



Keeyask Generation Project  
Fisheries Offsetting and Mitigation Plan

Lake Sturgeon Production and Stocking Report

FOMP-2024-01



# **KEYYASK GENERATION PROJECT**

## **FISHERIES OFF-SETTING AND MITIGATION PLAN**

REPORT #FOMP-2024-01

### **LAKE STURGEON PRODUCTION AND STOCKING SUMMARY FOR BIRTHDAY RAPIDS AND BURNTWOOD RIVER POPULATIONS**

**OCTOBER 2022 TO SEPTEMBER 2023: YEAR 2 OPERATION**

Prepared for

Manitoba Hydro

By

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# SUMMARY

## BACKGROUND

Construction of the Keeyask Generation Project at Gull Rapids began in July 2014 and was completed in March 2022. Before government allowed construction to begin the Keeyask Hydropower Limited Partnership (KHLP) had to prepare a plan outlining activities that could reduce the potential effects of the Keeyask Generation Project on fish in the Nelson River (the Fisheries Offsetting and Mitigation Plan, FOMP). The plan also explained how the proposed activities would be completed and monitored.

Activities directed at Lake Sturgeon (*Namao* in Cree) were included in the plan because of its importance to the partner First Nations, because the population in Gull and Stephens lakes were low before the Project, and because the generating station will change or destroy habitat used for spawning and early life stages both upstream and downstream.

In 2017, the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) reviewed and maintained the previous (2006) recommendation of listing the Nelson River population of Lake Sturgeon as Endangered. The goal of the KHLP is to have self-sustaining populations of Lake Sturgeon in this area in the future. To help achieve this, the KHLP has made a commitment to produce and release hatchery-reared sturgeon into the Keeyask area (i.e., Keeyask reservoir and Stephens Lake) and the Burntwood River until there are self-sustaining populations. These two areas are stocked in alternate years using the offspring from adults captured at Birthday Rapids on the Nelson River and First Rapids on the Burntwood River.

This report describes the hatchery production and stocking activities of Lake Sturgeon from October 2022 to September 2023.



**Lake Sturgeon feeding on bloodworm at the Grand Rapids Fish Hatchery**



## STOCKING PROGRAM

Lake Sturgeon are produced at the Grand Rapids Fish Hatchery (GRFH) located in Grand Rapids, MB from the eggs and milt (sperm) of wild adults. Offspring are reared in fiberglass troughs using well water. Fish are started on a diet of newly hatched brine shrimp and later transitioned to frozen bloodworm.

Lake Sturgeon are released as yearlings (12 months old) after spending their first winter in the hatchery. However, due to limited tank space, it is often necessary to release some of the sturgeon as fingerlings (3 to 4 months old) prior to winter. In the past, the hatchery also stocked larvae (less than 1 month old) but are no longer able to do that due to current virus testing criteria which require that the sturgeon be at least 9 weeks old. Virus testing before stocking is necessary to ensure hatchery fish do not increase the amount of Namao Virus present in wild populations. The virus does not appear to effect adults but can cause mortality among young sturgeon.

Prior to release, yearlings are marked with uniquely numbered Passive Integrated Transponder (PIT) tags, inserted into the muscle along the fish's back. PIT tag scanners held over the fish can detect a tag and display the number on a screen. This marking technique helps to identify hatchery-reared fish caught in the river and can be used to assess the movement and growth of individual fish following stocking. Fish released as fingerlings are not large enough to be PIT tagged. Instead, tissue samples from individuals representing all family groups are preserved to provide a genetic 'fingerprint', allowing future identification of stocked individuals.



**PIT tagging activities at the Grand Rapids Fish Hatchery**

Since 2013, when the KHLP began producing Lake Sturgeon, larvae, fingerlings, yearlings and two-year old’s have been stocked (see table below).

**Summary of Lake Sturgeon stocking in the Keeyask area since 2014**

Year	Burntwood River/Split Lake			Keeyask reservoir			Stephens Lake		
	Larvae	Fingerlings	Age-1+	Larvae	Fingerlings	Age-1	Larvae	Fingerlings	Age-1
2014	0	0	595	152,926	4,656	0	0	0	0
2015	0	0	0	0	0	423	0	0	418
2016	0	0	23	192,167	780	0	184,134	799	0
2017	71,740	3,765	0	0	0	463	0	0	720
2018	0	0	739	0	933	0	0	1,009	0
2019	0	3,681	0	0	0	398	0	0	390
2020	0	0	574	0	0	0	0	0	0
2021	0	0	188*	0	0	0	0	1,050	0
2022	0	5,197	0	0	0	402	0	0	400
2023	0	0	795	0	0	0	0	0	0
<b>Total</b>	<b>71,740</b>	<b>12,643</b>	<b>2,914</b>	<b>345,093</b>	<b>6,369</b>	<b>1,686</b>	<b>184,134</b>	<b>2,858</b>	<b>1,928</b>

\* 2-year old sturgeon

**BURNTWOOD RIVER POPULATION (2022 YEAR-CLASS)**

**Hatchery Production**

Eggs and milt were collected in spring 2022 from spawning adults captured in the Burntwood River downstream of First Rapids.

A total of 800 Burntwood River fingerlings consisting of four family groups (F1M1, F1M3, F1M6, F1M7) remained at the hatchery for the 2022/23 winter. They were raised in the recently renovated Pickerel Place in order to not subject the main hatchery building’s new equipment to iron and minerals within the source well water until additional improvements are completed. Survival from the beginning of October 2022 until the spring stocking in late May/early June 2023 was 99%.

**Stocking**

In spring 2023, a total of 795 Lake Sturgeon yearlings were released. One group of yearlings (398 fish) was transported by truck on May 30 to a location near where the Burntwood River flows into Split Lake. The fish were released by boat into Split Lake with assistance from Manitoba Hydro’s boat patrol crews (Site 1; see map below). On June 1 another group (397 fish) was transported by truck to the Orr Creek boat launch and released into the Burntwood River from shore (Site 2; see map below). On average, yearlings were 21 cm long and weighed 32 g.





**Release sites for Burntwood River sturgeon (2022 year-class) stocked into Split Lake (Site 1), the Burntwood River (Site 2). Stocked sturgeon were the offspring of spawning adults collected downstream of First Rapids (Site A).**

## **BIRTHDAY RAPIDS POPULATION (2023 YEAR-CLASS)**

### **Spawn Camp**

Gillnetting took place between May 27 and June 8, 2023 along the Nelson River downstream of Birthday Rapids (see map below). Despite the capture of several milting males, no females suitable for use as broodstock were captured. Field crews ended the spawn camp when temperatures had been over 13°C (the upper limit for spawning activities) for several days.

### **Hatchery Production**

No 2023 year-class of sturgeon was produced for the KHLF (see above).

### **Stocking**

No Lake Sturgeon fingerlings were stocked in fall 2023 for the KHLF (see above).





### Location of Birthday Rapids (A) and the Birthday Rapids Spawn Camp (B)

## STOCKING RESULTS

Since the stocking program began in 2013 a total of 600,967 larvae, 21,870 fingerlings, 6,340 yearlings and 188 sturgeon aged 2-years have been released by GRFH for the KHLF. Annual monitoring programs being conducted by the KHLF in the Keeyask and upper Split Lake areas have captured a total of 849 hatchery-reared sturgeon released as yearlings or aged 2-years. Annual survival of stocked yearlings in Stephens Lake, Keeyask reservoir and upper Split Lake area has been estimated to be 86%, 95% and 92%, respectively.

## FUTURE ACTIVITIES

No hatchery-reared sturgeon are available to be stocked as yearlings in spring 2024. Planning is underway to ensure the best possible chance of collecting eggs in spring 2024.

Further upgrades to the infrastructure at GRFH are expected to be completed by spring 2024.

# PRODUCTION AND STOCKING TEAM

## Grand Rapids Fish Hatchery

- Yhana Michaluk, Fish Culture Supervisor
- Shaun Kirchmann, Senior Fish Culturist
- Luc Boudreau, Senior Fish Culturist
- Jerry Cook, Fish Culturist
- Morgan Blacksmith, Fish Culturist
- Tobias Dolinski, Fish Culturist
- Jesse Scott, Fish Culturist
- Finn Mercredie, Assistant Fish Culturist
- Brianna Ballantyne, Assistant Fish Culturist
- Joey Ballantyne, Operating/Mechanical Technician

## Generation Environmental Services

- Allison Zacharias, Department Manager
- Stephanie Backhouse, Senior Environmental Specialist
- Cheryl Klassen, Environmental Specialist

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# 1.0 INTRODUCTION

In June 2012, the Keeyask Hydropower Limited Partnership (KHLP) filed an Environmental Impact Statement (EIS) in support of the Keeyask Generation Project (the Project), a 695 megawatt hydroelectric generating station (GS) to be built at Gull Rapids on the Nelson River (Map 1). Construction of the Project began in July 2014 following regulatory approval and was completed in March 2022.

As discussed in the EIS, construction and operation of the Project will result in the alteration and destruction of Lake Sturgeon habitat, thereby potentially affecting regional populations.

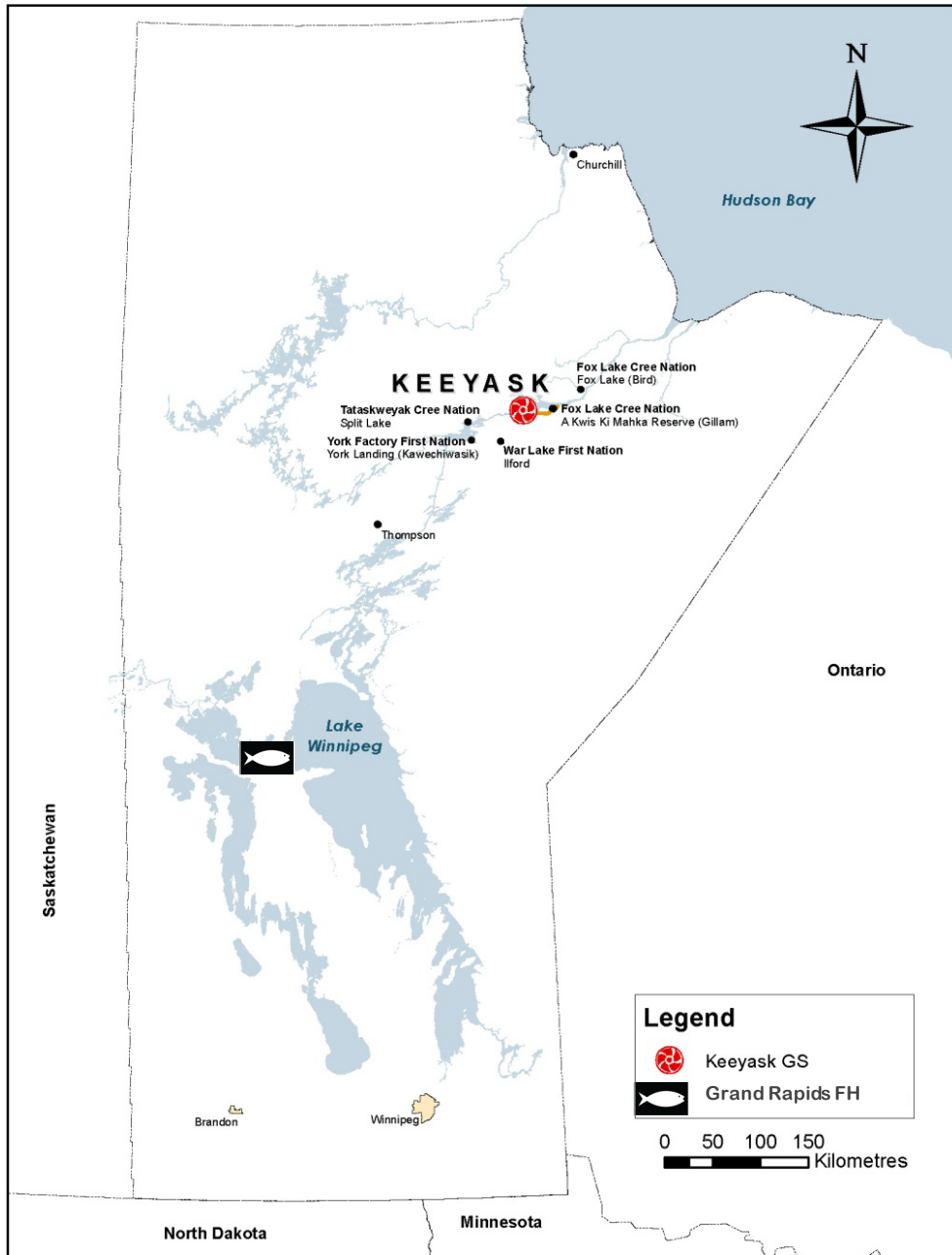
To mitigate impacts of the Project, the KHLP has developed a strategy that involves several components, including:

- management measures during construction to avoid mortality of sturgeon;
- stocking of sturgeon into Stephens Lake during construction to offset potential effects of the loss of spawning habitat in Gull Rapids;
- spawning habitat creation in the tailrace of the GS;
- alternations to habitat upstream of Birthday Rapids, if post-Project monitoring demonstrates that this area is no longer suitable for spawning sturgeon;
- creation of young-of-the-year rearing habitat at the upper end of Gull Lake following impoundment, if post-Project monitoring demonstrates that suitable habitat is not available;
- on-going studies to determine requirements (if any) for upstream fish passage;
- the use of monitoring of downstream movements and mortality to determine the need for any additional fish protection measures related to downstream passage at the GS;
- a conservation stocking program, with the objective of re-establishing a self-sustaining Lake Sturgeon population; and
- a conservation awareness program, highlighting the vulnerability of Lake Sturgeon.

Stocking was identified as being critically important because Stephens Lake may be able to support more Lake Sturgeon than are currently present. Therefore, a conservation stocking plan for the lower Nelson and Burntwood rivers was designed to address:

- existing low population numbers due to historic effects;
- potential effects of creation of the Keeyask reservoir, including possible emigration of adult Lake Sturgeon in response to water level changes at impoundment, and reduced year-class strength in the initial years of impoundment due to changes in spawning and young-of-the-year habitat. These effects are predicted to be restricted to the first years of impoundment, if they occur at all; and

- potential decrease in year-class strength of sturgeon in Stephens Lake, due to the alteration and ultimate loss of spawning habitat in Gull Rapids during construction of the GS. This effect is offset during the operation phase by the constructed spawning habitat.



**Map 1: Location of Keeyask Generation Project and Grand Rapids Fish Hatchery**

An initial 10-year stocking plan was developed and described in the Fisheries Offsetting and Mitigation Plan (FOMP). During the initial 10-year plan, the number of sturgeon released at each developmental stage (larval, fingerling and yearling) will be dependent upon:

- the number of Lake Sturgeon available at each developmental stage;
- the amount of hatchery space available to enable ‘normal’ growth of fish; and
- the end goal of maintaining 2,000 fingerlings annually through the winter to be released as yearlings the following spring.

Lake Sturgeon stocking in the lower Nelson and Burntwood rivers began in 2014 and has included the release of multiple stages over the years (Table 1).

**Table 1: Summary of Lake Sturgeon stocking in the lower Nelson River, Burntwood River and upper Split Lake since 2014**

Year	Burntwood River/Split Lake			Keeyask reservoir <sup>a</sup>			Stephens Lake		
	Larvae	Fingerlings	Age-1+	Larvae	Fingerlings	Age-1	Larvae	Fingerlings	Age-1
2014	0	0	595	152,926	4,656	0	0	0	0
2015	0	0	0	0	0	423	0	0	418
2016	0	0	23	192,167	780	0	184,134	799	0
2017	71,740	3,765	0	0	0	463	0	0	720
2018	0	0	739	0	933	0	0	1,009	0
2019	0	3,681	0	0	0	398	0	0	390
2020	0	0	574	0	0	0	0	0	0
2021	0	0	188 <sup>b</sup>	0	0	0	0	1,050	0
2022	0	5,197	0	0	0	402	0	0	400
2023	0	0	795	0	0	0	0	0	0
<b>Total</b>	<b>71,740</b>	<b>12,643</b>	<b>2,914</b>	<b>345,093</b>	<b>6,369</b>	<b>1,686</b>	<b>184,134</b>	<b>2,858</b>	<b>1,928</b>

<sup>a</sup> previously referred to as Gull Lake and the future Keeyask reservoir

<sup>b</sup> two-year old sturgeon

The Keeyask Fisheries Regulatory Review Committee (which also undertakes the role of Lake Sturgeon Advisory Committee as described in the *Environment Act* licence) may decide to modify the stocking plan based on annual monitoring activities.

Lake Sturgeon stocking in the lower Nelson and Burntwood rivers will continue until self-sustaining populations are established. At present, it is anticipated that stocking will occur for at least one full generation (25 years) to restore the historically depleted population.

To meet the goals outlined in the FOMP, the KHLP is stocking Lake Sturgeon hatched at the Grand Rapids Fish Hatchery (GRFH). The hatchery, located in the community of Grand Rapids, MB (Map 1), was constructed in the early 1970’s by the province of Manitoba. The building was originally configured for production of Walleye, Whitefish and a variety of trout species. In 1994, GRFH began producing Lake Sturgeon for the Nelson River Sturgeon Board, in support of efforts to conserve populations in the upper Nelson River.

Manitoba Hydro purchased GRFH in 2007 and the facility was operated in partnership with the Province. At the end of 2012, Manitoba Hydro assumed full operation of the hatchery and currently employs eight permanent and two seasonal staff. Operations and regulatory matters are overseen

by Manitoba Hydro's Generation Environmental Services Department. GRFH recently filled a new permanent position to support on-going maintenance of the facility's expanding infrastructure.

Since 2012, GRFH has focused its production efforts exclusively on Lake Sturgeon and Walleye. Rearing space for the Lake Sturgeon is shared between the two stocking programs: Keeyask Generation Project and the Nelson River Sturgeon Board.

To meet future annual stocking targets, Manitoba Hydro has upgraded and expanded rearing capacity at GRFH. In March 2014, a facility assessment was completed by HDR Inc. which confirmed that the existing infrastructure could not meet projected Lake Sturgeon production commitments. Upgrades were also necessary to attain national and provincial biosecurity standards and recommendations to reduce the risk of pathogens from entering the facility and spreading.

Planning for infrastructure upgrades and expansion of GRFH began at the end of 2014 and managed by Manitoba Hydro's Generation Projects Department. A final design was completed by SNC Lavalin in spring 2019 and a contract was awarded to NME Construction Services in fall 2019.

Pickerel Place (Photo 1), was commissioned in November 2020 and is serving as the interim sturgeon production facility until renovations in the main hatchery building are completed. Commissioning and handover of the main hatchery building was initially attained in October 2021; however, well water issues causing iron and calcium build-up within the new systems has led to the need for additional water treatment equipment. Final commissioning is expected to be completed by spring 2024, after which time Pickerel Place will be dedicated to GRFH's Walleye program.

Pickerel Place houses two separate water recirculating aquaculture systems (identified as System 4000 and 4100), each with two grey rearing troughs measuring 8.1 x 0.9 x 0.5 m (L x W x H; Photo 2). Each tank can be divided into 4 equal sections. The original piping feeding the building with surface water (Cedar Lake) was capped and a new line to bring in well water was installed. Water treatment equipment within the aquaculture systems include drum filter, biofilter, degasser, and UV disinfection. Temperature is controlled using a hot water tank and by adjusting the rate of make-up water added.

Total usable rearing area for Lake Sturgeon in Pickerel Place is approximately 27 m<sup>2</sup>. Rearing space is shared between the two stocking programs: Keeyask Hydropower Limited Partnership and the Nelson River Sturgeon Board.

The purpose of this report is to provide a summary of Lake Sturgeon production at Grand Rapids Fish Hatchery and stocking activities for the Keeyask Hydropower Limited Partnership in 2022/23.

Klassen et al. (2015; 2016; 2017; 2018; 2019; 2020; 2021; 2022; 2023) provides summaries from past years.





**Photo 1:** Water recirculating aquaculture systems in Pickerel Place. System 4000 (Right) and system 4100 (Left).



**Photo 2:** Rearing troughs in Pickerel Place used for interim Lake Sturgeon production. Installation of screens allow each tank to be divided into four sections.

