



Keeyask Generation Project Aquatic Effects Monitoring Plan

Floy-tag Application and Recapture Report

AEMP-2022-10



KEYYASK GENERATION PROJECT

AQUATIC EFFECTS MONITORING PLAN

REPORT #AEMP-2022-10

FLOY-TAG APPLICATION AND RECAPTURE INFORMATION FROM THE KEYYASK STUDY AREA, 2021

Prepared for

Manitoba Hydro

By

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SUMMARY

Background

The Keeyask Hydropower Limited Partnership (KHLP) was required to prepare a plan to monitor the effects of construction and operation of the Keeyask Generating Station (GS) on the environment. Besides measuring the accuracy of the predictions made and actual effects of the GS on the environment, monitoring results will provide information on how construction and operation of the GS will affect the environment and if more needs to be done to reduce harmful effects.

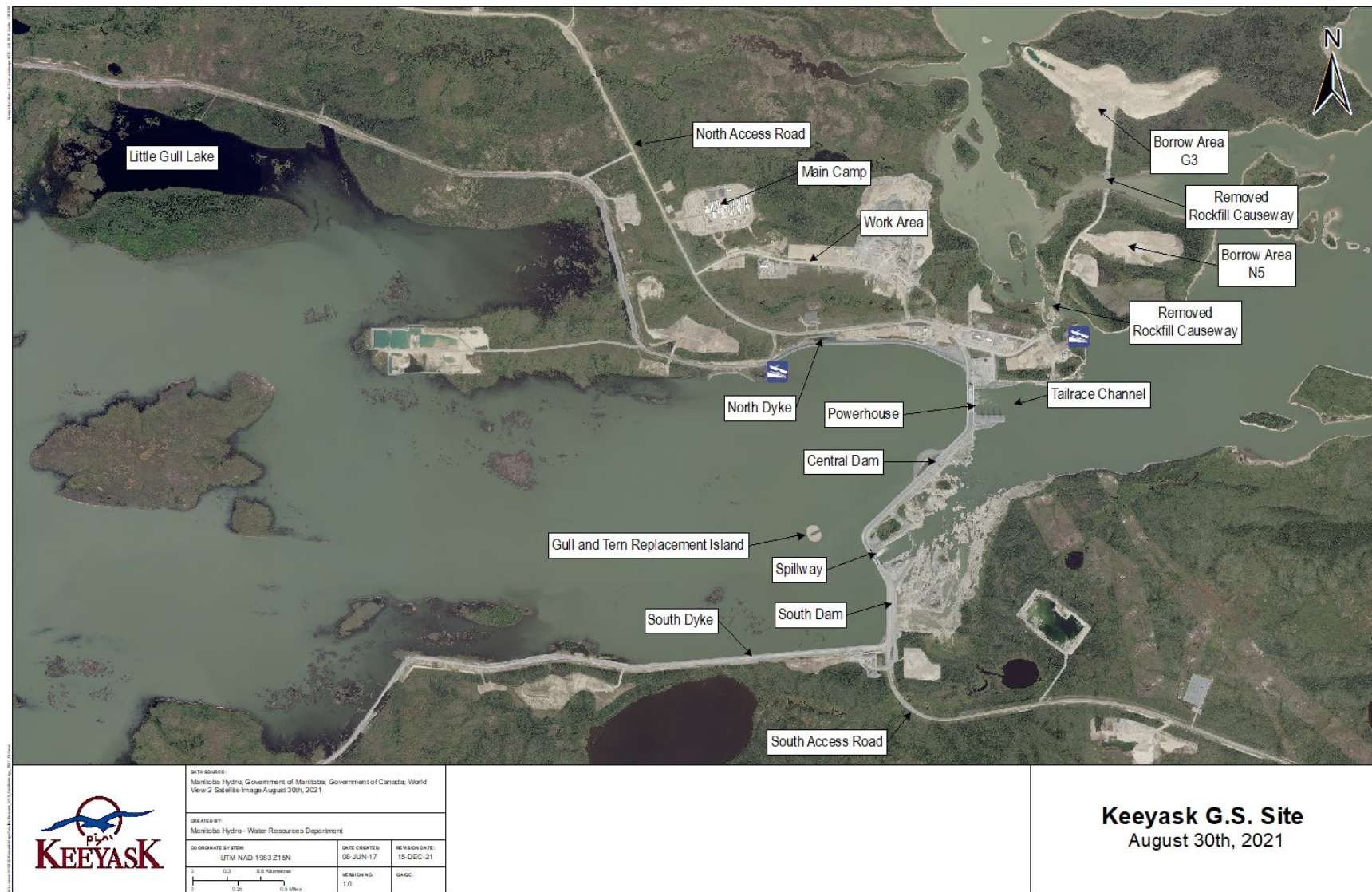
Construction of the Keeyask GS began in mid-July 2014 and instream work was completed in 2020. The reservoir was impounded with water levels being raised to full supply level between August 31 and September 5, 2020. Commissioning of the powerhouse turbines was initiated after impoundment and five of seven units were in-service by fall 2021. During commissioning and as units came into service, substantial flows continued through the spillway until the summer of 2021, when more flow was going through the powerhouse than spillway. By mid-September the spillway was closed and barely used in the fall.

Monitoring fish movements is an important component of the overall plan to monitor the impacts of construction and operation of the Keeyask GS on fish. Lake Sturgeon, Lake Whitefish, Northern Pike (jackfish), and Walleye (pickerel) were chosen as the key species to monitor because they are of commercial and domestic importance and were known to pass Gull Rapids prior to the start of construction of the Keeyask GS. Fine-scale movements of sturgeon, pickerel, and whitefish are being monitored using acoustic telemetry, but this method records the movements of relatively few fish. Floy tags are small, numbered tags applied externally to fish. Each tag has a unique number to allow a fish to be identified if it is recaptured. Marking fish with Floy tags allows many more fish movements to be tracked than acoustic telemetry but this method relies on recapturing the fish and only provides information on a single (recapture) location.

Floy tags are also being used to mark adult and juvenile Lake Sturgeon and these results are described in the population monitoring reports prepared for this species. This report focuses on tagging and recaptures of Lake Whitefish, jackfish, and pickerel.

Why is the study being done?

Floy tagging of Lake Whitefish, jackfish, and pickerel is being done to add to our understanding of fish movements in the Keeyask area. Tagged fish may be recaptured during monitoring studies and by fishermen. Fish that move upstream into Split Lake may be captured during the Coordinated Aquatic Monitoring Program (CAMP) monitoring studies, or in the commercial fishery or by domestic or recreational fishers. Fish that move downstream into Stephens Lake may be caught during Keeyask or CAMP studies, or by fishers. Where they are recaptured can tell us if the fish has stayed in the same area it was tagged in or if it has moved. Because the Floy tagging study requires fish to be recaptured, it can take several years before there are meaningful results.



Map illustrating instream structures at the Keeyask Generating Station site, August 2021.



Floy-tagging a Northern Pike (left) and Lake Whitefish (right).

What was done?

Lake Whitefish, jackfish, and pickerel were caught over two weeks in the spring and two weeks in the fall using gill nets. Gill nets were set for only a few hours at a time to capture live fish and reduce stress on the fish. A boat electrofisher was also used to capture fish in the fall. The electrofisher uses an electrical current to temporarily stun the fish, which are then captured using large dip nets – fish captured this way typically have less injury and stress than those captured in gill nets.

When a fish was caught, it was measured and weighed. If the fish was not already tagged, then an external (Floy®) tag was applied. If the captured fish had already been tagged, then the tag numbers were recorded before the fish was released.

What was found?

Lake Whitefish, jackfish, and pickerel were tagged and recaptured during studies between 1999 and 2010, before construction of the GS started. Because these fish do not live very long (whitefish to about 25 years old, jackfish between 10 and 15 years old, and pickerel around 15 to 20 years old), it is unlikely that many of these fish are alive and will be recaptured in the current studies. Information on the number of movements before construction of the GS started will be used to compare to that collected after construction. This can help us tell if the number of movements between areas has increased.

A total of 122 whitefish were tagged during construction between 2014 and 2020. An additional 42 Lake Whitefish were tagged in 2021, including 10 in the Keeyask reservoir, and 32 in Stephens Lake.

No tags were applied to jackfish during the construction period, but 312 were tagged in 2021. This includes 175 in the Keeyask reservoir and 137 in Stephens Lake. One jackfish tagged in the Keeyask reservoir in spring was recaptured in the fall in the same area of the reservoir.

A total of 225 pickerel were tagged during construction between 2014 and 2020. An additional 140 pickerel were tagged in 2021, including 69 in the Keeyask reservoir and 71 in Stephens Lake.

What does it mean?

Results regarding movements of fish tagging in 2021 will not be available for several years as fish must be captured by fishers or during other studies. One jackfish was recaptured in the same area of the reservoir where it was tagged four months later.

What will be done next?

The program will be repeated in 2022 to tag and recapture more fish. Recaptures from other studies (e.g., CAMP) and fishers will also be recorded.

ACKNOWLEDGEMENTS

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1.0 INTRODUCTION

The Keeyask Generation Project (the Project) is a 695-megawatt (MW) hydroelectric generating station at Gull Rapids on the lower Nelson River in northern Manitoba. The Project is approximately 725 kilometres (km) northeast of Winnipeg, 35 km upstream of the existing Kettle Generating Station, where Gull Lake flows into Stephens Lake, 60 km east of the community of Split Lake, 180 km east-northeast of Thompson and 30 km west of Gillam (Map 1). Construction of the Project began in July 2014.

The *Keeyask Generation Project: Response to EIS Guidelines*, completed in June 2012, provides a summary of predicted effects and planned mitigation for the Project. Technical supporting information for the aquatic environment, including a description of the environmental setting, effects and mitigation, and a summary of proposed monitoring and follow-up programs, is provided in the *Keeyask Generation Project Environmental Impact Statement: Aquatic Environment Supporting Volume* (AE SV). As part of the licensing process for the Project, an *Aquatic Effects Monitoring Plan* (AEMP) was developed detailing the monitoring activities of various components of the aquatic environment for the construction and operation phases of the Project.

Monitoring of the fish community during the post-impoundment phase of the Project includes a core monitoring program designed to assess changes in the fish community. These studies focused on fish species that were of particular interest during the environmental assessment (referred to as Valued Ecosystem Components, or VECs). VEC species include Lake Sturgeon, Lake Whitefish, Northern Pike, and Walleye. These species were chosen due to their importance to local communities for harvest, because they are sensitive to environmental change, and they use a variety of habitats for spawning and foraging that will be substantially altered by the Project.

The AEMP includes two types of movement studies: fine-scale movements of a relatively small number of juvenile and adult Lake Sturgeon, Walleye and Lake Whitefish in the reservoir and immediately downstream in Stephens Lake are being studied using acoustic telemetry; and larger scale movements (i.e., between waterbodies) are being recorded using Floy tags (this report) applied to a larger sample size of Lake Sturgeon, Walleye, Lake Whitefish and Northern Pike. The intent of applying Floy tags to these four species in the reservoir is to provide information on the frequency of fish movements out of the reservoir, either downstream through the Keeyask GS, or upstream into Split Lake. Marked fish will be recaptured by local fishermen, commercial fishermen and/or during biological studies such as index gillnetting conducted in the Keeyask reservoir, Split, Stephens and Assean lakes, Lake Sturgeon gillnetting conducted in the Upper Split Lake Area, the Keeyask reservoir and in Stephens Lake as well as other studies described as part of this AEMP. Annual gillnetting in Split and Assean lakes is also conducted under CAMP. Recapture data will be used to provide a descriptive comparison of the frequency and extent of movement between the pre-Project environment and operation.

Mark-recapture information for Lake Sturgeon is also being used to generate population estimates and is presented separately in juvenile and adult population monitoring reports. Details on Lake

Sturgeon mark-recaptures can be found in Burnett et al. (2022) and Loepky and Hrenchuk (2022).

The following report presents biological and tagging information for all Lake Whitefish, Northern Pike, and Walleye marked with Floy tags during fish community investigations in the Keeyask Study Area in 2021, the first year following impoundment of the Keeyask GS. It also summarizes tagging and recapture data collected during baseline (*i.e.*, 1999–2013) and construction (*i.e.*, 2014–2020) studies.

Although 2021 represents the first year of tagging data and is therefore too early to make conclusions regarding movements, future monitoring will be conducted to answer the following questions outlined in the AEMP:

- What is the number and proportion of Floy-tagged fish that move downstream past the Keeyask GS into Stephens Lake?
- What is the number and proportion of Floy-tagged fish that move upstream from Gull Lake/Keeyask Reservoir into the Split Lake area?

2.0 STUDY SETTING

The study area encompasses an approximately 110 km long reach of the Nelson River from Clark Lake to the upstream end of the Limestone Reservoir (Map 1). This section of river offers a diversity of physical habitat conditions, including a variety of substrate types, and variable water depths (range 0–30 m) and velocities. Clark Lake is located immediately downstream of Split Lake, and approximately 42 km upstream of the Keeyask GS (formerly Gull Rapids) (Map 1). Current is restricted to the main section of the lake, with off-current bays outside the main channel. The Assean River is the only major tributary to Clark Lake and flows into the north side. Downstream from the outlet of Clark Lake, the Nelson River narrows and water velocity increases for a 3 km stretch, known as Long Rapids. For the next 7 km, the river widens, and water velocity decreases. The area between Clark Lake and the Keeyask GS is considered the Keeyask reservoir.

Birthday Rapids is located approximately 10 km downstream of Clark Lake and 30 km upstream of Gull Rapids/the Keeyask GS and marks the upstream end of major water level changes as a result of impoundment by the Keeyask GS. The drop in elevation from the upstream to downstream side of Birthday Rapids was approximately 2 m prior to impoundment but is now a nearly level, albeit fast-flowing section of river. The 14 km reach of the Nelson River between Birthday Rapids and Gull Lake was characterized as a large and somewhat uniform channel with medium to high water velocities and a few large bays. This area is now within the Keeyask reservoir, though flooding was limited to mainly shoreline areas.

Prior to impoundment, Gull Lake was a widening of the Nelson River, with moderate to low water velocity beginning approximately 20 km upstream of Gull Rapids/the Keeyask GS. Water levels on Gull Lake increased by several metres following impoundment and flooding along the shoreline and small tributaries entering this reach was extensive. Although this area is now a portion of the Keeyask reservoir, it is referred to herein as Gull Lake.

Just below the Keeyask GS, the Nelson River enters Stephens Lake. Stephens Lake was formed in 1971 by construction of the Kettle GS. Construction of the Keeyask GS has altered the flow distribution immediately downstream of the station.

