	4.6	45	145	129	52	5.4	111.0	12.5	
9/4	465	1630	1380	1375	19	95	74	37	0.6	12.4	3.6	4.6	45	134	116	57	5.1	97.3	16.6	
9/5	511	1680	1340	1178	18	88	70	36	0.5	12.1	3.5	4.5	45	129	106	58	4.8	86.8	17.2	7.6
9/6	902	1370	1190	828	18	83	68	42	0.4	11.6	3.4	4.5	46	130	98	64	4.4	79.6	16.2	
9/7	860	1390	1180	738	18	78	67	53	0.4	11.1	3.4	4.6	45	135	97	66	4.1	76.5	15.2	5.9
9/8	703	1390	1190	925	17	73	66	58	0.4	10.5	3.4	4.9	45	135	101	70	3.9	77.9	15.1	25.9
9/9	460	1260	1150	996	17	69	63	57	0.4	10.1	3.5	4.8	45	126	96	107	3.7	72.7	14.5	506.6
9/10	445	1290	1130	1138	17	64	61	56	0.3	9.7	3.5	4.3	45	116	93	121	3.6	64.6	14.2	
9/11	440	1400	1130	1114	18	62	59	54	0.3	9.4	3.6	4.4	45	108	90	104	3.5	59.2	14.9	805.5
9/12	650	1430	1170	1045	18	61	56	50	0.3	9.0	3.6	4.0	44	108	86	93	3.4	53.4	17.1	694.7
9/13	875	1250	1050	450	18	59	53	47	0.3	8.7	3.4	3.8	40	110	97	81	3.3	48.6	20.4	
9/14	610	1400	1050	904	18	57	50	46	0.3	8.3	3.2	3.7	37	102	99	73	3.2	45.0	19.9	
9/15	460	1300	918	1089	18	54	48	44	0.3	8.0	3.2	3.6	37	93	89	67	3.1	42.0	17.7	423.0
9/16	457	1200	1080	1074	19	51	46	43	0.3	7.9	3.3	3.5	37	87	80	62	3.2	39.0	15.9	
9/17	443	1280	1170	1014	19	50	45	42	0.3	7.6	3.0	3.6	36	83	75	59	3.1	36.6	14.3	
9/18	506	1410	1150	1043	19	49	44	41	0.3	7.1	2.9	3.7	36	83	72	58	3.1	34.8	13.2	
9/19	570	1280	1130	1038	20	47	43	40	0.3	6.6	2.8	3.5	36	80	69	59	3.1	33.6	12.0	
9/20	470	1300	1170	677	20	46	42	41	0.3	6.6	2.7	3.5	36	75	65	71	3.1	33.2	11.1	
9/21	552	1320	1040	996	20	45	41	42	0.3	6.4	2.7	3.5	39	72	62	98	3.1	33.0	10.2	
9/22	444	1250	1060	1077	21	45	40	43	0.3	6.1	2.6	3.5	41	81	60	86	3.1	32.5	9.5	
9/23	628	1180	1090	1035	20	44	40	42	0.2	5.8	2.6	3.1	43	108	58	79	3.1	32.4	8.8	
9/24	741	1250	1070	1128	19	44	40	42	0.2	5.5	2.7	2.9	43	112	55	75	3.2	33.3	8.3	
9/25	1020	1250	1040	1216	19	43	40	42	0.2	5.7	2.5	3.3	43	108	54	71	3.2	33.6	7.8	
9/26	1050	1460	1120	1133	18	42	38	41	0.2	5.6	2.4	3.1	44	131	54	65	3.4	32.9	7.5	
9/27	809	1450	1020	1068	18	42	38	40	0.2	5.4	2.4	3.2	52	162	54	69	3.4	31.7	7.5	
9/28	775	1490	835	1072	18	43	37	40	0.2	5.0	2.5	2.7	54	171	57	76	3.4	31.5	7.3	
9/29	750	1480	960	1138	18	44	36	38	0.2	4.8	2.5	2.4	50	180	65	71	3.5	31.4	7.3	
9/30	642	1480	1050	1251	18	44	36	39	0.2	4.7	2.4	2.3	48	160	60	71	3.5	31.2	7.3	
10/1	508	1510	948	1279	18	43	35	38	0.2	4.7	2.3	2.3	48	144	56	73	3.4	32.1	7.1	

Date	Daily Discharge (m ³ /s)																			
	Peace River				Halfway River				Moberly River				Pine River				Beatton River			
	2006	2007	2008	2009	2006	2007	2008	2009	2006	2007	2008	2009	2006	2007	2008	2009	2006	2007	2008	2009
10/2	709	1420	951	1127	17	42	35	37	0.2	4.8	2.2	2.3	49	142	54	70	3.4	33.2	7.0	
10/3	966	1360	911	1132	17	41	35	37	0.2	5.0	2.2	2.3	49	201	54	70	3.4	33.2	7.0	
10/4	879	1530	1020	1272	17	40	36	36	0.2	4.7	2.3	2.2	46	194	57	69	3.4	32.3	7.0	
10/5	957	1420	1010	1196	17	40	35	35	0.2	4.6	2.3	2.1	43	165	62	66	3.4	32.4	6.8	
10/6	946	1470	1060	948	16	39	36	35	0.2	4.7	2.4	2.2	42	145	64	64	3.4	32.3	6.6	
10/7	799	1420	1060	1013	16	38	37	35	0.2	5.1	2.6	2.9	41	140	73	66	3.4	32.6	6.6	
10/8	642	1400	1170	1200	16	38	37	35	0.2	4.8	2.3	2.3	40	351	73	84	3.4	31.6	7.5	
10/9	589	1800	1150	1326	16	37	37	35	0.2	4.9	2.4	2.2	39	381	82	83	3.3	30.9	9.2	
10/10	814	1750	1180	1346	16	37	36	33	0.2	4.9	2.2	2.1	38	294	79	75	3.3	30.3	9.7	37.3
10/11	775	1620	1150	1281	16	36	35	31	0.2	5.2	2.1	2.0	37	248	73	66	3.3	29.8	9.3	37.4
10/12	1070	1480	1170	1299	16	35	34	30	0.2	5.5	2.4	2.4	37	227	67	57	3.3	29.4	9.1	28.8
10/13	987	1570	1010	1370	16	35	34	29	0.2	5.4	2.6	2.1	36	206	63	54	3.3	27.7	8.7	29.1
10/14	1020	1530	1060	1180	16	34	33	29	0.2	5.6	2.1	2.6	36	188	62	51	3.3	26.8	8.4	
10/15	876	1500	1180	1272	18	34	33	29	0.2	5.6	2.3	2.5	37	188	68	50	3.6	25.1	8.1	
10/16	1040	1370	1110	1016	18	35	32	30	0.2	5.7	2.1	2.4	37	200	67	50	3.8	24.4	7.8	
10/17	904	1490	1180	993	18	41	32	31	0.2	6.3	1.9	2.3	38	243	62	49	3.8	24.5	7.6	
10/18	809	1520	1050	1357	18	45	31	31	0.2	6.7	1.8	2.5	38	292	64	54	3.8	24.5	7.3	
10/19	851	1570	1140	1005	18	46	30	32	0.2	7.0	1.8	2.1	38	256	69	56	4.1	24.7	7.0	
10/20	908	1530	936	1038	17	44	30	31	0.2	7.4	1.7	2.1	38	226	65	53	4.4	27.2	6.6	
10/21	968	1560	1030	986	17	42	29	30	0.2	7.7	1.5	2.0	40	202	61	51	4.3	31.1	6.4	
10/22	913	1520	1030	997	17	41	29	30	0.2	8.0	1.7	2.0	43	184	59	49	4.2	30.0	5.9	
10/23	1020	1500	944	1114	17	39	29	30	0.2	8.2	1.5	2.1	42	190	58	48	4.3	27.7	5.7	8.0
10/24	963	1530	997	1175	17	38	29	29	0.2	8.1	1.4	2.2	40	297	78	49	4.5	25.7	6.4	
10/25	931	1760	1020	1283	17	36	29	29	0.2	9.1	1.3	2.4	42	492	87	62	4.5	24.6	6.3	
10/26	970	1820	1030	1224	17	36	27	29	0.2	9.1	1.3	2.4	46	413	81	63	4.4	22.4	6.2	
10/27	1170	1570	1020	1093	16	36	25	29	0.2	9.4	1.2	2.3	49	326	71	63	4.4	20.4	5.5	
10/28	1140	1620	1120	1216	17	36	26	29	0.2	9.4	1.2	2.2	54	278	67	60	4.8	19.8	4.6	
10/29	1130	1600	1180	1283	16	35	27	29	0.4	9.8	1.3	2.2	49	254	65	58	4.7	19.1	4.6	20.9
10/30	1190	1600	1100	1123	15	34	27	30	0.8	10.1	1.3	2.1	48	234	66	58	4.4	18.5	4.6	17.4
10/31	1320	1640	1150	1096	14	32	27	30	0.7	10.3	1.2	2.7	46	212	68	60	3.7	17.9	4.6	9.8
11/1	1170	1640	1180	861	13	30	26	29	0.7	10.3	1.2	2.3	46	196	67	171	3.4	17.4	4.6	
11/2	1270	1790	1130	1272	12	28	26	26	0.6	10.3	1.3	4.9	44	180	76	196	3.1	16.8	5.6	
11/3	1300	1650	1100	1303	13	27	26	25	0.6	10.2	1.4	4.5	43	166	101	162	3.0	15.8	6.1	10.4
11/4	1110	1650	1190	1336	13	26	26	26	0.5	9.7	1.5	7.2	42	155	120	137	3.1	14.9	5.6	8.3
11/5	964	1670	1060	1064	13	26	26	25	0.5	9.4	1.5	12.1	41	142	119	120	3.1	13.9	5.2	18.0
11/6	1110	1640	966	1040	12	26	25	29	0.5	9.0	1.4	11.6	40	133	108	117	3.2	13.0	3.7	21.7
11/7	1130	1600	954	1208	11	25	24	30	0.5	8.8	1.3	11.2	40	136	97	140	3.1	12.1	4.8	26.2
11/8	1070	1580	922	1241	10	25	23	29	0.5	8.4	1.3	12.0	39	140	95	135	2.7	12.3	4.7	22.8
11/9	1000	1620	904	1346	9	25	22	28	0.4	8.1	1.3	12.2	38	155	94	121	2.5	12.8	4.6	
11/10	934	1660	1040	1295	9	24	22	26	0.4	7.8	1.3		38	149	95	113	2.4	13.3	4.4	26.4
11/11	1110	1570	1110	1370	10	24	21	90	0.4	7.8	1.3	12.8	38	153	98	103	2.4	13.8	4.3	38.6
11/12	909	1720	1190	1427	11	24	20	149	0.4	7.8	1.3	12.9	38	150	104	91	2.4	13.9	4.2	45.6
11/13	1090	1690	958	1320	12	23	20	134	0.4	7.7	1.3	13.9	38	146	108	88	2.4	14.0	4.2	77.5
11/14	1170	1780	1340	1330	13	22	20	108	0.4	7.4	1.2	14.3	37	133	110	78	2.4	13.5	4.3	119.9
11/15	1090	1750	1590	957	13	22	20	102	0.4	7.0	1.2	10.8	37	127	108	73	2.5	13.0	4.4	116.3
11/16	1180	1710	1500	1325	13	22	19	97	0.4	6.7	1.1	10.5	37	121	103	82	2.6	12.5	4.4	97.4

Date	Daily Discharge (m ³ /s)																			
	Peace River				Halfway River				Moberly River				Pine River				Beatton River			
	2006	2007	2008	2009	2006	2007	2008	2009	2006	2007	2008	2009	2006	2007	2008	2009	2006	2007	2008	2009
11/17	1250	1700	1660		13	22	19		0.4	6.4	1.1		37	112	92		2.7	11.9	4.4	
11/18	1290	1730	1630		13	22	19		0.4	6.0	1.1		37	111	88		2.7	11.6	4.3	
11/19	1240	1730	1680		13	22	18		0.4	5.7	1.1		36	107	85		2.8	11.2	4.3	
11/20	1210	1750	1580		13	22	18		0.4	5.5	1.1		36	103	79		2.7	10.9	4.2	
11/21	1310	1730	1550		13	21	17		0.4	5.3	1.0		35	95	77		2.7	10.1	4.1	
11/22	1310	1720	1710		13	21	17		0.4	5.0	1.0		34	93	76		2.6	9.4	4.0	
11/23	1320	1690	1510		13	21	17		0.4	4.7	1.0		34	92	77		2.6	8.8	3.9	
11/24	1320	1710	1750		12	21	17		0.4	4.4	1.0		33	93	78		2.5	8.2	3.7	
11/25	1240	1670	1740		12	21	17		0.4	4.1	1.0		32	93	80		2.4	7.7	3.6	
11/26	1430	1760	1800		12	21	17		0.4	4.0	1.0		32	88	82		2.3	7.2	3.6	
11/27	1770	1720	1750		11	20	17		0.4	3.9	1.0		31	79	82		2.2	6.8	3.6	
11/28	1820	1700	1740		11	20	17		0.4	3.8	0.9		30	77	82		2.1	6.3	3.6	
11/29	1800	1700	1590		11	19	17		0.4	3.6	0.9		30	76	78		2.1	6.0	3.6	
11/30	1650	1720	1510		11	19	17		0.4	3.5	0.9		30	72	76		2.1	5.6	3.6	
12/1	1590	1810	1500		10	19	17		0.4	3.4	0.9		30	69	73		2.1	5.3	3.5	
12/2	1630	1800	1710		10	18	17		0.4	3.3	0.9		30	67	70		2.1	5.1	3.4	
12/3	1690	1840	1740		10	18	17		0.4	3.2	0.9		30	65	68		2.1	4.8	3.3	
12/4	1680	1730	1780		10	18	16		0.4	3.2	0.9		30	64	65		2.1	4.6	3.1	
12/5	1610	1610	1760		10	18	16		0.4	3.2	0.9		30	62	64		2.2	4.4	3.1	
12/6	1630	1850	1740		10	18	16		0.4	3.1	0.9		30	61	63		2.2	4.1	3.1	
12/7	1740	1920	1740		11	17	16		0.4	3.1	0.9		30	61	61		2.3	3.8	3.1	
12/8	1730	1880	1730		11	17	15		0.4	3.1	0.8		30	59	59		2.4	3.7	3.0	
12/9	1760	1920	1760		11	17	15		0.4	3.1	0.8		30	58	57		2.4	3.6	3.0	
12/10	1750	1930	1770		11	18	14		0.4	3.0	0.8		30	58	56		2.4	3.5	2.9	
12/11	1710	1820	1750		11	18	14		0.4	3.0	0.8		30	58	55		2.4	3.2	2.8	
12/12	1730	1780	1740		11	18	14		0.4	3.0	0.8		29	58	54		2.4	3.0	2.8	
12/13	1700	1810	1780		11	18	14		0.4	2.9	0.8		29	58	53		2.4	2.8	2.7	
12/14	1620	1820	1800		11	17	13		0.4	2.9	0.8		28	58	52		2.3	2.7	2.7	
12/15	1650	1850	1780		11	17	13		0.4	2.8	0.8		28	57	51		2.2	2.6	2.6	
12/16	1610	1770	1760		11	17	13		0.3	2.7	0.8		27	57	50		2.1	2.4	2.6	
12/17	1650	1780	1750		11	17	13		0.3	2.7	0.8		27	56	49		2.0	2.3	2.6	
12/18	1720	1780	1730		11	17	13		0.3	2.6	0.8		26	54	48		2.0	2.2	2.6	
12/19	1720	1870	1740		11	16	13		0.4	2.6	0.8		25	52	47		2.0	2.1	2.6	
12/20	1720	1940	1770		10	16	13		0.4	2.5	0.8		24	51	46		2.0	2.0	2.6	
12/21	1660	1960	1790		10	16	13		0.4	2.5	0.8		24	49	46		2.1	1.9	2.6	
12/22	1710	1870	1810		10	16	13		0.4	2.4	0.8		24	48	45		2.1	1.8	2.6	
12/23	1750	1880	1800		10	15	13		0.4	2.4	0.8		24	47	45		2.2	1.7	2.6	
12/24	1730	1880	1770		10	16	13		0.4	2.4	0.8		24	46	44		2.2	1.7	2.6	
12/25	1650	1840	1650		10	16	13		0.4	2.3	0.8		24	46	44		2.2	1.6	2.5	
12/26	1510	1860	1520		10	16	13		0.4	2.2	0.8		24	46	43		2.1	1.6	2.5	
12/27	1560	1880	1520		9	16	13		0.3	2.2	0.7		24	45	42		2.1	1.5	2.5	
12/28	1590	1950	1510		9	17	12		0.3	2.2	0.7		24	45	42		2.0	1.5	2.5	
12/29	1580	1970	1450		9	16	12		0.3	2.2	0.7		24	44	41		1.9	1.5	2.4	
12/30	1610	1980	1470		10	16	12		0.3	2.1	0.7		24	42	41		1.9	1.5	2.4	
12/31	1580	1970	1500		10	16	12		0.3	2.1	0.7		24	360	41		1.8	1.4	2.3	

Table A 2: Mean daily water temperature data for Cache, Farrell, Lynx and Maurice creeks (2005-2009)

Date	Daily Mean Water Temperature (°C)			
	Cache Creek	Farrell Creek	Lynx Creek	Maurice Creek
08/31/2005			10.9	
09/01/2005		13.2	10.9	
09/02/2005		13.8	11.0	
09/03/2005		12.3	10.0	10.5
09/04/2005		12.0	9.9	10.1
09/05/2005		11.7	9.2	9.7
09/06/2005		11.7	9.4	9.8
09/07/2005	13.5	13.2	11.1	11.6
09/08/2005	13.4	13.7	11.7	11.8
09/09/2005	12.2	12.4	10.7	11.0
09/10/2005	11.7	12.1	10.5	10.7
09/11/2005	10.5	10.6	9.0	9.3
09/12/2005	11.8	11.9	10.4	10.2
09/13/2005	11.6	11.7	10.0	10.1
09/14/2005	11.7	11.9	10.5	10.8
09/15/2005	10.5	10.9	9.4	9.8
09/16/2005	10.0	9.9	8.2	7.6
09/17/2005	10.0	10.0	8.2	8.0
09/18/2005	9.4	9.8	8.7	8.6
09/19/2005	8.6	8.8	8.0	8.3
09/20/2005	8.4	8.6	7.4	7.6
09/21/2005	8.5	7.8	6.9	6.9
09/22/2005	9.0	7.4	6.2	6.5
09/23/2005	7.1	6.3	5.2	5.4
09/24/2005	6.1	6.0	5.3	5.6
09/25/2005	7.9	8.0	7.6	7.3
09/26/2005	8.4	8.7	7.8	7.5
09/27/2005	7.5	7.1	6.1	6.0
09/28/2005	8.9	8.5	7.7	7.3
09/29/2005	8.1	8.1	7.1	6.9
09/30/2005	7.6	7.4	5.6	5.6
10/01/2005	6.5	6.3	4.8	5.0
10/02/2005	6.8	6.9	5.8	5.6
10/03/2005	6.5	6.5	5.4	5.4
10/04/2005	6.5	6.3	5.8	5.7
10/05/2005	5.8	5.8	5.1	4.9
10/06/2005	5.1	6.4	5.9	5.7
10/07/2005	6.0	6.3	5.7	6.0
10/08/2005	4.9	5.3	4.6	4.7
10/09/2005	3.9	4.3	3.5	3.9
10/10/2005	5.0	4.9	4.8	5.1
10/11/2005	4.1	4.3	3.7	3.9
10/12/2005	5.7	5.6	5.3	5.0

Date	Daily Mean Water Temperature (°C)			
	Cache Creek	Farrell Creek	Lynx Creek	Maurice Creek
10/13/2005	4.3	4.3	3.9	4.0
10/14/2005	2.8	2.6	2.1	2.3
10/15/2005	4.2	4.0	3.4	2.9
10/16/2005	3.6	3.8	3.5	3.3
10/17/2005	4.2	4.2	3.9	3.6
10/18/2005	4.4	4.1	3.9	3.7
10/19/2005	4.8	4.8	4.2	4.1
10/20/2005	2.1	2.3	1.4	2.0
10/21/2005	0.9	1.0	0.6	1.1
10/22/2005	1.7	1.7	1.5	1.6
10/23/2005	2.5	2.0	1.7	2.0
10/24/2005	2.2	1.3	1.3	1.7
10/25/2005	3.4	1.9	2.0	2.1
10/26/2005	3.4	2.2	2.4	2.4
10/27/2005	0.8	0.4	0.3	1.1
10/28/2005	0.2	0.0	0.0	0.7
10/29/2005	0.2	0.0	0.1	0.5
10/30/2005	0.2	0.1	0.2	0.5
10/31/2005	0.1	0.0	0.3	0.5
11/01/2005	0.4	0.1	0.7	0.7
11/02/2005	0.2	0.1	0.1	0.4
11/03/2005	0.1	0.0	0.0	0.4
11/04/2005	0.1	0.0	0.1	0.4
11/05/2005	0.2	0.0	0.1	0.3
11/06/2005	0.0	0.0	0.1	0.4
11/07/2005	0.0	0.0	0.0	0.3
11/08/2005	0.0	0.0	0.1	0.3
11/09/2005	0.1	0.0	0.4	0.4
11/10/2005	0.2	0.1	0.5	0.3
11/11/2005	0.0	0.0	0.0	0.2
11/12/2005	0.0	0.0	0.0	0.2
11/13/2005	0.0	0.0	0.0	0.2
11/14/2005	0.0	0.0	0.0	0.1
11/15/2005	0.0	0.0	0.0	0.2
11/16/2005	0.1	0.0	0.0	0.2
11/17/2005	0.2	0.0	0.0	0.2
11/18/2005	0.2	0.0	0.0	0.2
11/19/2005	0.2	0.0	0.2	0.1
11/20/2005	0.2	0.0	0.4	0.0
11/21/2005	0.1	0.1	1.1	0.2
11/22/2005	0.2	0.2	1.8	0.6
11/23/2005	0.0	0.1	0.5	0.2
11/24/2005	0.0	0.0	0.0	0.0
11/25/2005	0.0	0.0	0.0	0.0
11/26/2005	0.0	0.0	0.0	0.0
11/27/2005	0.0	0.0	-0.1	0.0

Date	Daily Mean Water Temperature (°C)			
	Cache Creek	Farrell Creek	Lynx Creek	Maurice Creek
11/28/2005	0.0	0.0	0.0	0.0
11/29/2005	0.0	0.0	-0.1	0.0
11/30/2005	0.0	0.0	0.0	0.0
12/01/2005	0.0	0.0	0.0	0.0
12/02/2005	0.1	0.0	-0.1	0.0
12/03/2005	0.3	0.0	0.0	0.0
12/04/2005	0.5	0.0	-0.1	0.0
12/05/2005	0.7	0.0	0.0	0.0
12/06/2005	0.8	0.0	0.0	0.0
12/07/2005	0.8	0.0	0.0	0.0
12/08/2005	0.8	0.0	0.0	0.0
12/09/2005	0.8	0.0	0.1	0.0
12/10/2005	0.8	0.0	0.0	0.0
12/11/2005	0.3	0.0	0.1	0.0
12/12/2005	0.4	0.0	0.1	0.0
12/13/2005	0.5	0.0	0.0	0.0
12/14/2005	0.6	0.0	-0.1	0.0
12/15/2005	0.7	0.0	0.0	0.0
12/16/2005	0.8	0.0	0.0	0.0
12/17/2005	0.7	0.0	-0.1	0.0
12/18/2005	0.6	0.0	0.0	0.0
12/19/2005	0.5	0.0	-0.1	0.0
12/20/2005	0.4	0.0	0.0	0.0
12/21/2005	0.4	0.2	0.0	0.0
12/22/2005	0.6	0.1	0.0	0.0
12/23/2005	0.6	0.0	-0.1	0.0
12/24/2005	0.7	0.0	0.1	0.0
12/25/2005	0.6	0.0	0.0	0.0
12/26/2005	0.6	0.0	0.0	0.0
12/27/2005	0.6	0.0	0.0	0.0
12/28/2005	0.6	0.0	0.0	0.0
12/29/2005	0.6	0.0	0.0	0.0
12/30/2005	0.6	0.0	0.0	0.0
12/31/2005	0.6	0.0	0.0	0.0
01/01/2006	0.6	0.0	0.0	0.0
01/02/2006	0.6	0.0	0.0	0.0
01/03/2006	0.5	0.0	0.0	0.0
01/04/2006	0.4	0.0	0.0	0.0
01/05/2006	0.3	0.0	0.0	0.0
01/06/2006	0.4	0.0	0.0	0.0
01/07/2006	0.3	0.0	-0.1	0.0
01/08/2006	0.3	0.0	-0.1	0.0
01/09/2006	0.3	0.0	0.0	0.0
01/10/2006	0.3	0.0	-0.1	0.0
01/11/2006	0.3	0.1	-0.1	0.0
01/12/2006	0.1	0.2	-0.3	0.0

Date	Daily Mean Water Temperature (°C)			
	Cache Creek	Farrell Creek	Lynx Creek	Maurice Creek
01/13/2006	0.1	0.2	-0.4	0.0
01/14/2006	0.1	0.2	-0.4	0.0
01/15/2006	0.1	0.2	-0.5	0.0
01/16/2006	0.1	0.2	-0.8	0.0
01/17/2006	0.1	0.2	-0.4	0.0
01/18/2006	0.1	0.2	-0.3	0.0
01/19/2006	0.0	0.2	-0.8	0.0
01/20/2006	0.0	0.0	-1.0	0.0
01/21/2006	0.0	0.0	-1.2	0.0
01/22/2006	0.0	0.0	-0.9	0.0
01/23/2006	0.0	0.0	-0.3	0.0
01/24/2006	0.0	0.0	-0.3	0.0
01/25/2006	0.0	0.1	-0.3	0.0
01/26/2006	0.0	0.2	-0.5	0.0
01/27/2006	0.0	0.0	-1.2	0.0
01/28/2006	-0.2	0.0	-1.6	0.0
01/29/2006	-0.2	0.0	-1.9	0.0
01/30/2006	-0.2	0.0	-2.1	0.0
01/31/2006	-0.3	0.0	-1.8	0.0
02/01/2006	-0.4	0.0	-1.7	0.0
02/02/2006	-0.4	0.0	-1.5	0.0
02/03/2006	-0.4	0.0	-1.4	0.0
02/04/2006	-0.4	0.0	-1.0	0.0
02/05/2006	-0.4	0.0	-1.0	0.0
02/06/2006	-0.4	0.0	-1.3	0.0
02/07/2006	-0.4	0.0	-1.2	0.0
02/08/2006	-0.4	0.0	-0.6	0.0
02/09/2006	-0.4	0.0	-0.5	0.0
02/10/2006	-0.4	0.0	-0.5	0.0
02/11/2006	-0.4	0.0	-0.1	0.0
02/12/2006	-0.4	0.0	0.1	0.0
02/13/2006	-0.4	0.0	0.1	0.0
02/14/2006	-0.4	0.0	0.1	0.0
02/15/2006	-0.4	0.0	0.1	0.0
02/16/2006	-0.4	0.0	0.1	0.0
02/17/2006	-0.5	0.0	-0.1	0.0
02/18/2006	-0.7	0.0	0.0	0.0
02/19/2006	-0.7	0.0	0.0	0.0
02/20/2006	-0.7	0.0	0.1	0.0
02/21/2006	-0.6	0.0	0.1	0.0
02/22/2006	-0.5	0.0	0.1	0.0
02/23/2006	-0.5	0.0	0.1	0.0
02/24/2006	-0.6	0.0	0.0	0.0
02/25/2006	-0.7	0.0	0.1	0.0
02/26/2006	-0.8	0.0	0.0	0.0
02/27/2006	-0.9	0.0	-0.1	0.0

Date	Daily Mean Water Temperature (°C)			
	Cache Creek	Farrell Creek	Lynx Creek	Maurice Creek
02/28/2006	-0.9	0.0	0.0	0.0
03/01/2006	-1.0	0.0	0.1	0.0
03/02/2006	-1.0	0.0	0.1	0.0
03/03/2006	-0.9	0.0	0.1	0.0
03/04/2006	-0.9	0.0	0.1	0.0
03/05/2006	-0.9	0.0	0.0	0.0
03/06/2006	-0.9	0.0	0.1	0.0
03/07/2006	-0.9	0.0	0.1	0.0
03/08/2006	-0.8	0.0	0.3	0.0
03/09/2006	-0.7	0.0	0.3	0.0
03/10/2006	-0.5	-0.1	0.2	0.0
03/11/2006	-0.4	0.0	0.0	0.0
03/12/2006	-0.4	0.0	0.0	0.0
03/13/2006	-0.4	-0.1	0.0	0.0
03/14/2006	-0.4	-0.1	-0.1	0.0
03/15/2006	-0.4	-0.1	-0.1	0.0
03/16/2006	-0.4	-0.1	0.0	0.0
03/17/2006	-0.5	-0.1	0.0	0.0
03/18/2006	-0.6	-0.1	0.0	0.0
03/19/2006	-0.7	-0.1	0.0	0.0
03/20/2006	-0.8	-0.1	-0.1	0.0
03/21/2006	-0.9	-0.1	0.0	0.0
03/22/2006	-0.9	-0.1	0.0	0.0
03/23/2006	-0.9	-0.1	0.0	0.0
03/24/2006	-0.7	-0.1	0.1	0.0
03/25/2006	-0.5	-0.1	0.3	0.0
03/26/2006	-0.5	-0.1	0.4	0.0
03/27/2006	-0.4	-0.1	0.5	0.0
03/28/2006	-0.4	0.0	0.4	0.0
03/29/2006	-0.2	0.0	0.3	0.0
03/30/2006	0.0	0.0	0.6	0.0
03/31/2006	0.0	0.0	0.4	0.0
04/01/2006	0.0	0.0	0.2	0.0
04/02/2006	0.0	0.0	0.2	0.0
04/03/2006	0.0	0.0	0.0	0.0
04/04/2006	0.0	0.0	0.0	0.0
04/05/2006	0.0	0.0	0.1	0.0
04/06/2006	0.0	0.1	0.1	0.0
04/07/2006	0.0	0.1	0.1	0.0
04/08/2006	0.0	0.1	0.2	0.0
04/09/2006	0.1	0.1	0.5	0.0
04/10/2006	0.6	0.1	0.7	0.0
04/11/2006	0.8	0.1	0.8	0.0
04/12/2006	1.0	0.1	1.0	0.0
04/13/2006	1.4	0.2	1.4	0.0
04/14/2006	1.1	0.2	1.2	0.0

Date	Daily Mean Water Temperature (°C)			
	Cache Creek	Farrell Creek	Lynx Creek	Maurice Creek
04/15/2006	1.2	0.1	1.0	0.0
04/16/2006	1.4	0.2	1.0	0.0
04/17/2006	1.7	0.5	1.1	0.0
04/18/2006	2.2	0.9	2.3	0.0
04/19/2006	3.9	1.2	3.2	0.0
04/20/2006	3.5	1.0	2.8	0.0
04/21/2006	3.9	1.3	2.4	0.0
04/22/2006	4.1	2.2	2.5	0.1
04/23/2006	5.9	3.3	3.2	0.2
04/24/2006	7.4	4.4	3.9	0.6
04/25/2006	7.7	4.8	3.8	0.8
04/26/2006	6.6	4.3	2.9	0.6
04/27/2006	6.8	5.2	4.2	1.3
04/28/2006	9.9	7.4	5.8	2.4
04/29/2006	9.1	6.7	4.7	2.0
04/30/2006	7.8	5.8	4.0	2.2
05/01/2006	7.4	5.8	4.1	2.4
05/02/2006	8.2	6.7	5.5	2.9
05/03/2006	8.6	6.9	4.6	3.2
05/04/2006	10.9	9.3	7.6	4.9
05/05/2006	11.5	10.8	8.2	5.9
05/06/2006	11.1	10.5	6.7	6.1
05/07/2006	10.6	9.7	6.2	5.9
05/08/2006	10.1		6.0	
05/09/2006		9.3	6.1	6.3
05/10/2006	10.0	9.8	6.9	6.6
05/11/2006	9.8	9.5	6.8	6.8
05/12/2006	9.3	9.5	7.1	7.0
05/13/2006	10.4	10.2	7.5	7.0
05/14/2006	9.5	9.9	7.1	6.8
05/15/2006	11.1	11.4	8.5	8.1
05/16/2006	13.2	13.5	10.5	9.9
05/17/2006	14.7	15.0	12.1	11.4
05/18/2006	15.2	15.6	12.8	12.1
05/19/2006	15.8	16.1	13.3	12.4
05/20/2006	13.9	14.3	11.9	11.4
05/21/2006	14.0	13.7	11.5	11.3
05/22/2006	13.9	13.1	10.6	10.5
05/23/2006	12.3	12.5	10.0	9.9
05/24/2006	11.0	12.0	9.2	8.9
05/25/2006	11.8	11.4	9.9	9.9
05/26/2006	12.9	12.1	10.8	10.7
05/27/2006	13.5	12.1	10.8	11.0
05/28/2006	14.3	12.5		11.2
05/29/2006	13.8	12.6	11.7	11.3
05/30/2006	15.8	14.4	12.7	12.0