## 2.0 BURNTWOOD RIVER POPULATION (2022 YEAR-CLASS)

### 2.1 PAST PRODUCTION AND STOCKING

Wild Lake Sturgeon adults from the Burntwood River were captured downstream of First Rapids (Map 2) in early June 2022. On June 12 the milt (sperm) from four males (M1, M3, M6, M7) was mixed with the eggs from one female (F1). The total number of eggs brought to GRFH was estimated to be 44,350. The overall percentage of viable eggs was estimated to be 84%. The estimated number of hatched larvae was 37,053.

Monthly survival during the spring and summer months remained at or above 60%. Survival during the month of September exceeded 95%.

On September 26 & 28, a total of 3,458 fingerlings were released into Split Lake with assistance from Manitoba Hydro's boat patrol crew. On September 30, a total of 1,739 fingerlings were released from shore into the Burntwood River at the Orr Creek boat launch.

At the time of the fall stocking, fingerlings had an average total length of 95 mm (range: 76 to 106 mm) and average weight of 3.34 g (range: 1.97 to 4.62 g).

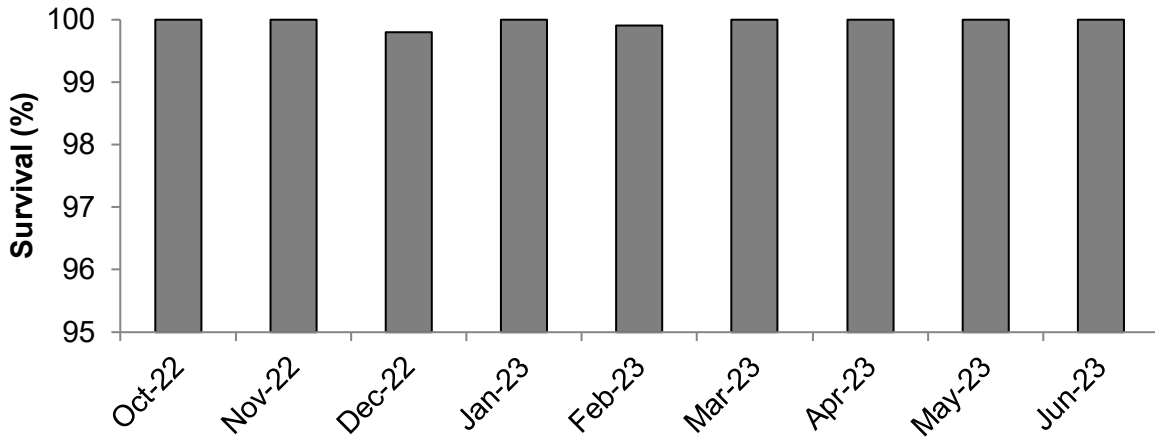
Klassen et al. (2023) provides additional detail on past production and stocking activities for the Burntwood River sturgeon (2022 year-class).

## 2.2 PRODUCTION

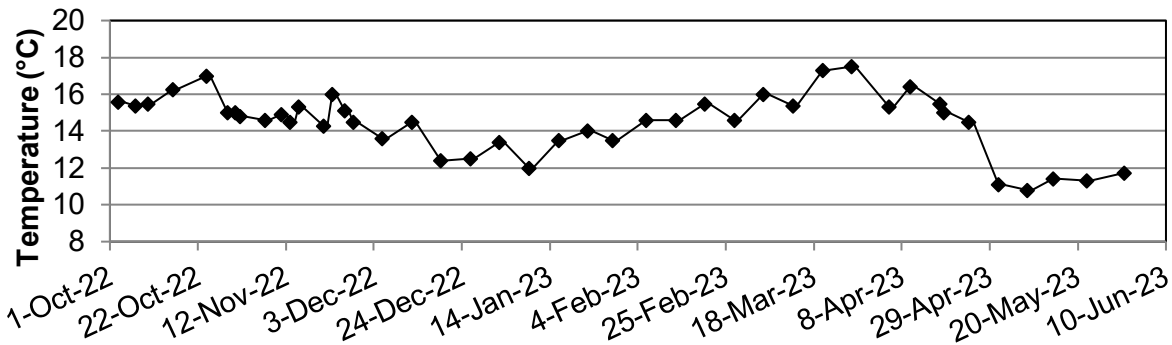
### 2.2.1 WINTER

A total of 800 Lake Sturgeon fingerlings representing four family groups (F1M1, F1M3, F1M6, F1M7) were kept at GRFH over the 2022/23 winter season for further grow-out. Fish were held in Pickerel Place (System 4000). Well water was used exclusively and UV disinfected prior to entering tanks. During the winter grow-out, sturgeon were fed frozen bloodworm twice daily to satiation in the morning and afternoon.

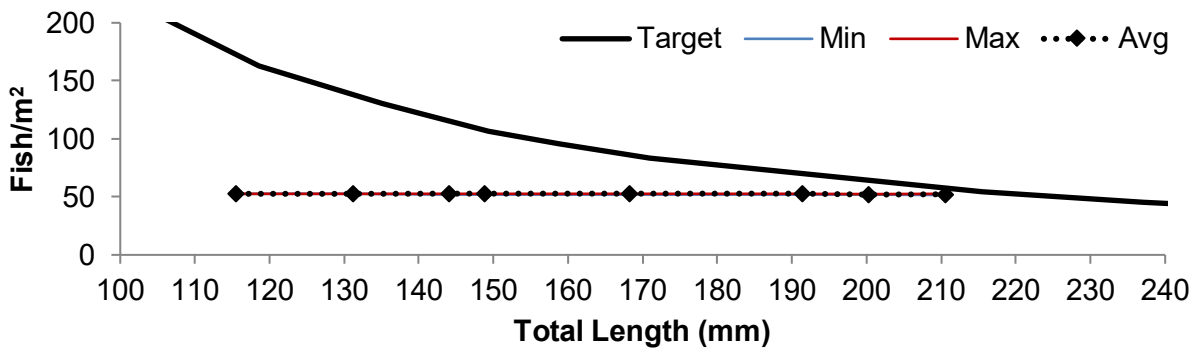
Overwinter survival for the 2022 year-class was 99.6% (Figure 1; Table A1-1). Three fish died naturally (two in December and one in February).



**Figure 1: Monthly survival (%) of Burntwood River sturgeon (2022 year-class) at GRFH from October 1, 2022 to June 1, 2023**



**Figure 2: Water temperatures (°C) in rearing troughs holding Burntwood River sturgeon (2022 year-class) at GRFH from October 1, 2022 to June 1, 2023**

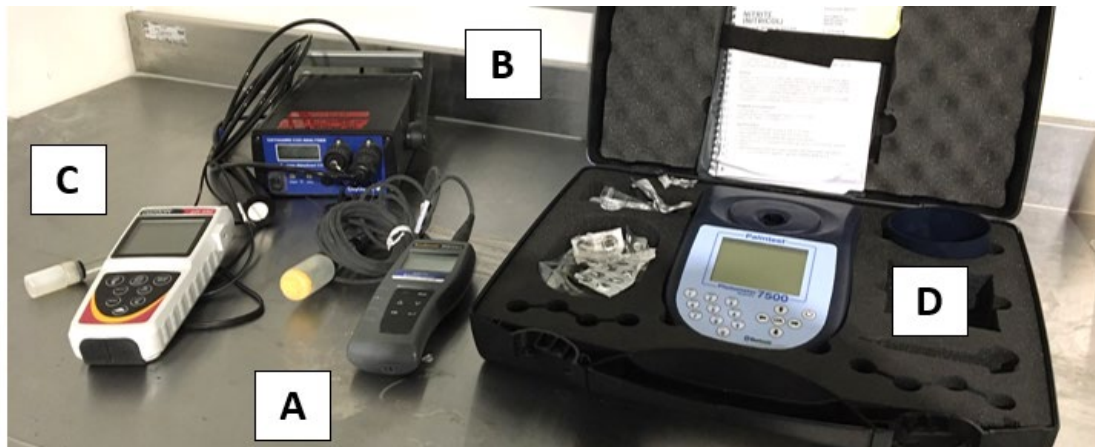


**Figure 3: Average, minimum and maximum rearing density (fish per m²) of Burntwood River sturgeon (2022 year-class) at GRFH from October 1, 2022 to June 1, 2023**

Average tank temperature recorded during water quality assessments was 14.5°C (range: 10.8°C to 17.5°C) from October 1, 2022 to June 1, 2023 (Figure 2).

Average Rearing densities remained at or below historical target levels (Figure 3).

Water quality samples were tested weekly (or more often, if needed) at a system level throughout the winter grow-out period. Measurements included dissolved oxygen (DO; EcoSense DO 200A, Pentair), dissolved carbon dioxide (dCO<sub>2</sub>; GO2P, Oxygaord International), pH (pH450, Oakton Instruments), total ammonia nitrogen (TAN; Photometer 7500, Palintest), un-ionized ammonia (UIA; Calculated by multiplying TAN with a multiplication factor based on temperature and pH, Emerson et al. 1975) and nitrite-nitrogen (NO<sub>2</sub>-N; Photometer 7500, Palintest; Photo 3).

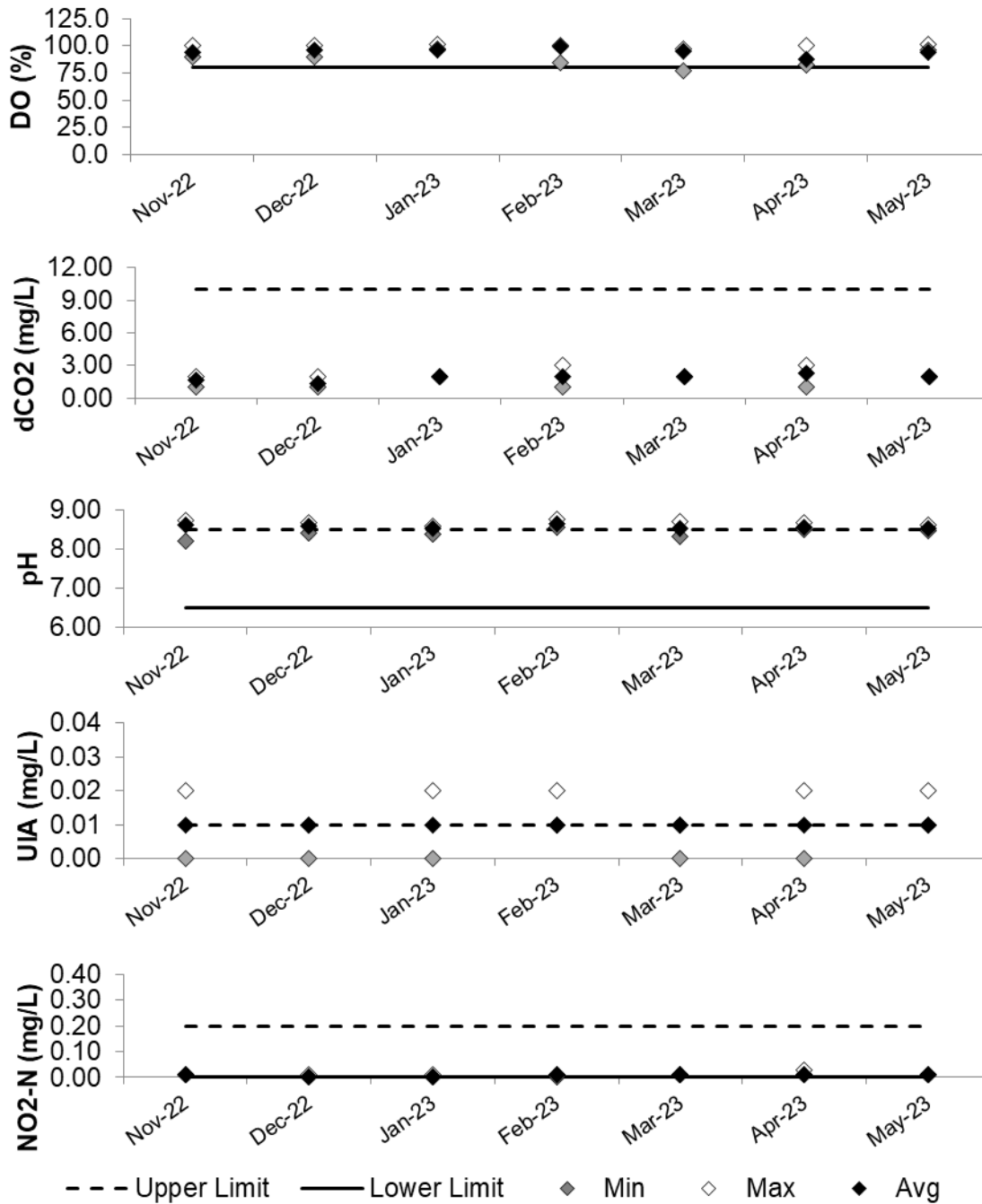


**Photo 3: Equipment used to test dissolved oxygen (A), dissolved carbon dioxide (B), pH (C), total ammonia nitrogen (D) and nitrite-nitrogen (D) at GRFH**

Average, minimum and maximum monthly water quality values, with the exception of TAN, are plotted in Figure 4. A detailed summary of monthly values is presented in Table A1-2. Recommended threshold values for sturgeon production are listed in Table A2-1.

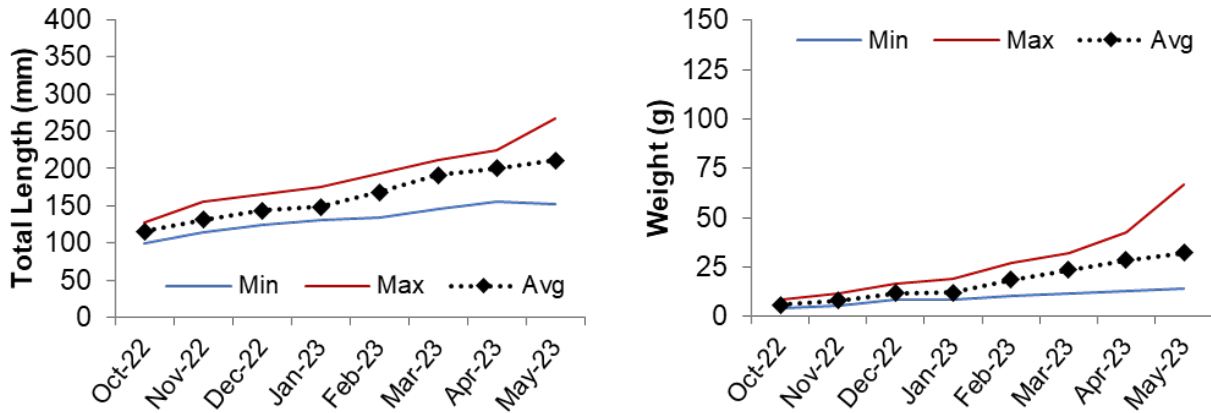
Average monthly values for DO (>80%), dCO<sub>2</sub> (<10 mg/L) and NO<sub>2</sub>-N (<0.2 mg/L) were at or within acceptable limits during winter production. Average monthly values for pH were slightly above recommended thresholds (6.5 to 8.5) throughout most of the winter production and UIA values exceeded recommended limits (<0.01 mg/L) on several occasions. Further upgrades to the hatchery's water treatment equipment are expected to better manage issues associated with the source well water (e.g., iron and mineral build-up within the rearing systems).





**Figure 4: Average, minimum and maximum monthly dissolved oxygen (DO), dissolved carbon dioxide (dCO<sub>2</sub>), pH, un-ionized ammonia (UIA) and nitrite-nitrogen (NO<sub>2</sub>-N) values in the rearing system holding Burntwood River sturgeon (2022 year-class) at GRFH from October 1, 2022 to June 1, 2023**

At the end of each month, 15 Burntwood River sturgeon were randomly selected and measured from each of the four family groups. All fish were measured in mid-May prior to the spring stocking. There was a gradual but steady increase in growth over winter (Figure 5; Table A1-3).



**Figure 5: Average, minimum and maximum total length (mm) and weight (g) for Burntwood River sturgeon (2022 year-class) at GRFH from October 2022 to mid-May 2023**

At the time of the spring stocking, yearlings had reached an overall average fork length of 184 mm (range: 137 to 235 mm), average total length of 211 mm (range: 153 to 267 mm) and average weight of 32.2 g (range: 13.8 to 66.8 g; Figure 5; Table A1-3).

## 2.3 STOCKING

### 2.3.1 SPRING

All Burntwood River sturgeon were marked with uniquely numbered Passive Integrated Transponder (PIT) tags (8 mm long x 1.4 mm diameter) by inserting the tag into the muscle along the fish’s back. This was completed by GRFH staff between April 1-3, 2023 when fish were large enough to undergo the procedure. A PIT tag scanner held over the fish detects the tag and displays the unique number on a screen. This marking technique helps to identify hatchery-reared fish caught in the river and can be used to assess the movement and growth of individual fish following stocking.

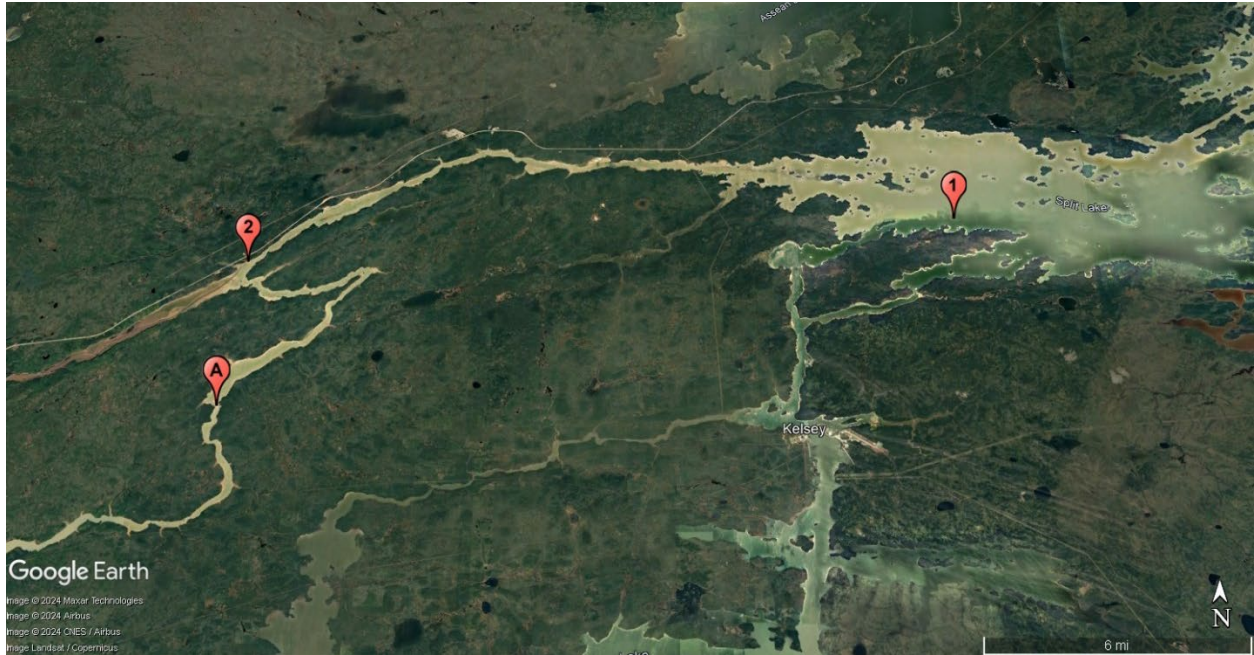
Tissue samples (pectoral fin) were collected from 30 Burntwood River sturgeon on April 12, 2023 and sent to RPC Science & Engineering in Fredericton, New Brunswick. All samples tested negative for Namao Virus using a virus specific qPCR test. Yearlings were cleared by the provincial fish health officer for stocking.

On May 30, 2023 a total of 398 sturgeon yearlings were transported by truck from the Grand Rapids Fish Hatchery to meet Manitoba Hydro's boat patrol crews near the stocking location. Following a period of acclimation, the sturgeon were released by boat into Split Lake at site 1 (Map 2; Table 2; Table A1-4). The river temperature at the release site was 12.8°C.

On June 1, another 397 sturgeon were transported by truck to the Orr Creek boat launch. Following a period of acclimation, the sturgeon were released from shore into the Burntwood River at Site 2 (Photo 4; Map 2; Table 2; Table A1-4). The river temperature at shore was 13.6°C.