Construction of the Kettle GS flooded Moose Nose Lake (north arm) and several other small lakes that previously drained into the Nelson River, as well as the old channels of the Nelson River that now lie within the southern portion of the lake. Major tributaries of Stephens Lake include the North and South Moswakot rivers that enter the north arm of the lake. Looking Back Creek is a second order stream that drains into the north arm of Stephens Lake. Kettle GS is located approximately 40 km downstream of the Keeyask GS.

2.1 FLOWS, WATER LEVELS, AND KEEYASK OPERATIONS

From October 2020 to mid-June 2021 the calculated Split Lake outflow varied about the median flow of about 3,300 m³/s, ranging between about 3,000 m³/s and 3,900 m³/s. From mid-June to mid-August, the flows steadily decreased from about 3,700 m³/s to about 2,000 m³/s, which is approximately the 5th percentile low flow. Low flow conditions persisted from summer into winter, with flows dropping to a low of about 1,800 m³/s at the end of November 2021. These are the lowest flows that have occurred during Keeyask construction. It is not since 2005 that flows this low have occurred on the Nelson River.

Water levels on Gull Lake have been held steady between 158.8-159.0 m since reservoir impoundment in September 2020. Upstream of Gull Lake at gauges below and above Birthday Rapids the levels were about 0.5 m and 2.0 m higher than on Gull Lake, a smaller difference than would have occurred prior to the project. Upstream levels increased about 3-4 m at these sites in winter due to ice effects as in previous years. Due to low flows in summer 2021 the water surface was relatively flat from Gull Lake to the gauge just upstream of Birthday Rapids, with a difference of only 0.8-0.9 m between the two.

Keeyask is transitioning from a construction project to an operating station (Map 2). In 2021, the work at site has been focused on bringing units into service. By the end of April 2021, prior to the start of aquatic monitoring, Unit 1 and Unit 2 were in service. Throughout the open water period more units were being tested and brought into service one at a time. As units came into service, the distribution of flow between the spillway and powerhouse has gradually shifted, as summarized below. By the end of October 2021 five units were fully in service.

Discharges from the spillway and powerhouse are not measured but have been estimated based on performance design curves. For reference it is noted that the design discharge capacity of the powerhouse is 4,000 m³/s, giving each turbine unit a discharge capacity of approximately 570 m³/s.

Table below outlines Keeyask GS operation, including powerhouse and spillway flows, in 2021.

Dates	Powerhouse Units	Spillway Gate Operation	Powerhouse	Spillway	Keeyask Total
			Discharge (m ³ /s)		
End Apr. - end June 2021	Unit 2 online; Unit 3 testing	Gates 1, 2, 3, 5, 7 in use until mid-June. Gates 1, 3, 5, 7 primarily mid- to end-June	Steady at about 1,100 varying down to 600 on a few intermittent days and up to 1,650 during two weeks of Unit 3 testing.	Generally, 2,200-2,800 except during Unit 3 testing it varied from about 1,400-2,400.	Generally, 3,400-3,900 except during Unit 3 testing it varied from 2,600-3,600.
End June – mid-Sept. 2021	Unit 3 online; Unit 5 testing	Generally, Gates 1, 3, 5, 7 until mid-July. Gates 3, 5, 7 until end of July. Various gates used in Aug. Gates 1 and 7 used in Sept. until closure of all gates on Sept. 11.	About 1,650, but reduced to 1,100 for two weeks with a unit shut down and varying up to 2,100 during two weeks of Unit 5 testing.	From end of June to mid Aug. Nelson R inflow declined from about 3,600 to about 1,800-2,200 and has remained steady around 2,000-2,200 since then – corresponding spillway discharge gradually declined from about 2,400 to 0 by mid-Sept. when Unit 5 came into service, although daily variations of +/- 200-400 or more in a few instances occurred during this time.	Total Keeyask discharge declined from about 3,600 to an average of about 2,000-2,200 corresponding to the decrease in Nelson R inflow, and daily variation of about +/- 200-400 depending on spillway and powerhouse operations.
Mid-Sept. – end Oct. 2021	Unit 5 online; Unit 4 testing; Unit 4 online Oct. 25	Various gates used very sporadically. First reopening on Sept. 28.	Average discharge about 2,000-2,200 with typical daily variation from 1,600-2,200 and a maximum variation between 1,000-2,800 depending on unit operations and Unit 4 testing.	No spillway flow except for a few intermittent days of up to 1,000.	Same as powerhouse.

3.0 METHODS

In 2021, tagging effort was focused over an approximate two-week period in both the spring and the fall to apply tags to Lake Whitefish, Northern Pike, and Walleye in the Keeyask reservoir (i.e., the Nelson River between Birthday Rapids and the Keeyask GS) and Stephens Lake.

Tags were also applied to Lake Sturgeon during the spring adult and fall juvenile Lake Sturgeon population monitoring programs. Tagging and recapture information for Lake Sturgeon can be found in Burnett et. al (2022) and Loepky and Hrenchuk (2022).

3.1 GILLNETTING

Gillnetting was conducted in the Keeyask reservoir and the upper 10 km of Stephens Lake in both spring and fall, 2021 (May 28–June 16 and October 3–13) in conjunction with spawning studies (Table 1). Gill nets were composed of four panels of 3, 3 ¾, 4 ¼, and 5" twisted nylon stretched mesh (76, 95, 108, and 127 mm). Each panel was 25 yards (yd) (22.9 m) long and 2.7 yd (2.5 m) deep. Each gill net set was given a unique identification number, and net locations were recorded using a Garmin Marine GPS navigator (Garmin International Inc., Olathe, KS). Water depth at each end of the net was measured using a PiranhaMax Series 150 Portable Sonar (Humminbird, Eufaula, AL). Gill nets were checked approximately every 1–3 hours to prevent fish mortality. Spring gillnetting sites are outlined in Maps 3 and 4, while fall sites are shown in Maps 5 and 6. Detailed methodology and sites can be found in Hrenchuk and Loepky (2022).

3.2 ELECTROFISHING

Boat-based electrofishing was conducted in the Keeyask reservoir and the upper 10 km of Stephens Lake in fall, 2021. Sampling was conducted with a Smith-Root APEX electrofisher with dual boom Smith-Root UAA-6 Umbrella anodes (0.91 m diameter). During electrofisher operation, the boat serves as a cathode, and lines of electrical current are established between the anode and the boat. The electric field causes muscle contractions in fish that lie within the electric field, forcing them to swim towards the anode. Prolonged exposure temporarily stuns the fish. Field technicians stationed at the front of the boat use large dip nets to collect stunned or partially stunned fish.

At each electrofishing site, start and end points were recorded using a Garmin Marine GPS navigator (Garmin International Inc., Olathe, KS). The fishing effort (number of seconds of operation) and electrofisher settings (volts, pulse width, and pulses per second) were also recorded. Electrofishing sites are shown in Maps 7 and 8.

3.3 BIOLOGICAL SAMPLING

All fish captured were counted by species and location. Walleye, Northern Pike, and Lake Whitefish were measured for fork length (FL; ± 1 mm) and weight (± 5 g using a digital scale, or nearest 25 g for fish greater than 4,000 g). Each VEC species were marked with individually numbered external Floy FD-94 T-bar anchor tags (Floy-tag & Mfg. Inc., Seattle, WA) using a Dennison® Mark II tagging gun.

4.0 RESULTS

Large numbers of Lake Whitefish, Northern Pike, and Walleye were tagged and recaptured during EIS studies conducted between 1999 and 2010. Based on the lifespan of these fish species, it is not expected that many of these tags will be recaptured in the current study. However, the number of tags applied are reported herein as these mark-recapture data will be used to compare post-Project to pre-Project recapture rates.

4.1 LAKE WHITEFISH

A total of 1,835 tags were applied to Lake Whitefish prior to reservoir impoundment (Table 1). A total of 1,713 Lake Whitefish were tagged during EIS studies between 1999 and 2008, before construction began.

An additional 122 tags were applied during the construction period in conjunction with acoustic monitoring studies. Previous tag applications and recaptures are presented in Table 1.

A total of 42 tags were applied to Lake Whitefish in the first year post-impoundment (2021), including 10 in the Keeyask reservoir and 32 in Stephens Lake (Table 1). No Lake Whitefish were recaptured. Biological information for these fish is outlined in Appendix A1-1.

4.2 NORTHERN PIKE

In total, 7,939 Northern Pike were tagged during EIS studies between 1999 and 2010, before construction began. No tags were applied during the construction period. Previous tag applications and recaptures are presented in Table 2.

A total of 312 tags were applied during the first year post-impoundment (*i.e.*, 2021) including 175 in the Keeyask reservoir and 137 in Stephens Lake (Table 2). Biological information for these fish is outlined in Appendix A1-2. One Northern Pike tagged in the Keeyask reservoir on June 1, 2021 was recaptured on October 5, within 500 m of its tagging location.

4.3 WALLEYE

In total, 5,910 Walleye were tagged since studies began in 1999 (Table 3). The majority of Walleye were tagged during EIS studies between 1999 and 2010, and a total of 5,545 were tagged before construction of the Keeyask GS began (*i.e.*, 1999–2013). An additional 225 tags were applied during construction (*i.e.*, 2014–2020) in conjunction with acoustic monitoring studies. Previous tag applications and recaptures are presented in Table 3.

A total of 140 Walleye were tagged in 2021, 69 in the Keeyask reservoir and 71 in Stephens Lake (Table 3). No Walleye were recaptured. Biological information for these fish is outlined in Appendix A1-3.

5.0 DISCUSSION

The primary objective of the Floy tagging program is to monitor movements of fish throughout the Keeyask study area, specifically, to provide information on the frequency of fish movements out of the reservoir, either downstream through the Keeyask GS, or upstream into Split Lake. Movements of adult Lake Sturgeon, juvenile Lake Sturgeon, Lake Whitefish, and Walleye are tracked on a fine-scale using acoustic telemetry (Funk and Hrenchuk 2022; Hrenchuk and Small 2022; Small and Hrenchuk 2022a, 2022b). Mark-recapture techniques enables tracking of movements of a larger number of fish on a coarse-scale. Floy-tags have been applied to VEC fish species during the pre-construction (*i.e.*, 1999–2013), construction (*i.e.*, 2014–2020), and post-impoundment (*i.e.*, 2021) phases of the Project.

Floy-tags were applied to Lake Whitefish, Northern Pike, and Walleye over a two-week period in both the spring and fall, 2021. Because this is the first mark-recapture period, it is too soon to make inferences about post-impoundment movement patterns. This study will be repeated in 2022 to increase the number of fish tagged and recaptured in the Keeyask reservoir and Stephens Lake.

6.0 SUMMARY AND CONCLUSIONS

- Lake Whitefish, Northern Pike, and Walleye were tagged using Floy-tags in both the Keeyask reservoir and Stephens Lake in 2021 (the first year following impoundment of the Keeyask reservoir).
- A total of 42 tags were applied to Lake Whitefish in 2021, including 10 in the Keeyask reservoir, and 32 in Stephens Lake.
- An additional 312 tags were applied to Northern Pike in 2021, including 175 in the Keeyask reservoir and 137 in Stephens Lake. One Northern Pike tagged in spring was recaptured in fall in the same area where it was tagged.
- A total of 140 Walleye were tagged in 2021, including 69 in the Keeyask reservoir and 71 in Stephens Lake.
- As 2021 represents the first year of tagging data, it is too early to make conclusions regarding fish movements out of the reservoir.
- This study will be repeated in 2022 to increase the number of fish tagged and recaptured in the Keeyask reservoir and Stephens Lake. Comparisons will be made to recapture data collected during EIS studies between 1999 and 2010.

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TABLES

Table 1: Summary of the total number of Floy-tags applied to Lake Whitefish and recaptured in the Upper Split Lake Area (USLA), Keeyask reservoir, and Stephens Lake during fisheries investigations from 1999 to 2021.

Year	USLA				Keeyask reservoir ¹				Stephens Lake			
	# Tags Applied	Recap Original Tagging Location			# Tags Applied	Recap Original Tagging Location			# Tags Applied	Recap Original Tagging Location		
		USLA	Keeyask reservoir	Stephens Lake		USLA	Keeyask reservoir	Stephens Lake		USLA	Keeyask reservoir	Stephens Lake
1999-2008 ²	550	111	-	-	167	-	1	-	996	1	-	29
2009	-	-	-	-	-	-	1	-	-	-	-	-
2010	-	-	-	-	-	-	-	-	-	-	-	-
2011	-	-	-	-	-	-	-	-	-	-	-	-
2012	-	-	-	-	-	-	-	-	-	-	-	-
2013	-	-	-	-	-	-	-	-	-	-	-	-
2014	-	-	-	-	20	-	-	-	40	-	-	-
2015	-	-	-	-	-	-	1	-	-	-	-	-
2016	-	-	-	-	-	-	-	-	-	-	-	-
2017	-	-	-	-	22	-	-	-	40	-	-	-
2018	-	-	-	-	-	-	-	-	-	-	-	-
2019	-	-	-	-	-	-	-	-	-	-	-	-
2020	-	-	-	-	-	-	-	-	-	-	-	-
2021	-	-	-	-	10	-	-	-	32	-	-	-
TOTAL	550	111	0	0	219	0	3	0	1,108	1	0	31

1. The area between Clark Lake and Gull Rapids/the Keeyask GS.
2. As reported in the Keeyask EIS.

Table 2: Summary of the total number of Floy-tags applied to Northern Pike and recaptured in the Upper Split Lake Area (USLA), Keeyask reservoir, and Stephens Lake during fisheries investigations from 1999 to 2021.