Date	Daily Mean Water Temperature (°C)			
	Cache Creek	Farrell Creek	Lynx Creek	Maurice Creek
05/31/2006	16.6	16.0	14.4	13.2
06/01/2006	16.8	16.7	14.4	13.5
06/02/2006	17.5	16.9	15.1	14.2
06/03/2006	15.2	15.5	13.2	13.0
06/04/2006	15.6	15.6	13.2	13.1
06/05/2006	15.6	15.8	13.1	13.0
06/06/2006	15.7	15.6	13.6	13.3
06/07/2006	16.9	16.5	14.0	14.0
06/08/2006	17.5	17.5	14.9	14.8
06/09/2006	18.1	17.8	14.9	14.7
06/10/2006	18.1	18.3	15.5	15.5
06/11/2006	19.3	19.3	16.2	15.9
06/12/2006	18.5	19.0	15.6	15.9
06/13/2006	19.8	20.0	16.7	17.0
06/14/2006	20.7	20.4	17.1	17.4
06/15/2006	21.4	20.8	17.2	16.9
06/16/2006	19.8	19.3	16.2	16.5
06/17/2006	18.7	18.3	15.7	15.8
06/18/2006	19.4	18.7	15.8	16.2
06/19/2006	18.8	18.8	16.2	16.7
06/20/2006	17.4	18.2	15.3	15.8
06/21/2006	18.1	17.8	14.9	15.5
06/22/2006	18.0	17.7	14.2	15.2
06/23/2006	18.4	17.9	14.8	15.5
06/24/2006	18.9	18.5	15.3	15.9
06/25/2006	20.6	20.7	17.7	18.1
06/26/2006	21.9	21.6	18.4	18.9
06/27/2006	21.4	21.3	18.0	18.7
06/28/2006	19.9	19.7	16.5	17.4
06/29/2006	16.7	17.6	14.6	15.9
06/30/2006	16.9	19.2	15.8	16.8
07/01/2006	18.0	21.0	17.4	18.0
07/02/2006	18.7	21.8	18.3	18.8
07/03/2006	18.1	21.9	18.4	18.8
07/04/2006	19.1	23.1	19.5	19.6
07/05/2006	19.2	20.9	17.8	18.7
07/06/2006	17.3	19.5	16.7	17.7
07/07/2006	18.1	18.9	16.4	17.8
07/08/2006	16.3	19.3	16.5	17.4
07/09/2006	17.3	20.7	17.3	18.0
07/10/2006	17.2	17.6	15.0	16.4
07/11/2006	16.4	16.7	14.2	15.2
07/12/2006	17.8	18.0	15.3	16.1
07/13/2006	19.0	18.6	16.0	16.9
07/14/2006	17.5	18.0	14.8	16.5
07/15/2006	17.2	18.4	15.7	17.0

Date	Daily Mean Water Temperature (°C)			
	Cache Creek	Farrell Creek	Lynx Creek	Maurice Creek
07/16/2006	18.6	19.2	16.0	17.2
07/17/2006	17.4	18.7	15.9	17.0
07/18/2006	17.9	19.0	15.8	16.9
07/19/2006	16.6	20.4	16.5	17.1
07/20/2006	17.6	20.5	17.0	18.5
07/21/2006	18.7	21.6	18.4	19.7
07/22/2006	19.4	23.2	19.8	20.4
07/23/2006	20.0	23.2	19.9	20.3
07/24/2006	21.0	23.1	19.7	20.3
07/25/2006	19.3	20.5	17.5	18.7
07/26/2006	18.8	20.6	17.4	18.0
07/27/2006	17.9	20.4	17.1	17.4
07/28/2006	18.3	19.7	16.4	17.2
07/29/2006	17.3	18.3	15.5	16.7
07/30/2006	16.6	19.1	15.9	16.7
07/31/2006	15.3	18.4	15.4	16.6
08/01/2006	16.7	17.7	15.4	16.2
08/02/2006	15.8	17.0	14.8	15.5
08/03/2006	14.5	16.4	13.8	14.5
08/04/2006	15.2	18.0	15.0	15.3
08/05/2006	14.8	16.2	13.7	14.6
08/06/2006	13.7	16.2	13.1	14.2
08/07/2006	15.4	16.3	13.6	14.5
08/08/2006	16.7	17.5	15.2	16.1
08/09/2006	15.4	17.3	14.2	15.3
08/10/2006	13.9	17.1	14.0	14.8
08/11/2006	14.8	17.8	14.7	15.4
08/12/2006	14.3	17.4	14.3	14.8
08/13/2006	14.9	17.0	14.4	15.0
08/14/2006	15.6	17.5	15.2	15.7
08/15/2006	14.8	17.1	14.5	15.0
08/16/2006	14.1	17.1	14.3	15.1
08/17/2006	14.7	18.0	15.0	15.4
08/18/2006	15.6	18.1	15.2	15.4
08/19/2006	13.9	17.1	13.7	13.9
08/20/2006	13.6	17.0	13.5	13.7
08/21/2006	13.5	16.7	13.5	14.0
08/22/2006	14.0	16.9	14.1	14.1
08/23/2006	13.9	16.9	13.9	13.7
08/24/2006	13.3	15.7	13.1	13.4
08/25/2006	12.5	15.9	13.1	13.0
08/26/2006	13.3	16.5	13.8	13.4
08/27/2006	13.4	16.2	13.2	13.2
08/28/2006	14.4	16.0	13.5	13.9
08/29/2006	13.6	15.2	12.6	12.8
08/30/2006	12.7	13.8	11.7	11.7

Date	Daily Mean Water Temperature (°C)			
	Cache Creek	Farrell Creek	Lynx Creek	Maurice Creek
08/31/2006	12.2	13.6	10.8	11.1
09/01/2006	11.8	15.3	12.8	12.4
09/02/2006	13.2	15.9	13.2	12.5
09/03/2006	13.3	15.9	12.9	12.4
09/04/2006	13.2	15.4	12.6	12.4
09/05/2006	13.6	16.0	12.9	12.4
09/06/2006	13.2	15.1	12.1	11.5
09/07/2006	13.2	14.7	12.0	11.7
09/08/2006	12.9	15.6	11.9	11.5
09/09/2006	12.5	14.3	11.3	11.3
09/10/2006	12.6	13.0	11.0	10.9
09/11/2006	10.8	12.4	10.1	9.7
09/12/2006	9.8	11.4	9.2	9.0
09/13/2006	9.5	9.3	7.7	8.3
09/14/2006	7.6	7.8	6.9	7.7
09/15/2006	6.6	7.1	5.9	6.4
09/16/2006	7.0	7.4	6.3	6.7
09/17/2006	7.9	8.3	7.1	7.4
09/18/2006	8.0	8.1	6.9	7.4
09/19/2006	8.6	9.4	8.2	8.5
09/20/2006	8.4	9.6	7.9	8.2
09/21/2006	9.2	10.2	8.8	9.2
09/22/2006	8.2	9.2	7.5	8.0
09/23/2006	8.4	10.5	9.5	9.7
09/24/2006	9.5	11.4	10.3	10.8
09/25/2006	10.3	12.0	11.1	11.3
09/26/2006	10.2	10.8	9.6	9.6
09/27/2006	8.7	9.9	8.5	9.4
09/28/2006	9.2	11.1	10.1	10.7
09/29/2006	9.4	11.2	10.4	10.9
09/30/2006	9.7	10.4	9.8	10.1
10/01/2006	7.4	7.1	6.2	6.9
10/02/2006	5.8	5.5	4.6	5.1
10/03/2006	4.6	4.1	3.3	3.7
10/04/2006	4.6	4.0	3.3	3.4
10/05/2006	6.3	7.1	6.3	6.1
10/06/2006	5.5	5.4	4.6	5.1
10/07/2006	4.6	3.3	2.9	3.2
10/08/2006	4.2	2.6	1.9	2.0
10/09/2006	4.4	3.1	3.0	2.4
10/10/2006	5.0	5.3	5.4	4.9
10/11/2006	5.4	5.1	4.4	4.3
10/12/2006	5.5	6.2	5.4	5.3
10/13/2006	6.0	7.0	6.3	5.9
10/14/2006	6.3	6.9	6.0	5.8
10/15/2006	6.0	6.0	5.2	5.3

Date	Daily Mean Water Temperature (°C)			
	Cache Creek	Farrell Creek	Lynx Creek	Maurice Creek
10/16/2006	3.9	3.2	2.8	3.3
10/17/2006	3.9	1.1	1.2	1.5
10/18/2006	4.4	2.7	2.9	2.6
10/19/2006	4.6	3.4	3.9	3.5
10/20/2006	5.0	3.8	3.3	3.0
10/21/2006	4.8	2.2	1.9	1.9
10/22/2006	3.6	2.3	2.7	2.6
10/23/2006				
10/24/2006	3.9	3.2	3.3	3.4
10/25/2006	3.6	2.6	2.5	2.6
10/26/2006	3.5	1.8	1.8	1.7
10/27/2006	3.6	0.8	1.3	1.4
10/28/2006	3.6	0.1	0.2	0.2
10/29/2006	3.7	0.1	0.1	0.1
10/30/2006	3.6	0.0	-0.1	0.1
10/31/2006	3.3	0.0	-0.1	0.1
11/01/2006	3.4	0.0	0.0	0.1
11/02/2006	3.4	0.0	0.0	0.1
11/03/2006	3.3	0.0	0.0	0.1
11/04/2006	3.1	0.0	0.0	0.1
11/05/2006	3.0	0.0	-0.1	0.1
11/06/2006	2.9	0.0	-0.1	0.1
11/07/2006	2.8	0.0	-0.1	0.1
11/08/2006	2.7	0.0	0.0	0.1
11/09/2006	2.6	0.0	-0.1	0.1
11/10/2006	2.5	0.0	0.0	0.1
11/11/2006	2.4	0.0	0.0	0.1
11/12/2006	2.3	0.0	-0.1	0.1
11/13/2006	2.2	0.0	0.0	0.1
11/14/2006	2.1	0.0	0.0	0.1
11/15/2006	2.1	0.0	0.0	0.1
11/16/2006	2.0	0.0	-0.1	0.1
11/17/2006	1.9	0.0	0.0	0.1
11/18/2006	1.8	0.0	0.0	0.1
11/19/2006	1.8	0.0	0.0	0.1
11/20/2006	1.6	0.0	0.0	0.1
11/21/2006	1.4	0.0	0.0	0.1
11/22/2006	1.1	0.0	0.0	0.1
11/23/2006	1.0	0.0	-0.1	0.1
11/24/2006	1.0	0.0	0.0	0.1
11/25/2006	0.9	0.0	-0.1	0.1
11/26/2006	0.9	0.0	-0.1	0.1
11/27/2006	1.0	0.0	-0.1	0.1
11/28/2006	1.1	0.0	-0.1	0.1
11/29/2006	1.1	0.0	-0.1	0.1
11/30/2006	1.1	0.0	-0.1	0.1

Date	Daily Mean Water Temperature (°C)			
	Cache Creek	Farrell Creek	Lynx Creek	Maurice Creek
12/01/2006	1.1	0.0	-0.1	0.1
12/02/2006	1.1	0.0	-0.1	0.1
12/03/2006	1.1	0.0	-0.1	0.1
12/04/2006	1.1	0.0	-0.1	0.1
12/05/2006	1.1	0.0	-0.1	0.1
12/06/2006	1.1	0.0	-0.1	0.1
12/07/2006	1.1	0.0	-0.1	0.1
12/08/2006	1.0	0.0	-0.1	0.1
12/09/2006	1.0	0.0	-0.1	0.1
12/10/2006	0.9	0.0	-0.1	0.1
12/11/2006	0.8	0.0	-0.1	0.1
12/12/2006	0.8	0.0	-0.1	0.1
12/13/2006	0.7	0.0	-0.1	0.1
12/14/2006	0.6	0.0	-0.1	0.1
12/15/2006	0.6	0.0	-0.1	0.1
12/16/2006	0.5	0.0	-0.1	0.1
12/17/2006	0.5	0.0	-0.1	0.1
12/18/2006	0.3	0.0	-0.1	0.1
12/19/2006	0.4	0.0	-0.1	0.1
12/20/2006	0.4	0.0	-0.1	0.1
12/21/2006	0.4	0.0	0.0	0.1
12/22/2006	0.4	0.0	0.0	0.1
12/23/2006	0.3	0.0	-0.1	0.1
12/24/2006	0.3	0.0	-0.1	0.1
12/25/2006	0.4	0.0	-0.1	0.1
12/26/2006	0.5	0.0	-0.1	0.1
12/27/2006	0.5	0.0	-0.1	0.1
12/28/2006	0.6	0.0	-0.1	0.1
12/29/2006	0.6	0.0	-0.1	0.1
12/30/2006	0.6	0.0	0.0	0.1
12/31/2006	0.6	0.0	-0.1	0.1
01/01/2007	0.6	0.0	-0.1	0.1
01/02/2007	0.6	0.0	0.0	0.1
01/03/2007	0.6	0.0	-0.1	0.1
01/04/2007	0.6	0.0	-0.1	0.1
01/05/2007	0.6	0.0	-0.1	0.1
01/06/2007	0.6	0.0	-0.1	0.1
01/07/2007	0.6	0.0	-0.1	0.1
01/08/2007	0.6	0.0	-0.1	0.1
01/09/2007	0.6	0.0	-0.1	0.1
01/10/2007	0.6	0.0	-0.1	0.1
01/11/2007	0.6	0.0	-0.1	0.1
01/12/2007	0.6	0.0	-0.1	0.1
01/13/2007	0.6	0.0	-0.1	0.1
01/14/2007	0.6	0.0	0.0	0.1
01/15/2007	0.6	0.0	-0.1	0.1

Date	Daily Mean Water Temperature (°C)			
	Cache Creek	Farrell Creek	Lynx Creek	Maurice Creek
01/16/2007	0.6	0.0	-0.1	0.1
01/17/2007	0.6	0.0	-0.1	0.1
01/18/2007	0.6	0.0	0.0	0.1
01/19/2007	0.6	0.0	0.0	0.1
01/20/2007	0.6	0.0	0.0	0.1
01/21/2007	0.6	0.0	0.0	0.1
01/22/2007	0.6	0.0	0.0	0.1
01/23/2007	0.6	0.0	0.1	0.1
01/24/2007	0.6	0.0	0.0	0.1
01/25/2007	0.6	0.0	0.0	0.1
01/26/2007	0.6	0.0	-0.1	0.1
01/27/2007	0.6	0.0	-0.1	0.1
01/28/2007	0.6	0.0	-0.1	0.1
01/29/2007	0.6	0.0	-0.1	0.1
01/30/2007	0.6	0.0	-0.1	0.1
01/31/2007	0.6	0.0	-0.1	0.1
02/01/2007	0.6	0.0	-0.1	0.1
02/02/2007	0.6	0.0	-0.1	0.1
02/03/2007	0.6	0.0	-0.1	0.1
02/04/2007	0.6	0.0	-0.1	0.1
02/05/2007	0.6	0.0	-0.1	0.1
02/06/2007	0.6	0.0	-0.1	0.1
02/07/2007	0.5	0.0	-0.1	0.1
02/08/2007	0.5	0.0	-0.1	0.1
02/09/2007	0.5	0.0	-0.1	0.1
02/10/2007	0.5	0.0	-0.1	0.1
02/11/2007	0.5	0.0	-0.1	0.1
02/12/2007	0.6	0.0	-0.1	0.1
02/13/2007	0.5	0.0	-0.1	0.1
02/14/2007	0.5	0.0	-0.1	0.1
02/15/2007	0.5	0.0	-0.1	0.1
02/16/2007	0.6	0.0	-0.1	0.1
02/17/2007	0.5	0.0	-0.1	0.1
02/18/2007	0.5	0.0	-0.1	0.1
02/19/2007	0.5	0.0	-0.1	0.1
02/20/2007	0.5	0.0	-0.1	0.1
02/21/2007	0.5	0.0	-0.1	0.1
02/22/2007	0.5	0.0	-0.1	0.1
02/23/2007	0.5	0.0	-0.1	0.1
02/24/2007	0.5	0.0	-0.1	0.1
02/25/2007	0.5	0.0	-0.1	0.1
02/26/2007	0.5	0.0	-0.1	0.1
02/27/2007	0.5	0.0	-0.1	0.1
02/28/2007	0.5	0.0	-0.1	0.1
03/01/2007	0.5	0.0	-0.1	0.1
03/02/2007	0.5	0.0	-0.1	0.1

Date	Daily Mean Water Temperature (°C)			
	Cache Creek	Farrell Creek	Lynx Creek	Maurice Creek
03/03/2007	0.5	0.0	-0.1	0.1
03/04/2007	0.5	0.0	-0.1	0.1
03/05/2007	0.5	0.0	-0.1	0.1
03/06/2007	0.5	0.0	-0.1	0.1
03/07/2007	0.4	0.0	-0.1	0.1
03/08/2007	0.3	0.0	-0.1	0.1
03/09/2007	0.5	0.0	-0.1	0.1
03/10/2007	0.5	0.0	-0.1	0.1
03/11/2007	0.5	0.0	-0.1	0.1
03/12/2007	0.5	0.0	-0.1	0.1
03/13/2007	0.5	0.0	-0.1	0.1
03/14/2007	0.5	0.0	-0.1	0.1
03/15/2007	0.5	0.0	-0.1	0.1
03/16/2007	0.5	0.0	-0.1	0.1
03/17/2007	0.4	0.0	-0.1	0.1
03/18/2007	0.3	0.0	-0.1	0.1
03/19/2007	0.3	0.0	-0.1	0.1
03/20/2007	0.4	0.0	-0.1	0.1
03/21/2007	0.4	0.0	-0.1	0.1
03/22/2007	0.4	0.0	-0.1	0.1
03/23/2007	0.4	0.0	0.0	0.1
03/24/2007	0.3	0.0	0.0	0.1
03/25/2007	0.3	0.0	0.1	0.1
03/26/2007	0.3	0.0	0.0	0.1
03/27/2007	0.3	0.0	0.0	0.1
03/28/2007	0.3	0.0	-0.1	0.1
03/29/2007	0.2	0.0	0.2	0.1
03/30/2007	0.2	0.0	0.1	0.1
03/31/2007	0.2	0.0	0.0	0.1
04/01/2007	0.2	0.0	-0.1	0.1
04/02/2007	0.2	0.0	-0.1	0.1
04/03/2007	0.2	0.0	-0.1	0.1
04/04/2007	0.2	0.0	-0.1	0.1
04/05/2007	0.2	0.0	-0.1	0.1
04/06/2007	0.2	0.0	0.0	0.1
04/07/2007	0.2	0.0	0.3	0.1
04/08/2007	0.2	0.0	0.5	0.1
04/09/2007	0.3	0.0	0.9	0.1
04/10/2007	0.3	0.0	0.7	0.1
04/11/2007	0.1	0.1	1.1	0.0
04/12/2007	0.0	0.0	0.7	0.1
04/13/2007	0.0	0.1	0.1	0.1
04/14/2007	0.2	0.3	0.2	0.1
04/15/2007	0.2	0.9	0.4	0.1
04/16/2007	0.3	1.5	0.5	0.1
04/17/2007	1.0	2.4	0.6	0.1

Date	Daily Mean Water Temperature (°C)			
	Cache Creek	Farrell Creek	Lynx Creek	Maurice Creek
04/18/2007	1.7	2.4	1.2	0.2
04/19/2007	2.1	2.0	1.8	0.5
04/20/2007	2.1	1.6	1.6	0.4
04/21/2007	2.3	3.1	2.4	1.1
04/22/2007	3.9	5.3	3.3	1.3
04/23/2007	4.6	6.0	3.5	1.5
04/24/2007	5.0	5.5	2.8	1.6
04/25/2007	4.4	4.5	3.2	1.9
04/26/2007	4.4	3.9	3.5	2.3
04/27/2007	4.8	4.3	4.1	2.8
04/28/2007	6.0	4.7	5.2	3.6
04/29/2007	5.9	5.0	4.7	3.3
04/30/2007	5.8	6.1	4.9	3.1
05/01/2007	6.0	6.5	5.4	3.8
05/02/2007	6.8	6.7	5.8	4.3
05/03/2007	6.9	7.0	6.7	4.0
05/04/2007	6.7	5.9	5.5	3.9
05/05/2007	6.5	5.0	5.5	4.7
05/06/2007	6.7	5.8	6.4	6.0
05/07/2007	7.2	6.4	6.4	6.2
05/08/2007	7.7	7.0	6.6	6.4
05/09/2007	8.5	7.2	7.0	6.4
05/10/2007	8.9	8.0	7.0	6.6
05/11/2007	8.7	7.3	6.9	7.1
05/12/2007	9.3	8.0	7.5	7.5
05/13/2007	9.6	8.4	7.6	7.6
05/14/2007	11.1	9.3	8.3	8.4
05/15/2007	12.5	11.0	9.6	9.7
05/16/2007	12.9	11.6	10.3	10.5
05/17/2007	11.7	10.8	9.3	9.5
05/18/2007	9.2	9.0	7.5	7.6
05/19/2007	9.6	9.0	7.8	7.4
05/20/2007	10.3	9.4	8.7	7.8
05/21/2007	12.0	9.7	8.3	8.0
05/22/2007	10.1	8.6	7.3	7.5
05/23/2007	10.4	9.1	8.0	7.9
05/24/2007	12.2	10.4	9.6	9.3
05/25/2007	14.5	12.6	11.5	11.2
05/26/2007	15.4	13.4	12.0	11.9
05/27/2007	14.7	14.4	13.1	13.0
05/28/2007	13.1	12.7	12.5	12.4
05/29/2007	15.0	13.6	12.7	12.8
05/30/2007	17.5	15.6	14.3	14.2
05/31/2007	17.8	16.3	14.5	14.7
06/01/2007	17.1	16.2	14.3	14.4
06/02/2007	18.9	18.0	15.9	16.0

Date	Daily Mean Water Temperature (°C)			
	Cache Creek	Farrell Creek	Lynx Creek	Maurice Creek
06/03/2007	20.5	19.5	17.0	17.1
06/04/2007	21.3	20.4	17.9	17.9
06/05/2007	19.9	18.8	16.1	16.5
06/06/2007	18.5	18.1	14.8	15.3
06/07/2007	16.0	16.1	13.8	14.0
06/08/2007	18.1	16.5	14.7	14.9
06/09/2007	19.1	17.4	15.3	15.4
06/10/2007	17.4	17.4	15.1	15.3
06/11/2007	18.0	17.1	14.3	14.2
06/12/2007	16.9	16.6	13.9	13.8
06/13/2007	17.4	17.0	14.2	14.2
06/14/2007	18.5	17.8	15.3	15.0
06/15/2007	18.5	17.7	15.0	14.6
06/16/2007	18.7	18.0	15.5	15.0
06/17/2007	18.5	17.8	15.3	15.4
06/18/2007	18.5	17.5	15.2	15.7
06/19/2007	16.5	16.2	14.4	14.8
06/20/2007	15.6	15.4	13.5	13.9
06/21/2007	16.3	16.1	14.2	14.6
06/22/2007	16.9	16.3	14.2	14.6
06/23/2007	15.1	14.6	11.9	11.8
06/24/2007	16.3	15.3	13.4	12.7
06/25/2007	17.7	16.7	14.1	13.9
06/26/2007	18.6	18.1	15.4	15.8
06/27/2007	18.9	18.0	15.6	
06/28/2007	18.0			14.4
06/29/2007		18.4	16.1	15.6
06/30/2007	16.7	17.1	14.8	15.0
07/01/2007	17.7	16.8	15.2	15.4
07/02/2007	18.6	17.6	15.3	15.6
07/03/2007	20.2	20.0	17.3	17.4
07/04/2007	21.1	20.2	17.5	17.7
07/05/2007	21.6	20.7	17.9	18.3
07/06/2007	19.8	19.0	16.4	16.7
07/07/2007	19.9	18.5	16.0	16.9
07/08/2007	18.0	17.1	14.6	15.3
07/09/2007	19.8	19.3	16.6	17.3
07/10/2007	20.8	20.0	17.0	17.5
07/11/2007	21.9	21.1	18.6	19.5
07/12/2007	23.1	22.6	19.8	20.7
07/13/2007	23.6	24.1	20.6	21.5
07/14/2007	24.0	24.5	21.4	21.8
07/15/2007	20.7	20.5	17.4	18.4
07/16/2007	21.7	21.3	18.3	19.5
07/17/2007	22.8	22.3	19.0	20.1
07/18/2007	22.8	23.1	20.0	20.4

Date	Daily Mean Water Temperature (°C)			
	Cache Creek	Farrell Creek	Lynx Creek	Maurice Creek
07/19/2007	22.1	21.7	18.9	20.1
07/20/2007	20.2	20.2	17.7	18.2
07/21/2007	19.6	19.9	16.7	18.3
07/22/2007	20.0	20.2	17.4	18.2
07/23/2007	19.1	19.2	16.7	17.5
07/24/2007	17.2	17.9	15.4	16.1
07/25/2007	16.0	19.0	16.1	17.2
07/26/2007	17.1	19.9	16.8	17.9
07/27/2007	18.7	21.3	18.0	18.8
07/28/2007	18.5	21.5	18.7	19.6
07/29/2007	18.7	20.3	17.5	18.5
07/30/2007	17.4	18.0	15.4	16.5
07/31/2007	16.0	16.5	14.3	15.1
08/01/2007	15.5	18.1	15.6	16.5
08/02/2007	17.2	19.7	16.5	17.7
08/03/2007	18.5	19.3	16.4	17.6
08/04/2007	18.9	19.6	16.9	17.6
08/05/2007	19.2	19.6	16.8	17.3
08/06/2007	19.7	20.2	17.0	17.5
08/07/2007	19.2	20.4	17.3	18.0
08/08/2007	16.3	16.5	13.8	14.6
08/09/2007	15.9	16.0	13.1	14.4
08/10/2007	16.0	16.3	13.7	14.6
08/11/2007	15.4	15.2	12.5	13.2
08/12/2007	14.2	14.1	11.8	12.3
08/13/2007	14.5	15.0	12.5	12.5
08/14/2007	14.4	15.8	12.9	12.9
08/15/2007	16.6	18.6	15.4	15.5
08/16/2007	16.6	18.8	15.6	15.8
08/17/2007	16.4	17.0	14.1	14.6
08/18/2007	15.5	15.4	12.6	12.5
08/19/2007	15.7	15.4	12.4	12.8
08/20/2007	14.9	14.8	12.5	12.9
08/21/2007	15.4	15.6	13.4	13.4
08/22/2007	16.5	16.7	14.3	14.2
08/23/2007	16.3	16.4	13.8	13.9
08/24/2007	16.4	15.9	13.3	13.4
08/25/2007	15.8	14.2	12.2	12.2
08/26/2007	13.4	12.6	10.6	10.7
08/27/2007	13.5	13.4	10.4	10.1
08/28/2007	14.1	13.5	10.7	10.2
08/29/2007	13.8	13.6	11.7	11.5
08/30/2007	14.9	14.3	12.9	12.7
08/31/2007	15.4	14.5	12.4	12.3
09/01/2007	14.8	13.9	11.5	11.0
09/02/2007	13.6	13.5	11.2	11.2

Date	Daily Mean Water Temperature (°C)			
	Cache Creek	Farrell Creek	Lynx Creek	Maurice Creek
09/03/2007	14.2	14.3	12.2	12.0
09/04/2007	14.8	14.7	12.4	12.6
09/05/2007	14.0	13.7	11.4	11.6
09/06/2007	13.6	12.9	10.8	10.9
09/07/2007	13.0	11.9	10.0	9.9
09/08/2007	13.3	12.3	9.5	9.3
09/09/2007	13.5	13.2	10.7	10.6
09/10/2007	14.8	14.6	12.1	12.0
09/11/2007	13.6	13.9	11.4	11.8
09/12/2007	12.9	12.3	9.8	10.0
09/13/2007	12.1	11.8	9.2	9.2
09/14/2007	12.2	12.0	9.4	9.8
09/15/2007	12.1	12.0	10.2	10.4
09/16/2007	12.6	12.4	10.9	10.9
09/17/2007	9.9	10.4	8.1	8.4
09/18/2007	8.9	8.8	7.2	7.4
09/19/2007	7.8	7.3	5.6	5.3
09/20/2007	8.9	9.0	7.8	7.5
09/21/2007	9.1	9.2	7.7	8.2
09/22/2007	9.0	8.9	7.7	8.0
09/23/2007	8.9	9.2	7.9	7.9
09/24/2007	7.6	8.1	7.2	7.1
09/25/2007	8.8	9.2	8.5	8.2
09/26/2007	9.1	9.4	8.4	8.0
09/27/2007	8.7	9.0	7.8	7.5
09/28/2007	7.0	6.4	5.2	5.5
09/29/2007	6.7	6.2	5.3	5.2
09/30/2007	7.2	6.7	5.9	5.7
10/01/2007	8.3	7.3	6.6	6.0
10/02/2007	7.7	7.0	6.0	5.7
10/03/2007	6.0	5.2	4.1	3.8
10/04/2007	5.2	4.7	3.7	3.1
10/05/2007	5.4	4.5	3.7	3.1
10/06/2007	5.6	5.0	4.6	3.9
10/07/2007	6.8	6.6	6.0	5.2
10/08/2007	5.2	4.8	4.0	3.6
10/09/2007	4.1	3.4	2.6	2.4
10/10/2007	4.8	4.4	3.6	3.0
10/11/2007	4.6	4.6	3.8	3.8
10/12/2007	3.7	3.5	2.8	2.6
10/13/2007	3.4	3.7	3.4	3.2
10/14/2007	5.2	5.4	5.2	5.0
10/15/2007	6.0	5.9	5.1	5.3
10/16/2007	6.8	6.9	6.2	6.0
10/17/2007	6.6	6.5	5.5	5.4
10/18/2007	4.5	3.5	2.6	2.9

Date	Daily Mean Water Temperature (°C)			
	Cache Creek	Farrell Creek	Lynx Creek	Maurice Creek
10/19/2007	3.6	2.8	2.5	2.9
10/20/2007	3.5	2.5	2.1	2.0
10/21/2007	1.9	1.0	1.1	1.3
10/22/2007	2.9	3.0	3.4	3.5
10/23/2007	3.4	3.4	3.7	3.7
10/24/2007	4.2	3.2	3.4	3.3
10/25/2007	2.0	1.1	1.2	1.5
10/26/2007	1.6	0.6	0.6	0.8
10/27/2007	2.1	1.8	2.3	1.8
10/28/2007	1.3	1.4	1.6	1.6
10/29/2007	1.4	1.2		
10/30/2007			1.1	1.2
10/31/2007	1.7	1.8	2.1	2.1
11/01/2007	0.7	0.4	0.5	0.6
11/02/2007	0.5	0.3	0.7	0.7
11/03/2007	0.3	0.0	0.4	0.5
11/04/2007	0.3	0.0	0.0	0.4
11/05/2007	0.2	0.0	-0.1	0.1
11/06/2007	0.2	0.0	-0.1	0.1
11/07/2007	0.3	0.0	0.1	0.1
11/08/2007	0.2	0.0	-0.1	0.1
11/09/2007	0.2	0.0	-0.1	0.1
11/10/2007	0.2	0.0	-0.1	0.1
11/11/2007	0.1	0.0	-0.1	0.1
11/12/2007	0.1	0.0	-0.1	0.1
11/13/2007	0.1	0.0	-0.1	0.1
11/14/2007	0.1	0.0	-0.1	0.1
11/15/2007	0.2	0.0	-0.1	0.1
11/16/2007	0.1	0.0	-0.1	0.1
11/17/2007	0.1	0.0	-0.1	0.1
11/18/2007	0.1	0.0	-0.1	0.1
11/19/2007	0.2	0.0	-0.1	0.1
11/20/2007	0.3	0.0	-0.1	0.1
11/21/2007	0.3	0.0	-0.1	0.1
11/22/2007	0.5	0.0	-0.1	0.1
11/23/2007	0.8	0.0	-0.1	0.1
11/24/2007	1.0	0.0	-0.1	0.1
11/25/2007	1.0	0.0	-0.1	0.1
11/26/2007	1.0	0.0	-0.1	0.1
11/27/2007	1.1	0.0	-0.1	0.1
11/28/2007	1.1	0.0	-0.1	0.1
11/29/2007	1.1	0.0	-0.1	0.1
11/30/2007	1.2	0.0	-0.1	0.1
12/01/2007	1.3	0.0	-0.1	0.1
12/02/2007	1.4	0.0	-0.1	0.1
12/03/2007	1.4	0.0	-0.1	0.1

