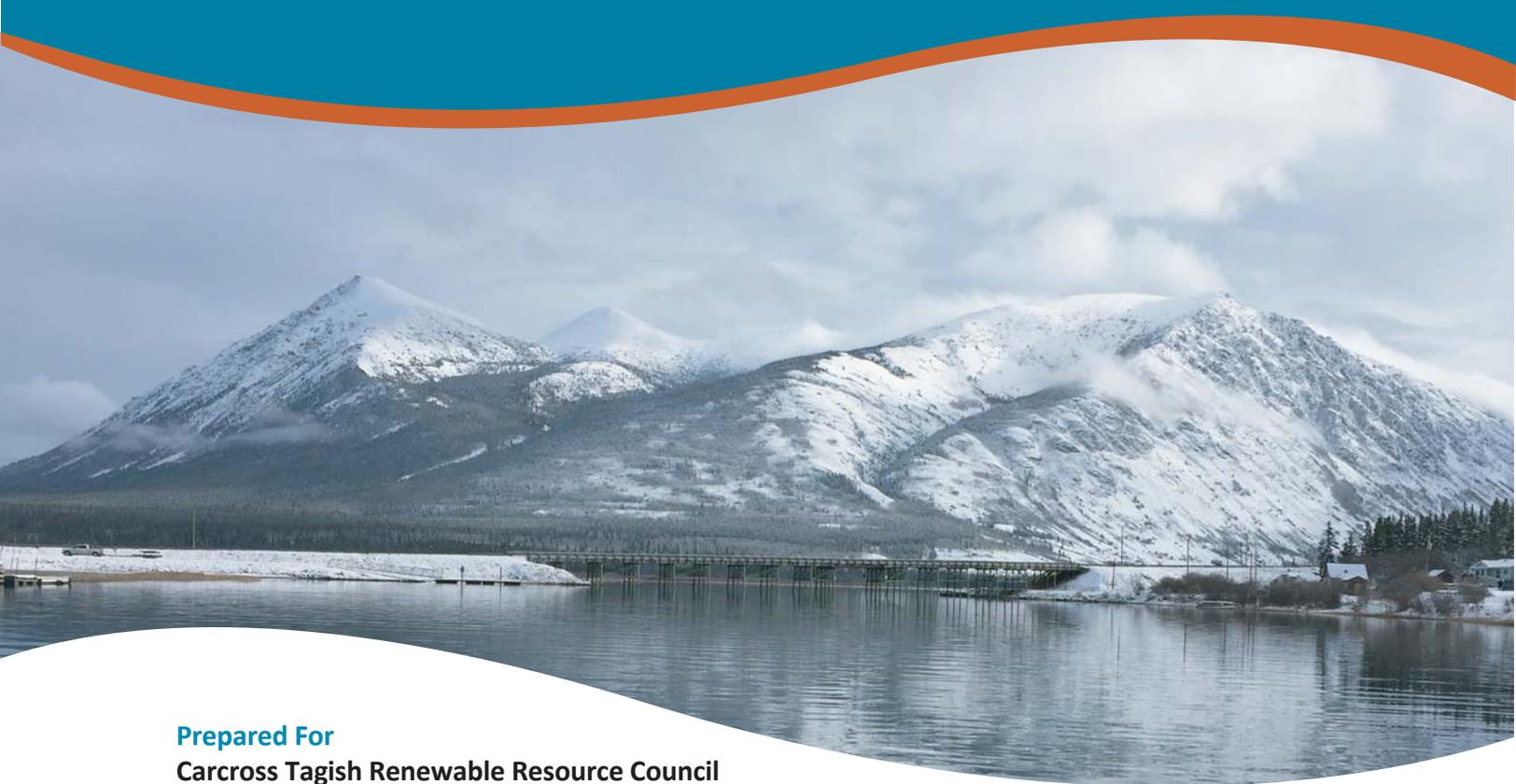


Tagish River and Nares River Least Cisco Assessment (Year 2)



Prepared For

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Down to Earth Biology

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EXECUTIVE SUMMARY

Least cisco are a widespread species of whitefish found throughout the Southern Lakes including Marsh Lake, Tagish Lake, Bennett Lake and the rivers and wetlands which connect these waterbodies. There is a local subsistence fishery for the species particularly in the vicinity of the communities of Carcross and Tagish. Cisco are a primary food source for predatory fish species of interest in the region, including lake trout, northern pike and burbot. In response to a long-standing interest from local citizens, the Carcross/Tagish Renewable Resources Council initiated a project during 2016 to gather information on life history of least cisco in the Southern Lakes and to determine seasonal distribution and abundance in the Tagish and Nares rivers. This project continued during 2017 with the following objectives: (1) collect a sample of up to 400 least cisco from the Tagish River and Nares River to collect life history information and genetic samples, (2) determine seasonal differences in least cisco abundance in the Tagish and Nares rivers during the summer of 2017, (3) 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, (4) conduct preliminary sampling to determine the timing and location of least cisco spawning in the Tagish and Nares rivers, and (5) provide training and capacity building opportunities for students and Carcross Tagish First Nation citizens.

The methods used for sampling least cisco involved the use of small mesh gillnets aimed at capturing all sizes of cisco. Sampling during the spring and summer was conducted on four days between late May and late August; fall sampling was conducted in late September and mid October. Net sets were focused primarily in the vicinity of Tagish (Tagish River/south end of Marsh Lake) and Carcross (Nares River/Nares Lake) with a limited amount of effort on Tagish Lake during mid-October only. All fish captured were identified to species with a variety of biological information collected including length, weight, maturity and sex. Genetic samples were collected from all cisco along with ageing structures (otoliths) which were analyzed to determine the age of individual fish.

A total of 212 least cisco were captured during the 2017 sampling effort with 156 captured during the spring/summer and 56 captured during the fall. The biological information collected during 2017 confirms the results of the 2016 project which indicated that least cisco in the Southern Lakes mature quickly with most fish spawning and mature at age 2 and do not have a long lifespan with just few fish reaching an age of 4 or 5. This is in contrast to other fish species in the system such as lake trout and lake whitefish which grow/mature slowly and have longer lifespans (up to 40+ years).

The sampling conducted during the fall months provided new information on the timing and location of least cisco spawning in the Southern Lakes. Spawning fish were captured in both the Tagish and Nares rivers on September 28, 2017. Sampling conducted in Tagish and Nares Rivers and Tagish Lake during mid-October did not capture any least cisco in spite of significant sampling effort however large schools of cisco were observed on several occasions on the Tagish River off the bridge by CTRRC members in November of 2017. Spawning cannot be ruled out in Tagish Lake and it is very likely that spawning occurs at numerous locations in the Southern Lakes.



Further sampling for least cisco in the Southern Lakes should focus on additional sampling in the Carcross area and elsewhere in the Southern Lakes during the summer months to better understand changes in seasonal abundances in the Nares River and to collect life history information and genetic samples from elsewhere in the system. Additional sampling in the Tagish area, Carcross area and elsewhere in the Southern Lakes should be considered during the spawning period (September/October) to better identify spawning locations and collect the genetic samples from spawning individuals to identify if populations are genetically distinct.

This project was carried out collaboratively by EDI, the Carcross Tagish Renewable Resources Council and the Carcross Tagish First Nation. Funding was provided by the Yukon Fish and Wildlife Enhancement Trust, Yukon Energy Corporation and the Carcross Tagish Renewable Resource Council.



ACKNOWLEDGEMENTS

Funding for this project was provided by the Yukon Fish & Wildlife Enhancement Trust Fund and the Yukon Energy Corporation and the Carcross Tagish Renewable Resource. 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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1 INTRODUCTION

Least cisco (*Coregonus sardinella*) are members of the whitefish family, common and are found in large 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 Lindsey 1970). In the Southern Lakes, cisco can be found in large lakes (Marsh, Tagish, Bennett and Atlin; Map 1), as well as the rivers connected to the lakes including Tagish and Nares rivers. There is a considerable base of historical traditional knowledge and local 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 coincide with 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 (Environment Yukon 2017). 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. This fishery has not been active in recent years and the allocation of cisco to commercial use is currently under review by the Yukon Government.

For many decades, Carcross/Tagish First Nation (CTFN) elders and citizens in addition to other local residents have expressed concerns about a possible decline of cisco in the Tagish and Carcross areas. 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 2017). 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 according to elders and knowledgeable local residents (Toews 2017).

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 concerns about the decline of cisco from CTFN elders, citizens and other locals, Larsen (2004) collected initial information on cisco in the Southern Lakes. This study 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.



1.1 SUMMARY OF 2016 FIELD STUDIES

During 2016, EDI collaborated with the Carcross Tagish Renewable Resources Council to undertake field studies aimed at improving the understanding of least cisco life history in the Southern Lakes. Least cisco were captured in the Tagish River during June, July and August with the highest capture rate during July (EDI 2017). 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 short lifespans 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.

Information on temporal changes in relative abundance were also documented in the Tagish River during 2016. The overall capture rate of cisco was highest in July, followed by August and June. Overall cisco populations in the Tagish River appeared to be relatively abundant throughout the summer period and relatively healthy based on representation of all year classes. However no young of the year juveniles were captured but was likely due to the lack of smaller mesh sizes used. The proportion of larger (3 year olds) was highest during June and the higher overall capture rate during July was due to a large number of one year olds captured. While sampling in the Nares River at Carcross was more limited, cisco were only captured in one net set over the course of the summer comprised largely of larger mature age 3 fish. No younger year classes or juveniles were captured.

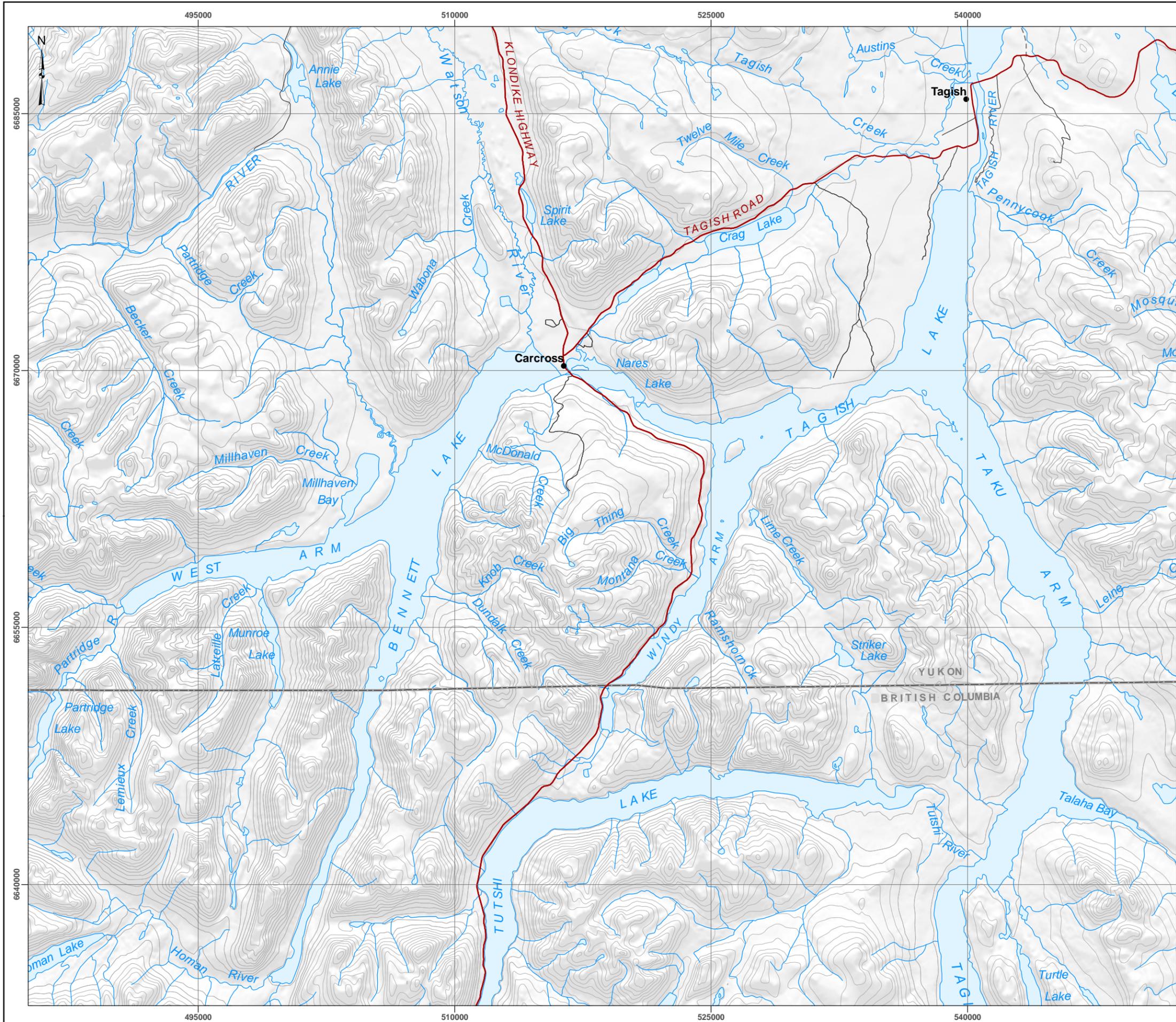
1.2 OBJECTIVES OF THE 2017 PROJECT

The purpose of this report is to present the findings of field assessments conducted during the summer and fall of 2017 which were intended to build on existing information of cisco in the Southern Lakes. The goal of the project was to collect information on the relative abundance and distribution of cisco in the Tagish and Nares Rivers during the spring and summer months, further establish the size and age structure of the population and to investigate the timing and location of spawning in the system. The specific objectives of the project included:

- Collect a sample of up to 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 and in particular increase the sampling effort in Nares River area at Carcross.
- Determine seasonal differences in least cisco abundance/distribution and size/age class structure in the Tagish and Nares rivers during the summer of 2017.



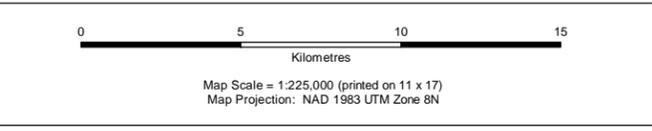
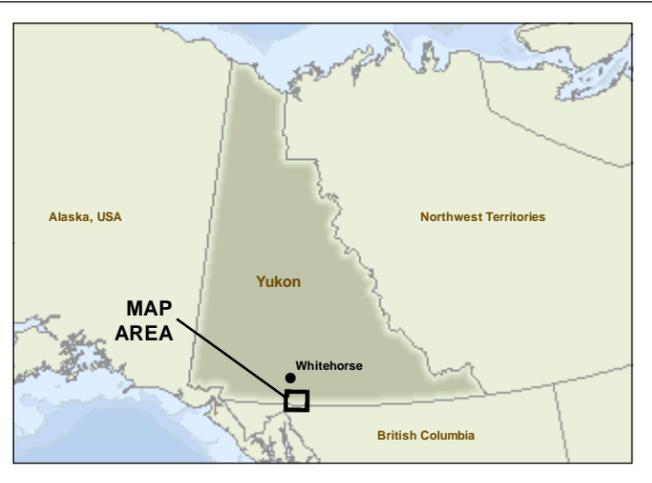
- Collect information on mesh size selectivity of different sizes and age classes of least cisco to inform potential sampling or monitoring efforts in the future and in particular increased sampling with smaller and additional mesh sizes to reduce size selectivity and catch juvenile cisco.
- Conduct preliminary sampling to determine the timing and location of least cisco spawning in the Tagish River, Nares River and elsewhere in the Southern Lakes system as time allows.
- Collect genetic sampling for lake cisco populations in Marsh, Bennett and Tagish Lakes
- Provide training and capacity building opportunities for students and Carcross Tagish First Nation citizens.



Map 1. Southern Lakes Least Cisco Assessment Overview

Legend

- Settlement/Community
- Highway
- Secondary road
- - - Trail



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2 METHODS

In the Tagish area, gillnetting was primarily located in the Tagish River with a limited amount of effort also at the south end of Marsh Lake and the north end (outlet) of Tagish Lake. Sampling in the Carcross area was largely focused in the Nares River and Nares Lake with a small number of sets in adjacent portions of Bennett Lake. Sampling for spawning least cisco was also attempted in mid-October on Tagish Lake in the vicinity of the Tutshi River, Talaha (Moose) Bay, the prominent point on the west shore of Taku Arm just north of the BC border and the Scotties Island area.

Sampling in the Tagish and Carcross areas took place on four occasions during the spring and summer of 2017: May 24, June 23, June 30 and August 23. Additional sampling was conducted in the fall in the Tagish area, Carcross area and on Tagish Lake on September 28 and October 20-21. During these sampling events five different nets were used, each with two to four panels and varying mesh sizes. Net gangs C and D were not used as frequently as A and B due to the inclusion of a larger mesh size which results in higher incidental mortalities of non-target species such as round whitefish. The very small mesh sizes included in net gang E were used on a trial basis only in an attempt to capture young-of-the-year least cisco in the Tagish area during August only.

Table 1. Summary of net gangs and mesh sizes used during 2017 least cisco targeted small mesh netting.

Net Number	Number of Panels	Mesh Sizes and Order (mm)	TOTAL NUMBER OF SETS
A	3	25/32/38	64
B	4	25/32/38/44	38
C	3	25/38/51	14
D	3	38/51/38	13
E	2	12/19	1
		TOTAL SETS	130

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 (set on the bottom) and when in flowing water, were set parallel or angled to the water flow with large anchors on either end to keep the net in position within the current; net sets not in flowing water had random orientations including perpendicular to the shoreline. 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. All sampling was completed during daylight hours (8:00-17:00); however, a portion of the sets on September 28 were conducted in the evening hours (until 23:00) to document spawning activity at dusk and afterwards.

All fish captured were given a unique identification number and 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; otoliths were collected from all individuals and scales were also collected from a subset of individuals to allow for a



comparison of ageing accuracy between the two methods. 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 where 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).

Least cisco capture numbers were converted to a measure of CPUE (catch-per-unit-effort) by standardizing the number of fish captured by net length and set duration. The CPUE value used was the number of fish captured per 100 m of net per hour.

Box plots were used to display the variability in small mesh netting CPUE. The thick horizontal line in the middle of the box is the median value with the box showing the interquartile range. The vertical lines show values within 1.5 times the interquartile range. The dots are the outliers, which are more than 1.5 times the interquartile range.

2.1 SPRING AND SUMMER SAMPLING

A total of 66 small mesh gillnetting sets were completed with the effort split evenly between the Carcross and Tagish areas with sampling conducted from late May through late August (Table 2; Map 2, Map 3). The duration of gillnet sets averaged 40 minutes and ranged from 20 to 63 minutes. In addition to the sampling conducted by EDI/CTRRC, a sample of 15 fish captured at the south end of Bennett Lake during the mid-summer were also provided by White Pass & Yukon Route Railway consultants and included as a separate component within this report. The fish provided included 14 least cisco and one juvenile round whitefish. At the time this report was prepared, no additional details regarding the sampling conducted by White Pass was available.

Table 2. Summary of targeted small mesh gillnets for least cisco by sampling area during the spring and summer of 2017

Sample Area	Sampling Location	Number of Gillnet Sets				
		May 24	Jun 13	Jun 30	Aug 23	ALL EVENTS COMBINED
Carcross Area	Bennett Lake	0	1	1	0	2
	Nares River	6	5	4	7	22
	Nares Lake	3	2	2	2	9
Tagish Area	Tagish River	3	10	7	10	30
	Marsh Lake	3	0	0	0	3
ALL EVENTS COMBINED		15	18	14	19	66

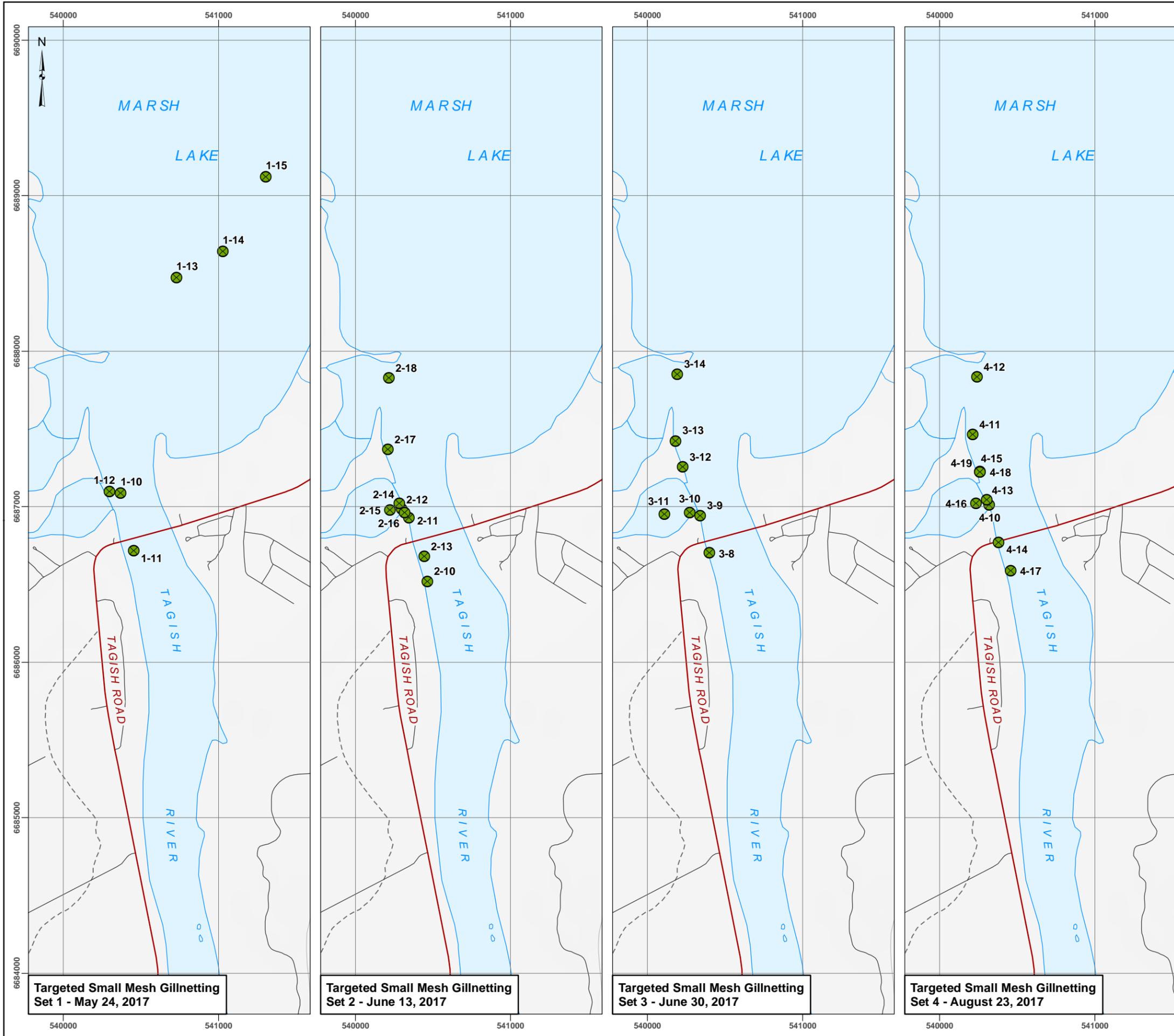


2.2 FALL SPAWNING ASSESSMENTS

A total of 64 small mesh gillnetting sets were completed during the fall spawning assessment including: 21 sets in Carcross area, 27 sets in the Tagish area and 16 sets on Tagish Lake (Table 3; Map 4, Map 5). The sampling effort on September 28 was limited to the Tagish and Carcross areas with the October 20/21 sampling event also including portions of Tagish Lake. The duration of gillnet sets averaged 46 minutes and ranged from 25 to 70 minutes.

Table 3. Summary of targeted small mesh gillnets for least cisco by sampling area during the fall of 2017.

