

Tagish River and Nares River Least Cisco Assessment



Prepared For

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Down to Earth Biology

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EXECUTIVE SUMMARY

Least cisco form the basis of a fishery in the Southern Lakes and are an important prey item to predatory fish species in the system, particularly lake trout. According to local knowledge, there is a long history of an apparent decline of cisco numbers in the Tagish and Nares rivers. The purpose of this project was to build on existing information of cisco in the Southern Lakes system, Yukon Territory, including distribution/abundance and size/age structure. A total of four sampling events were completed in the Tagish River between May 31 and August 26, 2016. A total of 408 cisco were captured across these four sampling events with the highest capture rate during the July 5 sampling event. The cisco captured in the Tagish River ranged from 105 to 208 mm and 1 to 4 years of age. The proportion of larger (3 year old) fish caught was higher earlier in the summer while smaller 1 year old cisco were more prominent in late summer. Two sampling events were conducted in the Nares River on July 5 and August 26. A total of 48 cisco were captured, all of which were captured in the July 5 sampling event. The cisco captured in the Nares River ranged from 174 to 240 mm and 2 to 5 years old. Maturity data of the cisco captured in both sampling areas indicates that the maturation rate is relatively rapid in the population with the bulk of 2 year olds (and many 1 year olds) being sexually mature by the end of the summer. Life history information collected for cisco in the Tagish and Nares rivers during 2016 indicates that the population has a relatively low longevity and rapid rate of maturation which is presumably due to the ecological role of this species as a prey species. Data collected on mesh size selectivity indicates that future sampling efforts for cisco in the system should consider the use of the following mesh sizes to sample all size and age classes: 25 mm (1.0 inch), 32 mm (1.25 inch), 38 mm (1.5 inch) and possibly the 19 mm (0.75 inch) mesh sizes.



ACKNOWLEDGEMENTS

Funding for this project was provided by the Yukon Fish & Wildlife Enhancement Trust Fund and the Yukon Energy Corporation. Don Toews and Adam Winters of the Carcross Tagish Renewable Resources Council provided valuable local knowledge of cisco in the Southern Lakes which contributed to the success of the field sampling and the preparation of this report.

AUTHORSHIP

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Don Toews also provided input on the draft version of this report.



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1 INTRODUCTION

Least cisco (*Coregonus sardinella*) are members of the whitefish family, common and widespread in lakes and rivers throughout the north. Across their range, they adopt a wide variety of life histories including strategies such as anadromous or residing exclusively in large rivers (McPhail 2007, McPhail and Lindsay 1970). In the Southern Lakes, cisco can be found in large lakes (Marsh, Tagish, Bennett and Atlin), as well as the rivers connected to the lakes (Tagish and Nares rivers; Figure 1). There is also anecdotal information about cisco migration into and throughout the Tagish and Nares rivers during the early summer. During this period cisco are visible from bridges over the rivers and the migration appears to be accompanied by a large migration of adult lake trout.

Least cisco form the basis of a fishery in the Southern Lakes and are an important prey item to predatory fish species in the system, particularly lake trout (*Salvelinus namaycush*; Larsen 2004). Cisco were historically and continue to be harvested by local First Nations as a subsistence food source. There is a long history of cisco snagging from the Tagish and Carcross railway bridges by anglers and in earlier years for subsistence and sale to mink and fox farms in the area. A special permit was instituted in 2004 to legalize the snagging of cisco by licenced anglers for bait from the Tagish River Bridge and the Carcross Foot Bridge (Nares River) with a daily limit of five fish including a harvest report (YG 2016). Since 1993, cisco have also been harvested by a small scale commercial fishery (quota of 25 to 50 kg) by the marina operator at Tagish to provide bait to local lake trout anglers.

For many decades, Carcross Tagish First Nation (CTFN) elders and citizens in addition to other local residents have expressed concerns about a decline of cisco in the lake systems around Tagish and Carcross. According to First Nation traditional and local knowledge, this decline was first recognized in the 1960's. Elders and knowledgeable local individuals say the decline was most pronounced in the Nares River at Carcross and coincided with a tailings pond failure and spills from the Artic Mine near Carcross in 1964 (Toews Pers. Comm. 2016). Prior to this event, the Nares River contained high numbers of cisco all year round and could be snagged in sufficient quantities to supply mink farms in the area. Populations of cisco in the Tagish River are also thought to have declined although this decline appears to be less pronounced. Large schools of cisco were commonly observed at the base of the old wooden bridge which allowed for easy snagging at Tagish prior to its replacement in 1978 (Toews Pers. Comm. 2016).

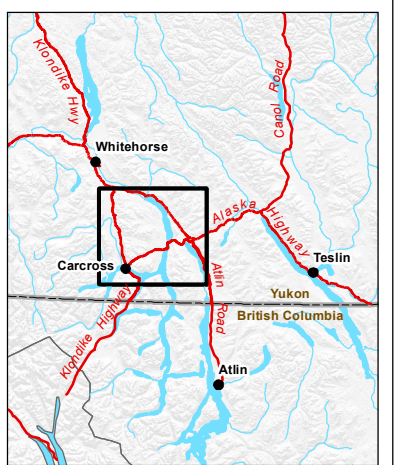
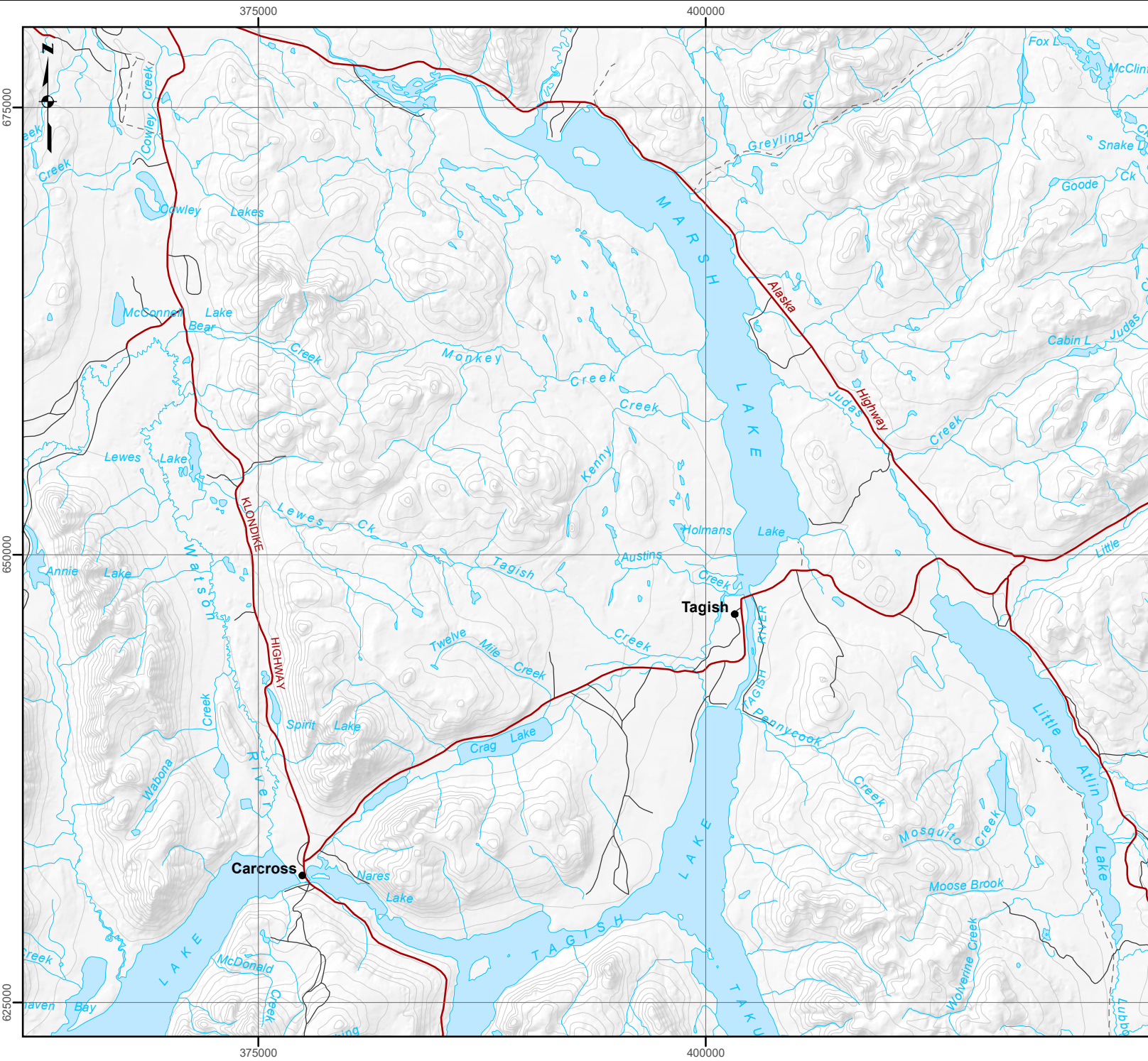
Relatively little is known about least cisco populations in the Southern Lakes other than widespread distribution throughout the system and their importance as a prey species for lake trout. In response to long standing concerns about the decline of cisco from CTFN elders, citizens and other locals, Larsen (2004) collected initial information on cisco in the Southern Lakes. The study by Larsen (2004) highlighted that the abundance of cisco was highest at the north end of the river (near the Tagish River Bridge) and that a mixture of mature, maturing and immature individuals were present in the river during the summer months; however, limitations of this study were that sampling effort was limited to the summer months of July and August and gill net gear was not appropriately sized to capture all sample sizes within the population. In addition, aging was not a component of the cisco captured.



The purpose of this report is to present the findings of field assessments conducted during the summer of 2016 which were intended to build on existing information of cisco in the Southern Lakes of Yukon Territory. The goal of the project was to collect information on the abundance and distribution of cisco in the Tagish and Nares Rivers during the spring and summer months and to establish the size and age structure of the population. This information could be used to provide evidence of annual spawning and recruitment success as an indicator of population health. The specific objectives of the project included:

- Collect a sample of approximately 400 least cisco from the Tagish River and Nares River to collect life history information including age, maturity, fork length and weight, diet and longevity. Collect genetic samples from least cisco for future analysis.
- Determine seasonal differences in least cisco abundance/distribution and size/age class structure in the Tagish and Nares rivers during the summer of 2017.
- Establish the relative health of cisco populations in Tagish and Nares Rivers based on evidence of regular annual reproduction and recruitment from age class analysis.
- Collect information on mesh size selectivity of different sizes and age classes of least cisco to inform potential sampling or monitoring efforts in the future.
- Provide training and capacity building opportunities for students and members of the Carcross Tagish First Nation.

A more detailed review of existing traditional and local knowledge on cisco in the Southern Lakes is being undertaken in conjunction with CTFN and will be documented in a separate report.



Legend

- Settlement/Community
- Major road
- Secondary road
- - - Trail

Southern Lakes Cisco Survey Overview

Data Sources
1:250,000 Topographic Spatial Data courtesy of Her Majesty the Queen in Right of Canada, Department of Natural Resources. All Rights Reserved.
Digital Elevation Model and 1:250,000 National Topographic Database (NTDB) provided by Geomatics Yukon - Yukon Government via online source (Corporate Spatial Warehouse) www.geomatics.yukon.ca.

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2 METHODS

Targeted small mesh gillnetting for least cisco was undertaken in the Tagish River on May 31, June 17, July 5 and August 26, 2016. Sampling was also conducted on the Nares River on July 5 and in both Nares Lake and the Nares River on August 26. Gillnetting sites were initially selected to cover a variety of habitat types and depths; however, subsequent sets were located in areas where least cisco were initially captured to achieve the sampling target of individuals captured. All gillnets were benthic and set parallel to the water flow with large anchors on either end to keep the net in position within the current.

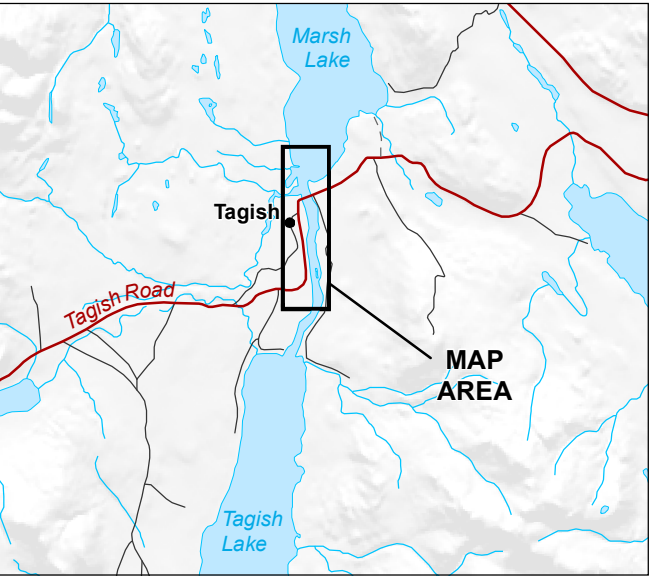
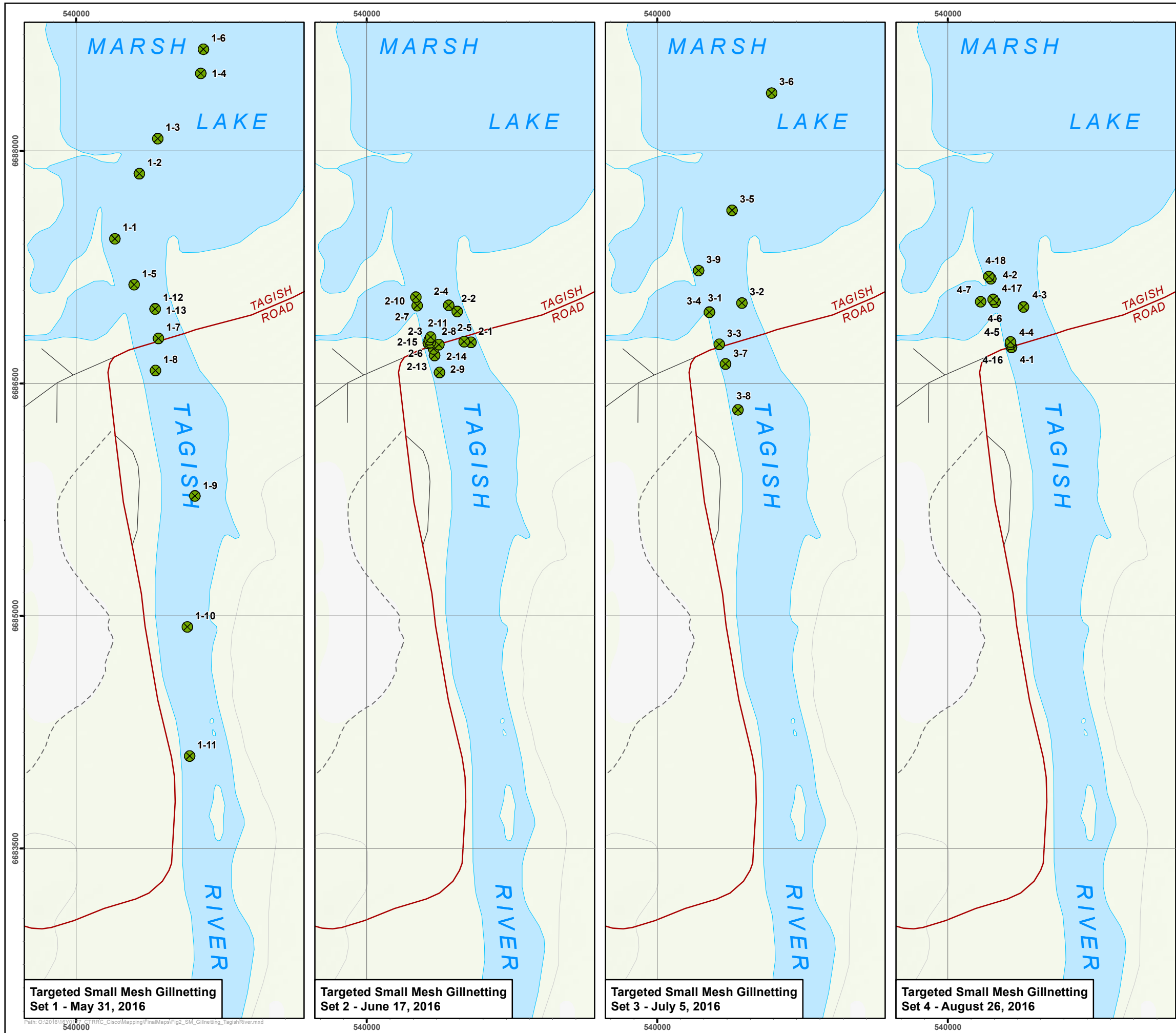
A total of 57 small mesh gillnetting sets were completed with the majority of sets located within the Tagish River (Table 1; Figure 2, Figure 3). The duration of gillnet sets averaged 51 minutes and ranged from 20 to 91 minutes depending on fish capture rates. During sampling events in May, June and July gillnet gangs were comprised of three different sized mesh panels, each of which was 22.8 m in length with the following mesh sizes: 25 mm (1 inch), 38 mm (1.5 inch) and 51 mm (2.0 inch). During the August sampling event, the 51 mm (2.0 inch) panel was removed during a portion of the sets as it did not catch cisco. It was replaced with two intermediate mesh sizes (32 mm – 1.25 inch and 44 mm – 1.75 inch). Information collected for each gillnet set included: date, GPS co-ordinates at each end of the net, water depth at each end of the net, mesh size orientation, time set/pulled and weather conditions.

Table 1. Summary of targeted small mesh gillnets for least cisco by sampling area, 2016.

Sampling Area	Number of Gillnet Sets				
	May 31	June 17	July 5	August 26	ALL EVENTS COMBINED
Tagish River	13	15	9	10	47
Nares River			2	5	7
Nares Lake				3	3
ALL AREAS COMBINED	13	15	11	18	57

All fish captured were assigned the mesh size within which they were captured. During fish processing, all fish were identified to species, measured to fork length (mm) and weighed (g) where possible. All least cisco captured were retained for ageing structure collection. Sex and maturity were determined for all fish mortalities and included the following classification: immature, maturing (will not spawn this year) and mature (will spawn this year).

