### **MEETING MINUTES**

Saskatchewan River Sturgeon Management Board December 6<sup>th</sup>, 2018 McIntosh Mall, SK – Boardroom 1.1 9.00 am to 1.00 pm

#### In attendance

Ian Kitch, Manitoba Sustainable Development (by phone) Gary Carriere, Cumberland House Fishermen's Co-op John Carriere, Cumberland House Fishermen's Co-op Irvin Constant, Opaskwayak Commercial Fishermen's Co-op Diane Ballantyne, Opaskwayak Cree Nation Marcy Bast, SaskPower Stephanie Backhouse, Manitoba Hydro Rebecca Eberts, Saskatchewan Ministry of Environment

- 1. Opening prayer John Carriere
- 2. Introduction of members
- 3. Additions or changes to the agenda
- 4. Selection of new co-chairs for a 2 year (4 meeting) term

• Motion to amend Terms of Reference, such that co-chairs are no longer required to be from a specific group. Rather, anyone interested in being a co-chair can nominate themselves. Motion passed.

- 2018 2020 (spring) co-chairs are Marcy Bast and Ian Kitch
- 5. Summaries of 2018 adult index fishing program MB and SK
  - Saskatchewan (Marcy)
    - 9 fishers (May 31 June 6)
    - 224 Lake sturgeon caught, ranging in size from 0 60 lbs
    - 186 of the 224 were new fish, 38 were recaptures (83% were new)

#### Discussion

- Gary emphasized the importance of allowing the fishermen to determine when to start the program, as they are most familiar with the river and the fish
- Marcy indicated that in a couple years, there will be a need to engage a consultant to summarize all data collected from 2014 on

• John discussed the importance of continuing to fund fishermen to do this work, in order to have current information to inform the SARA listing process. Cumberland House got federal funding (AFSAR – Aboriginal Fund for Species At Risk) to clear log jams from tributary mouths (to prevent sediment from building up), but by the time the money was awarded (November) the delta was freezing and the work wasn't feasible.

• Ian indicated MSD (Manitoba Sustainable Development) would like to work with OCN to develop an application for AFSAR funding. The deadline for proposals is January 8<sup>th</sup>. OCN is also interested in applying for AFSAR funding, especially for projects involving community/youth engagement and education.

• Gary raised concern about that status of Goldeye and Northern Pike populations, they are observing a decline in numbers

• Discussion on the role of TK in the SRSMB – unanimous agreement that the importance of TK was acknowledged, and it was viewed as an essential component and driving force behind the SRSMB actions

• Representatives from both Cumberland House and Opaskwayak indicated it was important to consider the system as a whole, and pay attention to all species, not just sturgeon.

• Concern from multiple parties about the effectiveness of the federal governments 'Duty to Consult' requirement

- Manitoba (information sent by Ron Campbell and presented by Stephanie)
  - 419 LKST captured (3 mortalities)
  - 26 recaptures (94% new fish) 20 from MB, 6 from SK
  - See attached information

#### Discussion

• Discussion on what may be causing the increase in LKST juveniles – possibly due to recent high-water years which triggered favourable spawning conditions

• Ian indicated that OCN, other FN's and anglers are all reporting an increase in the number of sturgeon, especially juveniles

• Gary asked what can be done to ensure that water conditions suitable for spawning (increased flows in July/August) can be provided in all years?

• The Saskatchewan Water Security Agency controls releases from Lake Diefenbaker, which provides water to E.B. Campbell. Discussions with the Water Security Agency and DFO on modifying flows from L. Diefenbaker may happen but cannot be confirmed

 $\circ$   $\$  Gary suggested the construction of weirs may be good mitigation against low water years

6. Observations from 2018 field work

• OCN shared observations from the 2018 field season, and emphasized the importance of community education and engagement activities

- 7. Other Business
  - Sturgeon Workshop Winnipeg, December 14 Stephanie
    - $\odot$  Invitation for Board members to attend

 $\odot$  Gary expressed concern about the lack of funding for travel to attend events like this

 $\odot$  The board gave approval for Stephanie to present SRSMB monitoring results and overview

• Invitation to participate in a joint sturgeon board meeting

 $_{\odot}$  The Kischi Sipi Namao Committee sent a letter to the SRSMB asking if they were interested in participating in a group meeting, along with the Nelson River Sturgeon Board