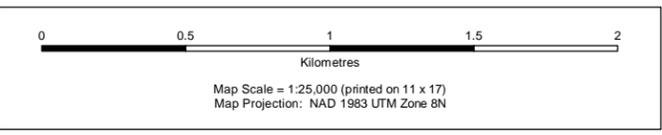
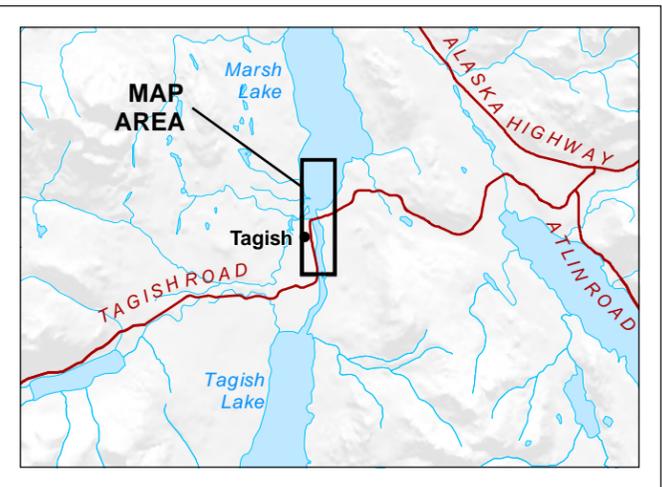
Sampling Area	Sampling Location	Number of Gillnet Sets			
		Sep 28	Oct 20	Oct 21	All Events Combined
Carcross Area	Bennett Lake	0	0	0	0
	Nares River	10	0	0	10
	Nares Lake	0	11	0	11
Tagish Area	Marsh Lake	0	3	0	3
	Tagish River	15	9	0	24
Tagish Lake	Tutshi River area	0	0	3	3
	Moose (Talaha) Bay	0	0	3	3
	Prominent point on the west shore of Taku Arm just north of the BC border	0	0	6	6
	Scotties Island area	0	0	4	4
ALL EVENTS COMBINED		25	23	16	64



Map 2. Overview of targeted summer small mesh gill netting sets in the Tagish area during 2017

Legend

- Least Cisco Sampling Sites
- Highway
- Secondary road
- - - Trail



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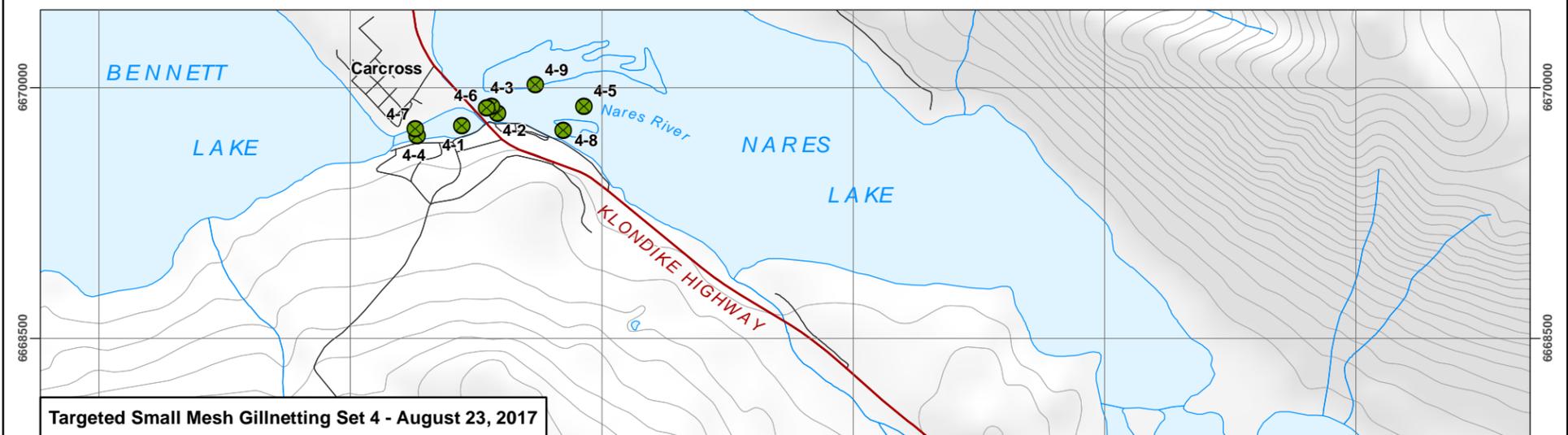
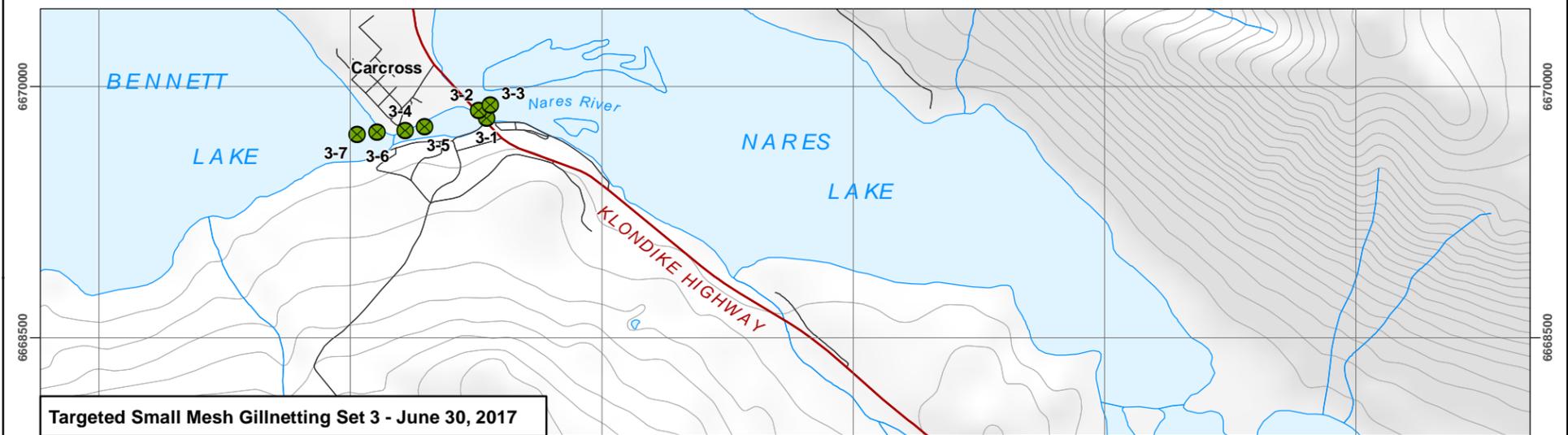
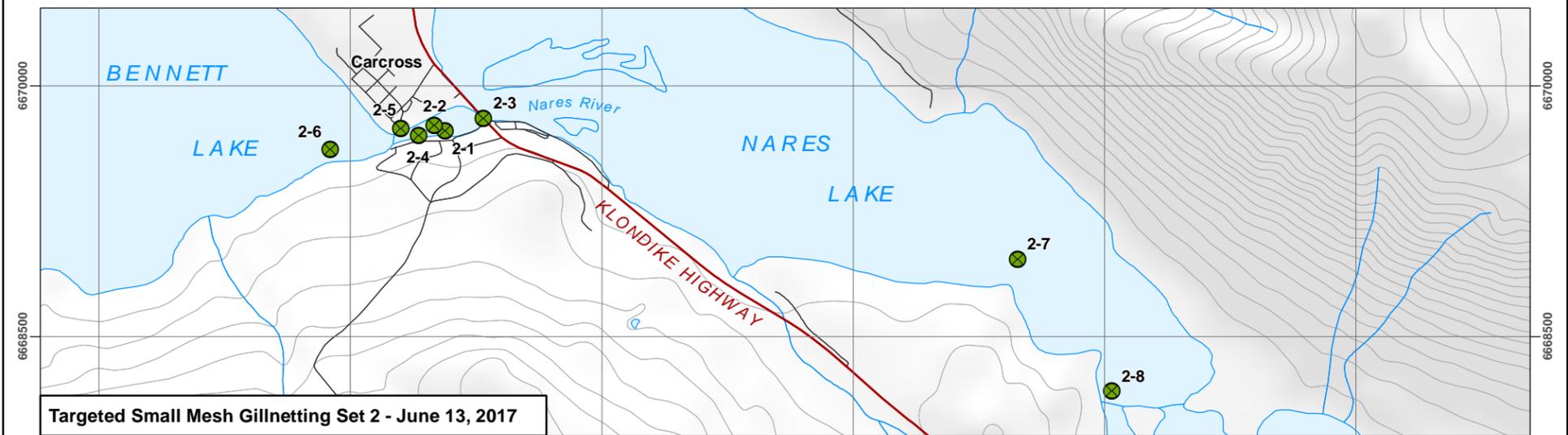
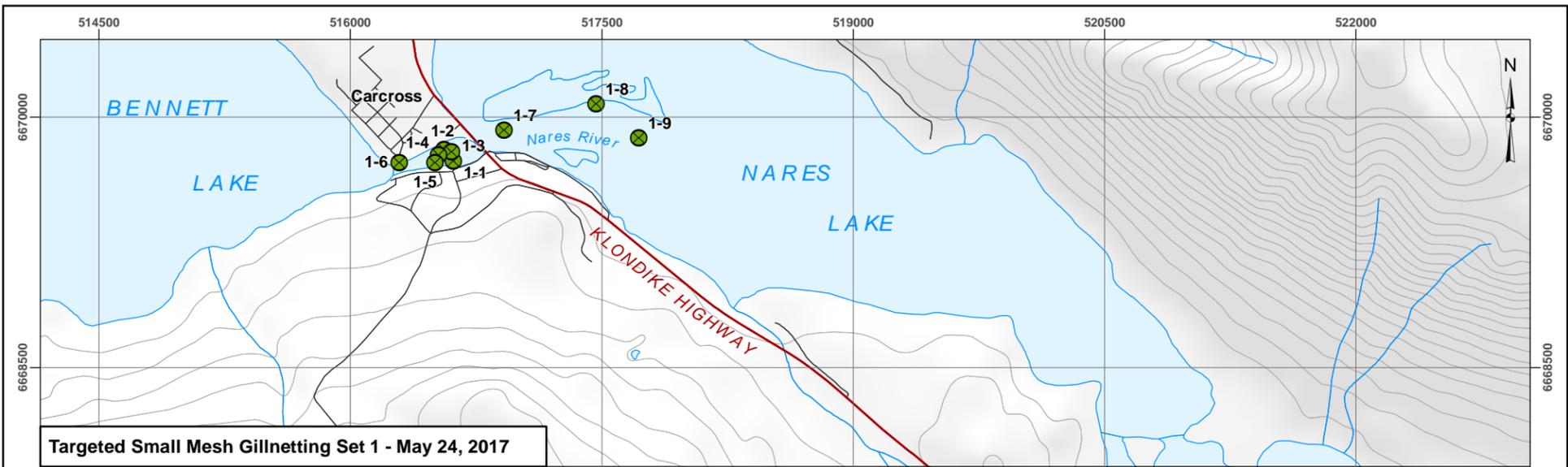
Targeted Small Mesh Gillnetting Set 1 - May 24, 2017

Targeted Small Mesh Gillnetting Set 2 - June 13, 2017

Targeted Small Mesh Gillnetting Set 3 - June 30, 2017

Targeted Small Mesh Gillnetting Set 4 - August 23, 2017

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Legend

- Least Cisco Sampling Sites
- Highway
- Secondary road
- - - Trail

Map 3. Overview of targeted summer small mesh gillnetting sets in the Carcross area during 2017

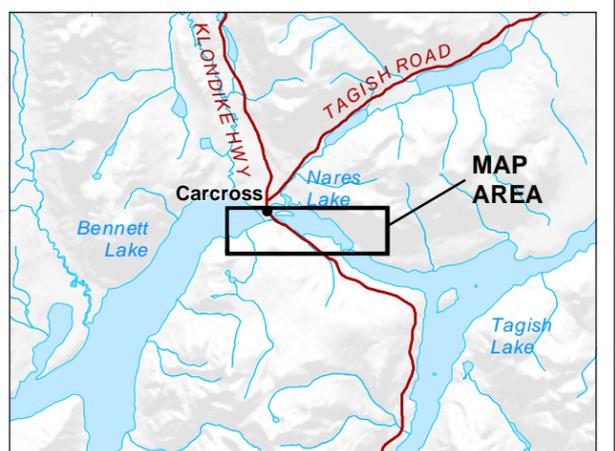
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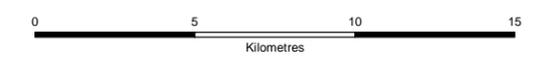
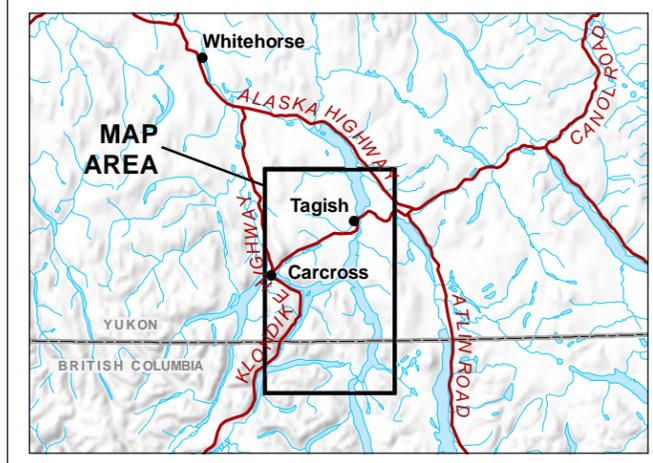
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Map 4. Targeted fall (spawning) small mesh gillnetting sets during September 2017

Legend

-  Least Cisco Sampling Sites
-  Settlement/Community
-  Highway
-  Secondary road
-  Trail



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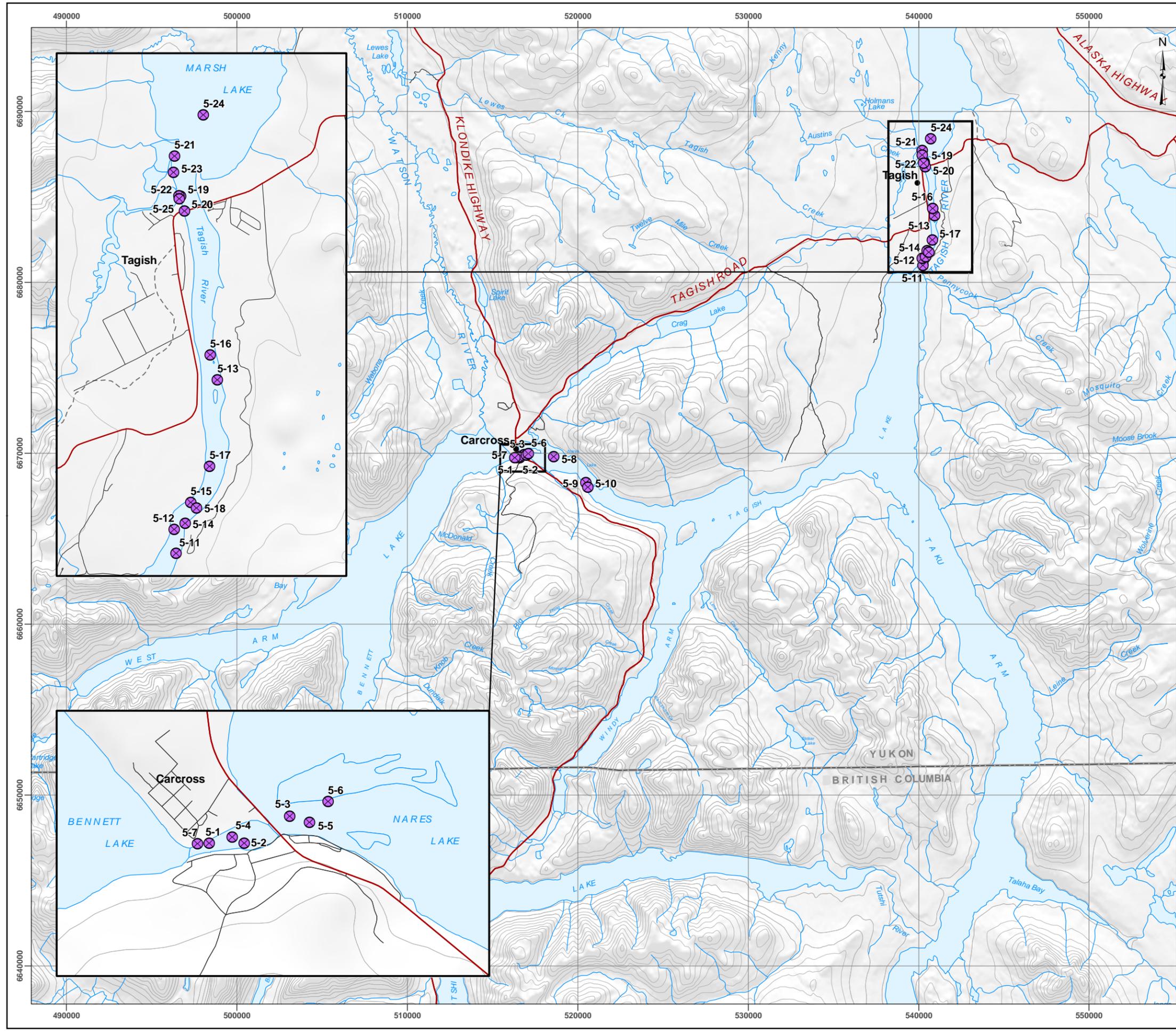
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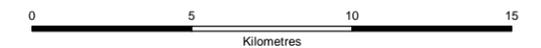
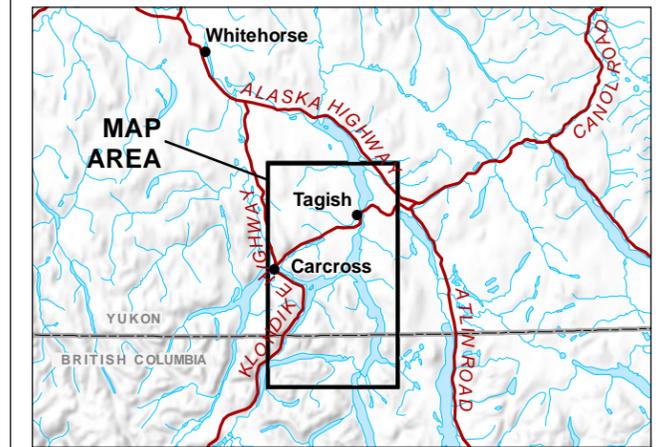
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Map 5. Targeted fall (spawning) small mesh gillnetting sets during October 2017

Legend

-  Least Cisco Sampling Sites
-  Settlement/Community
-  Highway
-  Secondary road
-  Trail



Map Scale = 1:225,000 (printed on 11 x 17)
Map Projection: NAD 1983 UTM Zone 8N

Data Sources
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3 RESULTS AND DISCUSSION

The results of the spring/summer and spawning assessments are presented in the following sections.

3.1 SPRING AND SUMMER SAMPLING

The results of the 2017 spring and summer least cisco sampling are presented in the following sections including: species composition, seasonal differences in least cisco capture rates, length and age frequencies and maturity of least cisco. Information on the comparison between otolith and scale ages and mesh size selectivity of least cisco are also presented with the spring/summer sampling data combined with the spawning assessment data.

3.1.1 SPECIES COMPOSITION

A total of 246 fish were captured during the four spring and summer sampling events in the Tagish area with least cisco being the most frequently captured species, accounting for 51% of all fish captured (Table 4). Lake whitefish were the second most frequently captured species (36%) followed by round whitefish (11%). Arctic grayling, longnose sucker, northern pike and burbot were also captured.

The results from the Carcross area differed from those in the Tagish area with round whitefish accounting for 50% of the 72 fish captured, followed by least cisco with 42% of all fish caught. The remainder of the catch in this sampling area was comprised of small numbers of lake trout and Arctic grayling. Gillnetting in the Carcross area was found to be very challenging due to various natural and anthropogenic debris on the river bottom which acted as an entanglement hazard for the gillnets.



Table 4. Summary of fish captured during targeted small mesh netting for least cisco in the Tagish area during the spring and summer of 2017.

Sampling Event	Species	Retained	Incidental Mortalities		Released/Escaped	TOTAL
			Juveniles	Adults		
May 24	Round Whitefish	-	-	-	2	2
June 13	Burbot	-	-	-	1	1
	Least Cisco	32	-	-	-	32
	Longnose Sucker	-	-	-	1	1
	Lake Whitefish	-	4	0	15	19
	Round Whitefish	-	1	1	4	6
June 30	Least Cisco	44	-	-	-	44
	Arctic Grayling	-	1	-	-	1
	Lake Whitefish	-	28	2	19	49
	Round Whitefish	-	2	1	7	10
August 23	Least Cisco	49	-	-	1	50
	Lake Whitefish	-	11	-	9	20
	Northern Pike	-	-	-	1	1
	Round Whitefish	-	4	3	3	10
ALL EVENTS COMBINED	Burbot	-	-	-	1	1
	Least Cisco	125	-	-	1	126
	Arctic Grayling	-	1	-	-	1
	Longnose Sucker	-	-	-	1	1
	Lake Whitefish	-	43	2	43	88
	Northern Pike	-	-	-	1	1
	Round Whitefish	-	7	5	14	26



Table 5. Summary of fish captured during targeted small mesh netting for least cisco in the Carcross area during the spring and summer of 2017.

Sampling Event	Species	Retained	Incidental Mortalities		Released/ Escaped	TOTAL
			Juveniles	Adults		
May 24	Arctic Grayling	-	-	-	1	1
	Lake Trout	-	-	-	1	1
	Round Whitefish	-	-	-	3	3
June 13	Arctic Grayling	-	-	-	2	2
June 30	Round Whitefish	-	-	-	5	5
August 23	Least Cisco	30	-	-	-	30
	Arctic Grayling	-	1	-	-	1
	Lake Trout	-	-	-	1	1
	Round Whitefish	-	9	1	18	28
All Events Combined	Least Cisco	30	-	-	-	30
	Arctic Grayling	-	1	-	3	4
	Lake Trout	-	-	-	2	2
	Round Whitefish	-	9	1	26	36



3.1.2 SEASONAL DIFFERENCES IN LEAST CISCO CAPTURE RATES

With four sampling events in the Tagish River during the summer of 2017, it is possible to investigate changes in capture rates throughout the season and compare the results to similar sampling during 2016 (EDI Environmental Dynamics Inc. 2017). 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 24 sampling event which is consistent with 2016 results when none were captured on May 31. Least cisco were captured in the three 2017 summer sampling events; however, the median CPUE was zero for both June sampling events indicating that at least half of the sets did not capture any cisco (Figure 1, left). Some very high CPUE values during both June sampling events contribute to the variability within CPUE; however, the average CPUE during all three summer sampling events was similar (7.1, 10.8 and 8.3 fish/100 m /hr on June 13, June 30 and August 23 respectively). The 2017 CPUE in the Tagish area was considerably lower than 2016. For example, the average CPUE during July and August 2016 ranged from 13.29 to 23.91 fish/ 100 m/hr; EDI Environmental Dynamics Inc. 2017). The highest captures in the Tagish area during 2017 were in the vicinity of the Tagish Creek confluence just to the north of the bridge (Map 6).

Least cisco were only captured in the Carcross area during the August sampling event in 2017. They were captured in 3 of 9 sets which resulted in an median CPUE of zero and a mean CPUE of 5.2 fish/100 m/hr (Figure 1, right). Least cisco were only captured during the August 23 sampling event in a small number of sets located adjacent to the wetland habitats directly downstream of the Klondike Highway bridge (Map 7). The 2017 capture rate is similar to the Tagish area results from 2017 but considerably lower than 2016. The limited amount of consistent captures in the Carcross area during 2016 and 2017 do not allow for a comparison of capture rates between years.