Aside from least cisco, all fish captured were released when possible; ageing structures (i.e., otoliths) were collected from all incidental mortalities. Non-target species were placed in an aerated livewell to recover prior to being measured and promptly released. All ageing structures collected were sent to North/South Consultants Inc. in Winnipeg for analysis. Genetic samples were collected from all least cisco captured along with the incidental mortalities of other species (all samples remain at the EDI office in Whitehorse, Yukon). Stomach samples for future diet analysis were taken from a subsample of cisco. All fish sampling was led by a qualified fisheries biologist from EDI with assistance from CTRRC members. Two CTFN summer students (Daisy Gatensby and Roberta Wally) also assisted with a portion of the fieldwork and were given an introduction to fish sampling procedures.



- Legend**
- Least Cisco Sampling Sites
 - Major Road
 - Secondary Road
 - Trail

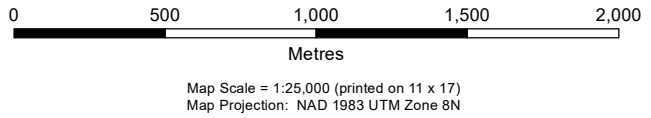
Overview of targeted small mesh gillnetting sets in the Tagish River during 2017

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Digital Elevation Model and 1:50,000 National Topographic Database (NTDB) provided by Geomatics Yukon - Yukon Government via online source (Corporate Spatial Warehouse) www.geomaticsyukon.ca.

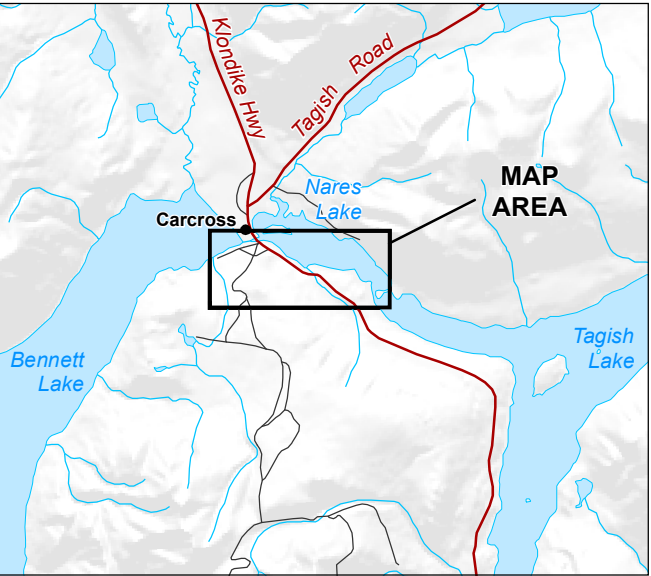
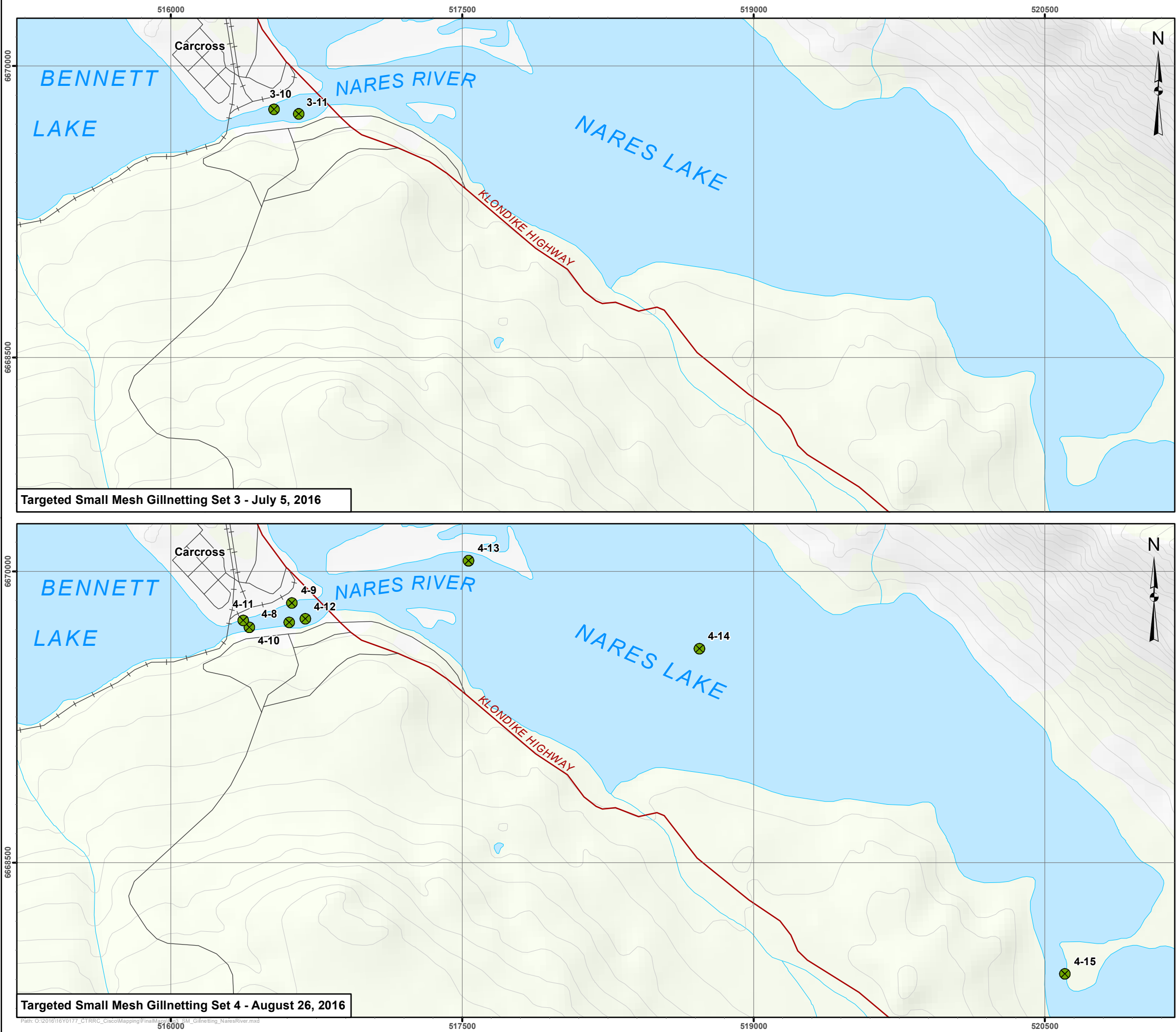
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This document is not an official land survey and the spatial data presented is subject to change.



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- Legend**
- Least Cisco Sampling Sites
 - Major Road
 - Secondary Road
 - Railway

Overview of targeted small mesh gillnetting sets in the Nares River and Nares Lake during 2017

1:50,000 and 1:250,000 Topographic Spatial Data courtesy of Her Majesty the Queen in Right of Canada, Department of Natural Resources. All Rights Reserved.

Digital Elevation Model and 1:50,000 National Topographic Database (NTDB) provided by Geomatics Yukon - Yukon Government via online source (Corporate Spatial Warehouse) www.geomaticsyukon.ca.

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3 RESULTS AND DISCUSSION

Sampling effort for least cisco in the Tagish River was primarily located in proximity to the Tagish River Bridge; a portion of the sampling was conducted elsewhere in the northern section of the river; no sampling was conducted at the south end (Tagish Lake) of the river. Cisco capture rates were consistently higher in two general locations including the west side of the river near the bridge, adjacent to the docks and south of the bridge; wooden structures north of the bridge near the outlet of Tagish Creek wetland (Figure 4).

Sampling effort in the Nares River was limited to a total of two sets during the July sampling event. These sets captured least cisco along the south shoreline of the river between the Nares River (South Klondike Highway) Bridge and the railway bridge (Figure 5). Sampling effort in the Nares system during August did not capture any least cisco but did include a number of sets in the Nares River and Nares Lake (Figure 5).

The results of the 2016 Tagish River and Nares River least cisco assessment are presented in the following sections including: species composition, seasonal differences in least cisco capture rates, length and age frequencies, maturity of least cisco and mesh size selectivity of least cisco.

3.1 SPECIES COMPOSITION

A total of 610 fish were captured during the four sampling events in the Tagish River with least cisco being the most frequently captured species, accounting for 67% of all fish captured (Table 2). Round whitefish were the second most frequently captured species (25%) followed by lake whitefish (7%). Three lake trout were also captured along with a single longnose sucker and northern pike.

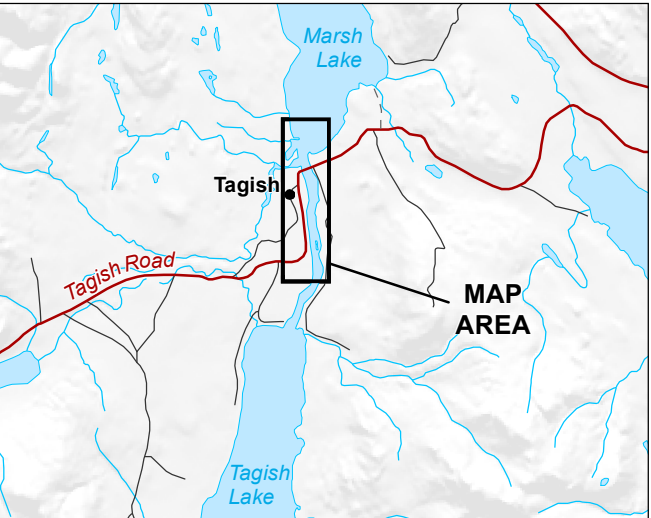
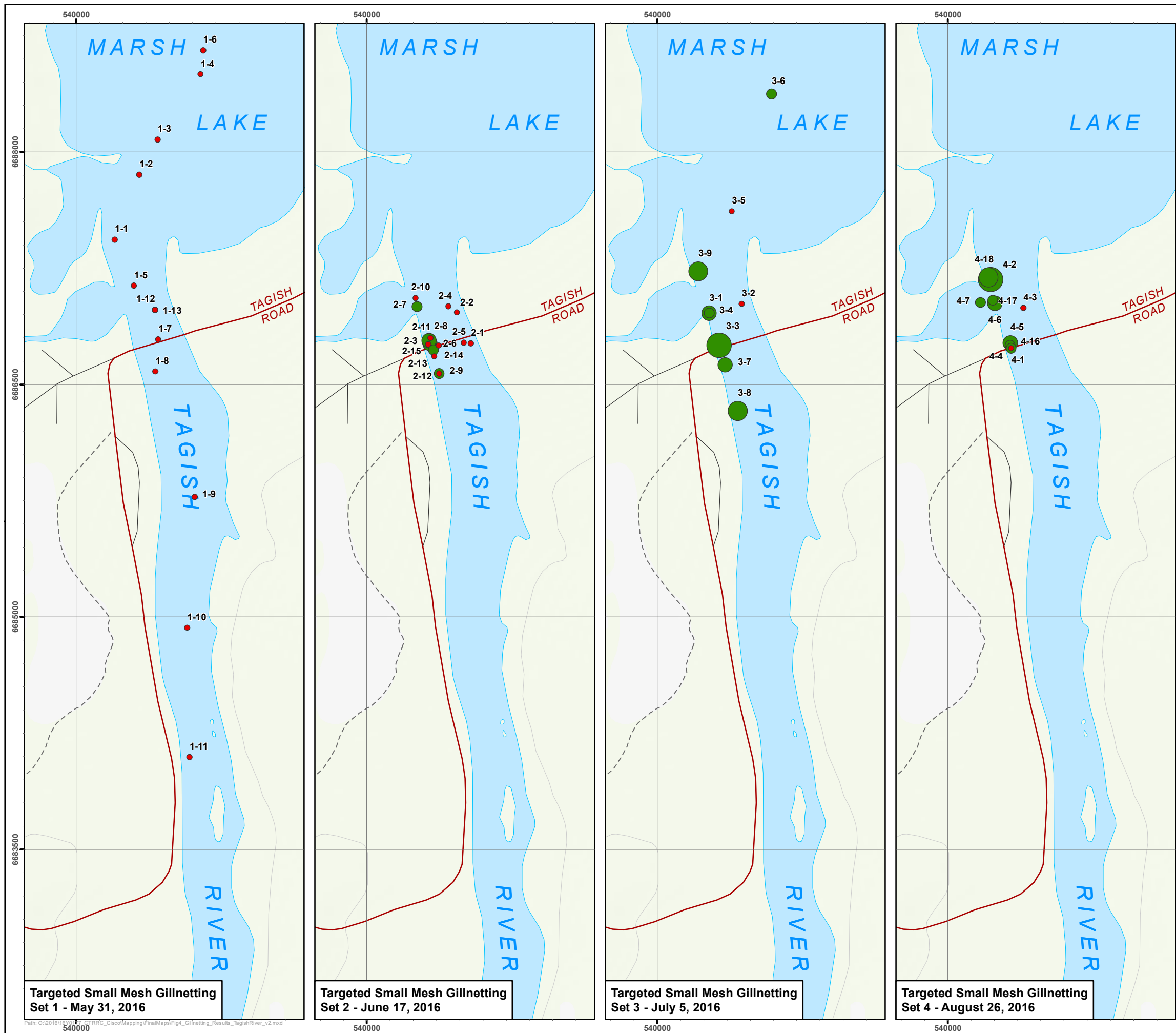
The results from Nares Lake/Nares River showed a similar result with least cisco accounting for 55% of the 87 fish captured, followed by round whitefish with 37% of all fish caught. The remainder of the catch in this sampling area was comprised of small numbers of lake trout, lake whitefish, longnose sucker and northern pike.

**Table 2. Summary of fish captured during targeted small mesh netting for least cisco in the Tagish River, 2016.**

Sampling Event	Species	Retained	Incidental Mortalities		Released / Escaped	TOTAL
			Juveniles	Adults		
May 31	Round whitefish	0	1	2	24	27
June 17	Least cisco	37	0	0	0	37
	Lake trout	0	0	0	3	3
	Lake whitefish	0	4	0	3	7
	Round whitefish	0	16	8	42	66
July 5	Least cisco	270	0	0	0	270
	Longnose sucker	0	0	0	1	1
	Lake whitefish	0	3	2	10	15
	Northern pike	0	0	0	1	1
	Round whitefish	0	8	6	36	50
August 26	Least cisco	101	0	0	0	101
	Lake whitefish	0	14	1	8	23
	Round whitefish	0	3	2	4	9
ALL EVENTS COMBINED	Least cisco	408	0	0	0	408
	Lake trout	0	0	0	3	3
	Longnose sucker	0	0	0	1	1
	Lake whitefish	0	21	3	21	45
	Northern pike	0	0	0	1	1
	Round whitefish	0	28	18	106	152

Table 3. Summary of fish captured during targeted small mesh netting for least cisco in Nares Lake and the Nares River (combined), 2016.

Sampling Event	Species	Retained	Incidental Mortalities		Released / Escaped	TOTAL
			Juveniles	Adults		
July 5	Least cisco	48	0	0	0	48
	Longnose sucker	0	0	0	1	1
	Round whitefish	0	0	0	3	3
August 26	Lake trout	0	0	0	2	2
	Lake whitefish	0	0	1	1	2
	Northern pike	0	0	0	2	2
	Round whitefish	0	11	2	16	29
ALL EVENTS COMBINED	Least cisco	48	0	0	0	48
	Lake trout	0	0	0	2	2
	Longnose sucker	0	0	0	1	1
	Lake whitefish	0	0	1	1	2
	Northern pike	0	0	0	2	2
	Round whitefish	0	11	2	19	32



Legend

Least Cisco Survey Results

- 0 Fish/Hour
- 1 - 9 Fish/Hour
- 10 - 29 Fish/Hour
- 30 - 43 Fish/Hour
- 44 - 70 Fish/Hour
- Major Road
- Secondary Road
- Trail

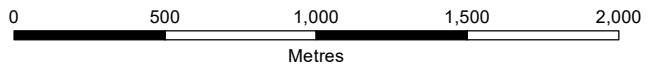
Overview of targeted small mesh gillnetting results in the Tagish River during 2017

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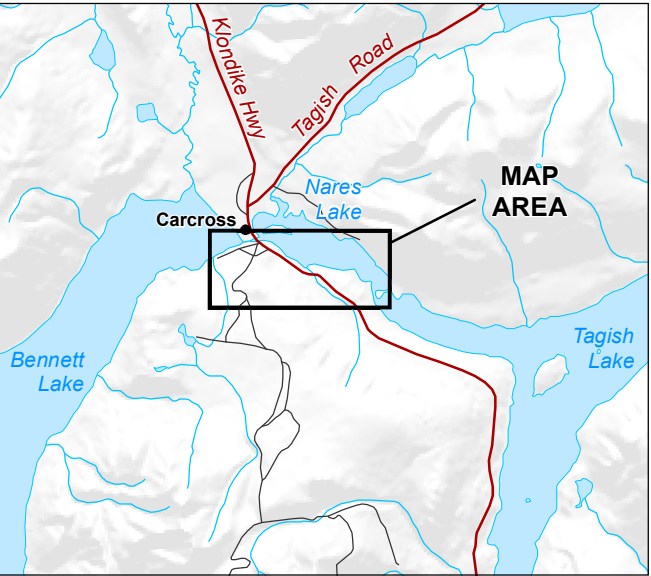
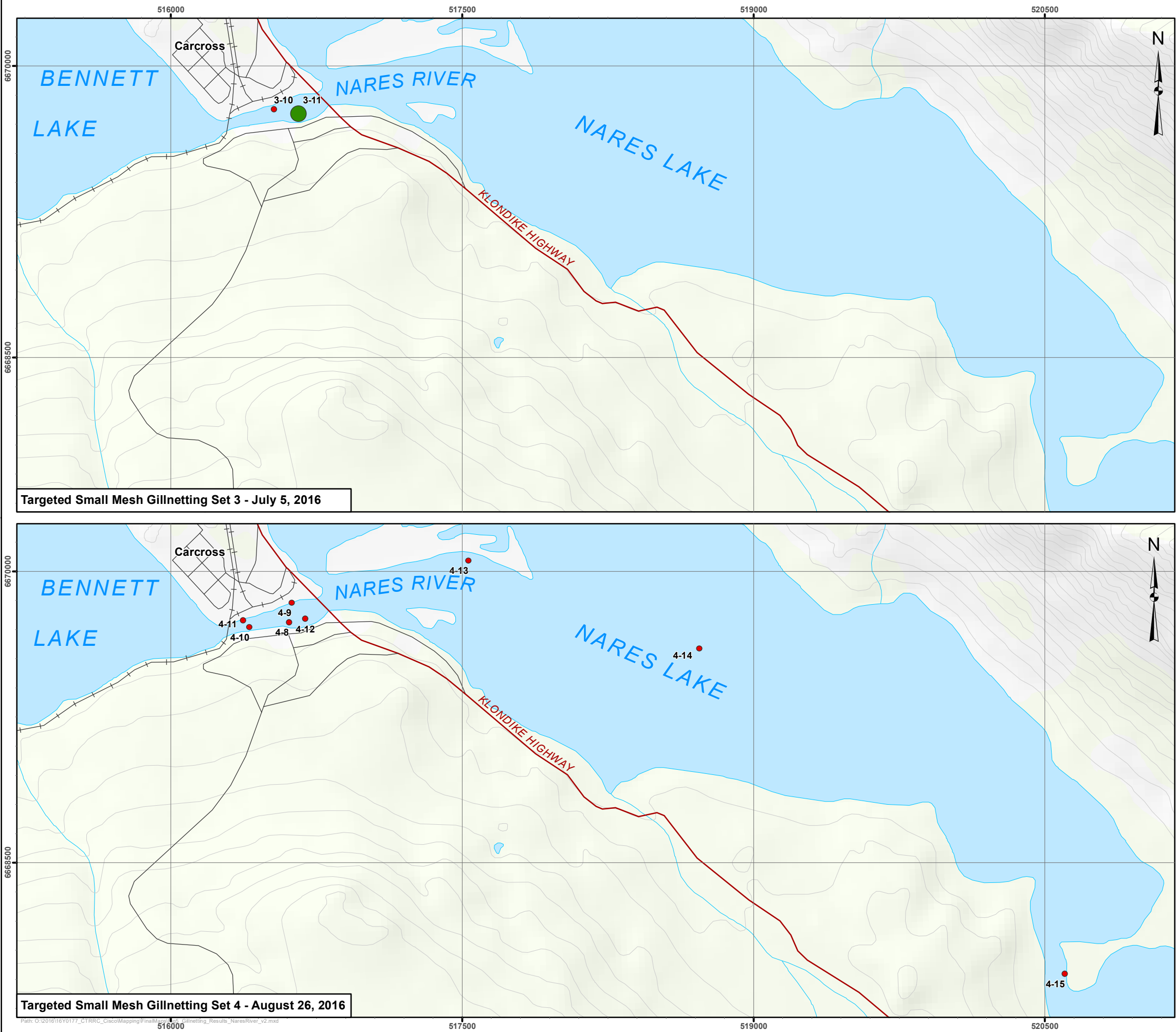
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Least Cisco Survey Results