**Table 2: Number of Burntwood River sturgeon (2022 year-class) released into the Burntwood River/Split Lake area in spring 2023**

Family	Stocking				
	Date	Number	Age (Mth)	Waterbody	Site ID
F1M1	30-May-23	100	11	Split Lake	1
F1M3	30-May-23	101	11	Split Lake	1
F1M6	30-May-23	98	11	Split Lake	1
F1M7	30-May-23	99	11	Split Lake	1
<b>Total (Site 1)</b>		<b>398</b>			
F1M1	01-Jun-23	99	11	Burntwood River	2
F1M3	01-Jun-23	98	11	Burntwood River	2
F1M6	01-Jun-23	100	11	Burntwood River	2
F1M7	01-Jun-23	100	11	Burntwood River	2
<b>Total (Site 2)</b>		<b>397</b>			



**Map 2:** Stocking location for Burntwood River sturgeon (2022 year-class) released into the Burntwood River/Split Lake area in spring 2023. Broodstock of yearlings were captured downstream of First Rapids, marked 'A'



**Photo 4:** Releasing yearlings into the Burntwood River at the Orr Creek boat launch on June 1, 2023



## 3.0 BIRTHDAY RAPIDS POPULATION (2023 YEAR-CLASS)

### 3.1 SPAWN CAMP

#### 3.1.1 BROODSTOCK COLLECTION

Lake Sturgeon adults were captured from the Nelson River downstream of Birthday Rapids (Map 3) with assistance from North South Consultants. Several milting males were caught between May 28 and June 6; however, no females suitable for use as broodstock were captured.

Male sturgeon were held in a tank set up on shore (photo 5). Average water temperature recorded from the holding tank between May 30 and June 7, 2023 was 12.5°C (range: 9.8 to 13.9°C).

Administration of Gonadotropin Releasing Hormone (GnRH; Product No. H-4070, Bachem Americas, Inc., Torrance, CA, USA) is useful for conservation aquaculture programs because it stimulates the production of sex steroids (estradiol and testosterone) necessary for maturation and production of eggs and milt. Research on the use of GnRH during Lake Sturgeon gamete collection suggests no lasting negative effects on broodstock health or human consumption complications (Genz et al. 2014). However, given that no eggs were available to be fertilized, none of the males were injected with GnRH.

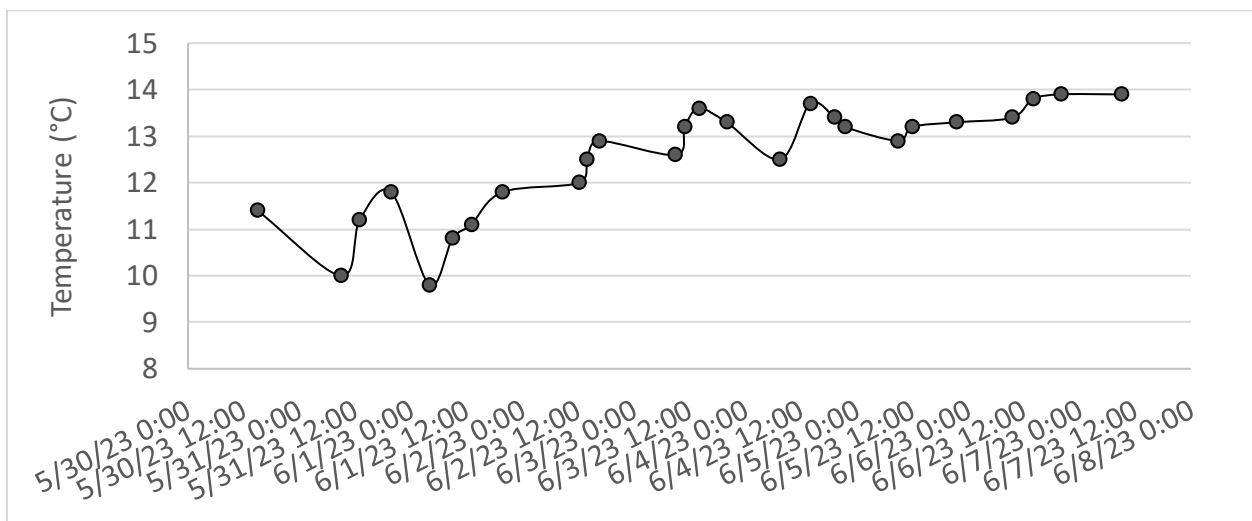
The spawn camp field crew left site on June 8, at which time river temperatures had been over 13°C (the upper limit for spawning) for several days.



**Map 3: Location of Birthday Rapids (A) and the Birthday Rapids Spawn Camp (B)**



**Photo 5: Sturgeon holding tanks at the Birthday Rapids spawn camp, June 2023**



**Figure 6: Water temperature (°C) in the broodstock holding tanks at the Birthday Rapids spawn camp from May 30 to June 7, 2023**

### 3.1.2 BROODSTOCK HEALTH

Netting was secured over the holding tanks (Photo 5) to prevent captured sturgeon from jumping out onto the ground.

All males held at the spawn camp were released back into the river within seven days of capture and appeared to be in good health.

## 4.0 POST-STOCKING RECAPTURES

A total of 6,528 Age-1+ Lake Sturgeon have been stocked into the lower Nelson and Burntwood rivers since 2014 (Burntwood River/Split Lake = 2,914; Keeyask reservoir = 1,686; Stephens Lake = 1,928). PIT tags injected into the sturgeon prior to release has allowed identification of 849 hatchery-reared fish from post-stocking monitoring in the Keeyask Study Area since 2014 (Table 3).

The majority of hatchery-reared sturgeon have been recaptured in Stephens Lake (52%, n = 445). Of these fish, 346 sturgeon were originally stocked into Stephens Lake (2015 = 80; 2017 = 67, 2019 = 184, 2022 = 15) with 98 sturgeon having been stocked upstream. Of these 98 fish, 93 sturgeon were stocked into what is now the Keeyask reservoir (2015 = 18; 2017 = 21; 2019 = 45, 2022 = 9) and five sturgeon were stocked into the Burntwood River (2014 = 1; 2018 = 3, 2021 = 1). The stocking location of one hatchery-reared fish recaptured in Stephens Lake during the 2019 monitoring program is unknown and was either stocked into Stephens Lake or the Keeyask reservoir in 2019. Annual survival of hatchery-reared sturgeon stocked as yearlings in Stephens Lake is currently estimated to be 86% (Dowd and Hrenchuk 2024).

The second most hatchery-reared fish have been recaptured in the Keeyask reservoir (39%, n = 332). Most of these fish were originally stocked in the Keeyask reservoir (2015 = 95; 2017 = 72; 2019 = 115, 2022 = 34), with the exception of 16 individuals that were stocked upstream in the Burntwood River (2014 = 13; 2018 = 3). Annual survival of hatchery-reared sturgeon stocked as yearlings in the Keeyask reservoir is currently estimated to be 95% (Dowd and Hrenchuk 2024).

The least number of hatchery-reared fish recaptured to date has been in the Burntwood River and upper Split Lake area (9%, n = 72). All were stocked into the Burntwood River (2014 = 20; 2016 = 3; 2018 = 39; 2020 = 7, 2021 = 3). Annual survival of hatchery-reared sturgeon stocked as yearlings in the upper Split Lake area is estimated to be 92% (Burnett et al. 2023).

Individuals from all year-classes produced at the Grand Rapids Fish Hatchery (aged 1+) have been recaptured, with the exception of the most recently released 2022 year-class. Over the course of the monitoring program:

- 4% (n = 34) were from the 2013 year-class,
- 23% (n = 193) from the 2014 year-class,
- <1% (n = 3) from the 2015 year-class,
- 19% (n = 160) from the 2016 year-class,
- 5% (n = 45) from the 2017 year-class,
- 41% (n = 345) from the 2018 year class
- 1% (n = 11) from the 2019 year-class, and
- 7% (n = 58) from the 2021 year-class.

At the time of recapture:

- 22% (n = 185) were age-1,
- 14% (n = 115) were age-2,
- 18% (n = 157) were age-3,
- 11% (n = 94) were age-4,
- 16% (n = 137) were age-5,
- 5% (n = 46) were age-6,
- 7% (n = 60) were age-7,
- 3% (n = 25) were age-8,
- 3% (n = 27) were age-9; and
- <1% (n = 3) were age-10.

Additional information about recaptured hatchery-reared sturgeon can be found in Henderson et al. (2015), Burnett et al. (2016; 2017; 2018; 2021; 2022; 2023), Burnett and Hrenchuk (2019; 2020) and Dowd and Hrenchuk (2024).



**Table 3: Number of PIT tagged hatchery-reared Lake Sturgeon stocked into the lower Nelson River, Burntwood River and upper Split Lake and number recaptured between 2014 and 2023**

Sample Year	Location <sup>a</sup>	Number Stocked	Number Recaptured										TOTAL
			Age 1	Age 2	Age 3	Age 4	Age 5	Age 6	Age 7	Age 8	Age 9	Age 10	
2023	STL	0	0	18	0	0	28	0	9	0	5	0	<b>60</b>
	GL/KR	0	0	18	0	0	35	0	13	0	15	3	<b>84</b>
	BWR/SPL	795	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	<b>n/a</b>
2022	STL	400	6	0	1	42	2	12	0	9	0	n/a	<b>72</b>
	GL/KR	402	16	0	0	12	0	6	0	13	1	n/a	<b>48</b>
	BWR/SPL	0	0	0	9	0	19	0	1	0	6	n/a	<b>35</b>
2021	STL	0	0	0	51	0	9	0	9	0	n/a	n/a	<b>69</b>
	GL/KR	0	0	0	24	1	8	0	21	3	n/a	n/a	<b>57</b>
	BWR/SPL	188	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	<b>n/a</b>
2020	STL	0	0	25	1	5	0	18	0	n/a	n/a	n/a	<b>49</b>
	GL/KR	0	0	17	0	12	0	6	1	n/a	n/a	n/a	<b>36</b>
	BWR/SPL	574	1	0	12	0	2	0	6	n/a	n/a	n/a	<b>21</b>
2019	STL	390	84	0	13	0	20	1	n/a	n/a	n/a	n/a	<b>118</b>
	GL/KR	398	27	1	16	0	12	1	n/a	n/a	n/a	n/a	<b>57</b>
	BWR/SPL	0	0	8	0	0	0	2	n/a	n/a	n/a	n/a	<b>10</b>
2018	STL	0	0	7	0	10	0	n/a	n/a	n/a	n/a	n/a	<b>17</b>
	GL/KR	0	1	8	0	8	1	n/a	n/a	n/a	n/a	n/a	<b>18</b>
	BWR/SPL	739	0	0	0	0	1	n/a	n/a	n/a	n/a	n/a	<b>1</b>
2017	STL	720	33	0	18	0	n/a	n/a	n/a	n/a	n/a	n/a	<b>51</b>
	GL/KR	463	9	0	11	1	n/a	n/a	n/a	n/a	n/a	n/a	<b>21</b>
	BWR/SPL	0	0	0	0	3	n/a	n/a	n/a	n/a	n/a	n/a	<b>3</b>
2016	STL	0	0	5	0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	<b>5</b>
	GL/KR	0	0	7	0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	<b>7</b>
	BWR/SPL	23	0	0	1	n/a	n/a	n/a	n/a	n/a	n/a	n/a	<b>1</b>
2015	STL	418	4	0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	<b>4</b>
	GL/KR	423	2	1	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	<b>3</b>
	BWR/SPL	0	0	0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	<b>0</b>
2014	STL	0	0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	<b>0</b>
	GL/KR	0	1	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	<b>1</b>
	BWR/SPL	595	1	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	<b>1</b>
<b>TOTAL</b>		<b>6,528</b>	<b>185</b>	<b>115</b>	<b>157</b>	<b>94</b>	<b>137</b>	<b>46</b>	<b>60</b>	<b>25</b>	<b>27</b>	<b>3</b>	<b>849</b>

<sup>a</sup> STL = Stephens Lake; GL/KR = Gull Lake/Keeyask reservoir; BWR/SPL = Burntwood River/Split Lake

## 5.0 PRODUCTION AND STOCKING ACTIVITIES IN 2024/25

Grand Rapids Fish Hatchery did not produce Lake Sturgeon for the Keeyask Hydropower Limited Partnership in 2023/24 due to no suitable female being captured near Birthday Rapids during spring gillnetting efforts. As such, no sturgeon are available to be stocked as yearlings in spring 2024. Planning is underway to ensure the best possible chance of collecting eggs in spring 2024.

The new water recirculating systems in the main hatchery building were commissioned in fall 2021; however, issues with the source well water (e.g., iron and calcium scale) has prevented operations from moving back into the main hatchery building. Additional water treatment options were assessed by the project team over the course of 2022. Following additional upgrades including the installation of a hydrogen peroxide dosing system, water chillers and variable frequency drives (VFDs) on the blowers (i.e., air supply to biofilters) operations are planned to resume in the main building by spring 2024.

## 6.0 SUMMARY AND CONCLUSIONS

A total of 795 Burntwood River yearlings consisting of four family groups (F1M1, F1M3, F1M6, F1M7) were released into the Burntwood River (397) and upper Split Lake area (398) in spring 2023. No offspring from the 2023 year-class were produced at Grand Rapids Fish Hatchery due to no gravid females being captured downstream of Birthday Rapids. As a result, there were no fingerlings stocked in the Keeyask area or sturgeon available to retain for release as yearlings in spring 2024.

Stocking activities for the construction and operation of the Keeyask Generating Station will continue until self-sustaining populations are present in the Keeyask and upper Split Lake areas. Assessment of the program is on-going in order to meet this objective. Results from juvenile monitoring programs indicate high survival of the hatchery-reared sturgeon stocked as yearlings but there is little evidence to support survival of the released fingerlings. As such the program will continue to focus on the production and release of yearlings.

Upgrades to the Grand Rapids Fish Hatchery is on-going with completion expected by spring 2024. Once completed, there will be capacity to produce greater numbers of yearlings for stocking.

GRFH filled a new permanent position to support on-going maintenance of the facility's expanding infrastructure.

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# **APPENDIX 1: BURNTWOOD RIVER (2022 YEAR-CLASS)**

**Table A1-1: Survival (%) of Burntwood River sturgeon (2022 year-class) at GRFH from October 1, 2022 to June 1, 2023**

LOT	Tanks <sup>1</sup>	Month-Year	Start of Month Total	Mortality			Transfer		Recount Adjustment	End of Month Total	Survival (%)
				Natural	Accidental	Euthanized	Stocking	Other			
LKST-BWR-22	2	Oct-22	800	0	0	0	0	0	0	800	100.0
LKST-BWR-22	2	Nov-22	800	0	0	0	0	0	0	800	100.0
LKST-BWR-22	2	Dec-22	800	2	0	0	0	0	0	798	99.8
LKST-BWR-22	2	Jan-23	798	0	0	0	0	0	0	798	100.0
LKST-BWR-22	2	Feb-23	798	1	0	0	0	0	0	797	99.9
LKST-BWR-22	2	Mar-23	797	0	0	0	0	0	0	797	100.0
LKST-BWR-22	2	Apr-23	797	0	0	0	0	0	2(-)	795	100.0
LKST-BWR-22	2	May-23	795	0	0	0	398 <sup>2</sup>	0	0	397	100.0
LKST-BWR-22	2	Jun-23	397	0	0	0	397 <sup>3</sup>	0	0	0	100.0
Total			798	3	0	0	795	0	2(-)	0	99.6

1. Pickerel Place: PP1-a/b (F1M1), PP1-c/d (F1M3), PP2-a/b (F1M6), PP2-c/d (F1M7)
2. Stocked into Split Lake
3. Stocked into Burntwood River



**Table A1-2: Monthly average ( $\pm$ SD), minimum and maximum Dissolved Oxygen (%), Dissolved Carbon Dioxide (mg/L), pH, Total Ammonia-Nitrogen (mg/L), Un-Ionized Ammonia (mg/L) and Nitrite Nitrogen (mg/L) values for Burntwood River sturgeon (2022 year-class) reared at Grand Rapids Fish Hatchery**

Parameter	Mth-Yr	n <sup>1</sup>	Mean	$\pm$ SD	Min	Max
<b>Dissolved O<sub>2</sub> (%)</b>	Oct-22	8	94.28	6.38	82.50	100.80
	Nov-22	9	96.07	3.74	89.80	100.90
	Dec-22	12	96.58	4.15	89.50	100.00
	Jan-23	5	99.82	1.35	97.30	101.00
	Feb-23	4	95.38	6.19	84.90	100.00
	Mar-23	3	87.77	8.52	76.90	97.70
	Apr-23	4	94.28	6.69	82.90	99.90
	May-23	4	99.00	2.20	95.80	101.90
<b>Dissolved CO<sub>2</sub> (mg/L)</b>	Oct-22	5	2.00	0.00	2.00	2.00
	Nov-22	8	1.63	0.48	1.00	2.00
	Dec-22	3	1.33	0.47	1.00	2.00
	Jan-23	5	2.00	0.00	2.00	2.00
	Feb-23	4	2.00	0.71	1.00	3.00
	Mar-23	4	2.00	0.00	2.00	2.00
	Apr-23	3	2.33	0.94	1.00	3.00
	May-23	3	2.00	0.00	2.00	2.00
<b>pH</b>	Oct-22	8	8.58	0.19	8.10	8.72
	Nov-22	9	8.61	0.15	8.20	8.74
	Dec-22	4	8.58	0.09	8.42	8.67
	Jan-23	5	8.53	0.09	8.39	8.60
	Feb-23	4	8.66	0.07	8.57	8.76
	Mar-23	4	8.54	0.13	8.33	8.70
	Apr-23	4	8.55	0.07	8.49	8.67
	May-23	4	8.54	0.06	8.47	8.62
<b>Total Ammonia (mg/L)</b>	Oct-22	8	0.090	0.020	0.070	0.120
	Nov-22	9	0.100	0.030	0.070	0.170
	Dec-22	4	0.100	0.010	0.080	0.110
	Jan-23	5	0.100	0.040	0.060	0.180
	Feb-23	4	0.100	0.030	0.060	0.130
	Mar-23	4	0.100	0.020	0.080	0.130
	Apr-23	4	0.110	0.020	0.090	0.130
	May-23	4	0.150	0.050	0.100	0.220
<b>UIA (mg/L)</b>	Oct-22	8	0.010	0.000	0.000	0.010
	Nov-22	9	0.010	0.000	0.000	0.020
	Dec-22	4	0.010	0.000	0.000	0.010
	Jan-23	5	0.010	0.000	0.000	0.020

<b>Parameter</b>	<b>Mth-Yr</b>	<b>n<sup>1</sup></b>	<b>Mean</b>	<b>± SD</b>	<b>Min</b>	<b>Max</b>
<b>Nitrite Nitrogen (mg/L)</b>	Feb-23	4	0.010	0.000	0.010	0.020
	Mar-23	4	0.010	0.000	0.000	0.010
	Apr-23	5	0.010	0.010	0.000	0.020
	May-23	4	0.010	0.000	0.010	0.020
	Oct-22	8	0.010	0.010	0.010	0.020
	Nov-22	9	0.010	0.000	0.010	0.010
	Dec-22	4	0.000	0.000	0.000	0.010
	Jan-23	5	0.000	0.000	0.000	0.010
	Feb-23	3	0.010	0.000	0.000	0.010
	Mar-23	4	0.010	0.000	0.010	0.010
	Apr-23	4	0.010	0.010	0.010	0.030
	May-23	4	0.010	0.000	0.010	0.010

1. Number of samples analyzed per month

**Table A1-3: Monthly average ( $\pm$ SD), minimum and maximum fork length (mm), total length (mm) and weight (g) for Burntwood River sturgeon (2022 year-class) reared at Grand Rapids Fish Hatchery**