Year	USLA				Keeyask reservoir ¹				Stephens Lake			
	# Tags Applied	Recap Original Tagging Location			# Tags Applied	Recap Original Tagging Location			# Tags Applied	Recap Original Tagging Location		
		USLA	Keeyask Reservoir	Stephens Lake		USLA	Keeyask Reservoir	Stephens Lake		USLA	Keeyask Reservoir	Stephens Lake
1999-2008²	3,770	264	9	1	2,069	1	40	-	2,037	1	6	96
2009	4	-	-	-	-	-	-	-	-	-	-	1
2010	9	-	-	-	20	-	-	-	30	-	-	-
2011	-	-	-	-	-	-	-	-	-	-	-	-
2012	-	-	-	-	-	-	-	-	-	-	-	-
2013	-	-	-	-	-	-	-	-	-	-	-	-
2014	-	-	-	-	-	-	-	-	-	-	-	-
2015	-	-	-	-	-	-	-	-	-	-	-	-
2016	-	-	-	-	-	-	-	-	-	-	-	-
2017	-	-	-	-	-	-	-	-	-	-	-	-
2018	-	-	-	-	-	-	-	-	-	-	-	-
2019	-	-	-	-	-	-	-	-	-	-	-	-
2020	-	-	-	-	-	-	-	-	-	-	-	-
2021	-	-	-	-	175	-	1	-	137	-	-	-
TOTAL	3,783	264	9	1	2,264	1	41	0	2,204	1	6	98

1. The area between Clark Lake and Gull Rapids/the Keeyask GS.

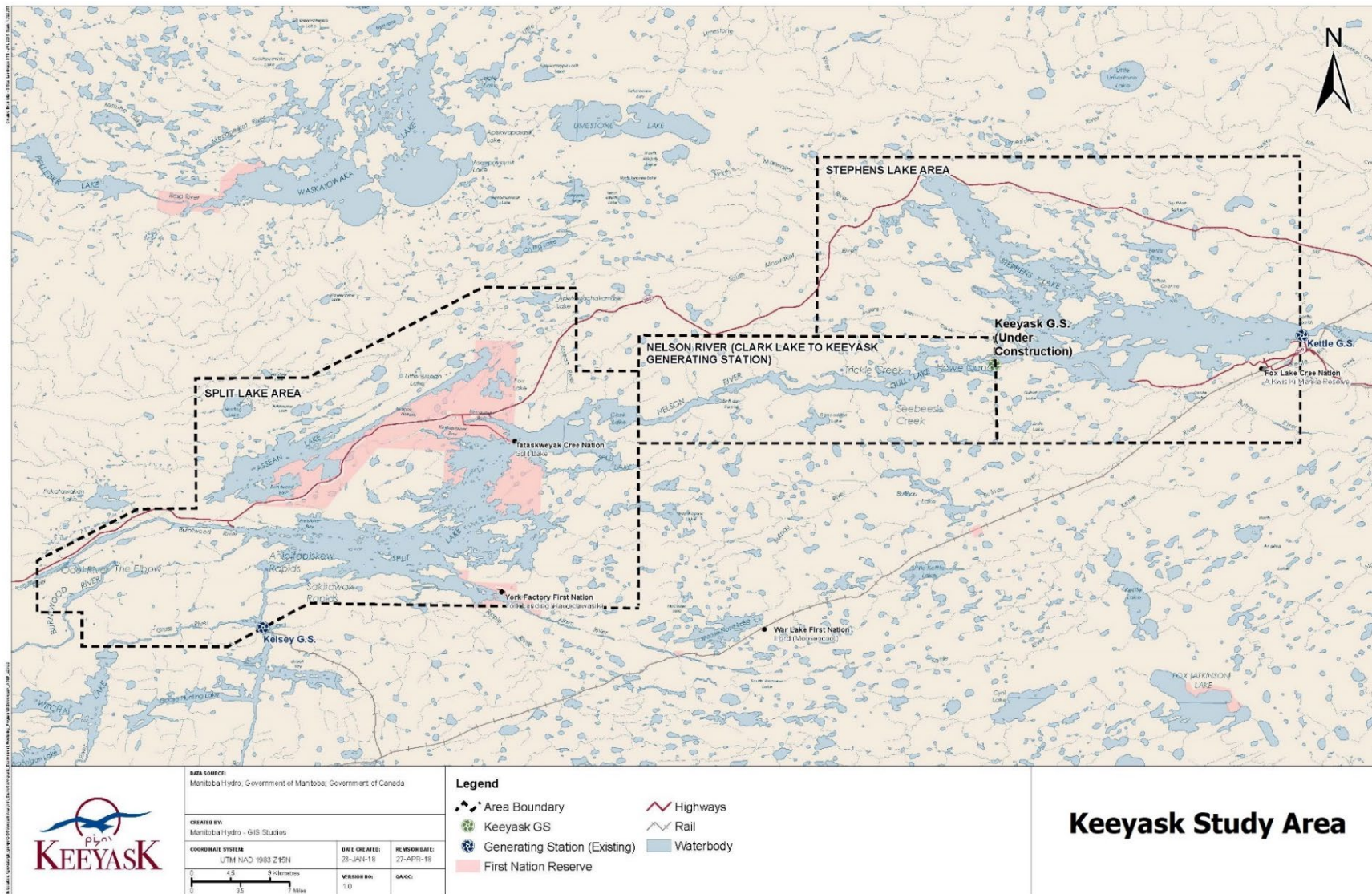
2. As reported in the Keeyask EIS.

Table 3: Summary of the total number of Floy-tags applied to Walleye and recaptured in the Upper Split Lake Area (USLA), Keeyask reservoir, and Stephens Lake during fisheries investigations from 1999 to 2021.

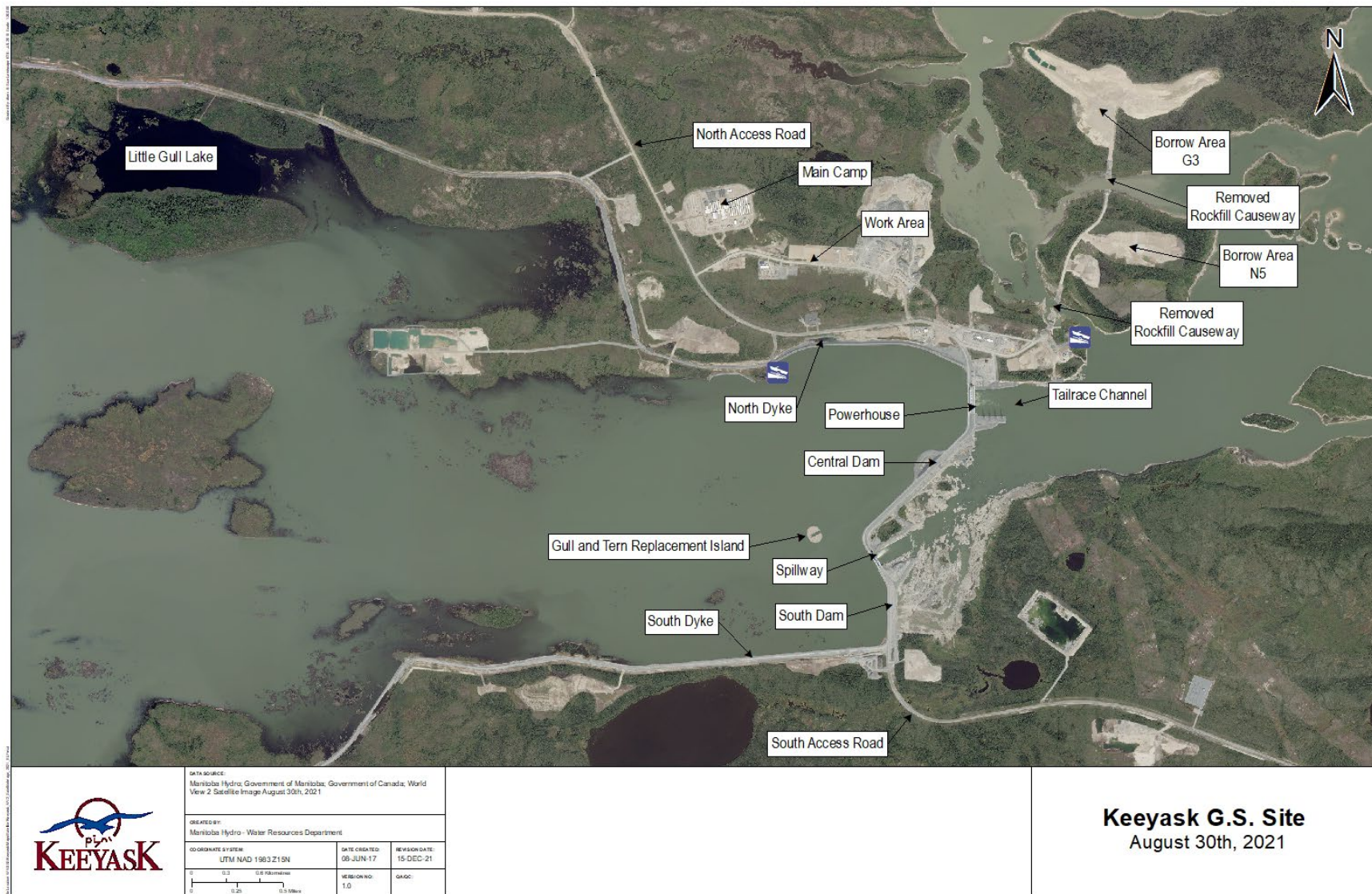
Year	USLA				Keeyask Reservoir ¹				Stephens Lake			
	# Tags Applied	Recap Original Tagging Location			# Tags Applied	Recap Original Tagging Location			# Tags Applied	Recap Original Tagging Location		
		USLA	Keeyask Reservoir	Stephens Lake		USLA	Keeyask Reservoir	Stephens Lake		USLA	Keeyask Reservoir	Stephens Lake
1999-2008²	3,838	900	5	-	496	1	14	1	1,129	1	2	101
2009	-	-	-	-	-	-	-	-	-	-	-	-
2010	-	-	-	-	-	-	-	-	-	-	-	-
2011	-	-	-	-	-	-	-	-	-	-	-	-
2012	-	-	-	-	-	-	-	-	-	-	-	-
2013	-	-	-	-	40	-	-	-	42	-	-	-
2014	-	-	-	-	3	-	2	-	-	-	-	-
2015	-	-	-	-	48	-	1	-	-	-	-	-
2016	-	-	-	-	-	-	-	-	40	-	-	-
2017	-	-	-	-	-	-	-	-	-	-	-	-
2018	-	1	1	-	17	-	-	-	7	1	-	-
2019	-	-	-	-	54	-	-	-	56	-	-	-
2020	-	-	-	-	-	-	-	-	-	-	-	-
2021	-	-	-	-	69	-	-	-	71	-	-	-
TOTAL	3,838	901	6	0	727	1	17	1	1,345	2	2	101