- 0 Fish/Hour
- 90 Fish/Hour
- Major Road
- Secondary Road
- Railway

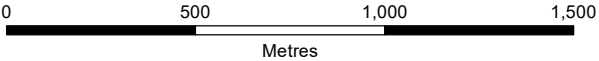
Overview of targeted small mesh gillnetting results in the Nares River and Nares Lake during 2017

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3.2 SEASONAL DIFFERENCES IN LEAST CISCO CAPTURE RATES

With four sampling events in the Tagish River during the summer of 2016, it is possible to investigate changes in capture rates throughout the season. Least cisco were captured during three of the four sampling events. Despite significant sampling effort over a wide range of habitats none were captured during the May 31 sampling event. The average capture rate of least cisco during the June sampling event was relatively low (2.63 cisco/hour; Figure 6). The highest capture rate during this sampling event was 11.58 cisco per hour and 10 of the 15 sets had zero cisco captured. This pattern would be expected for a species like cisco that exhibit strong schooling behavior. The average capture rate during the July sampling event was relatively high (23.91 cisco/hour; Figure 6) and cisco were captured in 7 of the 9 sets. There were also a number of sets with a high CPUE including 69.55 and 43.20 cisco/hour. The August sampling event had an average CPUE of 13.29 cisco/hour which was intermediate compared to the June and July sampling events. During August, cisco were captured in 8 out of 10 sets and the maximum set CPUE was 50.67 cisco/hour.

With only two sampling events in the Nares River/Nares Lake, it is not possible to draw comparisons in least cisco capture rates. The first sampling event (July 5) involved two sets in the Nares River, one of which captured zero cisco and the second of which captured a total of 48 cisco (90 cisco/hour). The second sampling event (August 26) involved 5 sets in the Nares River and 3 sets in Nares Lake with zero cisco captured. Additional sampling would be required to better understand seasonal differences in least cisco capture rates in the Nares River and/or Nares Lake.

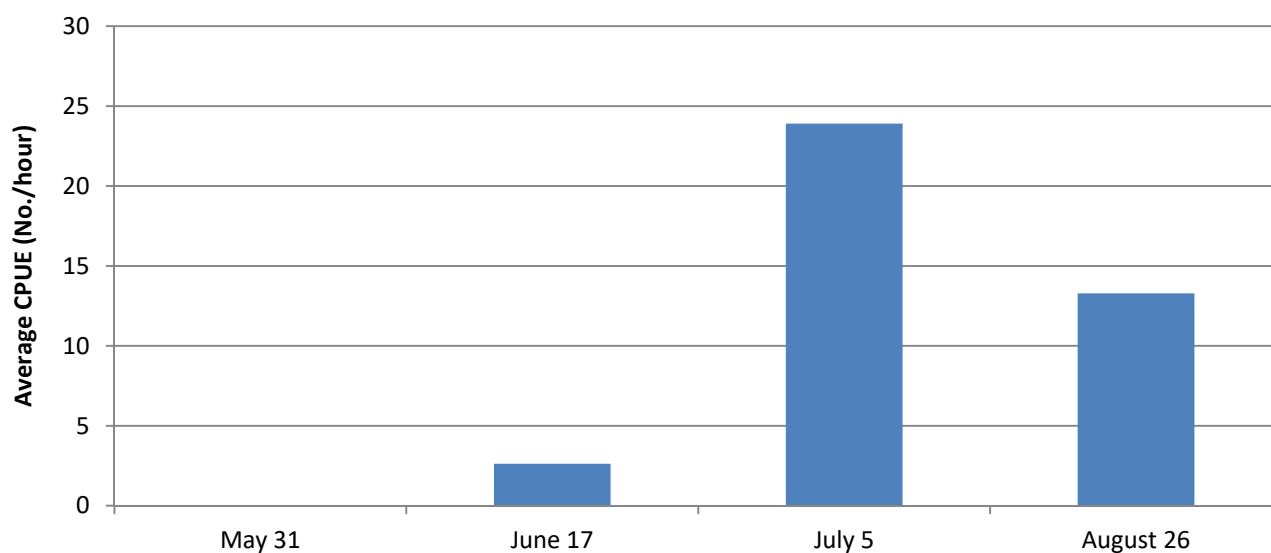


Figure 6. Average CPUE of least cisco during the four targeted small mesh netting sampling events in the Tagish River, 2016.

3.3 LENGTH AND AGE FREQUENCIES

Least cisco captured throughout the sampling program in the Tagish River ranged from 105 to 208 mm (fork length; Figure 7, Figure 8, Figure 9). The number of larger cisco (over 150 mm fork length) captured across the three summer sampling events was relatively consistent with 28 captured on June 17, 18 captured on July 5 and 26 captured on August 26. However, there were notable differences in the number of smaller cisco captured across sampling events. During June (Figure 7), only 9 cisco below 150 mm fork length were captured, accounting for 24% of the catch. This pattern was remarkably different during the July sampling event when smaller cisco dominated the catch (93%). The August sampling event showed a similar pattern to July, with cisco smaller than 150 mm accounting for 74% of the catch.

The length frequency data collected from the Nares River during the July sampling event showed that the cisco captured in this location were considerably larger than those captured in the Tagish River. The minimum size of cisco captured in the Nares River was 174 mm and the average length was 200.5 mm (Figure 10). The largest cisco captured during 2016 assessments were also captured in the Nares River and had a fork length of 240 mm (**Error! Reference source not found.**).



Photo 1. The largest least cisco captured during the 2016 sampling program, the individual pictured above was captured in the Nares River on July 5, had a fork length of 240 mm, was a mature female and aged at 5 years old.

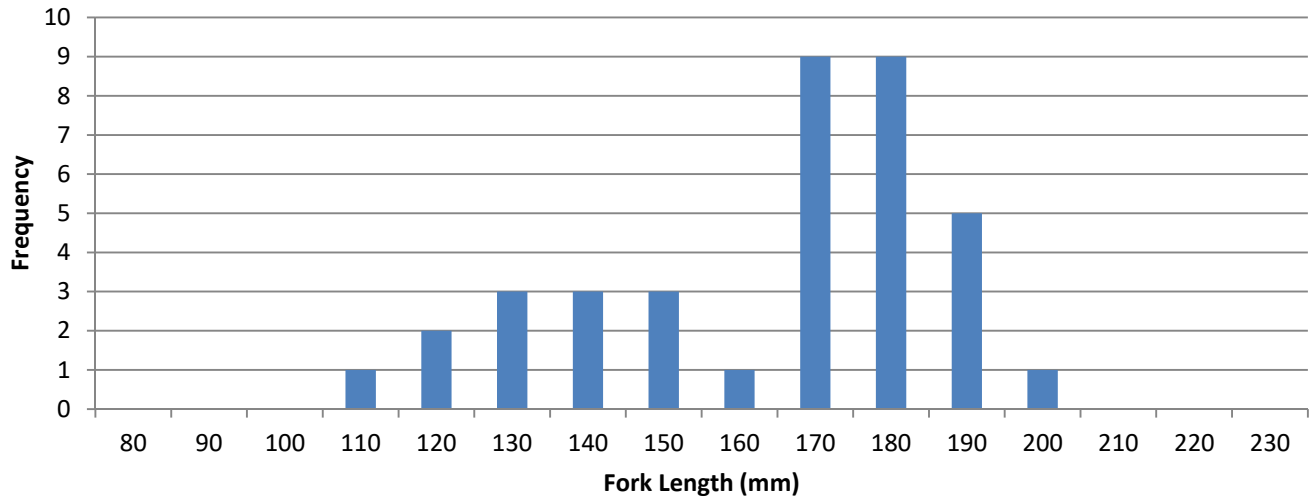


Figure 7. Least cisco length frequency diagram for the June 17, 2016 sampling event in the Tagish River (n=37).

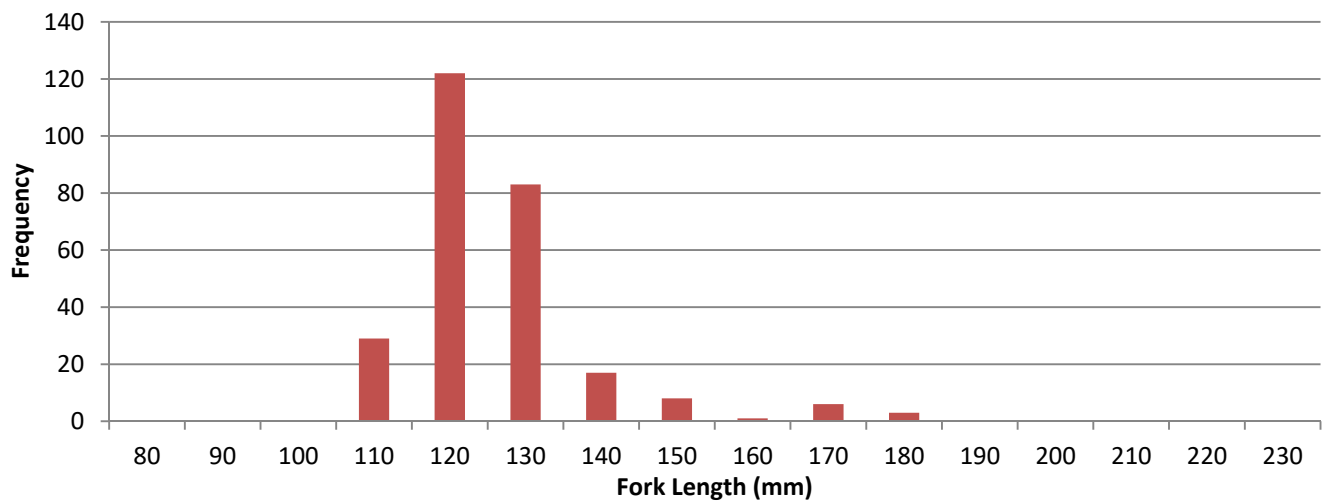


Figure 8. Least cisco length frequency diagram for the July 5, 2016 sampling event in the Tagish River (n=269).

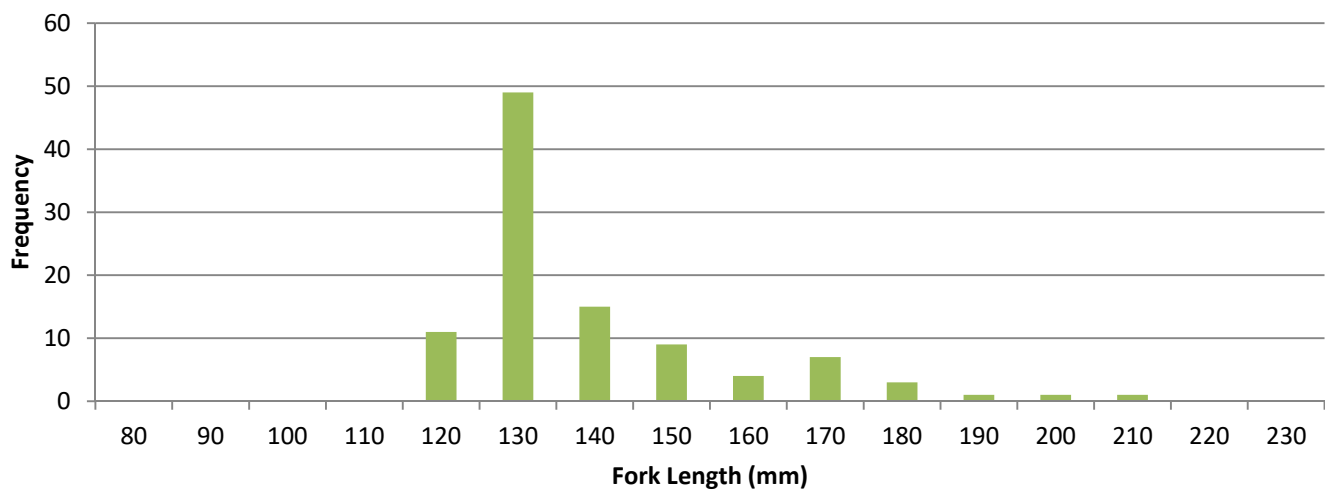


Figure 9. Least cisco length frequency diagram for the August 26, 2016 sampling event in the Tagish River (n=101).

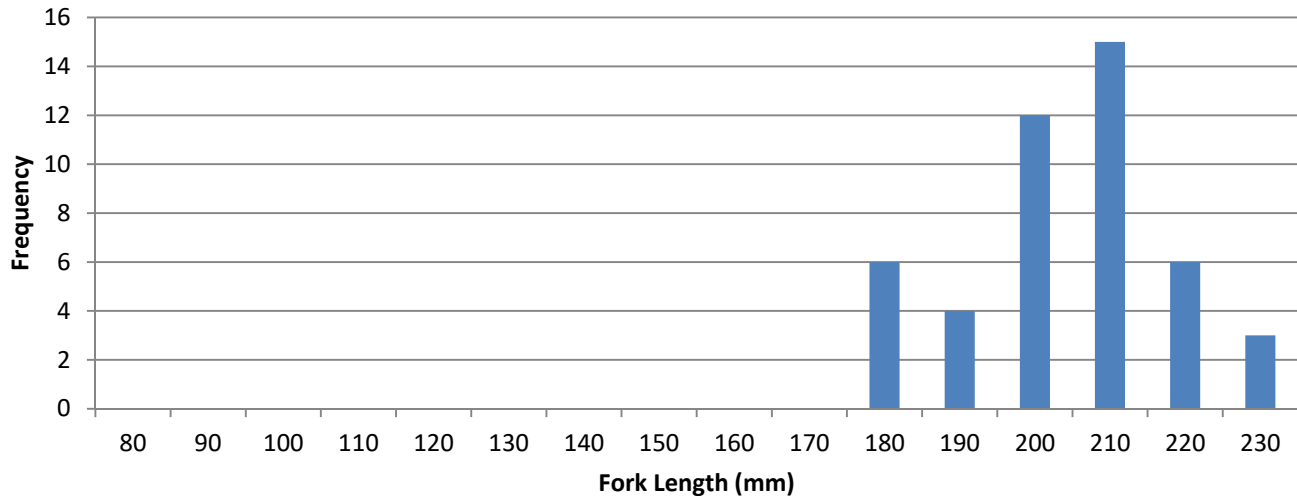


Figure 10. Least cisco length frequency diagram for the July 5, 2016 sampling event in the Nares River (n=48).

Length at age data of least cisco captured in the Tagish River during 2016 sampling showed some overlap in fork lengths between adjacent year classes (1 and 2, 2 and 3) but not between the 1 and 3 year old classes (Table 4). There was also evidence of considerable growth during the growing season amongst individual year classes, particularly between the July and August 26 sampling events. For example, the mean fork length of 1 year old fish increased from 119 to 130 mm, the 2 year olds from 135 to 162 mm and the 3 year olds from 170 to 198 mm.

Least cisco captured in the Nares River during the July 5 sampling event were comprised almost exclusively of a single year class; therefore, it is difficult to make inter-year comparisons due to low sample sizes.

Table 4. Summary of fork length at age data collected for least cisco captured in the Tagish River during 2016 (all fork lengths are displayed in mm).

Age	Tagish River												Nares River			
	June 17				July 5				August 26				July 5			
	N	Mean	Min	Max	N	Mean	Min	Max	N	Mean	Min	Max	N	Mean	Min	Max
1	7	123	109	146	228	119	105	146	86	130	115	165	0	-	-	-
2	8	150	135	176	28	135	119	162	12	162	137	199	1	-	199	-
3	21	174	165	191	8	170	162	180	2	198	187	208	42	201	174	225
4	1	-	165	-	0	-	-	-	0	-	-	-	4	196	193	201
5	0	-	-	-	0	-	-	-	0	-	-	-	1	-	240	-

A total of 418 least cisco were aged from the Tagish River and included 1 to 4 year old age classes (Figure 11). When data from all sample events is combined, the 1 year old class was most frequently captured (321 - 77%), followed by the 2 and 3 year old classes (each with 48 – 11%). A single 4 year old was captured



and accounted for less than 1% of the total catch. The 48 least cisco aged from the Nares River were dominated by 3 year old fish (88%) with four 4 year olds (8%) and single two and five year olds (Figure 12).

Results indicate a relatively low longevity and high natural mortality rates for the least cisco in Tagish and Nares rivers as indicated by the prevalence of younger fish with relatively few older fish and a maximum age of 5 years old. Age and length information collected on Tagish and Nares rivers during 2016 sampling is somewhat consistent with historical information from Teslin Lake which contains a similar non-migratory (non-anadromous) population. McPhail and Lindsay (1970) note that the oldest least cisco captured in Teslin Lake was eight years old and measured 249 mm long with the largest fish being 276 mm and aged as a 6 year old.