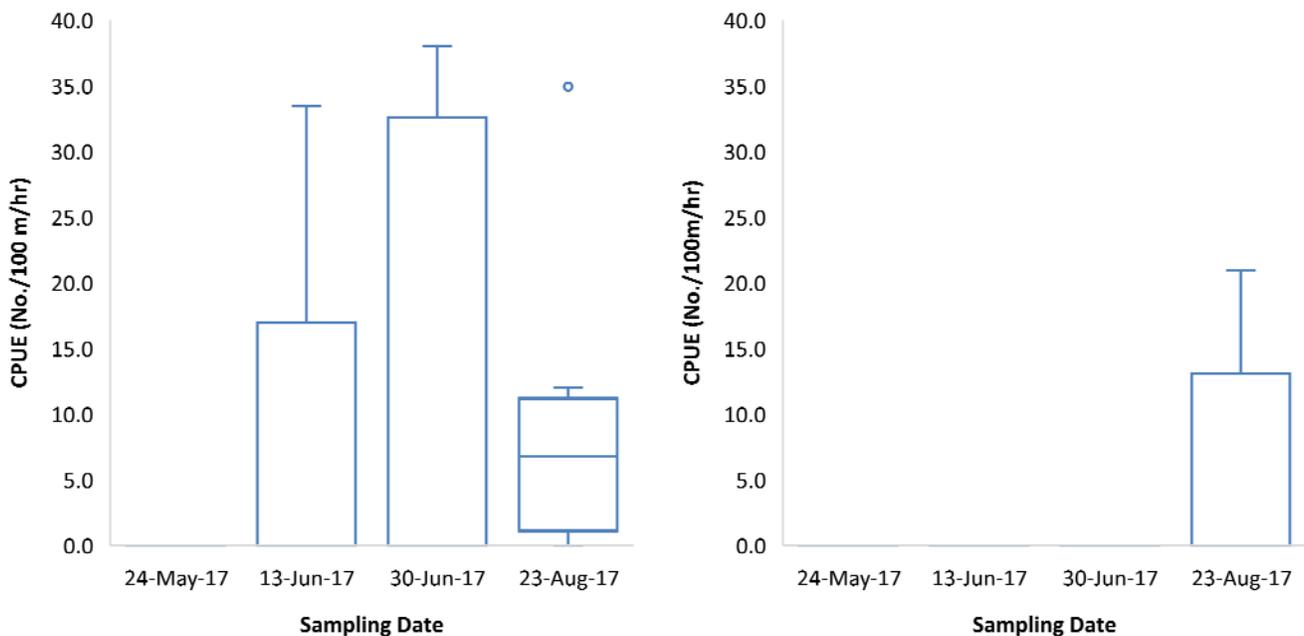


Figure 1. Least cisco CPUE during the four targeted small mesh netting sampling events during the spring and summer 2017 in the Tagish area (left) and Carcross area (right).

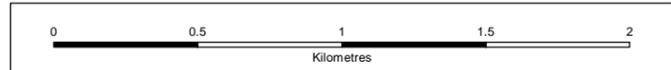
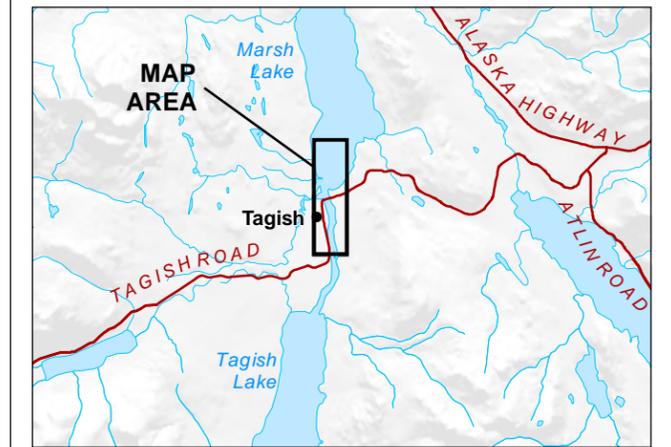
Map 6. Overview of targeted small mesh gillnetting results in the Tagish area during 2017

Legend

-  Highway
-  Secondary road
-  Trail

Least Cisco Survey Results

-  0 Fish/Hour
-  1 - 10 Fish/Hour
-  11 - 15 Fish/Hour
-  16 - 25 Fish/Hour
-  26 - 38 Fish/Hour



Map Scale = 1:25,000 (printed on 11 x 17)
Map Projection: NAD 1983 UTM Zone 8N

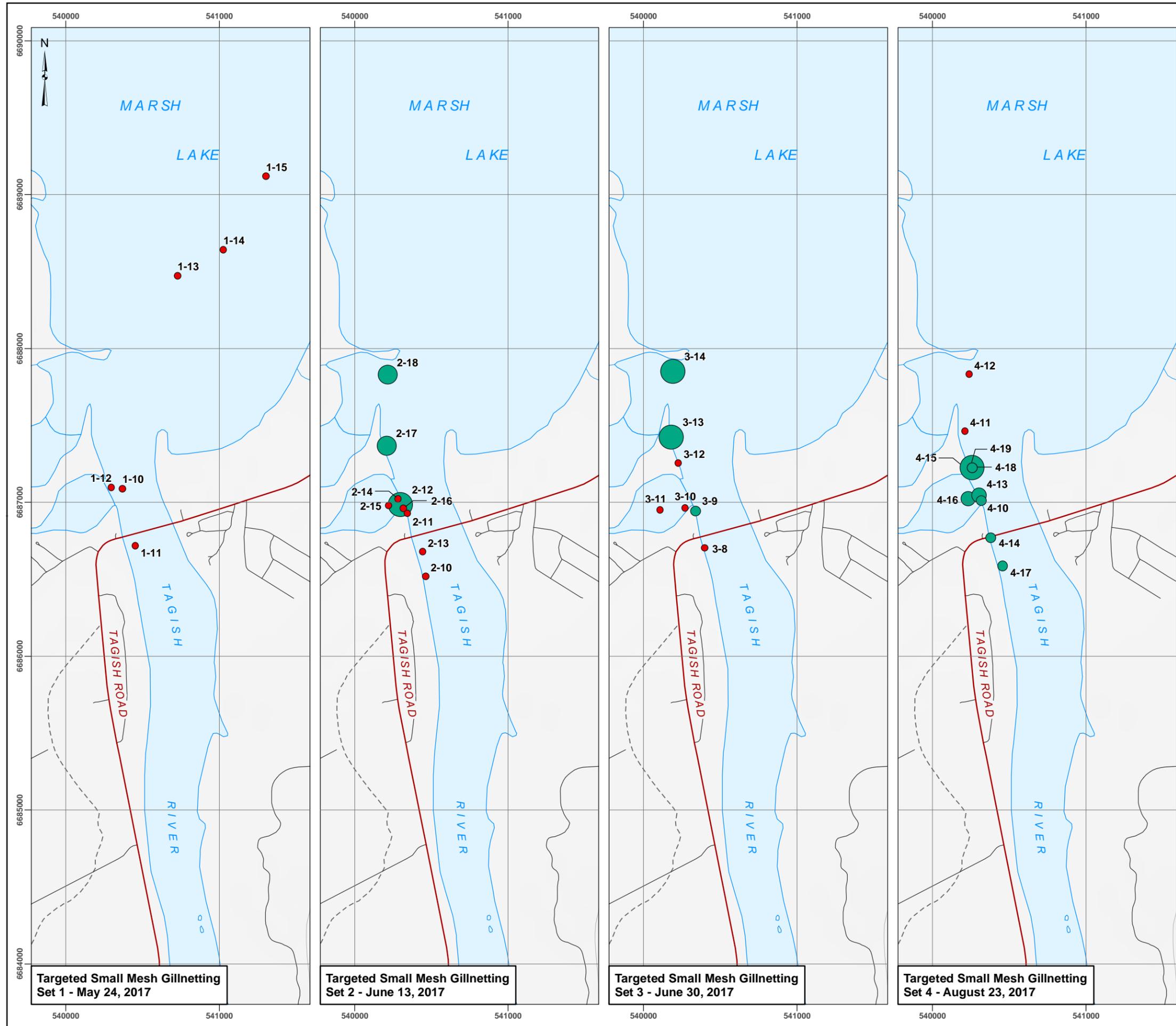
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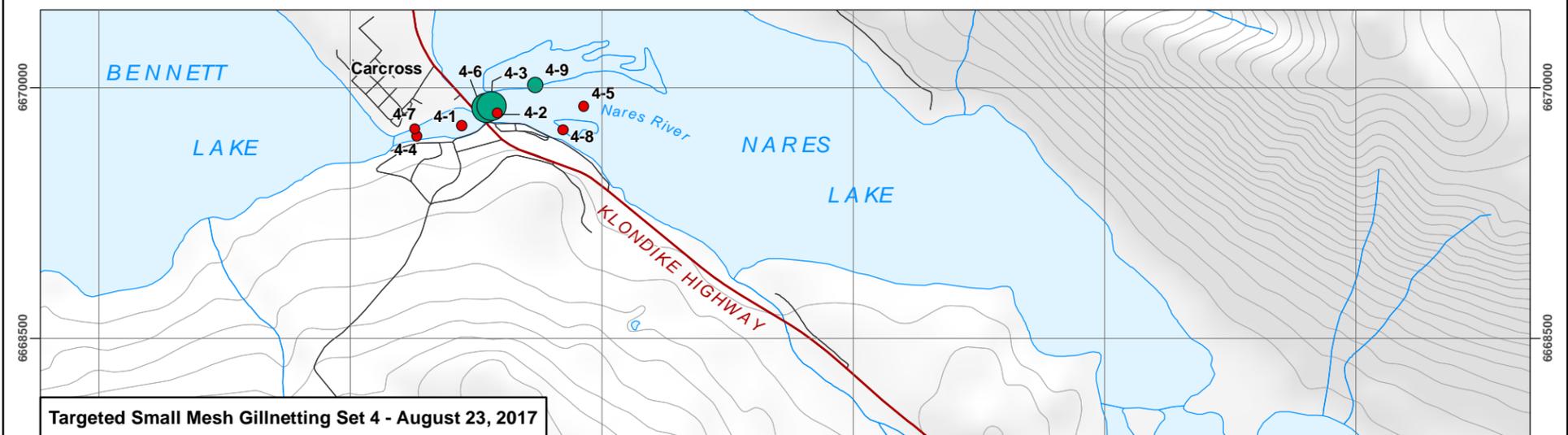
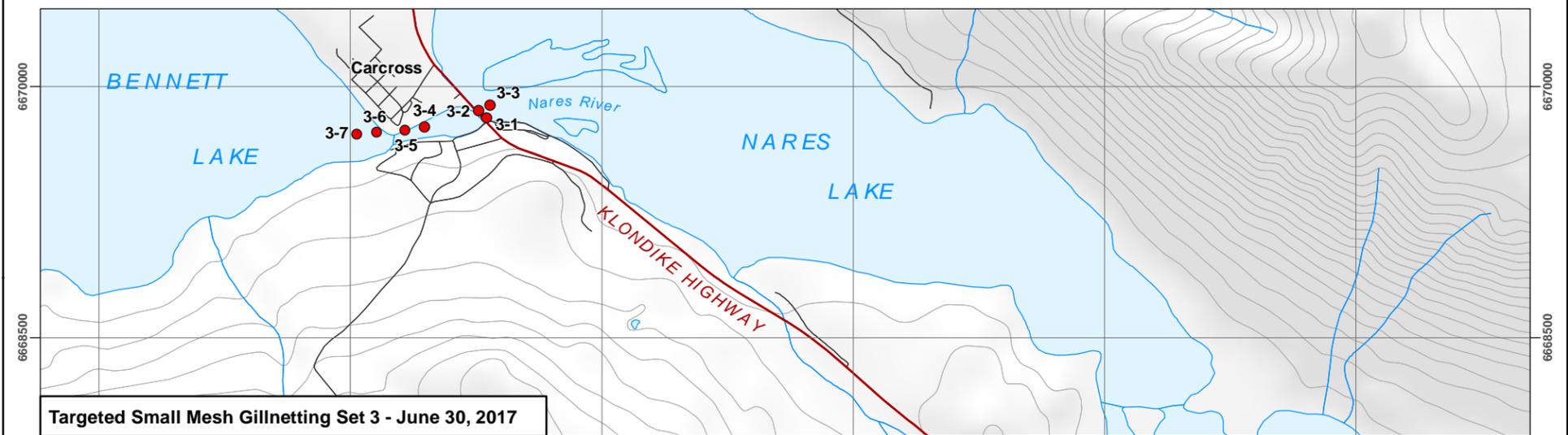
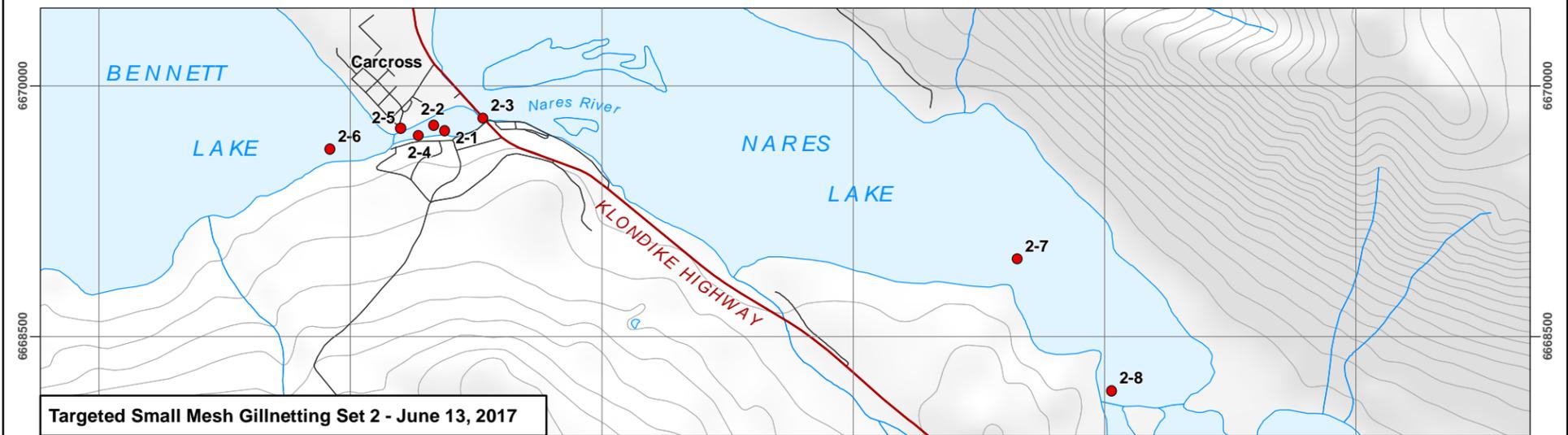
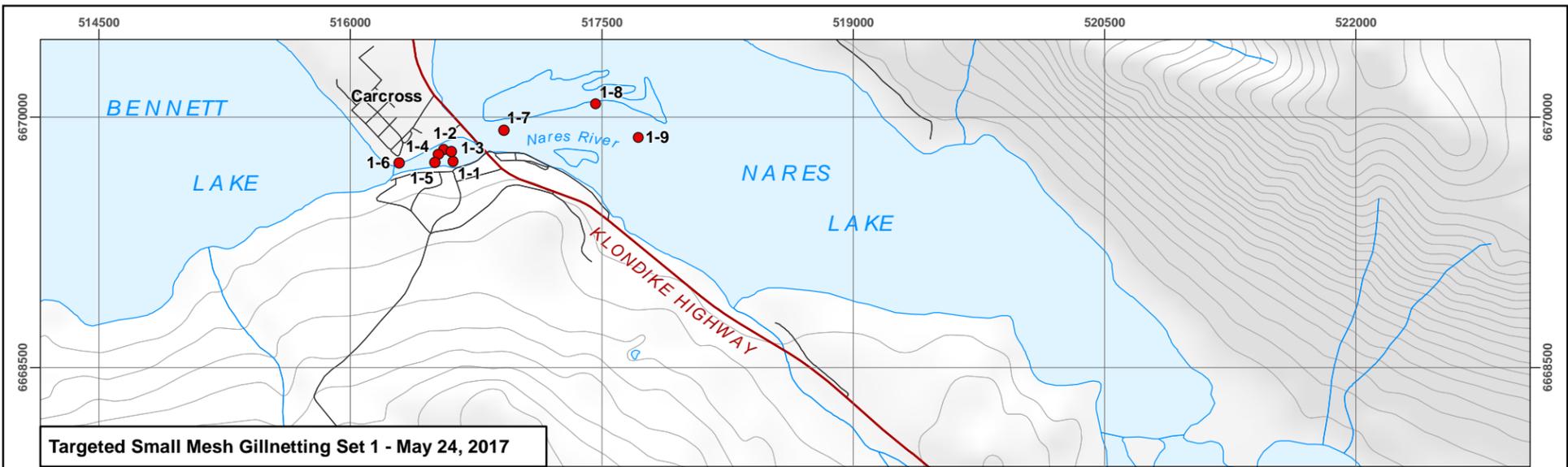
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Legend

- Highway
- Secondary road
- - - Trail

Least Cisco Survey Results

- 0 Fish/Hour
- 1 - 10 Fish/Hour
- 11 - 15 Fish/Hour
- 16 - 25 Fish/Hour
- 26 - 38 Fish/Hour

Map 7. Overview of targeted small mesh gillnetting results in the Carcross area during 2017

Data Sources
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Map Projection: NAD 1983 CSRS UTM Zone 8N

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MAP AREA



3.1.3 LENGTH AND AGE FREQUENCIES

Least cisco captured in the Tagish area during the spring and summer of 2017 ranged in length from 82 to 220 mm and there were differences in the length frequency distribution across sampling events (Figure 2). There was an overall decrease in the proportion of larger cisco captured as the summer progressed and an increase in smaller individuals later in the summer (August). These results are consistent with the 2016 sampling (EDI Environmental Dynamics Inc. 2017) which found that least cisco over 170 mm in length constituted a very small portion of the catch during July and August.

The length frequency data collected from the Carcross area during the July sampling event showed that the cisco captured in this location were considerably larger than those captured in the Tagish area and ranged in length from 142 to 214 mm (Figure 3). A considerable portion of the catch in the Tagish area during August 2017 included least cisco less than 140 mm (46.9%) and this size class was absent from the catch in the Carcross area.

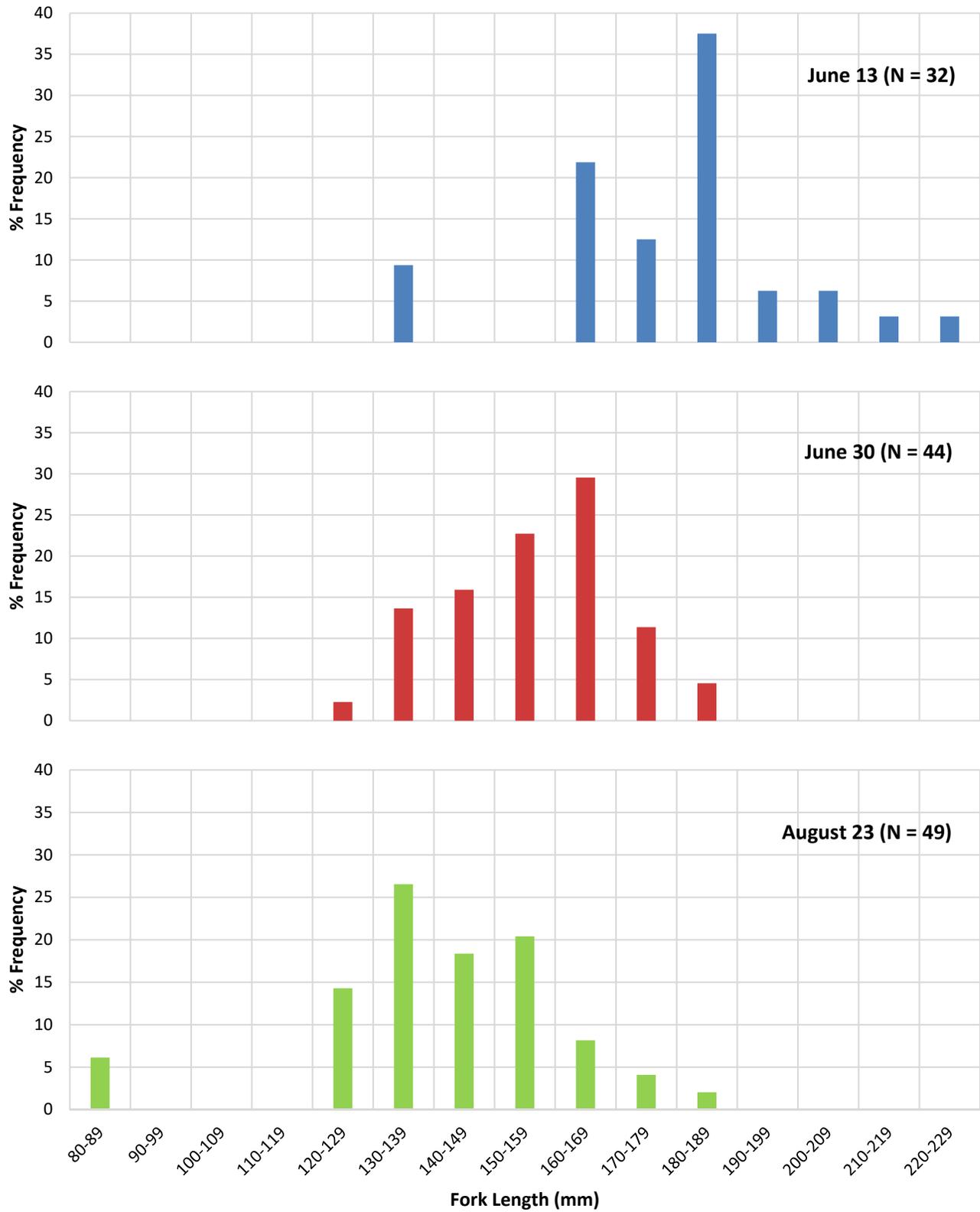


Figure 2. Least cisco length frequency diagram for the June 13, June 30 and August 23, 2017 sampling events in the Tagish area.

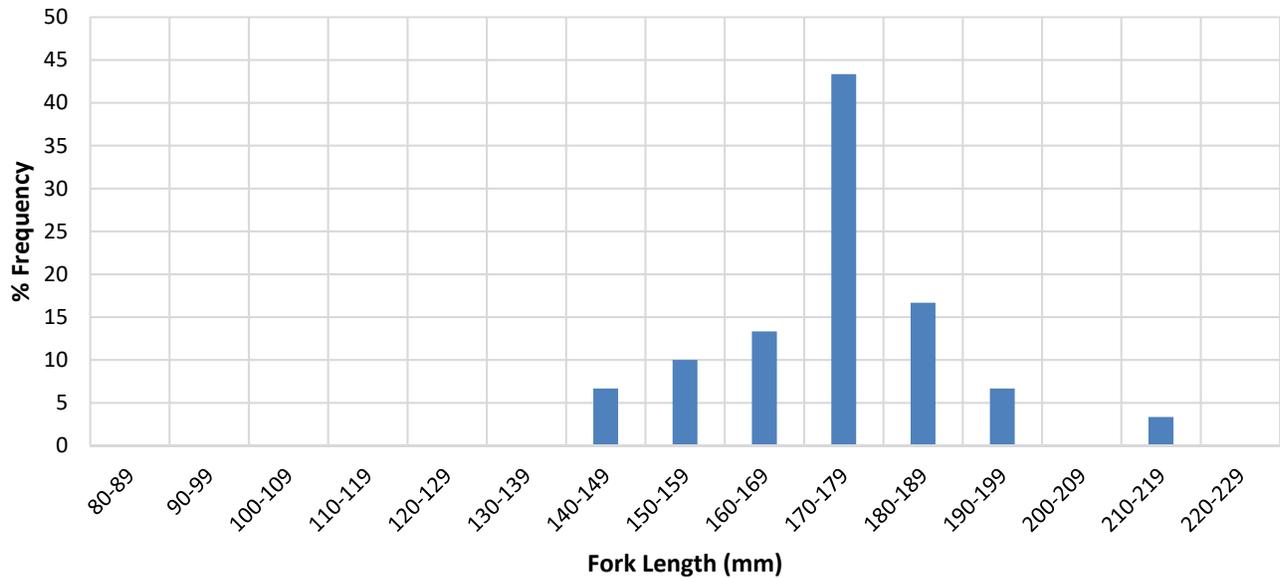


Figure 3. Least cisco length frequency diagram for the August 23, 2017 sampling event in the Carcross area (n=30).