Measurement	Mth-Yr	n <sup>1</sup>	Mean	$\pm$ SD	Min	Max
<b>Fork Length (mm)</b>	Oct-22	60	100	6	86	111
	Nov-22	60	114	6	99	135
	Dec-22	60	127	7	110	147
	Jan-23	60	130	7	115	153
	Feb-23	60	147	12	118	172
	Mar-23	60	165	10	124	184
	Apr-23	60	180	14	140	205
	May-23	795	184	15	137	235
<b>Total Length (mm)</b>	Oct-22	60	116	7	100	127
	Nov-22	60	131	7	114	155
	Dec-22	60	144	8	125	165
	Jan-23	60	149	8	131	176
	Feb-23	60	168	14	135	194
	Mar-23	60	191	12	145	211
	Apr-23	60	200	15	155	225
	May-23	795	211	17	153	267
<b>Weight (g)</b>	Oct-22	60	5.81	0.96	3.85	8.17
	Nov-22	60	7.99	1.25	5.23	11.72
	Dec-22	60	11.73	1.68	8.30	16.53
	Jan-23	60	12.10	1.79	8.36	19.06
	Feb-23	60	18.47	4.01	10.22	27.05
	Mar-23	60	23.39	3.81	11.35	31.84
	Apr-23	60	28.44	5.97	12.49	42.55
	May-23	795	32.23	7.45	13.78	66.80

1. Number of fish measured

**Table A1-4: Biological and PIT tag information for hatchery-reared Lake Sturgeon yearlings released into the Burntwood River and upper Split Lake area in 2023, including final hatchery measurements and stocking information.**

DEC Tag ID	Lot	Family	Date	Fork Length (mm)	Total Length (mm)	Weight (g)	Date	Waterbody	Site
900.043000247912	BWR_22	F1M1	5/19/2023	193	223	36.96	5/30/2023	Split Lake	1
900.043000247917	BWR_22	F1M1	5/19/2023	183	210	32.02	5/30/2023	Split Lake	1
900.043000247919	BWR_22	F1M1	5/19/2023	188	213	32.21	5/30/2023	Split Lake	1
900.043000247920	BWR_22	F1M1	5/19/2023	184	208	30.60	5/30/2023	Split Lake	1
900.043000247921	BWR_22	F1M1	5/19/2023	180	208	30.60	5/30/2023	Split Lake	1
900.043000247924	BWR_22	F1M1	5/19/2023	202	232	42.98	5/30/2023	Split Lake	1
900.043000247925	BWR_22	F1M1	5/19/2023	193	218	46.21	5/30/2023	Split Lake	1
900.043000247930	BWR_22	F1M1	5/19/2023	170	197	24.97	5/30/2023	Split Lake	1
900.043000247931	BWR_22	F1M1	5/19/2023	180	207	30.41	5/30/2023	Split Lake	1
900.043000247932	BWR_22	F1M1	5/19/2023	177	203	29.64	5/30/2023	Split Lake	1
900.043000247933	BWR_22	F1M1	5/19/2023	214	245	51.63	5/30/2023	Split Lake	1
900.043000247935	BWR_22	F1M1	5/19/2023	182	210	33.55	5/30/2023	Split Lake	1
900.043000247938	BWR_22	F1M1	5/19/2023	192	217	38.20	5/30/2023	Split Lake	1
900.043000247939	BWR_22	F1M1	5/19/2023	184	214	36.27	5/30/2023	Split Lake	1
900.043000247944	BWR_22	F1M1	5/19/2023	185	214	33.64	5/30/2023	Split Lake	1
900.043000247945	BWR_22	F1M1	5/19/2023	157	178	19.26	5/30/2023	Split Lake	1
900.043000247948	BWR_22	F1M1	5/19/2023	173	198	23.76	5/30/2023	Split Lake	1
900.043000247949	BWR_22	F1M1	5/19/2023	187	215	36.15	5/30/2023	Split Lake	1
900.043000247950	BWR_22	F1M1	5/19/2023	176	205	30.62	5/30/2023	Split Lake	1
900.043000247951	BWR_22	F1M1	5/19/2023	192	220	37.57	5/30/2023	Split Lake	1
900.043000247952	BWR_22	F1M1	5/19/2023	190	217	35.01	5/30/2023	Split Lake	1
900.043000247953	BWR_22	F1M1	5/19/2023	177	204	29.50	5/30/2023	Split Lake	1
900.043000247956	BWR_22	F1M1	5/19/2023	180	207	27.03	5/30/2023	Split Lake	1
900.043000247961	BWR_22	F1M1	5/19/2023	190	214	33.37	5/30/2023	Split Lake	1
900.043000247966	BWR_22	F1M1	5/19/2023	180	208	32.21	5/30/2023	Split Lake	1
900.043000247967	BWR_22	F1M1	5/19/2023	175	198	28.46	5/30/2023	Split Lake	1



DEC Tag ID	Lot	Family	Date	Fork Length (mm)	Total Length (mm)	Weight (g)	Date	Waterbody	Site
900.043000247968	BWR_22	F1M1	5/19/2023	163	184	24.05	5/30/2023	Split Lake	1
900.043000247969	BWR_22	F1M1	5/19/2023	190	217	38.23	5/30/2023	Split Lake	1
900.043000247971	BWR_22	F1M1	5/19/2023	198	228	43.46	5/30/2023	Split Lake	1
900.043000247972	BWR_22	F1M1	5/19/2023	188	218	34.56	5/30/2023	Split Lake	1
900.043000247973	BWR_22	F1M1	5/19/2023	168	194	24.26	5/30/2023	Split Lake	1
900.043000247975	BWR_22	F1M1	5/19/2023	190	217	33.11	5/30/2023	Split Lake	1
900.043000247977	BWR_22	F1M1	5/19/2023	187	213	31.88	5/30/2023	Split Lake	1
900.043000247980	BWR_22	F1M1	5/19/2023	182	204	30.44	5/30/2023	Split Lake	1
900.043000247983	BWR_22	F1M1	5/19/2023	178	207	29.08	5/30/2023	Split Lake	1
900.043000247984	BWR_22	F1M1	5/19/2023	190	217	34.70	5/30/2023	Split Lake	1
900.043000247987	BWR_22	F1M1	5/19/2023	176	204	28.99	5/30/2023	Split Lake	1
900.043000247990	BWR_22	F1M1	5/19/2023	167	190	25.39	5/30/2023	Split Lake	1
900.043000247991	BWR_22	F1M1	5/19/2023	197	223	36.13	5/30/2023	Split Lake	1
900.043000247992	BWR_22	F1M1	5/19/2023	166	190	25.07	5/30/2023	Split Lake	1
900.043000247993	BWR_22	F1M1	5/19/2023	200	225	38.77	5/30/2023	Split Lake	1
900.043000247994	BWR_22	F1M1	5/19/2023	180	202	29.05	5/30/2023	Split Lake	1
900.043000247995	BWR_22	F1M1	5/19/2023	196	223	36.45	5/30/2023	Split Lake	1
900.043000247999	BWR_22	F1M1	5/19/2023	184	210	30.71	5/30/2023	Split Lake	1
900.043000248002	BWR_22	F1M1	5/19/2023	150	173	18.94	5/30/2023	Split Lake	1
900.043000248005	BWR_22	F1M1	5/19/2023	178	201	28.12	5/30/2023	Split Lake	1
900.043000248006	BWR_22	F1M1	5/19/2023	173	201	27.20	5/30/2023	Split Lake	1
900.043000248010	BWR_22	F1M1	5/19/2023	202	233	43.11	5/30/2023	Split Lake	1
900.043000248011	BWR_22	F1M1	5/19/2023	200	226	29.60	5/30/2023	Split Lake	1
900.043000248115	BWR_22	F1M1	5/19/2023	173	198	26.73	5/30/2023	Split Lake	1
900.043000248117	BWR_22	F1M1	5/19/2023	184	208	34.14	5/30/2023	Split Lake	1
900.043000248119	BWR_22	F1M1	5/19/2023	195	220	34.71	5/30/2023	Split Lake	1
900.043000248120	BWR_22	F1M1	5/19/2023	190	213	33.00	5/30/2023	Split Lake	1
900.043000248121	BWR_22	F1M1	5/19/2023	185	210	31.33	5/30/2023	Split Lake	1

DEC Tag ID	Lot	Family	Date	Fork Length (mm)	Total Length (mm)	Weight (g)	Date	Waterbody	Site
900.043000248123	BWR_22	F1M1	5/19/2023	197	222	35.70	5/30/2023	Split Lake	1
900.043000248124	BWR_22	F1M1	5/19/2023	190	218	38.30	5/30/2023	Split Lake	1
900.043000248127	BWR_22	F1M1	5/19/2023	185	210	29.46	5/30/2023	Split Lake	1
900.043000248128	BWR_22	F1M1	5/19/2023	190	214	34.26	5/30/2023	Split Lake	1
900.043000248130	BWR_22	F1M1	5/19/2023	195	220	34.13	5/30/2023	Split Lake	1
900.043000248132	BWR_22	F1M1	5/19/2023	197	228	36.92	5/30/2023	Split Lake	1
900.043000248133	BWR_22	F1M1	5/19/2023	212	243	45.87	5/30/2023	Split Lake	1
900.043000248134	BWR_22	F1M1	5/19/2023	205	238	49.12	5/30/2023	Split Lake	1
900.043000248135	BWR_22	F1M1	5/19/2023	160	181	21.96	5/30/2023	Split Lake	1
900.043000248140	BWR_22	F1M1	5/19/2023	180	206	33.91	5/30/2023	Split Lake	1
900.043000248141	BWR_22	F1M1	5/19/2023	183	206	30.07	5/30/2023	Split Lake	1
900.043000248144	BWR_22	F1M1	5/19/2023	170	191	22.85	5/30/2023	Split Lake	1
900.043000248145	BWR_22	F1M1	5/19/2023	162	187	23.44	5/30/2023	Split Lake	1
900.043000248146	BWR_22	F1M1	5/19/2023	180	206	28.24	5/30/2023	Split Lake	1
900.043000248148	BWR_22	F1M1	5/19/2023	198	223	36.57	5/30/2023	Split Lake	1
900.043000248149	BWR_22	F1M1	5/19/2023	175	201	25.03	5/30/2023	Split Lake	1
900.043000248151	BWR_22	F1M1	5/19/2023	165	190	23.63	5/30/2023	Split Lake	1
900.043000248152	BWR_22	F1M1	5/19/2023	195	222	37.05	5/30/2023	Split Lake	1
900.043000248153	BWR_22	F1M1	5/19/2023	195	222	35.03	5/30/2023	Split Lake	1
900.043000248156	BWR_22	F1M1	5/19/2023	173	198	26.07	5/30/2023	Split Lake	1
900.043000248158	BWR_22	F1M1	5/19/2023	185	210	32.45	5/30/2023	Split Lake	1
900.043000248162	BWR_22	F1M1	5/19/2023	184	207	31.60	5/30/2023	Split Lake	1
900.043000248163	BWR_22	F1M1	5/19/2023	182	207	30.65	5/30/2023	Split Lake	1
900.043000248164	BWR_22	F1M1	5/19/2023	172	195	25.09	5/30/2023	Split Lake	1
900.043000248167	BWR_22	F1M1	5/19/2023	202	230	40.51	5/30/2023	Split Lake	1
900.043000248168	BWR_22	F1M1	5/19/2023	210	238	48.39	5/30/2023	Split Lake	1
900.043000248170	BWR_22	F1M1	5/19/2023	187	212	34.00	5/30/2023	Split Lake	1
900.043000248171	BWR_22	F1M1	5/19/2023	210	238	42.40	5/30/2023	Split Lake	1



DEC Tag ID	Lot	Family	Date	Fork Length (mm)	Total Length (mm)	Weight (g)	Date	Waterbody	Site
900.043000248174	BWR_22	F1M1	5/19/2023	190	218	35.10	5/30/2023	Split Lake	1
900.043000248176	BWR_22	F1M1	5/19/2023	187	216	31.53	5/30/2023	Split Lake	1
900.043000248179	BWR_22	F1M1	5/19/2023	175	203	27.52	5/30/2023	Split Lake	1
900.043000248182	BWR_22	F1M1	5/19/2023	212	245	51.50	5/30/2023	Split Lake	1
900.043000248184	BWR_22	F1M1	5/19/2023	192	223	39.56	5/30/2023	Split Lake	1
900.043000248185	BWR_22	F1M1	5/19/2023	168	195	26.15	5/30/2023	Split Lake	1
900.043000248188	BWR_22	F1M1	5/19/2023	192	223	38.46	5/30/2023	Split Lake	1
900.043000248194	BWR_22	F1M1	5/19/2023	192	214	33.32	5/30/2023	Split Lake	1
900.043000248195	BWR_22	F1M1	5/19/2023	190	217	35.12	5/30/2023	Split Lake	1
900.043000248196	BWR_22	F1M1	5/19/2023	185	215	36.84	5/30/2023	Split Lake	1
900.043000248197	BWR_22	F1M1	5/19/2023	186	218	37.48	5/30/2023	Split Lake	1
900.043000248199	BWR_22	F1M1	5/19/2023	183	208	30.11	5/30/2023	Split Lake	1
900.043000248202	BWR_22	F1M1	5/19/2023	178	206	31.08	5/30/2023	Split Lake	1
900.043000248203	BWR_22	F1M1	5/19/2023	190	220	36.73	5/30/2023	Split Lake	1
900.043000248204	BWR_22	F1M1	5/19/2023	194	221	36.86	5/30/2023	Split Lake	1
900.043000248205	BWR_22	F1M1	5/19/2023	177	208	29.43	5/30/2023	Split Lake	1
900.043000248208	BWR_22	F1M1	5/19/2023	180	206	27.52	5/30/2023	Split Lake	1
900.043000248210	BWR_22	F1M1	5/19/2023	203	230	42.42	5/30/2023	Split Lake	1
900.043000247812	BWR_22	F1M3	5/20/2023	148	174	17.51	5/30/2023	Split Lake	1
900.043000247814	BWR_22	F1M3	5/20/2023	182	209	31.04	5/30/2023	Split Lake	1
900.043000247820	BWR_22	F1M3	5/20/2023	149	175	18.50	5/30/2023	Split Lake	1
900.043000247821	BWR_22	F1M3	5/20/2023	193	220	36.21	5/30/2023	Split Lake	1
900.043000247822	BWR_22	F1M3	5/20/2023	186	210	36.24	5/30/2023	Split Lake	1
900.043000247824	BWR_22	F1M3	5/20/2023	170	196	24.65	5/30/2023	Split Lake	1
900.043000247825	BWR_22	F1M3	5/20/2023	174	196	26.92	5/30/2023	Split Lake	1
900.043000247826	BWR_22	F1M3	5/20/2023	163	187	21.82	5/30/2023	Split Lake	1
900.043000247827	BWR_22	F1M3	5/20/2023	167	193	24.13	5/30/2023	Split Lake	1
900.043000247829	BWR_22	F1M3	5/20/2023	164	189	23.15	5/30/2023	Split Lake	1



DEC Tag ID	Lot	Family	Date	Fork Length (mm)	Total Length (mm)	Weight (g)	Date	Waterbody	Site
900.043000247832	BWR_22	F1M3	5/20/2023	164	190	23.11	5/30/2023	Split Lake	1
900.043000247834	BWR_22	F1M3	5/20/2023	167	192	25.15	5/30/2023	Split Lake	1
900.043000247838	BWR_22	F1M3	5/20/2023	139	162	14.41	5/30/2023	Split Lake	1
900.043000247839	BWR_22	F1M3	5/20/2023	185	210	32.25	5/30/2023	Split Lake	1
900.043000247842	BWR_22	F1M3	5/20/2023	189	217	36.44	5/30/2023	Split Lake	1
900.043000247850	BWR_22	F1M3	5/20/2023	158	179	22.75	5/30/2023	Split Lake	1
900.043000247852	BWR_22	F1M3	5/20/2023	161	186	23.71	5/30/2023	Split Lake	1
900.043000247854	BWR_22	F1M3	5/20/2023	165	192	23.73	5/30/2023	Split Lake	1
900.043000247857	BWR_22	F1M3	5/20/2023	192	220	34.93	5/30/2023	Split Lake	1
900.043000247858	BWR_22	F1M3	5/20/2023	153	175	19.56	5/30/2023	Split Lake	1
900.043000247859	BWR_22	F1M3	5/20/2023	183	208	32.00	5/30/2023	Split Lake	1
900.043000247861	BWR_22	F1M3	5/20/2023	182	205	30.76	5/30/2023	Split Lake	1
900.043000247870	BWR_22	F1M3	5/20/2023	161	188	24.35	5/30/2023	Split Lake	1
900.043000247872	BWR_22	F1M3	5/20/2023	181	209	30.91	5/30/2023	Split Lake	1
900.043000247875	BWR_22	F1M3	5/20/2023	177	200	28.00	5/30/2023	Split Lake	1
900.043000247876	BWR_22	F1M3	5/20/2023	162	186	23.12	5/30/2023	Split Lake	1
900.043000247877	BWR_22	F1M3	5/20/2023	178	204	29.62	5/30/2023	Split Lake	1
900.043000247879	BWR_22	F1M3	5/20/2023	170	196	25.60	5/30/2023	Split Lake	1
900.043000247880	BWR_22	F1M3	5/20/2023	163	189	22.09	5/30/2023	Split Lake	1
900.043000247881	BWR_22	F1M3	5/20/2023	210	245	46.57	5/30/2023	Split Lake	1
900.043000247884	BWR_22	F1M3	5/20/2023	163	185	23.61	5/30/2023	Split Lake	1
900.043000247885	BWR_22	F1M3	5/20/2023	158	182	20.58	5/30/2023	Split Lake	1
900.043000247887	BWR_22	F1M3	5/20/2023	190	215	35.74	5/30/2023	Split Lake	1
900.043000247890	BWR_22	F1M3	5/20/2023	172	199	27.55	5/30/2023	Split Lake	1
900.043000247891	BWR_22	F1M3	5/20/2023	160	186	22.05	5/30/2023	Split Lake	1
900.043000247892	BWR_22	F1M3	5/20/2023	160	183	21.48	5/30/2023	Split Lake	1
900.043000247895	BWR_22	F1M3	5/20/2023	167	197	24.22	5/30/2023	Split Lake	1
900.043000247902	BWR_22	F1M3	5/20/2023	165	190	24.12	5/30/2023	Split Lake	1



DEC Tag ID	Lot	Family	Date	Fork Length (mm)	Total Length (mm)	Weight (g)	Date	Waterbody	Site
900.043000247903	BWR_22	F1M3	5/20/2023	184	210	29.25	5/30/2023	Split Lake	1
900.043000247904	BWR_22	F1M3	5/20/2023	160	186	23.73	5/30/2023	Split Lake	1
900.043000247906	BWR_22	F1M3	5/20/2023	174	200	26.62	5/30/2023	Split Lake	1
900.043000247911	BWR_22	F1M3	5/18/2023	150	169	19.13	5/30/2023	Split Lake	1
900.043000248013	BWR_22	F1M3	5/20/2023	184	210	32.00	5/30/2023	Split Lake	1
900.043000248018	BWR_22	F1M3	5/20/2023	172	200	26.41	5/30/2023	Split Lake	1
900.043000248019	BWR_22	F1M3	5/20/2023	157	184	21.03	5/30/2023	Split Lake	1
900.043000248021	BWR_22	F1M3	5/20/2023	155	180	20.66	5/30/2023	Split Lake	1
900.043000248022	BWR_22	F1M3	5/20/2023	170	196	25.38	5/30/2023	Split Lake	1
900.043000248023	BWR_22	F1M3	5/20/2023	177	204	29.06	5/30/2023	Split Lake	1
900.043000248024	BWR_22	F1M3	5/20/2023	179	203	28.33	5/30/2023	Split Lake	1
900.043000248027	BWR_22	F1M3	5/20/2023	164	190	22.72	5/30/2023	Split Lake	1
900.043000248028	BWR_22	F1M3	5/20/2023	187	212	33.80	5/30/2023	Split Lake	1
900.043000248029	BWR_22	F1M3	5/20/2023	139	163	14.74	5/30/2023	Split Lake	1
900.043000248030	BWR_22	F1M3	5/20/2023	178	202	28.87	5/30/2023	Split Lake	1
900.043000248031	BWR_22	F1M3	5/20/2023	180	212	33.00	5/30/2023	Split Lake	1
900.043000248032	BWR_22	F1M3	5/20/2023	164	188	22.02	5/30/2023	Split Lake	1
900.043000248038	BWR_22	F1M3	5/20/2023	195	225	39.23	5/30/2023	Split Lake	1
900.043000248039	BWR_22	F1M3	5/20/2023	174	200	27.39	5/30/2023	Split Lake	1
900.043000248041	BWR_22	F1M3	5/20/2023	174	200	27.57	5/30/2023	Split Lake	1
900.043000248042	BWR_22	F1M3	5/20/2023	175	201	28.42	5/30/2023	Split Lake	1
900.043000248043	BWR_22	F1M3	5/20/2023	155	179	20.86	5/30/2023	Split Lake	1
900.043000248044	BWR_22	F1M3	5/20/2023	169	196	26.44	5/30/2023	Split Lake	1
900.043000248045	BWR_22	F1M3	5/20/2023	194	223	34.80	5/30/2023	Split Lake	1
900.043000248048	BWR_22	F1M3	5/20/2023	164	188	23.71	5/30/2023	Split Lake	1
900.043000248050	BWR_22	F1M3	5/20/2023	168	190	23.28	5/30/2023	Split Lake	1
900.043000248051	BWR_22	F1M3	5/20/2023	167	192	24.85	5/30/2023	Split Lake	1
900.043000248053	BWR_22	F1M3	5/20/2023	205	231	45.24	5/30/2023	Split Lake	1