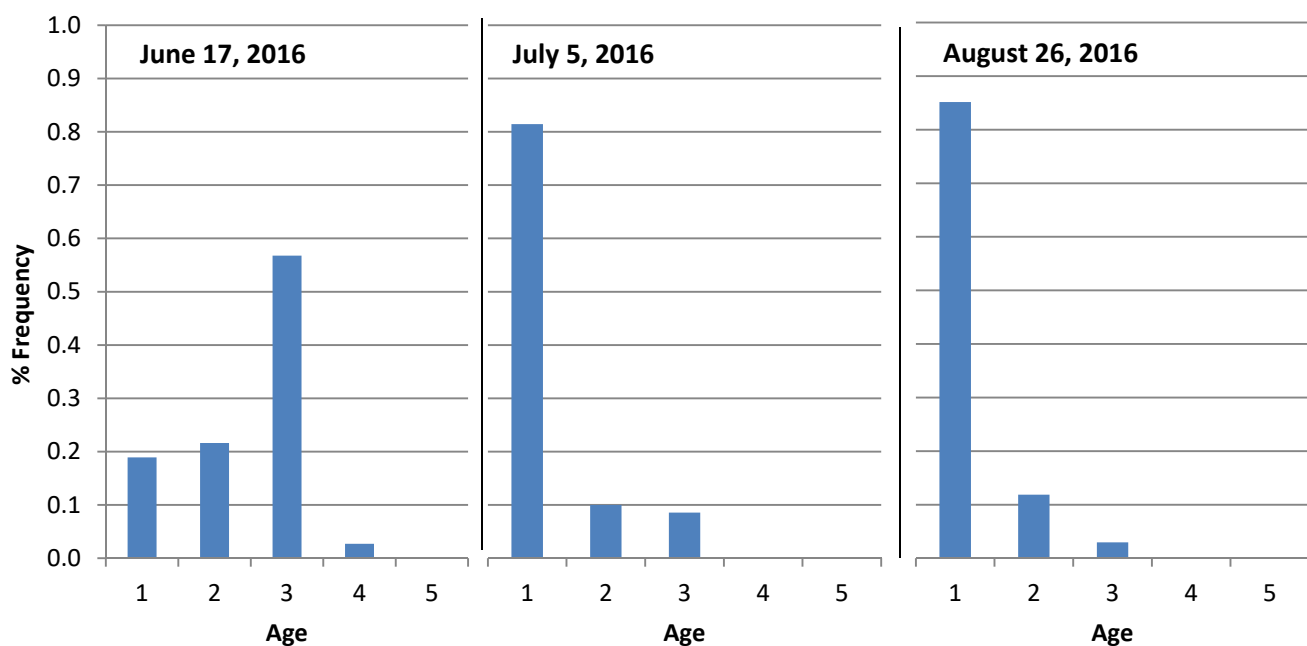


Figure 11. Age frequency of least cisco captured in the Tagish River.

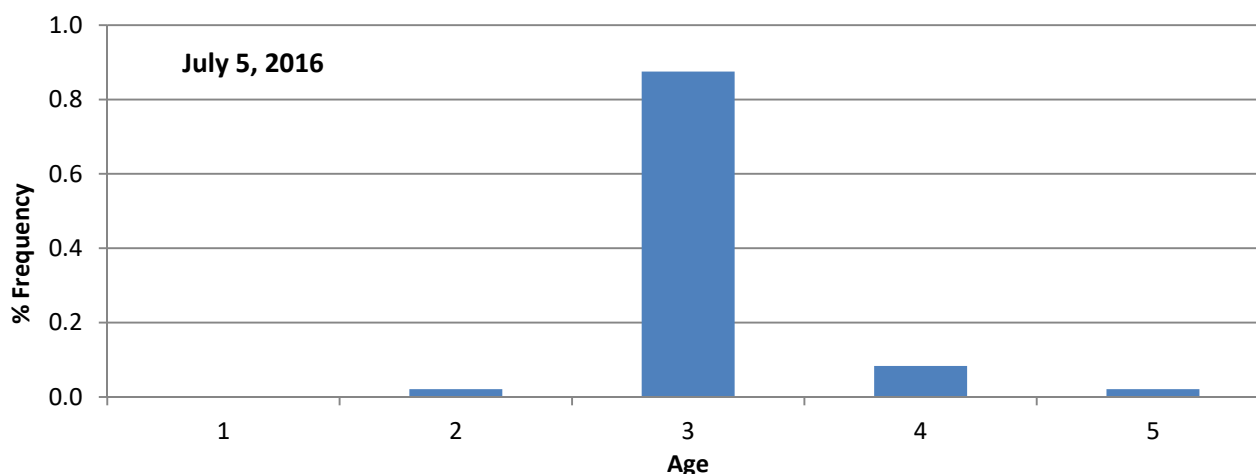


Figure 12. Age frequency of least cisco captured in the Nares River.

3.4 MATURITY OF LEAST CISCO

Maturity was successfully determined for 274 of the least cisco captured during the 2016 sampling program. A definitive qualitative measure of maturity could not be determined for a number of the remaining samples and these samples are excluded from the following analysis. Across all sampling events in the Tagish River, least cisco captured aged 3 and 4 were mature (Figure 13) and the majority (28 of 32) were females. The 2 year old class included both mature and maturing individuals with an increase in mature fish over the summer duration of the sampling program. The 1 year old captured during the first sampling event were dominated by immature individuals; however, the prevalence of maturing fish increased considerably in July and by the August sampling event, many individuals in this year class were classified as mature.

Least cisco captured in the Nares River were dominated by mature individuals which was expected due to the relatively large fork lengths of the individuals captured; however, 9 of the 42 three year olds captured in the Nares River were classified as maturing. In contrast, the results from the Tagish River where all 3 year olds were mature may indicate one of two patterns. Additional sampling is required to confirm. Least cisco in the Nares and Tagish rivers could be different forms with the form in the Nares River maturing at an older age. Alternatively, these maturing adults could represent sexually mature individuals which were not going to spawn in the current year (i.e., not spawn every year). Such a life history approach is not uncommon in northern fish species (such as lake trout or lake whitefish; McPhail 2007) and is likely an adaptation to the relatively short growing season in Yukon lakes and the food resources required to produce eggs/milt.

Collectively, the information compiled on maturity indicate rapid maturation of least cisco in the Southern Lakes system with a proportion of the individuals spawning for the first time at the end of their second growing season (as a 1 year old). This pattern of early maturity is what would be expected for a species that exhibits low longevity due to high natural mortality rates and a maximum effective reproductive life span of only 3 years.



Photo 2. Close-up of mature female cisco captured in the Tagish River during the August 26 sampling event. This individual measured 165 mm fork length and was aged as a 2 year old.

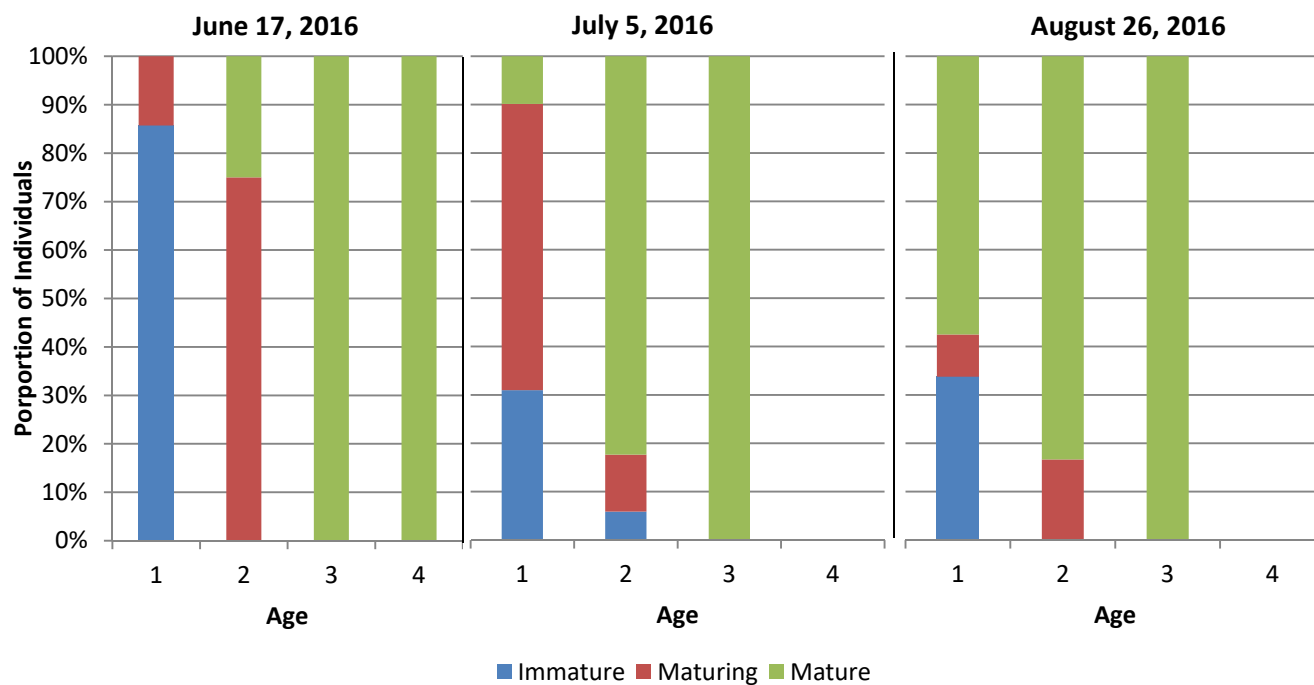


Figure 13. Proportion of immature, maturing and mature least cisco captured in the Tagish River.



3.5 MESH SIZE SELECTIVITY OF LEAST CISCO

Least cisco are highly selective to different mesh sizes due to their laterally compressed body shape and lack of large fins or teeth. The three primary mesh sizes used during 2016 sampling events included the 25 mm (1.0 inch), 38 mm (1.5 inch) and 51 mm (2.0 inch) mesh sizes. Due to this high selectivity and limited success using the 51 mm (2.0 inch) mesh size, 32 mm (1.25 inch) and 44 mm (1.75 inch) mesh sizes were added to the sampling program in August.

Of the 456 least cisco captured the largest proportion (77%) of fish were captured in the 25 mm (1.0 inch) mesh panel. The fish captured in this mesh size were relatively small with a range of 105 to 153 mm and a mean fork length of 122 mm. The 38 mm (1.5 inch) mesh size captured the second largest proportion of cisco, accounting for 19% of the total catch. This mesh size primarily captured larger cisco (mean fork length = 188 mm) and did not overlap with the size class of cisco captured in the 25 mm mesh. The 32 mm (1.25 inch) mesh did not catch a large proportion of the cisco; however, this is likely due to this mesh size only being used during August sampling. This mesh size did fill the gap between the 25 and 38 mm mesh sizes and had complete overlap with the aforementioned mesh sizes. The 44 mm (1.75 inch) mesh captured only one cisco during the August sampling event (fork length = 165 mm) and the 51 mm (2.0 inch) mesh did not capture any cisco. These findings indicate that future sampling efforts for least cisco should consider using the 25, 32 and 38 mm mesh sizes to adequately sample all sizes of least cisco. Consideration should also be given to using 19 mm (3/4 inch) mesh as no young of the year were captured in the sampling events later in the year. This may indicate that fish are not present in the river or that capture was unsuccessful due to mesh selectivity. The removal of the 51 mm mesh size will also help to reduce the number of incidental mortalities of non-target species such as round and lake whitefish.

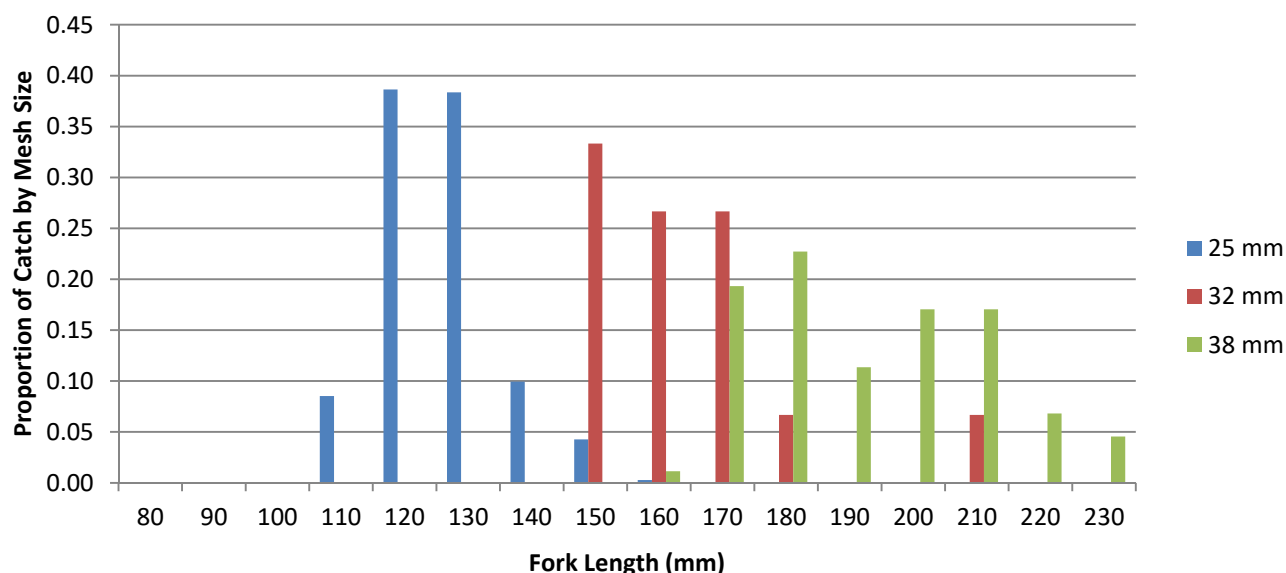


Figure 14. Proportion of least cisco captured by mesh size and fork length in the Tagish River and Nares River (combined), 2016.



4 CONCLUSION

Field studies undertaken in 2016 have improved the understanding of least cisco life history in the Southern Lakes. Least cisco were captured in Tagish River during June, July and August with the highest capture rate during July. A limited amount of sampling was conducted in Nares River and Nares Lake with cisco captured in July only.

The information collected on length, age and maturity indicate that least cisco in the Southern Lakes have a relatively low longevity, particularly when compared with other, slow growing fish species in the system such as lake trout and lake whitefish. The vast majority of least cisco captured were 1 or 2 years old and the maximum age recorded was 5 years. Evidence of low longevity and high natural mortality (most fish absent from population after age 3), indicates a rapid rate of maturation with many fish becoming sexually mature by the end of the second growing season; nearly all fish were found to be sexually mature at 3 years or older.

The mesh size selectivity analysis indicates that future sampling efforts for least cisco in the system should include the 25 mm (1.0 inch), 32 mm (1.25 inch) and 38 mm (1.5 inch) mesh sizes, as well as 19 mm (3/4 inch) mesh. This may determine if young of the year are absent due to mesh selectivity or another reason such as presence in the river as of the second growing season. Ensuring proper mesh size for least cisco capture will promote sampling across all size classes while reducing the number of incidental mortalities of other fish species.

While it is difficult to make definitive conclusions about the current abundance of least cisco populations in the Tagish River area, data collected during 2016 sampling indicates that cisco populations are likely healthy with evidence of regular annual recruitment and no missing year classes. Although sampling effort in the Nares River was limited, the presence of primarily one year class (age 3) raises questions about the relative health of this population and additional sampling throughout the spring and summer season is necessary to confirm. This is particularly relevant given that historical traditional and local knowledge indicates that this population has undergone a significant decline in abundance since the 1960s.

There is too much uncertainty to accurately identify the cause of long term changes in cisco abundance at Nares and Tagish River. Aggregations of lake trout in Tagish and Nares rivers during the summer months when cisco are most abundant and the effectiveness of cisco bait in catching lake trout at these locations is well established. It is known from diet analysis conducted by the Department of Environment that cisco constitute a major portion of the lake trout diet in the Southern Lakes. Lake trout are the dominant predator in the Southern Lakes and the abundance of prey populations such as least cisco would be highly sensitive to changes in abundance of lake trout; however, changes in the health of least cisco populations (such as regular annual recruitment) are not likely to be affected by increased predation. Changes in reproductive success are more likely to be the result of changes to critical habitats (spawning or rearing), changes in water quality/hydrology or other environmental factors.

It is currently unknown where cisco spawn making it challenging to understand population dynamics. It is also unknown if there are ecologically or genetically distinct populations of least cisco in the Tagish and Nares rivers and how these populations relate to lake based populations. Baseline genetic sampling of lake



cisco populations in these areas during the summer months and at spawning areas is necessary to establish these relationships.

Additional research on least cisco populations in the Southern Lakes should consider the following potential activities:

- Additional sampling in the Nares River/Nares Lake during June, July and August to determine seasonal differences in abundance and collect basic life history information (length, maturity, age) which is consistent with the data collected in the Tagish River during 2016 sampling. All least cisco captured should continue to be sampled for genetics for future analysis.
- Additional sampling in the Southern Lakes system during the summer months to collect genetic samples and basic life history information on least cisco. Locations to be selected based upon the CTRRC's ongoing local and traditional knowledge data gathering but may include Bennett and/or Tagish lakes.
- A trial project involving acoustic transmitters to track least cisco movements in the Southern Lakes using the Yukon Government's existing array of hydroacoustic receivers in the system.
- Sampling for spawning least cisco during the probable spawning period (late fall) with the locations and timing to be based upon input from regional experts and CTRRC's ongoing local and traditional knowledge data gathering exercise.



5 LITERATURE CITED

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- Yukon Government. 2016. Yukon fishing regulations summary (2016-2017). Available online: <http://www.env.gov.yk.ca/hunting-fishing-trapping/documents/FishRegs16-17.pdf>

5.1 PERSONAL COMMUNICATIONS

- Toews, D. 2016. Carcross Tagish Renewable Resources Council member. Personal communication with EDI on January 23, 2017.

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APPENDIX A. SAMPLING DATA

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Table A1. Targeted small mesh gillnetting set data.