Length at age data of least cisco captured in the Tagish and Carcross areas during 2017 showed some overlap in fork lengths between adjacent year classes (Table 6). The 4+ and 5+ age classes appeared to be very similar in size; however, it may be due to the small sampling size of these year classes. Age 0+ (young-of-the-year) individuals captured in the Tagish area during August were considerably smaller than the 1+ age class.

Table 6. Summary of fork length at age data collected for least cisco captured in the Tagish and Carcross areas during 2017 (all fork lengths are displayed in mm).

Age	Tagish Area												Carcross Area			
	June 13				June 30				August 23				August 23			
	N	Mean	Min	Max	N	Mean	Min	Max	N	Mean	Min	Max	N	Mean	Min	Max
0	0	-	-	-	0	-	-	-	3	82	86	89	0	-	-	-
1	0	-	-	-	7	147	129	162	28	137	125	164	6	151	142	160
2	6	154	133	183	31	156	134	179	17	160	145	180	23	177	163	196
3	19	178	164	191	5	172	165	181	0	-	-	-	1	-	214	-
4	4	201	182	218	0	-	-	-	0	-	-	-	0	-	-	-
5	3	201	186	220	0	-	-	-	0	-	-	-	0	-	-	-

A total of 125 least cisco were aged from the Tagish area and included 1 to 5 year old age classes (Figure 4). When data from all sample events is combined, the 2+ age class was most frequently captured (54 - 45%), followed by the 1+ age class (35 - 29%) and 3+ age class (24 - 20%). In the 4+ and 5+ age classes 4 and 3 cisco were captured, respectively, combining for 6% of the total catch. This trend was consistent in the Carcross area. Of the 30 least cisco aged, the 2+ age class was the most dominant at 77% (23), followed by 1+ at 30% and a single 3+ (Figure 5).



Consistent with the 2016 sampling, the 2017 results indicate a relatively low longevity and high natural mortality rates for the least cisco in Tagish and Carcross areas as indicated by the prevalence of younger fish with relatively few older fish and a maximum age of 5. Age and length information collected in Tagish and Carcross areas during 2017 sampling is somewhat consistent with the 2016 results and historical information from Teslin Lake which contains a similar non-migratory (non-anadromous) population. McPhail and Lindsey (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.

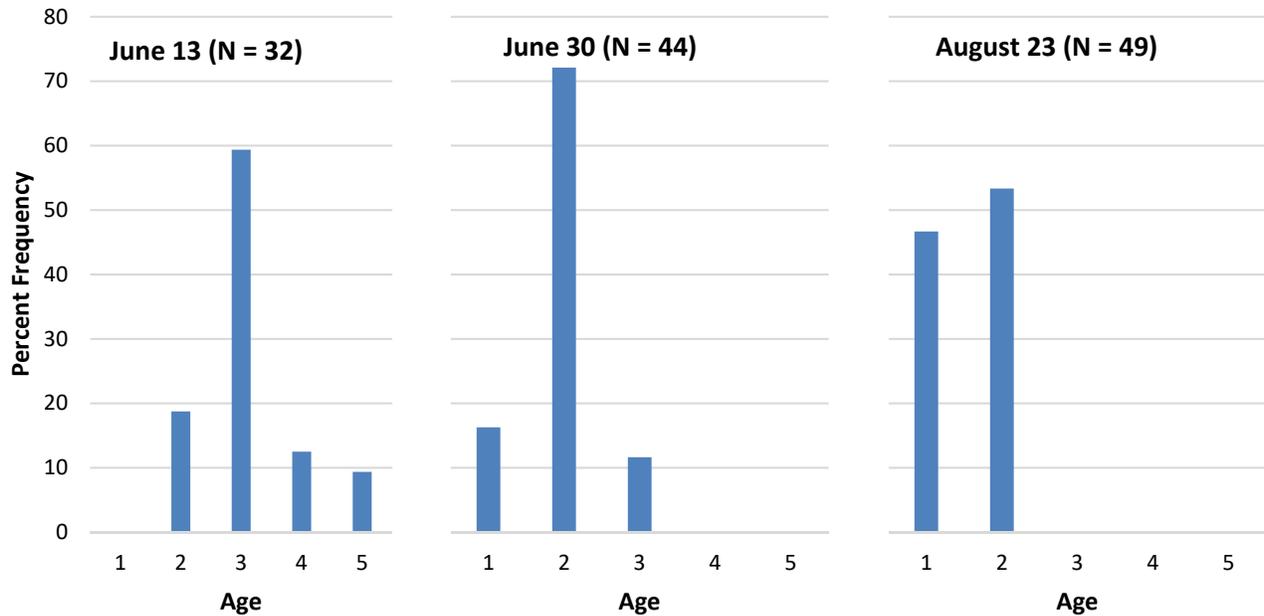


Figure 4. Age frequency of least cisco captured in the Tagish area during on June 23, June 30 and August 23, 2017.

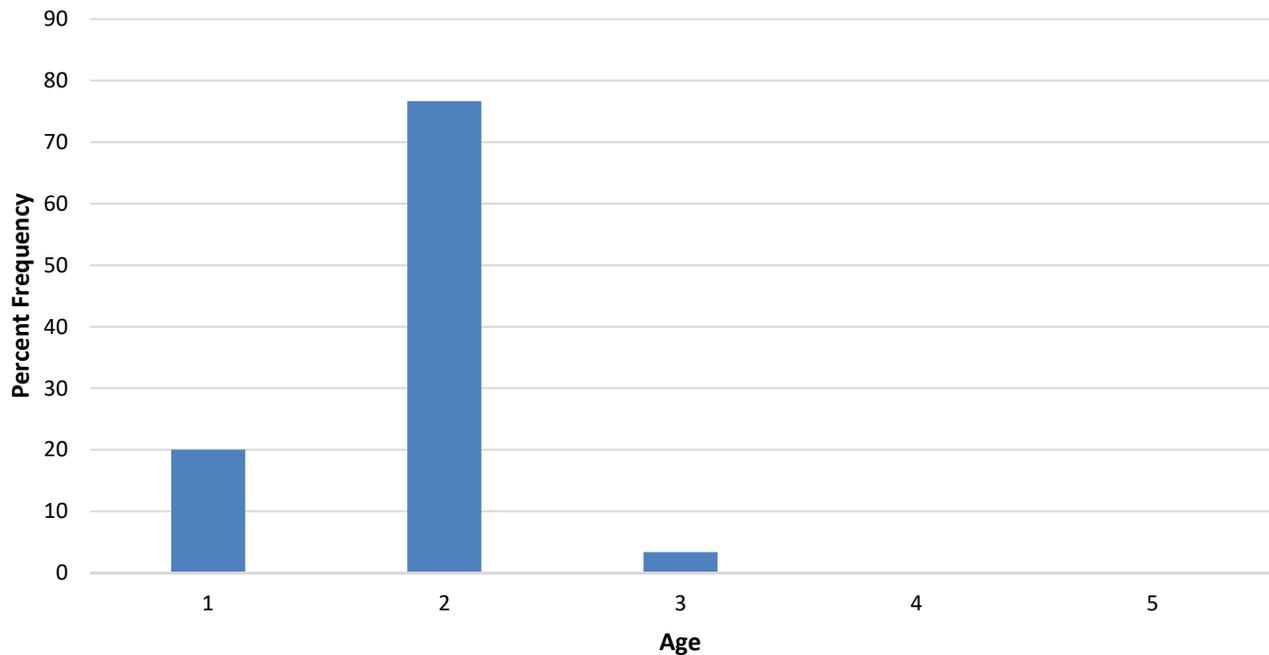


Figure 5. Age frequency of least cisco captured in the Carcross area on August 23, 2017.

3.1.4 MATURITY OF LEAST CISCO

Maturity was determined for 165 of the least cisco captured during the 2017 summer sampling program. A definitive qualitative measure of maturity could not be determined for the remaining samples and these samples are excluded from the following analysis. Across all sampling events in the Tagish area, least cisco ages of 3, 4 and 5 were mature, with the exception of two 3 year old fish that were classified as maturing (Figure 6). In these 3 age classes it was almost equal parts female and male at 52% and 48% respectively. The 2 year old class was mainly mature and maturing individuals with an increase in mature fish over the summer duration of the sampling program. During the August sampling event, two 2+ cisco were immature. The 1+ age class captured during the first sampling event were a combination of immature, maturing and mature but, were dominated by mature individuals. Interestingly in the August sampling event the 1 + age class was dominated by immature fish (50%).

Least cisco captured in the Carcross area were primarily mature individuals which was expected due to the relatively large fork lengths of the individuals captured; however, the single three-year old captured in the Nares River was classified as immature.

Collectively, the information compiled on maturity confirms the results from the 2016 sampling and 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 1 year olds). This pattern of early maturity is what would be expected for a species that exhibits low longevity due to high natural mortality rates and relatively short effective reproductive life span of 3 to 5 years.

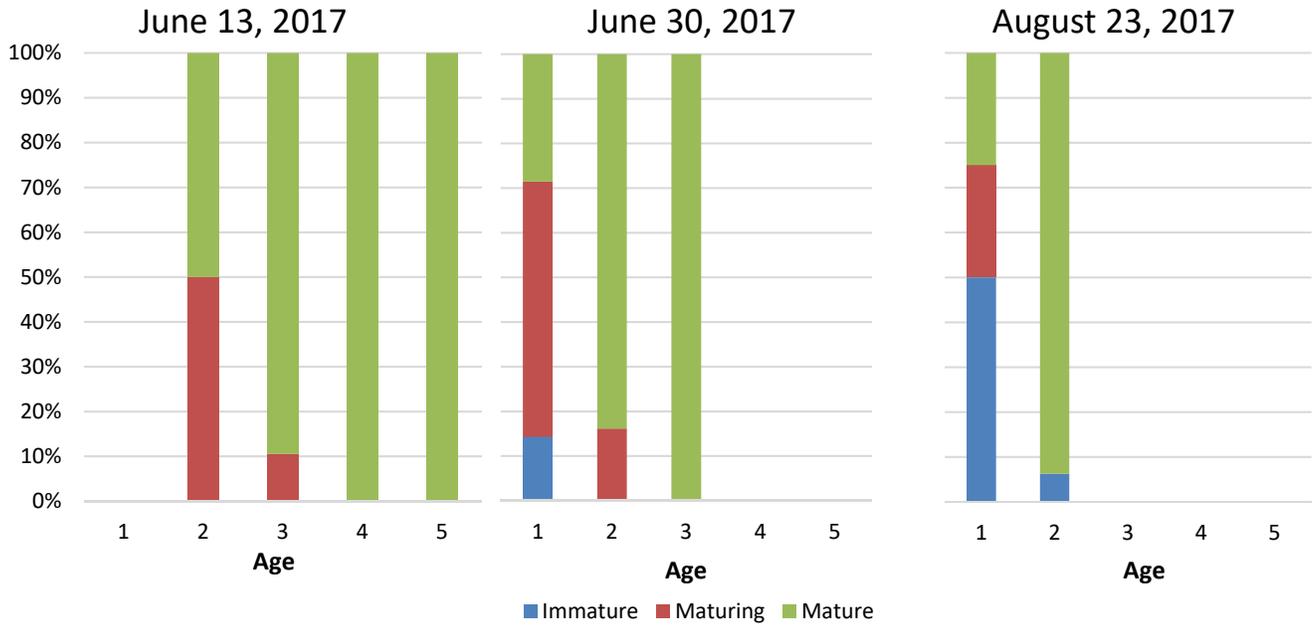


Figure 6. Proportion of immature, maturing and mature least cisco captured in the Tagish Area during the summer of 2017.

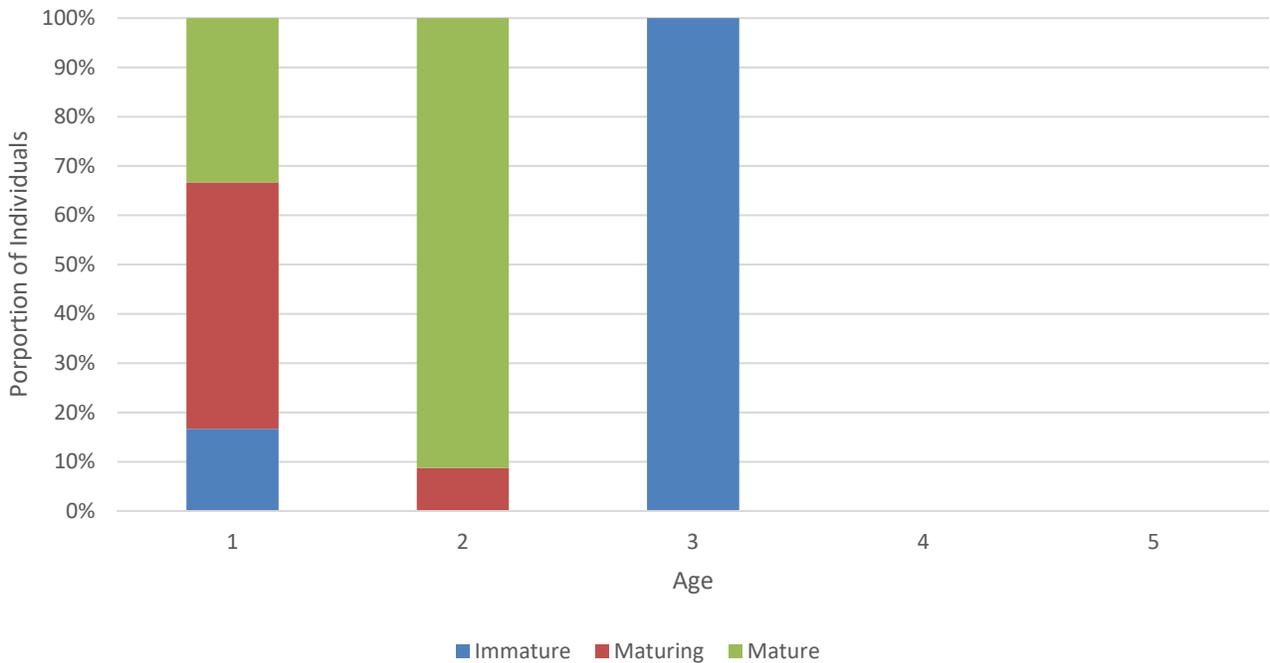


Figure 7. Proportion of immature, maturing and mature least cisco captured in the Carcross area on August 23, 2017.



3.2 FALL SPAWNING ASSESSMENTS

The spawning assessments involved targeted sampling for least cisco at potential spawning locations during September and October. Very little information currently exists on least cisco spawning timing and/or locations in the Southern Lakes and this preliminary sampling was intended to determine if spawning fish could be located. The results of the spawning assessments are presented in the following sections including: species composition, CPUE of least cisco, length and age frequencies and maturity. Sampling was conducted in three general areas including: the Tagish area, the Carcross area and portions of Tagish Lake including the Tutshi River area, Moose (Talahah) Bay, prominent point on the west shore of Taku Arm just north of the BC border and the Scotties Island area.

3.2.1 SPECIES COMPOSITION

A total of 95 fish were captured during the two fall sampling events in the Tagish area with round whitefish being the most frequently captured species, accounting for 53% of all fish captured (Table 7). Least cisco was the second most frequently captured species (35%) followed by lake whitefish (5%). Three lake trout, two longnose sucker and a single Arctic grayling and northern pike make up the remainder of the fish captured. Among the 32 least cisco captured in the Tagish area, all but one were captured in the September sampling event.

The results from the Carcross area showed a similar result with round whitefish accounting for 46% of the 76 fish captured, followed by least cisco with 30% of all fish caught (Table 8). The remainder of the catch in this sampling area was comprised of small numbers of Arctic grayling, longnose sucker and a single lake trout, lake whitefish and northern pike.

Results from Tagish Lake found that round whitefish were the most abundant catch at 91% of the 169 fish captured (Table 9). The remainder of the fish captured were lake trout (5%), Arctic grayling (4%) and a single lake whitefish.



Table 7. Summary of fish captured during targeted small mesh netting for least cisco in the Tagish area during the fall of 2017.

Sampling Event	Species	Retained	Incidental Mortalities		Released/Escaped	TOTAL
			Juvenile	Adult		
September 28	Least Cisco	31	0	0	1	32
	Arctic Grayling	0	0	0	1	1
	Longnose Sucker	0	0	0	2	2
	Lake Trout	0	0	0	2	2
	Lake Whitefish	0	0	0	5	5
	Northern Pike	0	0	0	1	1
	Round Whitefish	0	3	0	28	31
October 20	Least Cisco	1	0	0	0	1
	Lake Trout	0	0	0	1	1
	Round Whitefish	0	0	0	19	19
ALL EVENTS COMBINED	Least Cisco	32	0	0	1	33
	Arctic Grayling	0	0	0	1	1
	Longnose Sucker	0	0	0	2	2
	Lake Trout	0	0	0	3	3
	Lake Whitefish	0	0	0	5	5
	Northern Pike	0	0	0	1	1
	Round Whitefish	0	3	0	47	50



Table 8. Summary of fish captured during targeted small mesh netting for least cisco in the Carcross area during the fall of 2017.

Sampling Event	Species	Retained	Incidental Mortalities		Released/Escaped	TOTAL
			Juvenile	Adult		
September 28	Least Cisco	23	0	0	0	23
	Arctic Grayling	0	0	0	5	5
	Longnose Sucker	0	0	0	3	3
	Lake Whitefish	0	0	0	1	1
	Round Whitefish	0	1	1	11	13
October 20	Arctic Grayling	0	0	0	1	1
	Longnose Sucker	0	0	0	6	6
	Lake Trout	0	0	0	1	1
	Northern Pike	0	0	0	1	1
	Round Whitefish	0	2	3	17	22
ALL EVENTS COMBINED	Least Cisco	23	0	0	0	23
	Arctic Grayling	0	0	0	6	6
	Longnose Sucker	0	0	0	9	9
	Lake Trout	0	0	0	1	1
	Lake Whitefish	0	0	0	1	1
	Northern Pike	0	0	0	1	1
	Round Whitefish	0	3	4	28	35

Table 9. Summary of fish captured during targeted small mesh netting for least cisco in Tagish Lake during the fall of 2017.

Sampling Event	Species	Retained	Incidental Mortalities		Released/Escaped	TOTAL
			Juvenile	Adult		
October 21	Arctic Grayling	0	0	1	6	7
	Lake Trout	0	0	0	8	8
	Lake Whitefish	0	0	0	1	1
	Round Whitefish	0	30	8	115	153

3.2.2 LEAST CISCO CPUE

Least cisco were captured at 9 sites during the fall spawning assessments (Table 10; Map 8). In the Tagish River, spawning cisco were captured exclusively in the middle and upstream portion of the river and were absent from the area near the Tagish bridge/Tagish Creek confluence where they were consistently captured during the spring and summer of 2016 and 2017. The locations where spawning fish were captured was relatively shallow (< 3 m), along the river margin and in areas with a sand/gravel substrate free of plants. The most notable aggregation of spawning fish was at set 5-17 on the Tagish River where 23 individuals were captured in a 54 minute set (37.2 fish/100 m/hr). This location was along an inside bend of the river where a



large gravel/sand bar extended out into the main channel; water depths ranged from 2.1 to 2.9 m along the length of the set. The fish were captured in a tight school and all individuals were running milt/eggs upon retrieval (Photo 1).

In the Carcross area, a large group of spawning/spent cisco were captured in the large deep pool on the north riverbank directly downstream of the railway bridge. The water was turbid at the time of sampling; however, past observations of this area indicate that it had a substrate dominated by sand.

The sampling during October was largely unsuccessful in capturing least cisco in all three sampling areas with only a single non-spawning individual captured in the Tagish River on October 21 (Table 10). It is however interesting to note that large schools of cisco were observed off the Tagish bridge by CTRRC members in mid-November 2017.

Table 10. Summary of least cisco CPUE during 2017 fall spawning assessments.

Sampling Area	Date	Number of Sets	Sets with Least Cisco Captured	Number of Least Cisco Captured	CPUE (No./100 m/hr)		
					Mean	Median	Range
Tagish Area	September 28	15	4	32	3.7	0.0	0.0 - 37.2
	October 20	12	1	1	0.1	0.0	0.0 – 1.6
Carcross Area	September 28	10	4	23	4.5	0.0	0.0 – 37.4
	October 20	11	0	0	0.0	0.0	N/A
Tagish Lake	October 21	16	0	0	0.0	0.0	N/A



Photo 1. Number of spawning least cisco captured at site 5-17 on the Tagish River, September 28, 2017.

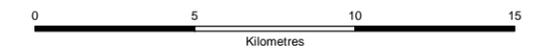
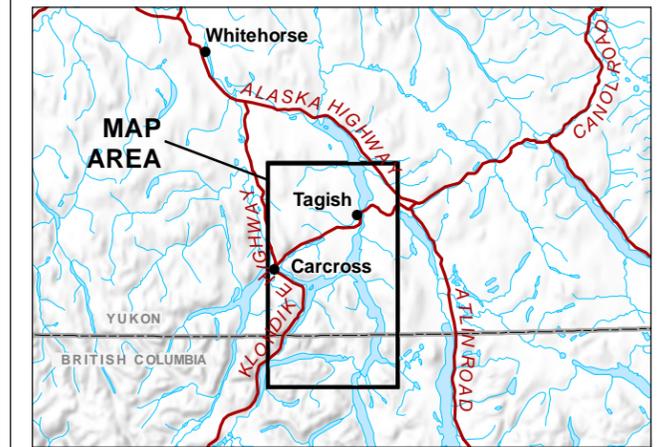
Map 8. Targeted fall (spawning) small mesh gillnetting results during September 2017

Legend

- Settlement/Community
- Highway
- Secondary road
- - - Trail

Least Cisco Survey Results

- 0 Fish/Hour
- 1 - 10 Fish/Hour
- 11 - 15 Fish/Hour
- 16 - 25 Fish/Hour
- 26 - 38 Fish/Hour



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3.2.3 LENGTH AND AGE FREQUENCIES

Least cisco captured the September spawning sampling program in the Tagish and Carcross areas were similar in size with a range of 155 to 204 mm (Table 11). The fish captured during September were on average larger than those captured in both locations during the summer. This may indicate continued growth through September or may be to the consideration that only the larger fish were present at the spawning areas. The age of the least cisco captured during September was dominated by 2 year olds which accounted for 86% of the catch in the Tagish and Carcross areas combined (Table 11).

Table 11. Summary of fork length at age data collected for least cisco captured in the Tagish and Carcross areas on September 28, 2017.