DEC Tag ID	Lot	Family	Date	Fork Length (mm)	Total Length (mm)	Weight (g)	Date	Waterbody	Site
900.043000248055	BWR_22	F1M3	5/20/2023	189	213	34.48	5/30/2023	Split Lake	1
900.043000248056	BWR_22	F1M3	5/20/2023	168	195	28.88	5/30/2023	Split Lake	1
900.043000248058	BWR_22	F1M3	5/20/2023	170	196	26.73	5/30/2023	Split Lake	1
900.043000248059	BWR_22	F1M3	5/20/2023	184	209	31.46	5/30/2023	Split Lake	1
900.043000248060	BWR_22	F1M3	5/20/2023	174	200	27.58	5/30/2023	Split Lake	1
900.043000248061	BWR_22	F1M3	5/20/2023	185	211	30.77	5/30/2023	Split Lake	1
900.043000248062	BWR_22	F1M3	5/20/2023	179	200	26.32	5/30/2023	Split Lake	1
900.043000248064	BWR_22	F1M3	5/20/2023	158	180	21.53	5/30/2023	Split Lake	1
900.043000248065	BWR_22	F1M3	5/20/2023	183	209	30.23	5/30/2023	Split Lake	1
900.043000248067	BWR_22	F1M3	5/20/2023	172	197	26.40	5/30/2023	Split Lake	1
900.043000248069	BWR_22	F1M3	5/20/2023	164	189	24.94	5/30/2023	Split Lake	1
900.043000248070	BWR_22	F1M3	5/20/2023	170	196	24.55	5/30/2023	Split Lake	1
900.043000248071	BWR_22	F1M3	5/20/2023	187	215	32.44	5/30/2023	Split Lake	1
900.043000248072	BWR_22	F1M3	5/20/2023	168	192	24.25	5/30/2023	Split Lake	1
900.043000248073	BWR_22	F1M3	5/20/2023	173	199	27.01	5/30/2023	Split Lake	1
900.043000248077	BWR_22	F1M3	5/20/2023	184	207	28.15	5/30/2023	Split Lake	1
900.043000248078	BWR_22	F1M3	5/20/2023	198	229	40.12	5/30/2023	Split Lake	1
900.043000248082	BWR_22	F1M3	5/20/2023	175	200	30.11	5/30/2023	Split Lake	1
900.043000248083	BWR_22	F1M3	5/20/2023	154	181	21.51	5/30/2023	Split Lake	1
900.043000248087	BWR_22	F1M3	5/20/2023	205	234	45.23	5/30/2023	Split Lake	1
900.043000248090	BWR_22	F1M3	5/20/2023	191	220	36.03	5/30/2023	Split Lake	1
900.043000248094	BWR_22	F1M3	5/20/2023	174	199	27.27	5/30/2023	Split Lake	1
900.043000248095	BWR_22	F1M3	5/20/2023	168	194	26.71	5/30/2023	Split Lake	1
900.043000248098	BWR_22	F1M3	5/20/2023	172	194	26.35	5/30/2023	Split Lake	1
900.043000248099	BWR_22	F1M3	5/20/2023	160	186	22.80	5/30/2023	Split Lake	1
900.043000248100	BWR_22	F1M3	5/20/2023	180	210	31.51	5/30/2023	Split Lake	1
900.043000248101	BWR_22	F1M3	5/20/2023	176	204	28.86	5/30/2023	Split Lake	1
900.043000248102	BWR_22	F1M3	5/20/2023	188	217	34.01	5/30/2023	Split Lake	1

DEC Tag ID	Lot	Family	Date	Fork Length (mm)	Total Length (mm)	Weight (g)	Date	Waterbody	Site
900.043000248103	BWR_22	F1M3	5/20/2023	168	195	26.24	5/30/2023	Split Lake	1
900.043000248105	BWR_22	F1M3	5/20/2023	150	172	18.50	5/30/2023	Split Lake	1
900.043000248106	BWR_22	F1M3	5/20/2023	195	225	40.53	5/30/2023	Split Lake	1
900.043000248107	BWR_22	F1M3	5/20/2023	180	210	30.14	5/30/2023	Split Lake	1
900.043000248108	BWR_22	F1M3	5/20/2023	145	166	17.48	5/30/2023	Split Lake	1
900.043000248109	BWR_22	F1M3	5/20/2023	188	215	34.11	5/30/2023	Split Lake	1
900.043000248110	BWR_22	F1M3	5/20/2023	188	216	34.90	5/30/2023	Split Lake	1
900.043000247614	BWR_22	F1M6	5/18/2023	176	197	26.04	5/30/2023	Split Lake	1
900.043000247615	BWR_22	F1M6	5/18/2023	197	224	37.60	5/30/2023	Split Lake	1
900.043000247616	BWR_22	F1M6	5/18/2023	180	203	28.46	5/30/2023	Split Lake	1
900.043000247617	BWR_22	F1M6	5/18/2023	183	208	33.94	5/30/2023	Split Lake	1
900.043000247621	BWR_22	F1M6	5/18/2023	200	225	39.46	5/30/2023	Split Lake	1
900.043000247625	BWR_22	F1M6	5/18/2023	173	202	25.56	5/30/2023	Split Lake	1
900.043000247629	BWR_22	F1M6	5/18/2023	235	267	66.80	5/30/2023	Split Lake	1
900.043000247633	BWR_22	F1M6	5/18/2023	193	217	35.04	5/30/2023	Split Lake	1
900.043000247635	BWR_22	F1M6	5/18/2023	202	227	42.66	5/30/2023	Split Lake	1
900.043000247636	BWR_22	F1M6	5/18/2023	188	213	31.57	5/30/2023	Split Lake	1
900.043000247638	BWR_22	F1M6	5/18/2023	203	225	42.07	5/30/2023	Split Lake	1
900.043000247639	BWR_22	F1M6	5/18/2023	185	208	31.87	5/30/2023	Split Lake	1
900.043000247641	BWR_22	F1M6	5/18/2023	193	215	35.98	5/30/2023	Split Lake	1
900.043000247642	BWR_22	F1M6	5/18/2023	185	210	32.12	5/30/2023	Split Lake	1
900.043000247643	BWR_22	F1M6	5/18/2023	209	237	43.42	5/30/2023	Split Lake	1
900.043000247644	BWR_22	F1M6	5/18/2023	170	193	25.53	5/30/2023	Split Lake	1
900.043000247647	BWR_22	F1M6	5/18/2023	213	242	49.30	5/30/2023	Split Lake	1
900.043000247649	BWR_22	F1M6	5/18/2023	197	225	38.20	5/30/2023	Split Lake	1
900.043000247652	BWR_22	F1M6	5/18/2023	205	230	39.86	5/30/2023	Split Lake	1
900.043000247654	BWR_22	F1M6	5/18/2023	205	233	44.12	5/30/2023	Split Lake	1
900.043000247657	BWR_22	F1M6	5/18/2023	179	203	30.71	5/30/2023	Split Lake	1



DEC Tag ID	Lot	Family	Date	Fork Length (mm)	Total Length (mm)	Weight (g)	Date	Waterbody	Site
900.043000247659	BWR_22	F1M6	5/18/2023	203	233	42.58	5/30/2023	Split Lake	1
900.043000247666	BWR_22	F1M6	5/18/2023	216	247	54.62	5/30/2023	Split Lake	1
900.043000247667	BWR_22	F1M6	5/18/2023	190	219	34.30	5/30/2023	Split Lake	1
900.043000247668	BWR_22	F1M6	5/18/2023	183	206	30.07	5/30/2023	Split Lake	1
900.043000247673	BWR_22	F1M6	5/18/2023	197	223	39.12	5/30/2023	Split Lake	1
900.043000247675	BWR_22	F1M6	5/18/2023	195	223	39.88	5/30/2023	Split Lake	1
900.043000247676	BWR_22	F1M6	5/18/2023	203	230	40.47	5/30/2023	Split Lake	1
900.043000247677	BWR_22	F1M6	5/18/2023	187	212	30.08	5/30/2023	Split Lake	1
900.043000247681	BWR_22	F1M6	5/18/2023	185	209	32.99	5/30/2023	Split Lake	1
900.043000247682	BWR_22	F1M6	5/18/2023	226	254	56.53	5/30/2023	Split Lake	1
900.043000247683	BWR_22	F1M6	5/18/2023	206	236	46.32	5/30/2023	Split Lake	1
900.043000247684	BWR_22	F1M6	5/18/2023	189	213	35.26	5/30/2023	Split Lake	1
900.043000247686	BWR_22	F1M6	5/18/2023	203	231	41.58	5/30/2023	Split Lake	1
900.043000247688	BWR_22	F1M6	5/18/2023	190	216	34.51	5/30/2023	Split Lake	1
900.043000247692	BWR_22	F1M6	5/18/2023	206	230	43.20	5/30/2023	Split Lake	1
900.043000247696	BWR_22	F1M6	5/18/2023	175	197	26.24	5/30/2023	Split Lake	1
900.043000247699	BWR_22	F1M6	5/18/2023	207	233	45.47	5/30/2023	Split Lake	1
900.043000247703	BWR_22	F1M6	5/18/2023	178	204	28.42	5/30/2023	Split Lake	1
900.043000247708	BWR_22	F1M6	5/18/2023	198	223	36.71	5/30/2023	Split Lake	1
900.043000247710	BWR_22	F1M6	5/18/2023	212	237	47.20	5/30/2023	Split Lake	1
900.043000247712	BWR_22	F1M6	5/18/2023	164	185	21.36	5/30/2023	Split Lake	1
900.043000247713	BWR_22	F1M6	5/18/2023	205	234	44.76	5/30/2023	Split Lake	1
900.043000247717	BWR_22	F1M6	5/18/2023	190	218	34.87	5/30/2023	Split Lake	1
900.043000247719	BWR_22	F1M6	5/18/2023	197	220	40.05	5/30/2023	Split Lake	1
900.043000247720	BWR_22	F1M6	5/18/2023	227	255	56.21	5/30/2023	Split Lake	1
900.043000247722	BWR_22	F1M6	5/18/2023	190	216	34.59	5/30/2023	Split Lake	1
900.043000247723	BWR_22	F1M6	5/18/2023	195	220	37.02	5/30/2023	Split Lake	1
900.043000247724	BWR_22	F1M6	5/18/2023	185	210	30.00	5/30/2023	Split Lake	1



DEC Tag ID	Lot	Family	Date	Fork Length (mm)	Total Length (mm)	Weight (g)	Date	Waterbody	Site
900.043000247725	BWR_22	F1M6	5/18/2023	193	217	34.42	5/30/2023	Split Lake	1
900.043000247726	BWR_22	F1M6	5/18/2023	205	233	42.78	5/30/2023	Split Lake	1
900.043000247727	BWR_22	F1M6	5/18/2023	202	228	37.88	5/30/2023	Split Lake	1
900.043000247729	BWR_22	F1M6	5/18/2023	200	228	35.82	5/30/2023	Split Lake	1
900.043000247730	BWR_22	F1M6	5/18/2023	182	210	33.27	5/30/2023	Split Lake	1
900.043000247731	BWR_22	F1M6	5/18/2023	202	232	39.33	5/30/2023	Split Lake	1
900.043000247732	BWR_22	F1M6	5/18/2023	184	206	31.55	5/30/2023	Split Lake	1
900.043000247735	BWR_22	F1M6	5/18/2023	225	253	57.62	5/30/2023	Split Lake	1
900.043000247737	BWR_22	F1M6	5/18/2023	185	206	27.97	5/30/2023	Split Lake	1
900.043000247738	BWR_22	F1M6	5/18/2023	180	207	28.62	5/30/2023	Split Lake	1
900.043000247739	BWR_22	F1M6	5/18/2023	195	220	35.69	5/30/2023	Split Lake	1
900.043000247740	BWR_22	F1M6	5/18/2023	180	205	30.57	5/30/2023	Split Lake	1
900.043000247741	BWR_22	F1M6	5/18/2023	212	233	40.18	5/30/2023	Split Lake	1
900.043000247742	BWR_22	F1M6	5/18/2023	198	224	41.65	5/30/2023	Split Lake	1
900.043000247745	BWR_22	F1M6	5/18/2023	176	203	25.42	5/30/2023	Split Lake	1
900.043000247746	BWR_22	F1M6	5/18/2023	205	240	44.16	5/30/2023	Split Lake	1
900.043000247748	BWR_22	F1M6	5/18/2023	190	218	36.27	5/30/2023	Split Lake	1
900.043000247752	BWR_22	F1M6	5/18/2023	183	211	30.62	5/30/2023	Split Lake	1
900.043000247753	BWR_22	F1M6	5/18/2023	197	225	40.83	5/30/2023	Split Lake	1
900.043000247754	BWR_22	F1M6	5/18/2023	185	208	32.33	5/30/2023	Split Lake	1
900.043000247755	BWR_22	F1M6	5/18/2023	202	227	41.56	5/30/2023	Split Lake	1
900.043000247756	BWR_22	F1M6	5/18/2023	195	223	36.72	5/30/2023	Split Lake	1
900.043000247757	BWR_22	F1M6	5/18/2023	198	228	38.47	5/30/2023	Split Lake	1
900.043000247758	BWR_22	F1M6	5/18/2023	203	228	40.58	5/30/2023	Split Lake	1
900.043000247759	BWR_22	F1M6	5/18/2023	188	213	32.05	5/30/2023	Split Lake	1
900.043000247762	BWR_22	F1M6	5/18/2023	203	229	43.01	5/30/2023	Split Lake	1
900.043000247763	BWR_22	F1M6	5/18/2023	188	214	31.62	5/30/2023	Split Lake	1
900.043000247764	BWR_22	F1M6	5/18/2023	190	215	35.26	5/30/2023	Split Lake	1



DEC Tag ID	Lot	Family	Date	Fork Length (mm)	Total Length (mm)	Weight (g)	Date	Waterbody	Site
900.043000247767	BWR_22	F1M6	5/18/2023	215	244	46.07	5/30/2023	Split Lake	1
900.043000247768	BWR_22	F1M6	5/18/2023	200	230	38.19	5/30/2023	Split Lake	1
900.043000247772	BWR_22	F1M6	5/18/2023	200	228	39.91	5/30/2023	Split Lake	1
900.043000247776	BWR_22	F1M6	5/18/2023	190	213	33.06	5/30/2023	Split Lake	1
900.043000247777	BWR_22	F1M6	5/18/2023	223	255	59.27	5/30/2023	Split Lake	1
900.043000247778	BWR_22	F1M6	5/18/2023	200	228	36.42	5/30/2023	Split Lake	1
900.043000247779	BWR_22	F1M6	5/18/2023	166	187	23.89	5/30/2023	Split Lake	1
900.043000247782	BWR_22	F1M6	5/18/2023	193	220	34.94	5/30/2023	Split Lake	1
900.043000247783	BWR_22	F1M6	5/18/2023	183	205	27.13	5/30/2023	Split Lake	1
900.043000247784	BWR_22	F1M6	5/18/2023	191	216	32.26	5/30/2023	Split Lake	1
900.043000247785	BWR_22	F1M6	5/18/2023	175	199	29.82	5/30/2023	Split Lake	1
900.043000247787	BWR_22	F1M6	5/18/2023	188	206	30.65	5/30/2023	Split Lake	1
900.043000247788	BWR_22	F1M6	5/18/2023	180	208	28.20	5/30/2023	Split Lake	1
900.043000247791	BWR_22	F1M6	5/18/2023	194	218	34.95	5/30/2023	Split Lake	1
900.043000247794	BWR_22	F1M6	5/18/2023	180	206	30.47	5/30/2023	Split Lake	1
900.043000247795	BWR_22	F1M6	5/18/2023	220	250	47.24	5/30/2023	Split Lake	1
900.043000247799	BWR_22	F1M6	5/18/2023	203	233	41.40	5/30/2023	Split Lake	1
900.043000247800	BWR_22	F1M6	5/18/2023	200	228	38.67	5/30/2023	Split Lake	1
900.043000247808	BWR_22	F1M6	5/18/2023	207	233	41.98	5/30/2023	Split Lake	1
900.043000247809	BWR_22	F1M6	5/18/2023	204	233	41.30	5/30/2023	Split Lake	1
900.043000247811	BWR_22	F1M6	5/18/2023	180	204	28.66	5/30/2023	Split Lake	1
900.043000247411	BWR_22	F1M7	5/19/2023	192	220	33.55	5/30/2023	Split Lake	1
900.043000247414	BWR_22	F1M7	5/19/2023	192	223	33.19	5/30/2023	Split Lake	1
900.043000247418	BWR_22	F1M7	5/19/2023	176	198	25.58	5/30/2023	Split Lake	1
900.043000247423	BWR_22	F1M7	5/19/2023	187	223	38.05	5/30/2023	Split Lake	1
900.043000247424	BWR_22	F1M7	5/19/2023	200	232	42.81	5/30/2023	Split Lake	1
900.043000247428	BWR_22	F1M7	5/19/2023	185	213	29.96	5/30/2023	Split Lake	1
900.043000247430	BWR_22	F1M7	5/19/2023	170	197	24.06	5/30/2023	Split Lake	1

DEC Tag ID	Lot	Family	Date	Fork Length (mm)	Total Length (mm)	Weight (g)	Date	Waterbody	Site
900.043000247431	BWR_22	F1M7	5/19/2023	180	204	30.78	5/30/2023	Split Lake	1
900.043000247434	BWR_22	F1M7	5/19/2023	190	220	37.41	5/30/2023	Split Lake	1
900.043000247435	BWR_22	F1M7	5/19/2023	172	200	23.05	5/30/2023	Split Lake	1
900.043000247436	BWR_22	F1M7	5/19/2023	178	207	29.60	5/30/2023	Split Lake	1
900.043000247438	BWR_22	F1M7	5/19/2023	170	196	23.95	5/30/2023	Split Lake	1
900.043000247439	BWR_22	F1M7	5/19/2023	197	225	36.14	5/30/2023	Split Lake	1
900.043000247441	BWR_22	F1M7	5/19/2023	183	211	29.20	5/30/2023	Split Lake	1
900.043000247442	BWR_22	F1M7	5/19/2023	185	214	31.54	5/30/2023	Split Lake	1
900.043000247444	BWR_22	F1M7	5/19/2023	165	193	23.05	5/30/2023	Split Lake	1
900.043000247448	BWR_22	F1M7	5/19/2023	202	230	38.79	5/30/2023	Split Lake	1
900.043000247449	BWR_22	F1M7	5/19/2023	190	219	35.08	5/30/2023	Split Lake	1
900.043000247451	BWR_22	F1M7	5/19/2023	187	218	32.02	5/30/2023	Split Lake	1
900.043000247452	BWR_22	F1M7	5/19/2023	180	204	28.83	5/30/2023	Split Lake	1
900.043000247453	BWR_22	F1M7	5/19/2023	164	192	24.66	5/30/2023	Split Lake	1
900.043000247455	BWR_22	F1M7	5/19/2023	160	185	20.32	5/30/2023	Split Lake	1
900.043000247459	BWR_22	F1M7	5/19/2023	235	267	65.30	5/30/2023	Split Lake	1
900.043000247465	BWR_22	F1M7	5/19/2023	180	212	28.32	5/30/2023	Split Lake	1
900.043000247468	BWR_22	F1M7	5/19/2023	198	230	37.47	5/30/2023	Split Lake	1
900.043000247471	BWR_22	F1M7	5/19/2023	188	217	34.78	5/30/2023	Split Lake	1
900.043000247473	BWR_22	F1M7	5/19/2023	188	216	31.51	5/30/2023	Split Lake	1
900.043000247475	BWR_22	F1M7	5/19/2023	210	242	48.66	5/30/2023	Split Lake	1
900.043000247476	BWR_22	F1M7	5/19/2023	173	207	30.66	5/30/2023	Split Lake	1
900.043000247480	BWR_22	F1M7	5/19/2023	195	225	38.53	5/30/2023	Split Lake	1
900.043000247482	BWR_22	F1M7	5/19/2023	192	220	33.32	5/30/2023	Split Lake	1
900.043000247483	BWR_22	F1M7	5/19/2023	170	194	23.66	5/30/2023	Split Lake	1
900.043000247484	BWR_22	F1M7	5/19/2023	188	218	35.35	5/30/2023	Split Lake	1
900.043000247487	BWR_22	F1M7	5/19/2023	188	214	34.51	5/30/2023	Split Lake	1
900.043000247488	BWR_22	F1M7	5/19/2023	172	197	26.00	5/30/2023	Split Lake	1