Date	Daily Mean Water Temperature (°C)			
	Cache Creek	Farrell Creek	Lynx Creek	Maurice Creek
12/04/2007	1.4	0.0	-0.1	0.1
12/05/2007	1.4	0.0	-0.1	0.1
12/06/2007	1.4	0.0	-0.1	0.1
12/07/2007	1.4	0.0	-0.1	0.1
12/08/2007	1.4	0.0	-0.1	0.1
12/09/2007	1.4	0.0	-0.1	0.1
12/10/2007	1.4	0.0	-0.1	0.1
12/11/2007	1.3	0.0	-0.1	0.1
12/12/2007	1.3	0.0	-0.1	0.1
12/13/2007	1.3	0.0	-0.1	0.1
12/14/2007	1.3	0.0	-0.1	0.1
12/15/2007	1.3	0.0	-0.1	0.1
12/16/2007	1.2	0.0	0.0	0.1
12/17/2007	1.1	0.0	-0.1	0.1
12/18/2007	1.1	0.0	-0.1	0.1
12/19/2007	1.1	0.0	-0.1	0.1
12/20/2007	1.1	0.0	-0.1	0.1
12/21/2007	1.1	0.0	-0.1	0.1
12/22/2007	1.1	0.0	-0.1	0.1
12/23/2007	1.1	0.0	-0.1	0.1
12/24/2007	0.8	0.0	-0.1	0.1
12/25/2007	0.9	0.0	-0.1	0.1
12/26/2007	1.0	0.0	-0.1	0.1
12/27/2007	1.0	0.0	-0.1	0.1
12/28/2007	0.9	0.0	-0.1	0.1
12/29/2007	1.0	0.0	-0.1	0.1
12/30/2007	1.0	0.0	-0.1	0.1
12/31/2007	1.0	0.0	-0.1	0.1
01/01/2008	1.0	0.0	-0.1	0.1
01/02/2008	0.8	0.0	-0.1	0.1
01/03/2008	0.8	0.0	-0.1	0.1
01/04/2008	0.8	0.0	-0.1	0.1
01/05/2008	0.6	0.0	-0.1	0.1
01/06/2008	0.8	0.0	-0.1	0.1
01/07/2008	0.8	0.0	-0.1	0.1
01/08/2008	0.8	0.0	-0.1	0.1
01/09/2008	0.8	0.0	-0.1	0.1
01/10/2008	0.8	0.0	-0.1	0.1
01/11/2008	0.8	0.0	-0.1	0.1
01/12/2008	0.8	0.0	-0.1	0.1
01/13/2008	0.8	0.0	-0.1	0.1
01/14/2008	0.8	0.0	0.0	0.1
01/15/2008	0.6	0.0	-0.1	0.1
01/16/2008	0.5	0.0	0.0	0.1
01/17/2008	0.5	0.0	-0.1	0.1
01/18/2008	0.5	0.0	-0.1	0.1

Date	Daily Mean Water Temperature (°C)			
	Cache Creek	Farrell Creek	Lynx Creek	Maurice Creek
01/19/2008	0.5	0.0	-0.1	0.1
01/20/2008	0.5	0.0	-0.1	0.1
01/21/2008	0.5	0.0	-0.1	0.1
01/22/2008	0.5	0.0	-0.1	0.1
01/23/2008	0.5	0.0	-0.1	0.1
01/24/2008	0.5	0.0	-0.1	0.1
01/25/2008	0.5	0.0	-0.1	0.1
01/26/2008	0.5	0.0	-0.1	0.1
01/27/2008	0.5	0.0	-0.1	0.1
01/28/2008	0.5	0.0	-0.1	0.1
01/29/2008	0.5	0.0	-0.1	0.1
01/30/2008	0.3	0.0	-0.1	0.1
01/31/2008	0.3	0.0	-0.1	0.1
02/01/2008	0.2	0.0	-0.1	0.1
02/02/2008	0.2	0.0	-0.1	0.1
02/03/2008	0.2	0.0	-0.1	0.1
02/04/2008	0.2	0.0	-0.1	0.1
02/05/2008	0.2	0.0	-0.1	0.1
02/06/2008	0.2	0.0	-0.1	0.1
02/07/2008	0.2	0.0	-0.1	0.1
02/08/2008	0.2	0.0	-0.1	0.1
02/09/2008	0.3	0.0	-0.1	0.1
02/10/2008	0.3	0.0	-0.1	0.1
02/11/2008	0.3	0.0	-0.1	0.1
02/12/2008	0.3	0.0	-0.1	0.1
02/13/2008	0.3	0.0	-0.1	0.1
02/14/2008	0.3	0.0	-0.1	0.1
02/15/2008	0.3	0.0	-0.1	0.1
02/16/2008	0.3	0.0	-0.1	0.1
02/17/2008	0.3	0.0	-0.1	0.1
02/18/2008	0.3	0.0	0.0	0.1
02/19/2008	0.2	0.0	0.0	0.1
02/20/2008	0.2	0.0	0.0	0.1
02/21/2008	0.2	0.0	0.0	0.1
02/22/2008	0.2	0.0	-0.1	0.1
02/23/2008	0.2	0.0	0.0	0.1
02/24/2008	0.2	0.0	0.1	0.1
02/25/2008	0.2	0.0	0.0	0.1
02/26/2008	0.2	0.0	0.1	0.1
02/27/2008	0.2	0.0	0.1	0.1
02/28/2008	0.2	0.0	0.1	0.1
02/29/2008	0.2	0.0	-0.1	0.1
03/01/2008	0.2	0.0	-0.1	0.1
03/02/2008	0.2	0.0	-0.1	0.1
03/03/2008	0.2	0.0	-0.1	0.1
03/04/2008	0.2	0.0	-0.1	0.1

Date	Daily Mean Water Temperature (°C)			
	Cache Creek	Farrell Creek	Lynx Creek	Maurice Creek
03/05/2008	0.2	0.0	0.0	0.1
03/06/2008	0.2	0.0	0.2	0.1
03/07/2008	0.2	0.0	0.2	0.1
03/08/2008	0.2	0.0	0.3	0.1
03/09/2008	0.2	0.0	0.2	0.1
03/10/2008	0.2	0.0	0.4	0.1
03/11/2008	0.2	0.0	0.5	0.1
03/12/2008	0.2	0.0	0.1	0.1
03/13/2008	0.2	0.0	0.1	0.1
03/14/2008	0.2	0.0	-0.1	0.1
03/15/2008	0.2	0.0	-0.1	0.1
03/16/2008	0.2	0.0	-0.1	0.1
03/17/2008	0.2	0.0	0.0	0.1
03/18/2008	0.2	0.0	0.3	0.1
03/19/2008	0.2	0.0	0.2	0.1
03/20/2008	0.2	0.0	0.3	0.1
03/21/2008	0.2	0.0	0.3	0.1
03/22/2008	0.2	0.0	0.6	0.1
03/23/2008	0.2	0.0	0.6	0.1
03/24/2008	0.2	0.0	0.3	0.1
03/25/2008	0.2	0.0	0.2	0.1
03/26/2008	0.2	0.0	0.3	0.1
03/27/2008	0.2	0.0	0.3	0.1
03/28/2008	0.3	0.0	0.2	0.1
03/29/2008	0.3	0.0	-0.1	0.1
03/30/2008	0.3	0.0	0.1	0.1
03/31/2008	0.3	0.0	0.4	0.1
04/01/2008	0.4	0.0	0.6	0.1
04/02/2008	0.5	0.0	0.5	0.1
04/03/2008	0.5	0.0	0.5	0.1
04/04/2008	0.5	0.0	0.7	0.1
04/05/2008	0.3	0.0	-0.1	0.1
04/06/2008	0.0	0.0	0.0	0.1
04/07/2008	0.0	0.0	0.0	0.1
04/08/2008	0.0	0.0	0.1	0.1
04/09/2008	0.0	0.0	0.0	0.1
04/10/2008	0.1	0.0	0.0	0.1
04/11/2008	0.2	0.0	0.1	0.1
04/12/2008	0.2	0.0	0.1	0.1
04/13/2008	0.3	0.0	0.2	0.1
04/14/2008	0.5	0.5	0.8	0.1
04/15/2008	0.7	1.5	1.5	0.1
04/16/2008	1.0	2.6	1.5	0.1
04/17/2008	1.1	2.0	-0.1	0.1
04/18/2008	0.4	0.2	-0.1	0.1
04/19/2008	0.0	0.0	-0.1	0.1

Date	Daily Mean Water Temperature (°C)			
	Cache Creek	Farrell Creek	Lynx Creek	Maurice Creek
04/20/2008	0.0	0.0	0.0	0.1
04/21/2008	0.4	0.2	0.7	0.1
04/22/2008	1.1	0.8	1.0	0.1
04/23/2008	1.2	0.8	0.3	0.2
04/24/2008	0.6	0.3	0.5	0.1
04/25/2008	1.9	1.3	2.6	0.3
04/26/2008	4.5	3.0	3.2	0.7
04/27/2008	3.5	3.3	3.5	1.1
04/28/2008	4.1	4.3	3.8	0.9
04/29/2008	5.6	6.0	1.2	0.9
04/30/2008	4.6	3.2	0.7	0.8
05/01/2008	2.2	0.6	1.4	0.8
05/02/2008	3.5	1.5	1.8	1.4
05/03/2008	5.0	1.8	3.5	2.3
05/04/2008	5.2	3.1	4.2	2.7
05/05/2008	5.7	4.0	5.9	2.7
05/06/2008	6.4	4.9	5.3	3.3
05/07/2008	6.4	5.1	6.2	3.6
05/08/2008	7.6	5.7	6.4	3.8
05/09/2008	7.6	6.1	6.7	4.1
05/10/2008	8.0	6.4	6.8	4.2
05/11/2008	8.4	7.2	7.5	4.5
05/12/2008	9.1	8.0	9.0	4.7
05/13/2008	10.1	9.1	8.1	5.4
05/14/2008	9.1	8.5	10.9	5.9
05/15/2008	11.9	10.5	11.6	6.6
05/16/2008	14.1	11.9	11.8	7.8
05/17/2008	13.9	12.4	12.5	8.6
05/18/2008	14.9	13.1	10.5	9.3
05/19/2008	13.5	12.1	10.6	9.5
05/20/2008	12.5	11.8	10.3	9.3
05/21/2008	11.3	11.0	9.8	9.0
05/22/2008	12.2	10.8	9.8	8.9
05/23/2008	11.3	10.6	9.2	8.9
05/24/2008	10.8	10.1	10.6	8.6
05/25/2008	13.1	10.9	11.2	8.2
05/26/2008	14.1	12.3	12.5	8.4
05/27/2008	15.6	13.9	12.6	9.2
05/28/2008	16.4	14.6	11.5	10.1
05/29/2008	13.9	13.5	12.5	9.7
05/30/2008	16.0	14.2	13.5	9.4
05/31/2008	16.5	14.8	13.7	10.1
06/01/2008	17.0	14.9	14.3	10.6
06/02/2008	17.9	15.8	15.6	11.2
06/03/2008	19.2	17.1	15.4	12.0
06/04/2008	18.7	17.1	13.5	12.7

Date	Daily Mean Water Temperature (°C)			
	Cache Creek	Farrell Creek	Lynx Creek	Maurice Creek
06/05/2008	16.5	15.7	12.0	12.6
06/06/2008	14.7	14.4	12.3	12.1
06/07/2008	15.0	14.3	11.5	11.5
06/08/2008	15.3	14.2	11.7	11.3
06/09/2008	15.3	14.3		
06/10/2008	16.7	15.6	13.8	11.0
06/11/2008			13.4	13.7
06/12/2008	17.6	16.3	12.6	13.4
06/13/2008	15.0	15.5	11.7	12.4
06/14/2008	15.5	14.4	13.2	11.7
06/15/2008	16.8	15.7	13.3	12.6
06/16/2008	16.9	16.0	13.7	12.7
06/17/2008	16.3	16.4	13.7	13.6
06/18/2008	17.3	16.4	14.0	13.7
06/19/2008	18.1	17.3	14.4	14.2
06/20/2008	18.4	17.7	15.0	14.2
06/21/2008	18.7	18.1	15.2	15.2
06/22/2008	18.0	17.9	14.1	15.8
06/23/2008	17.3	16.7	13.2	14.7
06/24/2008	17.3	16.4	13.4	13.7
06/25/2008	17.1	16.2	13.5	13.8
06/26/2008	16.4	16.3	15.2	13.9
06/27/2008	18.0	17.8	17.0	15.6
06/28/2008	20.0	19.7	16.6	17.2
06/29/2008	19.8	19.7	17.2	17.3
06/30/2008	20.0	21.1	17.7	17.9
07/01/2008	19.4	21.5	18.0	18.5
07/02/2008	20.1	22.1	18.6	18.8
07/03/2008	20.6	22.5	19.0	19.5
07/04/2008	21.8	22.8	17.0	19.8
07/05/2008	20.3	20.6	16.8	17.9
07/06/2008	19.5	20.2	16.1	17.8
07/07/2008	18.9	19.1	15.8	17.8
07/08/2008	17.5	18.7	15.1	16.9
07/09/2008	17.0	17.8	13.9	16.9
07/10/2008	14.9	16.4	15.5	15.7
07/11/2008	15.7	18.4	15.9	16.9
07/12/2008	17.0	18.8	15.7	17.2
07/13/2008	16.5	18.9	15.2	16.8
07/14/2008	16.6	18.3	15.0	16.7
07/15/2008	15.7	18.5	15.3	16.7
07/16/2008	16.3	18.8	16.3	16.7
07/17/2008	16.8	19.8	16.5	17.0
07/18/2008	16.4	19.7	15.8	17.6
07/19/2008	16.6	18.9	15.5	17.1
07/20/2008	17.2	17.8	14.6	16.6

Date	Daily Mean Water Temperature (°C)			
	Cache Creek	Farrell Creek	Lynx Creek	Maurice Creek
07/21/2008	16.5	17.5	14.2	16.1
07/22/2008	14.1	17.2	14.8	15.7
07/23/2008	14.7	18.1	15.4	16.2
07/24/2008	14.9	18.8	16.1	16.7
07/25/2008	15.8	19.8	16.4	17.4
07/26/2008	17.0	20.0	16.9	17.3
07/27/2008	17.3	19.7	16.4	17.6
07/28/2008	17.2	19.7	16.6	17.4
07/29/2008	17.9	19.5	15.6	17.8
07/30/2008	16.4	18.0	14.6	16.4
07/31/2008	14.3	17.1	12.3	15.7
08/01/2008	14.3	15.0	15.1	14.0
08/02/2008	15.0	17.8	16.5	16.2
08/03/2008	16.6	19.8	16.1	17.9
08/04/2008	17.0	19.5	17.0	17.0
08/05/2008	17.3	21.1	16.9	18.1
08/06/2008	17.7	21.3	17.0	17.9
08/07/2008	17.6	21.2	17.9	18.0
08/08/2008	17.9	22.1	18.4	18.5
08/09/2008	19.0	22.8	15.5	19.5
08/10/2008	18.3	18.9	14.4	17.1
08/11/2008	16.4	17.6	15.4	15.2
08/12/2008	16.3	19.1	15.3	15.5
08/13/2008	16.6	18.3	16.8	15.9
08/14/2008	16.8	19.9	17.5	17.4
08/15/2008	17.6	21.0	17.7	18.4
08/16/2008	18.3	21.3	17.7	18.8
08/17/2008	18.3	21.3	16.3	18.7
08/18/2008	18.3	20.1	13.5	17.8
08/19/2008	16.1	16.4	12.8	15.0
08/20/2008	14.9	15.0	11.9	14.1
08/21/2008	13.4	14.1	11.9	13.0
08/22/2008	12.1	15.2	13.0	12.5
08/23/2008	13.1	15.2	14.0	13.6
08/24/2008	14.5	16.0	12.4	14.7
08/25/2008	13.9	14.8	11.2	13.4
08/26/2008	11.6	13.2	11.3	12.0
08/27/2008	11.4	13.3	12.2	12.3
08/28/2008	12.4	14.4	10.4	13.1
08/29/2008	11.4	12.5	10.6	11.5
08/30/2008	11.6	12.7	10.2	11.3
08/31/2008	10.9	12.4	9.5	10.6
09/01/2008	10.0	12.1	9.9	9.5
09/02/2008	9.8	12.2	10.7	10.2
09/03/2008	10.7	13.3	10.9	10.8
09/04/2008	10.7	13.4	11.4	11.3

Date	Daily Mean Water Temperature (°C)			
	Cache Creek	Farrell Creek	Lynx Creek	Maurice Creek
09/05/2008	11.9	14.1	10.9	11.7
09/06/2008	12.2	13.7	10.3	11.5
09/07/2008	11.2	13.1	11.1	10.5
09/08/2008	11.0	13.6	11.6	11.5
09/09/2008	11.0	14.4	10.4	11.8
09/10/2008	10.0	12.6	11.0	10.6
09/11/2008	11.4	13.0	10.1	11.4
09/12/2008	9.7	12.2	8.8	10.4
09/13/2008	7.8	11.1	9.8	9.4
09/14/2008	8.7	11.3	11.2	10.3
09/15/2008	9.9	13.2	11.8	11.7
09/16/2008	11.9	14.3	11.5	12.0
09/17/2008	11.6	14.0	11.8	11.7
09/18/2008	11.3	14.6	11.5	12.1
09/19/2008	11.2	14.2	10.8	11.9
09/20/2008	10.6	13.3	10.4	11.1
09/21/2008	10.8	12.5	10.2	11.0
09/22/2008	10.3	11.9	8.9	10.8
09/23/2008	7.6	10.4	6.0	9.4
09/24/2008	4.2	6.8	6.6	6.6
09/25/2008	6.5	7.5	6.7	7.0
09/26/2008	6.3	8.1	8.0	6.7
09/27/2008	8.0	9.5	6.5	7.7
09/28/2008	6.1	7.6	9.0	6.8
09/29/2008	10.5	10.3	8.7	9.2
09/30/2008	9.2	10.5	8.0	8.9
10/01/2008	9.0	9.9	8.2	8.3
10/02/2008	9.3	9.8	9.5	8.5
10/03/2008	10.7	11.4	9.3	9.6
10/04/2008	10.4	11.0	9.1	9.6
10/05/2008	8.2	10.4	6.4	8.9
10/06/2008	3.9	7.0	6.4	6.5
10/07/2008	5.7	7.1	4.8	6.3
10/08/2008	2.2	5.5	3.9	4.8
10/09/2008	1.9	4.2	4.0	4.0
10/10/2008	3.4	4.3	4.1	3.5
10/11/2008	5.5	4.3	5.3	3.7
10/12/2008	5.8	5.8	4.6	4.9
10/13/2008	5.5	5.2	2.9	4.3
10/14/2008	4.2	3.1	2.4	2.7
10/15/2008	4.0	2.5	2.0	2.0
10/16/2008	4.0	2.0	2.8	1.6
10/17/2008	4.3	3.0	1.6	2.5
10/18/2008	3.9	1.6	1.1	1.5
10/19/2008	4.1	0.6	1.2	0.9
10/20/2008	4.5	0.8	1.3	1.0

Date	Daily Mean Water Temperature (°C)			
	Cache Creek	Farrell Creek	Lynx Creek	Maurice Creek
10/21/2008	4.1	0.9	2.9	1.0
10/22/2008	4.7	3.1	3.2	2.7
10/23/2008	4.2	2.9	3.4	2.7
10/24/2008	3.9	2.8	1.7	2.7
10/25/2008	3.4	0.8	0.6	1.3
10/26/2008	3.5	0.0	0.6	0.6
10/27/2008	3.8	0.1	1.1	0.4
10/28/2008	4.1	0.6	1.7	0.8
10/29/2008		1.1		1.5
10/30/2008	3.9			
10/31/2008	3.7	0.1	0.8	0.5
11/01/2008	3.5	1.5	1.4	0.6
11/02/2008	2.9	2.7	2.8	2.0
11/03/2008	2.8	2.6	2.2	1.5
11/04/2008	2.6	0.8	0.8	0.4
11/05/2008	2.9	0.1	0.0	0.0
11/06/2008	2.7	0.0	-0.1	0.0
11/07/2008	3.0	0.0	-0.1	0.0
11/08/2008	3.3	0.0	0.2	0.0
11/09/2008	3.4	0.0	0.1	0.1
11/10/2008	2.7	0.0	-0.1	0.0
11/11/2008	2.0	0.0	-0.1	0.0
11/12/2008	2.3	0.0	-0.1	0.0
11/13/2008	2.4	0.0	0.1	0.0
11/14/2008	2.5	0.0	-0.1	0.0
11/15/2008	2.5	0.0	-0.1	0.0
11/16/2008	2.6	0.0	-0.1	0.0
11/17/2008	2.6	0.0	-0.1	0.0
11/18/2008	2.7	0.0	-0.1	0.0
11/19/2008	2.7	0.0	-0.1	0.0
11/20/2008	2.8	0.0	-0.1	0.0
11/21/2008	2.8	0.0	-0.1	0.0
11/22/2008	2.8	0.0	-0.1	0.0
11/23/2008	2.7	0.0	-0.1	0.0
11/24/2008	2.7	0.0	-0.1	0.0
11/25/2008	2.7	0.0	0.0	0.0
11/26/2008	2.7	0.0	0.0	0.0
11/27/2008	2.7	0.0	-0.1	0.0
11/28/2008	2.6	0.0	-0.1	0.0
11/29/2008	2.5	0.0	0.0	0.0
11/30/2008	2.5	0.0	0.0	0.0
12/01/2008	2.5	0.0	0.0	0.0
12/02/2008	2.5	0.0	0.0	0.0
12/03/2008	2.5	0.0	-0.1	0.0
12/04/2008	2.5	0.0	-0.1	0.0
12/05/2008	2.5	0.0	0.0	0.0

Date	Daily Mean Water Temperature (°C)			
	Cache Creek	Farrell Creek	Lynx Creek	Maurice Creek
12/06/2008	2.4	0.0	0.0	0.0
12/07/2008	2.4	0.0	-0.1	0.0
12/08/2008	2.4	0.0	-0.1	0.0
12/09/2008	2.4	0.0	-0.1	0.0
12/10/2008	2.4	0.0	-0.1	0.0
12/11/2008	2.3	0.0	-0.1	0.0
12/12/2008	2.2	0.0	-0.1	0.0
12/13/2008	2.2	0.0	-0.1	0.0
12/14/2008	2.2	0.0	-0.1	0.0
12/15/2008	2.2	0.0	-0.1	0.0
12/16/2008	2.1	0.0	-0.1	0.0
12/17/2008	2.0	0.0	-0.1	0.0
12/18/2008	2.0	0.0	-0.1	0.0
12/19/2008	2.0	0.0	-0.1	0.0
12/20/2008	1.9	0.0	-0.1	0.0
12/21/2008	1.9	0.0	-0.1	0.0
12/22/2008	1.8	0.0	-0.1	0.0
12/23/2008	1.7	0.0	-0.1	0.0
12/24/2008	1.7	0.0	-0.1	0.0
12/25/2008	0.9	0.0	-0.1	0.0
12/26/2008	1.3	0.0	-0.1	0.0
12/27/2008	1.4	0.0	-0.1	0.0
12/28/2008	1.4	0.0	-0.1	0.0
12/29/2008	1.1	0.0	-0.1	0.0
12/30/2008	1.1	0.0	-0.1	0.0
12/31/2008	1.1	0.0	-0.1	0.0
01/01/2009	1.2	0.0	-0.1	0.0
01/02/2009	1.2	0.0	-0.1	0.0
01/03/2009	1.2	0.0	-0.1	0.0
01/04/2009	1.2	0.0	-0.1	0.0
01/05/2009	1.2	0.0	-0.1	0.0
01/06/2009	1.2	-0.3	-0.1	0.0
01/07/2009	1.4	-0.7	-0.1	0.0
01/08/2009	1.3	-1.0	-0.1	0.0
01/09/2009	1.2	-1.3	-0.1	0.0
01/10/2009	1.2	-1.6	-0.1	0.0
01/11/2009	1.2	-1.8	-0.1	0.0
01/12/2009	1.2	-1.9	-0.1	0.0
01/13/2009	1.1	-2.0	-0.1	0.0
01/14/2009	1.1	-2.1	-0.1	0.0
01/15/2009	1.1	-2.2	-0.1	0.0
01/16/2009	1.1	-2.3	-0.1	0.0
01/17/2009	1.1	-2.1	-0.1	0.0
01/18/2009	1.1	-1.9	-0.1	0.0
01/19/2009	1.0	-1.6	-0.1	0.0
01/20/2009	0.9	-1.4	-0.1	0.0

Date	Daily Mean Water Temperature (°C)			
	Cache Creek	Farrell Creek	Lynx Creek	Maurice Creek
01/21/2009	0.9	-1.4	-0.1	0.0
01/22/2009	0.9	-1.5	-0.1	0.0
01/23/2009	1.0	-1.9	-0.1	0.0
01/24/2009	0.9	-2.4	-0.1	0.0
01/25/2009	0.9	-3.1	-0.1	0.0
01/26/2009	0.9	-3.7	-0.1	0.0
01/27/2009	0.8	-4.2	-0.1	0.0
01/28/2009	0.8	-4.2	-0.1	0.0
01/29/2009	0.8	-4.0	-0.1	0.0
01/30/2009	0.8	-3.7	-0.1	0.0
01/31/2009	0.8	-3.0	-0.1	0.0
02/01/2009	0.8	-2.5	-0.1	0.0
02/02/2009	0.8	-2.5	-0.1	0.0
02/03/2009	0.8	-2.3	-0.1	0.0
02/04/2009	0.8	-2.0	0.0	0.0
02/05/2009	0.8	-1.7	0.0	0.0
02/06/2009	0.8	-1.4	0.0	0.0
02/07/2009	0.8	-1.2	0.1	0.0
02/08/2009	0.8	-1.1	0.2	0.0
02/09/2009	0.8	-0.9	0.0	0.0
02/10/2009	0.8	-0.9	-0.1	0.0
02/11/2009	0.8	-0.8	-0.1	0.0
02/12/2009	0.7	-0.7	-0.1	0.0
02/13/2009	0.6	-0.6	-0.1	0.0
02/14/2009	0.6	-0.6	-0.1	0.0
02/15/2009	0.6	-0.5	-0.1	0.0
02/16/2009	0.6	-0.5	-0.1	0.0
02/17/2009	0.6	-0.5	-0.1	0.0
02/18/2009	0.5	-0.5	-0.1	0.0
02/19/2009	0.4	-0.5	-0.1	0.0
02/20/2009	0.4	-0.6	-0.1	0.0
02/21/2009	0.4	-0.8	-0.1	0.0
02/22/2009	0.4	-1.0	-0.1	0.0
02/23/2009	0.4	-1.1	-0.1	0.0
02/24/2009	0.4	-1.3	-0.1	0.0
02/25/2009	0.4	-1.6	-0.1	0.0
02/26/2009	0.4	-2.0	-0.1	0.0
02/27/2009	0.4	-2.5	-0.1	0.0
02/28/2009	0.4	-2.9	-0.1	0.0
03/01/2009	0.3	-3.2	-0.1	0.0
03/02/2009	0.3	-3.3	-0.1	0.0
03/03/2009	0.3	-3.4	-0.1	0.0
03/04/2009	0.3	-3.3	-0.1	0.0
03/05/2009	0.3	-3.3	-0.1	0.0
03/06/2009	0.3	-3.3	-0.1	0.0
03/07/2009	0.3	-3.4	-0.1	0.0

Date	Daily Mean Water Temperature (°C)			
	Cache Creek	Farrell Creek	Lynx Creek	Maurice Creek
03/08/2009	0.3	-3.4	-0.1	0.0
03/09/2009	0.3	-3.4	-0.1	0.0
03/10/2009	0.3	-3.6	-0.1	0.0
03/11/2009	0.3	-3.9	-0.1	0.0
03/12/2009	0.3	-4.1	-0.1	0.0
03/13/2009	0.3	-4.1	-0.1	0.0
03/14/2009	0.3	-3.8	0.0	0.0
03/15/2009	0.3	-3.4	0.0	0.0
03/16/2009	0.4	-3.1	0.0	0.0
03/17/2009	0.4	-3.0	-0.1	0.0
03/18/2009	0.3	-3.1	-0.1	0.0
03/19/2009	0.3	-3.1	-0.1	0.0
03/20/2009	0.3	-3.2	0.0	0.0
03/21/2009	0.3	-3.1	0.0	0.0
03/22/2009	0.3	-3.1	0.1	0.0
03/23/2009	0.3	-3.1	0.1	0.0
03/24/2009	0.4	-2.9	0.3	0.0
03/25/2009	0.4	-2.7	0.1	0.0
03/26/2009	0.4	-2.5	-0.1	0.0
03/27/2009	0.4	-2.4	0.2	0.0
03/28/2009	0.4	-2.3	0.3	0.0
03/29/2009	0.4	-2.2	0.4	0.0
03/30/2009	0.4	-2.0	0.5	0.0
03/31/2009	0.4	-1.8	0.3	0.0
04/01/2009	0.4	-1.6	0.2	0.0
04/02/2009	0.4	-1.5	0.6	0.0
04/03/2009	0.4	-1.3	0.7	0.0
04/04/2009	0.4	-1.2	0.4	0.0
04/05/2009	0.4	-1.1	0.5	0.0
04/06/2009	0.4	-1.0	0.4	0.0
04/07/2009	0.5	-0.9	0.1	0.0
04/08/2009	0.6	-0.9	0.0	0.0
04/09/2009	0.6	-0.8	-0.1	0.0
04/10/2009	0.6	-0.8	0.0	0.0
04/11/2009	0.6	-0.7	0.0	0.0
04/12/2009	0.5	-0.6	0.0	0.0
04/13/2009	0.4	-0.6	0.0	0.0
04/14/2009	0.4	-0.6	0.1	0.0
04/15/2009	0.4	-0.6	0.1	0.0
04/16/2009	0.5	-0.6	0.3	0.0
04/17/2009	0.5	-0.5	0.6	0.0
04/18/2009	1.4	-0.5	0.8	0.1
04/19/2009	2.1	-0.5	1.1	0.1
04/20/2009	2.6	-0.5	1.6	0.1
04/21/2009	3.8	-0.4	2.4	0.2
04/22/2009	0.7	-0.3	0.7	0.0

Date	Daily Mean Water Temperature (°C)			
	Cache Creek	Farrell Creek	Lynx Creek	Maurice Creek
04/23/2009	1.3	0.1	1.1	0.1
04/24/2009	2.5	0.9	1.9	0.5
04/25/2009	4.1	1.7	2.6	1.1
04/26/2009	4.0	1.5	2.0	1.0
04/27/2009	3.1	1.9	1.7	1.2
04/28/2009	4.7	2.9	2.7	1.9
04/29/2009	5.6	3.6	2.7	2.3
04/30/2009	7.7	4.4	3.7	3.8
05/01/2009	8.7	5.7	4.3	4.7
05/02/2009	9.7	6.0	4.6	5.3
05/03/2009	9.5	6.7	4.4	5.6
05/04/2009	9.4	7.4	3.9	5.9
05/05/2009	9.1	7.1	3.8	6.2
05/06/2009	9.6	8.4	5.0	6.9
05/07/2009	9.5	8.0	6.0	7.2
05/08/2009	10.4	8.9	7.2	7.5
05/09/2009	10.7	9.4	7.7	7.6
05/10/2009	10.9	9.4	7.8	7.5
05/11/2009	10.1	8.8	7.2	6.9
05/12/2009	7.5	6.3	5.0	4.5
05/13/2009	7.1	6.3	5.3	4.9
05/14/2009	7.1	6.7	5.2	4.9
05/15/2009	8.9	7.9	6.8	5.5
05/16/2009	9.8	9.5	8.3	7.1
05/17/2009	6.9	6.2	5.0	4.2
05/18/2009	6.0	5.4	4.3	3.4
05/19/2009	5.3	4.8	3.9	2.6
05/20/2009	7.9	6.7	6.2	4.5
05/21/2009	11.5	10.3	8.5	5.6
05/22/2009	12.6	10.9	9.1	6.4
05/23/2009	13.1	11.2	9.5	7.6
05/24/2009	12.0	10.5	8.9	8.0
05/25/2009	13.9	11.5	9.9	8.9
05/26/2009	12.8	11.5	9.9	9.0
05/27/2009	10.4	9.7	8.2	7.3
05/28/2009	9.5	10.1	8.6	8.2
05/29/2009	10.3	10.9	10.8	10.4
05/30/2009	11.1	11.0	10.0	9.5
05/31/2009	11.2	11.0	9.7	9.6
06/01/2009	13.2	12.6	11.0	10.7
06/02/2009	13.8	13.1	11.5	11.1
06/03/2009	16.1	15.4	13.3	13.1
06/04/2009	15.5	16.1	13.7	13.8
06/05/2009	14.8	14.4	12.4	12.7
06/06/2009	14.2	14.1	11.5	11.6
06/07/2009	14.7	14.6	11.6	12.0