Age	Tagish Area				Carcross Area			
	N	Mean	Min	Max	N	Mean	Min	Max
1	3	162	155	171	2	169.5	166	173
2	23	171	160	185	21	181	155	204
3	2	190	189	190	0	-	-	-
4	0	-	-	-	0	-	-	-
5	0	-	-	-	0	-	-	-

3.2.4 MATURITY OF LEAST CISCO

Maturity was successfully determined for 53 of the 54 least cisco captured during the spawning sampling events, the single cisco that maturity was not determined for is excluded from the data analysis. In the Tagish area, the vast majority (89%; Figure 8) were ripe with eggs/milt easily extruded from the belly cavity (Photo 2). Two maturing individuals one spent individual (female) were also captured. Sampling in the Carcross area on the same date showed a similar result; however, there was a much higher proportion of spent fish (48%; Figure 9) which appeared to have completed spawning. These findings suggest that the timing of spawning may differ slightly between the locations. This is supported by water temperatures which averaged 8.3 °C in the Carcross area and 9.9 °C in the Tagish area.



Photo 2. Ripe female least cisco captured in the Carcross area on September 28, 2017.

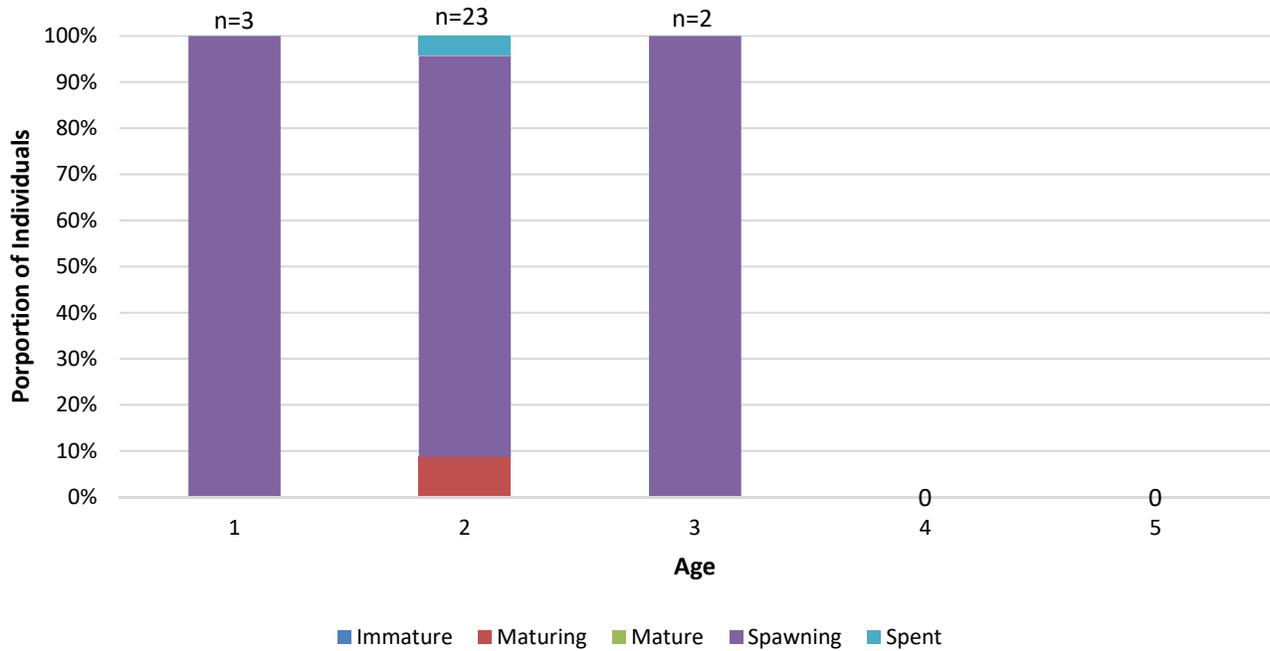


Figure 8. Maturity by age for least cisco captured in the Tagish area on September 28, 2017.

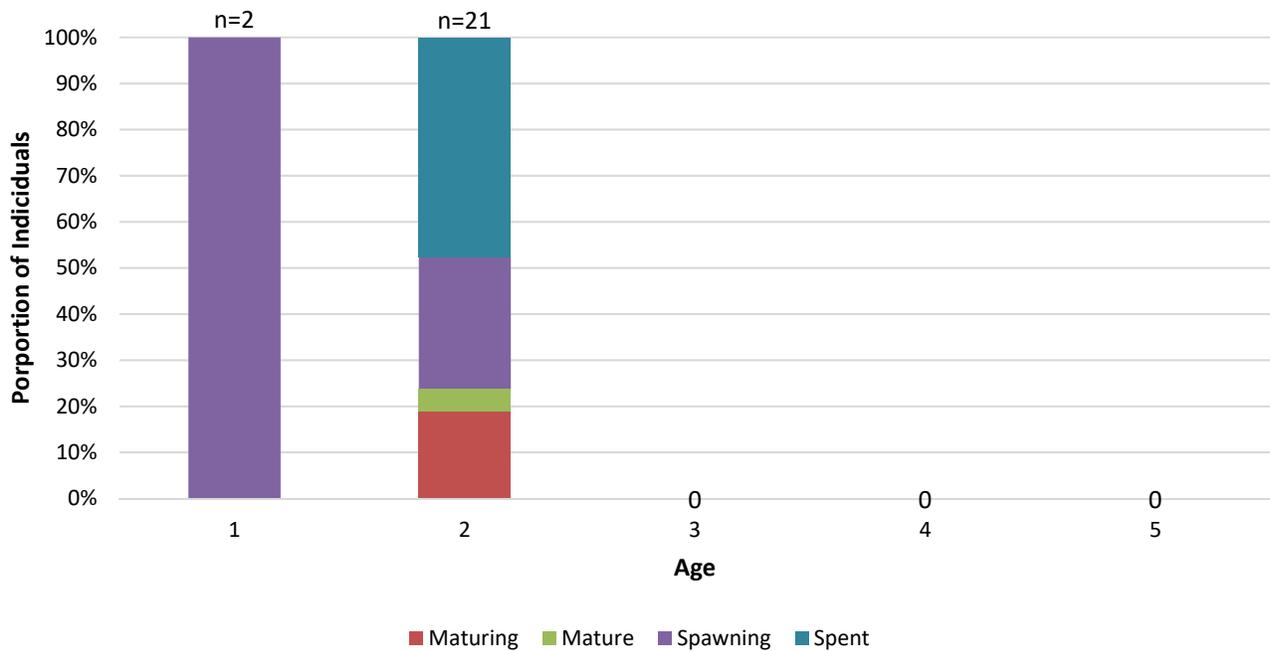


Figure 9. Maturity by age for least cisco captured in the Carcross area on September 28, 2017.



3.3 BENNETT LAKE SAMPLES

A sample of 14 least cisco was provided by consultants conducting fisheries monitoring at the south end of Bennett Lake during the mid-summer. At the time this report was prepared, no additional details regarding the sampling conducted by White Pass and Yukon Railroad was available; however, information on length at age can be compared to the data collected in the Carcross and Tagish areas during 2017. The 14 samples included individuals from 0 to 3 years old with the majority being one-year olds (Table 12). The fork length at age information is similar to that from the Carcross/Tagish areas and the presence of young-of-the-year (age 0) suggests that spawning may occur at the south end of Bennett Lake.

Table 12. Summary of fork length at age data collected from least cisco sampled at the south end of Bennett Lake during the summer of 2017.

Age	N	Fork Length (mm)		
		Mean	Min	Max
0	3	101	95	112
1	7	158	141	185
2	3	166	154	176
3	1	184	-	-

3.4 OTOLITH AND SCALE AGEING COMPARISON

Otoliths were used as the primary ageing structure for least cisco sampled in 2017. Scales were also collected from a small number of individuals to determine the accuracy of ageing compared to the otoliths. Scales may provide a non-lethal method of ageing least cisco should additional sampling be conducted in the Southern Lakes in the future.

A total of 34 least cisco were aged by paired otoliths and scales. Of these samples, 74% (25 fish) were aged the same for both methods. The remaining 26% (9 fish) were aged differently by one-year between the two structures with otoliths providing an older age for 4 fish and scales providing an older age for 5 fish. All four of the fish aged older with scales were aged as one year olds using the otoliths. The fish aged older with otoliths were almost exclusively aged 3 and 4 years old with otoliths. These findings suggest that scales provide a moderately accurate age compared to otoliths and depending on project objectives may provide a suitable non-lethal ageing method if required in the future.



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. A variety of mesh sizes were used during 2016 and 2017 ranging from 12 mm (0.5 inch) to 51 mm (2.0 inch) with the majority of sampling effort involved the use of meshes between 25 mm (1.0 inch) to 44 mm (1.75 inch). The following analysis presents the mesh selectivity of the primary mesh sizes used during 2016 and 2017 which ranged from 25 mm (1.0 inch) to 44 mm (1.75 inch). The 51 mm (2.0 inch) mesh is excluded given that it did not capture any cisco during 2016 and 2017.

Of the 705 least cisco captured during 2016 and 2017 combined, the largest proportion (60%) was captured in the 25 mm mesh; this is largely due to a small number of sets with very high capture rates in the Tagish area during 2016. The 32 and 38 mm mesh sizes captured similar proportions (18-20%, respectively) and the 44 mm mesh captured relatively few fish (1%). Differences in the selectivity of panel sizes is apparent (Figure 10) with fish less than 130 mm captured exclusively in the 25 mm mesh and fish greater than 190 mm captured almost exclusively in the 28 and 44 mm mesh. The 32 mm mesh overlapped considerably with the 25 and 38 mm mesh sizes and therefore is likely an important mesh size to include in sampling gear to ensure that all sizes of least cisco are captured.

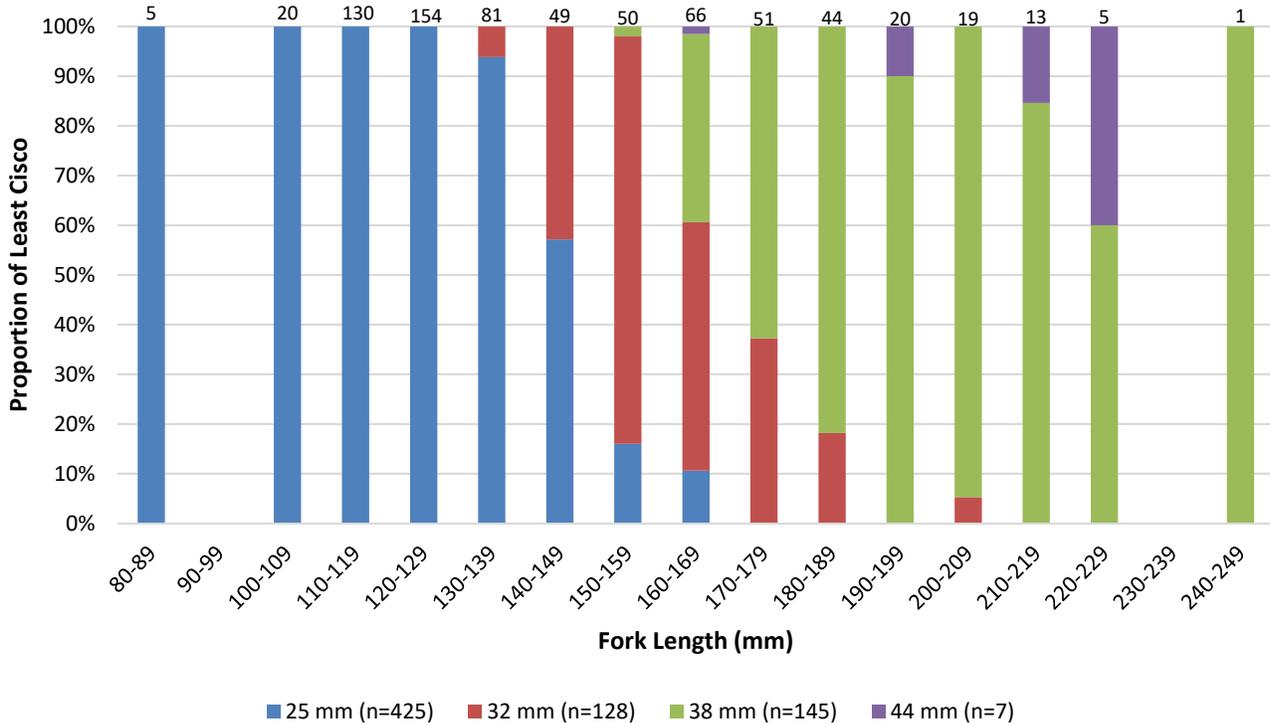


Figure 10. Mesh size selectivity of least cisco captured during 2016 and 2017 by mesh size. Excludes the 51 mm mesh which did not capture any least cisco. Numbers at the top of the figure indicate the sample size by fork length range.



4 CONCLUSION

Field studies undertaken in 2017 added to and filled in gaps on the data collected during 2016 and have provided some perspective into least cisco life history in the Southern Lakes. Sampling during 2017 captured least cisco in both the Tagish and Carcross areas although higher numbers were captured in more sets and sampling events in the Tagish areas as compared to Carcross similar to 2016.

The information collected on length, age and maturity confirmed the conclusion from 2016 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 as one year olds fish; nearly all fish were found to be sexually mature at 3 years or older.

The results of the 2017 spawning assessments provided the first account of least cisco spawning in the Southern Lakes. The capture of ripe spawning fish confirmed spawning in both the Tagish and Nares rivers during late September. In the Tagish River, the spawning fish were captured along the margins of the river in areas with water depths less than 3 m and a substrate dominated by sand/gravel and no aquatic plants. Sampling in portions of Tagish Lake did not capture any least cisco; however, spawning cannot be ruled out in these areas without additional sampling.

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. Trial sampling also indicates that 12 mm (0.50 inch) and 19 mm (0.75 inch) are able to catch young-of-the-year least cisco and their use may also be warranted during future sampling to location potential spawning and/or early rearing locations. 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 area, data collected during 2017 sampling builds on 2016 results and indicates that cisco populations are present in different areas of Tagish River with evidence of regular annual recruitment in recent years.



4.1 RECOMMENDATIONS

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

- Additional sampling during the summer months to collect genetic samples and basic life history information on least cisco in the Carcross area and elsewhere in the Southern Lakes including Bennett and/or Tagish lakes. Location selection to be based upon the CTRRC's ongoing local and traditional knowledge data gathering of least cisco in the system.
- 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. A fish holding study and range testing of the acoustic tags would be required prior to commencement of this component due to uncertainties associated with internal tagging least cisco and the ability for the existing receivers to detect the lower power tags required to be used.
- Additional sampling for spawning least cisco in the Tagish River, Nares River and elsewhere in the Southern Lakes system during the probable spawning period (mid to late September) as determined by the 2017 sampling results focusing on identification of additional spawning locations and genetic sampling to determine population separation.



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APPENDIX A. SAMPLING DATA

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Table A1. Spring/summer targeted small mesh gillnetting set data.

Waterbody	Date	Set ID	Latitude	Longitude	Time Set	Time Pulled	Duration	Net Composition	No. of Panels	Net Length (m)	Depth In (m)	Depth Out (m)
Nares River	24-May-17	1-1	60.1642	-134.7007	8:19	8:46	0:27	A	3	68.4	2.0	2.0
Nares River	24-May-17	1-2	60.1648	-134.7017	8:26	9:01	0:35	A	3	68.4	2.0	2.0
Nares River	24-May-17	1-3	60.1647	-134.7009	8:56	9:35	0:39	A	3	68.4	2.0	2.0
Nares River	24-May-17	1-4	60.1646	-134.7022	9:07	9:47	0:40	A	3	68.4	2.0	2.0
Nares River	24-May-17	1-5	60.1641	-134.7026	9:44	10:14	0:30	A	3	68.4	1.0	3.5
Nares River	24-May-17	1-6	60.1641	-134.7065	9:57	10:28	0:31	A	3	68.4	1.8	5.4
Nares River	24-May-17	1-7	60.1658	-134.6952	10:33	11:30	0:57	A	3	68.4	1.9	2.5
Nares River	24-May-17	1-8	60.1672	-134.6853	10:38	10:59	0:21	A	3	68.4	1.9	2.2
Nares River	24-May-17	1-9	60.1654	-134.6807	10:44	11:04	0:20	A	3	68.4	2.6	1.9
Tagish River	24-May-17	1-10	60.3183	-134.2692	12:47	13:29	0:42	A	3	68.4	5.0	5.0
Tagish River	24-May-17	1-11	60.3150	-134.2678	12:55	13:18	0:23	A	3	68.4	2.0	6.0
Tagish River	24-May-17	1-12	60.3184	-134.2705	13:15	13:40	0:25	A	3	68.4	2.0	6.0
Marsh Lake	24-May-17	1-13	60.3307	-134.2624	13:46	14:15	0:29	A	3	68.4	6.0	6.0
Marsh Lake	24-May-17	1-14	60.3322	-134.2570	13:52	14:18	0:26	A	3	68.4	2.0	5.0
Marsh Lake	24-May-17	1-15	60.3365	-134.2519	13:56	14:32	0:36	A	3	68.4	5.0	6.0
Nares River	13-Jun-17	2-1	60.1641	-134.7015	9:11	9:53	0:41	B	4	91.2	1.0	1.0
Nares River	13-Jun-17	2-2	60.1645	-134.7027	9:23	10:02	0:39	A	3	68.4	1.0	1.0
Nares River	13-Jun-17	2-3	60.1648	-134.6974	9:29	10:18	0:49	A	3	68.4	1.0	1.0
Nares River	13-Jun-17	2-4	60.1639	-134.7044	9:57	10:41	0:43	B	4	91.2	3.0	5.0
Nares River	13-Jun-17	2-5	60.1643	-134.7063	10:12	10:45	0:32	A	3	68.4	7.0	4.0
Bennett Lake	13-Jun-17	2-6	60.1632	-134.7139	10:32	11:14	0:42	A	3	68.4	3.0	1.5
Nares Lake	13-Jun-17	2-7	60.1571	-134.6401	11:27	12:29	1:02	A	3	68.4	10.0	16.0
Nares Lake	13-Jun-17	2-8	60.15	-134.63	11:35	12:27	0:51	A	3	68.4	5.0	10.0
Tagish River	13-Jun-17	2-9	60.1453	-134.6185	11:43	12:10	0:26	B	4	91.2	4.0	10.0
Tagish River	13-Jun-17	2-10	60.3132	-134.2676	13:36	14:09	0:32	B	4	91.2	2.5	2.5
Tagish River	13-Jun-17	2-11	60.3169	-134.2697	13:42	14:25	0:42	A	3	68.4	2.0	4.0
Tagish River	13-Jun-17	2-12	60.3174	-134.2705	13:48	14:35	0:47	A	3	68.4	1.5	2.5
Tagish River	13-Jun-17	2-13	60.3146	-134.2679	14:19	14:53	0:33	B	4	91.2	3.0	5.0
Tagish River	13-Jun-17	2-14	60.3178	-134.2708	14:30	15:00	0:29	A	3	68.4	2.5	2.0
Tagish River	13-Jun-17	2-15	60.3174	-134.2719	14:48	15:22	0:34	A	3	68.4	2.0	2.0
Tagish River	13-Jun-17	2-16	60.3172	-134.2702	15:28	15:49	0:20	A	3	68.4	1.0	3.0
Tagish River	13-Jun-17	2-17	60.3208	-134.272	15:33	15:55	0:21	A	3	68.4	2.0	2.0



Waterbody	Date	Set ID	Latitude	Longitude	Time Set	Time Pulled	Duration	Net Composition	No. of Panels	Net Length (m)	Depth In (m)	Depth Out (m)
Tagish River	13-Jun-17	2-18	60.325	-134.2718	15:38	16:08	0:30	B	4	91.2	1.5	1.5
Nares River	30-Jun-17	3-1	60.1649	-134.6971	8:15	8:48	0:32	B	4	91.2	2.0	2.4
Nares River	30-Jun-17	3-2	60.1653	-134.6979	8:19	8:55	0:36	A	3	68.4	2.5	2.8
Nares River	30-Jun-17	3-3	60.1656	-134.6967	8:28	9:13	0:45	A	3	68.4	1.5	3.4
Nares River	30-Jun-17	3-4	60.1644	-134.7038	9:04	9:34	0:30	A	3	68.4	2.3	2.3
Nares River	30-Jun-17	3-5	60.1642	-134.7058	9:10	9:47	0:36	B	4	91.2	2.3	3.4
Nares River	30-Jun-17	3-6	60.1641	-134.7089	9:24	9:54	0:29	A	3	68.4	2.3	7.1
Bennett Lake	30-Jun-17	3-7	60.164	-134.711	9:40	10:12	0:31	A	3	68.4	2.2	4.5
Tagish River	30-Jun-17	3-8	60.3149	-134.2687	11:12	11:40	0:28	A	3	68.4	2.2	3.4
Tagish River	30-Jun-17	3-9	60.317	-134.2698	11:18	11:55	0:36	B	4	91.2	2.4	2.6
Tagish River	30-Jun-17	3-10	60.3172	-134.271	12:09	12:38	0:29	B	4	91.2	1.8	2.7
Tagish River	30-Jun-17	3-11	60.3171	-134.2739	12:13	12:37	0:23	A	3	68.4	1.5	1.7
Tagish River	30-Jun-17	3-12	60.3198	-134.2717	12:57	13:39	0:42	A	3	68.4	1.8	2.1
Tagish River	30-Jun-17	3-13	60.3214	-134.2725	13:01	13:47	0:46	B	4	91.2	1.8	2.4
Tagish River	30-Jun-17	3-14	60.3252	-134.2722	13:08	14:07	0:59	A	3	68.4	1.8	2.5
Nares River	23-Aug-17	4-1	60.1645	-134.6997	9:10	10:00	0:50	B	4	91.2	1.6	3.9
Nares River	23-Aug-17	4-2	60.1652	-134.6959	9:20	10:22	1:02	A	3	68.4	3.1	3.6
Nares River	23-Aug-17	4-3	60.1656	-134.6965	9:35	10:35	1:00	C	3	68.4	1.3	4.0
Nares River	23-Aug-17	4-4	60.164	-134.7045	10:12	11:10	0:58	B	4	91.2	1.8	6.9
Nares River	23-Aug-17	4-5	60.1655	-134.6866	10:49	11:30	0:41	C	3	68.4	1.6	2.3
Nares River	23-Aug-17	4-6	60.1655	-134.697	10:58	11:48	0:50	A	3	68.4	1.6	3.4
Nares River	23-Aug-17	4-7	60.1644	-134.7047	11:15	12:00	0:45	B	4	91.2	6.4	1.9
Nares River	23-Aug-17	4-8	60.1643	-134.6888	11:35	12:20	0:45	C	3	68.4	2.0	2.1
Nares River	23-Aug-17	4-9	60.1667	-134.6918	11:54	12:54	1:00	A	3	68.4	1.6	1.9
Tagish River	23-Aug-17	4-10	60.3176	-134.2701	13:28	14:28	1:00	A	3	68.4	2.0	2.1
Tagish River	23-Aug-17	4-11	60.3217	-134.2719	13:32	14:38	1:06	C	3	68.4	1.6	2.2
Tagish River	23-Aug-17	4-12	60.325	-134.2714	13:38	14:53	1:15	B	4	91.2	1.6	2.3
Tagish River	23-Aug-17	4-13	60.318	-134.2704	14:34	15:22	0:48	A	3	68.4	1.6	2.2
Tagish River	23-Aug-17	4-14	60.3155	-134.2691	14:47	15:40	0:53	C	3	68.4	1.8	2.1
Tagish River	23-Aug-17	4-15	60.3196	-134.2712	15:02	15:57	0:55	B	4	91.2	2.0	2.2
Tagish River	23-Aug-17	4-16	60.3178	-134.2717	15:37	16:28	0:51	A	3	68.4	1.7	1.7
Tagish River	23-Aug-17	4-17	60.3138	-134.2677	15:51	16:37	0:46	C	3	68.4	2.0	2.3
Tagish River	23-Aug-17	4-18	60.3196	-134.2712	16:11	16:49	0:38	B	4	91.2	2.1	2.2



Waterbody	Date	Set ID	Latitude	Longitude	Time Set	Time Pulled	Duration	Net Composition	No. of Panels	Net Length (m)	Depth In (m)	Depth Out (m)
Tagish River	23-Aug-17	4-19	60.3196	-134.2712	16:53	17:17	0:24	E	2	45.6	2.0	2.1

Notes:

Net composition codes as follows: A – 25/32/38 mm mesh, B – 25/32/38/44 mm mesh, C – 25/38/51mm mesh, D – 38/51/38 mm mesh, E – 12/19 mm mesh.