1. The area between Clark Lake and Gull Rapids/the Keeyask GS.
2. As reported in the Keeyask EIS.

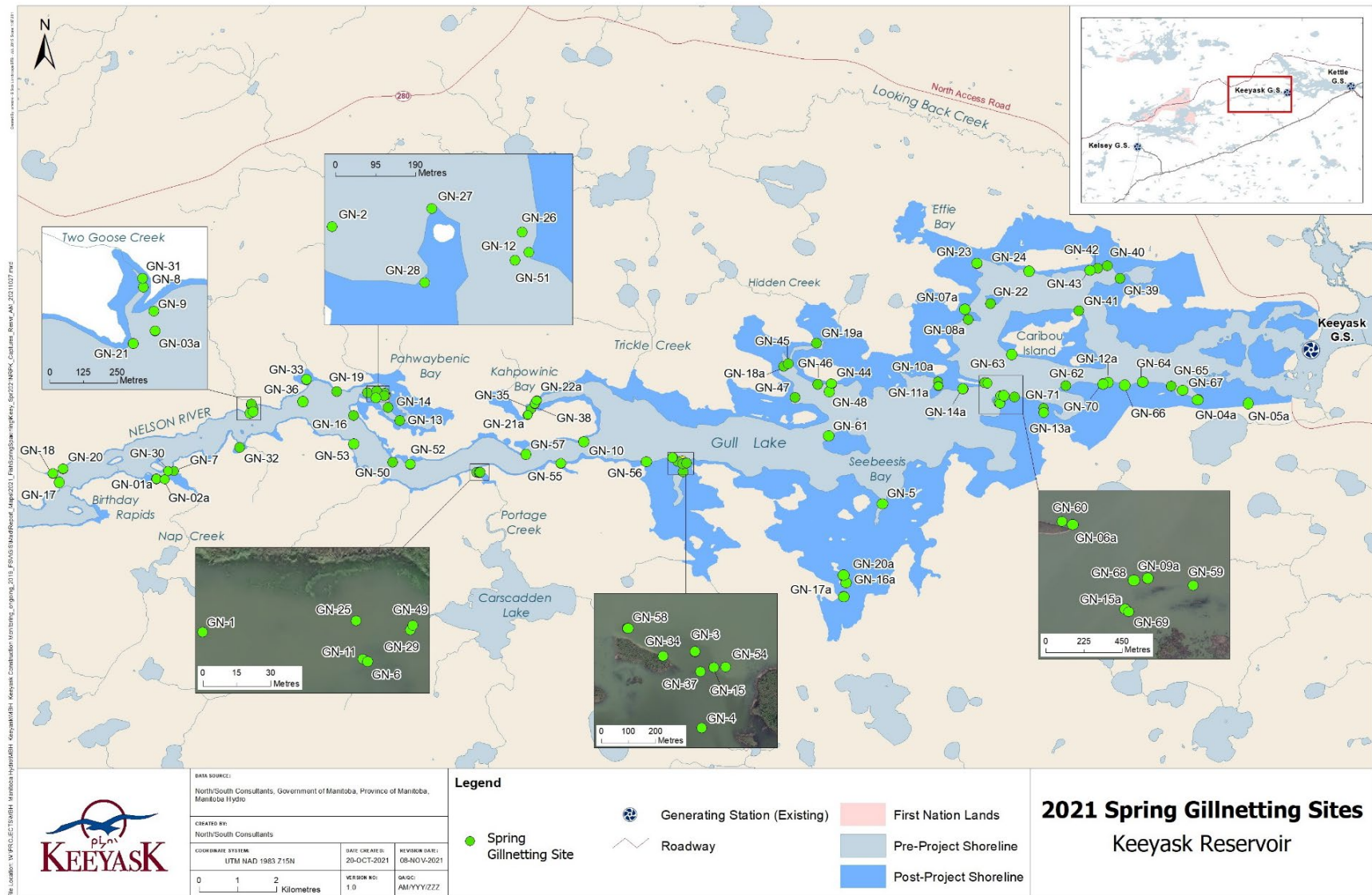
MAPS



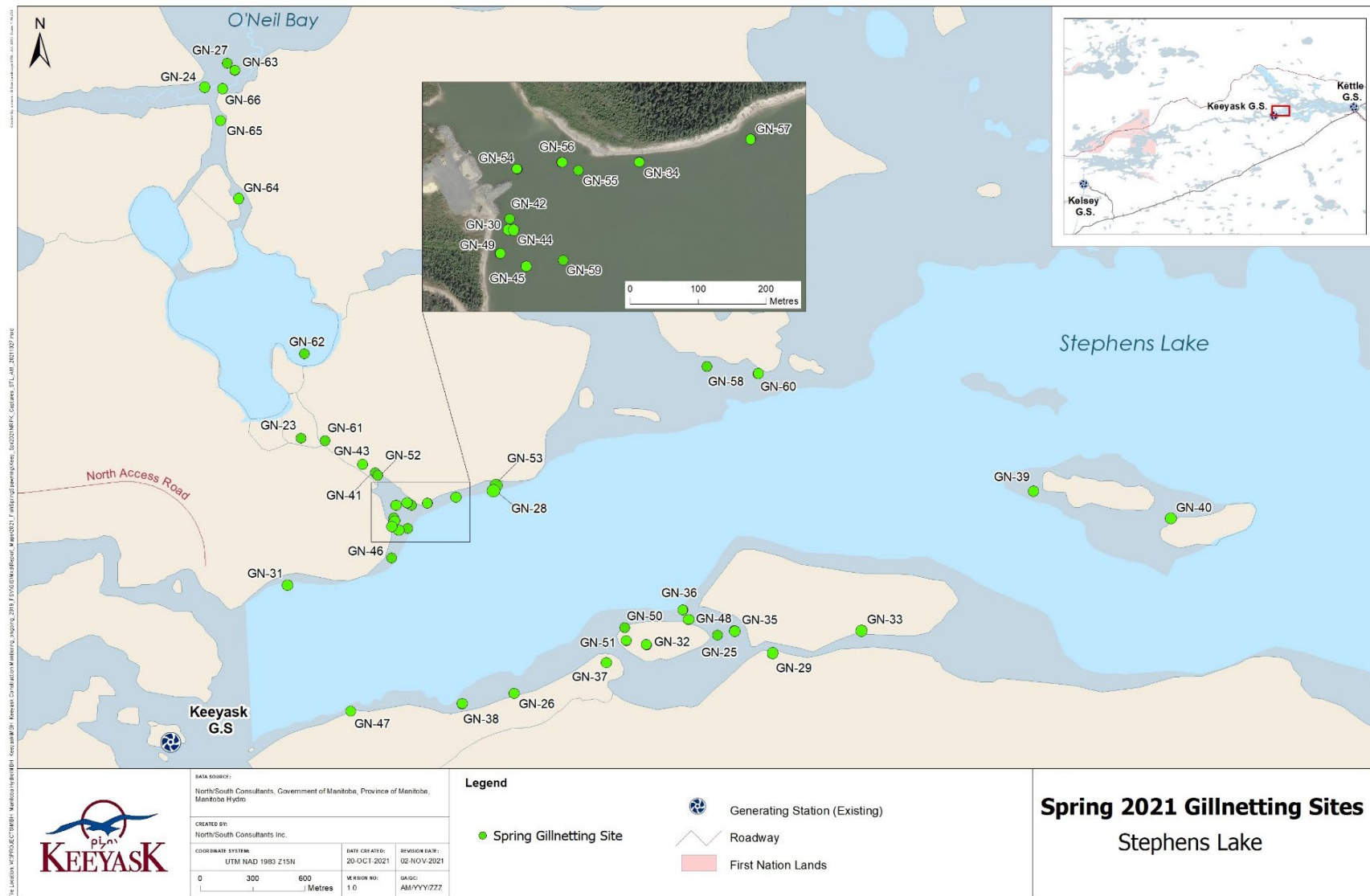
Map 1: Map of the Keeyask Study Area showing the Upper Split Lake Area, the Nelson River from Clark Lake to the Keeyask GS (referred to herein as the Keeyask reservoir), and Stephens Lake.



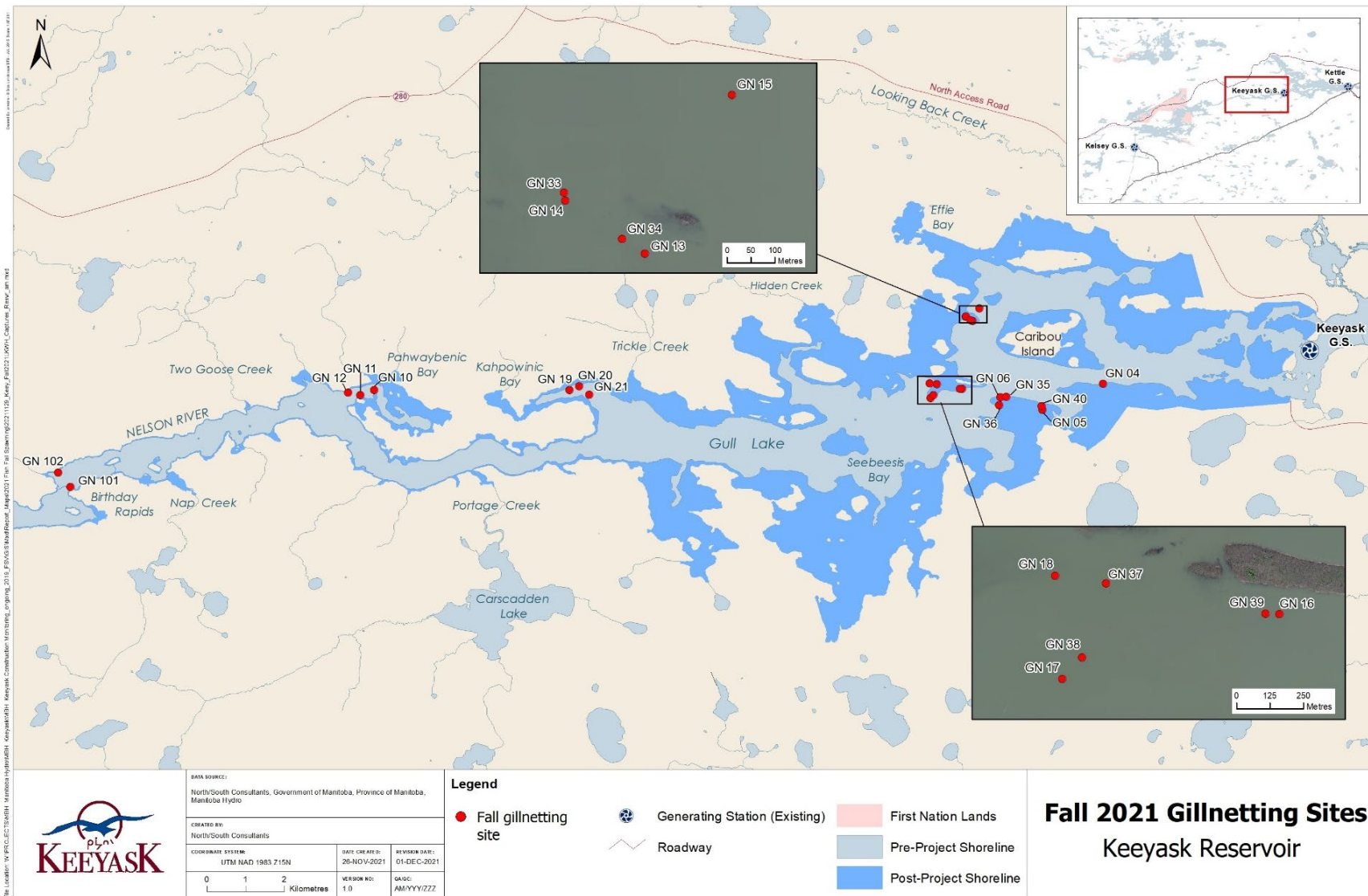
Map 2: Map illustrating instream structures at the Keeyask Generating Station site after reservoir flooding, August 2021.



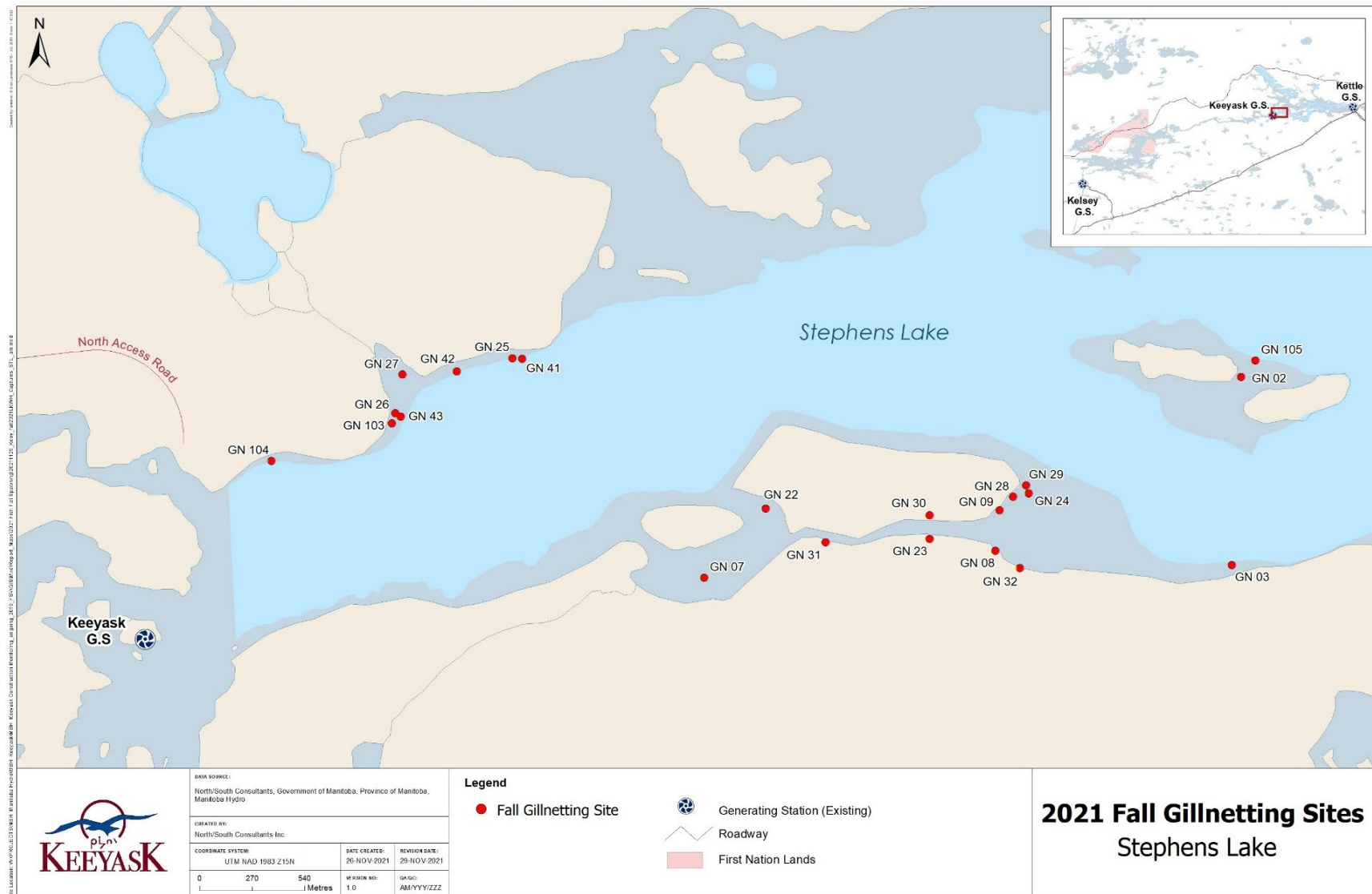
Map 3: Map of the Keeyask reservoir showing gill net sets to Floy-tag Lake Whitefish, Northern Pike, and Lake Whitefish, spring 2021.



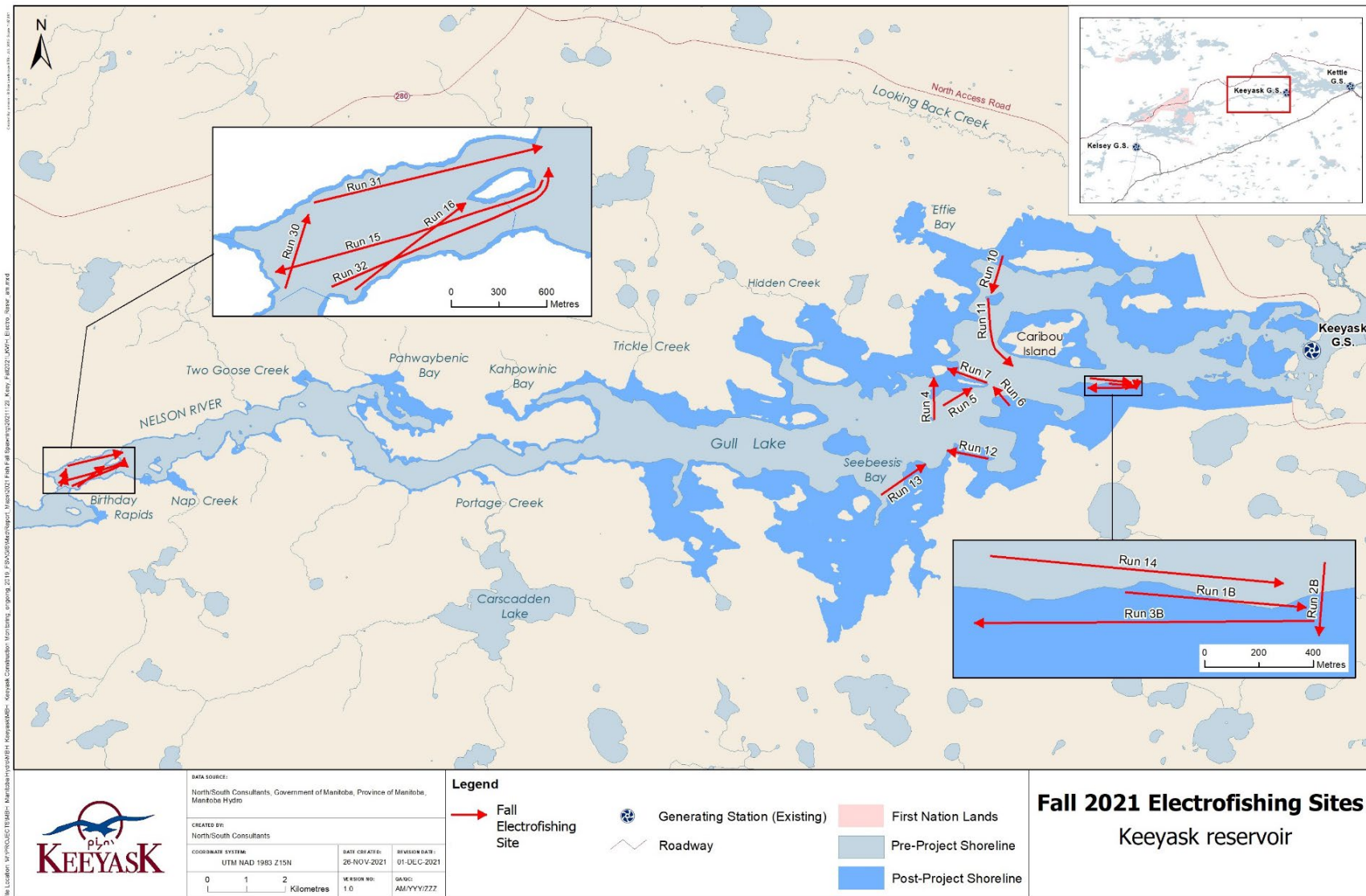
Map 4: Map of Stephens Lake showing gill net sets to Floy-tag Lake Whitefish, Northern Pike, and Lake Whitefish, spring 2021.