Date	Daily Mean Water Temperature (°C)			
	Cache Creek	Farrell Creek	Lynx Creek	Maurice Creek
06/08/2009	15.3	15.3	12.3	12.7
06/09/2009	16.1	15.8	12.8	13.3
06/10/2009	17.3	16.8	13.9	14.4
06/11/2009	18.8	18.1	15.1	15.8
06/12/2009	19.3	18.8	15.7	16.1
06/13/2009	19.7	19.1	16.1	16.5
06/14/2009	19.0	19.0	15.7	16.1
06/15/2009	19.4	18.4	14.7	15.2
06/16/2009	19.4	18.5	15.5	16.0
06/17/2009	18.8	18.7	15.7	15.9
06/18/2009	19.1	18.6	15.1	15.6
06/19/2009	18.4	18.5	14.9	15.2
06/20/2009	18.6	18.3	15.1	15.6
06/21/2009	16.5	16.5	13.4	14.0
06/22/2009	17.0	16.9	13.8	14.6
06/23/2009	17.3	17.8	14.6	15.6
06/24/2009	16.5	18.4	15.3	16.1
06/25/2009	18.5	18.2	15.3	15.6
06/26/2009	16.5	16.0	13.4	13.8
06/27/2009	14.5	14.2	11.8	12.6
06/28/2009	15.3	15.8	13.3	14.6
06/29/2009	14.3	15.7	12.5	13.6
06/30/2009	15.4	15.1	12.0	12.7
07/01/2009	15.3	15.4	12.7	13.6
07/02/2009	16.1	15.8	12.5	13.8
07/03/2009	16.5	16.6	13.6	14.5
07/04/2009	16.4	17.5	14.6	15.8
07/05/2009	16.0	18.3	14.9	16.1
07/06/2009	15.8	16.2	13.0	13.5
07/07/2009	14.2	14.2	11.3	10.4
07/08/2009	15.6	13.8	12.8	11.2
07/09/2009	15.5	11.7	12.3	11.5
07/10/2009	16.4	12.2	13.3	12.4
07/11/2009	18.4	13.2	15.6	13.9
07/12/2009	19.7	14.7	16.6	15.2
07/13/2009	17.7	14.7	14.5	13.7
07/14/2009	16.7	14.3	14.1	13.3
07/15/2009	17.8	14.7	15.0	14.4
07/16/2009	18.9	16.1	16.2	15.8
07/17/2009	18.9	16.8	16.0	15.8
07/18/2009	19.1	17.3	16.2	15.8
07/19/2009	19.3	17.8	16.4	16.3
07/20/2009	19.8	18.4	16.4	16.8
07/21/2009	20.0	18.7	16.3	17.2
07/22/2009	20.7	18.9	16.9	18.2
07/23/2009	20.8	19.6	17.6	20.8

Date	Daily Mean Water Temperature (°C)			
	Cache Creek	Farrell Creek	Lynx Creek	Maurice Creek
07/24/2009	21.7	20.7	18.5	21.4
07/25/2009	21.5	21.4	18.6	21.9
07/26/2009	21.7	21.7	18.5	21.7
07/27/2009	21.4	22.2	19.0	22.5
07/28/2009	21.4	23.4	20.1	22.8
07/29/2009	20.2	23.1	19.2	21.4
07/30/2009	19.7	23.1	19.2	22.0
07/31/2009	19.5	23.6	19.9	22.8
08/01/2009	19.9	24.0	20.0	22.5
08/02/2009	20.4	22.6	18.3	18.9
08/03/2009	18.8	19.4	14.9	14.9
08/04/2009	16.8	17.8	14.1	15.3
08/05/2009	17.1	17.5	13.9	14.5
08/06/2009	16.9	17.3	14.5	15.0
08/07/2009	17.4	18.2	15.5	16.9
08/08/2009	17.6	19.1	16.3	18.3
08/09/2009	17.7	19.1	16.0	17.6
08/10/2009	17.1	18.7	15.4	16.5
08/11/2009	16.0	17.1	13.6	14.6
08/12/2009	15.3	15.6	11.9	11.2
08/13/2009	14.3	15.2	12.0	12.8
08/14/2009	13.7	15.5	12.4	14.2
08/15/2009	14.3	17.0	14.4	15.9
08/16/2009	14.8	17.1	14.2	16.4
08/17/2009	15.2	18.3	15.5	17.9
08/18/2009	15.6	18.4	15.7	18.3
08/19/2009	15.4	18.3	14.9	17.0
08/20/2009	15.7	18.4	14.9	16.5
08/21/2009	16.1	19.1	15.9	17.8
08/22/2009	15.6	17.3	13.3	14.2
08/23/2009	14.4	15.6	12.3	14.4
08/24/2009	13.3	14.9	12.0	13.8
08/25/2009	13.6	15.6	12.9	14.0
08/26/2009	13.2	14.8	11.7	13.0
08/27/2009	12.6	14.4	11.3	12.6
08/28/2009	12.7	15.2	12.5	14.7
08/29/2009	13.2	16.5	13.7	15.5
08/30/2009	13.6	16.8	13.6	15.5
08/31/2009	13.9	17.1	13.6	15.2
09/01/2009	14.2	17.1	13.7	15.6
09/02/2009	14.4	17.5	14.3	15.9
09/03/2009	14.8	17.2	14.0	15.0
09/04/2009	15.6	17.5	14.3	15.2
09/05/2009	15.5	15.5	12.1	12.0
09/06/2009	15.1	14.8	11.9	11.9
09/07/2009	13.7	14.0	11.6	11.5

Date	Daily Mean Water Temperature (°C)			
	Cache Creek	Farrell Creek	Lynx Creek	Maurice Creek
09/08/2009	13.6	13.9	11.9	12.6
09/09/2009	13.0	12.5	9.7	8.8
09/10/2009	13.1	12.6	11.0	12.2
09/11/2009	13.7	13.6	11.8	13.1
09/12/2009	14.0	14.6	12.0	13.1
09/13/2009	14.1	15.2	12.0	13.1
09/14/2009	14.3	15.6	12.5	14.2
09/15/2009	14.1	15.5	12.3	13.2
09/16/2009	14.2	14.9	12.0	12.6
09/17/2009	14.1	13.9	10.9	10.9
09/18/2009	13.8	13.5	10.7	11.9
09/19/2009	13.9	13.6	10.9	11.1
09/20/2009	12.3	12.0	8.9	9.3
09/21/2009	11.9	11.7	9.8	12.3
09/22/2009	12.3	12.5	10.9	12.0
09/23/2009	12.3	13.0	10.5	11.0
09/24/2009	12.1	12.5	10.0	10.9
09/25/2009	11.2	11.1	8.5	8.6
09/26/2009	10.1	10.0	7.6	6.9
09/27/2009	8.4	8.5	6.0	5.5
09/28/2009	8.6	8.6	6.7	6.3
09/29/2009	8.5	7.6	5.8	4.1
09/30/2009	7.8	6.9	5.3	4.6



Plate 1: Beatton River, April 20, 2009



Plate 2: Beatton River, April 15, 2008



Plate 3: Beatton River, April 9, 2007



Plate 4: Beatton River, April 11, 2006



Plate 5: Pine River, April 20, 2009



Plate 6: Pine River, April 15, 2008



Plate 7: Pine River, April 9, 2007



Plate 8: Pine River, April 11, 2006



Plate 9: Halfway River, April 23, 2009



Plate 10: Halfway River, April 15, 2008



Plate 11: Halfway River, April 9, 2007



Plate 12: Halfway River, April 11, 2006



Plate 13: Moberly River, April 20, 2009



Plate 14: Moberly River, April 15, 2008



Plate 15: Moberly River, April 11, 2006

APPENDIX B
Radio Telemetry Data

Table B1: Summary of radio-tagged fish by species in the Peace River system

Tag #	Channel	Code	Species	FL (mm)	Weight (g)	Tagging		First Seen (2009)		Last Seen (2009)	
						Date	Zone	Date	Zone	Date	Zone
1	10	182	WP	495	1475	9/21/05	-31	nd	nd	nd	nd
2	13	34	WP	434	950	9/21/05	-31	nd	nd	nd	nd
3	10	185	WP	473	1350	9/21/05	-31	nd	nd	nd	nd
4	13	38	WP	414	850	9/21/05	-31	nd	nd	nd	nd
5	13	33	WP	394	700	9/21/05	-31	nd	nd	nd	nd
6	13	36	WP	387	750	9/21/05	-31	nd	nd	nd	nd
7	13	37	WP	439	1025	9/21/05	-31	nd	nd	nd	nd
8	10	183	WP	511	1500	9/21/05	-31	nd	nd	nd	nd
9	10	181	WP	455	1000	9/21/05	-31	nd	nd	nd	nd
10	13	18	WP	411	800	9/21/05	-31	nd	nd	nd	nd
11	13	11	WP	288	225	9/21/05	-31	nd	nd	nd	nd
12	13	15	WP	367	500	9/21/05	-31	nd	nd	nd	nd
13	13	20	WP	402	700	9/21/05	-31	nd	nd	nd	nd
14	10	191	WP	450	1075	9/21/05	-31	nd	nd	nd	nd
15	13	25	WP	345	600	9/21/05	-31	nd	nd	nd	nd
16	10	187	WP	490	1425	9/21/05	-31	nd	nd	nd	nd
17	10	180	WP	451	1050	9/21/05	-31	nd	nd	nd	nd
18	13	35	WP	414	800	9/21/05	-31	nd	nd	nd	nd
19	13	22	WP	427	950	9/21/05	-31	nd	nd	nd	nd
20	10	188	WP	451	1100	9/21/05	-31	nd	nd	nd	nd
21	10	190	WP	486	1500	9/21/05	-31	nd	nd	nd	nd
22	13	21	WP	394	850	9/21/05	-31	nd	nd	nd	nd
23	13	19	WP	430	950	9/21/05	-31	nd	nd	nd	nd
24	13	16	WP	406	800	9/21/05	-31	nd	nd	nd	nd
25	13	14	WP	444	1050	9/21/05	-31	nd	nd	nd	nd
26	13	12	WP	275	225	9/21/05	-31	nd	nd	nd	nd
27	10	193	WP	442	1025	9/21/05	-31	nd	nd	nd	nd
28	13	24	WP	439	1100	9/21/05	-31	nd	nd	nd	nd
29	10	192	WP	447	1100	9/21/05	-31	nd	nd	nd	nd
30	13	23	WP	299	275	9/21/05	-31	nd	nd	nd	nd
31	13	29	WP	351	500	9/22/05	-26	nd	nd	nd	nd

Tag #	Channel	Code	Species	FL (mm)	Weight (g)	Tagging		First Seen (2009)		Last Seen (2009)	
						Date	Zone	Date	Zone	Date	Zone
32	13	30	GR	264	275	9/23/05	-17	nd	nd	nd	nd
33	13	31	RB	309	400	9/23/05	-17	nd	nd	nd	nd
34	13	26	GR	300	450	9/23/05	-17	nd	nd	nd	nd
35	13	27	GR	302	400	9/23/05	-17	nd	nd	nd	nd
36	13	32	GR	359	625	9/23/05	-17	nd	nd	nd	nd
37	13	28	GR	340	600	9/23/05	-17	nd	nd	nd	nd
38	13	13	GR	343	525	9/23/05	-17	nd	nd	nd	nd
39	13	39	GR	289	350	9/23/05	-17	nd	nd	nd	nd
40	13	17	GR	291	350	9/23/05	-17	nd	nd	nd	nd
41	13	40	GR	355	625	9/23/05	-17	nd	nd	nd	nd
42	13	60	GR	272	250	9/23/05	-17	nd	nd	nd	nd
43	13	59	GR	344	600	9/23/05	-17	nd	nd	nd	nd
44	13	58	GR	276	300	9/23/05	-17	nd	nd	nd	nd
45	13	57	GR	375	725	9/23/05	-17	nd	nd	nd	nd
46	13	52	GR	277	375	9/23/05	-17	nd	nd	nd	nd
47	13	55	GR	331	550	9/23/05	-17	nd	nd	nd	nd
48	13	42	GR	289	375	9/23/05	-17	nd	nd	nd	nd
49	13	45	GR	320	575	9/23/05	-17	nd	nd	nd	nd
50	13	56	GR	310	450	9/23/05	-17	nd	nd	nd	nd
51	13	47	GR	288	375	9/23/05	-17	nd	nd	nd	nd
52	13	43	GR	290	425	9/23/05	-17	nd	nd	nd	nd
53	13	41	GR	350	600	9/23/05	-17	nd	nd	nd	nd
54	13	44	GR	304	400	9/24/05	-25	nd	nd	nd	nd
55	13	51	GR	283	375	9/24/05	-25	nd	nd	nd	nd
56	13	49	GR	306	400	9/24/05	-25	nd	nd	nd	nd
57	13	50	RB	365	550	9/24/05	-28	nd	nd	nd	nd
58	13	54	RB	332	800	9/24/05	-28	nd	nd	nd	nd
59	13	48	GR	352	575	9/24/05	-28	nd	nd	nd	nd
60	7	61	GR	-	-	9/24/05	-28	nd	nd	nd	nd
61	13	46	GR	282	325	9/24/05	-28	nd	nd	nd	nd
62	13	53	WP	331	425	9/24/05	-28	nd	nd	nd	nd
63	15	156	GR	311	425	9/25/05	-30	nd	nd	nd	nd
64	15	160	GR	284	350	9/25/05	-30	nd	nd	nd	nd

Tag #	Channel	Code	Species	FL (mm)	Weight (g)	Tagging		First Seen (2009)		Last Seen (2009)	
						Date	Zone	Date	Zone	Date	Zone
65	15	157	WP	331	400	9/25/05	-30	nd	nd	nd	nd
66	15	150	RB	400	775	9/26/05	-7	nd	nd	nd	nd
67	15	153	GR	303	350	9/26/05	-7	nd	nd	nd	nd
68	15	154	GR	311	425	9/26/05	-7	nd	nd	nd	nd
69	15	158	RB	311	350	9/26/05	-7	nd	nd	nd	nd
70	15	147	RB	275	275	9/26/05	-7	nd	nd	nd	nd
71	15	159	GR	325	475	9/26/05	-7	nd	nd	nd	nd
72	15	152	RB	331	400	9/26/05	-7	nd	nd	nd	nd
73	15	155	RB	379	525	9/26/05	-7	nd	nd	nd	nd
74	15	137	RB	276	300	9/26/05	-7	nd	nd	nd	nd
75	15	142	GR	300	400	9/26/05	-7	nd	nd	nd	nd
76	15	138	RB	363	625	9/26/05	-7	nd	nd	nd	nd
77	15	141	GR	259	250	9/26/05	-7	nd	nd	nd	nd
78	15	140	RB	350	600	9/26/05	-9	nd	nd	nd	nd
79	15	143	RB	315	450	9/26/05	-9	nd	nd	nd	nd
80	15	144	RB	269	300	9/26/05	-9	nd	nd	nd	nd
81	15	145	RB	256	225	9/26/05	-9	nd	nd	nd	nd
82	15	139	RB	267	275	9/26/05	-9	nd	nd	nd	nd
83	15	146	RB	345	525	9/26/05	-9	nd	nd	nd	nd
84	15	149	GR	330	500	9/26/05	-9	nd	nd	nd	nd
85	15	148	GR	361	675	9/26/05	-9	nd	nd	nd	nd
86	15	151	GR	257	300	9/26/05	-9	nd	nd	nd	nd
87	7	83	GR	371	650	9/27/05	-7	nd	nd	nd	nd
88	7	63	RB	396	825	9/27/05	-9	nd	nd	nd	nd
89	7	67	RB	260	300	9/27/05	-9	nd	nd	nd	nd
90	7	64	GR	251	300	9/27/05	-9	nd	nd	nd	nd
91	7	62	RB	259	300	9/27/05	-9	nd	nd	nd	nd
92	7	66	RB	342	550	9/27/05	-9	nd	nd	nd	nd
93	10	207	RB	452	1175	9/28/05	-3	nd	nd	nd	nd
94	7	87	RB	283	275	9/28/05	-3	nd	nd	nd	nd
95	7	88	RB	341	450	9/28/05	-3	nd	nd	nd	nd
96	7	90	RB	343	575	9/28/05	-3	nd	nd	nd	nd
97	7	89	RB	332	400	9/28/05	-3	nd	nd	nd	nd

Tag #	Channel	Code	Species	FL (mm)	Weight (g)	Tagging		First Seen (2009)		Last Seen (2009)	
						Date	Zone	Date	Zone	Date	Zone
98	7	70	RB	278	300	9/28/05	-5	nd	nd	nd	nd
99	7	91	RB	352	575	9/28/05	-5	nd	nd	nd	nd
100	7	92	RB	323	425	9/28/05	-5	nd	nd	nd	nd
101	7	65	RB	287	275	9/28/05	-5	nd	nd	nd	nd
102	7	72	WP	361	575	9/29/05	-31	nd	nd	nd	nd
103	7	74	WP	437	1050	9/29/05	-31	nd	nd	nd	nd
104	7	68	WP	478	1400	9/29/05	-31	nd	nd	nd	nd
105	7	69	WP	417	825	9/29/05	-31	nd	nd	nd	nd
106	10	177	WP	549	2200	9/29/05	-31	nd	nd	nd	nd
107	10	196	WP	574	2425	9/29/05	-31	6/20/09	110	9/6/09	110
108	7	73	WP	433	900	9/29/05	-31	nd	nd	nd	nd
109	7	71	WP	434	900	9/29/05	-31	nd	nd	nd	nd
110	7	75	WP	366	525	9/29/05	-31	nd	nd	nd	nd
111	7	77	WP	441	1000	9/29/05	-31	nd	nd	nd	nd
112	10	195	WP	479	1325	9/29/05	-31	8/6/09	95	8/6/09	95
113	7	76	WP	441	1050	9/29/05	-31	nd	nd	nd	nd
114	10	179	WP	450	1050	9/29/05	-31	nd	nd	nd	nd
115	7	80	WP	333	400	9/29/05	-31	nd	nd	nd	nd
116	7	81	WP	389	675	9/29/05	-31	nd	nd	nd	nd
117	7	82	WP	414	750	9/29/05	-31	nd	nd	nd	nd
118	7	78	WP	359	612	9/29/05	-31	nd	nd	nd	nd
119	7	79	WP	287	200	9/29/05	-31	nd	nd	nd	nd
120	7	84	WP	411	850	9/29/05	-31	nd	nd	nd	nd
121	7	86	WP	446	825	9/29/05	-31	nd	nd	nd	nd
122	7	85	WP	326	450	9/29/05	-31	nd	nd	nd	nd
123	7	94	WP	437	950	9/29/05	-31	nd	nd	nd	nd
124	7	93	WP	347	475	9/29/05	-31	nd	nd	nd	nd
125	10	208	WP	450	1150	9/29/05	-31	nd	nd	nd	nd
126	10	209	WP	507	1725	9/29/05	-31	nd	nd	nd	nd
127	7	11	MW	-	-	6/21/06	-28	nd	nd	nd	nd
128	7	12	MW	-	-	6/23/06	-15	nd	nd	nd	nd
129	7	13	MW	-	-	6/23/06	-15	nd	nd	nd	nd
130	7	14	GR	-	-	6/24/06	-9	nd	nd	nd	nd

Tag #	Channel	Code	Species	FL (mm)	Weight (g)	Tagging		First Seen (2009)		Last Seen (2009)	
						Date	Zone	Date	Zone	Date	Zone
131	7	15	MW	-	-	6/23/06	-15	nd	nd	nd	nd
132	7	16	MW	-	-	6/23/06	-15	nd	nd	nd	nd
133	7	17	MW	-	-	6/25/06	-17	nd	nd	nd	nd
134	7	18	MW	-	-	6/25/06	-17	nd	nd	nd	nd
135	7	19	MW	-	-	6/24/06	-9	nd	nd	nd	nd
136	7	20	MW	-	-	6/26/06	-5	nd	nd	nd	nd
137	7	21	MW	-	-	6/24/06	-9	nd	nd	nd	nd
138	7	22	MW	-	-	6/23/06	-15	nd	nd	nd	nd
139	7	23	MW	-	-	6/24/06	-9	nd	nd	nd	nd
140	7	24	MW	-	-	6/24/06	-9	nd	nd	nd	nd
141	7	25	MW	-	-	6/24/06	-9	nd	nd	nd	nd
142	7	26	MW	-	-	6/25/06	-17	nd	nd	nd	nd
143	7	27	MW	-	-	6/25/06	-17	nd	nd	nd	nd
144	7	28	GR	-	-	6/25/06	-17	nd	nd	nd	nd
145	7	29	MW	-	-	6/23/06	-15	nd	nd	nd	nd
146	7	30	MW	-	-	6/23/06	-15	nd	nd	nd	nd
147	7	31	MW	-	-	6/25/06	-17	nd	nd	nd	nd
148	7	32	MW	-	-	6/23/06	-15	nd	nd	nd	nd
149	7	33	MW	-	-	6/25/06	-17	nd	nd	nd	nd
150	7	34	MW	-	-	6/23/06	-15	nd	nd	nd	nd
151	7	35	MW	-	-	6/21/06	-28	nd	nd	nd	nd
152	7	36	MW	-	-	6/23/06	-15	nd	nd	nd	nd
153	7	37	MW	-	-	6/24/06	-9	nd	nd	nd	nd
154	7	38	MW	-	-	6/26/06	-5	nd	nd	nd	nd
155	7	39	MW	-	-	6/23/06	-15	nd	nd	nd	nd
156	7	40	MW	-	-	6/24/06	-9	nd	nd	nd	nd
157	7	41	MW	-	-	6/23/06	-15	nd	nd	nd	nd
158	7	42	GR	-	-	6/24/06	-9	nd	nd	nd	nd
159	7	43	MW	-	-	6/22/06	-21	nd	nd	nd	nd
160	7	44	MW	-	-	6/24/06	-9	nd	nd	nd	nd
161	7	45	MW	-	-	6/24/06	-9	nd	nd	nd	nd
162	7	46	MW	-	-	6/22/06	-21	nd	nd	nd	nd
163	7	47	GR	-	-	6/24/06	-9	nd	nd	nd	nd

Tag #	Channel	Code	Species	FL (mm)	Weight (g)	Tagging		First Seen (2009)		Last Seen (2009)	
						Date	Zone	Date	Zone	Date	Zone
164	7	48	MW	-	-	6/24/06	-9	nd	nd	nd	nd
165	7	49	RB	-	-	6/27/06	-15	nd	nd	nd	nd
166	7	50	MW	-	-	6/21/06	-28	nd	nd	nd	nd
167	13	61	MW	-	-	6/21/06	-28	nd	nd	nd	nd
168	13	62	MW	-	-	6/23/06	-15	nd	nd	nd	nd
169	13	63	GR	-	-	6/24/06	-9	nd	nd	nd	nd
170	13	64	MW	-	-	6/23/06	-15	nd	nd	nd	nd
171	13	65	MW	-	-	6/22/06	-21	nd	nd	nd	nd
172	13	66	MW	-	-	6/23/06	-15	nd	nd	nd	nd
173	13	67	GR	-	-	6/22/06	-21	nd	nd	nd	nd
174	13	68	RB	-	-	6/26/06	-5	nd	nd	nd	nd
175	13	69	MW	-	-	6/24/06	-9	nd	nd	nd	nd
176	13	70	MW	-	-	6/21/06	-28	nd	nd	nd	nd
177	13	71	MW	-	-	6/24/06	-9	nd	nd	nd	nd
178	13	72	GR	-	-	6/24/06	-9	nd	nd	nd	nd
179	13	73	MW	-	-	6/21/06	-28	nd	nd	nd	nd
180	13	74	MW	-	-	6/24/06	-9	nd	nd	nd	nd
181	13	75	MW	-	-	6/23/06	-15	nd	nd	nd	nd
182	15	11	MW	-	-	6/27/06	-15	nd	nd	nd	nd
183	15	12	MW	-	-	6/26/06	-5	nd	nd	nd	nd
184	15	13	MW	-	-	6/24/06	-9	nd	nd	nd	nd
185	15	14	MW	-	-	6/23/06	-15	nd	nd	nd	nd
186	15	15	MW	-	-	6/24/06	-9	nd	nd	nd	nd
187	15	16	GR	-	-	6/25/06	-17	nd	nd	nd	nd
188	15	18	MW	-	-	6/26/06	-5	nd	nd	nd	nd
189	15	19	MW	-	-	6/26/06	-5	nd	nd	nd	nd
190	15	20	MW	-	-	6/23/06	-15	nd	nd	nd	nd
191	15	21	MW	-	-	6/23/06	-15	nd	nd	nd	nd
192	15	22	MW	-	-	6/26/06	-5	nd	nd	nd	nd
193	15	23	MW	-	-	6/26/06	-5	nd	nd	nd	nd
194	15	24	MW	-	-	6/26/06	-5	nd	nd	nd	nd
195	15	25	MW	-	-	6/26/06	-5	nd	nd	nd	nd
196	15	26	MW	-	-	6/26/06	-5	nd	nd	nd	nd

Tag #	Channel	Code	Species	FL (mm)	Weight (g)	Tagging		First Seen (2009)		Last Seen (2009)	
						Date	Zone	Date	Zone	Date	Zone
197	15	27	MW	-	-	6/27/06	-15	nd	nd	nd	nd
198	15	28	MW	-	-	6/27/06	-15	nd	nd	nd	nd
199	15	29	MW	-	-	6/27/06	-15	nd	nd	nd	nd
200	15	30	MW	-	-	6/27/06	-15	nd	nd	nd	nd
201	15	31	MW	-	-	6/27/06	-15	nd	nd	nd	nd
202	15	32	MW	-	-	6/21/06	-28	nd	nd	nd	nd
203	15	33	MW	-	-	6/25/06	-17	nd	nd	nd	nd
204	15	34	MW	-	-	6/22/06	-21	nd	nd	nd	nd
205	15	35	MW	-	-	6/25/06	-17	nd	nd	nd	nd
206	15	36	MW	-	-	6/25/06	-17	nd	nd	nd	nd
207	15	37	MW	-	-	6/25/06	-17	nd	nd	nd	nd
208	15	38	MW	-	-	6/27/06	-15	nd	nd	nd	nd
209	15	39	MW	-	-	6/25/06	-17	nd	nd	nd	nd
210	15	40	MW	-	-	6/25/06	-17	nd	nd	nd	nd
211	15	41	MW	-	-	6/26/06	-5	nd	nd	nd	nd
212	15	42	MW	-	-	6/26/06	-5	nd	nd	nd	nd
213	15	43	RB	-	-	6/26/06	-5	nd	nd	nd	nd
214	15	44	MW	-	-	6/25/06	-17	nd	nd	nd	nd
215	15	45	MW	-	-	6/21/06	-28	nd	nd	nd	nd
216	15	46	MW	-	-	6/24/06	-9	nd	nd	nd	nd
217	15	47	MW	-	-	6/23/06	-15	nd	nd	nd	nd
218	15	48	MW	-	-	6/22/06	-21	nd	nd	nd	nd
219	15	49	MW	-	-	6/26/06	-5	nd	nd	nd	nd
220	15	50	MW	-	-	6/27/06	-15	nd	nd	nd	nd
221	15	51	MW	-	-	6/26/06	-5	nd	nd	nd	nd
222	15	52	MW	-	-	6/27/06	-15	nd	nd	nd	nd
223	15	53	MW	-	-	6/27/06	-15	nd	nd	nd	nd
224	15	54	MW	-	-	6/27/06	-15	nd	nd	nd	nd
225	15	55	MW	-	-	6/27/06	-15	nd	nd	nd	nd
226	15	56	MW	-	-	6/23/06	-15	nd	nd	nd	nd
227	15	57	GR	-	-	6/22/06	-21	nd	nd	nd	nd
228	15	58	MW	-	-	6/27/06	-15	nd	nd	nd	nd
229	15	60	MW	-	-	6/27/06	-15	nd	nd	nd	nd

Tag #	Channel	Code	Species	FL (mm)	Weight (g)	Tagging		First Seen (2009)		Last Seen (2009)	
						Date	Zone	Date	Zone	Date	Zone
230	15	61	MW	-	-	6/23/06	-15	nd	nd	nd	nd
231	15	62	MW	-	-	6/23/06	-15	nd	nd	nd	nd
232	15	63	MW	-	-	6/27/06	-15	nd	nd	nd	nd
233	15	64	MW	-	-	6/27/06	-15	nd	nd	nd	nd
234	15	65	MW	-	-	6/21/06	-28	nd	nd	nd	nd
235	15	66	MW	-	-	6/24/06	-9	nd	nd	nd	nd
236	15	67	MW	-	-	6/23/06	-15	nd	nd	nd	nd
237	15	68	MW	-	-	6/24/06	-9	nd	nd	nd	nd
238	15	69	MW	-	-	6/24/06	-9	nd	nd	nd	nd
239	15	70	MW	-	-	6/25/06	-17	nd	nd	nd	nd
240	15	71	MW	-	-	6/26/06	-5	nd	nd	nd	nd
241	15	72	MW	-	-	6/26/06	-5	nd	nd	nd	nd
242	15	73	GR	-	-	6/25/06	-17	nd	nd	nd	nd
243	15	74	MW	-	-	6/26/06	-5	nd	nd	nd	nd
244	15	75	MW	-	-	6/24/06	-9	nd	nd	nd	nd
245	15	76	MW	-	-	6/25/06	-17	nd	nd	nd	nd
246	15	77	MW	-	-	6/25/06	-17	nd	nd	nd	nd
247	15	78	MW	-	-	6/25/06	-17	nd	nd	nd	nd
248	15	79	MW	-	-	6/25/06	-17	nd	nd	nd	nd
249	15	80	MW	-	-	6/24/06	-9	nd	nd	nd	nd
250	15	81	MW	-	-	6/24/06	-9	nd	nd	nd	nd
251	15	82	MW	-	-	6/25/06	-17	nd	nd	nd	nd
252	15	83	MW	-	-	6/26/06	-5	nd	nd	nd	nd
253	15	84	MW	-	-	6/26/06	-5	nd	nd	nd	nd
254	15	85	MW	-	-	6/24/06	-9	nd	nd	nd	nd
255	15	86	MW	-	-	6/26/06	-5	nd	nd	nd	nd
256	7	95	BT	44	650	8/14/06	-48	nd	nd	nd	nd
257	7	96	RB	34	500	8/13/06	-48	nd	nd	nd	nd
258	7	97	RB	32	500	8/14/06	-48	nd	nd	nd	nd
259	7	98	GR	34	450	8/14/06	-48	nd	nd	nd	nd
260	7	99	BT	35	465	8/22/06	-47	nd	nd	nd	nd
261	7	100	RB	34	518	8/22/06	-47	nd	nd	nd	nd
262	7	101	BT	37	475	8/22/06	-47	nd	nd	nd	nd

Tag #	Channel	Code	Species	FL (mm)	Weight (g)	Tagging		First Seen (2009)		Last Seen (2009)	
						Date	Zone	Date	Zone	Date	Zone
263	7	102	RB	35	500	8/14/06	-48	nd	nd	nd	nd
264	7	103	BT	35	390	8/16/06	-48	nd	nd	nd	nd
265	7	104	GR	37	685	8/21/06	-47	nd	nd	nd	nd
266	7	105	BT	36	450	8/16/06	-48	nd	nd	nd	nd
267	7	106	BT	42	710	8/16/06	-48	nd	nd	nd	nd
268	7	107	BT	41	500	8/14/06	-48	nd	nd	nd	nd
269	7	108	BT	37	625	8/14/06	-48	nd	nd	nd	nd
270	7	109	BT	38	500	8/14/06	-48	nd	nd	nd	nd
271	7	110	BT	37	500	8/14/06	-48	nd	nd	nd	nd
272	10	121	BT	51	1108	10/19/06	-48	nd	nd	nd	nd
273	10	122	BT	68	4063	10/19/06	-48	nd	nd	nd	nd
274	10	123	BT	45	795	10/18/06	-48	nd	nd	nd	nd
275	10	161	BT	47	1145	8/22/06	-47	4/1/09	97	9/17/09	97
276	10	162	BT	42	715	8/21/06	-47	nd	nd	nd	nd
277	10	163	RB	40	790	8/21/06	-47	4/1/09	97	8/6/09	97
278	10	164	BT	44	895	8/21/06	-47	4/1/09	98	4/1/09	98
279	10	165	RB	43	960	8/20/06	-47	4/1/09	97	10/10/09	97
280	10	166	BT	45	940	8/21/06	-47	nd	nd	nd	nd
281	10	167	BT	47	940	8/21/06	-47	4/1/09	97	9/17/09	97
282	10	168	BT	44	800	8/22/06	-47	4/1/09	95	8/6/09	97
283	10	169	BT	54	1800	8/18/06	-48	4/1/09	98	9/17/09	98
284	10	170	BT	55	1715	8/22/06	-47	nd	nd	nd	nd
285	10	171	BT	43	685	8/20/06	-47	nd	nd	nd	nd
286	10	172	BT	49	1105	8/20/06	-47	4/21/09	97	10/10/09	97
287	10	173	BT	45	875	8/21/06	-47	nd	nd	nd	nd
288	10	174	BT	50	1150	8/20/06	-47	4/1/09	95	10/10/09	97
289	10	175	BT	66	2955	8/20/06	-47	4/1/09	97	8/6/09	97
290	10	176	BT	44	890	8/20/06	-47	4/1/09	97	4/1/09	97
291	10	178	BT	43	800	8/21/06	-47	4/25/09	297	4/25/09	297
292	10	184	RB	39	765	8/21/06	-47	nd	nd	nd	nd
293	10	186	BT	44	815	8/20/06	-47	4/1/09	97	8/6/09	97
294	10	189	RB	40	685	8/21/06	-47	4/1/09	97	8/26/09	97
295	10	194	BT	64	3115	8/21/06	-47	nd	nd	nd	nd