DEC Tag ID	Lot	Family	Date	Fork Length (mm)	Total Length (mm)	Weight (g)	Date	Waterbody	Site
900.043000247489	BWR_22	F1M7	5/19/2023	176	205	26.62	5/30/2023	Split Lake	1
900.043000247492	BWR_22	F1M7	5/19/2023	178	205	26.93	5/30/2023	Split Lake	1
900.043000247493	BWR_22	F1M7	5/19/2023	188	214	32.60	5/30/2023	Split Lake	1
900.043000247495	BWR_22	F1M7	5/19/2023	163	185	23.42	5/30/2023	Split Lake	1
900.043000247496	BWR_22	F1M7	5/19/2023	226	260	54.62	5/30/2023	Split Lake	1
900.043000247498	BWR_22	F1M7	5/19/2023	180	210	28.34	5/30/2023	Split Lake	1
900.043000247499	BWR_22	F1M7	5/19/2023	200	227	41.02	5/30/2023	Split Lake	1
900.043000247502	BWR_22	F1M7	5/19/2023	190	222	36.37	5/30/2023	Split Lake	1
900.043000247507	BWR_22	F1M7	5/19/2023	180	212	30.30	5/30/2023	Split Lake	1
900.043000247508	BWR_22	F1M7	5/19/2023	175	203	25.32	5/30/2023	Split Lake	1
900.043000247512	BWR_22	F1M7	5/19/2023	210	243	44.79	5/30/2023	Split Lake	1
900.043000247514	BWR_22	F1M7	5/19/2023	186	217	31.36	5/30/2023	Split Lake	1
900.043000247515	BWR_22	F1M7	5/19/2023	160	183	22.83	5/30/2023	Split Lake	1
900.043000247516	BWR_22	F1M7	5/19/2023	200	235	40.26	5/30/2023	Split Lake	1
900.043000247519	BWR_22	F1M7	5/19/2023	192	220	34.75	5/30/2023	Split Lake	1
900.043000247521	BWR_22	F1M7	5/19/2023	180	207	27.53	5/30/2023	Split Lake	1
900.043000247522	BWR_22	F1M7	5/19/2023	185	214	31.18	5/30/2023	Split Lake	1
900.043000247525	BWR_22	F1M7	5/19/2023	183	207	34.07	5/30/2023	Split Lake	1
900.043000247528	BWR_22	F1M7	5/19/2023	176	205	28.52	5/30/2023	Split Lake	1
900.043000247529	BWR_22	F1M7	5/19/2023	180	205	28.94	5/30/2023	Split Lake	1
900.043000247530	BWR_22	F1M7	5/19/2023	150	177	18.89	5/30/2023	Split Lake	1
900.043000247533	BWR_22	F1M7	5/19/2023	190	217	31.01	5/30/2023	Split Lake	1
900.043000247536	BWR_22	F1M7	5/19/2023	166	188	20.37	5/30/2023	Split Lake	1
900.043000247538	BWR_22	F1M7	5/19/2023	190	217	33.01	5/30/2023	Split Lake	1
900.043000247539	BWR_22	F1M7	5/19/2023	183	212	30.34	5/30/2023	Split Lake	1
900.043000247542	BWR_22	F1M7	5/19/2023	175	198	24.23	5/30/2023	Split Lake	1
900.043000247543	BWR_22	F1M7	5/19/2023	146	170	16.55	5/30/2023	Split Lake	1
900.043000247544	BWR_22	F1M7	5/19/2023	187	220	32.10	5/30/2023	Split Lake	1



DEC Tag ID	Lot	Family	Date	Fork Length (mm)	Total Length (mm)	Weight (g)	Date	Waterbody	Site
900.043000247546	BWR_22	F1M7	5/19/2023	186	217	30.34	5/30/2023	Split Lake	1
900.043000247548	BWR_22	F1M7	5/19/2023	180	208	28.30	5/30/2023	Split Lake	1
900.043000247549	BWR_22	F1M7	5/19/2023	176	210	30.79	5/30/2023	Split Lake	1
900.043000247550	BWR_22	F1M7	5/19/2023	193	217	32.50	5/30/2023	Split Lake	1
900.043000247551	BWR_22	F1M7	5/19/2023	194	227	39.54	5/30/2023	Split Lake	1
900.043000247553	BWR_22	F1M7	5/19/2023	185	207	30.86	5/30/2023	Split Lake	1
900.043000247554	BWR_22	F1M7	5/19/2023	177	206	25.78	5/30/2023	Split Lake	1
900.043000247555	BWR_22	F1M7	5/19/2023	180	207	29.95	5/30/2023	Split Lake	1
900.043000247561	BWR_22	F1M7	5/19/2023	176	203	28.83	5/30/2023	Split Lake	1
900.043000247562	BWR_22	F1M7	5/19/2023	196	223	35.30	5/30/2023	Split Lake	1
900.043000247565	BWR_22	F1M7	5/19/2023	180	210	29.50	5/30/2023	Split Lake	1
900.043000247566	BWR_22	F1M7	5/19/2023	210	240	44.92	5/30/2023	Split Lake	1
900.043000247567	BWR_22	F1M7	5/19/2023	180	212	31.76	5/30/2023	Split Lake	1
900.043000247568	BWR_22	F1M7	5/19/2023	192	218	32.72	5/30/2023	Split Lake	1
900.043000247569	BWR_22	F1M7	5/19/2023	185	212	30.02	5/30/2023	Split Lake	1
900.043000247571	BWR_22	F1M7	5/19/2023	188	217	34.77	5/30/2023	Split Lake	1
900.043000247573	BWR_22	F1M7	5/19/2023	195	221	34.72	5/30/2023	Split Lake	1
900.043000247575	BWR_22	F1M7	5/19/2023	190	223	38.49	5/30/2023	Split Lake	1
900.043000247579	BWR_22	F1M7	5/19/2023	165	192	20.92	5/30/2023	Split Lake	1
900.043000247582	BWR_22	F1M7	5/19/2023	187	212	28.07	5/30/2023	Split Lake	1
900.043000247584	BWR_22	F1M7	5/19/2023	178	203	28.35	5/30/2023	Split Lake	1
900.043000247585	BWR_22	F1M7	5/19/2023	165	192	22.19	5/30/2023	Split Lake	1
900.043000247587	BWR_22	F1M7	5/19/2023	198	225	42.75	5/30/2023	Split Lake	1
900.043000247590	BWR_22	F1M7	5/19/2023	203	233	26.28	5/30/2023	Split Lake	1
900.043000247592	BWR_22	F1M7	5/19/2023	190	220	31.86	5/30/2023	Split Lake	1
900.043000247593	BWR_22	F1M7	5/19/2023	197	214	32.46	5/30/2023	Split Lake	1
900.043000247594	BWR_22	F1M7	5/19/2023	186	212	32.26	5/30/2023	Split Lake	1
900.043000247595	BWR_22	F1M7	5/19/2023	207	236	44.79	5/30/2023	Split Lake	1



DEC Tag ID	Lot	Family	Date	Fork Length (mm)	Total Length (mm)	Weight (g)	Date	Waterbody	Site
900.043000247598	BWR_22	F1M7	5/19/2023	174	201	25.55	5/30/2023	Split Lake	1
900.043000247601	BWR_22	F1M7	5/19/2023	200	232	40.82	5/30/2023	Split Lake	1
900.043000247602	BWR_22	F1M7	5/19/2023	192	222	35.20	5/30/2023	Split Lake	1
900.043000247604	BWR_22	F1M7	5/19/2023	163	186	26.00	5/30/2023	Split Lake	1
900.043000247609	BWR_22	F1M7	5/19/2023	175	202	27.65	5/30/2023	Split Lake	1
900.043000247611	BWR_22	F1M7	5/19/2023	187	217	31.81	5/30/2023	Split Lake	1
900.043000247619	BWR_22	F1M7	5/19/2023	196	228	37.61	5/30/2023	Split Lake	1
900.043000247680	BWR_22	F1M7	5/19/2023	195	225	35.80	5/30/2023	Split Lake	1
900.043000247913	BWR_22	F1M1	5/19/2023	190	217	30.52	6/1/2023	Burntwood River	2
900.043000247914	BWR_22	F1M1	5/19/2023	198	230	44.02	6/1/2023	Burntwood River	2
900.043000247915	BWR_22	F1M1	5/19/2023	183	208	34.12	6/1/2023	Burntwood River	2
900.043000247916	BWR_22	F1M1	5/19/2023	187	212	35.46	6/1/2023	Burntwood River	2
900.043000247918	BWR_22	F1M1	5/19/2023	178	207	30.48	6/1/2023	Burntwood River	2
900.043000247922	BWR_22	F1M1	5/19/2023	192	212	31.40	6/1/2023	Burntwood River	2
900.043000247923	BWR_22	F1M1	5/19/2023	168	190	28.75	6/1/2023	Burntwood River	2
900.043000247926	BWR_22	F1M1	5/19/2023	152	207	31.45	6/1/2023	Burntwood River	2
900.043000247927	BWR_22	F1M1	5/19/2023	185	213	34.12	6/1/2023	Burntwood River	2
900.043000247928	BWR_22	F1M1	5/19/2023	167	192	25.32	6/1/2023	Burntwood River	2
900.043000247929	BWR_22	F1M1	5/19/2023	167	194	27.37	6/1/2023	Burntwood River	2
900.043000247934	BWR_22	F1M1	5/19/2023	180	204	29.47	6/1/2023	Burntwood River	2
900.043000247936	BWR_22	F1M1	5/19/2023	170	195	25.64	6/1/2023	Burntwood River	2
900.043000247937	BWR_22	F1M1	5/19/2023	180	207	28.44	6/1/2023	Burntwood River	2
900.043000247940	BWR_22	F1M1	5/19/2023	178	204	29.94	6/1/2023	Burntwood River	2
900.043000247941	BWR_22	F1M1	5/19/2023	184	212	32.33	6/1/2023	Burntwood River	2
900.043000247942	BWR_22	F1M1	5/19/2023	205	233	44.27	6/1/2023	Burntwood River	2
900.043000247943	BWR_22	F1M1	5/19/2023	190	220	33.75	6/1/2023	Burntwood River	2
900.043000247946	BWR_22	F1M1	5/19/2023	195	223	36.00	6/1/2023	Burntwood River	2
900.043000247947	BWR_22	F1M1	5/19/2023	185	212	32.26	6/1/2023	Burntwood River	2



DEC Tag ID	Lot	Family	Date	Fork Length (mm)	Total Length (mm)	Weight (g)	Date	Waterbody	Site
900.043000247954	BWR_22	F1M1	5/19/2023	166	185	23.88	6/1/2023	Burntwood River	2
900.043000247955	BWR_22	F1M1	5/19/2023	180	204	32.02	6/1/2023	Burntwood River	2
900.043000247957	BWR_22	F1M1	5/19/2023	183	207	30.90	6/1/2023	Burntwood River	2
900.043000247958	BWR_22	F1M1	5/19/2023	180	216	29.46	6/1/2023	Burntwood River	2
900.043000247959	BWR_22	F1M1	5/19/2023	195	222	39.72	6/1/2023	Burntwood River	2
900.043000247960	BWR_22	F1M1	5/19/2023	180	206	34.18	6/1/2023	Burntwood River	2
900.043000247962	BWR_22	F1M1	5/19/2023	195	225	33.53	6/1/2023	Burntwood River	2
900.043000247963	BWR_22	F1M1	5/19/2023	168	192	24.98	6/1/2023	Burntwood River	2
900.043000247964	BWR_22	F1M1	5/19/2023	188	217	31.90	6/1/2023	Burntwood River	2
900.043000247965	BWR_22	F1M1	5/19/2023	208	244	42.12	6/1/2023	Burntwood River	2
900.043000247970	BWR_22	F1M1	5/19/2023	176	203	26.50	6/1/2023	Burntwood River	2
900.043000247974	BWR_22	F1M1	5/19/2023	183	210	29.56	6/1/2023	Burntwood River	2
900.043000247976	BWR_22	F1M1	5/19/2023	185	212	32.96	6/1/2023	Burntwood River	2
900.043000247978	BWR_22	F1M1	5/19/2023	204	226	40.66	6/1/2023	Burntwood River	2
900.043000247979	BWR_22	F1M1	5/19/2023	178	205	30.44	6/1/2023	Burntwood River	2
900.043000247981	BWR_22	F1M1	5/19/2023	188	216	33.97	6/1/2023	Burntwood River	2
900.043000247982	BWR_22	F1M1	5/19/2023	202	227	41.78	6/1/2023	Burntwood River	2
900.043000247985	BWR_22	F1M1	5/19/2023	175	201	29.45	6/1/2023	Burntwood River	2
900.043000247986	BWR_22	F1M1	5/19/2023	184	211	30.87	6/1/2023	Burntwood River	2
900.043000247988	BWR_22	F1M1	5/19/2023	190	218	38.21	6/1/2023	Burntwood River	2
900.043000247989	BWR_22	F1M1	5/19/2023	171	197	27.44	6/1/2023	Burntwood River	2
900.043000247996	BWR_22	F1M1	5/19/2023	187	217	37.04	6/1/2023	Burntwood River	2
900.043000247997	BWR_22	F1M1	5/19/2023	174	197	27.25	6/1/2023	Burntwood River	2
900.043000247998	BWR_22	F1M1	5/19/2023	200	228	39.98	6/1/2023	Burntwood River	2
900.043000248000	BWR_22	F1M1	5/19/2023	200	232	42.87	6/1/2023	Burntwood River	2
900.043000248001	BWR_22	F1M1	5/19/2023	192	220	36.40	6/1/2023	Burntwood River	2
900.043000248003	BWR_22	F1M1	5/19/2023	175	202	30.06	6/1/2023	Burntwood River	2
900.043000248004	BWR_22	F1M1	5/19/2023	175	202	26.76	6/1/2023	Burntwood River	2

DEC Tag ID	Lot	Family	Date	Fork Length (mm)	Total Length (mm)	Weight (g)	Date	Waterbody	Site
900.043000248007	BWR_22	F1M1	5/19/2023	173	198	26.03	6/1/2023	Burntwood River	2
900.043000248008	BWR_22	F1M1	5/19/2023	190	216	32.75	6/1/2023	Burntwood River	2
900.043000248009	BWR_22	F1M1	5/19/2023	168	193	44.78	6/1/2023	Burntwood River	2
900.043000248112	BWR_22	F1M1	5/19/2023	187	215	33.60	6/1/2023	Burntwood River	2
900.043000248113	BWR_22	F1M1	5/19/2023	165	190	24.74	6/1/2023	Burntwood River	2
900.043000248114	BWR_22	F1M1	5/19/2023	164	188	22.16	6/1/2023	Burntwood River	2
900.043000248116	BWR_22	F1M1	5/19/2023	173	193	26.44	6/1/2023	Burntwood River	2
900.043000248118	BWR_22	F1M1	5/19/2023	190	218	35.45	6/1/2023	Burntwood River	2
900.043000248122	BWR_22	F1M1	5/19/2023	182	207	32.88	6/1/2023	Burntwood River	2
900.043000248125	BWR_22	F1M1	5/19/2023	205	230	47.08	6/1/2023	Burntwood River	2
900.043000248126	BWR_22	F1M1	5/19/2023	177	200	29.45	6/1/2023	Burntwood River	2
900.043000248129	BWR_22	F1M1	5/19/2023	192	217	36.16	6/1/2023	Burntwood River	2
900.043000248131	BWR_22	F1M1	5/19/2023	178	204	32.16	6/1/2023	Burntwood River	2
900.043000248136	BWR_22	F1M1	5/19/2023	175	198	26.80	6/1/2023	Burntwood River	2
900.043000248137	BWR_22	F1M1	5/19/2023	180	204	28.31	6/1/2023	Burntwood River	2
900.043000248138	BWR_22	F1M1	5/19/2023	173	198	26.98	6/1/2023	Burntwood River	2
900.043000248139	BWR_22	F1M1	5/19/2023	175	197	25.35	6/1/2023	Burntwood River	2
900.043000248142	BWR_22	F1M1	5/19/2023	190	212	30.92	6/1/2023	Burntwood River	2
900.043000248143	BWR_22	F1M1	5/19/2023	164	184	21.39	6/1/2023	Burntwood River	2
900.043000248147	BWR_22	F1M1	5/19/2023	197	225	37.30	6/1/2023	Burntwood River	2
900.043000248150	BWR_22	F1M1	5/19/2023	194	222	34.36	6/1/2023	Burntwood River	2
900.043000248154	BWR_22	F1M1	5/19/2023	187	214	35.76	6/1/2023	Burntwood River	2
900.043000248155	BWR_22	F1M1	5/19/2023	188	218	34.67	6/1/2023	Burntwood River	2
900.043000248157	BWR_22	F1M1	5/19/2023	172	197	26.24	6/1/2023	Burntwood River	2
900.043000248159	BWR_22	F1M1	5/19/2023	175	201	27.82	6/1/2023	Burntwood River	2
900.043000248160	BWR_22	F1M1	5/19/2023	163	186	23.05	6/1/2023	Burntwood River	2
900.043000248161	BWR_22	F1M1	5/19/2023	178	200	27.42	6/1/2023	Burntwood River	2
900.043000248165	BWR_22	F1M1	5/19/2023	177	200	28.78	6/1/2023	Burntwood River	2



DEC Tag ID	Lot	Family	Date	Fork Length (mm)	Total Length (mm)	Weight (g)	Date	Waterbody	Site
900.043000248166	BWR_22	F1M1	5/19/2023	186	212	32.08	6/1/2023	Burntwood River	2
900.043000248169	BWR_22	F1M1	5/19/2023	188	213	33.43	6/1/2023	Burntwood River	2
900.043000248172	BWR_22	F1M1	5/19/2023	182	210	31.80	6/1/2023	Burntwood River	2
900.043000248173	BWR_22	F1M1	5/19/2023	182	213	33.10	6/1/2023	Burntwood River	2
900.043000248177	BWR_22	F1M1	5/19/2023	178	191	28.97	6/1/2023	Burntwood River	2
900.043000248178	BWR_22	F1M1	5/19/2023	205	235	39.76	6/1/2023	Burntwood River	2
900.043000248180	BWR_22	F1M1	5/19/2023	208	237	42.76	6/1/2023	Burntwood River	2
900.043000248181	BWR_22	F1M1	5/19/2023	204	233	44.95	6/1/2023	Burntwood River	2
900.043000248183	BWR_22	F1M1	5/19/2023	202	234	43.98	6/1/2023	Burntwood River	2
900.043000248186	BWR_22	F1M1	5/19/2023	180	208	28.32	6/1/2023	Burntwood River	2
900.043000248187	BWR_22	F1M1	5/19/2023	171	197	26.33	6/1/2023	Burntwood River	2
900.043000248189	BWR_22	F1M1	5/19/2023	188	213	34.14	6/1/2023	Burntwood River	2
900.043000248190	BWR_22	F1M1	5/19/2023	180	205	30.76	6/1/2023	Burntwood River	2
900.043000248191	BWR_22	F1M1	5/19/2023	150	172	18.51	6/1/2023	Burntwood River	2
900.043000248192	BWR_22	F1M1	5/19/2023	185	210	33.67	6/1/2023	Burntwood River	2
900.043000248193	BWR_22	F1M1	5/19/2023	223	252	53.72	6/1/2023	Burntwood River	2
900.043000248198	BWR_22	F1M1	5/19/2023	164	184	22.86	6/1/2023	Burntwood River	2
900.043000248200	BWR_22	F1M1	5/19/2023	170	195	26.86	6/1/2023	Burntwood River	2
900.043000248201	BWR_22	F1M1	5/19/2023	178	204	28.61	6/1/2023	Burntwood River	2
900.043000248206	BWR_22	F1M1	5/19/2023	190	220	35.21	6/1/2023	Burntwood River	2
900.043000248207	BWR_22	F1M1	5/19/2023	176	201	29.38	6/1/2023	Burntwood River	2
900.043000248209	BWR_22	F1M1	5/19/2023	185	210	31.56	6/1/2023	Burntwood River	2
900.043000248211	BWR_22	F1M1	5/19/2023	188	214	37.11	6/1/2023	Burntwood River	2
900.043000247813	BWR_22	F1M3	5/20/2023	181	211	31.53	6/1/2023	Burntwood River	2
900.043000247815	BWR_22	F1M3	5/20/2023	164	190	24.37	6/1/2023	Burntwood River	2
900.043000247816	BWR_22	F1M3	5/20/2023	180	205	29.05	6/1/2023	Burntwood River	2
900.043000247817	BWR_22	F1M3	5/20/2023	163	189	25.07	6/1/2023	Burntwood River	2
900.043000247818	BWR_22	F1M3	5/20/2023	170	202	25.40	6/1/2023	Burntwood River	2