Table A2. Fall targeted small mesh gillnetting set data.

Waterbody	Date	Set ID	Easting	Northing	Time Set	Time Pulled	Duration	Net Composition	No. of Panels	Net Length (m)	Depth In (m)	Depth Out (m)
Nares River	28-Sep-17	5-1	516379	6669740	12:58	13:40	0:42	A	3	68.4	4.1	4.3
Nares River	28-Sep-17	5-2	516591	6669740	13:04	13:53	0:49	C	3	68.4	1.2	2.3
Nares River	28-Sep-17	5-3	516868	6669903	13:10	14:00	0:50	B	4	91.2	0.8	3.1
Nares River	28-Sep-17	5-4	516519	6669777	13:58	14:40	0:42	C	3	68.4	1.0	3.0
Nares River	28-Sep-17	5-5	516988	6669865	14:10	15:10	1:00	B	4	91.2	3.2	2.5
Nares River	28-Sep-17	5-6	517101	6669992	14:15	15:20	1:05	A	3	68.4	2.1	2.7
Nares River	28-Sep-17	5-7	516308	6669736	14:56	15:30	0:34	C	3	68.4	6.3	4.0
Nares River	28-Sep-17	5-8	518602	6669806	15:19	16:00	0:41	B	4	91.2	2.0	11.3
Nares River	28-Sep-17	5-9	520479	6668267	15:49	16:31	0:42	C	3	68.4	2.1	7.5
Nares River	28-Sep-17	5-10	520588	6668010	15:53	16:53	1:00	A	3	68.4	1.9	2.7
Tagish River	28-Sep-17	5-11	540251	6680990	17:51	18:20	0:29	A	3	68.4	1.7	2.3
Tagish River	28-Sep-17	5-12	540214	6681392	17:56	18:42	0:46	C	3	68.4	3.7	3.0
Tagish River	28-Sep-17	5-13	540947	6683921	18:05	18:50	0:45	B	4	91.2	2.1	2.4
Tagish River	28-Sep-17	5-14	540401	6681496	18:38	19:14	0:36	A	3	68.4	1.6	3.1
Tagish River	28-Sep-17	5-15	540495	6681852	18:50	19:28	0:38	C	3	68.4	2.6	2.7
Tagish River	28-Sep-17	5-16	540828	6684342	19:08	19:50	0:42	B	4	91.2	2.2	3.0
Tagish River	28-Sep-17	5-17	540815	6682460	19:25	20:19	0:54	A	3	68.4	2.1	2.9
Tagish River	28-Sep-17	5-18	540596	6681759	19:36	20:33	0:57	C	3	68.4	6.0	6.1
Tagish River	28-Sep-17	5-19	540324	6687028	19:58	20:54	0:56	B	4	91.2	2.2	2.1
Tagish River	28-Sep-17	5-20	540392	6686780	20:49	21:22	0:33	C	3	68.4	1.6	2.7
Tagish River	28-Sep-17	5-21	540221	6687704	20:54	21:47	0:53	A	3	68.4	1.5	2.1
Tagish River	28-Sep-17	5-22	540297	6687029	21:06	22:06	1:00	B	4	91.2	2.1	2.4
Tagish River	28-Sep-17	5-23	540207	6687430	21:32	22:22	0:50	D	3	68.4	2.1	2.2
Tagish River	28-Sep-17	5-24	540709	6688400	22:00	22:30	0:30	A	3	68.4	5.1	4.8
Tagish River	28-Sep-17	5-25	540301	6686990	22:17	22:42	0:25	B	4	91.2	1.9	1.7
Nares River	20-Oct-17	6-1	516648	6669754	9:34	10:20	0:46	D	3	68.4	1.3	3.5
Nares River	20-Oct-17	6-2	516454	6669765	9:44	10:30	0:46	B	4	91.2	3.1	2.7
Nares River	20-Oct-17	6-3	516357	6669712	9:50	10:45	0:55	A	3	68.4	1.6	4.2
Nares River	20-Oct-17	6-4	516877	6669856	10:27	11:14	0:47	D	3	68.4	3.6	3.6
Nares River	20-Oct-17	6-5	516886	6669910	10:43	11:25	0:42	B	4	91.2	1.2	3.1
Nares River	20-Oct-17	6-6	516210	6669687	11:07	11:51	0:44	A	3	68.4	2.6	5.0
Nares River	20-Oct-17	6-7	517097	6670010	11:25	12:10	0:45	D	3	68.4	1.8	1.9



Waterbody	Date	Set ID	Easting	Northing	Time Set	Time Pulled	Duration	Net Composition	No. of Panels	Net Length (m)	Depth In (m)	Depth Out (m)
Nares River	20-Oct-17	6-8	518450	6669748	11:40	12:45	1:05	B	4	91.2	1.6	2.8
Nares River	20-Oct-17	6-9	520475	6668276	12:30	13:09	0:39	B	4	91.2	1.6	5.4
Nares River	20-Oct-17	6-10	520765	6667647	12:37	13:20	0:43	D	3	68.4	1.7	11.9
Nares River	20-Oct-17	6-11	520577	6668256	12:40	13:26	0:46	A	3	68.4	2.0	7.1
Tagish River	20-Oct-17	6-12	540044	6680673	14:40	15:18	0:38	A	3	68.4	3.4	5.4
Tagish River	20-Oct-17	6-13	539972	6680743	14:45	15:29	0:44	D	3	68.4	3.0	2.9
Tagish River	20-Oct-17	6-14	540208	6681314	14:51	15:45	0:54	B	4	91.2	1.5	3.4
Tagish River	20-Oct-17	6-15	540394	6681497	15:26	16:00	0:34	A	3	68.4	1.4	3.2
Tagish River	20-Oct-17	6-16	540529	6681673	15:41	16:14	0:33	D	3	68.4	1.9	5.2
Tagish River	20-Oct-17	6-17	540830	6682548	15:55	16:37	0:42	B	4	91.2	1.4	3.2
Tagish River	20-Oct-17	6-18	540968	6683497	16:14	17:07	0:53	D	3	68.4	1.4	2.0
Tagish River	20-Oct-17	6-19	540963	6683875	16:19	17:02	0:43	A	3	68.4	2.0	2.2
Tagish River	20-Oct-17	6-20	540315	6687123	16:51	17:35	0:44	B	4	91.2	1.4	6.1
Marsh Lake	20-Oct-17	6-21	540439	6690367	17:23	17:50	0:27	D	3	68.4	3.4	4.1
Marsh Lake	20-Oct-17	6-22	541059	6687852	17:32	18:03	0:31	A	3	68.4	2.9	2.5
Marsh Lake	20-Oct-17	6-23	540461	6687987	17:43	18:18	0:35	B	4	91.2	6.1	6.6
Tagish Lake	21-Oct-17	7-1	539660	6641023	10:07	10:47	0:40	B	4	91.2	1.5	16.0
Tagish Lake	21-Oct-17	7-2	540761	6640349	10:15	10:58	0:43	A	3	68.4	1.5	12.0
Tagish Lake	21-Oct-17	7-3	541106	6641346	10:25	11:10	0:45	D	3	68.4	1.0	26.0
Tagish Lake	21-Oct-17	7-4	545735	6644115	11:33	12:15	0:42	D	3	68.4	1.4	1.9
Tagish Lake	21-Oct-17	7-5	549888	6643250	11:45	12:30	0:45	A	3	68.4	1.0	16.0
Tagish Lake	21-Oct-17	7-6	546340	6645602	11:55	12:46	0:51	B	4	91.2	1.5	23.0
Tagish Lake	21-Oct-17	7-7	544596	6656797	13:28	14:13	0:45	B	4	91.2	1.3	22.0
Tagish Lake	21-Oct-17	7-8	544318	6656876	13:35	14:32	0:57	A	3	68.4	1.4	24.0
Tagish Lake	21-Oct-17	7-9	544084	6656766	13:41	14:15	0:34	D	3	68.4	1.5	10.4
Tagish Lake	21-Oct-17	7-10	544450	6656975	14:29	15:21	0:52	B	4	91.2	1.6	28.0
Tagish Lake	21-Oct-17	7-11	544315	6656894	14:44	15:40	0:56	A	3	68.4	9.6	31.5
Tagish Lake	21-Oct-17	7-12	544118	6656810	15:03	15:51	0:48	D	3	68.4	24.0	21.0
Tagish Lake	21-Oct-17	7-13	540233	6663554	16:17	17:17	1:00	D	3	68.4	4.0	12.2
Tagish Lake	21-Oct-17	7-14	539381	6666619	16:25	17:29	1:04	A	3	68.4	2.0	14.5
Tagish Lake	21-Oct-17	7-15	536731	6669591	16:37	17:47	1:10	B	4	91.2	5.2	10.6
Tagish Lake	21-Oct-17	7-16	537689	6668587	17:40	18:10	0:30	A	3	68.4	1.5	15.0



Notes:

UTM Co-ordinates in Zone 8.

Net composition codes as follows: A – 25/32/38 mm mesh, B – 25/32/38/44 mm mesh, C – 25/38/51mm mesh, D – 38/51/38 mm mesh, E – 12/19 mm mesh.



Table A3. Spring/summer targeted small mesh gillnetting fish capture data.

Waterbody	Date	Set ID	Fish ID	Species	Mesh Size (mm)	Condition	Fork Length (mm)	Weight (g)	Sex	Maturity code	Otolith Age	Scale Age
Nares River	24-May-17	1-5	1	GR	38	RE	280					
Tagish River	24-May-17	1-11	2	RW	38	E						
Tagish River	24-May-17	1-11	3	RW	32	E						
Marsh Lake	24-May-17	1-13	4	RW	32	RP	365					
Marsh Lake	24-May-17	1-14	5	RW	38	RG	255					
Marsh Lake	24-May-17	1-14	6	RW	38	RP	265					
Marsh Lake	24-May-17	1-14	7	LT	38	RE	795					
Nares River	13-Jun-17	2-3	8	GR	32	RG	286					
Nares River	13-Jun-17	2-3	9	GR	25	RG	338					
Tagish River	13-Jun-17	2-9	10	BB	44	RG	240					
Tagish River	13-Jun-17	2-10	11	LW	44	KD	220	116.5	U	1		
Tagish River	13-Jun-17	2-10	12	LW	44	RG	459					
Tagish River	13-Jun-17	2-10	13	LW	32	KD	144	31.5	U	1		
Tagish River	13-Jun-17	2-10	14	LW	32	RG	332					
Tagish River	13-Jun-17	2-10	15	LW	32	RG	480					
Tagish River	13-Jun-17	2-10	16	LW	32	E	adult					
Tagish River	13-Jun-17	2-10	17	LW	32	E	adult					
Tagish River	13-Jun-17	2-10	18	LW	32	E	adult					
Tagish River	13-Jun-17	2-11	19	RW	38	RG	195					
Tagish River	13-Jun-17	2-11	20	LW	38	RG	200					
Tagish River	13-Jun-17	2-12	21	CS	32	KD	182	46.5	F	3	4	4
Tagish River	13-Jun-17	2-12	22	RW	32	RG	425					
Tagish River	13-Jun-17	2-12	23	LW	38	RG	145					
Tagish River	13-Jun-17	2-12	24	CS	38	KD	169	42.0	F	3	3	2
Tagish River	13-Jun-17	2-12	25	CS	38	KD	188	57.0	M	3	3	3
Tagish River	13-Jun-17	2-12	26	CS	38	KD	204	63.5	F	3	4	3
Tagish River	13-Jun-17	2-12	27	CS	38	KD	185	54.0	M	3	3	2
Tagish River	13-Jun-17	2-12	28	CS	38	KD	191	58.5	F	3	3	3
Tagish River	13-Jun-17	2-12	29	CS	38	KD	185	53.5	F	3	3	
Tagish River	13-Jun-17	2-12	30	CS	38	KD	171	49.0	F	3	3	
Tagish River	13-Jun-17	2-12	31	CS	38	KD	174	56.0	F	3	3	
Tagish River	13-Jun-17	2-12	32	CS	38	KD	169	43.5	F	3	3	



Waterbody	Date	Set ID	Fish ID	Species	Mesh Size (mm)	Condition	Fork Length (mm)	Weight (g)	Sex	Maturity code	Otolith Age	Scale Age
Tagish River	13-Jun-17	2-12	33	CS	38	KD	182	58.0	F	3	3	
Tagish River	13-Jun-17	2-12	34	CS	38	KD	186	55.5	M	3	5	
Tagish River	13-Jun-17	2-12	35	CS	38	KD	185	56.5	M	3	3	
Tagish River	13-Jun-17	2-12	36	CS	38	KD	187	58.0	M	3	3	
Tagish River	13-Jun-17	2-12	37	CS	38	KD	183	53.5	F	3	2	
Tagish River	13-Jun-17	2-12	38	CS	38	KD	201	78.0	F	3	4	
Tagish River	13-Jun-17	2-12	39	CS	38	KD	175	51.0	F	3	3	
Tagish River	13-Jun-17	2-12	40	CS	38	KD	188	55.0	F	2 OR 3	3	
Tagish River	13-Jun-17	2-13	41	RW	44	KD	241	122.5	F	1 OR 2		
Tagish River	13-Jun-17	2-13	42	RW	44	KD	255	154.0	F	2 OR 3		
Tagish River	13-Jun-17	2-13	43	RW	32	RP	225					
Tagish River	13-Jun-17	2-15	44	LSU	25	E	adult					
Tagish River	13-Jun-17	2-15	45	LW	25	RG	490					
Tagish River	13-Jun-17	2-16	46	RW	25	RG	275					
Tagish River	13-Jun-17	2-17	47	CS	38	KD	176	49.5	F	3	2	
Tagish River	13-Jun-17	2-17	48	LW	38	RG	160					
Tagish River	13-Jun-17	2-17	49	LW	38	E	adult					
Tagish River	13-Jun-17	2-17	50	LW	38	E	adult					
Tagish River	13-Jun-17	2-17	51	CS	38	KD	189	55.0	M	3	3	
Tagish River	13-Jun-17	2-17	52	CS	38	KD	182	48.5	M	2 OR 3	3	
Tagish River	13-Jun-17	2-17	53	CS	38	KD	169	45.0	F	3	3	
Tagish River	13-Jun-17	2-17	54	CS	32	KD	162	39.5	F	3	2	
Tagish River	13-Jun-17	2-17	55	CS	32	KD	164	40.0	F	3	3	
Tagish River	13-Jun-17	2-17	56	CS	32	KD	166	39.0	F	3	3	
Tagish River	13-Jun-17	2-17	57	LW	25	KD	135	26.0	U	1		
Tagish River	13-Jun-17	2-17	58	LW	25	KD	122	21.0	U	1		
Tagish River	13-Jun-17	2-18	59	CS	44	KD	220	91.0	F	3	5	
Tagish River	13-Jun-17	2-18	60	CS	44	KD	218	79.5	F	3	4	
Tagish River	13-Jun-17	2-18	61	CS	44	KD	198	67.0	M	3	5	
Tagish River	13-Jun-17	2-18	62	LW	32	E	adult					
Tagish River	13-Jun-17	2-18	63	LW	32	RG	405					
Tagish River	13-Jun-17	2-18	64	LW	32	RG	515					
Tagish River	13-Jun-17	2-18	65	CS	25	KD	165	41.0	M	3	3	
Tagish River	13-Jun-17	2-18	66	CS	25	KD	133	20.5	M	2	2	



Waterbody	Date	Set ID	Fish ID	Species	Mesh Size (mm)	Condition	Fork Length (mm)	Weight (g)	Sex	Maturity code	Otolith Age	Scale Age
Tagish River	13-Jun-17	2-18	67	CS	25	KD	134	22.0	M	2	2	
Tagish River	13-Jun-17	2-18	68	CS	25	KD	134	20.5	M	2	2	
Nares River	30-Jun-17	3-1	69	RW	44	RE	205					
Nares River	30-Jun-17	3-3	70	RW	38	RE	280					
Nares River	30-Jun-17	3-5	71	RW	44	RE	270					
Nares River	30-Jun-17	3-5	72	RW	38	RE	235					
Nares River	30-Jun-17	3-6	73	RW	38	RE	230					
Tagish River	30-Jun-17	3-8	74	LW	38	RG	465					
Tagish River	30-Jun-17	3-8	75	LW	38	RG	475					
Tagish River	30-Jun-17	3-8	76	LW	38	RE	adult					
Tagish River	30-Jun-17	3-8	77	LW	38	RE	adult					
Tagish River	30-Jun-17	3-8	78	LW	38	KD	430		M	2		
Tagish River	30-Jun-17	3-8	79	LW	32	RG	430					
Tagish River	30-Jun-17	3-8	80	LW	32	RG	410					
Tagish River	30-Jun-17	3-8	81	LW	32	RE	adult					
Tagish River	30-Jun-17	3-8	82	LW	32	RE	adult					
Tagish River	30-Jun-17	3-8	83	LW	32	RE	adult					
Tagish River	30-Jun-17	3-8	84	LW	25	RE	adult					
Tagish River	30-Jun-17	3-8	85	LW	25	RE	adult					
Tagish River	30-Jun-17	3-8	86	LW	25	RG	430					
Tagish River	30-Jun-17	3-8	87	LW	25	RG	510					
Tagish River	30-Jun-17	3-9	88	RW	44	KD	352		M	2		
Tagish River	30-Jun-17	3-9	89	RW	44	RP	275					
Tagish River	30-Jun-17	3-9	90	CS	32	KD	181		F	3	3	3
Tagish River	30-Jun-17	3-9	91	CS	32	KS	155	33.1	M	2	2	2
Tagish River	30-Jun-17	3-9	92	LW	32	KD	151	33.4	U	1		
Tagish River	30-Jun-17	3-9	93	LW	32	KD	155	34.7	U	1		
Tagish River	30-Jun-17	3-9	94	LW	32	KD	162	41.4	U	1		
Tagish River	30-Jun-17	3-10	95	RW	44	RG	275					
Tagish River	30-Jun-17	3-10	96	RW	44	RG	265					
Tagish River	30-Jun-17	3-10	97	RW	38	RG	190					
Tagish River	30-Jun-17	3-10	98	LW	38	KD	430		M	2		
Tagish River	30-Jun-17	3-10	99	LW	32	RG	345					
Tagish River	30-Jun-17	3-10	100	LW	32	E						



Waterbody	Date	Set ID	Fish ID	Species	Mesh Size (mm)	Condition	Fork Length (mm)	Weight (g)	Sex	Maturity code	Otolith Age	Scale Age
Tagish River	30-Jun-17	3-10	101	RW	32	E						
Tagish River	30-Jun-17	3-11	102	LW	25	RG	122					
Tagish River	30-Jun-17	3-11	103	RW	25	KD	150	27.1	U	1		
Tagish River	30-Jun-17	3-12	104	RW	32	RG	155					
Tagish River	30-Jun-17	3-12	105	RW	25	KD	166	38.0	U	1		
Tagish River	30-Jun-17	3-12	106	GR	25	KD	128	19.5	U	1		
Tagish River	30-Jun-17	3-13	107	RW	44	RG	285					
Tagish River	30-Jun-17	3-13	108	LW	44	RG	165					
Tagish River	30-Jun-17	3-13	109	LW	38	RG	155					
Tagish River	30-Jun-17	3-13	110	LW	38	RG	190					
Tagish River	30-Jun-17	3-13	111	CS	32	KD	179	43.3	M	3	2	
Tagish River	30-Jun-17	3-13	112	CS	32	KD	163	38.6	F	3	2	
Tagish River	30-Jun-17	3-13	113	CS	32	KD	171	40.8	F	3	2	
Tagish River	30-Jun-17	3-13	114	CS	32	KD	169	41.8	M	3	3	
Tagish River	30-Jun-17	3-13	115	CS	32	KD	144	28.5	F	3	2	
Tagish River	30-Jun-17	3-13	116	CS	32	KD	169	40.1	F	3	2	
Tagish River	30-Jun-17	3-13	117	CS	32	KD	156	34.5	M	2	2	
Tagish River	30-Jun-17	3-13	118	CS	32	KD	172	42.3	M	2	2	
Tagish River	30-Jun-17	3-13	119	CS	32	KD	157	32.3	F	3	2	
Tagish River	30-Jun-17	3-13	120	CS	32	KD	161	36.9	M	3	2	
Tagish River	30-Jun-17	3-13	121	CS	32	KD	172	45.3	F	3	2	
Tagish River	30-Jun-17	3-13	122	CS	32	KD	156	34.7	F	3	2	
Tagish River	30-Jun-17	3-13	123	CS	32	KD	159	33.7	M	3	2	
Tagish River	30-Jun-17	3-13	124	CS	32	KD	161	36.6	F	3	2	
Tagish River	30-Jun-17	3-13	125	CS	32	KD	180	43.1	M	3	3	
Tagish River	30-Jun-17	3-13	126	CS	32	KD	160	35.5	F	3	2	
Tagish River	30-Jun-17	3-13	127	CS	32	KD	159	31.8	F	3	2	
Tagish River	30-Jun-17	3-13	128	CS	32	KD	176	42.7	F	3	2	
Tagish River	30-Jun-17	3-13	129	CS	32	KD	165	35.0	M	3	3	
Tagish River	30-Jun-17	3-13	130	CS	32	KD	167	42.1	M	3	3	
Tagish River	30-Jun-17	3-13	131	LW	32	KD	211	98.6	U	1		
Tagish River	30-Jun-17	3-13	132	LW	32	KD	151	37.3	U	1		
Tagish River	30-Jun-17	3-13	133	LW	32	KD	156	36.6	U	1		
Tagish River	30-Jun-17	3-13	134	LW	32	KD	155	36.6	U	1		



Waterbody	Date	Set ID	Fish ID	Species	Mesh Size (mm)	Condition	Fork Length (mm)	Weight (g)	Sex	Maturity code	Otolith Age	Scale Age
Tagish River	30-Jun-17	3-13	135	LW	32	KD	142	26.0	U	1		
Tagish River	30-Jun-17	3-13	136	LW	32	KD	161	40.6	U	1		
Tagish River	30-Jun-17	3-13	137	LW	32	KD	153	32.0	U	1		
Tagish River	30-Jun-17	3-13	138	LW	32	KD	155	38.7	U	1		
Tagish River	30-Jun-17	3-13	139	LW	32	KD	142	25.4	U	1		
Tagish River	30-Jun-17	3-13	140	LW	32	KD	144	27.6	U	1		
Tagish River	30-Jun-17	3-13	141	LW	32	KD	151	29.8	U	1		
Tagish River	30-Jun-17	3-13	142	LW	32	KD	144	31.7	U	1		
Tagish River	30-Jun-17	3-13	143	LW	32	KD	160	37.6	U	1		
Tagish River	30-Jun-17	3-13	144	LW	32	KD	161	43.3	U	1		
Tagish River	30-Jun-17	3-13	145	LW	32	KD	145	27.8	U	1		
Tagish River	30-Jun-17	3-13	146	LW	32	KD	142	28.2	U	1		
Tagish River	30-Jun-17	3-13	147	LW	32	KD	151	33.0				
Tagish River	30-Jun-17	3-13	148	LW	32	KD	159	43.2				
Tagish River	30-Jun-17	3-13	149	LW	32	KD	151	32.3				
Tagish River	30-Jun-17	3-13	150	LW	32	KD	147	28.7				
Tagish River	30-Jun-17	3-13	151	LW	32	KD	147	28.9				
Tagish River	30-Jun-17	3-13	152	LW	32	KD	166	43.6				
Tagish River	30-Jun-17	3-13	153	LW	32	KD	151	31.8				
Tagish River	30-Jun-17	3-13	154	LW	32	KD	150	32.8				
Tagish River	30-Jun-17	3-13	155	LW	32	KD	140	26.8				
Tagish River	30-Jun-17	3-14	156	CS	32	KD	160	37.3	M	3	2	
Tagish River	30-Jun-17	3-14	157	CS	32	KD	161	39.9	M	3	2	
Tagish River	30-Jun-17	3-14	158	CS	25	KD	157	34.0	F	2	1	
Tagish River	30-Jun-17	3-14	159	CS	25	KD	141	26.0	F	3	2	
Tagish River	30-Jun-17	3-14	160	CS	25	KD	153	35.0	M	3	1	
Tagish River	30-Jun-17	3-14	161	CS	25	KD	166	40.3	F	3	2	
Tagish River	30-Jun-17	3-14	162	CS	25	KD	162	33.8	F	2	1	
Tagish River	30-Jun-17	3-14	163	CS	25	KD	149	27.2	F	3	2	
Tagish River	30-Jun-17	3-14	164	CS	25	KD	156	30.4	M	3	2	
Tagish River	30-Jun-17	3-14	165	CS	25	KD	151	29.8	M	3	1	
Tagish River	30-Jun-17	3-14	166	CS	25	KD	145	25.4	F	3	2	
Tagish River	30-Jun-17	3-14	167	CS	25	KD	139	22.3	F	3		1
Tagish River	30-Jun-17	3-14	168	CS	25	KD	129	19.5	M	2	1	