Tag #	Channel	Code	Species	FL (mm)	Weight (g)	Tagging		First Seen (2009)		Last Seen (2009)	
						Date	Zone	Date	Zone	Date	Zone
296	10	197	BT	42	735	8/21/06	-47	nd	nd	nd	nd
297	10	198	BT	44	950	8/14/06	-48	nd	nd	nd	nd
298	10	199	BT	41	712	8/22/06	-47	4/1/09	97	9/17/09	97
299	10	200	BT	45	905	8/21/06	-47	4/1/09	97	8/26/09	97
300	10	201	BT	58	1975	8/20/06	-47	nd	nd	nd	nd
301	10	202	BT	45	990	8/20/06	-47	nd	nd	nd	nd
302	10	203	BT	44	750	8/21/06	-47	nd	nd	nd	nd
303	10	204	BT	44	740	8/21/06	-47	nd	nd	nd	nd
304	10	205	BT	47	1010	8/20/06	-47	nd	nd	nd	nd
305	10	206	BT	45	895	8/20/06	-47	nd	nd	nd	nd
306	10	210	RB	41	800	8/21/06	-47	4/1/09	97	9/17/09	97
307	7	111	GR	37	580	8/15/06	-48	nd	nd	nd	nd
308	15	112	GR	40	1014	8/22/06	-47	nd	nd	nd	nd
309	15	113	GR	38	824	8/22/06	-47	nd	nd	nd	nd
310	15	114	BT	38	570	8/21/06	-47	nd	nd	nd	nd
311	15	115	BT	37	516	8/22/06	-47	nd	nd	nd	nd
312	15	116	RB	34	552	8/22/06	-47	nd	nd	nd	nd
313	15	117	RB	38	675	8/20/06	-47	nd	nd	nd	nd
314	15	118	GR	36	540	8/22/06	-47	nd	nd	nd	nd
315	15	119	BT	40	620	8/22/06	-47	nd	nd	nd	nd
316	15	120	RB	34	532	8/22/06	-47	nd	nd	nd	nd
317	15	121	BT	36	562	8/22/06	-47	nd	nd	nd	nd
318	15	122	BT	38	540	8/23/06	-47	nd	nd	nd	nd
319	15	123	BT	42	750	8/22/06	-47	nd	nd	nd	nd
320	15	124	BT	37	540	8/23/06	-47	nd	nd	nd	nd
321	15	125	RB	37	645	8/21/06	-47	nd	nd	nd	nd
322	15	126	BT	58	2625	8/23/06	-47	nd	nd	nd	nd
323	15	127	RB	33	475	8/22/06	-47	nd	nd	nd	nd
324	15	128	BT	39	695	8/21/06	-47	nd	nd	nd	nd
325	15	129	BT	45	865	8/22/06	-47	nd	nd	nd	nd
326	15	130	BT	41	660	8/20/06	-47	nd	nd	nd	nd
327	15	131	RB	37	658	8/22/06	-47	nd	nd	nd	nd
328	15	132	BT	37	555	8/21/06	-47	nd	nd	nd	nd

Tag #	Channel	Code	Species	FL (mm)	Weight (g)	Tagging		First Seen (2009)		Last Seen (2009)	
						Date	Zone	Date	Zone	Date	Zone
329	15	133	BT	38	640	8/21/06	-47	nd	nd	nd	nd
330	15	134	GR	38	762	8/22/06	-47	nd	nd	nd	nd
331	15	135	BT	35	612	8/22/06	-47	nd	nd	nd	nd
332	15	136	GR	37	615	8/22/06	-47	nd	nd	nd	nd
333	15	203	BT	42	1040	7/17/07	-22	nd	nd	nd	nd
334	7	201	BT	65	2650	8/16/07	-49	4/1/09	96	6/3/09	96
335	13	203	BT	57	1600	8/28/07	-49	4/1/09	96	4/1/09	96
336	13	201	BT	43	-	8/28/07	-49	4/1/09	96	6/3/09	96
337	7	202	BT	51	-	8/28/07	-49	4/1/09	96	7/15/09	96
338	13	202	BT	62	-	8/28/07	-49	nd	nd	nd	nd
339	15	202	BT	53	1350	9/1/07	-49	4/1/09	96	8/6/09	96
340	10	212	BT	62	2500	9/1/07	-49	3/31/09	105	6/4/09	105
341	10	211	BT	53	1500	9/1/07	-49	4/1/09	96	5/14/09	96
342	10	120	RB	412	650	6/17/08	-50	4/1/09	95	6/24/09	97
343	10	107	GR	372	575	6/19/08	-51	4/1/09	95	9/17/09	95
344	10	133	GR	310	325	6/19/08	-51	4/1/09	95	10/10/09	95
345	10	142	GR	276	250	6/19/08	-51	4/1/09	95	8/26/09	95
346	10	111	RB	228	200	6/19/08	-51	4/1/09	95	10/10/09	95
347	13	172	GR	297	300	6/19/08	-52	4/1/09	95	10/10/09	95
348	10	149	GR	287	250	6/19/08	-52	nd	nd	nd	nd
349	10	102	GR	285	250	6/19/08	-52	4/1/09	95	10/10/09	95
350	13	161	GR	312	275	6/19/08	-52	4/1/09	95	10/10/09	95
351	10	113	GR	310	300	6/19/08	-52	4/1/09	95	10/10/09	95
352	13	156	RB	358	525	6/19/08	-52	4/1/09	95	10/10/09	95
353	13	154	GR	305	300	6/19/08	-52	4/1/09	95	10/10/09	95
354	13	29	BT	317	375	6/19/08	-52	4/1/09	95	10/10/09	95
355	13	160	RB	314	425	6/20/08	-55	4/1/09	95	8/26/09	97
356	10	130	GR	302	325	6/20/08	-55	5/14/09	95	5/14/09	95
357	10	103	GR	313	350	6/20/08	-55	4/1/09	95	10/10/09	95
358	15	64	BT	266	200	6/20/08	-55	4/1/09	95	8/26/09	95
359	15	72	BT	510	1450	6/21/08	-52	4/1/09	95	9/17/09	95
360	13	163	GR	307	350	6/21/08	-52	nd	nd	nd	nd
361	10	135	GR	290	275	6/21/08	-52	4/1/09	95	10/10/09	95

Tag #	Channel	Code	Species	FL (mm)	Weight (g)	Tagging		First Seen (2009)		Last Seen (2009)	
						Date	Zone	Date	Zone	Date	Zone
362	10	126	RB	305	400	6/21/08	-52	4/1/09	95	10/10/09	95
363	13	152	GR	293	300	6/21/08	-52	4/1/09	95	10/10/09	95
364	10	114	RB	380	550	6/21/08	-52	3/31/09	105	8/5/09	105
365	10	125	GR	317	350	6/21/08	-52	4/1/09	95	8/6/09	95
366	13	165	GR	357	500	6/21/08	-52	4/1/09	96	10/10/09	96
367	13	159	GR	297	300	6/21/08	-52	4/1/09	95	10/10/09	95
368	13	153	RB	306	325	6/21/08	-52	4/1/09	95	10/10/09	95
369	10	129	GR	279	250	6/21/08	-52	4/1/09	97	10/10/09	97
370	10	109	GR	288	300	6/21/08	-52	4/1/09	95	10/10/09	95
371	13	158	RB	308	350	6/21/08	-52	nd	nd	nd	nd
372	10	139	RB	260	200	6/21/08	-52	4/1/09	95	10/10/09	95
373	10	138	GR	250	275	6/21/08	-52	4/1/09	95	10/10/09	95
374	10	136	GR	308	275	6/22/08	-52	4/1/09	95	10/10/09	95
375	10	124	GR	294	275	6/22/08	-52	4/1/09	95	10/10/09	95
376	10	108	GR	283	250	6/22/08	-52	6/3/09	95	6/3/09	95
377	13	157	GR	285	250	6/22/08	-52	4/1/09	95	9/17/09	95
378	15	69	BT	336	325	6/22/08	-52	4/1/09	95	10/10/09	95
379	10	101	GR	297	275	6/22/08	-52	4/1/09	95	10/10/09	95
380	10	119	RB	389	500	6/26/08	-53	4/1/09	95	10/10/09	95
381	15	76	BT	332	400	6/26/08	-53	4/1/09	97	8/26/09	97
382	13	36	BT	319	300	6/26/08	-53	4/1/09	98	10/10/09	98
383	10	104	RB	315	325	6/26/08	-52	4/1/09	95	9/17/09	97
384	13	155	RB	437	875	6/27/08	-56	4/2/09	55	10/7/09	105
385	13	59	BT	273	200	6/27/08	-56	4/1/09	97	10/10/09	97
386	10	23	BT	376	475	6/27/08	-56	nd	nd	nd	nd
387	13	53	RB	322	325	6/28/08	-56	4/1/09	97	10/10/09	95
388	15	74	RB	315	300	6/28/08	-56	4/1/09	97	10/10/09	97
389	13	162	BT	325	300	6/29/08	-56	4/1/09	97	4/1/09	97
390	10	131	BT	286	250	6/29/08	-56	4/1/09	97	9/17/09	97
391	10	110	BT	326	350	6/29/08	-56	4/1/09	97	10/10/09	97
692	14	18	BT	427	750	7/22/08	-52	4/1/09	95	10/10/09	95
693	14	20	BT	467	875	7/23/08	-52	4/1/09	95	10/10/09	95
694	14	12	BT	408	625	7/23/08	-52	4/1/09	95	10/10/09	95

Tag #	Channel	Code	Species	FL (mm)	Weight (g)	Tagging		First Seen (2009)		Last Seen (2009)	
						Date	Zone	Date	Zone	Date	Zone
695	14	17	BT	650	400	7/25/08	-54	4/1/09	95	9/17/09	95
696	14	4	BT	417	750	7/26/08	-52	4/1/09	97	10/10/09	97
697	14	11	BT	475	900	7/26/08	-52	4/1/09	95	10/10/09	95
438	13	205	BT	640	2500	8/6/08	-57	4/1/09	98	10/10/09	98
439	13	204	BT	510	1400	8/6/08	-57	4/1/09	98	10/10/09	98
440	15	204	BT	480	1150	8/6/08	-57	5/14/09	98	10/10/09	98
441	15	206	BT	448	950	8/6/08	-57	4/1/09	98	8/6/09	98
442	15	205	BT	485	1200	8/6/08	-57	4/1/09	98	10/10/09	98
443	15	207	BT	585	2100	8/6/08	-57	4/1/09	98	10/10/09	98
444	10	208	BT	540	2000	8/7/08	-57	4/1/09	98	8/26/09	98
645	3	17	BT	490	1200	8/7/08	-57	4/1/09	98	10/10/09	98
646	9	23	BT	460	1000	8/7/08	-57	4/1/09	98	10/10/09	98
647	3	16	BT	465	1400	8/7/08	-57	4/1/09	98	10/10/09	98
648	3	15	BT	450	1150	8/7/08	-57	4/1/09	98	8/26/09	98
649	2	12	BT	470	1100	8/7/08	-57	4/1/09	98	10/10/09	98
650	2	13	BT	500	1400	8/7/08	-57	4/1/09	98	10/10/09	98
651	2	14	BT	570	1850	8/7/08	-57	6/24/09	98	6/24/09	98
652	2	11	BT	495	1400	8/8/08	-57	4/1/09	98	9/17/09	98
653	5	31	BT	445	1100	8/8/08	-57	4/1/09	98	5/14/09	98
654	5	29	BT	440	950	8/8/08	-57	4/1/09	98	10/10/09	98
655	8	35	BT	460	825	8/28/08	-58	4/1/09	96	6/24/09	96
456	10	209	BT	485	1100	8/28/08	-58	4/1/09	96	10/10/09	96
457	10	207	BT	530	1775	8/28/08	-58	3/31/09	128	10/7/09	128
458	7	203	BT	490	1100	8/28/08	-58	4/1/09	96	6/3/09	96
459	13	206	BT	530	1825	8/28/08	-58	4/1/09	96	10/10/09	96
460	13	207	BT	600	2425	8/28/08	-58	4/1/09	96	10/10/09	96
461	7	205	BT	530	1100	8/28/08	-58	4/1/09	96	10/10/09	96
462	7	204	BT	535	1500	8/28/08	-58	4/1/09	96	10/10/09	96

Notes: ¹Species code: WP = walleye, GR = Arctic grayling, RB = rainbow trout, MW = mountain whitefish, and BT = bull trout. ²For locations of detection zones refer to Figure 3 in the report and Table B2; nd = never detected in 2009.

Table B2: Location of tag sites and zones included in Table B1

Tag Site	Location	Zone
-1	Peace Canyon Dam	1
-2	Peace Canyon Dam to Bridge	2
-3	Peace Canyon Bridge to Maurice Creek	3
-4	Maurice Creek mouth	10
-5	Maurice Creek to Lynx Creek	15
-6	Lynx Creek Mouth	20
-7	Lynx Creek to Farrell Creek	25
-8	Farrell Creek Mouth	30
-9	Farrell Creek to Halfway	35
-10	Halfway Creek Mouth	40
-11	Halfway Mouth to Graham	44
-12	Graham River Mouth	44
-13	Graham River drainage	45
-14	3 km Below Halfway	48
-15	Halfway Creek to Cache Creek	49
-16	Cache Creek Mouth	50
-17	Cache Creek to Tea Creek	55
-18	Tea Creek Mouth	60
-19	Tea Creek to Moberly River	65
-20	Moberly River Mouth	70
-21	Moberly Mouth to Bridge	72
-22	Bridge on Moberly to Moberly Lake	75
-23	Moberly River to RR Bridge	78
-24	RR Bridge	78
-25	RR Bridge to Pine River	85
-26	Pine River Mouth	90
-27	Pine River drainage	95
-28	Pine River to Hwy 97 Bridge	99
-29	Hwy 97 Bridge	99
-30	Hwy 97 Bridge to Beatton	105
-31	Beatton River Mouth	110
-32	Beatton River drainage	115
-33	Beatton to Kiskatinaw	118
-34	Mobile -Kiskatinaw River	125
-35	Kiskatinaw River drainage	125
-36	Kiskatinaw to Alces	128
-37	Alces River mouth	128
-38	Alces River drainage	135
-39	Alces River to Pouce Coupe	138
-40	Pouce Coupe River	145
-41	Pouce Coupe River drainage	145
-42	Pouce Coupe to Clear River	148
-43	Mobiel - Clear River mouth	155
-44	Clear River drainage	155
-45	Clear River to Sneddon Creek	158
-46	Sneddon Creek mouth	160
-47	Golder Tagged Fish (Pine River)	97
-48	Golder Tagged Fish (Burnt River)	95
-49	Wolverine (MOE Tagged BT)	96

Table B3: Summary of radio tags that were not detected in 2008

2005 Tagging		2006 Tagging		2007 Tagging		2008 Tagging	
Tag No	Species	Tag No	Species	Tag No	Species	Tag No	Species
1	Walleye	127	Mountain Whitefish	333	Bull Trout	348	Arctic Grayling
2	Walleye	128	Mountain Whitefish	338	Bull Trout	360	Arctic Grayling
3	Walleye	129	Mountain Whitefish			371	Rainbow Trout
4	Walleye	130	Arctic Grayling			386	Bull Trout
5	Walleye	131	Mountain Whitefish				
6	Walleye	132	Mountain Whitefish				
7	Walleye	133	Mountain Whitefish				
8	Walleye	134	Mountain Whitefish				
9	Walleye	135	Mountain Whitefish				
10	Walleye	136	Mountain Whitefish				
11	Walleye	137	Mountain Whitefish				
12	Walleye	138	Mountain Whitefish				
13	Walleye	139	Mountain Whitefish				
14	Walleye	140	Mountain Whitefish				
15	Walleye	141	Mountain Whitefish				
16	Walleye	142	Mountain Whitefish				
17	Walleye	143	Mountain Whitefish				
18	Walleye	144	Arctic Grayling				
19	Walleye	145	Mountain Whitefish				
20	Walleye	146	Mountain Whitefish				
21	Walleye	147	Mountain Whitefish				
22	Walleye	148	Mountain Whitefish				
23	Walleye	149	Mountain Whitefish				
24	Walleye	150	Mountain Whitefish				
25	Walleye	151	Mountain Whitefish				
26	Walleye	152	Mountain Whitefish				
27	Walleye	153	Mountain Whitefish				
28	Walleye	154	Mountain Whitefish				
29	Walleye	155	Mountain Whitefish				
30	Walleye	156	Mountain Whitefish				
31	Walleye	157	Mountain Whitefish				

2005 Tagging		2006 Tagging		2007 Tagging		2008 Tagging	
Tag No	Species	Tag No	Species	Tag No	Species	Tag No	Species
32	Arctic Grayling	158	Arctic Grayling				
33	Rainbow Trout	159	Mountain Whitefish				
34	Arctic Grayling	160	Mountain Whitefish				
35	Arctic Grayling	161	Mountain Whitefish				
36	Arctic Grayling	162	Mountain Whitefish				
37	Arctic Grayling	163	Arctic Grayling				
38	Arctic Grayling	164	Mountain Whitefish				
39	Arctic Grayling	165	Rainbow Trout				
40	Arctic Grayling	166	Mountain Whitefish				
41	Arctic Grayling	167	Mountain Whitefish				
42	Arctic Grayling	168	Mountain Whitefish				
43	Arctic Grayling	169	Arctic Grayling				
44	Arctic Grayling	170	Mountain Whitefish				
45	Arctic Grayling	171	Mountain Whitefish				
46	Arctic Grayling	172	Mountain Whitefish				
47	Arctic Grayling	173	Arctic Grayling				
48	Arctic Grayling	174	Rainbow Trout				
49	Arctic Grayling	175	Mountain Whitefish				
50	Arctic Grayling	176	Mountain Whitefish				
51	Arctic Grayling	177	Mountain Whitefish				
52	Arctic Grayling	178	Arctic Grayling				
53	Arctic Grayling	179	Mountain Whitefish				
54	Arctic Grayling	180	Mountain Whitefish				
55	Arctic Grayling	181	Mountain Whitefish				
56	Arctic Grayling	182	Mountain Whitefish				
57	Rainbow Trout	183	Mountain Whitefish				
58	Rainbow Trout	184	Mountain Whitefish				
59	Arctic Grayling	185	Mountain Whitefish				
60	Arctic Grayling	186	Mountain Whitefish				
61	Arctic Grayling	187	Arctic Grayling				
62	Walleye	188	Mountain Whitefish				
63	Arctic Grayling	189	Mountain Whitefish				

2005 Tagging		2006 Tagging		2007 Tagging		2008 Tagging	
Tag No	Species	Tag No	Species	Tag No	Species	Tag No	Species
64	Arctic Grayling	190	Mountain Whitefish				
65	Walleye	191	Mountain Whitefish				
66	Rainbow Trout	192	Mountain Whitefish				
67	Arctic Grayling	193	Mountain Whitefish				
68	Arctic Grayling	194	Mountain Whitefish				
69	Rainbow Trout	195	Mountain Whitefish				
70	Rainbow Trout	196	Mountain Whitefish				
71	Arctic Grayling	197	Mountain Whitefish				
72	Rainbow Trout	198	Mountain Whitefish				
73	Rainbow Trout	199	Mountain Whitefish				
74	Rainbow Trout	200	Mountain Whitefish				
75	Arctic Grayling	201	Mountain Whitefish				
76	Rainbow Trout	202	Mountain Whitefish				
77	Arctic Grayling	203	Mountain Whitefish				
78	Rainbow Trout	204	Mountain Whitefish				
79	Rainbow Trout	205	Mountain Whitefish				
80	Rainbow Trout	206	Mountain Whitefish				
81	Rainbow Trout	207	Mountain Whitefish				
82	Rainbow Trout	208	Mountain Whitefish				
83	Rainbow Trout	209	Mountain Whitefish				
84	Arctic Grayling	210	Mountain Whitefish				
85	Arctic Grayling	211	Mountain Whitefish				
86	Arctic Grayling	212	Mountain Whitefish				
87	Arctic Grayling	213	Rainbow Trout				
88	Rainbow Trout	214	Mountain Whitefish				
89	Rainbow Trout	215	Mountain Whitefish				
90	Arctic Grayling	216	Mountain Whitefish				
91	Rainbow Trout	217	Mountain Whitefish				
92	Rainbow Trout	218	Mountain Whitefish				
93	Rainbow Trout	219	Mountain Whitefish				
94	Rainbow Trout	220	Mountain Whitefish				
95	Rainbow Trout	221	Mountain Whitefish				
96	Rainbow Trout	222	Mountain Whitefish				

2005 Tagging		2006 Tagging		2007 Tagging		2008 Tagging	
Tag No	Species	Tag No	Species	Tag No	Species	Tag No	Species
97	Rainbow Trout	223	Mountain Whitefish				
98	Rainbow Trout	224	Mountain Whitefish				
99	Rainbow Trout	225	Mountain Whitefish				
100	Rainbow Trout	226	Mountain Whitefish				
101	Rainbow Trout	227	Arctic Grayling				
102	Walleye	228	Mountain Whitefish				
103	Walleye	229	Mountain Whitefish				
104	Walleye	230	Mountain Whitefish				
105	Walleye	231	Mountain Whitefish				
106	Walleye	232	Mountain Whitefish				
108	Walleye	233	Mountain Whitefish				
109	Walleye	234	Mountain Whitefish				
110	Walleye	235	Mountain Whitefish				
111	Walleye	236	Mountain Whitefish				
113	Walleye	237	Mountain Whitefish				
114	Walleye	238	Mountain Whitefish				
115	Walleye	239	Mountain Whitefish				
116	Walleye	240	Mountain Whitefish				
117	Walleye	241	Mountain Whitefish				
118	Walleye	242	Arctic Grayling				
119	Walleye	243	Mountain Whitefish				
120	Walleye	244	Mountain Whitefish				
121	Walleye	245	Mountain Whitefish				
122	Walleye	246	Mountain Whitefish				
123	Walleye	247	Mountain Whitefish				
124	Walleye	248	Mountain Whitefish				
125	Walleye	249	Mountain Whitefish				
126	Walleye	250	Mountain Whitefish				
		251	Mountain Whitefish				
		252	Mountain Whitefish				
		253	Mountain Whitefish				
		254	Mountain Whitefish				

2005 Tagging		2006 Tagging		2007 Tagging		2008 Tagging	
Tag No	Species	Tag No	Species	Tag No	Species	Tag No	Species
		255	Mountain Whitefish				
		256	Bull Trout				
		257	Rainbow Trout				
		258	Rainbow Trout				
		259	Arctic Grayling				
		260	Bull Trout				
		261	Rainbow Trout				
		262	Bull Trout				
		263	Rainbow Trout				
		264	Bull Trout				
		265	Arctic Grayling				
		266	Bull Trout				
		267	Bull Trout				
		268	Bull Trout				
		269	Bull Trout				
		270	Bull Trout				
		271	Bull Trout				
		272	Bull Trout				
		273	Bull Trout				
		274	Bull Trout				
		276	Bull Trout				
		280	Bull Trout				
		284	Bull Trout				
		285	Bull Trout				
		287	Bull Trout				
		292	Rainbow Trout				
		295	Bull Trout				
		296	Bull Trout				
		297	Bull Trout				
		300	Bull Trout				
		301	Bull Trout				
		302	Bull Trout				
		303	Bull Trout				

2005 Tagging		2006 Tagging		2007 Tagging		2008 Tagging	
Tag No	Species	Tag No	Species	Tag No	Species	Tag No	Species
		304	Bull Trout				
		305	Bull Trout				
		307	Arctic Grayling				
		308	Arctic Grayling				
		309	Arctic Grayling				
		310	Bull Trout				
		311	Bull Trout				
		312	Rainbow Trout				
		313	Rainbow Trout				
		314	Arctic Grayling				
		315	Bull Trout				
		316	Rainbow Trout				
		317	Bull Trout				
		318	Bull Trout				
		319	Bull Trout				
		320	Bull Trout				
		321	Rainbow Trout				
		322	Bull Trout				
		323	Rainbow Trout				
		324	Bull Trout				
		325	Bull Trout				
		326	Bull Trout				
		327	Rainbow Trout				
		328	Bull Trout				
		329	Bull Trout				
		330	Arctic Grayling				
		331	Bull Trout				
		332	Arctic Grayling				

Table B4: A summary of the date, time, location and distance moved for all fish detected in 2009¹

Fish Tag #	Species ¹	Date of Detection	Time of Detection ²	Date Detection Ceased ³	Time Detection Ceased ²	Easting ⁴	Northing ⁴	Zone	Distance (m) Moved Since Last Detection	Direction of Movement
107	WP	06/24/2009	12:24:36	06/24/2009	12:24:36	663318	6219940	118	610.2	Downstream
107	WP	06/24/2009	15:00:08	08/04/2009	21:26:15	662911	6220267	110	610.2	Upstream
107	WP	08/05/2009	16:34:48	08/05/2009	16:34:48	663073	6220890	115	643.7	Upstream
107	WP	08/06/2009	02:27:12	09/06/2009	03:20:08	662911	6220267	110	643.7	Downstream
275	BT	04/21/2009	11:48:50	04/21/2009	11:48:50	578374	6132245	97	763.5	Upstream
275	BT	07/15/2009	09:07:14	07/15/2009	09:07:14	577632	6132266	97	928	Upstream
275	BT	08/06/2009	13:40:30	08/06/2009	13:40:30	578196	6132081	97	845.9	Downstream
275	BT	08/26/2009	08:43:20	08/26/2009	08:43:20	577787	6132303	97	619.7	Upstream
275	BT	09/17/2009	09:17:28	09/17/2009	09:17:28	578035	6132134	97	544.1	Downstream
277	RB	04/21/2009	11:45:18	04/21/2009	11:45:18	567846	6132013	97	1197.5	Downstream
277	RB	05/14/2009	12:42:42	05/14/2009	12:42:42	568602	6132351	97	1079.2	Downstream
277	RB	06/03/2009	13:10:10	06/03/2009	13:10:10	568718	6132552	97	232.1	Downstream
277	RB	06/24/2009	08:42:58	06/24/2009	08:42:58	568551	6132544	97	167.2	Upstream
277	RB	07/15/2009	09:03:42	07/15/2009	09:03:42	567855	6131841	97	1242.6	Upstream
277	RB	08/06/2009	13:36:16	08/06/2009	13:36:16	568487	6132493	97	1157.5	Downstream
279	RB	04/21/2009	11:54:08	04/21/2009	11:54:08	585409	6148390	97	98.2	Downstream
279	RB	05/14/2009	12:51:44	05/14/2009	12:51:44	585288	6147792	97	794.1	Upstream
279	RB	06/03/2009	13:27:08	06/03/2009	13:27:08	585131	6148475	97	1013.1	Downstream
279	RB	06/24/2009	08:53:42	06/24/2009	08:53:42	585453	6147621	97	1228.4	Upstream
279	RB	07/15/2009	09:16:02	07/15/2009	09:16:02	585114	6147321	97	321.5	Upstream
279	RB	08/06/2009	13:48:44	08/06/2009	13:48:44	585561	6148170	97	889.3	Downstream
279	RB	08/26/2009	09:04:06	08/26/2009	09:04:06	585187	6148293	97	574.6	Downstream
279	RB	09/17/2009	09:30:24	09/17/2009	09:30:24	585676	6148339	97	457.6	Upstream
279	RB	10/10/2009	11:58:52	10/10/2009	11:58:52	585426	6147772	97	444.2	Upstream
281	BT	04/21/2009	11:49:46	04/21/2009	11:49:46	580708	6133474	97	528.6	Downstream
281	BT	05/14/2009	12:46:42	05/14/2009	12:46:42	580314	6132823	97	668.7	Upstream
281	BT	06/03/2009	13:20:16	06/03/2009	13:20:16	580534	6133592	97	790	Downstream

Notes: ¹ Species are BT = Bull trout, GR = Arctic grayling, MW = Mountain whitefish, RB = Rainbow trout, WP = Walleye; ² Early surveys did not record detection time. Time was assumed to be noon for movement analyses; ³ Detection is instantaneous for aerial survey data but a fish can spend long periods of time near a fixed station; ⁴ UTM are in NAD 1983 (Canada). Calculations take into account the curvature of the rivers.