DEC Tag ID	Lot	Family	Date	Fork Length (mm)	Total Length (mm)	Weight (g)	Date	Waterbody	Site
900.043000247819	BWR_22	F1M3	5/20/2023	155	178	20.86	6/1/2023	Burntwood River	2
900.043000247823	BWR_22	F1M3	5/20/2023	195	223	35.26	6/1/2023	Burntwood River	2
900.043000247828	BWR_22	F1M3	5/20/2023	183	211	30.20	6/1/2023	Burntwood River	2
900.043000247830	BWR_22	F1M3	5/20/2023	183	210	28.92	6/1/2023	Burntwood River	2
900.043000247831	BWR_22	F1M3	5/20/2023	180	120	28.14	6/1/2023	Burntwood River	2
900.043000247833	BWR_22	F1M3	5/20/2023	176	200	25.69	6/1/2023	Burntwood River	2
900.043000247835	BWR_22	F1M3	5/20/2023	164	191	23.57	6/1/2023	Burntwood River	2
900.043000247836	BWR_22	F1M3	5/20/2023	174	201	28.99	6/1/2023	Burntwood River	2
900.043000247837	BWR_22	F1M3	5/20/2023	158	185	20.01	6/1/2023	Burntwood River	2
900.043000247840	BWR_22	F1M3	5/20/2023	149	172	18.51	6/1/2023	Burntwood River	2
900.043000247841	BWR_22	F1M3	5/20/2023	188	219	32.79	6/1/2023	Burntwood River	2
900.043000247843	BWR_22	F1M3	5/20/2023	162	190	22.16	6/1/2023	Burntwood River	2
900.043000247844	BWR_22	F1M3	5/20/2023	140	164	15.60	6/1/2023	Burntwood River	2
900.043000247845	BWR_22	F1M3	5/20/2023	200	231	39.42	6/1/2023	Burntwood River	2
900.043000247846	BWR_22	F1M3	5/20/2023	179	204	28.14	6/1/2023	Burntwood River	2
900.043000247847	BWR_22	F1M3	5/20/2023	140	161	14.59	6/1/2023	Burntwood River	2
900.043000247848	BWR_22	F1M3	5/20/2023	178	201	28.64	6/1/2023	Burntwood River	2
900.043000247849	BWR_22	F1M3	5/20/2023	185	210	32.13	6/1/2023	Burntwood River	2
900.043000247851	BWR_22	F1M3	5/20/2023	154	175	18.72	6/1/2023	Burntwood River	2
900.043000247853	BWR_22	F1M3	5/20/2023	180	208	32.49	6/1/2023	Burntwood River	2
900.043000247855	BWR_22	F1M3	5/20/2023	167	185	23.97	6/1/2023	Burntwood River	2
900.043000247856	BWR_22	F1M3	5/20/2023	169	192	24.89	6/1/2023	Burntwood River	2
900.043000247860	BWR_22	F1M3	5/20/2023	188	215	34.27	6/1/2023	Burntwood River	2
900.043000247862	BWR_22	F1M3	5/20/2023	193	221	39.42	6/1/2023	Burntwood River	2
900.043000247863	BWR_22	F1M3	5/20/2023	160	190	21.63	6/1/2023	Burntwood River	2
900.043000247864	BWR_22	F1M3	5/20/2023	167	194	25.36	6/1/2023	Burntwood River	2
900.043000247865	BWR_22	F1M3	5/20/2023	164	190	24.19	6/1/2023	Burntwood River	2
900.043000247866	BWR_22	F1M3	5/20/2023	149	173	18.08	6/1/2023	Burntwood River	2



DEC Tag ID	Lot	Family	Date	Fork Length (mm)	Total Length (mm)	Weight (g)	Date	Waterbody	Site
900.043000247867	BWR_22	F1M3	5/20/2023	172	197	25.98	6/1/2023	Burntwood River	2
900.043000247868	BWR_22	F1M3	5/20/2023	181	211	30.62	6/1/2023	Burntwood River	2
900.043000247869	BWR_22	F1M3	5/20/2023	175	200	27.38	6/1/2023	Burntwood River	2
900.043000247871	BWR_22	F1M3	5/20/2023	176	202	26.12	6/1/2023	Burntwood River	2
900.043000247873	BWR_22	F1M3	5/20/2023	153	175	19.14	6/1/2023	Burntwood River	2
900.043000247874	BWR_22	F1M3	5/20/2023	174	200	26.95	6/1/2023	Burntwood River	2
900.043000247878	BWR_22	F1M3	5/20/2023	189	215	33.11	6/1/2023	Burntwood River	2
900.043000247882	BWR_22	F1M3	5/20/2023	160	187	22.62	6/1/2023	Burntwood River	2
900.043000247883	BWR_22	F1M3	5/20/2023	181	209	32.22	6/1/2023	Burntwood River	2
900.043000247886	BWR_22	F1M3	5/20/2023	161	186	22.27	6/1/2023	Burntwood River	2
900.043000247889	BWR_22	F1M3	5/20/2023	164	194	24.94	6/1/2023	Burntwood River	2
900.043000247893	BWR_22	F1M3	5/20/2023	171	202	26.72	6/1/2023	Burntwood River	2
900.043000247894	BWR_22	F1M3	5/20/2023	184	210	30.82	6/1/2023	Burntwood River	2
900.043000247896	BWR_22	F1M3	5/20/2023	175	201	27.72	6/1/2023	Burntwood River	2
900.043000247897	BWR_22	F1M3	5/20/2023	196	224	40.63	6/1/2023	Burntwood River	2
900.043000247898	BWR_22	F1M3	5/20/2023	175	202	29.33	6/1/2023	Burntwood River	2
900.043000247899	BWR_22	F1M3	5/20/2023	164	186	23.70	6/1/2023	Burntwood River	2
900.043000247900	BWR_22	F1M3	5/20/2023	158	185	19.18	6/1/2023	Burntwood River	2
900.043000247901	BWR_22	F1M3	5/20/2023	170	195	25.78	6/1/2023	Burntwood River	2
900.043000247905	BWR_22	F1M3	5/20/2023	163	188	23.02	6/1/2023	Burntwood River	2
900.043000247907	BWR_22	F1M3	5/20/2023	185	215	33.79	6/1/2023	Burntwood River	2
900.043000247908	BWR_22	F1M3	5/20/2023	155	181	21.42	6/1/2023	Burntwood River	2
900.043000247909	BWR_22	F1M3	5/20/2023	160	186	23.94	6/1/2023	Burntwood River	2
900.043000247910	BWR_22	F1M3	5/20/2023	165	190	22.39	6/1/2023	Burntwood River	2
900.043000248012	BWR_22	F1M3	5/20/2023	160	184	20.33	6/1/2023	Burntwood River	2
900.043000248014	BWR_22	F1M3	5/20/2023	174	200	27.49	6/1/2023	Burntwood River	2
900.043000248015	BWR_22	F1M3	5/20/2023	165	190	23.42	6/1/2023	Burntwood River	2
900.043000248016	BWR_22	F1M3	5/20/2023	173	198	25.85	6/1/2023	Burntwood River	2





DEC Tag ID	Lot	Family	Date	Fork Length (mm)	Total Length (mm)	Weight (g)	Date	Waterbody	Site
900.043000248017	BWR_22	F1M3	5/20/2023	175	203	25.77	6/1/2023	Burntwood River	2
900.043000248020	BWR_22	F1M3	5/20/2023	188	213	32.44	6/1/2023	Burntwood River	2
900.043000248025	BWR_22	F1M3	5/20/2023	170	195	26.00	6/1/2023	Burntwood River	2
900.043000248026	BWR_22	F1M3	5/20/2023	190	220	35.13	6/1/2023	Burntwood River	2
900.043000248033	BWR_22	F1M3	5/20/2023	186	210	33.57	6/1/2023	Burntwood River	2
900.043000248034	BWR_22	F1M3	5/20/2023	183	211	34.29	6/1/2023	Burntwood River	2
900.043000248035	BWR_22	F1M3	5/20/2023	181	204	28.22	6/1/2023	Burntwood River	2
900.043000248036	BWR_22	F1M3	5/20/2023	186	213	34.79	6/1/2023	Burntwood River	2
900.043000248037	BWR_22	F1M3	5/20/2023	191	222	39.71	6/1/2023	Burntwood River	2
900.043000248040	BWR_22	F1M3	5/20/2023	177	206	31.41	6/1/2023	Burntwood River	2
900.043000248046	BWR_22	F1M3	5/20/2023	205	240	44.75	6/1/2023	Burntwood River	2
900.043000248047	BWR_22	F1M3	5/20/2023	195	226	41.09	6/1/2023	Burntwood River	2
900.043000248049	BWR_22	F1M3	5/20/2023	183	207	30.82	6/1/2023	Burntwood River	2
900.043000248052	BWR_22	F1M3	5/20/2023	184	213	32.24	6/1/2023	Burntwood River	2
900.043000248054	BWR_22	F1M3	5/20/2023	175	202	28.42	6/1/2023	Burntwood River	2
900.043000248057	BWR_22	F1M3	5/20/2023	173	198	26.69	6/1/2023	Burntwood River	2
900.043000248063	BWR_22	F1M3	5/20/2023	179	205	30.06	6/1/2023	Burntwood River	2
900.043000248066	BWR_22	F1M3	5/20/2023	178	201	28.21	6/1/2023	Burntwood River	2
900.043000248068	BWR_22	F1M3	5/20/2023	184	211	32.52	6/1/2023	Burntwood River	2
900.043000248074	BWR_22	F1M3	5/20/2023	149	173	19.64	6/1/2023	Burntwood River	2
900.043000248075	BWR_22	F1M3	5/20/2023	192	218	35.25	6/1/2023	Burntwood River	2
900.043000248076	BWR_22	F1M3	5/20/2023	160	185	20.87	6/1/2023	Burntwood River	2
900.043000248079	BWR_22	F1M3	5/20/2023	164	190	22.77	6/1/2023	Burntwood River	2
900.043000248080	BWR_22	F1M3	5/20/2023	180	208	31.05	6/1/2023	Burntwood River	2
900.043000248081	BWR_22	F1M3	5/20/2023	182	209	31.09	6/1/2023	Burntwood River	2
900.043000248084	BWR_22	F1M3	5/20/2023	190	220	35.62	6/1/2023	Burntwood River	2
900.043000248085	BWR_22	F1M3	5/20/2023	198	227	40.15	6/1/2023	Burntwood River	2
900.043000248086	BWR_22	F1M3	5/20/2023	180	206	28.80	6/1/2023	Burntwood River	2

DEC Tag ID	Lot	Family	Date	Fork Length (mm)	Total Length (mm)	Weight (g)	Date	Waterbody	Site
900.043000248088	BWR_22	F1M3	5/20/2023	202	231	41.50	6/1/2023	Burntwood River	2
900.043000248089	BWR_22	F1M3	5/20/2023	184	210	30.62	6/1/2023	Burntwood River	2
900.043000248091	BWR_22	F1M3	5/20/2023	199	226	41.03	6/1/2023	Burntwood River	2
900.043000248092	BWR_22	F1M3	5/20/2023	191	221	34.45	6/1/2023	Burntwood River	2
900.043000248093	BWR_22	F1M3	5/20/2023	168	191	23.74	6/1/2023	Burntwood River	2
900.043000248096	BWR_22	F1M3	5/20/2023	186	210	32.95	6/1/2023	Burntwood River	2
900.043000248097	BWR_22	F1M3	5/20/2023	173	197	25.92	6/1/2023	Burntwood River	2
900.043000248104	BWR_22	F1M3	5/20/2023	169	195	26.19	6/1/2023	Burntwood River	2
900.043000248111	BWR_22	F1M3	5/20/2023	197	228	39.28	6/1/2023	Burntwood River	2
900.043000247612	BWR_22	F1M6	5/18/2023	200	227	33.46	6/1/2023	Burntwood River	2
900.043000247613	BWR_22	F1M6	5/18/2023	180	201	28.60	6/1/2023	Burntwood River	2
900.043000247618	BWR_22	F1M6	5/18/2023	188	213	33.14	6/1/2023	Burntwood River	2
900.043000247620	BWR_22	F1M6	5/18/2023	197	223	35.47	6/1/2023	Burntwood River	2
900.043000247622	BWR_22	F1M6	5/18/2023	195	217	35.01	6/1/2023	Burntwood River	2
900.043000247623	BWR_22	F1M6	5/18/2023	205	233	40.40	6/1/2023	Burntwood River	2
900.043000247624	BWR_22	F1M6	5/18/2023	195	215	35.36	6/1/2023	Burntwood River	2
900.043000247626	BWR_22	F1M6	5/18/2023	190	214	37.14	6/1/2023	Burntwood River	2
900.043000247627	BWR_22	F1M6	5/18/2023	173	193	35.37	6/1/2023	Burntwood River	2
900.043000247628	BWR_22	F1M6	5/18/2023	197	223	38.76	6/1/2023	Burntwood River	2
900.043000247630	BWR_22	F1M6	5/18/2023	182	203	29.37	6/1/2023	Burntwood River	2
900.043000247631	BWR_22	F1M6	5/18/2023	207	233	42.95	6/1/2023	Burntwood River	2
900.043000247632	BWR_22	F1M6	5/18/2023	185	213	31.26	6/1/2023	Burntwood River	2
900.043000247634	BWR_22	F1M6	5/18/2023	193	217	36.50	6/1/2023	Burntwood River	2
900.043000247637	BWR_22	F1M6	5/18/2023	187	209	34.19	6/1/2023	Burntwood River	2
900.043000247640	BWR_22	F1M6	5/18/2023	190	215	31.28	6/1/2023	Burntwood River	2
900.043000247645	BWR_22	F1M6	5/18/2023	195	223	39.14	6/1/2023	Burntwood River	2
900.043000247646	BWR_22	F1M6	5/18/2023	190	217	31.33	6/1/2023	Burntwood River	2
900.043000247648	BWR_22	F1M6	5/18/2023	198	225	37.56	6/1/2023	Burntwood River	2

DEC Tag ID	Lot	Family	Date	Fork Length (mm)	Total Length (mm)	Weight (g)	Date	Waterbody	Site
900.043000247651	BWR_22	F1M6	5/18/2023	190	220	34.50	6/1/2023	Burntwood River	2
900.043000247653	BWR_22	F1M6	5/18/2023	190	214	32.56	6/1/2023	Burntwood River	2
900.043000247655	BWR_22	F1M6	5/18/2023	193	217	35.43	6/1/2023	Burntwood River	2
900.043000247656	BWR_22	F1M6	5/18/2023	216	242	48.35	6/1/2023	Burntwood River	2
900.043000247658	BWR_22	F1M6	5/18/2023	196	222	33.10	6/1/2023	Burntwood River	2
900.043000247660	BWR_22	F1M6	5/18/2023	177	198	36.77	6/1/2023	Burntwood River	2
900.043000247661	BWR_22	F1M6	5/18/2023	163	185	22.69	6/1/2023	Burntwood River	2
900.043000247662	BWR_22	F1M6	5/18/2023	165	183	26.57	6/1/2023	Burntwood River	2
900.043000247663	BWR_22	F1M6	5/18/2023	189	212	35.97	6/1/2023	Burntwood River	2
900.043000247664	BWR_22	F1M6	5/18/2023	220	245	53.26	6/1/2023	Burntwood River	2
900.043000247665	BWR_22	F1M6	5/18/2023	190	217	38.32	6/1/2023	Burntwood River	2
900.043000247669	BWR_22	F1M6	5/18/2023	195	223	49.33	6/1/2023	Burntwood River	2
900.043000247670	BWR_22	F1M6	5/18/2023	183	210	32.04	6/1/2023	Burntwood River	2
900.043000247671	BWR_22	F1M6	5/18/2023	180	200	27.10	6/1/2023	Burntwood River	2
900.043000247672	BWR_22	F1M6	5/18/2023	197	223	36.16	6/1/2023	Burntwood River	2
900.043000247674	BWR_22	F1M6	5/18/2023	200	223	37.48	6/1/2023	Burntwood River	2
900.043000247678	BWR_22	F1M6	5/18/2023	195	222	34.51	6/1/2023	Burntwood River	2
900.043000247679	BWR_22	F1M6	5/18/2023	190	217	35.41	6/1/2023	Burntwood River	2
900.043000247685	BWR_22	F1M6	5/18/2023	193	215	33.01	6/1/2023	Burntwood River	2
900.043000247687	BWR_22	F1M6	5/18/2023	190	218	34.04	6/1/2023	Burntwood River	2
900.043000247689	BWR_22	F1M6	5/18/2023	170	193	24.44	6/1/2023	Burntwood River	2
900.043000247690	BWR_22	F1M6	5/18/2023	175	198	30.56	6/1/2023	Burntwood River	2
900.043000247691	BWR_22	F1M6	5/18/2023	173	196	26.45	6/1/2023	Burntwood River	2
900.043000247693	BWR_22	F1M6	5/18/2023	170	195	23.28	6/1/2023	Burntwood River	2
900.043000247694	BWR_22	F1M6	5/18/2023	202	230	43.36	6/1/2023	Burntwood River	2
900.043000247695	BWR_22	F1M6	5/18/2023	185	210	30.47	6/1/2023	Burntwood River	2
900.043000247697	BWR_22	F1M6	5/18/2023	222	253	51.86	6/1/2023	Burntwood River	2
900.043000247698	BWR_22	F1M6	5/18/2023	185	213	34.26	6/1/2023	Burntwood River	2