Waterbody	Date	Set ID	Latitude	Longitude	Set Time	Pull Time	Duration (min)	Net Composition	# of Panels	Net Length (m)	Depth In (m)	Depth Out (m)
Tagish River	31-May-16	1-1	60.321	-134.271	9:05	9:47	0:42	A	3	68.4	4	4.6
Tagish River	31-May-16	1-2	60.325	-134.268	9:15	10:13	0:58	A	3	68.4	2.1	4.2
Tagish River	31-May-16	1-3	60.327	-134.266	9:58	10:40	0:42	A	3	68.4	5.2	5.4
Tagish River	31-May-16	1-4	60.331	-134.261	10:24	11:10	0:46	A	3	68.4	2.4	2.9
Tagish River	31-May-16	1-5	60.319	-134.269	10:55	11:28	0:33	A	3	68.4	2.1	2.4
Tagish River	31-May-16	1-6	60.332	-134.261	11:18	12:18	1:00	A	3	68.4	3.2	12.4
Tagish River	31-May-16	1-7	60.316	-134.266	11:40	12:34	0:54	A	3	68.4	2.2	2.4
Tagish River	31-May-16	1-8	60.314	-134.267	12:27	13:27	1:00	A	3	68.4	1.8	2.4
Tagish River	31-May-16	1-9	60.306	-134.262	12:46	13:43	0:57	A	3	68.4	2.1	2.3
Tagish River	31-May-16	1-10	60.299	-134.263	13:38	14:28	0:50	A	3	68.4	1.8	2.2
Tagish River	31-May-16	1-11	60.291	-134.263	13:50	14:41	0:51	A	3	68.4	2.4	3.1
Tagish River	31-May-16	1-12	60.317	-134.267	14:34	15:30	0:56	A	3	68.4	2	2.1
Tagish River	31-May-16	1-13	60.317	-134.267	14:33	15:40	1:07	A	3	68.4	4.1	2.9
Tagish River	17-Jun-16	2-1	60.315	-134.264	8:46	9:45	0:59	A	3	68.4	1.1	1.2
Tagish River	17-Jun-16	2-2	60.317	-134.265	8:52	9:30	0:38	A	3	68.4	1.9	2.1
Tagish River	17-Jun-16	2-3	60.315	-134.269	8:58	9:55	0:57	A	3	68.4	1.6	2.1
Tagish River	17-Jun-16	2-4	60.318	-134.266	9:35	10:52	1:17	A	3	68.4	1.3	1.8
Tagish River	17-Jun-16	2-5	60.315	-134.265	9:48	11:05	1:17	A	3	68.4	1.7	2.1
Tagish River	17-Jun-16	2-6	60.315	-134.268	9:45	11:15	1:30	A	3	68.4	1.8	1.9
Tagish River	17-Jun-16	2-7	60.318	-134.27	11:03	11:44	0:41	A	3	68.4	0.9	1.4
Tagish River	17-Jun-16	2-8	60.316	-134.269	11:13	11:56	0:43	A	3	68.4	0.9	1.3
Tagish River	17-Jun-16	2-9	60.314	-134.267	11:24	12:10	0:46	A	3	68.4	0.9	0.9
Tagish River	17-Jun-16	2-10	60.318	-134.27	12:53	13:21	0:28	A	3	68.4	1.7	1.8
Tagish River	17-Jun-16	2-11	60.316	-134.268	13:05	14:05	1:00	A	3	68.4	2.2	1.9
Tagish River	17-Jun-16	2-12	60.314	-134.267	13:16	14:10	0:54	A	3	68.4	0.9	0.9
Tagish River	17-Jun-16	2-13	60.315	-134.268	14:30	15:34	1:04	A	3	68.4	1.7	2
Tagish River	17-Jun-16	2-14	60.315	-134.268	14:44	15:41	0:57	A	3	68.4	2.4	3.2
Tagish River	17-Jun-16	2-15	60.315	-134.269	15:03	15:54	0:51	A	3	68.4	0.9	1.3
Tagish River	5-Jul-16	3-1	60.317	-134.27	8:00	9:10	1:10	B	6	136.8	1.4	1.6
Tagish River	5-Jul-16	3-2	60.318	-134.266	8:10	9:30	1:20	A	3	68.4	1.6	2
Tagish River	5-Jul-16	3-3	60.315	-134.269	8:15	9:43	1:28	A	3	68.4	1.4	1.6
Tagish River	5-Jul-16	3-4	60.317	-134.27	9:26	10:05	0:39	B	6	136.8	1.4	1.6



Waterbody	Date	Set ID	Latitude	Longitude	Set Time	Pull Time	Duration (min)	Net Composition	# of Panels	Net Length (m)	Depth In (m)	Depth Out (m)
Tagish River	5-Jul-16	3-5	60.323	-134.267	9:40	10:15	0:35	A	3	68.4	1.1	1.4
Tagish River	5-Jul-16	3-6	60.33	-134.262	10:24	11:35	1:11	B	6	136.8	2	4.7
Tagish River	5-Jul-16	3-7	60.314	-134.268	10:31	12:02	1:31	A	3	68.4	1.1	1.6
Tagish River	5-Jul-16	3-8	60.312	-134.267	12:14	13:04	0:50	A	3	68.4	1.2	2.2
Tagish River	5-Jul-16	3-9	60.32	-134.271	12:22	13:16	0:54	A	3	68.4	1.4	2
Nares River	5-Jul-16	3-10	60.165	-134.702	14:32	14:52	0:20	A	3	68.4	2.7	2.1
Nares River	5-Jul-16	3-11	60.164	-134.7	14:38	15:10	0:32	A	3	68.4	0.9	2
Tagish River	26-Aug-16	4-1	60.315	-134.269	8:22	8:49	0:27	C	4	91.2	2.4	2.3
Tagish River	26-Aug-16	4-2	60.319	-134.271	8:57	9:42	0:45	C	4	91.2	2.1	2.5
Tagish River	26-Aug-16	4-3	60.317	-134.267	9:06	9:59	0:53	A	3	68.4	3.1	3.6
Tagish River	26-Aug-16	4-4	60.315	-134.269	9:13	10:10	0:57	A	3	68.4	1.8	2.6
Tagish River	26-Aug-16	4-5	60.315	-134.269	10:15	10:50	0:35	A	3	68.4	1.5	2.7
Tagish River	26-Aug-16	4-6	60.318	-134.27	10:20	10:57	0:37	C	4	91.2	1.6	2.7
Tagish River	26-Aug-16	4-7	60.318	-134.272	10:25	11:07	0:42	A	3	68.4	1.5	1.9
Nares River	26-Aug-16	4-8	60.164	-134.701	12:21	13:00	0:39	C	4	91.2	1.5	3.7
Nares River	26-Aug-16	4-9	60.165	-134.7	12:26	13:05	0:39	A	3	68.4	1.2	1.6
Nares River	26-Aug-16	4-10	60.164	-134.704	13:04	13:44	0:40	A	3	68.4	1.5	6.8
Nares River	26-Aug-16	4-11	60.164	-134.705	13:15	13:51	0:36	A	3	68.4	3.6	1.9
Nares River	26-Aug-16	4-12	60.164	-134.699	13:20	14:03	0:43	A	3	68.4	1.6	1.7
Nares Lake	26-Aug-16	4-13	60.167	-134.684	14:12	14:40	0:28	A	3	68.4	1.8	2.3
Nares Lake	26-Aug-16	4-14	60.163	-134.663	14:21	14:49	0:28	C	4	91.2	2.2	7.7
Nares Lake	26-Aug-16	4-15	60.148	-134.629	14:30	15:10	0:40	A	3	68.4	1.5	3.1
Tagish River	26-Aug-16	4-16	60.315	-134.269	16:12	16:57	0:45	A	3	68.4	1.6	2.6
Tagish River	26-Aug-16	4-17	60.318	-134.271	16:17	17:14	0:57	C	4	91.2	1.9	2.7
Tagish River	26-Aug-16	4-18	60.319	-134.271	16:22	17:21	0:59	A	3	68.4	2.1	2.6

Notes:

Net composition codes as follows: A – single panels of 25 mm (1.0 inch), 38 mm (1.5 inch) and 51 mm (2.0 inch) mesh; B - two panels of 25 mm (1.0 inch), 38 mm (1.5 inch) and 51 mm (2.0 inch) mesh; C - single panels of 25 mm (1.0 inch), 32 mm (1.25 inch), 38 mm (1.50 inch) and 44 mm (1.75 inch) mesh.



Table A2. Targeted small mesh gillnetting fish capture data.

Waterbody	Date	Set ID	Fish #	Species	Mesh Size (mm)	Condition	Fork Length (mm)	Age	Weight (g)	Sex	Maturity code
Tagish River	31-May-16	1-1	1	RW	51	RE	280				
Tagish River	31-May-16	1-1	2	RW	51	RE	285				
Tagish River	31-May-16	1-1	3	RW	51	RE	270				
Tagish River	31-May-16	1-1	4	RW	51	RE	305				
Tagish River	31-May-16	1-2	5	RW	38	RE	285				
Tagish River	31-May-16	1-2	6	RW	38	RE	340				
Tagish River	31-May-16	1-2	7	RW	51	RG	290				
Tagish River	31-May-16	1-2	8	RW	51	RP	305				
Tagish River	31-May-16	1-3	9	RW	51	RG	283				
Tagish River	31-May-16	1-3	10	RW	51	RE	260				
Tagish River	31-May-16	1-3	11	RW	51	RE	245				
Tagish River	31-May-16	1-3	12	RW	51	RG	255				
Tagish River	31-May-16	1-7	13	RW	51	RF	305				
Tagish River	31-May-16	1-7	14	RW	51	RF	265				
Tagish River	31-May-16	1-8	15	RW	38	KD	285		190	F	3
Tagish River	31-May-16	1-10	16	RW	38	RE	207				
Tagish River	31-May-16	1-11	16	RW	51	RE	295				
Tagish River	31-May-16	1-10	17	RW	38	RG	245				
Tagish River	31-May-16	1-12	17	RW	51	RE	270				
Tagish River	31-May-16	1-10	18	RW	38	RE	223				
Tagish River	31-May-16	1-12	18	RW	51	RE	310				
Tagish River	31-May-16	1-13	19	RW	38	RE	235				
Tagish River	31-May-16	1-13	20	RW	38	RE	235				
Tagish River	31-May-16	1-13	21	RW	38	KD	251		150	m	1
Tagish River	31-May-16	1-13	22	RW	38	KD	270		175	m	3
Tagish River	31-May-16	1-13	23	RW	51	RP	305				
Tagish River	31-May-16	1-13	24	RW	51	RP	295				
Tagish River	17-Jun-16	2-1	25	LW	51	RE	260				
Tagish River	17-Jun-16	2-1	26	LW	51	KD	218		103.6	U	1
Tagish River	17-Jun-16	2-3	27	RW	51	RE	330				
Tagish River	17-Jun-16	2-3	28	RW	51	RG	235				
Tagish River	17-Jun-16	2-3	29	RW	38	RG	255				
Tagish River	17-Jun-16	2-3	30	LC	38	KD	176	3	48.2	F	3
Tagish River	17-Jun-16	2-3	31	LC	38	KD	181	3	56.7	F	3
Tagish River	17-Jun-16	2-3	32	RW	38	KD	200		67	U	1
Tagish River	17-Jun-16	2-3	33	LC	38	KD	169	3	45.8	M	3
Tagish River	17-Jun-16	2-3	34	LC	38	KD	165	3	44.8	F	3
Tagish River	17-Jun-16	2-3	35	LC	38	KD	181	3	50.5	F	3



Waterbody	Date	Set ID	Fish #	Species	Mesh Size (mm)	Condition	Fork Length (mm)	Age	Weight (g)	Sex	Maturity code
Tagish River	17-Jun-16	2-3	36	LC	38	KD	171	3	47.5	F	3
Tagish River	17-Jun-16	2-3	37	LC	38	KD	171	2	46.1	F	3
Tagish River	17-Jun-16	2-3	38	LC	38	KD	176	3	47.7	F	3
Tagish River	17-Jun-16	2-3	39	LC	38	KD	171	3	47	F	3
Tagish River	17-Jun-16	2-3	40	RW	25	KD	138		21	U	1
Tagish River	17-Jun-16	2-3	41	LC	25	KD	128	1	16.3	M	1
Tagish River	17-Jun-16	2-3	42	LC	25	KD	115	1	13.2	M	1
Tagish River	17-Jun-16	2-4	43	RW	51	RG	235				
Tagish River	17-Jun-16	2-4	44	RW	51	KD	295		232.6	M	3
Tagish River	17-Jun-16	2-5	45	RW	51	RE	305				
Tagish River	17-Jun-16	2-5	46	RW	51	RE	260				
Tagish River	17-Jun-16	2-5	47	RW	38	RE	210				
Tagish River	17-Jun-16	2-5	48	RW	38	RE	220				
Tagish River	17-Jun-16	2-6	49	RW	51	RE	265				
Tagish River	17-Jun-16	2-6	50	RW	25	RP	125				
Tagish River	17-Jun-16	2-6	51	LC	38	KD	180	3	46.4	F	3
Tagish River	17-Jun-16	2-6	52	LC	38	KD	165	3	40.9	F	3
Tagish River	17-Jun-16	2-6	53	LW	38	KD	156		37.4	U	1
Tagish River	17-Jun-16	2-6	54	LC	38	KD	170	3	43.3	F	3
Tagish River	17-Jun-16	2-6	55	LC	38	KD	190	3	58.5	F	3
Tagish River	17-Jun-16	2-6	56	LC	38	KD	183	3	50.6	F	3
Tagish River	17-Jun-16	2-6	57	LC	38	KD	171	3	47	F	3
Tagish River	17-Jun-16	2-6	58	LC	38	KD	176	2	45.7	F	3
Tagish River	17-Jun-16	2-6	59	LC	38	KD	166	3	42.7	F	3
Tagish River	17-Jun-16	2-6	60	LC	38	KD	165	4	45.2	F	3
Tagish River	17-Jun-16	2-6	61	LC	38	KD	165	3	41.5	F	3
Tagish River	17-Jun-16	2-6	62	LC	38	KD	191	3	62.2	F	3
Tagish River	17-Jun-16	2-6	63	RW	38	KD	202		71.8	U	1
Tagish River	17-Jun-16	2-7	64	LC	25	KD	146	1	22.2	F	2
Tagish River	17-Jun-16	2-7	65	LC	25	KD	138	2	21.7	F	2
Tagish River	17-Jun-16	2-7	66	RW	38	RE	230				
Tagish River	17-Jun-16	2-7	67	RW	38	RE	230				
Tagish River	17-Jun-16	2-7	68	RW	51	RG	370				
Tagish River	17-Jun-16	2-8	69	RW	51	KD	355			F	3
Tagish River	17-Jun-16	2-8	70	RW	51	E					
Tagish River	17-Jun-16	2-8	71	RW	38	KD	210		80	U	1
Tagish River	17-Jun-16	2-8	72	LC	38	KD	184	3	51.6	F	3
Tagish River	17-Jun-16	2-8	73	LC	38	KD	168	3	42.3	M	3
Tagish River	17-Jun-16	2-8	74	LC	38	KD	170	3	46.8	F	3



Waterbody	Date	Set ID	Fish #	Species	Mesh Size (mm)	Condition	Fork Length (mm)	Age	Weight (g)	Sex	Maturity code
Tagish River	17-Jun-16	2-8	75	RW	38	KD	210		78.7	U	1
Tagish River	17-Jun-16	2-8	76	LC	25	KD	149	2	30.3	F	2
Tagish River	17-Jun-16	2-8	77	LC	25	KD	141	2	23.8	M	2
Tagish River	17-Jun-16	2-8	78	LC	25	KD	153	2	30.6	F	2
Tagish River	17-Jun-16	2-8	79	LC	38	KD	179	3	51.6	F	3
Tagish River	17-Jun-16	2-9	80	RW	38	KD	205		71.3	U	1
Tagish River	17-Jun-16	2-9	81	RW	38	RE	225				
Tagish River	17-Jun-16	2-9	82	LW	38	KD	160		38.6	U	1
Tagish River	17-Jun-16	2-9	83	RW	38	RE	200				
Tagish River	17-Jun-16	2-9	84	RW	38	KD	248		137.8	F	2
Tagish River	17-Jun-16	2-9	85	LW	38	KD	156		39.6	U	1
Tagish River	17-Jun-16	2-9	86	LC	25	KD	135	2	28.7	F	2
Tagish River	17-Jun-16	2-9	87	LC	25	KD	138	2	21.2	M	2
Tagish River	17-Jun-16	2-9	88	LC	25	KD	123	1	14.4	M	1
Tagish River	17-Jun-16	2-9	89	LC	25	KD	109	1	11.7	F	1
Tagish River	17-Jun-16	2-9	90	LC	25	KD	128	1	15.1	U	1
Tagish River	17-Jun-16	2-9	91	LC	25	KD	115	1	13	M	1
Tagish River	17-Jun-16	2-9	92	RW	38	RG	210				
Tagish River	17-Jun-16	2-10	93	RW	38	RE	210				
Tagish River	17-Jun-16	2-10	94	RW	38	RE	220				
Tagish River	17-Jun-16	2-11	95	RW	51	RG	325				
Tagish River	17-Jun-16	2-11	96	LW	38	RE	215				
Tagish River	17-Jun-16	2-11	97	LW	38	RE	240				
Tagish River	17-Jun-16	2-11	98	RW	38	RP	250				
Tagish River	17-Jun-16	2-11	99	RW	38	RG	230				
Tagish River	17-Jun-16	2-11	100	RW	25	RG	135				
Tagish River	17-Jun-16	2-11	101	RW	25	RE	130				
Tagish River	17-Jun-16	2-12	102	RW	51	RG	250				
Tagish River	17-Jun-16	2-12	103	RW	51	RG	220				
Tagish River	17-Jun-16	2-12	104	RW	51	RG	320				
Tagish River	17-Jun-16	2-12	105	RW	51	RG	255				
Tagish River	17-Jun-16	2-12	106	RW	51	RG	220				
Tagish River	17-Jun-16	2-12	107	RW	51	KD	305			F	3
Tagish River	17-Jun-16	2-12	108	RW	51	KD	301		276	F	3
Tagish River	17-Jun-16	2-12	109	RW	38	RG	205				
Tagish River	17-Jun-16	2-12	110	RW	38	RG	225				
Tagish River	17-Jun-16	2-12	111	RW	38	RG	205				
Tagish River	17-Jun-16	2-12	112	RW	38	RG	205				
Tagish River	17-Jun-16	2-12	113	RW	38	RG	215				



