



Freshwater Fisheries Society of BC

Report for April 2018 to March 2019

For the fifth year in a row, the Nechako White Sturgeon Conservation Centre (NWSCC) has successfully delivered a broad range of services that have contributed to the ongoing efforts to help conserve Nechako White Sturgeon.



In April and May of 2018, the NWSCC released 4,334 juvenile white sturgeon (Brood-Year 2017) into 9 unique sites on the Nechako River. These juveniles averaged 159.5 grams each. 30 of these juveniles received acoustic tags to support juvenile monitoring efforts.

32 large radio tagged juvenile white sturgeon were released in July 2018. These white sturgeon ranged from 46.8 cm to 57.5cm in length and weighed between 795 grams and 1609 grams.

All juveniles are PIT tagged, screened for polyploidy, scute marked, and have length and weight recorded prior to release.

2018 brood collection efforts included 4 days of angling and 17

days of set-lining between April 20, 2018 and May 16, 2018. These efforts produced 58 sturgeon captures (14 first captures and 43 recaptures). 15 of these adults were used for spawning at the hatchery. 3 females that were previously caught and held at the NWSCC were also used for spawning. 39 sturgeon were released during brood capture. During brood capture 10 old radio tags were replaced, and 15 new radio tags were applied.

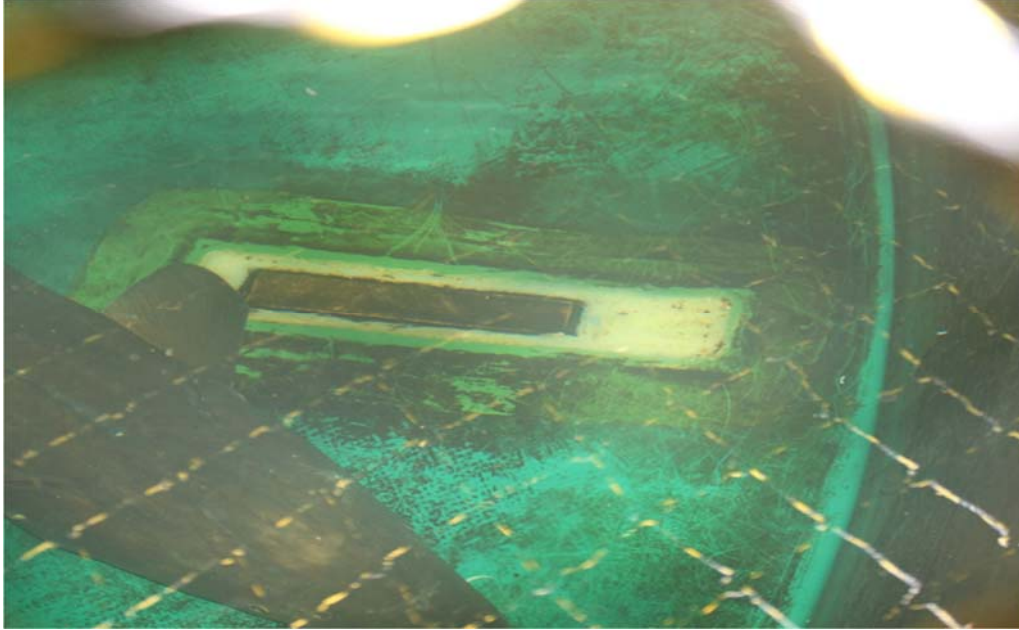
Spawning took place at NWSCC on May 18, 2018 and May 22, 2018. A total of 222,500 eggs were fertilized, this included approximately 15,000 eggs for two different university research projects. A total of 7 females each crossed with 11 males were spawned. This created 77 unique family groups that were later combined to make 7 maternal families.

The NWSCC also continued with its “wild egg” rearing program. Eggs collected for the spawn monitoring program on the Nechako River were brought back to the NWSCC and reared. Despite improved practice, high mortality was observed in the eggs. 16 juveniles are currently being reared from this program.

From July 10, 2018 to September 21, 2018 the NWSCC participated in the Juvenile Indexing Program that is organized by the Nechako White Sturgeon Recovery Initiative (NWSRI). This was also supported in part by staff from a Rio Tinto Internship Sponsorship Program. With a total of 61,740 hook hours applied our staff captured 27 sturgeon. Of these, 22 were hatchery (4 of them being recaptures), 3 were wild sub-adults (all recaptures), and 2 were wild juveniles (1 recapture).



In the Fall of 2018, with direction from BC Government Ministry of Forests, Lands, Natural Resource Operations and Rural Development (FLNRORD) NWSCC released 3,561 juvenile white sturgeon into the Nechako River. Releases took place on November 28, December 6, and December 7, 2018. These releases went well and were divided into 7 unique sites.