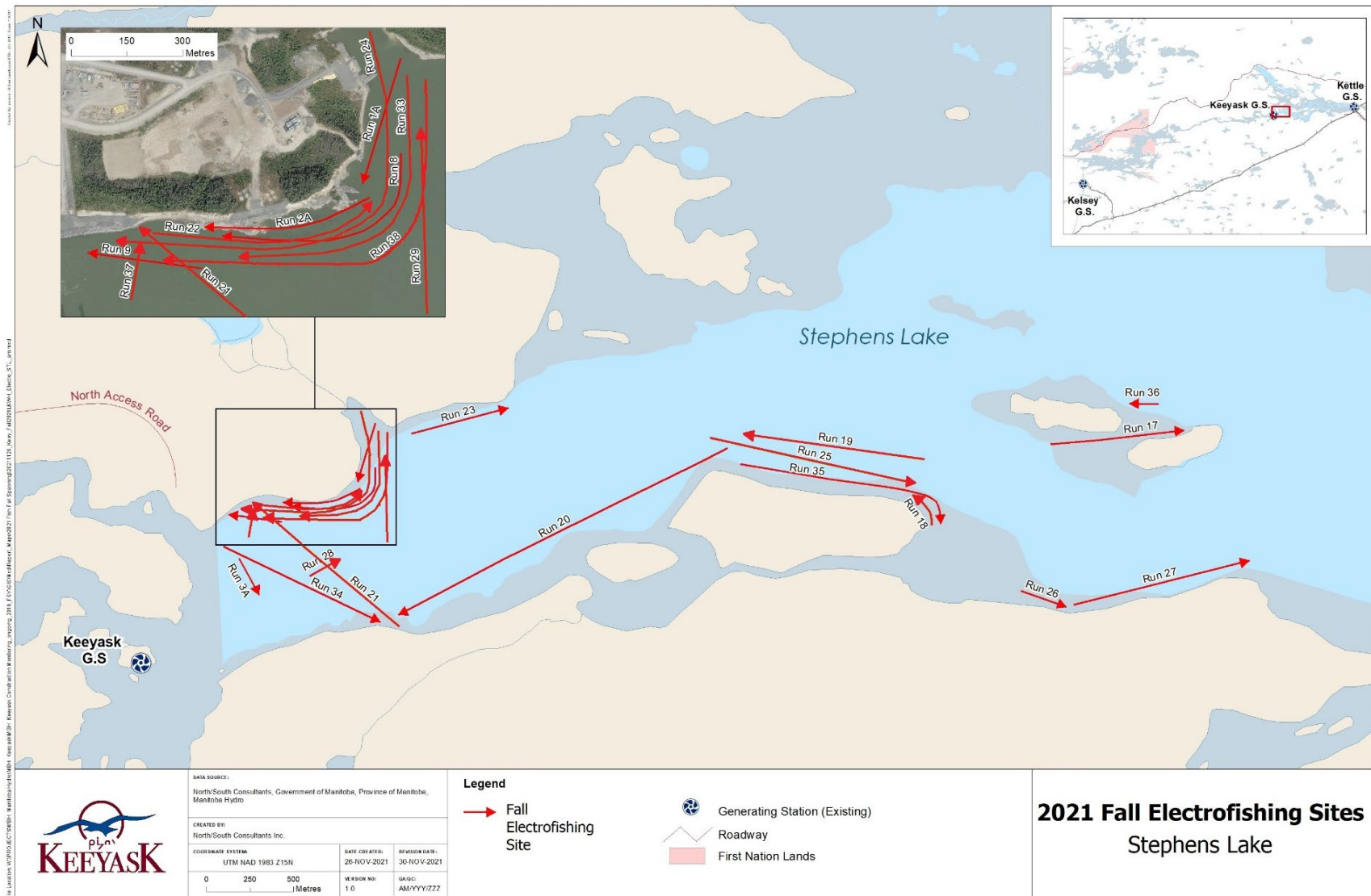
Map 5: Map of the Keeyask reservoir showing gill net sets to Floy-tag Lake Whitefish, Northern Pike, and Lake Whitefish, fall 2021.



Map 6: Map of Stephens Lake showing gillnet sets to Floy-tag Lake Whitefish, Northern Pike, and Lake Whitefish, fall 2021.



Map 7: Map of the Keeyask reservoir showing electrofishing runs to Floy-tag Lake Whitefish, Northern Pike, and Lake Whitefish, fall 2021.



Map 8: Map of Stephens Lake showing electrofishing runs to Floy-tag Lake Whitefish, Northern Pike, and Lake Whitefish, fall 2021.

APPENDICES

APPENDIX 1: TAGGING AND BIOLOGICAL INFORMATION FOR ALL FISH CAPTURED IN THE KEEYASK STUDY AREA, 2021.

Table A1-1:	Tagging and biological data for Lake Whitefish (LKWH) captured in the Keeyask reservoir and Stephens Lake in 2021.....	28
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Table A1-1: Tagging and biological data for Lake Whitefish (LKWH) captured in the Keeyask reservoir and Stephens Lake in 2021.

Location	Prefix	Floy-Tag Number	PIT Tag Number	Species	Date Tagged	Fork Length (mm)	Total Length (mm)	Weight (g)	Sex	Maturity
Keeyask reservoir	NSC	121525	-	LKWH	07/06/21	472	-	2180	-	-
Keeyask reservoir	NSC	121528	-	LKWH	13/06/21	447	-	1620	-	-
Keeyask reservoir	NSC	121529	-	LKWH	13/06/21	383	-	1000	-	-
Keeyask reservoir	NSC	121530	-	LKWH	13/06/21	355	-	1080	-	-
Keeyask reservoir	NSC	121535	-	LKWH	14/06/21	408	-	1350	-	-
Keeyask reservoir	NSC	121607	-	LKWH	05/06/21	510	-	2770	-	-
Keeyask reservoir	NSC	121618	-	LKWH	05/06/21	545	-	3200	-	-
Keeyask reservoir	NSC	122074	-	LKWH	01/06/21	365	-	950	-	-
Keeyask reservoir	NSC	122268	-	LKWH	01/06/21	461	-	2410	-	-
Keeyask reservoir	NSC	122273	-	LKWH	31/05/21	542	-	2580	-	-
Stephens Lake	NSC	116980	-	LKWH	10/04/21	415	-	1400	-	-
Stephens Lake	NSC	117269	-	LKWH	10/09/21	450	-	1400	-	-
Stephens Lake	NSC	117270	-	LKWH	10/09/21	461	-	1725	-	-
Stephens Lake	NSC	117271	-	LKWH	10/09/21	480	-	1650	-	-
Stephens Lake	NSC	117319	-	LKWH	10/10/21	455	-	1700	-	-
Stephens Lake	NSC	117976	-	LKWH	10/12/21	438	-	1725	-	-
Stephens Lake	NSC	117979	-	LKWH	10/13/21	454	-	750	-	-
Stephens Lake	NSC	117980	-	LKWH	10/13/21	486	-	1500	M	7
Stephens Lake	NSC	117981	-	LKWH	10/13/21	511	-	2250	M	7
Stephens Lake	NSC	118137	-	LKWH	10/12/21	534	-	2550	F	3
Stephens Lake	NSC	118141	-	LKWH	10/12/21	503	-	2375	-	-
Stephens Lake	NSC	118149	-	LKWH	10/12/21	521	-	2300	-	-
Stephens Lake	NSC	122001	-	LKWH	10/10/21	494	-	2550	-	-
Stephens Lake	NSC	122009	-	LKWH	10/10/21	437	-	1425	M	7
Stephens Lake	NSC	122010	-	LKWH	10/10/21	504	-	2300	F	3

Table A1-1: Tagging and biological data for Lake Whitefish (LKWH) captured in the Keeyask reservoir and Stephens Lake in 2021 (continued).

Location	Prefix	Floy-Tag Number	PIT Tag Number	Species	Date Tagged	Fork Length (mm)	Total Length (mm)	Weight (g)	Sex	Maturity
Stephens Lake	NSC	122011	-	LKWH	10/10/21	479	-	2375	-	-
Stephens Lake	NSC	122012	-	LKWH	10/10/21	508	-	2350	-	-
Stephens Lake	NSC	122013	-	LKWH	10/10/21	490	-	2200	-	-
Stephens Lake	NSC	122014	-	LKWH	10/10/21	514	-	2250	-	-
Stephens Lake	NSC	122015	-	LKWH	10/10/21	544	-	2400	-	-
Stephens Lake	NSC	122017	-	LKWH	10/10/21	487	-	1600	M	8
Stephens Lake	NSC	122025	-	LKWH	10/10/21	469	-	2000	-	-
Stephens Lake	NSC	122177	-	LKWH	10/09/21	520	-	2800	-	-
Stephens Lake	NSC	122178	-	LKWH	10/09/21	420	-	925	-	-
Stephens Lake	NSC	122179	-	LKWH	10/09/21	521	-	2450	M	8
Stephens Lake	NSC	122181	-	LKWH	10/09/21	443	-	1550	-	-
Stephens Lake	NSC	122186	-	LKWH	10/10/21	465	-	1650	-	-
Stephens Lake	NSC	122187	-	LKWH	10/10/21	494	-	2200	-	-
Stephens Lake	NSC	122197	-	LKWH	10/09/21	449	-	1500	-	-
Stephens Lake	NSC	122198	-	LKWH	10/09/21	486	-	2150	-	-
Stephens Lake	NSC	122199	-	LKWH	10/10/21	451	-	1750	-	-
Stephens Lake	NSC	122200	-	LKWH	10/09/21	430	-	1550	-	-

Table A1-2: Tagging and biological data for Northern Pike (NRPK) captured in the Keeyask reservoir and Stephens Lake in 2021.

Location	Prefix	Floy-Tag Number	PIT Tag Number	Species	Date Tagged	Fork Length (mm)	Total Length (mm)	Weight (g)	Sex	Maturity
Keeyask reservoir	NSC	116953	-	NRPK	08/10/21	516	-	1100	-	-
Keeyask reservoir	NSC	116954	-	NRPK	08/10/21	533	-	1400	-	-
Keeyask reservoir	NSC	116955	-	NRPK	08/10/21	461	-	525	-	-
Keeyask reservoir	NSC	116956	-	NRPK	08/10/21	352	-	300	-	-
Keeyask reservoir	NSC	116957	-	NRPK	08/10/21	979	-	5500	-	-
Keeyask reservoir	NSC	116958	-	NRPK	08/10/21	911	-	5500	-	-
Keeyask reservoir	NSC	116959	-	NRPK	08/10/21	749	-	3900	-	-
Keeyask reservoir	NSC	116960	-	NRPK	07/10/21	543	-	1225	-	-
Keeyask reservoir	NSC	116961	-	NRPK	07/10/21	910	-	6800	-	-
Keeyask reservoir	NSC	116962	-	NRPK	07/10/21	401	-	525	-	-
Keeyask reservoir	NSC	116966	-	NRPK	03/10/21	943	-	7000	-	-
Keeyask reservoir	NSC	116976	-	NRPK	29/09/21	265	-	200	-	-
Keeyask reservoir	NSC	116977	-	NRPK	29/09/21	270	-	200	-	-
Keeyask reservoir	NSC	116978	-	NRPK	03/10/21	490	-	800	-	-
Keeyask reservoir	NSC	116987	-	NRPK	05/10/21	435	-	650	-	-
Keeyask reservoir	NSC	116988	-	NRPK	05/10/21	748	-	3350	-	-
Keeyask reservoir	NSC	116992	-	NRPK	05/10/21	842	-	6100	-	-
Keeyask reservoir	NSC	116996	-	NRPK	05/10/21	486	-	800	-	-
Keeyask reservoir	NSC	116997	-	NRPK	05/10/21	652	-	2450	-	-
Keeyask reservoir	NSC	116998	-	NRPK	05/10/21	466	-	600	-	-
Keeyask reservoir	NSC	117000	-	NRPK	05/10/21	704	-	3525	-	-
Keeyask reservoir	NSC	117253	-	NRPK	05/10/21	907	-	6400	-	-
Keeyask reservoir	NSC	117254	-	NRPK	05/10/21	748	-	3500	-	-
Keeyask reservoir	NSC	117258	-	NRPK	07/10/21	580	-	1600	-	-
Keeyask reservoir	NSC	117259	-	NRPK	07/10/21	893	-	5900	-	-
Keeyask reservoir	NSC	117260	-	NRPK	07/10/21	749	-	3850	-	-

Table A1-2: Tagging and biological data for Northern Pike (NRPK) captured in the Keeyask reservoir and Stephens Lake in 2021 (continued).

Location	Prefix	Floy-Tag Number	PIT Tag Number	Species	Date Tagged	Fork Length (mm)	Total Length (mm)	Weight (g)	Sex	Maturity
Keeyask reservoir	NSC	117264	-	NRPK	08/10/21	951	-	7100	-	-
Keeyask reservoir	NSC	117265	-	NRPK	08/10/21	743	-	2750	-	-
Keeyask reservoir	NSC	117324	-	NRPK	11/10/21	650	-	2200	-	-
Keeyask reservoir	NSC	117325	-	NRPK	11/10/21	768	-	3400	-	-
Keeyask reservoir	NSC	117326	-	NRPK	11/10/21	735	-	2900	-	-
Keeyask reservoir	NSC	117327	-	NRPK	11/10/21	781	-	4000	-	-
Keeyask reservoir	NSC	117607	-	NRPK	28/05/21	726	-	3000	F	2
Keeyask reservoir	NSC	117608	-	NRPK	29/05/21	870	-	6000	F	2
Keeyask reservoir	NSC	117609	-	NRPK	29/05/21	850	-	5500	F	2
Keeyask reservoir	NSC	117610	-	NRPK	29/05/21	735	-	3500	-	-
Keeyask reservoir	NSC	118126	-	NRPK	11/10/21	607	-	1875	-	-
Keeyask reservoir	NSC	118127	-	NRPK	11/10/21	345	-	400	-	-
Keeyask reservoir	NSC	118128	-	NRPK	11/10/21	380	-	800	-	-
Keeyask reservoir	NSC	118129	-	NRPK	11/10/21	597	-	1800	-	-
Keeyask reservoir	NSC	118130	-	NRPK	11/10/21	935	-	7150	-	-
Keeyask reservoir	NSC	118131	-	NRPK	11/10/21	440	-	300	-	-
Keeyask reservoir	NSC	121501	-	NRPK	10/06/21	622	-	1940	-	-
Keeyask reservoir	NSC	121502	-	NRPK	10/06/21	768	-	2700	-	-
Keeyask reservoir	NSC	121503	-	NRPK	10/06/21	958	-	6700	-	-
Keeyask reservoir	NSC	121512	-	NRPK	13/06/21	740	-	3550	-	-
Keeyask reservoir	NSC	121515	-	NRPK	08/06/21	888	-	5340	-	-
Keeyask reservoir	NSC	121516	-	NRPK	08/06/21	728	-	3150	-	-
Keeyask reservoir	NSC	121517	-	NRPK	08/06/21	568	-	1450	-	-
Keeyask reservoir	NSC	121518	-	NRPK	08/06/21	700	-	2700	-	-
Keeyask reservoir	NSC	121519	-	NRPK	08/06/21	697	-	2000	-	-

Table A1-2: Tagging and biological data for Northern Pike (NRPK) captured in the Keeyask reservoir and Stephens Lake in 2021 (continued).