Fish Tag #	Species ¹	Date of Detection	Time of Detection ²	Date Detection Ceased ³	Time Detection Ceased ²	Easting ⁴	Northing ⁴	Zone	Distance (m) Moved Since Last Detection	Direction of Movement
281	BT	06/24/2009	08:47:56	06/24/2009	08:47:56	580852	6133514	97	130.2	Upstream
281	BT	07/15/2009	09:09:24	07/15/2009	09:09:24	580778	6134112	97	824.2	Downstream
281	BT	08/06/2009	13:41:58	08/06/2009	13:41:58	580844	6133423	97	830.3	Upstream
281	BT	08/26/2009	08:56:38	08/26/2009	08:56:38	580778	6133802	97	404	Downstream
281	BT	09/17/2009	09:24:02	09/17/2009	09:24:02	580401	6133120	97	691	Upstream
282	BT	04/22/2009	09:02:50	04/22/2009	09:02:50	596189	6167839	95	31.6	Upstream
282	BT	06/03/2009	14:52:44	06/03/2009	14:52:44	597004	6169036	95	1593.7	Downstream
282	BT	06/08/2009	09:49:12	06/08/2009	09:58:12	589805	6164132	297	13298.2	Upstream
282	BT	07/15/2009	09:12:00	07/15/2009	09:12:00	580721	6136372	97	41849.8	Upstream
282	BT	08/06/2009	13:43:28	08/06/2009	13:43:28	580735	6136979	97	766.5	Downstream
283	BT	05/14/2009	14:13:34	05/14/2009	14:13:34	555393	6166462	98	170.8	Downstream
283	BT	06/24/2009	10:20:10	06/24/2009	10:20:10	554765	6166532	98	803.4	Upstream
283	BT	07/15/2009	10:55:48	07/15/2009	10:55:48	555610	6165906	98	1229.4	Downstream
283	BT	08/06/2009	15:02:22	08/06/2009	15:02:22	553593	6166518	98	2461.5	Upstream
283	BT	08/26/2009	10:33:16	08/26/2009	10:33:16	555436	6166135	98	2190	Downstream
283	BT	09/17/2009	11:02:14	09/17/2009	11:02:14	554780	6166354	98	843.8	Upstream
286	BT	05/14/2009	12:47:30	05/14/2009	12:47:30	580943	6135128	97	1787.1	Downstream
286	BT	06/03/2009	13:20:54	06/03/2009	13:20:54	581075	6135039	97	159.2	Upstream
286	BT	06/24/2009	08:48:46	06/24/2009	08:48:46	580944	6135957	97	1018.2	Downstream
286	BT	07/15/2009	09:11:42	07/15/2009	09:11:42	580912	6135539	97	585.1	Upstream
286	BT	08/06/2009	13:42:56	08/06/2009	13:42:56	581021	6135727	97	305.6	Downstream
286	BT	08/26/2009	08:45:42	08/26/2009	08:45:42	581046	6135723	97	25.3	Upstream
286	BT	09/17/2009	09:25:40	09/17/2009	09:25:40	581050	6135349	97	391.9	Upstream
286	BT	10/10/2009	11:25:14	10/10/2009	11:25:14	580885	6135792	97	547.1	Downstream
288	BT	04/21/2009	10:07:26	04/21/2009	10:07:26	610892	6183917	95	584.2	Downstream
288	BT	05/14/2009	11:14:10	05/14/2009	11:14:10	610785	6187647	95	4277.7	Downstream
288	BT	06/03/2009	11:26:48	06/03/2009	11:26:48	610310	6186582	95	1166.1	Upstream
288	BT	06/24/2009	07:04:50	06/24/2009	07:04:50	610235	6187566	95	1187.1	Downstream
288	BT	06/28/2009	22:41:09	06/29/2009	00:42:47	611916	6176270	296	13461.5	Upstream
288	BT	07/01/2009	09:35:31	07/01/2009	11:20:31	589805	6164132	297	34680.9	Upstream
288	BT	07/15/2009	09:11:12	07/15/2009	09:11:12	580738	6134119	97	44298.5	Upstream

Fish Tag #	Species ¹	Date of Detection	Time of Detection ²	Date Detection Ceased ³	Time Detection Ceased ²	Easting ⁴	Northing ⁴	Zone	Distance (m) Moved Since Last Detection	Direction of Movement
288	BT	08/06/2009	13:41:58	08/06/2009	13:41:58	580844	6133423	97	704.4	Upstream
288	BT	08/26/2009	08:56:28	08/26/2009	08:56:28	580805	6134168	97	972	Downstream
288	BT	10/10/2009	11:52:00	10/10/2009	11:52:00	580855	6133627	97	775.1	Upstream
289	BT	04/21/2009	11:48:50	04/21/2009	11:48:50	578374	6132245	97	1512.5	Upstream
289	BT	05/14/2009	12:46:10	05/14/2009	12:46:10	579049	6131934	97	1183.1	Downstream
289	BT	06/03/2009	13:18:20	06/03/2009	13:18:20	580373	6132240	97	2090.1	Downstream
289	BT	06/24/2009	08:47:00	06/24/2009	08:47:00	579165	6131853	97	1958.7	Upstream
289	BT	08/06/2009	13:41:02	08/06/2009	13:41:02	579387	6131949	97	241.9	Downstream
293	BT	04/21/2009	11:51:48	04/21/2009	11:51:48	582348	6140655	97	467.7	Upstream
293	BT	05/14/2009	12:49:24	05/14/2009	12:49:24	582998	6140704	97	703.9	Downstream
293	BT	06/03/2009	13:23:22	06/03/2009	13:23:22	582459	6140435	97	778	Upstream
293	BT	06/24/2009	08:50:56	06/24/2009	08:50:56	583175	6140924	97	1113	Downstream
293	BT	07/15/2009	09:13:42	07/15/2009	09:13:42	582769	6140647	97	703.7	Upstream
293	BT	08/06/2009	13:45:36	08/06/2009	13:45:36	583029	6141437	97	1080.2	Downstream
294	RB	04/21/2009	11:52:30	04/21/2009	11:52:30	583510	6143029	97	332.8	Upstream
294	RB	05/14/2009	12:49:58	05/14/2009	12:49:58	583719	6142335	97	782.6	Upstream
294	RB	06/03/2009	13:24:44	06/03/2009	13:24:44	583641	6143184	97	982.2	Downstream
294	RB	06/24/2009	08:51:56	06/24/2009	08:51:56	583738	6143361	97	201.8	Downstream
294	RB	07/15/2009	09:14:36	07/15/2009	09:14:36	583704	6143080	97	283	Upstream
294	RB	08/06/2009	13:46:22	08/06/2009	13:46:22	583710	6143138	97	58.3	Downstream
294	RB	08/26/2009	08:51:46	08/26/2009	08:51:46	583543	6143199	97	177.8	Downstream
298	BT	04/21/2009	11:47:48	04/21/2009	11:47:48	575487	6133211	97	106.7	Upstream
298	BT	05/14/2009	12:45:14	05/14/2009	12:45:14	576235	6132771	97	980.3	Downstream
298	BT	06/03/2009	13:14:08	06/03/2009	13:14:08	576002	6132732	97	236.2	Upstream
298	BT	06/24/2009	08:46:04	06/24/2009	08:46:04	576567	6132369	97	780.2	Downstream
298	BT	07/15/2009	09:06:36	07/15/2009	09:06:36	575980	6132777	97	824.4	Upstream
298	BT	08/06/2009	13:39:30	08/06/2009	13:39:30	575950	6132477	97	599.4	Upstream
298	BT	09/17/2009	09:16:54	09/17/2009	09:16:54	576263	6132601	97	426.7	Downstream
299	BT	05/14/2009	12:49:08	05/14/2009	12:49:08	582555	6139946	97	1792.8	Upstream
299	BT	06/03/2009	13:15:08	06/03/2009	13:15:08	578159	6132498	97	15148.2	Upstream
299	BT	06/24/2009	08:46:50	06/24/2009	08:46:50	578755	6132051	97	1004.7	Downstream
299	BT	07/15/2009	09:07:22	07/15/2009	09:07:22	578042	6132267	97	812.3	Upstream

Fish Tag #	Species ¹	Date of Detection	Time of Detection ²	Date Detection Ceased ³	Time Detection Ceased ²	Easting ⁴	Northing ⁴	Zone	Distance (m) Moved Since Last Detection	Direction of Movement
299	BT	08/06/2009	13:40:16	08/06/2009	13:40:16	577684	6132166	97	494.4	Upstream
299	BT	08/26/2009	08:44:36	08/26/2009	08:44:36	580751	6132822	97	4608.5	Downstream
306	RB	04/21/2009	11:52:30	04/21/2009	11:52:30	583510	6143029	97	828.8	Upstream
306	RB	05/14/2009	12:50:04	05/14/2009	12:50:04	583842	6142612	97	551.9	Upstream
306	RB	06/03/2009	13:24:44	06/03/2009	13:24:44	583641	6143184	97	738.2	Downstream
306	RB	06/24/2009	08:51:44	06/24/2009	08:51:44	583619	6142845	97	403.8	Upstream
306	RB	07/15/2009	09:14:44	07/15/2009	09:14:44	583818	6143477	97	1170.4	Downstream
306	RB	08/06/2009	13:46:10	08/06/2009	13:46:10	583527	6142703	97	1278	Upstream
306	RB	08/26/2009	08:51:46	08/26/2009	08:51:46	583543	6143199	97	608	Downstream
306	RB	09/17/2009	09:28:18	09/17/2009	09:28:18	583736	6142321	97	1168.5	Upstream
334	BT	04/21/2009	10:18:34	04/21/2009	10:18:34	614170	6165340	96	708.2	Downstream
334	BT	05/14/2009	11:26:24	05/14/2009	11:26:24	614743	6165871	96	519.7	Downstream
334	BT	06/03/2009	11:47:18	06/03/2009	11:47:18	614337	6165981	96	181.7	Downstream
336	BT	04/21/2009	10:32:00	04/21/2009	10:32:00	621069	6142534	96	888.2	Downstream
336	BT	05/14/2009	11:38:52	05/14/2009	11:38:52	620731	6142799	96	658.5	Downstream
336	BT	06/03/2009	11:59:50	06/03/2009	11:59:50	620620	6142759	96	118	Downstream
337	BT	04/21/2009	11:15:06	04/21/2009	11:15:06	609868	6101403	96	801.6	Upstream
337	BT	05/14/2009	12:13:12	05/14/2009	12:13:12	609700	6101038	96	658.6	Upstream
337	BT	06/24/2009	08:17:14	06/24/2009	08:17:14	610463	6101329	96	1249.2	Downstream
337	BT	07/15/2009	08:36:42	07/15/2009	08:36:42	609727	6100507	96	2551.3	Upstream
339	BT	04/21/2009	10:26:02	04/21/2009	10:26:02	616942	6153035	96	585	Downstream
339	BT	05/14/2009	11:33:12	05/14/2009	11:33:12	616837	6153550	96	665.4	Downstream
339	BT	06/03/2009	11:54:16	06/03/2009	11:54:16	616911	6153178	96	379.3	Upstream
339	BT	06/24/2009	07:40:12	06/24/2009	07:40:12	628252	6137126	96	30649.3	Upstream
339	BT	07/15/2009	07:58:08	07/15/2009	07:58:08	632760	6125912	96	14704.5	Upstream
339	BT	08/06/2009	13:02:44	08/06/2009	13:02:44	623809	6111174	96	23006.4	Upstream
340	BT	04/23/2009	11:03:44	04/23/2009	11:03:44	646711	6222687	105	3272	Upstream
340	BT	05/14/2009	16:03:40	05/14/2009	16:03:40	649513	6223080	105	2895.2	Downstream
340	BT	06/04/2009	07:55:58	06/04/2009	07:55:58	648157	6222972	105	1389	Upstream
341	BT	04/21/2009	11:10:48	04/21/2009	11:10:48	616135	6107453	96	821.7	Upstream
341	BT	05/14/2009	12:10:06	05/14/2009	12:10:06	615862	6107222	96	445.3	Upstream

Fish Tag #	Species ¹	Date of Detection	Time of Detection ²	Date Detection Ceased ³	Time Detection Ceased ²	Easting ⁴	Northing ⁴	Zone	Distance (m) Moved Since Last Detection	Direction of Movement
342	RB	04/21/2009	09:48:30	04/21/2009	09:48:30	621273	6215121	95	1002.9	Downstream
342	RB	05/14/2009	13:08:08	05/14/2009	13:08:08	602024	6172048	95	74572.4	Upstream
342	RB	05/15/2009	22:58:55	05/16/2009	00:17:18	589805	6164132	297	22107.7	Upstream
342	RB	06/24/2009	08:57:06	06/24/2009	08:57:06	586763	6156420	97	12438.8	Upstream
343	GR	04/01/2009	17:01:33	04/10/2009	02:08:08	611916	6176270	296	223.1	Upstream
343	GR	04/23/2009	08:00:06	04/23/2009	08:00:06	612708	6176481	95	947.5	Downstream
343	GR	04/26/2009	00:22:23	05/08/2009	10:00:04	611916	6176270	296	947.5	Upstream
343	GR	05/14/2009	11:19:16	05/14/2009	11:19:16	612389	6175870	96	373.3	Downstream
343	GR	06/03/2009	11:39:20	06/03/2009	11:39:20	612666	6176645	95	730.4	Downstream
343	GR	06/24/2009	07:14:16	06/24/2009	07:14:16	612594	6176821	95	196.4	Downstream
343	GR	07/11/2009	23:13:31	07/13/2009	12:34:37	611916	6176270	296	1204.1	Upstream
343	GR	07/15/2009	07:21:36	07/15/2009	07:21:36	612582	6177037	95	1526.6	Downstream
343	GR	08/02/2009	16:39:34	08/06/2009	07:33:56	611916	6176270	296	1526.6	Upstream
343	GR	08/06/2009	12:00:04	08/06/2009	12:00:04	612411	6176381	95	637.8	Downstream
343	GR	08/12/2009	14:28:46	09/16/2009	12:25:09	611916	6176270	296	635.8	Upstream
343	GR	09/17/2009	07:40:32	09/17/2009	07:40:32	612906	6176882	95	1394.6	Downstream
344	GR	04/21/2009	09:55:46	04/21/2009	09:55:46	610890	6205970	95	1560	Upstream
344	GR	05/14/2009	11:01:48	05/14/2009	11:01:48	611629	6206303	95	1303.3	Downstream
344	GR	06/03/2009	11:10:48	06/03/2009	11:10:48	611613	6207041	95	904.5	Downstream
344	GR	06/24/2009	06:49:22	06/24/2009	06:49:22	611337	6206287	95	1088.4	Upstream
344	GR	07/15/2009	06:48:06	07/15/2009	06:48:06	611943	6207247	95	1211.4	Downstream
344	GR	08/06/2009	11:38:30	08/06/2009	11:38:30	611529	6206975	95	495.4	Upstream
344	GR	08/26/2009	06:47:44	08/26/2009	06:47:44	611691	6207280	95	521	Downstream
344	GR	09/17/2009	07:17:16	09/17/2009	07:17:16	611869	6207097	95	255.3	Upstream
344	GR	10/10/2009	08:20:24	10/10/2009	08:20:24	612282	6207623	95	2832.5	Downstream
345	GR	04/21/2009	09:51:30	04/21/2009	09:51:30	615895	6212724	95	777.2	Upstream
345	GR	05/14/2009	10:58:04	05/14/2009	10:58:04	616242	6213304	95	690.5	Downstream
345	GR	06/03/2009	11:05:52	06/03/2009	11:05:52	618070	6214559	95	2313.6	Downstream
345	GR	06/24/2009	06:44:32	06/24/2009	06:44:32	616968	6213959	95	1274.3	Upstream
345	GR	07/15/2009	06:43:56	07/15/2009	06:43:56	617638	6214504	95	864.8	Downstream
345	GR	08/06/2009	11:34:24	08/06/2009	11:34:24	616985	6214141	95	756.7	Upstream
345	GR	08/26/2009	06:42:46	08/26/2009	06:42:46	617691	6214487	95	805.9	Downstream

Fish Tag #	Species ¹	Date of Detection	Time of Detection ²	Date Detection Ceased ³	Time Detection Ceased ²	Easting ⁴	Northing ⁴	Zone	Distance (m) Moved Since Last Detection	Direction of Movement
346	RB	04/21/2009	10:05:32	04/21/2009	10:05:32	610625	6188184	95	1389.4	Downstream
346	RB	05/14/2009	11:14:10	05/14/2009	11:14:10	610785	6187647	95	563.9	Upstream
346	RB	06/03/2009	11:31:30	06/03/2009	11:31:30	610391	6187356	95	489.8	Upstream
346	RB	06/24/2009	07:09:14	06/24/2009	07:09:14	610438	6187524	95	174.5	Downstream
346	RB	07/15/2009	07:11:40	07/15/2009	07:11:40	610513	6187537	95	76.1	Downstream
346	RB	08/06/2009	11:50:08	08/06/2009	11:50:08	610282	6187301	95	282.4	Upstream
346	RB	08/26/2009	06:59:36	08/26/2009	06:59:36	610357	6187197	95	237.2	Upstream
346	RB	09/17/2009	07:27:48	09/17/2009	07:27:48	610524	6187775	95	800.1	Downstream
346	RB	10/10/2009	08:32:10	10/10/2009	08:32:10	610273	6186785	95	1109.6	Upstream
347	GR	04/21/2009	09:57:08	04/21/2009	09:57:08	609599	6203712	95	1192.3	Downstream
347	GR	05/14/2009	10:54:14	05/14/2009	10:54:14	623499	6217755	95	26447.5	Downstream
347	GR	06/03/2009	10:57:52	06/03/2009	10:57:52	623153	6217697	95	357.2	Upstream
347	GR	06/24/2009	06:40:44	06/24/2009	06:40:44	623228	6217580	95	139	Downstream
347	GR	07/15/2009	06:40:56	07/15/2009	06:40:56	623384	6217570	95	156.3	Downstream
347	GR	08/06/2009	11:30:36	08/06/2009	11:30:36	623935	6218046	95	731.2	Downstream
347	GR	08/26/2009	06:38:46	08/26/2009	06:38:46	624009	6218091	95	100	Downstream
347	GR	09/17/2009	07:07:50	09/17/2009	07:07:50	624276	6218175	95	274.7	Downstream
347	GR	10/10/2009	08:14:00	10/10/2009	08:14:00	624076	6218159	95	165	Upstream
349	GR	04/01/2009	17:01:26	06/03/2009	11:28:28	611916	6176270	296	617.8	Upstream
349	GR	06/03/2009	11:39:40	06/03/2009	11:39:40	612079	6176045	95	277.8	Upstream
349	GR	06/03/2009	23:01:07	07/14/2009	13:02:06	611916	6176270	296	277.8	Downstream
349	GR	07/15/2009	10:24:38	07/15/2009	10:24:38	611282	6176021	95	827.6	Upstream
349	GR	08/06/2009	07:14:00	08/06/2009	07:34:06	611916	6176270	296	827.6	Downstream
349	GR	08/06/2009	12:04:50	08/06/2009	12:04:50	612089	6175733	96	672.4	Upstream
349	GR	08/25/2009	14:47:47	08/25/2009	15:00:50	611916	6176270	296	672.4	Downstream
349	GR	08/26/2009	07:04:50	08/26/2009	07:04:50	612095	6175844	95	566.8	Upstream
349	GR	09/16/2009	11:57:49	09/16/2009	12:24:58	611916	6176270	296	566.8	Downstream
349	GR	09/17/2009	07:33:14	09/17/2009	07:33:14	611634	6176027	95	426.7	Upstream
349	GR	10/08/2009	09:22:39	10/08/2009	09:23:17	611916	6176270	296	426.7	Downstream
349	GR	10/10/2009	13:45:42	10/10/2009	13:45:42	612344	6175815	95	699.1	Downstream
350	GR	04/21/2009	10:10:04	04/21/2009	10:10:04	613190	6177941	95	813.3	Upstream

Fish Tag #	Species ¹	Date of Detection	Time of Detection ²	Date		Time		Easting ⁴	Northing ⁴	Zone	Distance (m) Moved Since Last Detection	Direction of Movement
				Detection Ceased ³	Detection Ceased ²							
350	GR	05/14/2009	11:18:20	05/14/2009	11:18:20	613055	6178068	95	185.3	Downstream		
350	GR	06/03/2009	11:38:50	06/03/2009	11:38:50	613089	6177861	95	209.8	Upstream		
350	GR	06/24/2009	07:13:38	06/24/2009	07:13:38	613108	6178089	95	228.8	Downstream		
350	GR	07/15/2009	07:17:26	07/15/2009	07:17:26	612933	6178168	95	192	Downstream		
350	GR	08/06/2009	11:59:20	08/06/2009	11:59:20	613099	6177897	95	317.8	Upstream		
350	GR	08/26/2009	07:03:46	08/26/2009	07:03:46	613127	6177801	95	100	Upstream		
350	GR	09/17/2009	07:31:46	09/17/2009	07:31:46	613145	6178421	95	620.3	Downstream		
350	GR	10/10/2009	08:39:06	10/10/2009	08:39:06	612669	6178627	95	518.7	Downstream		
351	GR	04/21/2009	10:06:18	04/21/2009	10:06:18	610186	6186419	95	584.2	Upstream		
351	GR	05/14/2009	11:14:36	05/14/2009	11:14:36	610308	6186733	95	336.9	Downstream		
351	GR	06/03/2009	11:31:40	06/03/2009	11:31:40	610253	6186937	95	211.3	Downstream		
351	GR	06/24/2009	06:59:52	06/24/2009	06:59:52	610279	6186922	95	30	Upstream		
351	GR	07/15/2009	07:12:10	07/15/2009	07:12:10	610180	6186614	95	323.5	Upstream		
351	GR	08/06/2009	11:50:08	08/06/2009	11:50:08	610282	6187301	95	677	Downstream		
351	GR	08/26/2009	06:59:46	08/26/2009	06:59:46	610267	6186815	95	464.4	Upstream		
351	GR	09/17/2009	07:28:24	09/17/2009	07:28:24	610212	6186503	95	316.8	Upstream		
351	GR	10/10/2009	08:32:00	10/10/2009	08:32:00	610158	6186387	95	128	Upstream		
352	RB	06/24/2009	07:13:22	06/24/2009	07:13:22	613094	6178709	95	2310.4	Upstream		
352	RB	07/15/2009	10:18:46	07/15/2009	10:18:46	611374	6181137	95	3094.9	Downstream		
352	RB	08/06/2009	11:57:56	08/06/2009	11:57:56	611693	6180800	95	554.7	Upstream		
352	RB	08/26/2009	07:02:18	08/26/2009	07:02:18	611661	6180966	95	169.1	Downstream		
352	RB	09/17/2009	07:30:42	09/17/2009	07:30:42	611891	6180939	95	231.6	Upstream		
352	RB	10/10/2009	08:38:06	10/10/2009	08:38:06	611550	6180972	95	342.6	Downstream		
353	GR	04/21/2009	10:06:50	04/21/2009	10:06:50	610261	6185229	95	682.8	Upstream		
353	GR	05/14/2009	11:15:50	05/14/2009	11:15:50	610812	6183906	95	1788.2	Upstream		
353	GR	06/03/2009	11:34:16	06/03/2009	11:34:16	610805	6183753	95	153.2	Upstream		
353	GR	06/24/2009	07:03:12	06/24/2009	07:03:12	610958	6183165	95	607.6	Upstream		
353	GR	07/15/2009	07:12:58	07/15/2009	07:12:58	610349	6184919	95	1953.1	Downstream		
353	GR	08/06/2009	11:56:18	08/06/2009	11:56:18	610696	6184324	95	698.6	Upstream		
353	GR	08/26/2009	07:00:50	08/26/2009	07:00:50	610586	6184286	95	116.4	Upstream		
353	GR	09/17/2009	07:29:14	09/17/2009	07:29:14	610532	6184507	95	227.5	Downstream		
353	GR	10/10/2009	13:49:32	10/10/2009	13:49:32	610824	6184114	95	590.7	Upstream		

Fish Tag #	Species ¹	Date of Detection	Time of Detection ²	Date Detection Ceased ³	Time Detection Ceased ²	Easting ⁴	Northing ⁴	Zone	Distance (m) Moved Since Last Detection	Direction of Movement
354	BT	04/21/2009	10:05:22	04/21/2009	10:05:22	610666	6188593	95	837.5	Upstream
354	BT	05/14/2009	11:14:06	05/14/2009	11:14:06	610832	6187810	95	863.8	Upstream
354	BT	06/03/2009	11:31:10	06/03/2009	11:31:10	610601	6188211	95	500.4	Downstream
354	BT	06/24/2009	07:08:58	06/24/2009	07:08:58	610588	6188094	95	117.7	Upstream
354	BT	07/15/2009	07:04:52	07/15/2009	07:04:52	610556	6188498	95	438.1	Downstream
354	BT	08/06/2009	11:49:40	08/06/2009	11:49:40	610368	6188436	95	198	Upstream
354	BT	08/26/2009	06:58:40	08/26/2009	06:58:40	610563	6189379	95	1022.1	Downstream
354	BT	09/17/2009	07:27:28	09/17/2009	07:27:28	610674	6188525	95	884	Upstream
354	BT	10/10/2009	08:34:40	10/10/2009	08:34:40	610656	6189592	95	1162.8	Downstream
355	RB	04/21/2009	10:01:08	04/21/2009	10:01:08	607479	6197380	95	1414	Upstream
355	RB	05/08/2009	04:20:30	05/08/2009	11:50:24	611916	6176270	296	27814.5	Upstream
355	RB	05/14/2009	13:12:22	05/14/2009	13:12:22	590975	6166291	95	31755.5	Upstream
355	RB	05/14/2009	15:25:57	05/14/2009	17:05:14	589805	6164132	297	2925.4	Upstream
355	RB	06/03/2009	13:23:18	06/03/2009	13:23:18	582299	6140390	97	34491.5	Upstream
355	RB	06/24/2009	08:50:46	06/24/2009	08:50:46	582814	6140691	97	782.8	Downstream
355	RB	08/26/2009	08:52:56	08/26/2009	08:52:56	583162	6140976	97	710.1	Downstream
357	GR	04/21/2009	09:43:06	04/21/2009	09:43:06	629798	6220138	95	298.2	Downstream
357	GR	05/14/2009	10:51:12	05/14/2009	10:51:12	629388	6220368	95	651.8	Upstream
357	GR	06/03/2009	10:54:10	06/03/2009	10:54:10	629534	6220224	95	205.1	Downstream
357	GR	06/24/2009	06:36:44	06/24/2009	06:36:44	629347	6220542	95	253.9	Upstream
357	GR	07/15/2009	06:37:32	07/15/2009	06:37:32	629660	6220357	95	490.5	Downstream
357	GR	08/06/2009	11:27:34	08/06/2009	11:27:34	629209	6220412	95	638.8	Upstream
357	GR	08/26/2009	06:34:56	08/26/2009	06:34:56	630183	6220405	95	1198.4	Downstream
357	GR	09/17/2009	07:04:16	09/17/2009	07:04:16	630329	6220407	95	146	Downstream
357	GR	10/10/2009	08:11:06	10/10/2009	08:11:06	630346	6220475	95	70.1	Downstream
358	BT	04/21/2009	10:00:34	04/21/2009	10:00:34	607693	6198514	95	245.8	Upstream
358	BT	05/14/2009	11:05:56	05/14/2009	11:05:56	607803	6198478	95	115.7	Downstream
358	BT	06/03/2009	11:16:18	06/03/2009	11:16:18	608053	6198619	95	287	Downstream
358	BT	06/24/2009	06:54:28	06/24/2009	06:54:28	607363	6198122	95	1082.7	Upstream
358	BT	07/15/2009	06:59:48	07/15/2009	06:59:48	608061	6198972	95	1433.5	Downstream
358	BT	08/06/2009	11:43:54	08/06/2009	11:43:54	608121	6198877	95	112.4	Upstream

Fish Tag #	Species ¹	Date of Detection	Time of Detection ²	Date Detection Ceased ³	Time Detection Ceased ²	Easting ⁴	Northing ⁴	Zone	Distance (m) Moved Since Last Detection	Direction of Movement
358	BT	08/26/2009	06:53:34	08/26/2009	06:53:34	608177	6198760	95	129.7	Upstream
359	BT	04/21/2009	10:06:42	04/21/2009	10:06:42	610162	6185521	95	605.5	Upstream
359	BT	05/14/2009	11:07:02	05/14/2009	11:07:02	607829	6195815	95	14971.4	Downstream
359	BT	06/03/2009	11:17:50	06/03/2009	11:17:50	608037	6195968	95	292.3	Downstream
359	BT	06/24/2009	06:54:28	06/24/2009	06:54:28	607363	6198122	95	3533.9	Downstream
359	BT	07/15/2009	06:59:54	07/15/2009	06:59:54	607874	6198873	95	1474.3	Downstream
359	BT	08/06/2009	11:44:02	08/06/2009	11:44:02	607885	6198704	95	169.4	Upstream
359	BT	08/26/2009	06:53:34	08/26/2009	06:53:34	608177	6198760	95	297.3	Downstream
359	BT	09/17/2009	07:22:50	09/17/2009	07:22:50	607753	6198600	95	735.1	Upstream
361	GR	04/21/2009	10:04:28	04/21/2009	10:04:28	610352	6190787	95	810.2	Downstream
361	GR	05/14/2009	11:13:20	05/14/2009	11:13:20	610690	6189755	95	1453.4	Upstream
361	GR	06/03/2009	11:29:52	06/03/2009	11:29:52	610380	6189752	95	335.8	Downstream
361	GR	06/24/2009	07:08:04	06/24/2009	07:08:04	610417	6190174	95	423.6	Downstream
361	GR	07/15/2009	07:03:54	07/15/2009	07:03:54	610504	6190663	95	759.6	Downstream
361	GR	08/06/2009	11:48:56	08/06/2009	11:48:56	610231	6190182	95	607.7	Upstream
361	GR	08/26/2009	06:58:12	08/26/2009	06:58:12	610408	6190511	95	373.6	Downstream
361	GR	09/17/2009	07:26:46	09/17/2009	07:26:46	610893	6190261	95	1598.3	Upstream
361	GR	10/10/2009	08:33:28	10/10/2009	08:33:28	610459	6190013	95	988.6	Downstream
362	RB	05/14/2009	11:17:40	05/14/2009	11:17:40	612663	6179737	95	134	Downstream
362	RB	06/03/2009	11:37:46	06/03/2009	11:37:46	612096	6180487	95	971.9	Downstream
362	RB	06/24/2009	07:13:10	06/24/2009	07:13:10	613019	6179158	95	1702	Upstream
362	RB	07/15/2009	07:15:20	07/15/2009	07:15:20	612622	6180100	95	1159.5	Downstream
362	RB	08/06/2009	11:58:30	08/06/2009	11:58:30	612565	6179757	95	347.7	Upstream
362	RB	08/26/2009	07:02:52	08/26/2009	07:02:52	612557	6179712	95	45.7	Upstream
362	RB	09/17/2009	07:31:06	09/17/2009	07:31:06	612426	6179989	95	318.8	Downstream
362	RB	10/10/2009	13:47:18	10/10/2009	13:47:18	612715	6179427	95	665.4	Upstream
363	GR	04/21/2009	10:10:04	04/21/2009	10:10:04	613190	6177941	95	6938.8	Upstream
363	GR	05/14/2009	11:18:20	05/14/2009	11:18:20	613055	6178068	95	185.3	Downstream
363	GR	06/03/2009	11:38:24	06/03/2009	11:38:24	612979	6179024	95	1071.5	Downstream
363	GR	06/24/2009	07:13:18	06/24/2009	07:13:18	613079	6178860	95	192.1	Upstream
363	GR	07/15/2009	10:19:50	07/15/2009	10:19:50	613155	6178881	95	78.8	Downstream
363	GR	08/26/2009	07:03:22	08/26/2009	07:03:22	613076	6178709	95	189.3	Upstream

Fish Tag #	Species ¹	Date of Detection	Time of Detection ²	Date Detection Ceased ³	Time Detection Ceased ²	Easting ⁴	Northing ⁴	Zone	Distance (m) Moved Since Last Detection	Direction of Movement
363	GR	09/17/2009	07:31:38	09/17/2009	07:31:38	613062	6178754	95	47.1	Downstream
363	GR	10/10/2009	08:39:10	10/10/2009	08:39:10	612696	6178455	95	472.6	Upstream
364	RB	04/23/2009	11:04:42	04/23/2009	11:04:42	649125	6222841	105	668	Upstream
364	RB	05/14/2009	16:03:34	05/14/2009	16:03:34	649774	6223055	105	642.7	Downstream
364	RB	06/04/2009	07:56:32	06/04/2009	07:56:32	649372	6223025	105	403.1	Upstream
364	RB	06/24/2009	12:30:50	06/24/2009	12:30:50	649521	6222958	105	163.4	Downstream
364	RB	07/15/2009	13:31:04	07/15/2009	13:31:04	650416	6222607	105	1055	Downstream
364	RB	08/05/2009	16:40:28	08/05/2009	16:40:28	649288	6223014	105	1336.9	Upstream
365	GR	04/21/2009	10:00:10	04/21/2009	10:00:10	608406	6199079	95	746.5	Upstream
365	GR	05/14/2009	11:05:30	05/14/2009	11:05:30	608761	6199082	95	355	Downstream
365	GR	06/03/2009	11:16:10	06/03/2009	11:16:10	608253	6198857	95	1093.2	Upstream
365	GR	06/24/2009	06:54:08	06/24/2009	06:54:08	607870	6198700	95	589.8	Upstream
365	GR	07/15/2009	06:59:26	07/15/2009	06:59:26	608829	6199089	95	1490.2	Downstream
365	GR	08/06/2009	11:43:54	08/06/2009	11:43:54	608121	6198877	95	1212.7	Upstream
366	GR	04/21/2009	10:20:28	04/21/2009	10:20:28	614025	6161698	96	242.3	Downstream
366	GR	05/14/2009	11:28:12	05/14/2009	11:28:12	613912	6161667	96	117.2	Downstream
366	GR	06/03/2009	11:49:02	06/03/2009	11:49:02	613821	6161501	96	189.3	Downstream
366	GR	06/24/2009	07:23:54	06/24/2009	07:23:54	614013	6161567	96	203	Upstream
366	GR	07/15/2009	07:31:26	07/15/2009	07:31:26	614062	6162278	96	1608.1	Downstream
366	GR	08/06/2009	12:14:36	08/06/2009	12:14:36	613970	6162306	96	96.2	Downstream
366	GR	08/26/2009	07:13:26	08/26/2009	07:13:26	614436	6163346	96	1919.1	Downstream
366	GR	09/17/2009	07:49:18	09/17/2009	07:49:18	614416	6163272	96	76.7	Upstream
366	GR	10/10/2009	13:36:48	10/10/2009	13:36:48	614012	6161364	96	3251	Upstream
367	GR	04/21/2009	09:53:58	04/21/2009	09:53:58	612689	6209051	95	127.4	Upstream
367	GR	05/14/2009	11:00:52	05/14/2009	11:00:52	612510	6208361	95	736.9	Upstream
367	GR	06/03/2009	11:09:44	06/03/2009	11:09:44	612606	6208722	95	381.9	Downstream
367	GR	06/24/2009	06:48:42	06/24/2009	06:48:42	611980	6207559	95	1584.3	Upstream
367	GR	07/15/2009	06:47:10	07/15/2009	06:47:10	612608	6209318	95	2179.7	Downstream
367	GR	08/06/2009	11:37:24	08/06/2009	11:37:24	612593	6209098	95	220.5	Upstream
367	GR	08/26/2009	06:47:06	08/26/2009	06:47:06	612130	6208318	95	2222.4	Upstream
367	GR	09/17/2009	07:17:02	09/17/2009	07:17:02	612145	6207452	95	931.5	Downstream