Capital projects from this reporting period include a Backup Oxygen System for the Adult Holding Tank, and an updated alarm system. Both of these upgrades will help protect this priceless resource that we have been entrusted with.

Work Plan for April 2019 to March 2020

For Fiscal Year 2020, most of the NWSCC's operations will be very similar to previous years, but there will be a couple of significant changes. One change is that we will have fewer juvenile white sturgeon to release in the spring of 2019 as the majority of these Brood-Year 2018 fish were released in the Fall of 2018. We will be releasing 500 juvenile sturgeon on May 3, 2019 as part of the community release event. Another change is the addition of a two-year rearing strategy at the facility that will produce significantly larger fish. Decision makers have decided to hold 189 Brood-Year 2018 individuals for two years at the hatchery to be able to achieve a release size of 70cm (3,000 grams). This strategy will hopefully increase survivability and provide information for future stocking decisions. Release decisions for 2020 are not completed by decision makers yet.

Brood capture is expected to be very similar to previous years. We are aiming for the maximum genetic diversity possible. Our previous goal of 12 females crossed with each of 12 males has been changed to 8 females crossed with each of 12 males. This change is to accommodate the operational constraints due to having the additional two-year program.

We will continue rearing wild collected eggs as in previous years, as this adds genetic breadth to our program.

The NWSCC will also participate in the juvenile monitoring program that is organized by the NWSRI.

Capital improvements to the NWSCC for Fiscal 2020 will include replacing the UPS for the Main PLC, and upgrading selected exterior lights with energy efficient LED fixtures.

FRESHWATER FISHERIES SOCIETY OF BC
Nechako White Sturgeon Recovery Facility

FUNDING SUMMARY	ACTUAL 2018	PRELIMINARY 2019	BUDGET 2020
Funding carry-over (shortfall)	(51,669)	(101,829)	(132,900)
Balance of building funding	-	-	-
NEEF Funding	400,000	400,000	400,000
RTA Funding	50,000	50,000	50,000
Funds for operating expenses	(493,408)	(472,437)	(482,854)
Funds for operating capital	(6,753)	(8,633)	(630)
Balance of funding	(101,829)	(132,900)	(166,383)

ACTUAL for Operating Year Completed	PRELIMINARY FISCAL 2019			
April 1, 2018 - March 31, 2019	TOTAL	NEEF 1061	RTA 1060	FFSBC/OTHER
Operating Expenses				
Salaries	269,993	188,922	50,000	31,070
Travel	-	-	-	-
Contract services	640	640	-	-
Operating Supplies & Services	48,286	48,286	-	-
Vehicle Expenses	12,669	12,669	-	-
Fish Feed	7,626	7,626	-	-
Facilities	38,724	38,724	-	-
Utilities	29,179	29,179	-	-
Property Taxes & Permits	12,409	12,409	-	-
Administration	33,864	33,864	-	-
Sub-total	453,390	372,319	50,000	31,070
GST payable	19,048	19,048	-	-
Total Operating Expenses	472,437	391,367	50,000	31,070
Operating Equipment				
Vehicles (net)	-	-	-	-
Production Equipment and computers	8,633	8,633	-	-
Total Operating equipment	8,633	8,633	-	-
Total Operating Costs	481,070	400,000	50,000	31,070

BUILDING				
Building capital costs (including gate)				
April 1, 2016 - March 31, 2019	18,150	18,150	-	-
Prior years cumulative costs	5,459,676	3,810,741	1,648,935	-
Total Building and Gate Cost	5,477,826	3,828,891	1,648,935	-

BUDGET for Current Operating Year	FISCAL 2020			
April 1, 2019 - March 31, 2020	TOTAL	NEEF 1061	RTA 1060	FFSBC/OTHER
Operating Expenses				
Salaries	270,778	187,294	50,000	33,484
Travel	2,000	2,000	-	-
Contract services	1,500	1,500	-	-
Operating Supplies & Services	48,550	48,550	-	-
Vehicle Expenses	13,074	13,074	-	-
Fish Feed	7,550	7,550	-	-
Facilities	31,955	31,955	-	-
Utilities	34,160	34,160	-	-
Property Taxes & Permits	18,958	18,958	-	-
Administration	35,281	35,281	-	-
Indirect expense allocation	-	-	-	-
Sub-total	463,806	380,322	50,000	33,484
GST payable	19,048	19,048	-	-
Total Operating Expenses	482,854	399,370	50,000	33,484
Operating Equipment				
Vehicles (net)	-	-	-	-
Production Equipment and computers	630	630	-	-
Total Operating equipment	630	630	-	-
Total Operating costs	483,484	400,000	50,000	33,484