Location	Prefix	Floy-Tag Number	PIT Tag Number	Species	Date Tagged	Fork Length (mm)	Total Length (mm)	Weight (g)	Sex	Maturity
Keeyask reservoir	NSC	121521	-	NRPK	07/06/21	987	-	6800	-	-
Keeyask reservoir	NSC	121522	-	NRPK	07/06/21	545	-	1090	-	-
Keeyask reservoir	NSC	121523	-	NRPK	07/06/21	440	-	550	-	-
Keeyask reservoir	NSC	121526	-	NRPK	13/06/21	841	-	4150	-	-
Keeyask reservoir	NSC	121531	-	NRPK	13/06/21	455	-	700	-	-
Keeyask reservoir	NSC	121532	-	NRPK	13/06/21	517	-	1040	-	-
Keeyask reservoir	NSC	121533	-	NRPK	14/06/21	613	-	1580	-	-
Keeyask reservoir	NSC	121537	-	NRPK	14/06/21	937	-	5890	-	-
Keeyask reservoir	NSC	121544	-	NRPK	16/06/21	594	-	1580	-	-
Keeyask reservoir	NSC	121546	-	NRPK	15/06/21	784	-	3500	-	-
Keeyask reservoir	NSC	121548	-	NRPK	15/06/21	566	-	1425	-	-
Keeyask reservoir	NSC	121549	-	NRPK	15/06/21	505	-	720	-	-
Keeyask reservoir	NSC	121604	-	NRPK	03/06/21	587	-	1420	-	-
Keeyask reservoir	NSC	121605	-	NRPK	03/06/21	450	-	600	-	-
Keeyask reservoir	NSC	121606	-	NRPK	04/06/21	508	-	960	-	-
Keeyask reservoir	NSC	121608	-	NRPK	05/06/21	625	-	2050	-	-
Keeyask reservoir	NSC	121609	-	NRPK	05/06/21	671	-	2840	-	-
Keeyask reservoir	NSC	121610	-	NRPK	05/06/21	717	-	3840	-	-
Keeyask reservoir	NSC	121611	-	NRPK	05/06/21	797	-	4500	-	-
Keeyask reservoir	NSC	121615	-	NRPK	05/06/21	1140	-	6600	-	-
Keeyask reservoir	NSC	121616	-	NRPK	05/06/21	878	-	4720	-	-
Keeyask reservoir	NSC	121617	-	NRPK	05/06/21	417	-	500	-	-
Keeyask reservoir	NSC	121620	-	NRPK	05/06/21	448	-	630	-	-
Keeyask reservoir	NSC	121621	-	NRPK	05/06/21	537	-	1160	-	-
Keeyask reservoir	NSC	121630	-	NRPK	06/06/21	647	-	2100	-	-

Table A1-2: Tagging and biological data for Northern Pike (NRPK) captured in the Keeyask reservoir and Stephens Lake in 2021 (continued).

Location	Prefix	Floy-Tag Number	PIT Tag Number	Species	Date Tagged	Fork Length (mm)	Total Length (mm)	Weight (g)	Sex	Maturity
Keeyask reservoir	NSC	121631	-	NRPK	06/06/21	436	-	600	-	-
Keeyask reservoir	NSC	121632	-	NRPK	06/06/21	660	-	2300	-	-
Keeyask reservoir	NSC	121633	-	NRPK	06/06/21	605	-	1550	-	-
Keeyask reservoir	NSC	121634	-	NRPK	06/06/21	413	-	500	-	-
Keeyask reservoir	NSC	121635	-	NRPK	06/06/21	849	-	5700	-	-
Keeyask reservoir	NSC	121637	-	NRPK	06/06/21	485	-	650	-	-
Keeyask reservoir	NSC	121639	-	NRPK	06/06/21	600	-	1400	-	-
Keeyask reservoir	NSC	121640	-	NRPK	06/06/21	678	-	2400	-	-
Keeyask reservoir	NSC	121641	-	NRPK	06/06/21	631	-	1750	-	-
Keeyask reservoir	NSC	121642	-	NRPK	06/06/21	682	-	2100	-	-
Keeyask reservoir	NSC	121643	-	NRPK	06/06/21	525	-	1000	-	-
Keeyask reservoir	NSC	121644	-	NRPK	06/06/21	574	-	1500	-	-
Keeyask reservoir	NSC	121645	-	NRPK	06/06/21	520	-	950	-	-
Keeyask reservoir	NSC	121646	-	NRPK	06/06/21	838	-	4000	-	-
Keeyask reservoir	NSC	121647	-	NRPK	07/06/21	420	-	550	-	-
Keeyask reservoir	NSC	121648	-	NRPK	07/06/21	760	-	3440	-	-
Keeyask reservoir	NSC	121649	-	NRPK	07/06/21	597	-	1500	-	-
Keeyask reservoir	NSC	121650	-	NRPK	07/06/21	537	-	1090	-	-
Keeyask reservoir	NSC	122006	-	NRPK	11/10/21	280	-	150	-	-
Keeyask reservoir	NSC	122007	-	NRPK	11/10/21	924	-	6750	-	-
Keeyask reservoir	NSC	122018	-	NRPK	11/10/21	294	-	200	-	-
Keeyask reservoir	NSC	122019	-	NRPK	11/10/21	523	-	1200	-	-
Keeyask reservoir	NSC	122020	-	NRPK	11/10/21	678	-	2425	-	-
Keeyask reservoir	NSC	122021	-	NRPK	11/10/21	635	-	2600	-	-
Keeyask reservoir	NSC	122023	-	NRPK	11/10/21	349	-	350	-	-

Table A1-2: Tagging and biological data for Northern Pike (NRPK) captured in the Keeyask reservoir and Stephens Lake in 2021 (continued).

Location	Prefix	Floy-Tag Number	PIT Tag Number	Species	Date Tagged	Fork Length (mm)	Total Length (mm)	Weight (g)	Sex	Maturity
Keeyask reservoir	NSC	122024	-	NRPK	11/10/21	573	-	1500	-	-
Keeyask reservoir	NSC	122053	-	NRPK	31/05/21	720	-	2750	-	-
Keeyask reservoir	NSC	122054	-	NRPK	31/05/21	585	-	1600	F	2
Keeyask reservoir	NSC	122055	-	NRPK	01/06/21	455	-	700	M	7
Keeyask reservoir	NSC	122056	-	NRPK	01/06/21	511	-	1000	M	7
Keeyask reservoir	NSC	122057	-	NRPK	01/06/21	450	-	725	M	7
Keeyask reservoir	NSC	122058	-	NRPK	01/06/21	491	-	900	M	7
Keeyask reservoir	NSC	122059	-	NRPK	01/06/21	458	-	725	M	7
Keeyask reservoir	NSC	122060	-	NRPK	01/06/21	422	-	600	-	-
Keeyask reservoir	NSC	122061	-	NRPK	01/06/21	595	-	1450	-	-
Keeyask reservoir	NSC	122062	-	NRPK	01/06/21	465	-	800	M	7
Keeyask reservoir	NSC	122063	-	NRPK	01/06/21	513	-	1200	-	-
Keeyask reservoir	NSC	122064	-	NRPK	01/06/21	492	-	950	M	7
Keeyask reservoir	NSC	122065	-	NRPK	01/06/21	534	-	1200	-	-
Keeyask reservoir	NSC	122066	-	NRPK	01/06/21	550	-	1200	M	7
Keeyask reservoir	NSC	122067	-	NRPK	01/06/21	796	-	4000	-	-
Keeyask reservoir	NSC	122068	-	NRPK	01/06/21	800	-	4200	F	2
Keeyask reservoir	NSC	122069	-	NRPK	01/06/21	640	-	2200	-	-
Keeyask reservoir	NSC	122070	-	NRPK	01/06/21	610	-	1600	-	-
Keeyask reservoir	NSC	122071	-	NRPK	01/06/21	512	-	1000	F	2
Keeyask reservoir	NSC	122072	-	NRPK	01/06/21	803	-	4500	M	7
Keeyask reservoir	NSC	122073	-	NRPK	01/06/21	805	-	3850	F	2
Keeyask reservoir	NSC	122075	-	NRPK	01/06/21	797	-	3800	F	3
Keeyask reservoir	NSC	122076	-	NRPK	31/05/21	617	-	1700	-	-
Keeyask reservoir	NSC	122077	-	NRPK	31/05/21	645	-	1700	-	-

Table A1-2: Tagging and biological data for Northern Pike (NRPK) captured in the Keeyask reservoir and Stephens Lake in 2021 (continued).

Location	Prefix	Floy-Tag Number	PIT Tag Number	Species	Date Tagged	Fork Length (mm)	Total Length (mm)	Weight (g)	Sex	Maturity
Keeyask reservoir	NSC	122078	-	NRPK	31/05/21	420	-	550	-	-
Keeyask reservoir	NSC	122079	-	NRPK	29/05/21	452	-	600	M	7
Keeyask reservoir	NSC	122080	-	NRPK	29/05/21	550	-	1250	F	2
Keeyask reservoir	NSC	122088	-	NRPK	28/05/21	733	-	3800	F	2
Keeyask reservoir	NSC	122089	-	NRPK	28/05/21	792	-	4550	-	-
Keeyask reservoir	NSC	122090	-	NRPK	28/05/21	611	-	2100	F	2
Keeyask reservoir	NSC	122091	-	NRPK	28/05/21	841	-	5200	F	2
Keeyask reservoir	NSC	122092	-	NRPK	28/05/21	652	-	2600	-	-
Keeyask reservoir	NSC	122093	-	NRPK	28/05/21	666	-	1600	-	-
Keeyask reservoir	NSC	122094	-	NRPK	28/05/21	800	-	5200	-	-
Keeyask reservoir	NSC	122095	-	NRPK	28/05/21	760	-	4200	F	2
Keeyask reservoir	NSC	122096	-	NRPK	28/05/21	648	-	2300	-	-
Keeyask reservoir	NSC	122098	-	NRPK	28/05/21	650	-	2000	M	7
Keeyask reservoir	NSC	122099	-	NRPK	28/05/21	510	-	975	-	-
Keeyask reservoir	NSC	122100	-	NRPK	28/05/21	464	-	700	M	7
Keeyask reservoir	NSC	122226	-	NRPK	31/05/21	621	-	1910	-	-
Keeyask reservoir	NSC	122227	-	NRPK	31/05/21	721	-	2740	-	-
Keeyask reservoir	NSC	122228	-	NRPK	31/05/21	702	-	2530	-	-
Keeyask reservoir	NSC	122229	-	NRPK	31/05/21	682	-	2240	-	-
Keeyask reservoir	NSC	122230	-	NRPK	31/05/21	420	-	675	-	-
Keeyask reservoir	NSC	122231	-	NRPK	31/05/21	485	-	900	-	-
Keeyask reservoir	NSC	122232	-	NRPK	31/05/21	440	-	650	-	-
Keeyask reservoir	NSC	122233	-	NRPK	31/05/21	414	-	500	-	-
Keeyask reservoir	NSC	122234	-	NRPK	31/05/21	505	-	850	-	-
Keeyask reservoir	NSC	122235	-	NRPK	31/05/21	728	-	3080	-	-

Table A1-2: Tagging and biological data for Northern Pike (NRPK) captured in the Keeyask reservoir and Stephens Lake in 2021 (continued).

Location	Prefix	Floy-Tag Number	PIT Tag Number	Species	Date Tagged	Fork Length (mm)	Total Length (mm)	Weight (g)	Sex	Maturity
Keeyask reservoir	NSC	122236	-	NRPK	31/05/21	563	-	1710	-	-
Keeyask reservoir	NSC	122237	-	NRPK	31/05/21	490	-	850	-	-
Keeyask reservoir	NSC	122238	-	NRPK	30/05/21	618	-	1700	-	-
Keeyask reservoir	NSC	122239	-	NRPK	30/05/21	446	-	550	F	2
Keeyask reservoir	NSC	122241	-	NRPK	30/05/21	723	-	3170	-	-
Keeyask reservoir	NSC	122242	-	NRPK	30/05/21	871	-	4990	-	-
Keeyask reservoir	NSC	122243	-	NRPK	30/05/21	661	-	2080	-	-
Keeyask reservoir	NSC	122248	-	NRPK	30/05/21	514	-	1080	-	-
Keeyask reservoir	NSC	122249	-	NRPK	28/05/21	535	-	920	-	-
Keeyask reservoir	NSC	122250	-	NRPK	28/05/21	534	-	900	-	-
Keeyask reservoir	NSC	122253	-	NRPK	03/06/21	441	-	570	-	-
Keeyask reservoir	NSC	122256	-	NRPK	01/06/21	639	-	1770	-	-
Keeyask reservoir	NSC	122258	-	NRPK	01/06/21	691	-	2480	-	-
Keeyask reservoir	NSC	122259	-	NRPK	01/06/21	887	-	4760	-	-
Keeyask reservoir	NSC	122260	-	NRPK	01/06/21	797	-	3980	-	-
Keeyask reservoir	NSC	122262	-	NRPK	01/06/21	486	-	730	-	-
Keeyask reservoir	NSC	122263	-	NRPK	01/06/21	559	-	1480	-	-
Keeyask reservoir	NSC	122265	-	NRPK	01/06/21	650	-	1880	-	-
Keeyask reservoir	NSC	122267	-	NRPK	01/06/21	422	-	590	-	-
Keeyask reservoir	NSC	122269	-	NRPK	01/06/21	579	-	1380	F	2
Keeyask reservoir	NSC	122271	-	NRPK	01/06/21	492	-	920	M	7
Keeyask reservoir	NSC	122272	-	NRPK	01/06/21	836	-	4500	-	-
Keeyask reservoir	NSC	122274	-	NRPK	31/05/21	520	-	950	-	-
Keeyask reservoir	NSC	122275	-	NRPK	31/05/21	804	-	3900	-	-
Stephens Lake	NSC	116426	-	NRPK	06/02/21	830	-	3900	-	-

Table A1-2: Tagging and biological data for Northern Pike (NRPK) captured in the Keeyask reservoir and Stephens Lake in 2021 (continued).