Waterbody	Date	Set ID	Fish #	Species	Mesh Size (mm)	Condition	Fork Length (mm)	Age	Weight (g)	Sex	Maturity code
Tagish River	17-Jun-16	2-12	114	RW	38	KD	260		209.4	F	2
Tagish River	17-Jun-16	2-12	115	RW	38	KD	204		88.8	U	1
Tagish River	17-Jun-16	2-12	116	RW	25	RE	140				
Tagish River	17-Jun-16	2-12	117	RW	25	KD	149		49.6	U	1
Tagish River	17-Jun-16	2-12	118	RW	25	KD	161		34.1		
Tagish River	17-Jun-16	2-12	118B	RW	25	KD	126		22.6		
Tagish River	17-Jun-16	2-13	119	RW	25	RG	145				
Tagish River	17-Jun-16	2-13	120	RW	25	RG	130				
Tagish River	17-Jun-16	2-13	121	RW	25	RG	125				
Tagish River	17-Jun-16	2-13	122	RW	25	RG	135				
Tagish River	17-Jun-16	2-14	123	RW	51	RE	290				
Tagish River	17-Jun-16	2-14	124	LT	51	RE	670				
Tagish River	17-Jun-16	2-14	125	RW	51	KD	257		170.4	M	2
Tagish River	17-Jun-16	2-14	126	RW	51	RE	290				
Tagish River	17-Jun-16	2-14	127	RW	38	KD	224		106		
Tagish River	17-Jun-16	2-14	128	LT	38	RE	680				
Tagish River	17-Jun-16	2-14	129	RW	38	RP	220				
Tagish River	17-Jun-16	2-14	130	RW	38	KD	202		82.8		
Tagish River	17-Jun-16	2-14	131	RW	38	KD	210		86.3		
Tagish River	17-Jun-16	2-14	132	RW	38	KD	216		93.6		
Tagish River	17-Jun-16	2-14	133	RW	38	KD	208		82.3		
Tagish River	17-Jun-16	2-14	133B	RW	38	KD	199		71.1		
Tagish River	17-Jun-16	2-15	134	RW	51	KD	249				
Tagish River	17-Jun-16	2-15	135	LT	51	RE	605				
Tagish River	5-Jul-16	3-1	138	RW	51	RG	270				
Tagish River	5-Jul-16	3-1	140	LW	51	RG	215				
Tagish River	5-Jul-16	3-1	141	LW	51	RG	510				
Tagish River	5-Jul-16	3-1	143	NP	51	RE	410				
Tagish River	5-Jul-16	3-1	144	RW	51	KD	345		450	F	3
Tagish River	5-Jul-16	3-1	145	RW	51	KD	360		520	F	3
Tagish River	5-Jul-16	3-1	146	LW	51	KD	450		1245	M	3
Tagish River	5-Jul-16	3-1	147	LC	38	KD	162	2	48.1	F	3
Tagish River	5-Jul-16	3-1	148	LC	25	KD	124	2	16.3	M	2/3
Tagish River	5-Jul-16	3-1	149	LC	25	KD	112	1	12.7	F	1/2
Tagish River	5-Jul-16	3-1	150	LC	25	KD	116	1	13.7	M	3
Tagish River	5-Jul-16	3-1	151	LC	25	KD	123	1	15.9	M	2
Tagish River	5-Jul-16	3-1	152	LC	25	KD	124	2	15.5	M	2
Tagish River	5-Jul-16	3-1	153	LC	25	KD	119	2	14.5	M	2/3
Tagish River	5-Jul-16	3-1	154	LC	25	KD	119	2	15.1	M	3



Waterbody	Date	Set ID	Fish #	Species	Mesh Size (mm)	Condition	Fork Length (mm)	Age	Weight (g)	Sex	Maturity code
Tagish River	5-Jul-16	3-1	155	LC	25	KD	130	1	18.8	F	1/2
Tagish River	5-Jul-16	3-1	156	LC	25	KD	119	1	13.5	M	2/3
Tagish River	5-Jul-16	3-1	157	LC	25	KD	123	1	16.4	F	1/2
Tagish River	5-Jul-16	3-1	158	LC	25	KD	119	1	13.7	M	2/3
Tagish River	5-Jul-16	3-1	159	LC	25	KD	136	1	20.2	F	1/2
Tagish River	5-Jul-16	3-1	160	LC	25	KD	123	1	16.5	F	3
Tagish River	5-Jul-16	3-1	161	RW	25	KD	160		32.9	U	1
Tagish River	5-Jul-16	3-1	162	LC	25	KD	123	1	16.8	F	1/2
Tagish River	5-Jul-16	3-1	163	LC	25	KD	127	1	17.7	F	1/2
Tagish River	5-Jul-16	3-1	164	LC	25	KD	123	1	15.4	M	1/2
Tagish River	5-Jul-16	3-1	165	LC	25	KD	122	1	16.4	M	1/2
Tagish River	5-Jul-16	3-1	166	LC	25	KD	129	1	20	F	1/2
Tagish River	5-Jul-16	3-1	167	LC	25	KD	117	1	14.3	F	1/2
Tagish River	5-Jul-16	3-1	168	LC	25	KD	126	1	17.1	M	1/2
Tagish River	5-Jul-16	3-1	169	LC	25	KD	122	1	16.2	M	2/3
Tagish River	5-Jul-16	3-1	170	LC	25	KD	109	1	11.2	M	1
Tagish River	5-Jul-16	3-1	171	LC	25	KD	121	1	14.8	F	1
Tagish River	5-Jul-16	3-1	172	LC	25	KD	138	1	21.7	M	1
Tagish River	5-Jul-16	3-1	173	LC	25	KD	110	1	12.7	M	1
Tagish River	5-Jul-16	3-1	174	LC	25	KD	112	1	12.1	F	1
Tagish River	5-Jul-16	3-1	175	LC	25	KD	118	1	14.6	U	1
Tagish River	5-Jul-16	3-1	176	LC	25	KD	130	1	18.4	F	2
Tagish River	5-Jul-16	3-1	177	LC	25	KD	120	1	15.4	M	2
Tagish River	5-Jul-16	3-1	178	LC	25	KD	127	1	16.8	M	3
Tagish River	5-Jul-16	3-1	179	LC	25	KD	119	1	13.5	M	3
Tagish River	5-Jul-16	3-1	180	LC	25	KD	111	1	10.9	F	1
Tagish River	5-Jul-16	3-1	181	LC	25	KD	122	2	14.3	F	1
Tagish River	5-Jul-16	3-2	181B	LSU	51	E					
Tagish River	5-Jul-16	3-2	181C	RW	51	RG	280				
Tagish River	5-Jul-16	3-3	182	LW	51	KD	480		1325	M	3
Tagish River	5-Jul-16	3-3	183	LW	51	RG	520				
Tagish River	5-Jul-16	3-3	184	LW	51	RG	540				
Tagish River	5-Jul-16	3-3	185	LW	51	RG	575				
Tagish River	5-Jul-16	3-3	186	LW	51	RG	420				
Tagish River	5-Jul-16	3-3	187	LW	38	RG	145				
Tagish River	5-Jul-16	3-3	188	LC	38	KD	180	3	52.7	M	3
Tagish River	5-Jul-16	3-3	189	LC	25	KD	121	1	17.8	F	2
Tagish River	5-Jul-16	3-3	190	LC	25	KD	113	1	13.4	M	2
Tagish River	5-Jul-16	3-3	191	LC	25	KD	123	1	16.8	F	2



Waterbody	Date	Set ID	Fish #	Species	Mesh Size (mm)	Condition	Fork Length (mm)	Age	Weight (g)	Sex	Maturity code
Tagish River	5-Jul-16	3-3	192	LC	25	KD	128	1	18.5	M	2
Tagish River	5-Jul-16	3-3	193	LC	25	KD	119	1	15.3	M	2
Tagish River	5-Jul-16	3-3	194	LC	25	KD	121	1	16	F	2
Tagish River	5-Jul-16	3-3	195	LC	25	KD	111	1	13.2	M	2
Tagish River	5-Jul-16	3-3	196	LC	25	KD	112	1	12.7	U	1
Tagish River	5-Jul-16	3-3	197	LC	25	KD	129	1	19.3	M	2/3
Tagish River	5-Jul-16	3-3	198	LC	25	KD	129	1	17.5	M	2
Tagish River	5-Jul-16	3-3	199	LC	25	KD	125	1	16.5	F	2
Tagish River	5-Jul-16	3-3	200	LC	25	KD	110	1	13.1	U	1
Tagish River	5-Jul-16	3-3	201	LC	25	KD	115	1	13.9	M	2
Tagish River	5-Jul-16	3-3	202	LC	25	KD	139	2	25.7	F	3
Tagish River	5-Jul-16	3-3	203	LC	25	KD	119	1	14.4	F	2
Tagish River	5-Jul-16	3-3	204	LC	25	KD	116	1	14.5	M	2
Tagish River	5-Jul-16	3-3	205	LC	25	KD	125	1	17	M	2
Tagish River	5-Jul-16	3-3	206	LC	25	KD	127	1	17.8	F	2/3
Tagish River	5-Jul-16	3-3	207	LC	25	KD	131	1	18.8	F	2
Tagish River	5-Jul-16	3-3	208	LC	25	KD	124	1	18.1	F	2
Tagish River	5-Jul-16	3-3	209	LC	25	KD	120	1	16.5	M	2
Tagish River	5-Jul-16	3-3	210	LC	25	KD	119	1	15.7	F	2
Tagish River	5-Jul-16	3-3	211	LC	25	KD	121	1	14.5	F	2/3
Tagish River	5-Jul-16	3-3	212	LC	25	KD	118	1	14.5	F	2
Tagish River	5-Jul-16	3-3	213	LC	25	KD	118	1	15.7	U	1
Tagish River	5-Jul-16	3-3	214	LC	25	KD	122	1	14.7	M	2
Tagish River	5-Jul-16	3-3	215	LC	25	KD	120	1	14.8	F	2
Tagish River	5-Jul-16	3-3	216	LC	25	KD	128	1	20.4	M	2
Tagish River	5-Jul-16	3-3	217	LC	25	KD	118	1	14.6	M	2
Tagish River	5-Jul-16	3-3	218	LC	25	KD	121	1	16.5	F	2
Tagish River	5-Jul-16	3-3	219	LC	25	KD	119	1	13.5	F	2
Tagish River	5-Jul-16	3-3	220	LC	25	KD	113	1	13.3	F	2
Tagish River	5-Jul-16	3-3	221	LC	25	KD	116	1	14.4	U	1
Tagish River	5-Jul-16	3-3	222	LC	25	KD	113	1	14.6	F	1/2
Tagish River	5-Jul-16	3-3	223	LC	25	KD	125	1	19.1	F	2
Tagish River	5-Jul-16	3-3	224	LC	25	KD	124	1	17.1	M	2
Tagish River	5-Jul-16	3-3	225	LC	25	KD	124	1	17.5	M	2
Tagish River	5-Jul-16	3-3	226	LC	25	KD	119	1	17.1	F	2/3
Tagish River	5-Jul-16	3-3	227	LC	25	KD	114	1	14.8	F	1/2
Tagish River	5-Jul-16	3-3	228	LC	25	KD	116	1	13.8	M	2
Tagish River	5-Jul-16	3-3	229	LC	25	KD	113	1	13.2	F	1/2
Tagish River	5-Jul-16	3-3	230	LC	25	KD	120	1	15.2	F	1/2



Waterbody	Date	Set ID	Fish #	Species	Mesh Size (mm)	Condition	Fork Length (mm)	Age	Weight (g)	Sex	Maturity code
Tagish River	5-Jul-16	3-3	231	LC	25	KD	120	1	16.7	F	1/2
Tagish River	5-Jul-16	3-3	232	LC	25	KD	115	1	14.6	M	2
Tagish River	5-Jul-16	3-3	233	LC	25	KD	114	1	15.2	F	1/2
Tagish River	5-Jul-16	3-3	234	LC	25	KD	107	1	13.1	F	1
Tagish River	5-Jul-16	3-3	235	LC	25	KD	120	1	16.6	M	2
Tagish River	5-Jul-16	3-3	236	LC	25	KD	111	1	13.1	U	1
Tagish River	5-Jul-16	3-3	237	LC	25	KD	121	1	17.6	M	2/3
Tagish River	5-Jul-16	3-3	238	LC	25	KD	116	1	16.5	M	2/3
Tagish River	5-Jul-16	3-3	239	LC	25	KD	129	1	18.6	U	1
Tagish River	5-Jul-16	3-3	240	LC	25	KD	108	1	13.1	M	2/3
Tagish River	5-Jul-16	3-3	241	LC	25	KD	129	1	18.1	F	2/3
Tagish River	5-Jul-16	3-3	242	LC	25	KD	111	1	13	M	2/3
Tagish River	5-Jul-16	3-3	243	LC	25	KD	122	1	16.1	M	1/2
Tagish River	5-Jul-16	3-3	244	LC	25	KD	118	1	15.7	F	2/3
Tagish River	5-Jul-16	3-3	245	LC	25	KD	142	1	26.9	M	1/2
Tagish River	5-Jul-16	3-3	246	LC	25	KD	124	1	17.5	M	2/3
Tagish River	5-Jul-16	3-3	247	LC	25	KD	121	1	15.5	M	2/3
Tagish River	5-Jul-16	3-3	248	LC	25	KD	115	1	14.1	F	1/2
Tagish River	5-Jul-16	3-3	249	LC	25	KD	117	1	15.7	F	2
Tagish River	5-Jul-16	3-3	250	LC	25	KD	120	1	16.2	F	2
Tagish River	5-Jul-16	3-3	251	LC	25	KD	107	1	13.8	M	2
Tagish River	5-Jul-16	3-3	252	LC	25	KD	119	1	14.2	M	2
Tagish River	5-Jul-16	3-3	253	LC	25	KD	132	1	19.5		
Tagish River	5-Jul-16	3-3	254	LC	25	KD	129	1	20.1	M	1/2
Tagish River	5-Jul-16	3-3	255	LC	25	KD	121	1	15.5	F	2/3
Tagish River	5-Jul-16	3-3	256	LC	25	KD	123	1	16.9	M	2/3
Tagish River	5-Jul-16	3-3	257	LC	25	KD	120	1	15.9	F	2/3
Tagish River	5-Jul-16	3-3	258	LC	25	KD	109	1	12.4	F	1/2
Tagish River	5-Jul-16	3-3	259	LC	25	KD	116	1	15.8	F	1
Tagish River	5-Jul-16	3-3	260	LC	25	KD	134	1	22.1	F	2/3
Tagish River	5-Jul-16	3-3	261	LC	25	KD	120	1	15.6	U	1
Tagish River	5-Jul-16	3-3	262	LC	25	KD	119	1	15.1	F	1/2
Tagish River	5-Jul-16	3-3	263	LC	25	KD	111	1	13.1	F	1/2
Tagish River	5-Jul-16	3-3	264	LC	25	KD	110	1	12.7	F	2
Tagish River	5-Jul-16	3-3	265	LC	25	KD	117	1	14.4	M	3
Tagish River	5-Jul-16	3-3	266	LC	25	KD	116	1	13.9	M	1/2
Tagish River	5-Jul-16	3-3	267	LC	25	KD	130	1	21.3	M	1/2
Tagish River	5-Jul-16	3-3	268	LC	25	KD	118	1	15.3	F	1/2
Tagish River	5-Jul-16	3-3	269	LC	25	KD	126	2	18.1	M	2



Waterbody	Date	Set ID	Fish #	Species	Mesh Size (mm)	Condition	Fork Length (mm)	Age	Weight (g)	Sex	Maturity code
Tagish River	5-Jul-16	3-3	270	LC	25	KD	137	1	21.7	F	1/2
Tagish River	5-Jul-16	3-3	271	LC	25	KD	110	1	12.9	M	2/3
Tagish River	5-Jul-16	3-3	272	LC	25	KD	121	1	16.4	F	1
Tagish River	5-Jul-16	3-3	273	LC	25	KD	126	1	18.2	M	2/3
Tagish River	5-Jul-16	3-3	274	LC	25	KD	130	1	19.4	F	2/3
Tagish River	5-Jul-16	3-3	275	LC	25	KD	116	1	14.1	U	1
Tagish River	5-Jul-16	3-3	276	LC	25	KD	127	1	19.4	F	1/2
Tagish River	5-Jul-16	3-3	277	LC	25	KD	113	1	13.3	F	2/3
Tagish River	5-Jul-16	3-3	278	LC	25	KD	115	1	14.3	F	1/2
Tagish River	5-Jul-16	3-3	279	LC	25	KD	114	1	14.6	M	1/2
Tagish River	5-Jul-16	3-3	280	LC	25	KD	124	1	16.7	M	1/2
Tagish River	5-Jul-16	3-3	281	LC	25	KD	146	2	25.3	M	3
Tagish River	5-Jul-16	3-3	282	LC	25	KD	117	1	15.5	F	1/2
Tagish River	5-Jul-16	3-3	283	LC	25	KD	131	1	21.8	F	1/2
Tagish River	5-Jul-16	3-3	284	LC	25	KD	111	1	14.6	M	1
Tagish River	5-Jul-16	3-3	285	LC	25	KD	119	1	16.8	F	2/3
Tagish River	5-Jul-16	3-3	286	LC	25	KD	117	1	14.7	U	1
Tagish River	5-Jul-16	3-3	287	LC	25	KD	125	1	18.9	F	1
Tagish River	5-Jul-16	3-3	288	LC	25	KD	112	1	16.3	U	1
Tagish River	5-Jul-16	3-3	289	LC	25	KD	114	1	15	M	2
Tagish River	5-Jul-16	3-3	290	LC	25	KD	111	1	15	F	2
Tagish River	5-Jul-16	3-3	291	LC	25	KD	110	1	14.9		
Tagish River	5-Jul-16	3-3	292	LC	25	KD	111	1	15		
Tagish River	5-Jul-16	3-3	293	LC	25	KD	114	1	15.8		
Tagish River	5-Jul-16	3-3	294	LC	25	KD	114	1	15.6		
Tagish River	5-Jul-16	3-3	295	LC	25	KD	112	1	14.8		
Tagish River	5-Jul-16	3-3	296	LC	25	KD	110	1	15.2		
Tagish River	5-Jul-16	3-3	297	LC	25	KD	111	1	15.8		
Tagish River	5-Jul-16	3-3	298	LC	25	KD	109	1	14		
Tagish River	5-Jul-16	3-3	299	LC	25	KD	114	1	16		
Tagish River	5-Jul-16	3-3	300	LC	25	KD	111	1	15.3		
Tagish River	5-Jul-16	3-3	301	LC	25	KD	112	1	15.7		
Tagish River	5-Jul-16	3-3	302	LC	25	KD	110	1	12		
Tagish River	5-Jul-16	3-3	303	LC	25	KD	113	1	16.5		
Tagish River	5-Jul-16	3-3	304	LC	25	KD	113	1	15.3		
Tagish River	5-Jul-16	3-3	305	LC	25	KD	105	1	13.6		
Tagish River	5-Jul-16	3-3	306	LC	25	KD	121	1	19.4		
Tagish River	5-Jul-16	3-3	307	LC	25	KD	110	1	15.7		
Tagish River	5-Jul-16	3-3	308	LC	25	KD	124	1	20.7		