Fish Tag #	Species ¹	Date of Detection	Time of Detection ²	Date Detection Ceased ³	Time Detection Ceased ²	Easting ⁴	Northing ⁴	Zone	Distance (m) Moved Since Last Detection	Direction of Movement
367	GR	10/10/2009	08:20:28	10/10/2009	08:20:28	612221	6207463	95	76.8	Downstream
368	RB	04/01/2009	17:01:57	04/03/2009	22:43:28	611916	6176270	296	2240.2	Downstream
368	RB	04/23/2009	08:02:12	04/23/2009	08:02:12	609067	6174119	95	3844	Upstream
368	RB	05/14/2009	13:09:06	05/14/2009	13:09:06	599202	6171508	95	12272.4	Upstream
368	RB	05/22/2009	12:41:03	05/22/2009	16:02:04	589805	6164132	297	18816.5	Upstream
368	RB	06/03/2009	13:25:48	06/03/2009	13:25:48	584861	6145361	97	26610.9	Upstream
368	RB	06/16/2009	00:23:15	06/16/2009	00:32:15	589805	6164132	297	26690.5	Downstream
368	RB	06/20/2009	07:13:46	06/22/2009	03:06:16	611916	6176270	296	34732.3	Downstream
368	RB	06/24/2009	07:14:24	06/24/2009	07:14:24	612398	6176616	95	1007.8	Downstream
368	RB	06/25/2009	20:17:35	07/01/2009	09:07:01	611916	6176270	296	1025.2	Upstream
368	RB	07/15/2009	07:20:38	07/15/2009	07:20:38	612685	6179233	95	3841.5	Downstream
368	RB	08/06/2009	14:28:32	08/06/2009	14:28:32	613019	6178118	95	1263.7	Upstream
368	RB	08/26/2009	07:03:22	08/26/2009	07:03:22	613076	6178709	95	722.6	Downstream
368	RB	09/17/2009	07:34:14	09/17/2009	07:34:14	612971	6178272	95	516.1	Upstream
368	RB	10/10/2009	08:39:00	10/10/2009	08:39:00	612611	6178882	95	722.1	Downstream
369	GR	04/21/2009	11:57:18	04/21/2009	11:57:18	587840	6158712	97	1949.4	Downstream
369	GR	05/14/2009	12:55:06	05/14/2009	12:55:06	589495	6157688	97	2445.6	Upstream
369	GR	06/03/2009	13:31:06	06/03/2009	13:31:06	587532	6158622	97	2804.6	Upstream
369	GR	06/24/2009	08:58:16	06/24/2009	08:58:16	587802	6159415	97	1394.9	Downstream
369	GR	07/15/2009	09:25:48	07/15/2009	09:25:48	587915	6159265	97	187.8	Upstream
369	GR	08/06/2009	13:53:30	08/06/2009	13:53:30	588012	6159133	97	163.8	Upstream
369	GR	08/26/2009	09:08:00	08/26/2009	09:08:00	587430	6158276	97	1408.4	Upstream
369	GR	09/17/2009	09:33:28	09/17/2009	09:33:28	587444	6157408	97	886.6	Upstream
369	GR	10/10/2009	11:09:48	10/10/2009	11:09:48	587612	6158682	97	1708	Downstream
370	GR	04/23/2009	08:01:56	04/23/2009	08:01:56	609576	6174531	95	229.7	Upstream
370	GR	05/14/2009	13:05:18	05/14/2009	13:05:18	609688	6174831	95	320.2	Downstream
370	GR	06/03/2009	14:47:32	06/03/2009	14:47:32	609041	6173986	95	1111.2	Upstream
370	GR	06/24/2009	09:48:34	06/24/2009	09:48:34	609330	6174313	95	436.4	Downstream
370	GR	07/15/2009	10:25:48	07/15/2009	10:25:48	609421	6174171	95	168.7	Upstream
370	GR	08/06/2009	14:30:48	08/06/2009	14:30:48	609554	6174269	95	165.2	Downstream
370	GR	08/26/2009	10:04:18	08/26/2009	10:04:18	610149	6175016	95	965.3	Downstream
370	GR	09/17/2009	10:32:18	09/17/2009	10:32:18	610160	6174955	95	62	Upstream

Fish Tag #	Species ¹	Date of Detection	Time of Detection ²	Date Detection Ceased ³	Time Detection Ceased ²	Easting ⁴	Northing ⁴	Zone	Distance (m) Moved Since Last Detection	Direction of Movement
370	GR	10/10/2009	08:41:14	10/10/2009	08:41:14	609479	6174504	95	932.7	Upstream
372	RB	04/21/2009	09:50:34	04/21/2009	09:50:34	617148	6214099	95	2572.5	Downstream
372	RB	05/14/2009	10:57:56	05/14/2009	10:57:56	616444	6213575	95	952.7	Upstream
372	RB	06/03/2009	11:06:40	06/03/2009	11:06:40	616511	6213701	95	142.7	Downstream
372	RB	06/24/2009	06:44:44	06/24/2009	06:44:44	616668	6213667	95	160.6	Upstream
372	RB	07/15/2009	06:44:58	07/15/2009	06:44:58	615953	6212881	95	1082.4	Upstream
372	RB	08/06/2009	11:34:50	08/06/2009	11:34:50	616253	6213438	95	635.1	Downstream
372	RB	08/26/2009	06:43:34	08/26/2009	06:43:34	616426	6213568	95	216.4	Downstream
372	RB	09/17/2009	07:13:00	09/17/2009	07:13:00	616413	6213573	95	13.9	Downstream
372	RB	10/10/2009	08:17:00	10/10/2009	08:17:00	617292	6214077	95	1109.6	Downstream
373	GR	04/21/2009	10:05:14	04/21/2009	10:05:14	610661	6188911	95	185.9	Downstream
373	GR	05/14/2009	11:13:56	05/14/2009	11:13:56	610862	6188233	95	707.2	Upstream
373	GR	06/03/2009	11:25:50	06/03/2009	11:25:50	610446	6189019	95	934.9	Downstream
373	GR	06/24/2009	07:09:08	06/24/2009	07:09:08	610494	6187739	95	1466.8	Upstream
373	GR	07/15/2009	07:08:22	07/15/2009	07:08:22	610681	6188079	95	415.8	Downstream
373	GR	08/06/2009	11:49:40	08/06/2009	11:49:40	610368	6188436	95	474.8	Downstream
373	GR	08/26/2009	06:58:56	08/26/2009	06:58:56	610623	6188737	95	394.5	Downstream
373	GR	09/17/2009	07:27:26	09/17/2009	07:27:26	610687	6188607	95	144.9	Upstream
373	GR	10/10/2009	08:29:34	10/10/2009	08:29:34	610451	6188768	95	285.7	Downstream
374	GR	04/21/2009	10:03:24	04/21/2009	10:03:24	608448	6192476	95	553.7	Upstream
374	GR	05/14/2009	11:08:32	05/14/2009	11:08:32	608356	6192432	95	102	Upstream
374	GR	06/03/2009	11:23:44	06/03/2009	11:23:44	608242	6192148	95	358.3	Upstream
374	GR	06/24/2009	06:56:34	06/24/2009	06:56:34	607939	6193530	95	1464.8	Downstream
374	GR	07/15/2009	06:55:20	07/15/2009	06:55:20	607101	6194842	95	1933.4	Downstream
374	GR	08/06/2009	11:46:10	08/06/2009	11:46:10	606939	6194854	95	162.4	Downstream
374	GR	08/26/2009	06:55:22	08/26/2009	06:55:22	607282	6195386	95	818.1	Downstream
374	GR	09/17/2009	07:24:34	09/17/2009	07:24:34	607439	6194989	95	426.9	Upstream
374	GR	10/10/2009	08:26:46	10/10/2009	08:26:46	607381	6194460	95	532.2	Upstream
375	GR	04/21/2009	10:00:10	04/21/2009	10:00:10	608406	6199079	95	887.4	Upstream
375	GR	05/14/2009	11:06:16	05/14/2009	11:06:16	607354	6197748	95	2147	Upstream
375	GR	06/03/2009	11:16:28	06/03/2009	11:16:28	607748	6198357	95	771.8	Downstream

Fish Tag #	Species ¹	Date of Detection	Time of Detection ²	Date Detection Ceased ³	Time Detection Ceased ²	Easting ⁴	Northing ⁴	Zone	Distance (m) Moved Since Last Detection	Direction of Movement
375	GR	06/24/2009	06:54:30	06/24/2009	06:54:30	607327	6198057	95	577.7	Upstream
375	GR	07/15/2009	06:59:26	07/15/2009	06:59:26	608829	6199089	95	2613.3	Downstream
375	GR	08/06/2009	11:44:04	08/06/2009	11:44:04	607825	6198663	95	1706.5	Upstream
375	GR	08/26/2009	06:53:40	08/26/2009	06:53:40	608083	6198585	95	269.5	Upstream
375	GR	09/17/2009	07:22:28	09/17/2009	07:22:28	608342	6198929	95	456.3	Downstream
375	GR	10/10/2009	08:25:06	10/10/2009	08:25:06	607573	6198297	95	1162.3	Upstream
377	GR	04/21/2009	10:06:50	04/21/2009	10:06:50	610261	6185229	95	1597.9	Downstream
377	GR	05/14/2009	11:15:34	05/14/2009	11:15:34	610540	6184517	95	923	Upstream
377	GR	07/15/2009	07:12:58	07/15/2009	07:12:58	610349	6184919	95	482	Downstream
377	GR	08/26/2009	07:00:30	08/26/2009	07:00:30	610287	6185074	95	166.9	Downstream
377	GR	09/17/2009	07:29:04	09/17/2009	07:29:04	610397	6184926	95	184.4	Upstream
378	BT	04/23/2009	08:02:26	04/23/2009	08:02:26	608551	6173835	95	1213.5	Downstream
378	BT	05/14/2009	13:05:38	05/14/2009	13:05:38	608818	6174292	95	529.3	Downstream
378	BT	06/03/2009	14:47:52	06/03/2009	14:47:52	608133	6173646	95	1331.6	Upstream
378	BT	06/24/2009	09:49:32	06/24/2009	09:49:32	607200	6173670	95	1018.4	Upstream
378	BT	07/15/2009	10:26:48	07/15/2009	10:26:48	607272	6173597	95	102.5	Downstream
378	BT	08/06/2009	14:32:10	08/06/2009	14:32:10	606564	6173738	95	722.1	Upstream
378	BT	08/26/2009	09:59:46	08/26/2009	09:59:46	605262	6172406	95	2140.2	Upstream
378	BT	09/17/2009	10:33:40	09/17/2009	10:33:40	607065	6173886	95	2622.5	Downstream
378	BT	10/10/2009	08:41:36	10/10/2009	08:41:36	608641	6174062	95	1968	Downstream
379	GR	04/21/2009	10:05:32	04/21/2009	10:05:32	610625	6188184	95	1389.4	Downstream
379	GR	05/10/2009	05:55:17	05/10/2009	06:00:17	611916	6176270	296	14009	Upstream
379	GR	05/14/2009	11:14:22	05/14/2009	11:14:22	610550	6187215	95	13051.8	Downstream
379	GR	06/03/2009	11:31:30	06/03/2009	11:31:30	610391	6187356	95	212.5	Downstream
379	GR	06/24/2009	07:04:50	06/24/2009	07:04:50	610235	6187566	95	261.6	Downstream
379	GR	07/15/2009	07:11:40	07/15/2009	07:11:40	610513	6187537	95	279.5	Upstream
379	GR	08/06/2009	11:50:08	08/06/2009	11:50:08	610282	6187301	95	330.2	Upstream
379	GR	08/17/2009	08:05:03	08/17/2009	18:49:11	611916	6176270	296	13138.6	Upstream
379	GR	08/26/2009	06:59:36	08/26/2009	06:59:36	610357	6187197	95	12973	Downstream
379	GR	09/17/2009	07:27:44	09/17/2009	07:27:44	610559	6187919	95	811.5	Downstream
379	GR	09/19/2009	19:19:42	09/19/2009	19:59:50	611916	6176270	296	13776.5	Upstream
379	GR	10/10/2009	08:32:10	10/10/2009	08:32:10	610273	6186785	95	12517.8	Downstream

Fish Tag #	Species ¹	Date of Detection	Time of Detection ²	Date Detection Ceased ³	Time Detection Ceased ²	Easting ⁴	Northing ⁴	Zone	Distance (m) Moved Since Last Detection	Direction of Movement
380	RB	04/21/2009	09:45:10	04/21/2009	09:45:10	625984	6219740	95	125.1	Upstream
380	RB	05/14/2009	10:50:00	05/14/2009	10:50:00	631811	6222001	95	9087.6	Downstream
380	RB	06/03/2009	10:50:50	06/03/2009	10:50:50	636273	6224648	95	6659.7	Downstream
380	RB	06/24/2009	06:32:34	06/24/2009	06:32:34	635622	6225041	95	840.5	Upstream
380	RB	07/15/2009	06:32:34	07/15/2009	06:32:34	638869	6223445	95	4260.1	Downstream
380	RB	08/06/2009	11:26:22	08/06/2009	11:26:22	631569	6221874	95	10216.2	Upstream
380	RB	08/26/2009	06:34:16	08/26/2009	06:34:16	631153	6221273	95	790.3	Upstream
380	RB	09/17/2009	07:01:02	09/17/2009	07:01:02	635123	6225075	95	6247.9	Downstream
380	RB	10/10/2009	08:08:32	10/10/2009	08:08:32	635137	6225065	95	17.2	Downstream
381	BT	04/21/2009	11:55:16	04/21/2009	11:55:16	586308	6152219	97	802	Downstream
381	BT	05/14/2009	12:53:20	05/14/2009	12:53:20	586896	6152879	97	1168.4	Downstream
381	BT	06/03/2009	13:28:38	06/03/2009	13:28:38	586049	6152275	97	1505.2	Upstream
381	BT	06/24/2009	08:55:52	06/24/2009	08:55:52	586862	6153031	97	1636.6	Downstream
381	BT	07/15/2009	09:23:14	07/15/2009	09:23:14	586145	6151434	97	2384.6	Upstream
381	BT	08/06/2009	13:51:10	08/06/2009	13:51:10	586877	6153599	97	3295.9	Downstream
381	BT	08/26/2009	09:05:52	08/26/2009	09:05:52	586872	6152686	97	1220.2	Upstream
382	BT	04/23/2009	08:25:10	04/23/2009	08:25:10	579762	6166299	98	916.8	Upstream
382	BT	05/14/2009	13:17:28	05/14/2009	13:17:28	579901	6166180	98	183	Downstream
382	BT	06/03/2009	15:04:48	06/03/2009	15:04:48	580399	6166495	98	613.3	Downstream
382	BT	06/24/2009	10:04:48	06/24/2009	10:04:48	580385	6166767	98	272.4	Downstream
382	BT	07/15/2009	10:43:18	07/15/2009	10:43:18	579944	6165874	98	996.3	Upstream
382	BT	08/06/2009	14:48:00	08/06/2009	14:48:00	579403	6166143	98	702.8	Upstream
382	BT	08/26/2009	10:21:22	08/26/2009	10:21:22	579244	6166217	98	175.4	Upstream
382	BT	09/17/2009	10:49:12	09/17/2009	10:49:12	579664	6166133	98	483.8	Downstream
382	BT	10/10/2009	08:55:44	10/10/2009	08:55:44	579392	6166232	98	289.5	Upstream
383	RB	04/21/2009	10:08:54	04/21/2009	10:08:54	611949	6180578	95	1245.3	Downstream
383	RB	05/14/2009	11:18:04	05/14/2009	11:18:04	613031	6178763	95	2174.8	Upstream
383	RB	05/25/2009	17:48:08	05/26/2009	02:03:31	611916	6176270	296	3306.2	Upstream
383	RB	05/31/2009	18:43:57	05/31/2009	20:44:12	589805	6164132	297	34773.5	Upstream
383	RB	06/03/2009	13:30:18	06/03/2009	13:30:18	586666	6156559	97	12366.1	Upstream
383	RB	07/15/2009	09:12:00	07/15/2009	09:12:00	580721	6136372	97	29550.6	Upstream

Fish Tag #	Species ¹	Date of Detection	Time of Detection ²	Date Detection Ceased ³	Time Detection Ceased ²	Easting ⁴	Northing ⁴	Zone	Distance (m) Moved Since Last Detection	Direction of Movement
383	RB	08/06/2009	13:43:22	08/06/2009	13:43:22	580722	6136735	97	650.9	Downstream
383	RB	08/26/2009	08:59:12	08/26/2009	08:59:12	580672	6137123	97	401.5	Downstream
383	RB	09/17/2009	09:19:42	09/17/2009	09:19:42	580922	6136483	97	979.1	Upstream
384	RB	04/23/2009	10:53:22	04/23/2009	10:53:22	624784	6233230	55	267.2	Upstream
384	RB	05/14/2009	16:14:08	05/14/2009	16:14:08	627166	6232410	65	2822.7	Downstream
384	RB	05/15/2009	01:06:01	05/25/2009	22:00:32	629510	6230464	70	3104.2	Downstream
384	RB	05/26/2009	17:38:01	05/26/2009	23:53:14	642964	6224599	90	16944.6	Downstream
384	RB	06/03/2009	11:20:58	06/03/2009	11:20:58	607245	6195147	95	68588.8	Upstream
384	RB	06/06/2009	20:33:33	06/06/2009	22:17:23	611916	6176270	296	25243.1	Upstream
384	RB	06/09/2009	20:13:18	07/07/2009	16:29:47	589805	6164132	297	34830.4	Upstream
384	RB	07/07/2009	20:36:34	07/07/2009	20:41:26	611916	6176270	296	34830.4	Downstream
384	RB	07/08/2009	07:05:57	07/08/2009	07:06:10	642964	6224599	90	93674.1	Downstream
384	RB	07/15/2009	13:29:06	07/15/2009	13:29:06	655307	6221902	105	13083.1	Downstream
384	RB	08/05/2009	16:38:32	08/05/2009	16:38:32	654161	6222009	105	1151	Upstream
384	RB	08/26/2009	13:17:50	08/26/2009	13:17:50	654872	6221978	105	711.7	Downstream
384	RB	09/16/2009	18:55:32	09/16/2009	18:55:32	656539	6221777	105	1768.3	Downstream
384	RB	10/07/2009	12:43:40	10/07/2009	12:43:40	654992	6221885	105	1688.1	Upstream
385	BT	04/21/2009	11:51:06	04/21/2009	11:51:06	581378	6138284	97	2218.1	Upstream
385	BT	05/14/2009	12:48:36	05/14/2009	12:48:36	581768	6138395	97	574.5	Upstream
385	BT	06/24/2009	08:49:56	06/24/2009	08:49:56	581517	6139012	97	1892.2	Downstream
385	BT	07/15/2009	09:13:20	07/15/2009	09:13:20	581950	6139929	97	1252.4	Downstream
385	BT	08/06/2009	13:44:46	08/06/2009	13:44:46	582202	6139674	97	447	Upstream
385	BT	08/26/2009	09:00:36	08/26/2009	09:00:36	582444	6140185	97	872.7	Downstream
385	BT	09/17/2009	09:27:20	09/17/2009	09:27:20	582105	6139850	97	564.6	Upstream
385	BT	10/10/2009	11:54:44	10/10/2009	11:54:44	581782	6139303	97	779.2	Upstream
387	RB	04/21/2009	11:55:18	04/21/2009	11:55:18	586353	6152329	97	14114.9	Downstream
387	RB	04/29/2009	00:46:42	05/09/2009	04:55:57	589805	6164132	297	17977	Downstream
387	RB	05/14/2009	12:57:02	05/14/2009	12:57:02	590577	6163282	95	1149.9	Downstream
387	RB	06/03/2009	14:59:36	06/03/2009	14:59:36	590358	6163956	95	708.7	Downstream
387	RB	06/24/2009	09:58:54	06/24/2009	09:58:54	589740	6164481	98	1216.7	Upstream
387	RB	07/15/2009	10:36:28	07/15/2009	10:36:28	590621	6164382	95	1819	Downstream
387	RB	08/06/2009	14:40:46	08/06/2009	14:40:46	590560	6164495	95	128.4	Downstream

Fish Tag #	Species ¹	Date of Detection	Time of Detection ²	Date Detection Ceased ³	Time Detection Ceased ²	Easting ⁴	Northing ⁴	Zone	Distance (m) Moved Since Last Detection	Direction of Movement
387	RB	08/26/2009	10:15:12	08/26/2009	10:15:12	589959	6164432	95	1785.1	Upstream
387	RB	09/17/2009	10:42:40	09/17/2009	10:42:40	590834	6164657	95	2105.1	Downstream
387	RB	10/10/2009	08:49:50	10/10/2009	08:49:50	590824	6164902	95	245.2	Downstream
388	RB	04/21/2009	11:53:12	04/21/2009	11:53:12	584643	6145396	97	8771.5	Downstream
388	RB	05/14/2009	12:50:46	05/14/2009	12:50:46	584706	6144741	97	695.9	Upstream
388	RB	06/03/2009	13:25:42	06/03/2009	13:25:42	584851	6145092	97	379.8	Downstream
388	RB	06/24/2009	08:52:56	06/24/2009	08:52:56	584907	6145590	97	658	Downstream
388	RB	07/15/2009	09:20:54	07/15/2009	09:20:54	584515	6144456	97	1743.2	Upstream
388	RB	08/06/2009	13:47:00	08/06/2009	13:47:00	584639	6144283	97	212.8	Upstream
388	RB	08/26/2009	09:02:38	08/26/2009	09:02:38	584858	6144565	97	697.3	Downstream
388	RB	09/17/2009	09:29:02	09/17/2009	09:29:02	584392	6144443	97	511.3	Upstream
388	RB	10/10/2009	11:15:20	10/10/2009	11:15:20	584866	6144814	97	1021.1	Downstream
390	BT	04/21/2009	11:57:02	04/21/2009	11:57:02	587430	6157888	97	488.8	Downstream
390	BT	05/14/2009	12:54:06	05/14/2009	12:54:06	587904	6155059	97	5250.3	Upstream
390	BT	06/03/2009	13:30:30	06/03/2009	13:30:30	586776	6157113	97	3882.3	Downstream
390	BT	06/24/2009	08:57:28	06/24/2009	08:57:28	586821	6157459	97	385.1	Downstream
390	BT	07/15/2009	09:26:38	07/15/2009	09:26:38	587292	6157936	97	1010.5	Downstream
390	BT	08/06/2009	13:53:06	08/06/2009	13:53:06	587579	6158223	97	773.4	Downstream
390	BT	08/26/2009	09:07:52	08/26/2009	09:07:52	587315	6157927	97	596.3	Upstream
390	BT	09/17/2009	09:33:42	09/17/2009	09:33:42	587791	6158031	97	595.5	Downstream
391	BT	04/21/2009	11:52:50	04/21/2009	11:52:50	584091	6144155	97	269.2	Downstream
391	BT	05/14/2009	12:50:40	05/14/2009	12:50:40	584616	6144434	97	661	Downstream
391	BT	06/03/2009	13:25:02	06/03/2009	13:25:02	584097	6143716	97	1453.1	Upstream
391	BT	06/24/2009	08:52:36	06/24/2009	08:52:36	584829	6144713	97	2200.9	Downstream
391	BT	07/15/2009	09:15:16	07/15/2009	09:15:16	584391	6145030	97	875.7	Downstream
391	BT	08/06/2009	13:47:04	08/06/2009	13:47:04	584739	6144394	97	1418	Upstream
391	BT	08/26/2009	09:02:34	08/26/2009	09:02:34	584782	6144406	97	44.6	Downstream
391	BT	09/17/2009	09:29:08	09/17/2009	09:29:08	584569	6144688	97	353.4	Downstream
391	BT	10/10/2009	11:20:00	10/10/2009	11:20:00	584719	6144423	97	304.5	Upstream
438	BT	04/23/2009	08:38:32	04/23/2009	08:38:32	553086	6166754	98	775.1	Downstream
438	BT	05/14/2009	14:08:32	05/14/2009	14:08:32	542708	6160947	98	15388.1	Upstream

Fish Tag #	Species ¹	Date of Detection	Time of Detection ²	Date Detection Ceased ³	Time Detection Ceased ²	Easting ⁴	Northing ⁴	Zone	Distance (m) Moved Since Last Detection	Direction of Movement
438	BT	06/03/2009	15:21:00	06/03/2009	15:21:00	542207	6160633	98	1660.5	Upstream
438	BT	06/24/2009	10:34:20	06/24/2009	10:34:20	538562	6158329	98	5170.2	Upstream
438	BT	07/15/2009	11:11:38	07/15/2009	11:11:38	539591	6158951	98	1584.1	Downstream
438	BT	08/26/2009	10:55:02	08/26/2009	10:55:02	524111	6151276	98	23677.5	Upstream
438	BT	10/10/2009	09:12:06	10/10/2009	09:12:06	546795	6164651	98	34873	Downstream
439	BT	04/23/2009	08:45:50	04/23/2009	08:45:50	540458	6158963	98	7143.3	Upstream
439	BT	05/14/2009	14:01:10	05/14/2009	14:01:10	532665	6154057	98	13002.9	Upstream
439	BT	06/03/2009	15:25:34	06/03/2009	15:25:34	531973	6153218	98	1414.9	Upstream
439	BT	06/24/2009	10:38:00	06/24/2009	10:38:00	531497	6152497	98	1842.5	Upstream
439	BT	07/15/2009	11:15:52	07/15/2009	11:15:52	532995	6154183	98	3691.9	Downstream
439	BT	08/06/2009	15:20:06	08/06/2009	15:20:06	532333	6153648	98	1460.9	Upstream
439	BT	10/10/2009	09:13:12	10/10/2009	09:13:12	544484	6162842	98	20365.3	Downstream
440	BT	06/03/2009	15:35:44	06/03/2009	15:35:44	514773	6145459	98	407.9	Downstream
440	BT	06/24/2009	10:47:40	06/24/2009	10:47:40	514604	6145675	98	274.3	Downstream
440	BT	07/15/2009	11:27:44	07/15/2009	11:27:44	514714	6145748	98	132	Downstream
440	BT	08/06/2009	15:30:18	08/06/2009	15:30:18	513730	6146345	98	1238.5	Downstream
440	BT	08/26/2009	11:14:52	08/26/2009	11:14:52	515044	6145175	98	1964.8	Upstream
440	BT	09/17/2009	11:31:10	09/17/2009	11:31:10	514140	6146318	98	1712	Downstream
440	BT	10/10/2009	09:28:52	10/10/2009	09:28:52	514254	6146021	98	328.8	Upstream
441	BT	04/23/2009	09:44:20	04/23/2009	09:44:20	537651	6157150	98	855.7	Downstream
441	BT	05/14/2009	13:34:18	05/14/2009	13:34:18	538764	6157260	98	3440.4	Downstream
441	BT	06/03/2009	15:23:24	06/03/2009	15:23:24	536963	6156946	98	3992.8	Upstream
441	BT	06/24/2009	10:29:46	06/24/2009	10:29:46	537034	6157044	98	121	Downstream
441	BT	07/15/2009	11:06:36	07/15/2009	11:06:36	536942	6157108	98	112.1	Upstream
441	BT	08/06/2009	15:22:02	08/06/2009	15:22:02	528132	6151503	98	13888.6	Upstream
442	BT	04/23/2009	08:44:10	04/23/2009	08:44:10	542414	6161406	98	488.3	Upstream
442	BT	05/14/2009	14:08:28	05/14/2009	14:08:28	542549	6160809	98	1083.3	Upstream
442	BT	06/03/2009	15:20:48	06/03/2009	15:20:48	542606	6161046	98	1224.2	Downstream
442	BT	06/24/2009	10:26:54	06/24/2009	10:26:54	542635	6160744	98	1387.7	Upstream
442	BT	07/15/2009	11:09:44	07/15/2009	11:09:44	542139	6160511	98	635.1	Upstream
442	BT	08/06/2009	15:25:10	08/06/2009	15:25:10	520647	6151131	98	30799.4	Upstream
442	BT	08/26/2009	10:58:12	08/26/2009	10:58:12	517348	6152944	98	4696.4	Upstream

Fish Tag #	Species ¹	Date of Detection	Time of Detection ²	Date Detection Ceased ³	Time Detection Ceased ²	Easting ⁴	Northing ⁴	Zone	Distance (m) Moved Since Last Detection	Direction of Movement
442	BT	09/17/2009	11:27:06	09/17/2009	11:27:06	518093	6152967	98	803.4	Downstream
442	BT	10/10/2009	09:25:06	10/10/2009	09:25:06	517575	6152986	98	605.3	Upstream
443	BT	04/23/2009	08:31:06	04/23/2009	08:31:06	567783	6162028	98	8471.2	Upstream
443	BT	05/14/2009	13:24:48	05/14/2009	13:24:48	562424	6162737	98	6529.3	Upstream
443	BT	06/03/2009	15:13:44	06/03/2009	15:13:44	558482	6164875	98	8187.4	Upstream
443	BT	06/24/2009	10:25:14	06/24/2009	10:25:14	545341	6163702	98	17806.2	Upstream
443	BT	07/15/2009	11:09:44	07/15/2009	11:09:44	542139	6160511	98	6115.3	Upstream
443	BT	08/06/2009	15:10:42	08/06/2009	15:10:42	539041	6158898	98	3932.7	Upstream
443	BT	08/26/2009	10:43:10	08/26/2009	10:43:10	538412	6158466	98	767.8	Upstream
443	BT	09/17/2009	11:11:34	09/17/2009	11:11:34	538577	6158477	98	165.4	Downstream
443	BT	10/10/2009	09:03:36	10/10/2009	09:03:36	559791	6162329	98	31968.5	Downstream
444	BT	04/23/2009	08:35:32	04/23/2009	08:35:32	559393	6164566	98	1097.8	Downstream
444	BT	05/14/2009	14:14:20	05/14/2009	14:14:20	557907	6165106	98	1619	Upstream
444	BT	06/03/2009	15:29:26	06/03/2009	15:29:26	523151	6151253	98	50897.8	Upstream
444	BT	06/24/2009	10:41:16	06/24/2009	10:41:16	523215	6151137	98	132.5	Upstream
444	BT	08/26/2009	10:55:24	08/26/2009	10:55:24	523233	6151266	98	130.2	Downstream
456	BT	04/21/2009	10:36:00	04/21/2009	10:36:00	628028	6138002	96	164.8	Downstream
456	BT	05/14/2009	11:42:18	05/14/2009	11:42:18	628381	6139805	96	2055.5	Downstream
456	BT	06/03/2009	12:03:26	06/03/2009	12:03:26	628526	6140126	96	352.2	Downstream
456	BT	06/24/2009	07:38:34	06/24/2009	07:38:34	628419	6141116	96	1308.7	Downstream
456	BT	07/15/2009	07:47:12	07/15/2009	07:47:12	628409	6140087	96	1076.2	Upstream
456	BT	08/06/2009	12:32:02	08/06/2009	12:32:02	627994	6138897	96	1299.9	Upstream
456	BT	08/26/2009	07:29:16	08/26/2009	07:29:16	628288	6139947	96	1124.1	Downstream
456	BT	09/17/2009	08:01:40	09/17/2009	08:01:40	628483	6140949	96	1049.4	Downstream
456	BT	10/10/2009	13:22:12	10/10/2009	13:22:12	627938	6138021	96	3082.3	Upstream
457	BT	04/23/2009	11:15:52	04/23/2009	11:15:52	678672	6220607	128	5413.6	Upstream
457	BT	05/14/2009	08:51:09	05/15/2009	22:56:37	662911	6220267	110	16288	Upstream
457	BT	06/04/2009	08:25:14	06/04/2009	08:25:14	658486	6229396	115	10990.1	Upstream
457	BT	06/04/2009	13:24:24	06/05/2009	08:14:04	662911	6220267	110	10990.1	Downstream
457	BT	06/24/2009	12:27:08	06/24/2009	12:27:08	657807	6221391	105	6072	Upstream
457	BT	06/25/2009	10:06:08	06/25/2009	11:02:25	662911	6220267	110	6072	Upstream