Location	Prefix	Floy-Tag Number	PIT Tag Number	Species	Date Tagged	Fork Length (mm)	Total Length (mm)	Weight (g)	Sex	Maturity
Stephens Lake	NSC	116427	-	NRPK	06/02/21	415	-	600	-	-
Stephens Lake	NSC	116428	-	NRPK	06/02/21	491	-	850	-	-
Stephens Lake	NSC	116430	-	NRPK	06/02/21	580	-	1200	-	-
Stephens Lake	NSC	116438	-	NRPK	06/02/21	490	-	900	M	7
Stephens Lake	NSC	116439	-	NRPK	06/02/21	580	-	1450	M	7
Stephens Lake	NSC	116440	-	NRPK	06/02/21	395	-	500	-	-
Stephens Lake	NSC	116441	-	NRPK	06/02/21	585	-	1500	M	7
Stephens Lake	NSC	116442	-	NRPK	06/02/21	734	-	3350	-	-
Stephens Lake	NSC	116951	-	NRPK	10/09/21	465	-	650	-	-
Stephens Lake	NSC	116952	-	NRPK	10/09/21	790	-	4300	-	-
Stephens Lake	NSC	116964	-	NRPK	10/04/21	550	-	1100	-	-
Stephens Lake	NSC	116965	-	NRPK	10/04/21	610	-	1350	-	-
Stephens Lake	NSC	116967	-	NRPK	10/03/21	565	-	1275	-	-
Stephens Lake	NSC	116968	-	NRPK	10/03/21	435	-	575	-	-
Stephens Lake	NSC	116969	-	NRPK	10/03/21	455	-	750	-	-
Stephens Lake	NSC	116970	-	NRPK	10/03/21	592	-	1650	-	-
Stephens Lake	NSC	116971	-	NRPK	10/03/21	803	-	3750	-	-
Stephens Lake	NSC	116972	-	NRPK	10/03/21	615	-	2200	-	-
Stephens Lake	NSC	116981	-	NRPK	10/04/21	446	-	590	-	-
Stephens Lake	NSC	116985	-	NRPK	10/04/21	687	-	2225	-	-
Stephens Lake	NSC	116986	-	NRPK	10/04/21	659	-	3100	-	-
Stephens Lake	NSC	117234	-	NRPK	10/13/21	712	-	2325	-	-
Stephens Lake	NSC	117272	-	NRPK	10/09/21	910	-	5500	-	-
Stephens Lake	NSC	117274	-	NRPK	10/09/21	602	-	1500	-	-
Stephens Lake	NSC	117275	-	NRPK	10/09/21	755	-	3400	-	-

Table A1-2: Tagging and biological data for Northern Pike (NRPK) captured in the Keeyask reservoir and Stephens Lake in 2021 (continued).

Location	Prefix	Floy-Tag Number	PIT Tag Number	Species	Date Tagged	Fork Length (mm)	Total Length (mm)	Weight (g)	Sex	Maturity
Stephens Lake	NSC	117301	-	NRPK	10/09/21	673	-	2450	-	-
Stephens Lake	NSC	117302	-	NRPK	10/09/21	955	-	7800	-	-
Stephens Lake	NSC	117304	-	NRPK	10/10/21	610	-	2000	-	-
Stephens Lake	NSC	117305	-	NRPK	10/10/21	480	-	650	-	-
Stephens Lake	NSC	117306	-	NRPK	10/10/21	687	-	3100	-	-
Stephens Lake	NSC	117307	-	NRPK	10/10/21	658	-	2100	-	-
Stephens Lake	NSC	117308	-	NRPK	10/10/21	692	-	2650	-	-
Stephens Lake	NSC	117309	-	NRPK	10/10/21	822	-	5300	-	-
Stephens Lake	NSC	117311	-	NRPK	10/10/21	1100	-	10000	-	-
Stephens Lake	NSC	117312	-	NRPK	10/10/21	825	-	5700	-	-
Stephens Lake	NSC	117313	-	NRPK	10/10/21	1050	-	8600	-	-
Stephens Lake	NSC	117320	-	NRPK	10/10/21	780	-	4000	-	-
Stephens Lake	NSC	117321	-	NRPK	10/10/21	577	-	1400	-	-
Stephens Lake	NSC	117331	-	NRPK	10/12/21	444	-	600	-	-
Stephens Lake	NSC	117955	-	NRPK	06/08/21	674	-	2350	-	-
Stephens Lake	NSC	117956	-	NRPK	06/08/21	408	-	500	-	-
Stephens Lake	NSC	117960	-	NRPK	06/06/21	555	-	1350	-	-
Stephens Lake	NSC	117961	-	NRPK	06/05/21	474	-	675	-	-
Stephens Lake	NSC	117962	-	NRPK	06/05/21	369	-	400	M	7
Stephens Lake	NSC	117963	-	NRPK	06/05/21	424	-	475	M	7
Stephens Lake	NSC	117964	-	NRPK	06/05/21	470	-	675	-	-
Stephens Lake	NSC	117965	-	NRPK	06/05/21	498	-	800	F	2
Stephens Lake	NSC	117966	-	NRPK	06/05/21	551	-	1200	-	-
Stephens Lake	NSC	117967	-	NRPK	06/05/21	444	-	650	F	2
Stephens Lake	NSC	117968	-	NRPK	06/05/21	630	-	2000	-	-

Table A1-2: Tagging and biological data for Northern Pike (NRPK) captured in the Keeyask reservoir and Stephens Lake in 2021 (continued).

Location	Prefix	Floy-Tag Number	PIT Tag Number	Species	Date Tagged	Fork Length (mm)	Total Length (mm)	Weight (g)	Sex	Maturity
Stephens Lake	NSC	117969	-	NRPK	06/05/21	515	-	825	-	-
Stephens Lake	NSC	117978	-	NRPK	10/12/21	805	-	5300	-	-
Stephens Lake	NSC	117982	-	NRPK	10/13/21	485	-	725	-	-
Stephens Lake	NSC	118134	-	NRPK	10/12/21	585	-	1525	-	-
Stephens Lake	NSC	118135	-	NRPK	10/12/21	913	-	5350	-	-
Stephens Lake	NSC	118136	-	NRPK	10/12/21	380	-	475	-	-
Stephens Lake	NSC	118138	-	NRPK	10/12/21	469	-	750	-	-
Stephens Lake	NSC	118139	-	NRPK	10/12/21	860	-	5500	-	-
Stephens Lake	NSC	118140	-	NRPK	10/12/21	835	-	4950	-	-
Stephens Lake	NSC	118142	-	NRPK	10/12/21	402	-	450	-	-
Stephens Lake	NSC	118143	-	NRPK	10/12/21	570	-	1050	-	-
Stephens Lake	NSC	118144	-	NRPK	10/12/21	446	-	600	-	-
Stephens Lake	NSC	118145	-	NRPK	10/12/21	510	-	975	-	-
Stephens Lake	NSC	118146	-	NRPK	10/12/21	748	-	3875	-	-
Stephens Lake	NSC	118147	-	NRPK	10/12/21	435	-	450	-	-
Stephens Lake	NSC	118148	-	NRPK	10/12/21	740	-	3150	-	-
Stephens Lake	NSC	118150	-	NRPK	10/12/21	891	-	5425	-	-
Stephens Lake	NSC	122003	-	NRPK	10/10/21	532	-	1100	-	-
Stephens Lake	NSC	122004	-	NRPK	10/10/21	600	-	1400	-	-
Stephens Lake	NSC	122005	-	NRPK	10/10/21	480	-	850	-	-
Stephens Lake	NSC	122008	-	NRPK	10/10/21	363	-	350	-	-
Stephens Lake	NSC	122026	-	NRPK	06/03/21	816	-	4350	M	7
Stephens Lake	NSC	122027	-	NRPK	06/03/21	838	-	4700	-	-
Stephens Lake	NSC	122029	-	NRPK	06/03/21	540	-	1075	-	-
Stephens Lake	NSC	122030	-	NRPK	06/03/21	721	-	2900	-	-

Table A1-2: Tagging and biological data for Northern Pike (NRPK) captured in the Keeyask reservoir and Stephens Lake in 2021 (continued).

Location	Prefix	Floy-Tag Number	PIT Tag Number	Species	Date Tagged	Fork Length (mm)	Total Length (mm)	Weight (g)	Sex	Maturity
Stephens Lake	NSC	122031	-	NRPK	06/03/21	922	-	7100	F	3
Stephens Lake	NSC	122035	-	NRPK	06/04/21	733	-	3650	F	2
Stephens Lake	NSC	122037	-	NRPK	06/04/21	460	-	700	M	7
Stephens Lake	NSC	122038	-	NRPK	06/04/21	448	-	650	M	7
Stephens Lake	NSC	122039	-	NRPK	06/04/21	424	-	650	F	2
Stephens Lake	NSC	122040	-	NRPK	06/04/21	533	-	950	-	-
Stephens Lake	NSC	122041	-	NRPK	06/04/21	424	-	525	M	7
Stephens Lake	NSC	122042	-	NRPK	06/04/21	524	-	1025	F	2
Stephens Lake	NSC	122043	-	NRPK	06/04/21	635	-	1450	-	-
Stephens Lake	NSC	122044	-	NRPK	06/04/21	505	-	1100	-	-
Stephens Lake	NSC	122048	-	NRPK	06/06/21	709	-	2700	-	-
Stephens Lake	NSC	122049	-	NRPK	06/06/21	703	-	2500	-	-
Stephens Lake	NSC	122050	-	NRPK	06/06/21	845	-	4750	-	-
Stephens Lake	NSC	122101	-	NRPK	06/02/21	515	-	1000	-	-
Stephens Lake	NSC	122102	-	NRPK	06/02/21	795	-	3150	-	-
Stephens Lake	NSC	122105	-	NRPK	06/02/21	515	-	950	-	-
Stephens Lake	NSC	122106	-	NRPK	06/02/21	497	-	1000	-	-
Stephens Lake	NSC	122107	-	NRPK	06/02/21	595	-	1500	-	-
Stephens Lake	NSC	122108	-	NRPK	06/02/21	505	-	900	-	-
Stephens Lake	NSC	122110	-	NRPK	06/02/21	655	-	1750	-	-
Stephens Lake	NSC	122111	-	NRPK	06/02/21	765	-	3000	M	7
Stephens Lake	NSC	122114	-	NRPK	06/02/21	807	-	3750	-	-
Stephens Lake	NSC	122117	-	NRPK	06/03/21	751	-	3200	M	7
Stephens Lake	NSC	122118	-	NRPK	06/03/21	699	-	2500	-	-
Stephens Lake	NSC	122119	-	NRPK	06/03/21	465	-	800	M	9

Table A1-2: Tagging and biological data for Northern Pike (NRPK) captured in the Keeyask reservoir and Stephens Lake in 2021 (continued).

Location	Prefix	Floy-Tag Number	PIT Tag Number	Species	Date Tagged	Fork Length (mm)	Total Length (mm)	Weight (g)	Sex	Maturity
Stephens Lake	NSC	122120	-	NRPK	06/03/21	578	-	1550	F	3
Stephens Lake	NSC	122121	-	NRPK	06/03/21	872	-	5400	F	3
Stephens Lake	NSC	122124	-	NRPK	06/03/21	758	-	3300	F	2
Stephens Lake	NSC	122125	-	NRPK	06/03/21	948	-	6800	M	7
Stephens Lake	NSC	122129	-	NRPK	06/06/21	659	-	2550	-	-
Stephens Lake	NSC	122130	-	NRPK	06/06/21	570	-	1500	-	-
Stephens Lake	NSC	122151	-	NRPK	06/08/21	656	-	1950	-	-
Stephens Lake	NSC	122153	-	NRPK	06/08/21	424	-	450	-	-
Stephens Lake	NSC	122154	-	NRPK	06/08/21	505	-	650	-	-
Stephens Lake	NSC	122155	-	NRPK	06/08/21	588	-	1650	-	-
Stephens Lake	NSC	122156	-	NRPK	06/08/21	708	-	2700	-	-
Stephens Lake	NSC	122158	-	NRPK	06/08/21	425	-	600	-	-
Stephens Lake	NSC	122159	-	NRPK	06/08/21	497	-	650	-	-
Stephens Lake	NSC	122161	-	NRPK	06/08/21	858	-	5500	F	2
Stephens Lake	NSC	122162	-	NRPK	06/08/21	843	-	4350	F	2
Stephens Lake	NSC	122163	-	NRPK	06/08/21	868	-	6750	-	-
Stephens Lake	NSC	122166	-	NRPK	06/08/21	558	-	1200	-	-
Stephens Lake	NSC	122167	-	NRPK	06/08/21	760	-	3750	-	-
Stephens Lake	NSC	122169	-	NRPK	06/10/21	347	-	350	-	-
Stephens Lake	NSC	122170	-	NRPK	06/10/21	314	-	250	-	-
Stephens Lake	NSC	122171	-	NRPK	06/10/21	723	-	3150	-	-
Stephens Lake	NSC	122176	-	NRPK	10/09/21	450	-	700	-	-
Stephens Lake	NSC	122180	-	NRPK	10/10/21	973	-	7475	-	-
Stephens Lake	NSC	122183	-	NRPK	10/09/21	911	-	5850	-	-
Stephens Lake	NSC	122184	-	NRPK	10/09/21	471	-	975	-	-

Table A1-2: Tagging and biological data for Northern Pike (NRPK) captured in the Keeyask reservoir and Stephens Lake in 2021 (continued).

Location	Prefix	Floy-Tag Number	PIT Tag Number	Species	Date Tagged	Fork Length (mm)	Total Length (mm)	Weight (g)	Sex	Maturity
Stephens Lake	NSC	122185	-	NRPK	10/09/21	240	-	200	-	-
Stephens Lake	NSC	122188	-	NRPK	06/10/21	728	-	3000	-	-
Stephens Lake	NSC	122188	-	NRPK	10/10/21	426	-	500	-	-
Stephens Lake	NSC	122189	-	NRPK	10/10/21	528	-	1450	-	-
Stephens Lake	NSC	122190	-	NRPK	10/10/21	525	-	1350	-	-
Stephens Lake	NSC	122191	-	NRPK	10/10/21	895	-	5600	-	-
Stephens Lake	NSC	122192	-	NRPK	10/09/21	815	-	5000	-	-
Stephens Lake	NSC	122193	-	NRPK	10/09/21	680	-	2700	-	-
Stephens Lake	NSC	122194	-	NRPK	10/09/21	295	-	300	-	-
Stephens Lake	NSC	122195	-	NRPK	10/09/21	478	-	675	-	-
Stephens Lake	NSC	122196	-	NRPK	10/09/21	427	-	550	-	-

Table A1-3: Tagging and biological data for Walleye (WALL) captured in the Keeyask reservoir and Stephens Lake in 2021.