Waterbody	Date	Set ID	Fish ID	Species	Mesh Size (mm)	Condition	Fork Length (mm)	Weight (g)	Sex	Maturity code	Otolith Age	Scale Age
Tagish River	30-Jun-17	3-14	169	CS	25	KD	134	18.9	M	1-2	1	
Tagish River	30-Jun-17	3-14	170	CS	25	KD	142	18.0	M	2	2	
Tagish River	30-Jun-17	3-14	171	CS	25	KD	138	20.2	M	3	2	
Tagish River	30-Jun-17	3-14	172	CS	25	KD	137	22.3	F	3	2	
Tagish River	30-Jun-17	3-14	173	CS	25	KD	141	25.4	F	3	2	
Tagish River	30-Jun-17	3-14	174	CS	25	KD	162	36.4	M	3	2	
Tagish River	30-Jun-17	3-14	175	CS	25	KD	141	22.8	M	2	1	
Tagish River	30-Jun-17	3-14	176	CS	25	KD	134	20.0	M	2	2	
Tagish River	30-Jun-17	3-14	177	CS	25	KD	137	22.1	F	3	2	
Nares River	23-Aug-17	4-1	401	RW	32	E	adult					
Nares River	23-Aug-17	4-1	402	RW	32	KD	234	111.0	M	1		
Nares River	23-Aug-17	4-1	403	RW	32	KD	224	113.0	F	1		
Nares River	23-Aug-17	4-1	404	RW	32	KD	211	88.0	M	1		
Nares River	23-Aug-17	4-1	405	RW	32	KD	194	61.0	F	1		
Nares River	23-Aug-17	4-1	406	RW	38	KD	176	95.0	U	1		
Nares River	23-Aug-17	4-1	407	RW	44	KD	292	242.0	F	1		
Nares River	23-Aug-17	4-2	408	RW	25	KD	179	50.0	U	1		
Nares River	23-Aug-17	4-2	409	RW	25	RE	330					
Nares River	23-Aug-17	4-2	410	RW	25	KD	220	92.0	M	1		
Nares River	23-Aug-17	4-2	411	RW	25	RG	360					
Nares River	23-Aug-17	4-2	412	RW	32	RG	440					
Nares River	23-Aug-17	4-2	413	RW	32	E	adult					
Nares River	23-Aug-17	4-2	414	RW	38	RE	345					
Nares River	23-Aug-17	4-2	415	RW	38	RG	223					
Nares River	23-Aug-17	4-2	416	RW	38	KD	214	90.0	M	1		
Nares River	23-Aug-17	4-2	417	GR	38	KD	174	97.0	M	1		
Nares River	23-Aug-17	4-3	418	RW	51	KD	328	325.0	M	3		
Nares River	23-Aug-17	4-3	419	RW	51	RE	290					
Nares River	23-Aug-17	4-3	420	RW	51	RG	270					
Nares River	23-Aug-17	4-3	421	RW	51	RE	320					
Nares River	23-Aug-17	4-3	423	CS	38	KD	190	73.0	F	3	2	
Nares River	23-Aug-17	4-3	424	CS	38	KD	186	67.0	F	3	2	
Nares River	23-Aug-17	4-3	425	CS	38	KD	176	54.0	F	3	2	
Nares River	23-Aug-17	4-3	426	CS	38	KD	196	69.0	F	3	2	



Waterbody	Date	Set ID	Fish ID	Species	Mesh Size (mm)	Condition	Fork Length (mm)	Weight (g)	Sex	Maturity code	Otolith Age	Scale Age
Nares River	23-Aug-17	4-3	427	CS	38	KD	186	66.0	F	3	2	
Nares River	23-Aug-17	4-3	428	CS	38	KD	163	42.0	M	3	2	
Nares River	23-Aug-17	4-3	429	CS	38	KD	175	50.0	F	3	2	
Nares River	23-Aug-17	4-3	430	CS	38	KS	171	50.0	M	3	2	
Nares River	23-Aug-17	4-3	431	CS	38	KS	179	54.0	F	3	2	
Nares River	23-Aug-17	4-3	432	CS	38	KS	173	51.0	M	2	2	
Nares River	23-Aug-17	4-3	433	CS	38	KS	168	47.0	F	F	2	
Nares River	23-Aug-17	4-3	434	CS	38	KS	181	58.0	F	F	2	
Nares River	23-Aug-17	4-3	435	CS	38	KS	173	49.0	M	M	2	
Nares River	23-Aug-17	4-3	436	CS	25	KD	142	22.0	M	M	1	
Nares River	23-Aug-17	4-4	437	LT	32	RE	458					
Nares River	23-Aug-17	4-4	438	RW	32	RE	340					
Nares River	23-Aug-17	4-4	439	RW	38	RE	232					
Nares River	23-Aug-17	4-4	440	RW	38	RG	185					
Nares River	23-Aug-17	4-5	441	RW	51	RE	275					
Nares River	23-Aug-17	4-5	442	RW	38	RE	270					
Nares River	23-Aug-17	4-5	443	RW	38	RG	260					
Nares River	23-Aug-17	4-5	444	RW	38	RG	170					
Nares River	23-Aug-17	4-6	445	RW	32	RP	284					
Nares River	23-Aug-17	4-6	446	CS	32	KD	160	43.0	F	2	1	
Nares River	23-Aug-17	4-6	447	CS	32	KD	173	52.0	F	3	2	
Nares River	23-Aug-17	4-6	448	CS	32	KD	144	23.0	M	1	1	
Nares River	23-Aug-17	4-6	449	CS	32	KD	152	32.0	M	3	1	
Nares River	23-Aug-17	4-6	450	CS	32	KD	179	60.0	F	3	2	
Nares River	23-Aug-17	4-6	451	CS	32	KD	174	54.0	F	3	2	
Nares River	23-Aug-17	4-6	452	CS	32	KD	156	37.0	F	2/3	1	
Nares River	23-Aug-17	4-6	453	CS	32	KD	170	47.0	F	3	2	
Nares River	23-Aug-17	4-6	454	CS	32	KD	152	33.0	F	3	1	
Nares River	23-Aug-17	4-6	455	CS	32	KD	168	40.0	M	3	2	
Nares River	23-Aug-17	4-6	456	CS	38	KD	175	47.0	F	3	2	
Nares River	23-Aug-17	4-6	457	CS	38	KD	214	106.0	M	1	3	3
Nares River	23-Aug-17	4-7	NFC									
Nares River	23-Aug-17	4-8	NFC									
Nares River	23-Aug-17	4-9	458	CS	32	KD	170	50.0	F	2	2	2



Waterbody	Date	Set ID	Fish ID	Species	Mesh Size (mm)	Condition	Fork Length (mm)	Weight (g)	Sex	Maturity code	Otolith Age	Scale Age
Nares River	23-Aug-17	4-9	459	CS	32	KD	182	59.0	M	3	2	2
Nares River	23-Aug-17	4-9	460	CS	32	KD	177	60.0	F	3	2	2
Nares River	23-Aug-17	4-9	461	CS	38	KD	189	76.0	F	3	2	2
Tagish River	23-Aug-17	4-10	462	CS	25	KD	145	33.0	M	3	2	
Tagish River	23-Aug-17	4-11	463	RW	51	RG	200					
Tagish River	23-Aug-17	4-11	464	RW	38	RP	276					
Tagish River	23-Aug-17	4-11	465	LW	38	RG	182					
Tagish River	23-Aug-17	4-11	466	LW	38	RG	174					
Tagish River	23-Aug-17	4-12	467	RW	44	KD	301	268.0	F	2		
Tagish River	23-Aug-17	4-12	468	RW	32	KD	342	300+	M	3		
Tagish River	23-Aug-17	4-12	469	LW	32	E	adult					
Tagish River	23-Aug-17	4-13	470	CS	25	KD	136	25.0	M	3	1	1
Tagish River	23-Aug-17	4-13	471	CS	25	KD	129	21.0	M	2	1	1
Tagish River	23-Aug-17	4-13	472	LW	25	KD	159	40.0	U	1		
Tagish River	23-Aug-17	4-13	473	LW	32	RE	228					
Tagish River	23-Aug-17	4-13	474	CS	32	KD	149	35.0	M	3	1	1
Tagish River	23-Aug-17	4-13	475	CS	32	KD	150	34.0	M	3	2	2
Tagish River	23-Aug-17	4-13	476	CS	32	KD	166	41.0	F	3	2	2
Tagish River	23-Aug-17	4-13	477	CS	32	KD	158	38.0	F	3	2	ua
Tagish River	23-Aug-17	4-13	478	CS	32	KD	159	38.0	M	3	2	2
Tagish River	23-Aug-17	4-13	479	CS	32	KD	166	43.0	M	3	2	2
Tagish River	23-Aug-17	4-13	480	NP	38	RE	685					
Tagish River	23-Aug-17	4-13	481	LW	38	KD	180	55.0	U	1		
Tagish River	23-Aug-17	4-13	482	LW	38	KD	166	51.0	U	1		
Tagish River	23-Aug-17	4-13	483	LW	38	KD	172	52.0	U	1		
Tagish River	23-Aug-17	4-13	484	LW	38	KD	175	60.0	U	1		
Tagish River	23-Aug-17	4-13	485	LW	38	KD	183	62.0	U	1		
Tagish River	23-Aug-17	4-13	486	LW	38	KD	180	64.0	U	1		
Tagish River	23-Aug-17	4-14	487	RW	51	KD	305					
Tagish River	23-Aug-17	4-14	488	RW	38	KD	180					
Tagish River	23-Aug-17	4-14	489	LW	38	RG	170					
Tagish River	23-Aug-17	4-14	490	LW	38	E	juvenile					
Tagish River	23-Aug-17	4-14	491	LW	38	KD	218	118.0	U	1		
Tagish River	23-Aug-17	4-14	492	CS	38	KD	176	57.0	M	3	2	



Waterbody	Date	Set ID	Fish ID	Species	Mesh Size (mm)	Condition	Fork Length (mm)	Weight (g)	Sex	Maturity code	Otolith Age	Scale Age
Tagish River	23-Aug-17	4-14	493	CS	25	KD	135	21.0	F	1/2	1	
Tagish River	23-Aug-17	4-14	494	CS	25	KD	132	22.0	M	3	1	
Tagish River	23-Aug-17	4-14	495	CS	25	KD	130	20.0	M	2	1	
Tagish River	23-Aug-17	4-14	496	CS	25	KD	130	22.0	M	1		
Tagish River	23-Aug-17	4-15	497	RW	44	KD	304	278.0	M	1		
Tagish River	23-Aug-17	4-15	498	RW	44	RE	231					
Tagish River	23-Aug-17	4-15	499	RW	32	KD	342	300+	F	1		
Tagish River	23-Aug-17	4-15	500	CS	32	KD	135	29.4	M	3	1	
Tagish River	23-Aug-17	4-15	501	CS	32	KD	135	26.7	M	1	1	
Tagish River	23-Aug-17	4-15	502	CS	32	KD	155	42.7	F	3	2	
Tagish River	23-Aug-17	4-15	503	CS	32	KD	157	40.6	M	3	2	
Tagish River	23-Aug-17	4-15	504	CS	32	KD	156	47.1	F	3	2	
Tagish River	23-Aug-17	4-15	505	CS	32	KD	149	34.4	M	1	2	
Tagish River	23-Aug-17	4-15	506	CS	32	KD	154	43.1	F	3	2	
Tagish River	23-Aug-17	4-15	507	CS	32	KD	142	30.7	F	2	1	
Tagish River	23-Aug-17	4-15	508	CS	32	KD	141	31.0	F	1	1	
Tagish River	23-Aug-17	4-15	509	CS	32	KD	150	34.5	M	3	2	
Tagish River	23-Aug-17	4-15	510	CS	32	KD	158	44.9	F	3	2	
Tagish River	23-Aug-17	4-15	511	CS	32	KD	180	63.0	F	1	2	
Tagish River	23-Aug-17	4-15	512	CS	32	KD	157	42.5	F	3	1	
Tagish River	23-Aug-17	4-15	513	CS	32	KD	166	50.4	M	3	2	
Tagish River	23-Aug-17	4-15	514	CS	32	KD	140	30.8	F	1	1	
Tagish River	23-Aug-17	4-15	515	CS	32	KD	149	32.5	F	1	1	
Tagish River	23-Aug-17	4-15	516	CS	32	KD	137	27.2	M	1	1	
Tagish River	23-Aug-17	4-15	517	CS	25	E						
Tagish River	23-Aug-17	4-15	518	CS	25	KD	130	23.9	F	1	1	
Tagish River	23-Aug-17	4-15	519	CS	25	KD	129	20.8	F	1	1	
Tagish River	23-Aug-17	4-15	520	CS	25	KD	133	24.0	M	3	1	
Tagish River	23-Aug-17	4-15	521	CS	25	KD	131	24.4	F	1	1	
Tagish River	23-Aug-17	4-16	522	LW	25	RE	304					
Tagish River	23-Aug-17	4-16	523	CS	25	KD	136	28.0	M	1	1	
Tagish River	23-Aug-17	4-16	524	CS	25	KD	129	22.0	M	1	1	
Tagish River	23-Aug-17	4-16	525	CS	25	KD	132	26.0	F	2	1	
Tagish River	23-Aug-17	4-16	526	CS	25	KD	127	21.1	F	1	1	



Waterbody	Date	Set ID	Fish ID	Species	Mesh Size (mm)	Condition	Fork Length (mm)	Weight (g)	Sex	Maturity code	Otolith Age	Scale Age
Tagish River	23-Aug-17	4-16	527	CS	25	KD	128	20.4	M	1	1	
Tagish River	23-Aug-17	4-16	528	CS	32	KD	140	28.5	F	1	1	
Tagish River	23-Aug-17	4-16	529	CS	32	KD	147	35.2	F	2	1	
Tagish River	23-Aug-17	4-16	530	LW	32	KD	165	58.9	U	1		
Tagish River	23-Aug-17	4-16	531	LW	32	KD	173	59.1	U	1		
Tagish River	23-Aug-17	4-16	532	LW	38	KD	192	93.9	U	1		
Tagish River	23-Aug-17	4-17	533	CS	25	KD	127	21.6	M	2	1	
Tagish River	23-Aug-17	4-17	534	CS	25	KD	125	22.0	M	2	1	
Tagish River	23-Aug-17	4-17	535	CS	38	KD	164	48.3	M	3	1	
Tagish River	23-Aug-17	4-17	536	CS	38	KD	176	68.6	F	3	2	
Tagish River	23-Aug-17	4-18	537	LW	44	RG	440					
Tagish River	23-Aug-17	4-18	538	RW	32	KD	180	52.8	U	1		
Tagish River	23-Aug-17	4-18	539	LW	25	RE	104					
Tagish River	23-Aug-17	4-18	542	CS	25	KD	89	6.1	U	1	0	
Tagish River	23-Aug-17	4-19	540	CS	19	KD	82	6.6	U	1	0	
Tagish River	23-Aug-17	4-19	541	CS	19	KD	88	7.9	U	1	0	

Notes:

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

Conditions 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), 4 – ripe, 5 – spent.



Table A4. Fall targeted small mesh gillnetting fish capture data.

Waterbody	Date	Set ID	Fish ID	Species	Mesh Size (mm)	Condition	Fork Length (mm)	Weight (g)	Sex	Maturity code	Otolith Age	Scale Age
Nares River	28-Sep-17	5-1	545	CS	38	KD	194		F	5	2	
Nares River	28-Sep-17	5-1	546	CS	38	KD	196		F	5/4	2	
Nares River	28-Sep-17	5-1	547	CS	38	KD	189	57.0	F	5	2	
Nares River	28-Sep-17	5-1	548	CS	38	KD	190	51.0	F	5	2	
Nares River	28-Sep-17	5-1	549	CS	38	KD	176	46.0	F	5	2	
Nares River	28-Sep-17	5-1	550	CS	38	KD	183	56.0	F	2	2	
Nares River	28-Sep-17	5-1	551	CS	38	KD	184	60.0	F	4	2	
Nares River	28-Sep-17	5-1	552	CS	38	KD	173	54.0	F	4	1	
Nares River	28-Sep-17	5-1	553	CS	38	KD	204	66.0	F	5	2	
Nares River	28-Sep-17	5-1	554	CS	38	KD	179	52	M	2/3	2	
Nares River	28-Sep-17	5-1	555	CS	38	KD	193	56	F	2	2	
Nares River	28-Sep-17	5-1	556	CS	38	KD	202	72	F	5	2	
Nares River	28-Sep-17	5-1	557	CS	38	KD	178	48	F	5	2	
Nares River	28-Sep-17	5-1	558	CS	38	KD	181	56	M	2/3	2	
Nares River	28-Sep-17	5-1	559	CS	38	KD	179	49	F	5	2	
Nares River	28-Sep-17	5-1	560	CS	38	KD	173	48	M	4	2	
Nares River	28-Sep-17	5-1	561	CS	38	KD	184	51	M	3	2	
Nares River	28-Sep-17	5-1	562	CS	38	KD	176	48	F	4	2	
Nares River	28-Sep-17	5-1	567	GR	32	RE	190					
Nares River	28-Sep-17	5-3	568	RW	44	RE	285					
Nares River	28-Sep-17	5-3	569	RW	44	RE	270					
Nares River	28-Sep-17	5-3	570	RW	44	KD	370		F	2		
Nares River	28-Sep-17	5-4	571	LW	32	E	juvenile					
Nares River	28-Sep-17	5-4	572	GR	51	RG	250					
Nares River	28-Sep-17	5-4	573	RW	51	RG	225					
Nares River	28-Sep-17	5-4	574	GR	51	E	juvenile					
Nares River	28-Sep-17	5-5	575	CS	32	KD	155	35	F	4	2	
Nares River	28-Sep-17	5-5	576	CS	32	KD	169	42	F	5	2	



Waterbody	Date	Set ID	Fish ID	Species	Mesh Size (mm)	Condition	Fork Length (mm)	Weight (g)	Sex	Maturity code	Otolith Age	Scale Age
Nares River	28-Sep-17	5-5	577	CS	32	KD	162	40	F	4	2	
Nares River	28-Sep-17	5-5	578	RW	44	RE	290					
Nares River	28-Sep-17	5-5	579	RW	44	RE	280					
Nares River	28-Sep-17	5-5	580	RW	44	RG	278					
Nares River	28-Sep-17	5-5	581	RW	44	RP	290					
Nares River	28-Sep-17	5-5	582	RW	44	KD	240	124.4	F	1		
Nares River	28-Sep-17	5-6	583	CS	25	KD	163	44.8	F	4	2	
Nares River	28-Sep-17	5-7	584	LSU	38	E	adult					
Nares River	28-Sep-17	5-7	585	GR	38	E	adult					
Nares River	28-Sep-17	5-7	586	LSU	51	RE	340					
Nares River	28-Sep-17	5-7	587	GR	51	RG	250					
Nares River	28-Sep-17	5-7	588	LSU	51	RE	380					
Nares River	28-Sep-17	5-7	589	RW	51	RP	300					
Nares River	28-Sep-17	5-9	590	CS	38	KD	166	45.7	F	4	1	
Nares River	28-Sep-17	5-9	591	RW	51	E	adult					
Nares River	28-Sep-17	5-9	592	RW	51	RE	295					
Nares River	28-Sep-17	5-10	593	RW		E	adult					
Tagish River	28-Sep-17	5-11	594	RW	32	RG	275					
Tagish River	28-Sep-17	5-11	595	RW	25	KD	195	63.6		U1		
Tagish River	28-Sep-17	5-12	596	CS	38	E						
Tagish River	28-Sep-17	5-12	597	CS	38	KD	170	47.6	F	4	2	
Tagish River	28-Sep-17	5-13	598	RW	32	E						
Tagish River	28-Sep-17	5-13	599	RW	38	RE	195					
Tagish River	28-Sep-17	5-13	600	RW	38	RE	260					
Tagish River	28-Sep-17	5-13	601	CS	38	KS	185	65.4	F	4	2	
Tagish River	28-Sep-17	5-13	602	CS	38	KS	190	69.9	F	4	3	
Tagish River	28-Sep-17	5-13	603	RW	44	RG	296					
Tagish River	28-Sep-17	5-13	604	RW	44	RG	333					
Tagish River	28-Sep-17	5-14	605	RW	38	RE	210					



Waterbody	Date	Set ID	Fish ID	Species	Mesh Size (mm)	Condition	Fork Length (mm)	Weight (g)	Sex	Maturity code	Otolith Age	Scale Age
Tagish River	28-Sep-17	5-14	606	CS	38	KD	176	52.7	F	4	2	
Tagish River	28-Sep-17	5-14	607	CS	38	KD	159	40.5	F	4	1	
Tagish River	28-Sep-17	5-14	608	CS	38	KD	185	64.2	F	4	2	
Tagish River	28-Sep-17	5-14	609	CS	32	KD	189	59.5	F	4	3	
Tagish River	28-Sep-17	5-14	610	GR	25	RG						
Tagish River	28-Sep-17	5-14	611	CS	25	KD	155	32.5	F	4	1	
Tagish River	28-Sep-17	5-15	612	RW	32	RE	182					
Tagish River	28-Sep-17	5-16	614	RW	25	RE	125					
Tagish River	28-Sep-17	5-16	615	RW	25	RG	115					
Tagish River	28-Sep-17	5-16	616	LT	32	RE	400					
Tagish River	28-Sep-17	5-16	617	RW	32	RE	300					
Tagish River	28-Sep-17	5-16	618	RW	32	RG	330					
Tagish River	28-Sep-17	5-16	619	RW	38	RE	255					
Tagish River	28-Sep-17	5-16	620	RW	38	RG	250					
Tagish River	28-Sep-17	5-16	621	RW	44	RE	310					
Tagish River	28-Sep-17	5-16	613	RW	44	KD	260	163	F	1		
Tagish River	28-Sep-17	5-17	622	RW	38	RG	200					
Tagish River	28-Sep-17	5-17	623	RW	38	KD	210	78.3	M	1		
Tagish River	28-Sep-17	5-17	624	RW	38	RE	200					
Tagish River	28-Sep-17	5-17	625	LW	38	RE	195					
Tagish River	28-Sep-17	5-17	626	RW	38	RE	355					
Tagish River	28-Sep-17	5-17	627	RW	38	E						
Tagish River	28-Sep-17	5-17	628	RW	38	RG	190					
Tagish River	28-Sep-17	5-17	629	RW	38	RG	245					
Tagish River	28-Sep-17	5-17	630	RW	38	RE	210					
Tagish River	28-Sep-17	5-17	631	RW	38	E						
Tagish River	28-Sep-17	5-17	632	RW	38	RG	205					
Tagish River	28-Sep-17	5-17	633	CS	32	KD	174	52.5	F	4	2	
Tagish River	28-Sep-17	5-17	634	CS	32	KD	164	44.2	F	4	2	