Fish Tag #	Species ¹	Date of Detection	Time of Detection ²	Date Detection Ceased ³	Time Detection Ceased ²	Easting ⁴	Northing ⁴	Zone	Distance (m) Moved Since Last Detection	Direction of Movement
457	BT	07/15/2009	13:17:02	07/15/2009	13:17:02	682353	6223485	128	21115.6	Downstream
457	BT	07/20/2009	11:01:21	07/20/2009	12:49:54	662911	6220267	110	21115.6	Upstream
457	BT	07/21/2009	15:33:03	07/21/2009	16:18:16	642964	6224599	90	21404.7	Upstream
457	BT	07/26/2009	17:22:13	07/27/2009	09:29:46	611916	6176270	296	93610.8	Upstream
457	BT	08/06/2009	12:37:44	08/06/2009	12:37:44	632709	6127130	96	87955	Upstream
457	BT	08/26/2009	08:06:52	08/26/2009	08:06:52	613609	6105018	96	41300.4	Upstream
457	BT	09/17/2009	08:38:46	09/17/2009	08:38:46	614492	6105600	96	2772.9	Downstream
457	BT	09/20/2009	00:07:45	09/20/2009	00:23:46	611916	6176270	296	126489.3	Downstream
457	BT	09/22/2009	01:57:06	09/22/2009	02:00:19	642964	6224599	90	93780.3	Downstream
457	BT	09/22/2009	15:44:05	09/22/2009	15:47:45	662911	6220267	110	21563	Downstream
457	BT	10/07/2009	13:18:00	10/07/2009	13:18:00	681298	6222342	128	19478.9	Downstream
458	BT	04/21/2009	10:40:06	04/21/2009	10:40:06	630727	6129339	96	716.1	Downstream
458	BT	05/14/2009	11:46:18	05/14/2009	11:46:18	630954	6129218	96	257.2	Upstream
458	BT	06/03/2009	12:07:20	06/03/2009	12:07:20	630611	6129783	96	661.9	Downstream
459	BT	04/21/2009	10:37:00	04/21/2009	10:37:00	628843	6135971	96	266.3	Upstream
459	BT	05/14/2009	11:44:42	05/14/2009	11:44:42	630215	6133751	96	3291.6	Upstream
459	BT	06/03/2009	12:05:24	06/03/2009	12:05:24	629101	6134987	96	2096.7	Downstream
459	BT	06/24/2009	07:40:50	06/24/2009	07:40:50	628822	6135645	96	865.3	Downstream
459	BT	07/15/2009	07:49:20	07/15/2009	07:49:20	629064	6134997	96	821.3	Upstream
459	BT	08/06/2009	12:33:50	08/06/2009	12:33:50	629157	6134920	96	120.7	Upstream
459	BT	08/26/2009	07:31:02	08/26/2009	07:31:02	628562	6135943	96	1277.9	Downstream
459	BT	09/17/2009	08:03:34	09/17/2009	08:03:34	628452	6136319	96	552.3	Downstream
459	BT	10/10/2009	13:20:48	10/10/2009	13:20:48	629312	6134857	96	1855.1	Upstream
460	BT	04/21/2009	10:39:16	04/21/2009	10:39:16	630632	6131191	96	179.8	Upstream
460	BT	05/14/2009	11:45:36	05/14/2009	11:45:36	630562	6131200	96	70.6	Downstream
460	BT	06/03/2009	12:06:24	06/03/2009	12:06:24	630300	6132439	96	1870.7	Downstream
460	BT	06/24/2009	07:43:54	06/24/2009	07:43:54	630730	6128339	96	4810.1	Upstream
460	BT	07/15/2009	07:56:52	07/15/2009	07:56:52	630784	6128058	96	286.1	Upstream
460	BT	08/06/2009	12:36:38	08/06/2009	12:36:38	630593	6128057	96	191	Upstream
460	BT	08/26/2009	07:33:56	08/26/2009	07:33:56	630575	6129780	96	1850.5	Downstream
460	BT	09/17/2009	08:06:56	09/17/2009	08:06:56	630868	6128059	96	1889.5	Upstream
460	BT	10/10/2009	13:18:00	10/10/2009	13:18:00	630721	6127821	96	279.7	Upstream

Fish Tag #	Species ¹	Date of Detection	Time of Detection ²	Date Detection Ceased ³	Time Detection Ceased ²	Easting ⁴	Northing ⁴	Zone	Distance (m) Moved Since Last Detection	Direction of Movement
461	BT	04/21/2009	10:45:06	04/21/2009	10:45:06	630468	6119974	96	574.2	Downstream
461	BT	05/14/2009	11:50:04	05/14/2009	11:50:04	630255	6120031	96	220.5	Downstream
461	BT	06/03/2009	12:11:44	06/03/2009	12:11:44	630247	6119261	96	884	Upstream
461	BT	06/24/2009	07:49:04	06/24/2009	07:49:04	629914	6119168	96	345.7	Upstream
461	BT	07/15/2009	08:04:48	07/15/2009	08:04:48	630634	6121152	96	4528.6	Downstream
461	BT	08/06/2009	12:40:40	08/06/2009	12:40:40	630469	6120504	96	1321.8	Upstream
461	BT	08/26/2009	07:38:24	08/26/2009	07:38:24	630664	6121628	96	1649.2	Downstream
461	BT	09/17/2009	08:10:28	09/17/2009	08:10:28	630443	6121113	96	1826.9	Upstream
461	BT	10/10/2009	13:14:40	10/10/2009	13:14:40	630253	6121272	96	247.8	Upstream
462	BT	05/14/2009	11:50:52	05/14/2009	11:50:52	629439	6117945	96	487.9	Upstream
462	BT	06/03/2009	12:12:26	06/03/2009	12:12:26	629105	6117561	96	729.6	Upstream
462	BT	06/24/2009	07:50:06	06/24/2009	07:50:06	629284	6117092	96	748.5	Upstream
462	BT	07/15/2009	08:06:36	07/15/2009	08:06:36	629174	6117535	96	810.8	Downstream
462	BT	08/26/2009	08:04:06	08/26/2009	08:04:06	617643	6109771	96	17872.7	Upstream
462	BT	09/17/2009	08:12:00	09/17/2009	08:12:00	629109	6117731	96	18273.8	Downstream
462	BT	10/10/2009	13:13:38	10/10/2009	13:13:38	629702	6118673	96	1470.5	Downstream
645	BT	04/23/2009	09:46:40	04/23/2009	09:46:40	541928	6159353	98	1855.5	Upstream
645	BT	05/14/2009	14:08:00	05/14/2009	14:08:00	541528	6159842	98	631.8	Downstream
645	BT	06/24/2009	10:35:36	06/24/2009	10:35:36	536189	6156367	98	8487.9	Upstream
645	BT	07/15/2009	11:20:52	07/15/2009	11:20:52	523120	6151186	98	18314.7	Upstream
645	BT	08/06/2009	15:24:04	08/06/2009	15:24:04	523318	6151261	98	211.7	Downstream
645	BT	08/26/2009	10:55:28	08/26/2009	10:55:28	523079	6151215	98	243.4	Upstream
645	BT	09/17/2009	11:21:14	09/17/2009	11:21:14	523036	6151175	98	58.7	Upstream
645	BT	10/10/2009	09:55:18	10/10/2009	09:55:18	541383	6159446	98	26629.4	Downstream
646	BT	04/23/2009	09:58:28	04/23/2009	09:58:28	555003	6166441	98	1009.3	Upstream
646	BT	05/14/2009	14:13:30	05/14/2009	14:13:30	555183	6166582	98	228.7	Downstream
646	BT	06/03/2009	15:15:30	06/03/2009	15:15:30	554746	6167052	98	641.8	Upstream
646	BT	06/24/2009	10:20:04	06/24/2009	10:20:04	554944	6166443	98	640.4	Downstream
646	BT	07/15/2009	10:56:20	07/15/2009	10:56:20	554478	6166211	98	583.9	Upstream
646	BT	08/26/2009	10:55:28	08/26/2009	10:55:28	523079	6151215	98	46232.2	Upstream
646	BT	10/10/2009	10:01:42	10/10/2009	10:01:42	554294	6166329	98	46150.8	Downstream

Fish Tag #	Species ¹	Date of Detection	Time of Detection ²	Date Detection Ceased ³	Time Detection Ceased ²	Easting ⁴	Northing ⁴	Zone	Distance (m) Moved Since Last Detection	Direction of Movement
647	BT	04/23/2009	08:46:14	04/23/2009	08:46:14	539531	6159300	98	3827.3	Upstream
647	BT	05/14/2009	14:07:18	05/14/2009	14:07:18	539603	6159009	98	299.8	Downstream
647	BT	06/03/2009	15:22:26	06/03/2009	15:22:26	538883	6158802	98	947.9	Upstream
647	BT	06/24/2009	10:31:56	06/24/2009	10:31:56	538840	6158661	98	147.4	Upstream
647	BT	07/15/2009	11:05:08	07/15/2009	11:05:08	539162	6158918	98	412	Downstream
647	BT	08/06/2009	15:12:58	08/06/2009	15:12:58	538982	6158894	98	181.6	Upstream
647	BT	08/26/2009	10:42:46	08/26/2009	10:42:46	539030	6158904	98	49	Downstream
647	BT	10/10/2009	09:15:44	10/10/2009	09:15:44	539455	6158674	98	483.2	Downstream
648	BT	04/23/2009	09:51:54	04/23/2009	09:51:54	545330	6162986	98	6253.6	Upstream
648	BT	05/14/2009	14:08:02	05/14/2009	14:08:02	541602	6159910	98	6409	Upstream
648	BT	06/03/2009	15:21:22	06/03/2009	15:21:22	541692	6159782	98	156.5	Upstream
648	BT	06/24/2009	10:32:46	06/24/2009	10:32:46	541201	6159038	98	891.4	Upstream
648	BT	07/15/2009	11:11:00	07/15/2009	11:11:00	540907	6158854	98	346.8	Upstream
648	BT	08/06/2009	15:09:46	08/06/2009	15:09:46	540963	6159152	98	303.2	Downstream
648	BT	08/26/2009	10:41:44	08/26/2009	10:41:44	540998	6158846	98	308	Upstream
649	BT	04/23/2009	09:49:50	04/23/2009	09:49:50	542252	6159896	98	2523.2	Upstream
649	BT	06/03/2009	15:21:22	06/03/2009	15:21:22	541692	6159782	98	571.5	Upstream
649	BT	06/24/2009	10:38:18	06/24/2009	10:38:18	530782	6152077	98	18421.1	Upstream
649	BT	08/06/2009	15:21:12	08/06/2009	15:21:12	530104	6152189	98	700.8	Upstream
649	BT	09/17/2009	11:16:38	09/17/2009	11:16:38	529667	6151938	98	543.7	Upstream
649	BT	10/10/2009	09:19:08	10/10/2009	09:19:08	531868	6152923	98	3692	Downstream
650	BT	04/23/2009	08:52:38	04/23/2009	08:52:38	529485	6151982	98	1356	Upstream
650	BT	05/14/2009	13:59:26	05/14/2009	13:59:26	527737	6151417	98	2502.4	Upstream
650	BT	06/03/2009	15:27:14	06/03/2009	15:27:14	528793	6151721	98	1318.1	Downstream
650	BT	06/24/2009	10:39:14	06/24/2009	10:39:14	528449	6151460	98	650.2	Upstream
650	BT	07/15/2009	11:18:14	07/15/2009	11:18:14	528782	6151287	98	375.3	Downstream
650	BT	08/06/2009	15:22:10	08/06/2009	15:22:10	527818	6151365	98	967.2	Upstream
650	BT	08/26/2009	10:48:52	08/26/2009	10:48:52	528573	6151558	98	785.7	Downstream
650	BT	09/17/2009	11:16:46	09/17/2009	11:16:46	529354	6151826	98	1219.4	Downstream
650	BT	10/10/2009	09:48:26	10/10/2009	09:48:26	527785	6151642	98	1773.3	Upstream
652	BT	04/23/2009	08:30:16	04/23/2009	08:30:16	569668	6162682	98	282.7	Downstream
652	BT	05/14/2009	13:22:14	05/14/2009	13:22:14	568803	6162167	98	1448.7	Upstream

Fish Tag #	Species ¹	Date of Detection	Time of Detection ²	Date Detection Ceased ³	Time Detection Ceased ²	Easting ⁴	Northing ⁴	Zone	Distance (m) Moved Since Last Detection	Direction of Movement
652	BT	06/03/2009	15:11:04	06/03/2009	15:11:04	563681	6163352	98	6104	Upstream
652	BT	06/24/2009	10:12:04	06/24/2009	10:12:04	564486	6163009	98	936.2	Downstream
652	BT	07/15/2009	10:51:08	07/15/2009	10:51:08	564335	6163217	98	257	Upstream
652	BT	08/06/2009	14:58:28	08/06/2009	14:58:28	559307	6162771	98	7002.5	Upstream
652	BT	08/26/2009	10:30:54	08/26/2009	10:30:54	559111	6163116	98	501.7	Upstream
652	BT	09/17/2009	10:59:34	09/17/2009	10:59:34	559485	6162933	98	865.9	Downstream
653	BT	04/23/2009	09:49:24	04/23/2009	09:49:24	541573	6159178	98	5683.4	Upstream
653	BT	05/14/2009	14:03:54	05/14/2009	14:03:54	540244	6158723	98	1404.7	Upstream
654	BT	04/23/2009	08:47:18	04/23/2009	08:47:18	537718	6158206	98	7828.6	Upstream
654	BT	05/14/2009	14:06:00	05/14/2009	14:06:00	537812	6157869	98	349.9	Upstream
654	BT	06/03/2009	15:22:56	06/03/2009	15:22:56	537960	6157798	98	164.1	Downstream
654	BT	06/24/2009	10:29:08	06/24/2009	10:29:08	538243	6158121	98	556.5	Downstream
654	BT	08/26/2009	11:11:52	08/26/2009	11:11:52	514699	6145736	98	40441.1	Upstream
654	BT	09/17/2009	11:31:44	09/17/2009	11:31:44	515174	6145251	98	885.1	Upstream
654	BT	10/10/2009	09:39:02	10/10/2009	09:39:02	515680	6144922	98	686.2	Upstream
655	BT	04/21/2009	10:16:56	04/21/2009	10:16:56	617346	6166493	96	157.7	Upstream
655	BT	05/14/2009	11:25:20	05/14/2009	11:25:20	617175	6166302	96	256.4	Upstream
655	BT	06/03/2009	11:46:08	06/03/2009	11:46:08	617021	6166056	96	290.2	Upstream
655	BT	06/24/2009	07:20:46	06/24/2009	07:20:46	617186	6166581	96	550.3	Downstream
692	BT	04/01/2009	17:02:23	05/12/2009	13:26:25	611916	6176270	296	185.3	Downstream
692	BT	05/14/2009	11:19:06	05/14/2009	11:19:06	612438	6176293	95	593.2	Downstream
692	BT	06/02/2009	15:05:03	06/02/2009	15:20:23	611916	6176270	296	593.2	Upstream
692	BT	06/03/2009	11:39:32	06/03/2009	11:39:32	612308	6176285	95	392.3	Downstream
692	BT	06/24/2009	07:12:40	06/24/2009	07:12:40	612403	6180224	95	4389	Downstream
692	BT	07/09/2009	13:20:37	07/09/2009	13:25:17	611916	6176270	296	4843.7	Upstream
692	BT	07/15/2009	07:14:14	07/15/2009	07:14:14	610894	6182211	95	7384.8	Downstream
692	BT	07/15/2009	15:38:33	07/15/2009	16:01:14	611916	6176270	296	7384.8	Upstream
692	BT	08/06/2009	11:57:18	08/06/2009	11:57:18	610858	6182034	95	7227.8	Downstream
692	BT	08/26/2009	07:01:44	08/26/2009	07:01:44	610993	6182192	95	7355.2	Downstream
692	BT	09/17/2009	07:37:50	09/17/2009	07:37:50	611390	6182535	95	524.7	Downstream
692	BT	10/10/2009	13:48:38	10/10/2009	13:48:38	611140	6182047	95	548.3	Upstream

Fish Tag #	Species ¹	Date of Detection	Time of Detection ²	Date Detection Ceased ³	Time Detection Ceased ²	Easting ⁴	Northing ⁴	Zone	Distance (m) Moved Since Last Detection	Direction of Movement
693	BT	04/21/2009	10:07:00	04/21/2009	10:07:00	610451	6184860	95	565.3	Upstream
693	BT	05/14/2009	11:15:18	05/14/2009	11:15:18	610200	6185100	95	347.3	Downstream
693	BT	06/24/2009	07:04:00	06/24/2009	07:04:00	610286	6185201	95	132.7	Downstream
693	BT	07/15/2009	07:06:24	07/15/2009	07:06:24	610451	6185159	95	170.3	Upstream
693	BT	08/06/2009	11:51:00	08/06/2009	11:51:00	610070	6185285	95	401.3	Downstream
693	BT	08/26/2009	07:00:38	08/26/2009	07:00:38	610413	6184753	95	701.4	Upstream
693	BT	09/17/2009	07:28:34	09/17/2009	07:28:34	610212	6186110	95	1618.6	Downstream
693	BT	10/10/2009	08:36:28	10/10/2009	08:36:28	610316	6184971	95	1426.2	Upstream
694	BT	04/22/2009	08:56:28	04/22/2009	08:56:28	605384	6173195	95	296.1	Downstream
694	BT	05/14/2009	13:06:24	05/14/2009	13:06:24	606834	6173520	95	1843.4	Downstream
694	BT	05/27/2009	22:13:29	06/23/2009	20:58:20	611916	6176270	296	6137.9	Downstream
694	BT	06/24/2009	07:15:26	06/24/2009	07:15:26	613460	6174923	96	2372.2	Upstream
694	BT	07/07/2009	10:11:09	07/25/2009	03:03:09	611916	6176270	296	2372.2	Downstream
694	BT	08/06/2009	12:30:42	08/06/2009	12:30:42	627727	6141614	96	69639.5	Upstream
694	BT	08/26/2009	07:14:18	08/26/2009	07:14:18	614265	6161353	96	41119.7	Downstream
694	BT	09/08/2009	05:56:44	09/09/2009	06:57:00	611916	6176270	296	28586.9	Downstream
694	BT	09/17/2009	07:34:14	09/17/2009	07:34:14	612971	6178272	95	2927.4	Downstream
694	BT	10/10/2009	13:47:04	10/10/2009	13:47:04	612890	6178904	95	637.2	Downstream
695	BT	04/02/2009	00:20:14	04/12/2009	01:59:21	589805	6164132	297	2173.5	Upstream
695	BT	04/23/2009	08:16:02	04/23/2009	08:16:02	590675	6164463	95	1545	Downstream
695	BT	05/14/2009	12:57:10	05/14/2009	12:57:10	590465	6163663	95	877.2	Upstream
695	BT	06/03/2009	14:55:30	06/03/2009	14:55:30	591163	6165065	95	1640.6	Downstream
695	BT	06/24/2009	09:58:10	06/24/2009	09:58:10	591440	6165237	95	326.1	Downstream
695	BT	07/10/2009	15:46:07	07/10/2009	15:55:14	589805	6164132	297	2731.4	Upstream
695	BT	07/15/2009	10:36:36	07/15/2009	10:36:36	590450	6164164	95	1039.2	Downstream
695	BT	07/21/2009	04:54:49	07/21/2009	04:54:56	589805	6164132	297	1039.2	Upstream
695	BT	08/06/2009	14:40:54	08/06/2009	14:40:54	590326	6164268	95	1026.1	Downstream
695	BT	08/20/2009	22:09:35	09/02/2009	22:01:44	589805	6164132	297	1026.1	Upstream
695	BT	09/17/2009	10:42:48	09/17/2009	10:42:48	590535	6164609	95	1571.2	Downstream
696	BT	04/21/2009	11:56:12	04/21/2009	11:56:12	587013	6155180	97	4322.2	Upstream
696	BT	04/27/2009	00:04:47	04/27/2009	00:17:10	589805	6164132	297	13779.3	Downstream
696	BT	06/03/2009	14:53:34	06/03/2009	14:53:34	595673	6167043	95	10212.6	Downstream

Fish Tag #	Species ¹	Date of Detection	Time of Detection ²	Date Detection Ceased ³	Time Detection Ceased ²	Easting ⁴	Northing ⁴	Zone	Distance (m) Moved Since Last Detection	Direction of Movement
696	BT	06/20/2009	16:13:35	06/20/2009	16:13:58	611916	6176270	296	24585.9	Downstream
696	BT	06/24/2009	06:59:32	06/24/2009	06:59:32	610554	6187575	95	13254.2	Downstream
696	BT	07/06/2009	07:11:07	07/06/2009	09:12:37	611916	6176270	296	13254.2	Upstream
696	BT	07/27/2009	03:48:50	07/27/2009	04:33:50	589805	6164132	297	34923	Upstream
696	BT	08/06/2009	13:42:36	08/06/2009	13:42:36	581142	6134929	97	43233.8	Upstream
696	BT	08/26/2009	08:56:14	08/26/2009	08:56:14	580817	6134672	97	414.3	Upstream
696	BT	09/17/2009	09:18:54	09/17/2009	09:18:54	580858	6134155	97	530.7	Upstream
696	BT	10/10/2009	11:52:46	10/10/2009	11:52:46	581207	6135303	97	1255	Downstream
697	BT	04/01/2009	17:02:23	05/12/2009	13:26:25	611916	6176270	296	540.5	Downstream
697	BT	05/14/2009	11:19:06	05/14/2009	11:19:06	612438	6176293	95	593.2	Downstream
697	BT	06/02/2009	15:05:03	06/02/2009	15:20:31	611916	6176270	296	593.2	Upstream
697	BT	06/03/2009	11:39:32	06/03/2009	11:39:32	612308	6176285	95	392.3	Downstream
697	BT	06/23/2009	13:16:13	06/23/2009	13:31:27	611916	6176270	296	392.3	Upstream
697	BT	06/24/2009	09:47:16	06/24/2009	09:47:16	611669	6176254	95	247.5	Upstream
697	BT	07/14/2009	18:11:18	08/06/2009	07:34:42	611916	6176270	296	247.5	Downstream
697	BT	08/06/2009	12:04:54	08/06/2009	12:04:54	612177	6175593	96	863.9	Upstream
697	BT	08/25/2009	14:48:25	08/25/2009	15:01:33	611916	6176270	296	863.9	Downstream
697	BT	08/26/2009	10:03:26	08/26/2009	10:03:26	611631	6176138	95	441.5	Upstream
697	BT	09/17/2009	07:32:22	09/17/2009	07:32:22	612852	6177050	95	1861.6	Downstream
697	BT	09/17/2009	09:27:53	10/08/2009	09:24:00	611916	6176270	296	1565.9	Upstream
697	BT	10/10/2009	08:40:30	10/10/2009	08:40:30	611031	6175642	95	1394.2	Upstream

Notes: ¹Species are BT = Bull trout, GR = Arctic grayling, MW = Mountain whitefish, RB = Rainbow trout, WP = Walleye; ²Early surveys did not record detection time. Time was assumed to be noon for movement analyses; ³Detection is instantaneous for aerial survey data but a fish can spend long periods of time near a fixed station; ⁴UTM are in NAD 1983 (Canada).

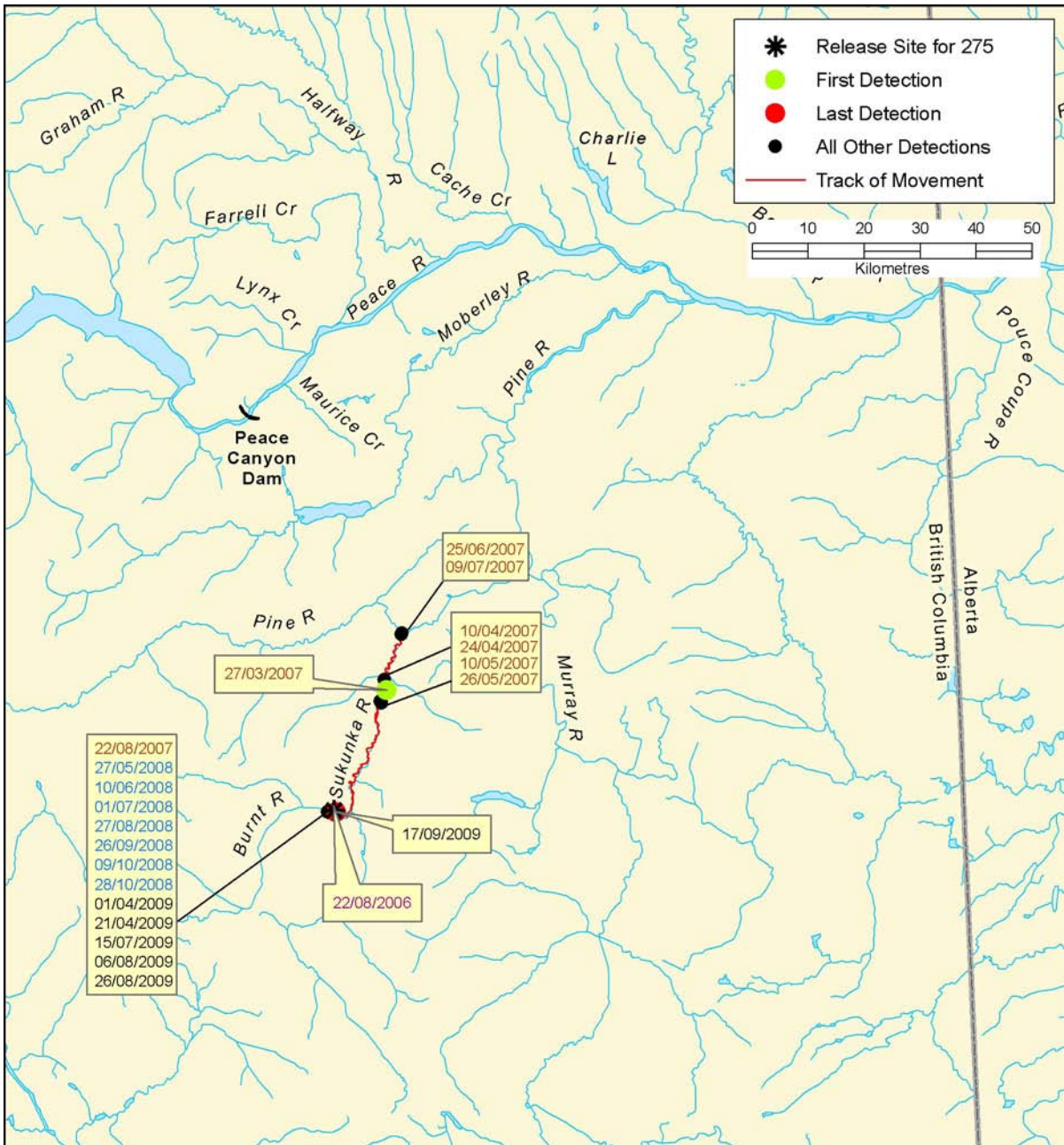


Figure B 1: Individual bull trout track, tag #275

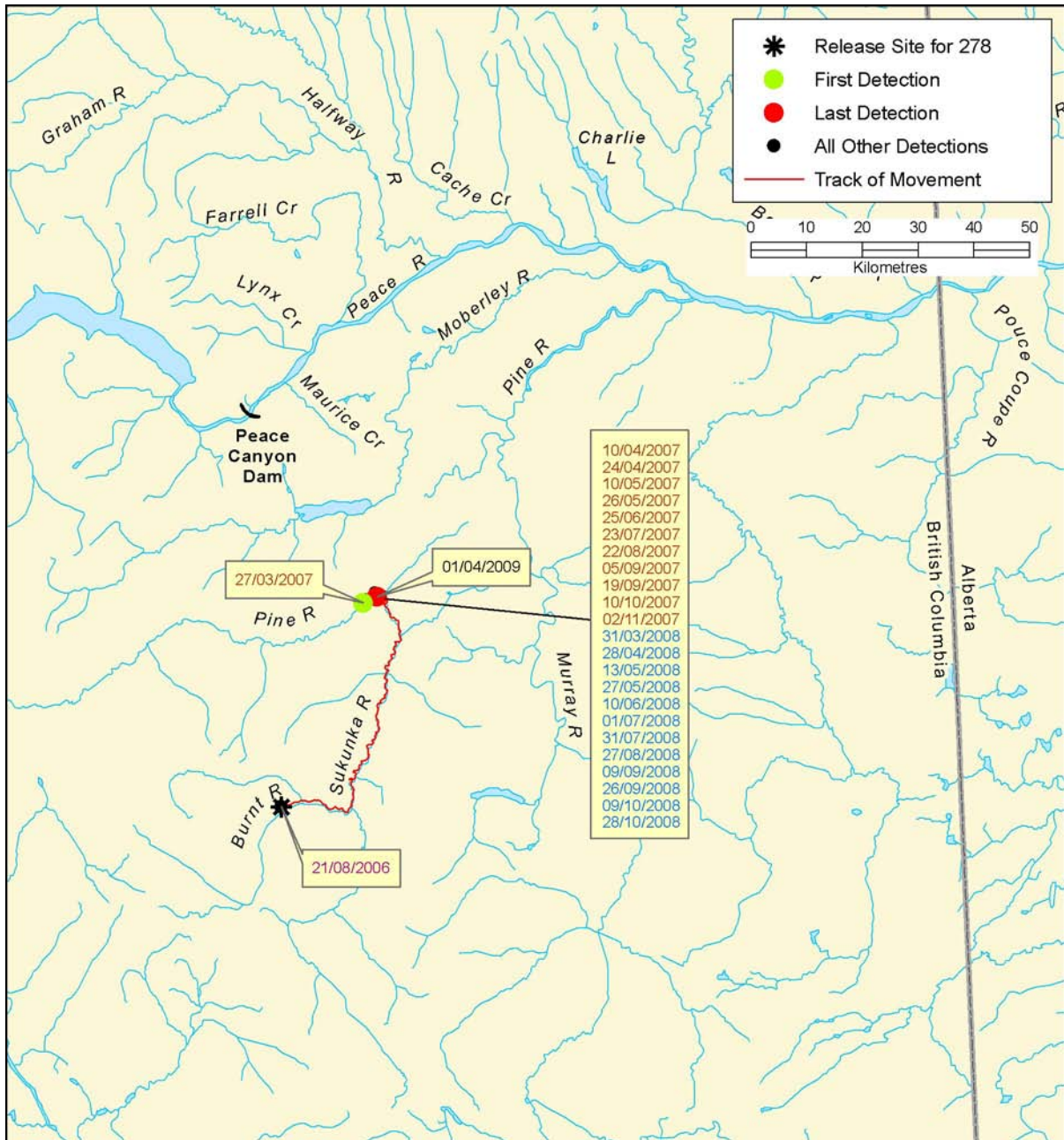


Figure B 2: Individual bull trout track, tag #278

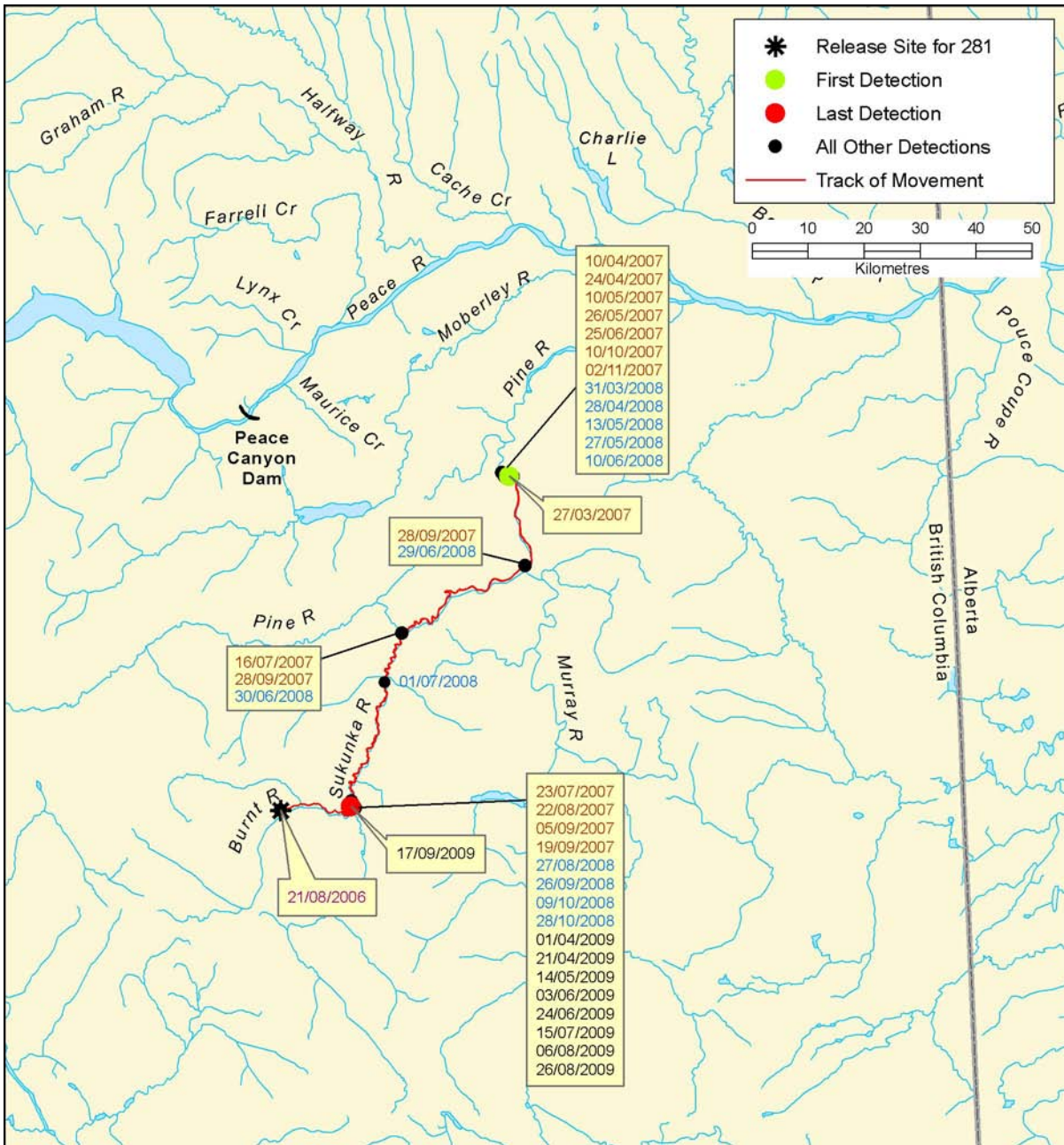


Figure B 3: Individual bull trout track, tag #281