Location	Prefix	Floy-Tag Number	PIT Tag Number	Species	Date Tagged	Fork Length (mm)	Total Length (mm)	Weight (g)	Sex	Maturity
Keeyask reservoir	NSC	116416	-	WALL	31/05/21	349	-	500	-	-
Keeyask reservoir	NSC	116417	-	WALL	31/05/21	319	-	500	-	-
Keeyask reservoir	NSC	116418	-	WALL	31/05/21	327	-	490	-	-
Keeyask reservoir	NSC	116419	-	WALL	31/05/21	363	-	580	M	7
Keeyask reservoir	NSC	116420	-	WALL	31/05/21	386	-	740	M	7
Keeyask reservoir	NSC	116421	-	WALL	31/05/21	440	-	1250	-	-
Keeyask reservoir	NSC	116422	-	WALL	31/05/21	541	-	2100	-	-
Keeyask reservoir	NSC	116423	-	WALL	31/05/21	474	-	1350	-	-
Keeyask reservoir	NSC	116424	-	WALL	31/05/21	393	-	640	-	-
Keeyask reservoir	NSC	116425	-	WALL	31/05/21	435	-	1000	-	-
Keeyask reservoir	NSC	116989	-	WALL	05/10/21	397	-	775	-	-
Keeyask reservoir	NSC	116990	-	WALL	05/10/21	370	-	700	-	-
Keeyask reservoir	NSC	116991	-	WALL	05/10/21	402	-	825	-	-
Keeyask reservoir	NSC	116993	-	WALL	05/10/21	480	-	1475	-	-
Keeyask reservoir	NSC	116994	-	WALL	05/10/21	305	-	350	-	-
Keeyask reservoir	NSC	116995	-	WALL	05/10/21	410	-	900	-	-
Keeyask reservoir	NSC	116999	-	WALL	05/10/21	411	-	925	-	-
Keeyask reservoir	NSC	117256	-	WALL	07/10/21	330	-	375	-	-
Keeyask reservoir	NSC	117257	-	WALL	07/10/21	309	-	350	-	-
Keeyask reservoir	NSC	117261	-	WALL	08/10/21	389	-	750	-	-
Keeyask reservoir	NSC	117262	-	WALL	08/10/21	424	-	900	-	-
Keeyask reservoir	NSC	117266	-	WALL	08/10/21	305	-	325	-	-
Keeyask reservoir	NSC	117267	-	WALL	08/10/21	496	-	1850	-	-
Keeyask reservoir	NSC	117268	-	WALL	08/10/21	511	-	1600	-	-
Keeyask reservoir	NSC	117322	-	WALL	11/10/21	414	-	950	-	-
Keeyask reservoir	NSC	117323	-	WALL	11/10/21	417	-	950	-	-

Table A1-3: Tagging and biological data for Walleye (WALL) captured in the Keeyask reservoir and Stephens Lake in 2021 (continued).

Location	Prefix	Floy-Tag Number	PIT Tag Number	Species	Date Tagged	Fork Length (mm)	Total Length (mm)	Weight (g)	Sex	Maturity
Keeyask reservoir	NSC	117328	-	WALL	11/10/21	422	-	900	-	-
Keeyask reservoir	NSC	118132	-	WALL	11/10/21	430	-	1000	-	-
Keeyask reservoir	NSC	121513	-	WALL	10/06/21	320	-	475	-	-
Keeyask reservoir	NSC	121520	-	WALL	07/06/21	422	-	1050	-	-
Keeyask reservoir	NSC	121527	-	WALL	13/06/21	330	-	500	-	-
Keeyask reservoir	NSC	121536	-	WALL	14/06/21	392	-	710	-	-
Keeyask reservoir	NSC	121538	-	WALL	14/06/21	482	-	1120	-	-
Keeyask reservoir	NSC	121550	-	WALL	14/06/21	357	-	700	-	-
Keeyask reservoir	NSC	121601	-	WALL	03/06/21	385	-	720	-	-
Keeyask reservoir	NSC	121612	-	WALL	05/06/21	505	-	1700	-	-
Keeyask reservoir	NSC	121613	-	WALL	05/06/21	497	-	1500	-	-
Keeyask reservoir	NSC	121614	-	WALL	05/06/21	516	-	1870	M	7
Keeyask reservoir	NSC	121619	-	WALL	05/06/21	460	-	1270	-	-
Keeyask reservoir	NSC	121622	-	WALL	05/06/21	475	-	1280	M	7
Keeyask reservoir	NSC	121623	-	WALL	05/06/21	452	-	1160	-	-
Keeyask reservoir	NSC	121624	-	WALL	05/06/21	538	-	1700	M	7
Keeyask reservoir	NSC	121625	-	WALL	05/06/21	488	-	1440	-	-
Keeyask reservoir	NSC	121626	-	WALL	05/06/21	474	-	1220	-	-
Keeyask reservoir	NSC	121627	-	WALL	05/06/21	431	-	1000	-	-
Keeyask reservoir	NSC	121628	-	WALL	05/06/21	438	-	920	-	-
Keeyask reservoir	NSC	121636	-	WALL	06/06/21	440	-	1150	-	-
Keeyask reservoir	NSC	121638	-	WALL	06/06/21	390	-	700	-	-
Keeyask reservoir	NSC	122022	-	WALL	11/10/21	283	-	300	-	-
Keeyask reservoir	NSC	122051	-	WALL	31/05/21	352	-	500	-	-
Keeyask reservoir	NSC	122052	-	WALL	31/05/21	396	-	700	-	-

Table A1-3: Tagging and biological data for Walleye (WALL) captured in the Keeyask reservoir and Stephens Lake in 2021 (continued).

Location	Prefix	Floy-Tag Number	PIT Tag Number	Species	Date Tagged	Fork Length (mm)	Total Length (mm)	Weight (g)	Sex	Maturity
Keeyask reservoir	NSC	122081	-	WALL	28/05/21	427	-	700	-	-
Keeyask reservoir	NSC	122082	-	WALL	28/05/21	367	-	550	M	7
Keeyask reservoir	NSC	122083	-	WALL	28/05/21	425	-	900	-	-
Keeyask reservoir	NSC	122084	-	WALL	28/05/21	388	-	700	-	-
Keeyask reservoir	NSC	122085	-	WALL	28/05/21	458	-	1100	-	-
Keeyask reservoir	NSC	122086	-	WALL	28/05/21	412	-	800	-	-
Keeyask reservoir	NSC	122087	-	WALL	28/05/21	410	-	800	-	-
Keeyask reservoir	NSC	122097	-	WALL	28/05/21	457	-	900	F	2
Keeyask reservoir	NSC	122240	-	WALL	30/05/21	325	-	600	-	-
Keeyask reservoir	NSC	122244	-	WALL	30/05/21	471	-	1280	-	-
Keeyask reservoir	NSC	122245	-	WALL	30/05/21	400	-	770	-	-
Keeyask reservoir	NSC	122246	-	WALL	30/05/21	488	-	1480	-	-
Keeyask reservoir	NSC	122247	-	WALL	30/05/21	515	-	1050	M	7
Keeyask reservoir	NSC	122254	-	WALL	01/06/21	355	-	520	-	-
Keeyask reservoir	NSC	122255	-	WALL	01/06/21	360	-	570	-	-
Keeyask reservoir	NSC	122261	-	WALL	01/06/21	350	-	500	-	-
Keeyask reservoir	NSC	122266	-	WALL	01/06/21	420	-	850	-	-
Keeyask reservoir	NSC	122270	-	WALL	01/06/21	398	-	770	M	7
Stephens Lake	NSC	116429	-	WALL	06/02/21	353	-	500	-	-
Stephens Lake	NSC	116431	-	WALL	06/02/21	415	-	875	-	-
Stephens Lake	NSC	116432	-	WALL	06/02/21	350	-	600	-	-
Stephens Lake	NSC	116433	-	WALL	06/02/21	365	-	600	-	-
Stephens Lake	NSC	116434	-	WALL	06/02/21	362	-	600	-	-
Stephens Lake	NSC	116435	-	WALL	06/02/21	345	-	550	-	-
Stephens Lake	NSC	116436	-	WALL	06/02/21	433	-	810	-	-

Table A1-3: Tagging and biological data for Walleye (WALL) captured in the Keeyask reservoir and Stephens Lake in 2021 (continued).

Location	Prefix	Floy-Tag Number	PIT Tag Number	Species	Date Tagged	Fork Length (mm)	Total Length (mm)	Weight (g)	Sex	Maturity
Stephens Lake	NSC	116437	-	WALL	06/02/21	380	-	580	-	-
Stephens Lake	NSC	116443	-	WALL	06/02/21	370	-	600	-	-
Stephens Lake	NSC	116444	-	WALL	06/02/21	428	-	1000	M	7
Stephens Lake	NSC	116445	-	WALL	06/02/21	337	-	400	M	7
Stephens Lake	NSC	116446	-	WALL	06/02/21	348	-	490	M	7
Stephens Lake	NSC	116447	-	WALL	06/02/21	402	-	720	-	-
Stephens Lake	NSC	116448	-	WALL	06/02/21	462	-	1320	-	-
Stephens Lake	NSC	116449	-	WALL	06/02/21	454	-	1070	M	7
Stephens Lake	NSC	116450	-	WALL	06/02/21	761	-	2550	-	-
Stephens Lake	NSC	116963	-	WALL	10/04/21	415	-	750	-	-
Stephens Lake	NSC	116982	-	WALL	10/04/21	365	-	650	-	-
Stephens Lake	NSC	116983	-	WALL	10/04/21	394	-	725	-	-
Stephens Lake	NSC	116984	-	WALL	10/04/21	444	-	1150	-	-
Stephens Lake	NSC	117232	-	WALL	10/13/21	375	-	575	-	-
Stephens Lake	NSC	117233	-	WALL	10/13/21	450	-	1100	-	-
Stephens Lake	NSC	117235	-	WALL	10/13/21	398	-	775	-	-
Stephens Lake	NSC	117273	-	WALL	10/09/21	423	-	850	-	-
Stephens Lake	NSC	117303	-	WALL	10/10/21	341	-	400	-	-
Stephens Lake	NSC	117310	-	WALL	10/10/21	450	-	1100	-	-
Stephens Lake	NSC	117314	-	WALL	10/10/21	458	-	1100	-	-
Stephens Lake	NSC	117315	-	WALL	10/10/21	460	-	1250	-	-
Stephens Lake	NSC	117316	-	WALL	10/10/21	367	-	650	-	-
Stephens Lake	NSC	117317	-	WALL	10/10/21	385	-	800	-	-
Stephens Lake	NSC	117318	-	WALL	10/10/21	507	-	1400	-	-
Stephens Lake	NSC	117330	-	WALL	10/12/21	527	-	1500	-	-

Table A1-3: Tagging and biological data for Walleye (WALL) captured in the Keeyask reservoir and Stephens Lake in 2021 (continued).

Location	Prefix	Floy-Tag Number	PIT Tag Number	Species	Date Tagged	Fork Length (mm)	Total Length (mm)	Weight (g)	Sex	Maturity
Stephens Lake	NSC	117958	-	WALL	06/06/21	415	-	850	-	-
Stephens Lake	NSC	117959	-	WALL	06/06/21	416	-	800	-	-
Stephens Lake	NSC	117970	-	WALL	06/05/21	412	-	650	-	-
Stephens Lake	NSC	117971	-	WALL	06/04/21	440	-	825	-	-
Stephens Lake	NSC	117973	-	WALL	06/02/21	355	-	500	M	7
Stephens Lake	NSC	117974	-	WALL	06/02/21	397	-	840	F	2
Stephens Lake	NSC	117975	-	WALL	06/02/21	422	-	950	F	2
Stephens Lake	NSC	117983	-	WALL	10/13/21	484	-	1000	-	-
Stephens Lake	NSC	118133	-	WALL	10/12/21	465	-	1400	-	-
Stephens Lake	NSC	122002	-	WALL	10/10/21	323	-	500	-	-
Stephens Lake	NSC	122016	-	WALL	10/10/21	373	-	650	-	-
Stephens Lake	NSC	122032	-	WALL	06/04/21	430	-	1000	-	-
Stephens Lake	NSC	122033	-	WALL	06/04/21	420	-	900	-	-
Stephens Lake	NSC	122034	-	WALL	06/04/21	355	-	600	M	7
Stephens Lake	NSC	122036	-	WALL	06/04/21	398	-	1000	-	-
Stephens Lake	NSC	122045	-	WALL	06/06/21	472	-	1100	-	-
Stephens Lake	NSC	122046	-	WALL	06/06/21	350	-	450	-	-
Stephens Lake	NSC	122047	-	WALL	06/06/21	481	-	1250	-	-
Stephens Lake	NSC	122103	-	WALL	06/02/21	536	-	1750	F	2
Stephens Lake	NSC	122104	-	WALL	06/02/21	535	-	1900	F	2
Stephens Lake	NSC	122109	-	WALL	06/02/21	460	-	1250	-	-
Stephens Lake	NSC	122112	-	WALL	06/02/21	350	-	500	M	7
Stephens Lake	NSC	122113	-	WALL	06/02/21	375	-	650	M	7
Stephens Lake	NSC	122115	-	WALL	06/03/21	444	-	950	F	2
Stephens Lake	NSC	122116	-	WALL	06/03/21	545	-	1850	F	3

Table A1-3: Tagging and biological data for Walleye (WALL) captured in the Keeyask reservoir and Stephens Lake in 2021 (continued).

Location	Prefix	Floy-Tag Number	PIT Tag Number	Species	Date Tagged	Fork Length (mm)	Total Length (mm)	Weight (g)	Sex	Maturity
Stephens Lake	NSC	122122	-	WALL	06/03/21	435	-	950	M	7
Stephens Lake	NSC	122123	-	WALL	06/03/21	365	-	500	M	8
Stephens Lake	NSC	122126	-	WALL	06/06/21	422	-	750	-	-
Stephens Lake	NSC	122127	-	WALL	06/06/21	340	-	450	-	-
Stephens Lake	NSC	122128	-	WALL	06/06/21	485	-	1300	M	7
Stephens Lake	NSC	122147	-	WALL	06/06/21	484	-	1350	M	7
Stephens Lake	NSC	122148	-	WALL	06/06/21	460	-	950	-	-
Stephens Lake	NSC	122149	-	WALL	06/06/21	430	-	1000	M	7
Stephens Lake	NSC	122150	-	WALL	06/06/21	391	-	675	F	2
Stephens Lake	NSC	122152	-	WALL	06/08/21	453	-	900	-	-
Stephens Lake	NSC	122157	-	WALL	06/08/21	391	-	750	-	-
Stephens Lake	NSC	122164	-	WALL	06/08/21	375	-	700	-	-
Stephens Lake	NSC	122165	-	WALL	06/08/21	395	-	650	M	7
Stephens Lake	NSC	122182	-	WALL	10/09/21	525	-	1000	-	-