Waterbody	Date	Set ID	Fish #	Species	Mesh Size (mm)	Condition	Fork Length (mm)	Age	Weight (g)	Sex	Maturity code
Tagish River	5-Jul-16	3-3	309	LC	25	KD	110	1	13.1		
Tagish River	5-Jul-16	3-3	310	LC	25	KD	117	1	17.6		
Tagish River	5-Jul-16	3-4	311	RW	38	RE	210				
Tagish River	5-Jul-16	3-4	312	LW	38	RE	210				
Tagish River	5-Jul-16	3-4	313	LC	35	KD	126	1	22.2		
Tagish River	5-Jul-16	3-4	314	LC	35	KD	114	1	15.8		
Tagish River	5-Jul-16	3-4	315	LC	35	KD	118	1	18.3		
Tagish River	5-Jul-16	3-4	316	LC	35	KD	119	1	18.3		
Tagish River	5-Jul-16	3-4	317	LC	35	KD	107	1	13		
Tagish River	5-Jul-16	3-4	318	LC	38	KD	177	3	52.3	F	3
Tagish River	5-Jul-16	3-4	319	RW	38	KD	189		64.5	U	1
Tagish River	5-Jul-16	3-6	320	RW	51	RG	275				
Tagish River	5-Jul-16	3-6	321	RW	51	RG	375				
Tagish River	5-Jul-16	3-6	322	RW	51	RE	370				
Tagish River	5-Jul-16	3-6	323	RW	51	RG	235				
Tagish River	5-Jul-16	3-6	324	RW	51	RG	330				
Tagish River	5-Jul-16	3-6	325	RW	51	RE	245				
Tagish River	5-Jul-16	3-6	326	RW	51	RG	290				
Tagish River	5-Jul-16	3-6	327	RW	51	RE	290				
Tagish River	5-Jul-16	3-6	328	RW	51	RG	260				
Tagish River	5-Jul-16	3-6	329	RW	51	RE	265				
Tagish River	5-Jul-16	3-6	330	RW	51	RE	300				
Tagish River	5-Jul-16	3-6	331	RW	51	RG	235				
Tagish River	5-Jul-16	3-6	332	RW	51	RG	245				
Tagish River	5-Jul-16	3-6	333	RW	51	RG	270				
Tagish River	5-Jul-16	3-6	334	RW	38	RP	245				
Tagish River	5-Jul-16	3-6	335	RW	38	RG	260				
Tagish River	5-Jul-16	3-6	336	RW	38	RP	205				
Tagish River	5-Jul-16	3-6	337	RW	38	RE	200				
Tagish River	5-Jul-16	3-6	338	RW	38	RG	295				
Tagish River	5-Jul-16	3-6	339	RW	38	RG	195				
Tagish River	5-Jul-16	3-6	340	RW	38	RP	210				
Tagish River	5-Jul-16	3-6	341	RW	38	RG	240				
Tagish River	5-Jul-16	3-6	342	RW	38	RG	270				
Tagish River	5-Jul-16	3-6	343	RW	38	RG	285				
Tagish River	5-Jul-16	3-6	344	RW	38	RE	300				
Tagish River	5-Jul-16	3-6	345	RW	38	RG	295				
Tagish River	5-Jul-16	3-6	346	RW	38	RG	245				
Tagish River	5-Jul-16	3-6	347	RW	38	RG	275				



Waterbody	Date	Set ID	Fish #	Species	Mesh Size (mm)	Condition	Fork Length (mm)	Age	Weight (g)	Sex	Maturity code
Tagish River	5-Jul-16	3-6	348	RW	38	RG	255				
Tagish River	5-Jul-16	3-6	349	LC	25	KD	122	1	19.1		
Tagish River	5-Jul-16	3-6	350	LC	25	KD	115	1	13.7		
Tagish River	5-Jul-16	3-6	351	LC	25	KD	118		16.7		
Tagish River	5-Jul-16	3-6	352	LC	25	KD	116	1	15.8		
Tagish River	5-Jul-16	3-6	353	LC	25	KD	118	1	18		
Tagish River	5-Jul-16	3-6	354	LC	25	KD	107	1	13.2		
Tagish River	5-Jul-16	3-6	355	LC	25	KD	113	1	16.8		
Tagish River	5-Jul-16	3-6	356	LC	38	KD	172	3	53.6	F	3
Tagish River	5-Jul-16	3-6	357	RW	38	KD	239		153.2		
Tagish River	5-Jul-16	3-6	358	RW	38	KD	241		145.5		
Tagish River	5-Jul-16	3-6	359	RW	38	KD	258		179.3		
Tagish River	5-Jul-16	3-6	360	RW	38	KD	279		238.1	U	1
Tagish River	5-Jul-16	3-6	361	RW	38	KD	236		133.5		
Tagish River	5-Jul-16	3-6	362	RW	38	KD	276		227.7	M	2
Tagish River	5-Jul-16	3-6	363	RW	38	KD	305				
Tagish River	5-Jul-16	3-6	364	RW	38	KD	280		244.5	M	2
Tagish River	5-Jul-16	3-6	365	RW	38	KD	255		159.8	U	1
Tagish River	5-Jul-16	3-6	366	RW	38	KD	244		216	M	3
Tagish River	5-Jul-16	3-7	367	RW	38	RG	235				
Tagish River	5-Jul-16	3-7	368	LW	51	RG	225				
Tagish River	5-Jul-16	3-7	369	LC	38	KD	164	3	48.5	M	3
Tagish River	5-Jul-16	3-7	370	LC	25	KD	121	1	19.4		
Tagish River	5-Jul-16	3-7	371	LC	25	KD	123	1	21.5		
Tagish River	5-Jul-16	3-7	372	LC	25	KD	114	1	17.2		
Tagish River	5-Jul-16	3-7	373	LC	25	KD	121	1	20.3		
Tagish River	5-Jul-16	3-7	374	LC	25	KD	136	2	28.9	F	3
Tagish River	5-Jul-16	3-7	375	LC	25	KD	109		14.2		
Tagish River	5-Jul-16	3-7	376	LC	25	KD	116	1	18.3		
Tagish River	5-Jul-16	3-7	377	LC	25	KD	121	1	18.7		
Tagish River	5-Jul-16	3-7	378	LC	25	KD	126	1	22.4		
Tagish River	5-Jul-16	3-7	379	LC	25	KD	126	1	21		
Tagish River	5-Jul-16	3-7	380	LC	25	KD	114	1	16.2		
Tagish River	5-Jul-16	3-7	381	LC	25	KD	129	1	24		
Tagish River	5-Jul-16	3-7	382	LC	25	KD	125	1	22.8		
Tagish River	5-Jul-16	3-7	383	LC	25	KD	146	1	34.8	M	3
Tagish River	5-Jul-16	3-7	384	LC	25	KD	148	2	30.6	F	3
Tagish River	5-Jul-16	3-7	385	LC	25	KD	119	1	17.4		
Tagish River	5-Jul-16	3-7	386	LC	25	KD	130	2	25.1	F	3



Waterbody	Date	Set ID	Fish #	Species	Mesh Size (mm)	Condition	Fork Length (mm)	Age	Weight (g)	Sex	Maturity code
Tagish River	5-Jul-16	3-7	387	LC	25	KD	124	1	19.4	F	2
Tagish River	5-Jul-16	3-7	388	LC	25	KD	119	1	17.2		
Tagish River	5-Jul-16	3-7	389	LC	25	KD	115	1	15.6		
Tagish River	5-Jul-16	3-7	390	LC	25	KD	119	2	16.8		
Tagish River	5-Jul-16	3-7	391	LC	25	KD	122	1	20		
Tagish River	5-Jul-16	3-7	392	LC	25	KD	109	1	14.9		
Tagish River	5-Jul-16	3-7	393	LC	25	KD	118	1	17		
Tagish River	5-Jul-16	3-7	394	LC	25	KD	114	1	18.1		
Tagish River	5-Jul-16	3-7	395	LC	25	KD	118	1	15.8		
Tagish River	5-Jul-16	3-7	396	LC	25	KD	113	1	16		
Tagish River	5-Jul-16	3-8	397	LC	38	KD	165	3	53.4	F	3
Tagish River	5-Jul-16	3-8	398	LC	38	KD	169	3	56.8	F	3
Tagish River	5-Jul-16	3-8	399	LC	25	KD	109	1	14.5		
Tagish River	5-Jul-16	3-8	400	LC	25	KD	107	1	13.7		
Tagish River	5-Jul-16	3-8	401	LC	25	KD	113	1	15.7		
Tagish River	5-Jul-16	3-8	402	LC	25	KD	111	1	13.3		
Tagish River	5-Jul-16	3-8	403	LC	25	KD	108		14.4		
Tagish River	5-Jul-16	3-8	404	LC	25	KD	115	1	16		
Tagish River	5-Jul-16	3-8	405	LC	25	KD	116	1	16		
Tagish River	5-Jul-16	3-8	406	LC	25	KD	111	1	15.3		
Tagish River	5-Jul-16	3-8	407	LC	25	KD	114	1	14.7		
Tagish River	5-Jul-16	3-8	408	LC	25	KD	117	1	16.2		
Tagish River	5-Jul-16	3-8	409	LC	25	KD	122	1	21.5		
Tagish River	5-Jul-16	3-8	410	LC	25	KD	108	1	13.6		
Tagish River	5-Jul-16	3-8	411	LC	25	KD	109	1	14.5		
Tagish River	5-Jul-16	3-8	412	LC	25	KD	127	1	21.9		
Tagish River	5-Jul-16	3-8	413	LC	25	KD	121	1	18.8		
Tagish River	5-Jul-16	3-8	414	LC	25	KD	112	1	16.9		
Tagish River	5-Jul-16	3-8	415	LC	25	KD	108	1	14.6		
Tagish River	5-Jul-16	3-8	416	LC	25	KD	114	1	16.8		
Tagish River	5-Jul-16	3-8	417	LC	25	KD	120	1	17.3		
Tagish River	5-Jul-16	3-8	418	LC	25	KD	119	1	17.7		
Tagish River	5-Jul-16	3-8	419	LC	25	KD	116	1	16.6		
Tagish River	5-Jul-16	3-8	420	LC	25	KD	126	1	19.5		
Tagish River	5-Jul-16	3-8	421	LC	25	KD	111	1	13.8		
Tagish River	5-Jul-16	3-8	422	LC	25	KD	120	1	17.5		
Tagish River	5-Jul-16	3-8	423	LC	25	KD	110	1	16.3		
Tagish River	5-Jul-16	3-8	424	LC	25	KD	126	2	13.9	F	3
Tagish River	5-Jul-16	3-8	425	LC	25	KD	106	1	12.7		



Waterbody	Date	Set ID	Fish #	Species	Mesh Size (mm)	Condition	Fork Length (mm)	Age	Weight (g)	Sex	Maturity code
Tagish River	5-Jul-16	3-8	426	LC	25	KD	136	2	25.9	M	2/3
Tagish River	5-Jul-16	3-8	427	LC	25	KD	111	1	15		
Tagish River	5-Jul-16	3-8	428	LC	25	KD	114	1	14.9		
Tagish River	5-Jul-16	3-8	429	LC	25	KD	109	1	14.2		
Tagish River	5-Jul-16	3-8	430	LC	25	KD	120	1	16.9		
Tagish River	5-Jul-16	3-8	431	LC	25	KD	115	1	16.2		
Tagish River	5-Jul-16	3-8	432	LC	25	KD	115	1	14.7		
Tagish River	5-Jul-16	3-9	433	RW	38	RE	245				
Tagish River	5-Jul-16	3-9	434	RW	38	RG	215				
Tagish River	5-Jul-16	3-9	435	RW	38	RE	185				
Tagish River	5-Jul-16	3-9	436	LW	51	RE	495				
Tagish River	5-Jul-16	3-9	437	LW	51	KD	275		259.3	M	1
Tagish River	5-Jul-16	3-9	438	LW	51	KD	271		270.3	M	1
Tagish River	5-Jul-16	3-9	439	LW	51	KD	285				
Tagish River	5-Jul-16	3-9	440	LC	38	KD	167	3	57.4	F	3
Tagish River	5-Jul-16	3-9	441	LC	38	KD	154	2	46.1	F	3
Tagish River	5-Jul-16	3-9	442	LC	38	KD	162	3	52	F	3
Tagish River	5-Jul-16	3-9	443	LC	25	KD	126	1	22.2		
Tagish River	5-Jul-16	3-9	444	LC	25	KD	130	1	22.6		
Tagish River	5-Jul-16	3-9	445	LC	25	KD	122	1	20.5		
Tagish River	5-Jul-16	3-9	446	LC	25	KD	131	2	24.3		
Tagish River	5-Jul-16	3-9	447	LC	25	KD	114		16.4		
Tagish River	5-Jul-16	3-9	448	LC	25	KD	114		16.5		
Tagish River	5-Jul-16	3-9	449	LC	25	KD	127	1	22.3		
Tagish River	5-Jul-16	3-9	450	LC	25	KD	119	1	17.4		
Tagish River	5-Jul-16	3-9	451	LC	25	KD	114	1	16.7		
Tagish River	5-Jul-16	3-9	452	LC	25	KD	149	2	36.6	F	3
Tagish River	5-Jul-16	3-9	453	LC	25	KD	111	1	16		
Tagish River	5-Jul-16	3-9	454	LC	25	KD	138	2	31		
Tagish River	5-Jul-16	3-9	455	LC	25	KD	126	1	20.8		
Tagish River	5-Jul-16	3-9	456	LC	25	KD	141	2	31.5	M	3
Tagish River	5-Jul-16	3-9	457	LC	25	KD	132	2	26.5		
Tagish River	5-Jul-16	3-9	458	LC	25	KD	118	1	18		
Tagish River	5-Jul-16	3-9	459	LC	25	KD	141	2	27.1	F	3
Tagish River	5-Jul-16	3-9	460	LC	25	KD	126	1	20.3		
Tagish River	5-Jul-16	3-9	461	LC	25	KD	125	1	19.4		
Tagish River	5-Jul-16	3-9	462	LC	25	KD	130	1	23.1		
Tagish River	5-Jul-16	3-9	463	LC	25	KD	118	1	18.5		
Tagish River	5-Jul-16	3-9	464	LC	25	KD	138	2	32.5	F	3



Waterbody	Date	Set ID	Fish #	Species	Mesh Size (mm)	Condition	Fork Length (mm)	Age	Weight (g)	Sex	Maturity code
Tagish River	5-Jul-16	3-9	465	LC	25	KD	129	1	21.7		
Tagish River	5-Jul-16	3-9	466	LC	25	KD	120	1	18.5		
Tagish River	5-Jul-16	3-9	467	LC	25	KD	115	1	17.4		
Tagish River	5-Jul-16	3-9	468	LC	25	KD	123		18.4		
Tagish River	5-Jul-16	3-9	469	LC	25	KD	141	2	29.2	F	3
Tagish River	5-Jul-16	3-9	470	LC	25	KD	131	2	24.7		
Tagish River	5-Jul-16	3-9	471	LC	25	KD	135	2	24.7		
Tagish River	5-Jul-16	3-9	472	LC	25	KD	130	2	26.3		
Tagish River	5-Jul-16	3-9	473	LC	25	KD	129	2	24		
Tagish River	5-Jul-16	3-9	474	LC	25	KD	137	1	29.4	M	3
Nares River	5-Jul-16	3-11	475	RW	38	RG	240				
Nares River	5-Jul-16	3-10	475A	RW	51	RG	285				
Nares River	5-Jul-16	3-11	476	LSU	38	E					
Nares River	5-Jul-16	3-11	477	RW	38	RG	270				
Nares River	5-Jul-16	3-11	478	LC	38	KD	210	3	92.4	F	3
Nares River	5-Jul-16	3-11	479	LC	38	KD	179	3	62.2	M	3
Nares River	5-Jul-16	3-11	480	LC	38	KD	209	3	99.9	F	3
Nares River	5-Jul-16	3-11	481	LC	38	KD	177	3	62	F	3
Nares River	5-Jul-16	3-11	482	LC	38	KD	206	3	84.2	F	3
Nares River	5-Jul-16	3-11	483	LC	38	KD	200	3	80.3	F	3
Nares River	5-Jul-16	3-11	484	LC	38	KD	208	3	90.7	M	3
Nares River	5-Jul-16	3-11	485	LC	38	KD	191	3	70.1	M	3
Nares River	5-Jul-16	3-11	486	LC	38	KD	212	3	85.8	M	3
Nares River	5-Jul-16	3-11	487	LC	38	KD	216	3	113.5	F	3
Nares River	5-Jul-16	3-11	488	LC	38	KD	211	3	108.4	F	3
Nares River	5-Jul-16	3-11	489	LC	38	KD	222	3	113.8	F	3
Nares River	5-Jul-16	3-11	490	LC	38	KD	206	3	81.7	M	3
Nares River	5-Jul-16	3-11	491	LC	38	KD	184	3	54.2	M	2
Nares River	5-Jul-16	3-11	492	LC	38	KD	200	3	75.7	F	3
Nares River	5-Jul-16	3-11	493	LC	38	KD	185	3	68.6	F	3
Nares River	5-Jul-16	3-11	494	LC	38	KD	197	4	76.1	F	3
Nares River	5-Jul-16	3-11	495	LC	38	KD	206	3	83.7	F	3
Nares River	5-Jul-16	3-11	496	LC	38	KD	195	3	70	F	2
Nares River	5-Jul-16	3-11	497	LC	38	KD	225	3	12	F	3
Nares River	5-Jul-16	3-11	498	LC	38	KD	216	3	104.3	F	3
Nares River	5-Jul-16	3-11	499	LC	38	KD	193	4	70.8		
Nares River	5-Jul-16	3-11	500	LC	38	KD	200	3	84.5	F	3
Nares River	5-Jul-16	3-11	501	LC	38	KD	178	3	63	F	3
Nares River	5-Jul-16	3-11	502	LC	38	KD	174	3	62.4	F	3