DEC Tag ID	Lot	Family	Date	Fork Length (mm)	Total Length (mm)	Weight (g)	Date	Waterbody	Site
900.043000247700	BWR_22	F1M6	5/18/2023	203	228	41.53	6/1/2023	Burntwood River	2
900.043000247701	BWR_22	F1M6	5/18/2023	195	220	40.73	6/1/2023	Burntwood River	2
900.043000247702	BWR_22	F1M6	5/18/2023	195	225	39.13	6/1/2023	Burntwood River	2
900.043000247704	BWR_22	F1M6	5/18/2023	182	208	28.80	6/1/2023	Burntwood River	2
900.043000247705	BWR_22	F1M6	5/18/2023	210	237	44.60	6/1/2023	Burntwood River	2
900.043000247706	BWR_22	F1M6	5/18/2023	187	211	31.81	6/1/2023	Burntwood River	2
900.043000247707	BWR_22	F1M6	5/18/2023	194	225	31.85	6/1/2023	Burntwood River	2
900.043000247709	BWR_22	F1M6	5/18/2023	182	207	30.49	6/1/2023	Burntwood River	2
900.043000247711	BWR_22	F1M6	5/18/2023	212	237	44.17	6/1/2023	Burntwood River	2
900.043000247714	BWR_22	F1M6	5/18/2023	187	213	31.22	6/1/2023	Burntwood River	2
900.043000247715	BWR_22	F1M6	5/18/2023	185	212	30.95	6/1/2023	Burntwood River	2
900.043000247716	BWR_22	F1M6	5/18/2023	182	203	30.47	6/1/2023	Burntwood River	2
900.043000247718	BWR_22	F1M6	5/18/2023	183	208	39.61	6/1/2023	Burntwood River	2
900.043000247721	BWR_22	F1M6	5/18/2023	205	230	41.38	6/1/2023	Burntwood River	2
900.043000247728	BWR_22	F1M6	5/18/2023	193	217	34.12	6/1/2023	Burntwood River	2
900.043000247733	BWR_22	F1M6	5/18/2023	203	225	40.77	6/1/2023	Burntwood River	2
900.043000247734	BWR_22	F1M6	5/18/2023	187	208	33.11	6/1/2023	Burntwood River	2
900.043000247736	BWR_22	F1M6	5/18/2023	200	227	38.46	6/1/2023	Burntwood River	2
900.043000247743	BWR_22	F1M6	5/18/2023	176	200	26.57	6/1/2023	Burntwood River	2
900.043000247744	BWR_22	F1M6	5/18/2023	200	226	39.60	6/1/2023	Burntwood River	2
900.043000247747	BWR_22	F1M6	5/18/2023	190	213	33.07	6/1/2023	Burntwood River	2
900.043000247749	BWR_22	F1M6	5/18/2023	215	245	46.74	6/1/2023	Burntwood River	2
900.043000247750	BWR_22	F1M6	5/18/2023	178	204	26.70	6/1/2023	Burntwood River	2
900.043000247751	BWR_22	F1M6	5/18/2023	203	227	38.22	6/1/2023	Burntwood River	2
900.043000247760	BWR_22	F1M6	5/18/2023	187	212	32.25	6/1/2023	Burntwood River	2
900.043000247761	BWR_22	F1M6	5/18/2023	185	207	29.90	6/1/2023	Burntwood River	2
900.043000247765	BWR_22	F1M6	5/18/2023	183	208	30.57	6/1/2023	Burntwood River	2
900.043000247766	BWR_22	F1M6	5/18/2023	170	192	22.17	6/1/2023	Burntwood River	2



DEC Tag ID	Lot	Family	Date	Fork Length (mm)	Total Length (mm)	Weight (g)	Date	Waterbody	Site
900.043000247769	BWR_22	F1M6	5/18/2023	172	197	25.40	6/1/2023	Burntwood River	2
900.043000247770	BWR_22	F1M6	5/18/2023	192	217	36.10	6/1/2023	Burntwood River	2
900.043000247771	BWR_22	F1M6	5/18/2023	176	202	27.21	6/1/2023	Burntwood River	2
900.043000247773	BWR_22	F1M6	5/18/2023	200	227	36.25	6/1/2023	Burntwood River	2
900.043000247774	BWR_22	F1M6	5/18/2023	215	243	47.97	6/1/2023	Burntwood River	2
900.043000247775	BWR_22	F1M6	5/18/2023	188	215	34.58	6/1/2023	Burntwood River	2
900.043000247780	BWR_22	F1M6	5/18/2023	190	217	44.15	6/1/2023	Burntwood River	2
900.043000247781	BWR_22	F1M6	5/18/2023	208	237	43.39	6/1/2023	Burntwood River	2
900.043000247786	BWR_22	F1M6	5/18/2023	208	240	44.66	6/1/2023	Burntwood River	2
900.043000247789	BWR_22	F1M6	5/18/2023	195	221	35.26	6/1/2023	Burntwood River	2
900.043000247790	BWR_22	F1M6	5/18/2023	183	213	32.70	6/1/2023	Burntwood River	2
900.043000247792	BWR_22	F1M6	5/18/2023	190	216	33.06	6/1/2023	Burntwood River	2
900.043000247793	BWR_22	F1M6	5/18/2023	186	214	32.08	6/1/2023	Burntwood River	2
900.043000247796	BWR_22	F1M6	5/18/2023	233	263	58.46	6/1/2023	Burntwood River	2
900.043000247797	BWR_22	F1M6	5/18/2023	198	225	38.75	6/1/2023	Burntwood River	2
900.043000247798	BWR_22	F1M6	5/18/2023	168	190	23.05	6/1/2023	Burntwood River	2
900.043000247801	BWR_22	F1M6	5/18/2023	200	225	39.54	6/1/2023	Burntwood River	2
900.043000247802	BWR_22	F1M6	5/18/2023	195	224	41.82	6/1/2023	Burntwood River	2
900.043000247803	BWR_22	F1M6	5/18/2023	185	208	39.27	6/1/2023	Burntwood River	2
900.043000247804	BWR_22	F1M6	5/18/2023	202	225	38.32	6/1/2023	Burntwood River	2
900.043000247805	BWR_22	F1M6	5/18/2023	192	223	34.56	6/1/2023	Burntwood River	2
900.043000247806	BWR_22	F1M6	5/18/2023	186	207	33.02	6/1/2023	Burntwood River	2
900.043000247807	BWR_22	F1M6	5/18/2023	187	208	33.71	6/1/2023	Burntwood River	2
900.043000247810	BWR_22	F1M6	5/18/2023	190	214	35.14	6/1/2023	Burntwood River	2
900.043000247888	BWR_22	F1M6	5/18/2023	192	215	36.07	6/1/2023	Burntwood River	2
900.043000247412	BWR_22	F1M7	5/18/2023	205	235	41.35	6/1/2023	Burntwood River	2
900.043000247413	BWR_22	F1M7	5/18/2023	150	172	19.37	6/1/2023	Burntwood River	2
900.043000247415	BWR_22	F1M7	5/18/2023	180	208	29.78	6/1/2023	Burntwood River	2





DEC Tag ID	Lot	Family	Date	Fork Length (mm)	Total Length (mm)	Weight (g)	Date	Waterbody	Site
900.043000247416	BWR_22	F1M7	5/18/2023	207	237	39.06	6/1/2023	Burntwood River	2
900.043000247417	BWR_22	F1M7	5/18/2023	183	212	29.13	6/1/2023	Burntwood River	2
900.043000247419	BWR_22	F1M7	5/18/2023	200	236	42.22	6/1/2023	Burntwood River	2
900.043000247420	BWR_22	F1M7	5/18/2023	187	214	33.72	6/1/2023	Burntwood River	2
900.043000247421	BWR_22	F1M7	5/18/2023	196	227	43.05	6/1/2023	Burntwood River	2
900.043000247422	BWR_22	F1M7	5/18/2023	185	216	33.23	6/1/2023	Burntwood River	2
900.043000247425	BWR_22	F1M7	5/18/2023	183	213	30.67	6/1/2023	Burntwood River	2
900.043000247426	BWR_22	F1M7	5/18/2023	190	217	33.47	6/1/2023	Burntwood River	2
900.043000247427	BWR_22	F1M7	5/18/2023	203	233	43.96	6/1/2023	Burntwood River	2
900.043000247429	BWR_22	F1M7	5/18/2023	203	233	44.62	6/1/2023	Burntwood River	2
900.043000247432	BWR_22	F1M7	5/18/2023	180	210	29.76	6/1/2023	Burntwood River	2
900.043000247437	BWR_22	F1M7	5/18/2023	198	221	33.20	6/1/2023	Burntwood River	2
900.043000247440	BWR_22	F1M7	5/18/2023	186	213	32.63	6/1/2023	Burntwood River	2
900.043000247443	BWR_22	F1M7	5/18/2023	166	197	24.91	6/1/2023	Burntwood River	2
900.043000247445	BWR_22	F1M7	5/18/2023	182	212	31.16	6/1/2023	Burntwood River	2
900.043000247446	BWR_22	F1M7	5/18/2023	208	240	41.86	6/1/2023	Burntwood River	2
900.043000247447	BWR_22	F1M7	5/18/2023	193	213	26.54	6/1/2023	Burntwood River	2
900.043000247450	BWR_22	F1M7	5/18/2023	205	236	40.53	6/1/2023	Burntwood River	2
900.043000247454	BWR_22	F1M7	5/18/2023	190	220	32.05	6/1/2023	Burntwood River	2
900.043000247456	BWR_22	F1M7	5/18/2023	190	218	34.17	6/1/2023	Burntwood River	2
900.043000247458	BWR_22	F1M7	5/18/2023	175	203	24.71	6/1/2023	Burntwood River	2
900.043000247460	BWR_22	F1M7	5/18/2023	178	205	28.34	6/1/2023	Burntwood River	2
900.043000247461	BWR_22	F1M7	5/18/2023	187	217	33.46	6/1/2023	Burntwood River	2
900.043000247462	BWR_22	F1M7	5/18/2023	190	218	33.64	6/1/2023	Burntwood River	2
900.043000247463	BWR_22	F1M7	5/18/2023	180	205	25.66	6/1/2023	Burntwood River	2
900.043000247464	BWR_22	F1M7	5/18/2023	178	202	27.23	6/1/2023	Burntwood River	2
900.043000247467	BWR_22	F1M7	5/18/2023	180	211	30.30	6/1/2023	Burntwood River	2
900.043000247469	BWR_22	F1M7	5/18/2023	180	210	30.08	6/1/2023	Burntwood River	2



DEC Tag ID	Lot	Family	Date	Fork Length (mm)	Total Length (mm)	Weight (g)	Date	Waterbody	Site
900.043000247470	BWR_22	F1M7	5/18/2023	170	195	23.73	6/1/2023	Burntwood River	2
900.043000247472	BWR_22	F1M7	5/18/2023	170	204	26.44	6/1/2023	Burntwood River	2
900.043000247474	BWR_22	F1M7	5/18/2023	166	193	21.62	6/1/2023	Burntwood River	2
900.043000247477	BWR_22	F1M7	5/18/2023	175	198	26.97	6/1/2023	Burntwood River	2
900.043000247478	BWR_22	F1M7	5/18/2023	174	201	25.90	6/1/2023	Burntwood River	2
900.043000247479	BWR_22	F1M7	5/18/2023	214	248	49.15	6/1/2023	Burntwood River	2
900.043000247481	BWR_22	F1M7	5/18/2023	195	227	36.36	6/1/2023	Burntwood River	2
900.043000247485	BWR_22	F1M7	5/18/2023	190	223	34.11	6/1/2023	Burntwood River	2
900.043000247486	BWR_22	F1M7	5/18/2023	190	220	33.80	6/1/2023	Burntwood River	2
900.043000247490	BWR_22	F1M7	5/18/2023	197	228	34.47	6/1/2023	Burntwood River	2
900.043000247491	BWR_22	F1M7	5/18/2023	163	187	20.92	6/1/2023	Burntwood River	2
900.043000247494	BWR_22	F1M7	5/18/2023	200	232	35.96	6/1/2023	Burntwood River	2
900.043000247497	BWR_22	F1M7	5/18/2023	190	219	37.81	6/1/2023	Burntwood River	2
900.043000247500	BWR_22	F1M7	5/18/2023	184	213	32.79	6/1/2023	Burntwood River	2
900.043000247503	BWR_22	F1M7	5/18/2023	188	220	32.33	6/1/2023	Burntwood River	2
900.043000247504	BWR_22	F1M7	5/18/2023	170	197	25.70	6/1/2023	Burntwood River	2
900.043000247505	BWR_22	F1M7	5/18/2023	160	187	23.47	6/1/2023	Burntwood River	2
900.043000247506	BWR_22	F1M7	5/18/2023	157	177	19.54	6/1/2023	Burntwood River	2
900.043000247509	BWR_22	F1M7	5/18/2023	182	216	30.14	6/1/2023	Burntwood River	2
900.043000247510	BWR_22	F1M7	5/18/2023	203	235	39.90	6/1/2023	Burntwood River	2
900.043000247511	BWR_22	F1M7	5/18/2023	172	202	25.62	6/1/2023	Burntwood River	2
900.043000247513	BWR_22	F1M7	5/18/2023	160	188	21.76	6/1/2023	Burntwood River	2
900.043000247517	BWR_22	F1M7	5/18/2023	180	210	28.30	6/1/2023	Burntwood River	2
900.043000247518	BWR_22	F1M7	5/18/2023	212	239	46.42	6/1/2023	Burntwood River	2
900.043000247520	BWR_22	F1M7	5/18/2023	190	216	33.30	6/1/2023	Burntwood River	2
900.043000247523	BWR_22	F1M7	5/18/2023	196	225	34.59	6/1/2023	Burntwood River	2
900.043000247524	BWR_22	F1M7	5/18/2023	185	217	31.80	6/1/2023	Burntwood River	2
900.043000247526	BWR_22	F1M7	5/18/2023	166	193	35.10	6/1/2023	Burntwood River	2

DEC Tag ID	Lot	Family	Date	Fork Length (mm)	Total Length (mm)	Weight (g)	Date	Waterbody	Site
900.043000247527	BWR_22	F1M7	5/18/2023	193	226	34.16	6/1/2023	Burntwood River	2
900.043000247531	BWR_22	F1M7	5/18/2023	163	188	22.34	6/1/2023	Burntwood River	2
900.043000247532	BWR_22	F1M7	5/18/2023	150	171	15.72	6/1/2023	Burntwood River	2
900.043000247534	BWR_22	F1M7	5/18/2023	197	228	38.12	6/1/2023	Burntwood River	2
900.043000247537	BWR_22	F1M7	5/18/2023	185	212	30.76	6/1/2023	Burntwood River	2
900.043000247540	BWR_22	F1M7	5/18/2023	193	220	34.20	6/1/2023	Burntwood River	2
900.043000247541	BWR_22	F1M7	5/18/2023	198	228	37.96	6/1/2023	Burntwood River	2
900.043000247545	BWR_22	F1M7	5/18/2023	187	216	32.22	6/1/2023	Burntwood River	2
900.043000247547	BWR_22	F1M7	5/18/2023	177	206	26.94	6/1/2023	Burntwood River	2
900.043000247552	BWR_22	F1M7	5/18/2023	193	222	34.85	6/1/2023	Burntwood River	2
900.043000247556	BWR_22	F1M7	5/18/2023	183	207	29.64	6/1/2023	Burntwood River	2
900.043000247557	BWR_22	F1M7	5/18/2023	155	216	33.40	6/1/2023	Burntwood River	2
900.043000247558	BWR_22	F1M7	5/18/2023	190	220	30.72	6/1/2023	Burntwood River	2
900.043000247559	BWR_22	F1M7	5/18/2023	172	200	26.62	6/1/2023	Burntwood River	2
900.043000247560	BWR_22	F1M7	5/18/2023	175	200	30.22	6/1/2023	Burntwood River	2
900.043000247563	BWR_22	F1M7	5/18/2023	185	213	32.14	6/1/2023	Burntwood River	2
900.043000247564	BWR_22	F1M7	5/18/2023	188	220	34.97	6/1/2023	Burntwood River	2
900.043000247570	BWR_22	F1M7	5/18/2023	182	210	30.61	6/1/2023	Burntwood River	2
900.043000247572	BWR_22	F1M7	5/18/2023	182	212	31.05	6/1/2023	Burntwood River	2
900.043000247574	BWR_22	F1M7	5/18/2023	217	248	52.05	6/1/2023	Burntwood River	2
900.043000247576	BWR_22	F1M7	5/18/2023	137	153	13.78	6/1/2023	Burntwood River	2
900.043000247577	BWR_22	F1M7	5/18/2023	176	205	29.48	6/1/2023	Burntwood River	2
900.043000247578	BWR_22	F1M7	5/18/2023	185	213	33.01	6/1/2023	Burntwood River	2
900.043000247580	BWR_22	F1M7	5/18/2023	195	224	35.11	6/1/2023	Burntwood River	2
900.043000247581	BWR_22	F1M7	5/18/2023	170	198	24.37	6/1/2023	Burntwood River	2
900.043000247583	BWR_22	F1M7	5/18/2023	208	244	45.56	6/1/2023	Burntwood River	2
900.043000247586	BWR_22	F1M7	5/18/2023	180	206	28.01	6/1/2023	Burntwood River	2
900.043000247588	BWR_22	F1M7	5/18/2023	185	214	30.87	6/1/2023	Burntwood River	2

DEC Tag ID	Lot	Family	Date	Fork Length (mm)	Total Length (mm)	Weight (g)	Date	Waterbody	Site
900.043000247589	BWR_22	F1M7	5/18/2023	193	223	35.86	6/1/2023	Burntwood River	2
900.043000247591	BWR_22	F1M7	5/18/2023	210	238	41.99	6/1/2023	Burntwood River	2
900.043000247596	BWR_22	F1M7	5/18/2023	180	207	29.71	6/1/2023	Burntwood River	2
900.043000247597	BWR_22	F1M7	5/18/2023	180	203	26.31	6/1/2023	Burntwood River	2
900.043000247599	BWR_22	F1M7	5/18/2023	197	227	40.53	6/1/2023	Burntwood River	2
900.043000247600	BWR_22	F1M7	5/18/2023	187	214	31.99	6/1/2023	Burntwood River	2
900.043000247603	BWR_22	F1M7	5/18/2023	180	203	26.56	6/1/2023	Burntwood River	2
900.043000247605	BWR_22	F1M7	5/18/2023	185	213	29.62	6/1/2023	Burntwood River	2
900.043000247606	BWR_22	F1M7	5/18/2023	186	217	33.06	6/1/2023	Burntwood River	2
900.043000247607	BWR_22	F1M7	5/18/2023	175	203	26.65	6/1/2023	Burntwood River	2
900.043000247608	BWR_22	F1M7	5/18/2023	180	208	27.52	6/1/2023	Burntwood River	2
900.043000247610	BWR_22	F1M7	5/18/2023	196	223	39.73	6/1/2023	Burntwood River	2
900.043000247650	BWR_22	F1M7	5/18/2023	190	220	31.72	6/1/2023	Burntwood River	2

## **APPENDIX 2: WATER QUALITY THRESHOLD**

**Table A2-1: Reported Lake Sturgeon threshold values for Dissolved Oxygen, Dissolved Carbon Dioxide, pH, Ammonia-Nitrogen and Nitrite Nitrogen**

Parameter	Threshold Values	References
<b>Dissolved O<sub>2</sub> (%)</b>	> 80	Yoon et al 2019 <sup>1</sup>
	> 60	Chebanov and Galich 2011 <sup>2</sup>
<b>Dissolved O<sub>2</sub> (mg/L)</b>	> 6.0	Hochleithner and Gessner 2012 <sup>3</sup>
	> 4.0	Chebanov and Galich 2011
	> 5.0	Mims et al 2002 <sup>4</sup>
	> 6.0	Dettlaff et al 1993 <sup>5</sup>
<b>Dissolved CO<sub>2</sub> (mg/L)</b>	< 10.0	Hochleithner and Gessner 2012
	< 10.0	Chebanov and Galich 2011
<b>pH</b>	6.5 to 8.0	Hochleithner and Gessner 2012
	6.5 to 7.5	Chebanov and Galich 2011
	6.5 to 8.5	Mims et al 2002
	6.5 to 8.0	Dettlaff et al 1993
<b>Ammonia NH<sub>3</sub>-N (mg/L)</b>	< 0.010	Hochleithner and Gessner 2012
	< 0.003	Chebanov and Galich 2011
	< 0.010	Mims et al 2002
<b>Nitrite Nitrogen (mg/L)</b>	0.1 to 0.2	Chebanov and Galich 2011
	< 0.1	Mims et al 2002

1. Yoon, G.R., Deslauriers, D., Enders, E.C., Treberg, J.R., and Anderson, W.G. 2019. Effects of temperature, dissolved oxygen, and substrate on the development of metabolic phenotypes in age-0 lake sturgeon (*Acipenser fulvescens*): implications for overwintering survival. *Canadian Journal of Fisheries and Aquatic Sciences* 76(9): 1596-1607
2. Chebanov, M.S.C. and Galich, E.V. Sturgeon hatchery manual. 2011. FAO Fisheries and Aquaculture Technical Paper. No. 558. Ankara, FAO, 303 p.
3. Hochleithner, M. and Gessner, J. 2012. The sturgeons and paddlefishes of the world: biology and aquaculture 3rd edition. Aqua Tech Publications, Kitzbuehel, Austria, 248 pp.
4. Mims, S.D., Lazur, A., Shelton, W.L., Gomelsky, B. and Chapman, F. 2002. Species profile: production of sturgeon. Southern Regional Aquaculture Centre Publication No. 7200. 8 pp.
5. Dettlaff, T.A., Ginsburg, A.S. and Schmalhausen, O.I. 1993. Sturgeon fishes: developmental biology and aquaculture. Springer-Verlag, New York, 300 pp.