Waterbody	Date	Set ID	Fish ID	Species	Mesh Size (mm)	Condition	Fork Length (mm)	Weight (g)	Sex	Maturity code	Otolith Age	Scale Age
Tagish River	28-Sep-17	5-17	635	CS	32	KD	165	42.8	F	4	2	
Tagish River	28-Sep-17	5-17	636	CS	32	KD	177	50.7	F	4	2	
Tagish River	28-Sep-17	5-17	637	CS	32	KD	164	43.2	F	4	2	
Tagish River	28-Sep-17	5-17	638	CS	32	KD	163	43.5	F	4	2	
Tagish River	28-Sep-17	5-17	639	CS	32	KD	172	49.1	M	2/3	2	
Tagish River	28-Sep-17	5-17	640	CS	32	KD	160	41.8	F	4	2	
Tagish River	28-Sep-17	5-17	641	CS	32	KD	182	52.6	F	5	2	
Tagish River	28-Sep-17	5-17	642	CS	32	KD	182	61.3	F	4	2	
Tagish River	28-Sep-17	5-17	643	CS	32	KD	182	55.8	F	4	2	
Tagish River	28-Sep-17	5-17	644	CS	32	KD	162	34.5	F	1		
Tagish River	28-Sep-17	5-17	645	CS	32	KD	170	47.2	F	4	2	
Tagish River	28-Sep-17	5-17	646	CS	32	KD	170	51.6	F	4		
Tagish River	28-Sep-17	5-17	647	CS	32	KD	160	37	F	4	2	
Tagish River	28-Sep-17	5-17	648	CS	32	KD	162	40.4	F	4	2	
Tagish River	28-Sep-17	5-17	649	CS	32	KD	176	49.7	F	4	2	
Tagish River	28-Sep-17	5-17	650	CS	32	KD	165	42.2	F	4	2	
Tagish River	28-Sep-17	5-17	651	CS	32	KD	164	34.8	M	2/3	2	
Tagish River	28-Sep-17	5-17	652	CS	32	KD	162	39.5	F	4	2	
Tagish River	28-Sep-17	5-17	653	CS	32	KD	170	48.3	F	4	2	
Tagish River	28-Sep-17	5-17	654	CS	32	KD	160	39.8	F	4		
Tagish River	28-Sep-17	5-17	655	CS	32	KD	171	3903	F	4	1	
Tagish River	28-Sep-17	5-17	656	RW	25	E						
Tagish River	28-Sep-17	5-17	657	LSU	25	RE	145					
Tagish River	28-Sep-17	5-17	658	NP	25	RE	215					
Tagish River	28-Sep-17	5-18	659	LT	38	E						
Tagish River	28-Sep-17	5-18	660	RW	38	RG	335					
Tagish River	28-Sep-17	5-19	661	LW	44	RG	500					
Tagish River	28-Sep-17	5-22	662	LW	32	E	adult					
Tagish River	28-Sep-17	5-22	663	RW	32	RG	197					



Waterbody	Date	Set ID	Fish ID	Species	Mesh Size (mm)	Condition	Fork Length (mm)	Weight (g)	Sex	Maturity code	Otolith Age	Scale Age
Tagish River	28-Sep-17	5-22	664	LSU	32	RE	157					
Tagish River	28-Sep-17	5-22	665	LW	44	RE	460					
Tagish River	28-Sep-17	5-22	666	LW	44	E	adult					
Tagish River	28-Sep-17	5-24	667	RW	38	RG	195					
Nares River	20-Oct-17	6-1	680	RW	51	RE	290					
Nares River	20-Oct-17	6-2	681	RW	44	E						
Nares River	20-Oct-17	6-2	682	RW	44	RE	330					
Nares River	20-Oct-17	6-2	683	RW	44	RE	310					
Nares River	20-Oct-17	6-2	684	RW	44	RP	325					
Nares River	20-Oct-17	6-2	685	RW	44	KD	322	325	F	2		
Nares River	20-Oct-17	6-3	686	RW	25	RE	345		M	4		
Nares River	20-Oct-17	6-3	687	RW	25	KD	303	275	F	2		
Nares River	20-Oct-17	6-3	688	RW	25	E						
Nares River	20-Oct-17	6-3	689	LSU	32	E						
Nares River	20-Oct-17	6-3	690	LSU	32	E						
Nares River	20-Oct-17	6-3	691	LSU	32	RE	320					
Nares River	20-Oct-17	6-3	692	LSU	32	RE	368					
Nares River	20-Oct-17	6-4	693	RW	51	RG	280					
Nares River	20-Oct-17	6-5	694	RW	38	E	adult					
Nares River	20-Oct-17	6-5	695	GR	38	RG	178					
Nares River	20-Oct-17	6-5	696	RW	44	RG	295					
Nares River	20-Oct-17	6-5	697	RW	44	RE	355					
Nares River	20-Oct-17	6-5	698	RW	44	RE	378		F	4		
Nares River	20-Oct-17	6-5	699	RW	44	RE	389					
Nares River	20-Oct-17	6-5	700	RW	44	RE	285					
Nares River	20-Oct-17	6-5	701	RW	44	KD	286	210	F	1		
Nares River	20-Oct-17	6-5	702	RW	44	KD	249	150	M	1		
Nares River	20-Oct-17	6-5	703	RW	44	KD	308	290	F	2		
Nares River	20-Oct-17	6-6	704	LSU	38	RE	405					



Waterbody	Date	Set ID	Fish ID	Species	Mesh Size (mm)	Condition	Fork Length (mm)	Weight (g)	Sex	Maturity code	Otolith Age	Scale Age
Nares River	20-Oct-17	6-6	705	LSU	38	RE	adult					
Nares River	20-Oct-17	6-8	706	RW	25	RE	130					
Nares River	20-Oct-17	6-8	707	RW	25	RE	132					
Nares River	20-Oct-17	6-8	708	RW	25	RE	176					
Nares River	20-Oct-17	6-9	709	LT	38	RE			F	5		
Nares River	20-Oct-17	6-11	710	NP	25	RE	685					
Tagish River	20-Oct-17	6-12	711	RW	25	RG	120					
Tagish River	20-Oct-17	6-13	712	LT	38	RE	1050		F	5		
Tagish River	20-Oct-17	6-14	713	CS	32	KS	153	30.6	M	1	1	
Marsh Lake	20-Oct-17	6-23	714	RW	32	E	adult					
Marsh Lake	20-Oct-17	6-23	715	RW	32	E	adult					
Marsh Lake	20-Oct-17	6-23	716	RW	32	RE	320					
Marsh Lake	20-Oct-17	6-23	717	RW	32	RE	198					
Marsh Lake	20-Oct-17	6-23	718	RW	32	E	adult					
Marsh Lake	20-Oct-17	6-23	719	RW	32	RE	192					
Marsh Lake	20-Oct-17	6-23	720	RW	38	RP	292					
Marsh Lake	20-Oct-17	6-23	721	RW	38	RP	230					
Marsh Lake	20-Oct-17	6-23	722	RW	38	RG	230					
Marsh Lake	20-Oct-17	6-23	723	RW	38	RE	220					
Marsh Lake	20-Oct-17	6-23	724	RW	38	E	adult					
Marsh Lake	20-Oct-17	6-23	725	RW	38	RE	255					
Marsh Lake	20-Oct-17	6-23	726	RW	44	RP	260					
Marsh Lake	20-Oct-17	6-23	727	RW	44	RG	265					
Marsh Lake	20-Oct-17	6-23	728	RW	44	RG	280					
Marsh Lake	20-Oct-17	6-23	729	RW	44	RG	275					
Marsh Lake	20-Oct-17	6-23	730	RW	44	RG	310					
Marsh Lake	20-Oct-17	6-23	731	RW	44	RP	290					
Tagish Lake	21-Oct-17	7-1	732	RW	44	RE	245					
Tagish Lake	21-Oct-17	7-2	733	RW	38	E	adult					



Waterbody	Date	Set ID	Fish ID	Species	Mesh Size (mm)	Condition	Fork Length (mm)	Weight (g)	Sex	Maturity code	Otolith Age	Scale Age
Tagish Lake	21-Oct-17	7-2	734	RW	38	RG	232					
Tagish Lake	21-Oct-17	7-2	735	RW	38	KD	290	250.0	F	1		
Tagish Lake	21-Oct-17	7-2	736	RW	38	RG	282					
Tagish Lake	21-Oct-17	7-2	737	RW	38	RG	175					
Tagish Lake	21-Oct-17	7-2	738	RW	32	KD	182	50.0	M	1		
Tagish Lake	21-Oct-17	7-2	739	RW	32	KD	185	50.0	F	1		
Tagish Lake	21-Oct-17	7-2	740	RW	32	KD	250	150.0	M	1		
Tagish Lake	21-Oct-17	7-2	741	RW	25	KD	185	50.0	M	1		
Tagish Lake	21-Oct-17	7-2	742	RW	25	RE	180					
Tagish Lake	21-Oct-17	7-2	743	RW	25	RE	170					
Tagish Lake	21-Oct-17	7-3	744	RW	38	RG	195					
Tagish Lake	21-Oct-17	7-3	745	RW	38	RE	230					
Tagish Lake	21-Oct-17	7-3	746	RW	38	RE	275					
Tagish Lake	21-Oct-17	7-3	747	RW	51	RE	284					
Tagish Lake	21-Oct-17	7-3	748	LT	51	RE	523		M	4/5		
Tagish Lake	21-Oct-17	7-3	749	RW	38	RE	230					
Tagish Lake	21-Oct-17	7-4	750	LT	38	RE	680		F	5		
Tagish Lake	21-Oct-17	7-5	751	RW	25	RE	175					
Tagish Lake	21-Oct-17	7-5	752	RW	25	RE	200					
Tagish Lake	21-Oct-17	7-5	753	RW	25	RE	120					
Tagish Lake	21-Oct-17	7-5	754	RW	25	KD	167	50.0	U	1		
Tagish Lake	21-Oct-17	7-5	755	RW	25	RE	174					
Tagish Lake	21-Oct-17	7-5	756	RW	25	RG	172					
Tagish Lake	21-Oct-17	7-6	757	RW	32	RE	195					
Tagish Lake	21-Oct-17	7-6	758	RW	32	RE	184					
Tagish Lake	21-Oct-17	7-6	759	RW	32	KD	229	100.0	M	1		
Tagish Lake	21-Oct-17	7-6	760	RW	32	KD	176	50.0	M	1		
Tagish Lake	21-Oct-17	7-6	761	RW	32	KD	182	50.0	M	1		
Tagish Lake	21-Oct-17	7-6	762	RW	32	KD	181	50.0	U	1		



Waterbody	Date	Set ID	Fish ID	Species	Mesh Size (mm)	Condition	Fork Length (mm)	Weight (g)	Sex	Maturity code	Otolith Age	Scale Age
Tagish Lake	21-Oct-17	7-6	763	RW	32	KD	177	50.0	U	1		
Tagish Lake	21-Oct-17	7-6	764	RW	32	KD	170	50.0	U	1		
Tagish Lake	21-Oct-17	7-6	765	RW	32	KD	176	50.0	U	1		
Tagish Lake	21-Oct-17	7-6	766	RW	32	KD	177	50.0	F	1		
Tagish Lake	21-Oct-17	7-6	767	RW	32	RG	182					
Tagish Lake	21-Oct-17	7-6	768	RW	32	KD	222	100.0	M	1		
Tagish Lake	21-Oct-17	7-6	769	RW	32	KD	243	125.0	F	1		
Tagish Lake	21-Oct-17	7-6	770	RW	38	RE	320					
Tagish Lake	21-Oct-17	7-6	771	RW	38	RG	244					
Tagish Lake	21-Oct-17	7-6	772	RW	38	KD	213	75.0	F	1		
Tagish Lake	21-Oct-17	7-6	773	RW	38	KD	252	125.0	F	1		
Tagish Lake	21-Oct-17	7-6	774	RW	38	KD	232	100.0	M	1		
Tagish Lake	21-Oct-17	7-6	775	RW	38	KD	210	75.0	F	1		
Tagish Lake	21-Oct-17	7-6	776	RW	38	KD	214	100.0	M	1		
Tagish Lake	21-Oct-17	7-6	777	RW	38	RE	210					
Tagish Lake	21-Oct-17	7-6	778	RW	38	RE	215					
Tagish Lake	21-Oct-17	7-6	779	RW	38	RE	198					
Tagish Lake	21-Oct-17	7-6	780	RW	38	RG	197					
Tagish Lake	21-Oct-17	7-6	781	RW	38	RG	190					
Tagish Lake	21-Oct-17	7-6	781B	RW	38	KD	294	150.0	M	1		
Tagish Lake	21-Oct-17	7-6	782	LT	38		425					
Tagish Lake	21-Oct-17	7-6	783	RW	44	RE	222					
Tagish Lake	21-Oct-17	7-6	784	RW	44	RE	308					
Tagish Lake	21-Oct-17	7-6	785	RW	44	RG	303					
Tagish Lake	21-Oct-17	7-6	786	RW	44	RE	255					
Tagish Lake	21-Oct-17	7-6	787	RW	44	KD	314	275.0	M	1		
Tagish Lake	21-Oct-17	7-6	788	RW	44	KD	298	300.0	M	1		
Tagish Lake	21-Oct-17	7-6	789	RW	44	KD	340	350.0	M	1		
Tagish Lake	21-Oct-17	7-6	790	RW	44	RP	290					



Waterbody	Date	Set ID	Fish ID	Species	Mesh Size (mm)	Condition	Fork Length (mm)	Weight (g)	Sex	Maturity code	Otolith Age	Scale Age
Tagish Lake	21-Oct-17	7-7	791	RW	32	RE	350					
Tagish Lake	21-Oct-17	7-7	792	RW	32	RE	377					
Tagish Lake	21-Oct-17	7-7	793	RW	32	RE	315					
Tagish Lake	21-Oct-17	7-7	794	RW	32	RE	350					
Tagish Lake	21-Oct-17	7-7	795	LT	32	RE	440		U			
Tagish Lake	21-Oct-17	7-7	796	RW	32	KD	253	175.0	M	1		
Tagish Lake	21-Oct-17	7-7	797	LT	32	RE	380		U			
Tagish Lake	21-Oct-17	7-7	798	RW	32	RE	382					
Tagish Lake	21-Oct-17	7-7	799	RW	38	RE	326					
Tagish Lake	21-Oct-17	7-7	800	GR	38	RE	365					
Tagish Lake	21-Oct-17	7-7	801	GR	38	RE	328					
Tagish Lake	21-Oct-17	7-7	802	RW	38	RE	342					
Tagish Lake	21-Oct-17	7-7	803	RW	44	KD	320	325.0	M	1		
Tagish Lake	21-Oct-17	7-7	804	RW	44	KD	345	375.0	M	2		
Tagish Lake	21-Oct-17	7-7	805	RW	44	E						
Tagish Lake	21-Oct-17	7-7	806	GR	44	E						
Tagish Lake	21-Oct-17	7-7	807	RW	44	RE	290					
Tagish Lake	21-Oct-17	7-7	808	RW	44	RE	303					
Tagish Lake	21-Oct-17	7-7	809	RW	44	E						
Tagish Lake	21-Oct-17	7-8	810	RW	25	KD	228	125.0	F	1		
Tagish Lake	21-Oct-17	7-8	811	RW	25	RE	380					
Tagish Lake	21-Oct-17	7-8	812	RW	25	RE	195					
Tagish Lake	21-Oct-17	7-8	813	RW	25	RE	322					
Tagish Lake	21-Oct-17	7-8	814	RW	32	RE	350					
Tagish Lake	21-Oct-17	7-8	815	RW	32	KD	177	50.0	U	1		
Tagish Lake	21-Oct-17	7-8	816	RW	32	RP	252					
Tagish Lake	21-Oct-17	7-8	817	RW	32	E						
Tagish Lake	21-Oct-17	7-8	818	RW	32	E						
Tagish Lake	21-Oct-17	7-8	819	RW	32	E						



Waterbody	Date	Set ID	Fish ID	Species	Mesh Size (mm)	Condition	Fork Length (mm)	Weight (g)	Sex	Maturity code	Otolith Age	Scale Age
Tagish Lake	21-Oct-17	7-8	820	RW	32	RE	335					
Tagish Lake	21-Oct-17	7-8	821	RW	32	RP	246					
Tagish Lake	21-Oct-17	7-8	822	RW	32	E						
Tagish Lake	21-Oct-17	7-8	823	RW	32	RE	322					
Tagish Lake	21-Oct-17	7-8	824	RW	38	RG	380					
Tagish Lake	21-Oct-17	7-8	825	RW	38	E						
Tagish Lake	21-Oct-17	7-8	826	RW	38	RG	235					
Tagish Lake	21-Oct-17	7-8	827	RW	38	RE	265					
Tagish Lake	21-Oct-17	7-8	828	RW	38	RP	235					
Tagish Lake	21-Oct-17	7-9	829	RW	38	RE	254					
Tagish Lake	21-Oct-17	7-9	830	RW	38	RE	366					
Tagish Lake	21-Oct-17	7-9	831	RW	38	KD	329	375.0	F	3		
Tagish Lake	21-Oct-17	7-9	832	RW	51	RE	340					
Tagish Lake	21-Oct-17	7-9	833	RW	51	RP	315					
Tagish Lake	21-Oct-17	7-9	834	RW	51	RE	346					
Tagish Lake	21-Oct-17	7-9	835	RW	51	RE	356					
Tagish Lake	21-Oct-17	7-9	836	RW	51	RE	320					
Tagish Lake	21-Oct-17	7-9	837	RW	51	RE	340					
Tagish Lake	21-Oct-17	7-9	838	RW	51	RG	285					
Tagish Lake	21-Oct-17	7-9	839	RW	51	RG	352					
Tagish Lake	21-Oct-17	7-9	840	RW	51	KD	300	250.0	M	1		
Tagish Lake	21-Oct-17	7-9	841	RW	51	KD	343	400.0	M	4		
Tagish Lake	21-Oct-17	7-9	842	RW	51	KD	335	350.0	M	4		
Tagish Lake	21-Oct-17	7-9	843	RW	51	RE	330					
Tagish Lake	21-Oct-17	7-9	844	RW	51	KD	362	500.0	F	4		
Tagish Lake	21-Oct-17	7-9	845	RW	51	RG	302					
Tagish Lake	21-Oct-17	7-9	846	RW	38	RE	205					
Tagish Lake	21-Oct-17	7-9	847	RW	38	RE	215					
Tagish Lake	21-Oct-17	7-9	848	RW	38	RE	220					



Waterbody	Date	Set ID	Fish ID	Species	Mesh Size (mm)	Condition	Fork Length (mm)	Weight (g)	Sex	Maturity code	Otolith Age	Scale Age
Tagish Lake	21-Oct-17	7-9	849	RW	38	RE	242					
Tagish Lake	21-Oct-17	7-9	850	LW	38	E	adult					
Tagish Lake	21-Oct-17	7-9	851	RW	38	RE	195					
Tagish Lake	21-Oct-17	7-10	852	RW	32	E	adult					
Tagish Lake	21-Oct-17	7-10	853	RW	32	RE	330					
Tagish Lake	21-Oct-17	7-10	854	RW	32	RE	325		M	4		
Tagish Lake	21-Oct-17	7-10	855	RW	32	RE	370					
Tagish Lake	21-Oct-17	7-10	856	RW	32	RE	340					
Tagish Lake	21-Oct-17	7-10	857	RW	32	RE	330					
Tagish Lake	21-Oct-17	7-10	858	RW	32	RE	375					
Tagish Lake	21-Oct-17	7-10	859	RW	38	E	adult					
Tagish Lake	21-Oct-17	7-10	860	RW	38	RE	208					
Tagish Lake	21-Oct-17	7-10	861	RW	38	E	adult					
Tagish Lake	21-Oct-17	7-10	862	RW	38	RE	370					
Tagish Lake	21-Oct-17	7-10	863	RW	38	RE	330					
Tagish Lake	21-Oct-17	7-10	864	RW	38	RE	220					
Tagish Lake	21-Oct-17	7-10	865	RW	44	RE	325					
Tagish Lake	21-Oct-17	7-10	866	RW	44	RE	325					
Tagish Lake	21-Oct-17	7-10	867	RW	44	RE	305					
Tagish Lake	21-Oct-17	7-10	868	RW	44	RE	312					
Tagish Lake	21-Oct-17	7-10	869	RW	44	RE	325					
Tagish Lake	21-Oct-17	7-10	870	GR	44	RE	328					
Tagish Lake	21-Oct-17	7-10	871	GR	44	RE	380					
Tagish Lake	21-Oct-17	7-10	872	GR	44	RE	325					
Tagish Lake	21-Oct-17	7-10	873	RW	44	RE	362					
Tagish Lake	21-Oct-17	7-10	874	RW	44	RE	340					
Tagish Lake	21-Oct-17	7-10	875	RW	44	RE	340					
Tagish Lake	21-Oct-17	7-10	876	RW	44	RE	318					
Tagish Lake	21-Oct-17	7-10	877	RW	44	RP	312					



Waterbody	Date	Set ID	Fish ID	Species	Mesh Size (mm)	Condition	Fork Length (mm)	Weight (g)	Sex	Maturity code	Otolith Age	Scale Age
Tagish Lake	21-Oct-17	7-10	878	RW	38	RE	372					
Tagish Lake	21-Oct-17	7-10	879	RW	38	KD	356	450.0	F	3/4		
Tagish Lake	21-Oct-17	7-10	880	GR	38	KD	394	700.0	M	3		
Tagish Lake	21-Oct-17	7-10	881	RW	38	RE	225					
Tagish Lake	21-Oct-17	7-11	882	LT	32	RE	505		M	4		
Tagish Lake	21-Oct-17	7-11	883	RW	32	RE	182					
Tagish Lake	21-Oct-17	7-11	884	RW	38	RE	280					
Tagish Lake	21-Oct-17	7-11	885	RW	38	E						
Tagish Lake	21-Oct-17	7-11	886	RW	38	E						
Tagish Lake	21-Oct-17	7-11	887	RW	38	RP	350					
Tagish Lake	21-Oct-17	7-11	888	RW	38	RE	328					
Tagish Lake	21-Oct-17	7-12	889	LT	51	RE	680		u			
Tagish Lake	21-Oct-17	7-12	890	LT	51	RE	530		u			
Tagish Lake	21-Oct-17	7-13	891	RW	38	E	adult					
Tagish Lake	21-Oct-17	7-13	892	RW	38	KD	354	500.0	F	3/4		
Tagish Lake	21-Oct-17	7-13	893	LT	38	E	adult					
Tagish Lake	21-Oct-17	7-16	894	RW	25	RE	185					
Tagish Lake	21-Oct-17	7-16	895	RW	25	RE	185					
Tagish Lake	21-Oct-17	7-16	896	RW	25	RE	182					
Tagish Lake	21-Oct-17	7-16	897	RW	25	RE	215					
Tagish Lake	21-Oct-17	7-16	898	RW	32	E	adult					
Tagish Lake	21-Oct-17	7-16	899	RW	38	RP	266					

Notes:

Fish species codes as follows: CS – least cisco, LSU – longnose sucker, LT – lake trout, LW – lake whitefish, NP – northern pike, RW – round whitefish, GR – Arctic grayling. Conditions 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), 4 – ripe, 5 – spent.