Waterbody	Date	Set ID	Fish #	Species	Mesh Size (mm)	Condition	Fork Length (mm)	Age	Weight (g)	Sex	Maturity code
Nares River	5-Jul-16	3-11	503	LC	38	KD	209	3	89.1	M	3
Nares River	5-Jul-16	3-11	504	LC	38	KD	204	3	84.3	F	3
Nares River	5-Jul-16	3-11	505	LC	38	KD	194	3	75.9	M	3
Nares River	5-Jul-16	3-11	506	LC	38	KD	191	3		F	2
Nares River	5-Jul-16	3-11	507	LC	38	KD	217	3	104	F	3
Nares River	5-Jul-16	3-11	508	LC	38	KD	207	3	80.9	F	2
Nares River	5-Jul-16	3-11	509	LC	38	KD	240	5	138.1	F	3
Nares River	5-Jul-16	3-11	510	LC	38	KD	191	3	71	M	2
Nares River	5-Jul-16	3-11	511	LC	38	KD	196	3	79	F	3
Nares River	5-Jul-16	3-11	512	LC	38	KD	185	3	70.1	M	2
Nares River	5-Jul-16	3-11	513	LC	38	KD	180	3	62	F	3
Nares River	5-Jul-16	3-11	514	LC	38	KD	208	3	84.4	M	2
Nares River	5-Jul-16	3-11	515	LC	38	KD	212	3	95.9	F	2
Nares River	5-Jul-16	3-11	516	LC	38	KD	176	3	54.3	M	3
Nares River	5-Jul-16	3-11	517	LC	38	KD	194	4	77	F	3
Nares River	5-Jul-16	3-11	518	LC	38	KD	201	4	86.7	M	1
Nares River	5-Jul-16	3-11	519	LC	38	KD	210	3	86.5	M	2
Nares River	5-Jul-16	3-11	520	LC	38	KD	210	3	91.2	F	3
Nares River	5-Jul-16	3-11	521	LC	38	KD	199	2	77.7	F	3
Nares River	5-Jul-16	3-11	522	LC	38	KD	188	3	75	F	3
Nares River	5-Jul-16	3-11	523	LC	38	KD	224	3	112.8	M	3
Nares River	5-Jul-16	3-11	524	LC	38	KD	208	3	83.8	F	3
Nares River	5-Jul-16	3-11	525	LC	38	KD	209	3	87.2	M	3
Tagish River	26-Aug-16	4-1	800	RW	44	RE	235				
Tagish River	26-Aug-16	4-2	801	RW	32	RG	270				
Tagish River	26-Aug-16	4-2	802	LC	32	KD	164	2	39.5	M	3
Tagish River	26-Aug-16	4-2	803	LC	32	KD	208	3	84.5	F	3
Tagish River	26-Aug-16	4-2	804	LC	32	KD	169	2	51	F	3
Tagish River	26-Aug-16	4-2	805	LC	32	KD	174	2	54	F	2
Tagish River	26-Aug-16	4-2	806	LC	25	KD	139	1	25	M	3
Tagish River	26-Aug-16	4-2	807	LC	25	KD	133	1	22.5	M	3
Tagish River	26-Aug-16	4-2	808	LC	25	KD	129	1	21	M	3
Tagish River	26-Aug-16	4-2	809	LC	25	KD	134	1	22.5	M	3
Tagish River	26-Aug-16	4-2	810	LC	25	KD	128	1	18	F	2
Tagish River	26-Aug-16	4-2	811	LC	25	KD	128	1	19	M	3
Tagish River	26-Aug-16	4-2	812	LC	25	KD	135	1	22	M	3
Tagish River	26-Aug-16	4-2	813	LC	25	KD	139	1	29	M	3
Tagish River	26-Aug-16	4-2	814	LC	25	KD	132	1	19	M	3
Tagish River	26-Aug-16	4-2	815	LC	25	KD	124	1	16.5	M	1



Waterbody	Date	Set ID	Fish #	Species	Mesh Size (mm)	Condition	Fork Length (mm)	Age	Weight (g)	Sex	Maturity code
Tagish River	26-Aug-16	4-2	816	LC	25	KD	129	1	18	M	3
Tagish River	26-Aug-16	4-2	817	LC	25	KD	123	1	17	M	3
Tagish River	26-Aug-16	4-2	818	LC	25	KD	136	1	23	M	3
Tagish River	26-Aug-16	4-2	819	LC	25	KD	130	1	18.5	F	2
Tagish River	26-Aug-16	4-2	820	LC	25	KD	128	1	18.7	M	3
Tagish River	26-Aug-16	4-2	821	LC	25	KD	122	1	17.2	M	3
Tagish River	26-Aug-16	4-2	822	LC	25	KD	126	1	18.5	M	3
Tagish River	26-Aug-16	4-2	823	LC	25	KD	132	1	19.6	M	1
Tagish River	26-Aug-16	4-2	824	LC	25	KD	146	2	28.2	F	2
Tagish River	26-Aug-16	4-2	825	LC	25	KD	123	1	17.1	M	1
Tagish River	26-Aug-16	4-2	826	LC	25	KD	121	1	17.7	M	3
Tagish River	26-Aug-16	4-2	827	LC	25	KD	126	1	19	M	3
Tagish River	26-Aug-16	4-2	828	LC	25	KD	124	1	17.8	F	2
Tagish River	26-Aug-16	4-2	829	LC	25	KD	137	1	23.7	M	3
Tagish River	26-Aug-16	4-2	830	LC	25	KD	120	1	16.5	F	3
Tagish River	26-Aug-16	4-2	831	LC	25	KD	128	1	20.8	M	3
Tagish River	26-Aug-16	4-2	832	LC	25	KD	124	1	17.3	U	1
Tagish River	26-Aug-16	4-2	833	LC	25	KD	121	1	16.8	U	1
Tagish River	26-Aug-16	4-2	834	LC	25	KD	122	1	17.4	U	1
Tagish River	26-Aug-16	4-2	835	LC	25	KD	128	1	19.9	M	3
Tagish River	26-Aug-16	4-2	836	LC	25	KD	125	1	19.2	U	1
Tagish River	26-Aug-16	4-2	837	LC	25	KD	131	1	24	F	3
Tagish River	26-Aug-16	4-2	838	LC	25	KD	124	1	18.5	F	3
Tagish River	26-Aug-16	4-2	839	LC	25	KD	122	1	17.7	U	1
Tagish River	26-Aug-16	4-3	840	RW	51	KD	292		238.3	M	1
Tagish River	26-Aug-16	4-3	841	RW	51	KD	296		229.3	F	3
Tagish River	26-Aug-16	4-3	842	RW	51	RE					
Tagish River	26-Aug-16	4-3	843	RW	38	RG					
Tagish River	26-Aug-16	4-4	844	LC	38	KD	164	2	46.8	F	3
Tagish River	26-Aug-16	4-5	845	LC	25	KD	137	2	27.1	M	3
Tagish River	26-Aug-16	4-5	846	LC	25	KD	145	1	28.8	M	3
Tagish River	26-Aug-16	4-5	847	LC	25	KD	126	1	19.1	F	1
Tagish River	26-Aug-16	4-5	848	LC	25	KD	124	1	19.9	F	1
Tagish River	26-Aug-16	4-5	849	LC	25	KD	131	1	23.9	F	2
Tagish River	26-Aug-16	4-5	850	LC	25	KD	130	1	22.4	M	3
Tagish River	26-Aug-16	4-5	851	LC	38	KD	199	2	88.9	F	3
Tagish River	26-Aug-16	4-5	852	LC	38	KD	178	2	61.9	F	3
Tagish River	26-Aug-16	4-5	853	LC	38	KD	164	1	48.1	F	3
Tagish River	26-Aug-16	4-6	854	LW	32	RE	205				



Waterbody	Date	Set ID	Fish #	Species	Mesh Size (mm)	Condition	Fork Length (mm)	Age	Weight (g)	Sex	Maturity code
Tagish River	26-Aug-16	4-6	855	LW	32	RE	115				
Tagish River	26-Aug-16	4-6	856	LW	38	E	adult				
Tagish River	26-Aug-16	4-6	857	LC	38	KD	187	3	68.1	F	3
Tagish River	26-Aug-16	4-6	858	LC	32	KD	149	2	33.5	M	3
Tagish River	26-Aug-16	4-6	859	LC	32	KD	162	1	40.1	M	3
Tagish River	26-Aug-16	4-6	860	LC	32	KD	149	1	34.6	F	2
Tagish River	26-Aug-16	4-6	861	LC	32	KD	143	2	30.7	M	3
Tagish River	26-Aug-16	4-6	862	LC	32	KD	161	1	50	F	3
Tagish River	26-Aug-16	4-6	863	LC	32	KD	147	2	33.6	F	3
Tagish River	26-Aug-16	4-6	864	LC	32	KD	159	1	49.3	M	3
Tagish River	26-Aug-16	4-6	865	LC	32	KD	151	1	35.9	M	2
Tagish River	26-Aug-16	4-6	866	LC	32	KD	151	1	39.1	F	3
Tagish River	26-Aug-16	4-6	867	LC	32	KD	143	1	31.7	F	3
Tagish River	26-Aug-16	4-6	868	LC	32	KD	155	1	40	F	3
Tagish River	26-Aug-16	4-7	869	LW	51	E	adult				
Tagish River	26-Aug-16	4-7	870	LW	51	E	adult				
Tagish River	26-Aug-16	4-7	871	LW	38	E	adult				
Tagish River	26-Aug-16	4-7	872	LW	38	E	adult				
Tagish River	26-Aug-16	4-7	873	LW	38	KD	480		1300	M	3
Tagish River	26-Aug-16	4-7	875	LC	25	KD	121	1	17.4	U	1
Tagish River	26-Aug-16	4-7	876	LC	25	KD	124	1	19.3	M	3
Tagish River	26-Aug-16	4-7	877	LC	25	KD	117	1	14.6	U	1
Tagish River	26-Aug-16	4-7	878	LC	25	KD	121	1	16	U	1
Tagish River	26-Aug-16	4-7	879	LW	25	RE	200				
Tagish River	26-Aug-16	4-7	880	LW	25	RE	118				
Nares River	26-Aug-16	4-8	881	RW	32	RE	270				
Nares River	26-Aug-16	4-8	882	RW	32	RE	340				
Nares River	26-Aug-16	4-8	883	RW	38	KD	293		240.5	M	1
Nares River	26-Aug-16	4-8	884	RW	38	KD	255		165.5	U	1
Nares River	26-Aug-16	4-8	885	RW	38	RE	210				
Nares River	26-Aug-16	4-8	886	RW	44	KD	268		176.6	U	1
Nares River	26-Aug-16	4-8	887	RW	44	KD	348		500	F	3
Nares River	26-Aug-16	4-8	889	RW	44	RE	345				
Nares River	26-Aug-16	4-8	890	RW	44	RE	320				
Nares River	26-Aug-16	4-9	891	NP	25	RE	165				
Nares River	26-Aug-16	4-10	892	LW	44	RE	460				
Nares River	26-Aug-16	4-10	893	RW	38	RE	250				
Nares River	26-Aug-16	4-10	894	RW	38	KD	340		475	M	3
Nares River	26-Aug-16	4-11	895	LT	51	RE	645				



Waterbody	Date	Set ID	Fish #	Species	Mesh Size (mm)	Condition	Fork Length (mm)	Age	Weight (g)	Sex	Maturity code
Nares River	26-Aug-16	4-11	896	RW	38	KD	271		191.3	M	1
Nares River	26-Aug-16	4-12	897	RW	51	RG	325				
Nares River	26-Aug-16	4-12	898	RW	51	RG	315				
Nares River	26-Aug-16	4-12	899	RW	38	KD	288		245.3	U	1
Nares River	26-Aug-16	4-12	900	RW	38	KD	259		157.3	U	1
Nares Lake	26-Aug-16	4-13	901	RW	51	RE	315				
Nares Lake	26-Aug-16	4-13	902	RW	51	RE	355				
Nares Lake	26-Aug-16	4-13	903	RW	51	RE	375				
Nares Lake	26-Aug-16	4-14	904	RW	44	KD	251		162.9	U	1
Nares Lake	26-Aug-16	4-14	905	RW	44	KD	276		213.4	U	1
Nares Lake	26-Aug-16	4-14	906	RW	44	KD	227		107.2	U	1
Nares Lake	26-Aug-16	4-14	907	RW	44	KD	221		101	U	1
Nares Lake	26-Aug-16	4-14	908	RW	44	KD	263		192.3	U	1
Nares Lake	26-Aug-16	4-14	909	RW	44	RE	300				
Nares Lake	26-Aug-16	4-14	910	RW	38	RG	230				
Nares Lake	26-Aug-16	4-14	911	NP	38	RE	670				
Nares Lake	26-Aug-16	4-14	912	LT	38	E	adult				
Nares Lake	26-Aug-16	4-14	913	LW	32	KD	495		1950	F	3
Nares Lake	26-Aug-16	4-15	914	RW	51	RE	220				
Nares Lake	26-Aug-16	4-15	915	RW	51	RE	275				
Nares Lake	26-Aug-16	4-15	916	RW	38	RG	240				
Tagish River	26-Aug-16	4-16	917	LW	51	E	adult				
Tagish River	26-Aug-16	4-16	918	LC	38	KD	171	2	56.2	F	3
Tagish River	26-Aug-16	4-17	919	LC	25	KD	123	1	17.7	F	1
Tagish River	26-Aug-16	4-17	920	LC	25	KD	138	1	26.2	M	3
Tagish River	26-Aug-16	4-17	921	LW	25	KD	104				
Tagish River	26-Aug-16	4-17	922	LW	25	KD	101				
Tagish River	26-Aug-16	4-17	923	LW	25	KD	110				
Tagish River	26-Aug-16	4-17	924	LW	25	KD	105				
Tagish River	26-Aug-16	4-17	925	LW	25	KD	108				
Tagish River	26-Aug-16	4-17	926	LW	25	KD	99				
Tagish River	26-Aug-16	4-17	927	LW	25	KD	109				
Tagish River	26-Aug-16	4-17	928	LW	25	KD	120				
Tagish River	26-Aug-16	4-17	929	LW	25	KD	113				
Tagish River	26-Aug-16	4-17	930	LW	25	KD	100				
Tagish River	26-Aug-16	4-17	931	LW	25	KD	108				
Tagish River	26-Aug-16	4-17	932	LW	25	KD	111				
Tagish River	26-Aug-16	4-17	933	LW	32	KD	189		82.8	U	1
Tagish River	26-Aug-16	4-17	934	RW	32	KD	251		140	U	1



Waterbody	Date	Set ID	Fish #	Species	Mesh Size (mm)	Condition	Fork Length (mm)	Age	Weight (g)	Sex	Maturity code
Tagish River	26-Aug-16	4-17	935	RW	32	KD	349		500	M	3
Tagish River	26-Aug-16	4-17	936	LC	44	KD	165	1	46.6	F	3
Tagish River	26-Aug-16	4-18	937	LW	38	KD	191		78.4	U	1
Tagish River	26-Aug-16	4-18	938	RW	25	KD	111			U	1
Tagish River	26-Aug-16	4-18	939	LC	25	KD	115	1	15.3	U	1
Tagish River	26-Aug-16	4-18	940	LC	25	KD	129	1	18.5	U	1
Tagish River	26-Aug-16	4-18	941	LC	25	KD	121	1	16.2	M	1
Tagish River	26-Aug-16	4-18	942	LC	25	KD	136	1	26.2	M	3
Tagish River	26-Aug-16	4-18	943	LC	25	KD	121	1	15.8	U	1
Tagish River	26-Aug-16	4-18	944	LC	25	KD	126	1	19.6	M	3
Tagish River	26-Aug-16	4-18	945	LC	25	KD	122	1	17.2	M	3
Tagish River	26-Aug-16	4-18	946	LC	25	KD	125	1	16.8	F	1/2
Tagish River	26-Aug-16	4-18	947	LC	25	KD	126	1	19.6	M	2
Tagish River	26-Aug-16	4-18	948	LC	25	KD	129	1	19.8	F	1/2
Tagish River	26-Aug-16	4-18	949	LC	25	KD	123	1	18.1	M	3
Tagish River	26-Aug-16	4-18	950	LC	25	KD	126	1	19.4	F	1/2
Tagish River	26-Aug-16	4-18	951	LC	25	KD	128	1	21.1	M	3
Tagish River	26-Aug-16	4-18	952	LC	25	KD	128	1	21	F	1/2
Tagish River	26-Aug-16	4-18	953	LC	25	KD	122	1	17.6	M	3
Tagish River	26-Aug-16	4-18	954	LC	25	KD	118	1	15.5	U	1
Tagish River	26-Aug-16	4-18	955	LC	25	KD	126	1	18.4	U	1
Tagish River	26-Aug-16	4-18	956	LC	25	KD	124	1	18.1	F	1/2
Tagish River	26-Aug-16	4-18	957	LC	25	KD	141	1	29.8	M	3
Tagish River	26-Aug-16	4-18	958	LC	25	KD	128	1	19.5	M	1
Tagish River	26-Aug-16	4-18	959	LC	25	KD	118	1	13.2	U	1
Tagish River	26-Aug-16	4-18	960	LC	25	KD	124	1	18.5	U	1
Tagish River	26-Aug-16	4-18	961	LC	25	KD	119	1	15	M	1
Tagish River	26-Aug-16	4-18	962	LC	25	KD	142	1	29.3	M	3
Tagish River	26-Aug-16	4-18	963	LC	25	KD	119	1	15.7	M	3
Tagish River	26-Aug-16	4-18	964	LC	25	KD	118	1	14.7	U	1
Tagish River	26-Aug-16	4-18	965	LC	25	KD	124	1	17.5	U	1
Tagish River	26-Aug-16	4-18	966	LC	25	KD	120	1	17.8	F	1/2
Tagish River	26-Aug-16	4-18	967	LC	25	KD	124	1	18	U	1
Tagish River	26-Aug-16	4-18	968	LC	25	KD	134	1	22.4	M	3
Tagish River	26-Aug-16	4-18	969	LC	25	KD	119		16.6	U	1
Tagish River	26-Aug-16	4-18	970	LC	25	KD	120	1	16.4	M	3
Tagish River	26-Aug-16	4-18	971	LC	25	KD	128	1	19.8	M	3



Notes:

Fish species codes as follows: LC – least cisco, LSU – longnose sucker, LT – lake trout, LW – lake whitefish, NP – northern pike, RW – round whitefish.

Fate codes as follows: E – escape, KD – killed (retrieved dead), KS – killed (retrieved alive and sacrificed), RE – released (excellent), RG – released (good), RP – released (poor).

Sex and maturity codes as follows: M – male, F – female, U – unknown; 1 – immature, 2 – mature/resting (will not spawn this year), 3 – mature/spawner (will spawn this year).