SRSMB agreed they are interested, although had concerns about the location.
ACTION: Stephanie and Rebecca volunteered to participate in a group planning committee

• Student observations of index fishing at OCN - Diane

8-10 students participated in the 2018 index netting. It was well-received by students, the school and the field staff, and OCN would like to continue to do this.
OCN supported the students with \$\$ for boat gas and oil. Next year, they would like assistance with funding from Manitoba Hydro

• Water Festival and update on sturgeon school kits – Diane

 $_{\odot}$  Festival organized by the Kelsey Conservation District in the first week of June, includes OCN, The Pas and Cranberry School Division

 $\odot$  Diane brought the SRSMB sturgeon activity Marilynn put together, and it was very well received

# ACTION: Stephanie to send Diane other sturgeon education activities put together for the Kischi Sipi Namao Committee that Diane can use if she feels they are appropriate

• Preliminary Discussion about field work next year

 $\circ$  Will finalize during the spring meeting

 $_{\odot}$  Tentative plan is to do juvenile inventories, but recognize concern from OCN and CH about taking work away from fishermen

 $\odot$  SRSMB should consider applying for external funding, to be able to run both adult and juvenile programs each year

# ACTION: MSD to coordinate AFSAR application including funding for field work and community engagement, school activities.

• Invasive Species updates if new information is available – MB and SK

i. Saskatchewan (Jeri Geiger, Aquatic Invasive Species Coordinator with the Saskatchewan Ministry of Environment):

In 2018, sampled 131 sites in 121 water bodies (veliger and eDNA samples)

• Adult Invasive Mussel Monitoring (AIMM) – program to engage citizens to install substrate samplers, currently in place on 64 lakes with more than 275 entries

• Inspection – 2 permanent and one roaming station

- Approx. 2600 inspections, 50 decontaminations
- Early Detection/Rapid Response plan is under development

ii. Manitoba (Ian Kitch, Regional Fisheries Manager-Western and Northwestern Regions)

• In 2018, 6 watercraft inspection stations, 12,865 inspections, 1509 decontamination and 4 mussel fouled boats

• Monitoring on 78 water bodies (veligers, adults, eDNA and spiny waterflea)

• Other – Presentation from Rebecca on 2018 Index netting program on Tobin Lake, and resulting LKST captures

- 8. Closing prayer Gary Carriere
- 9. Lunch
- 10. Adjourn ~1.00

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December 21, 2018

# **Subject:** Saskatchewan River Lake Sturgeon Index Monitoring Program Summary 2018.

gill netting deployment days (14) and two (2) days for preparation and cleanup of equip

equipped with several (4) mesh sizes of gill nets (140, 203, 254, and 305 mm). Each fisher was assigned a reach (R1, R2, R3, and R4) of the Manitoba portion of the Saskatchewan River study area. Manitoba Sustainable Development - fisheries staff supervised and provided the technical / biological support necessary to complete the study.



**Figure 1.** Saskatchewan River Lake Sturgeon study area that starts from the Manitoba/Saskatchewan border and ends at the outflow of Cedar Lake (approx. 200 rkm) and divided in four (50 rkm) reaches (R1, R2, R3, and R4).

tags that emit a unique ten digit numbering code when scanned. These PIT tags are

Sturgeon population in the Manitoba portion of the Saskatchewan River. Numbered visual floy tags were also injected near the anterior portion of the dorsal fin to continue to encourage and promote public awareness and cooperation.

Hired fishers recorded abiotic data for each Lake Sturgeon captures that comprises the date, location, and gill net mesh size used to capture Lake Sturgeon. In addition, conventional morphometric measurement techniques were implemented from standard methodology for acipenserdae sampling. No ageing samples were taken this year.



**Figure 2.** Illustration of morph metric characters collected from Lake Sturgeon captured in the Saskatchewan River for this study (inter-orbital width, IOW; total length, TL; fork length, FL; pectoral length, PL).

A total of 419 Lake Sturgeon were captured within the time period and 416 were released with three (3) mortalities. Total of twenty (20) recaptures from the Manitoba and six (6) recaptures from the Saskatchewan tagging program. Manitoba data will be compiled with

Lake Sturgeon. This information is very crucial in implementing the recovery plan for the local Saskatchewan River Lake Sturgeon population.

I have attached some tables and histograms to summarize the data for your review. I will be imputing the data to determine / estimated the current population for 2018.

Ron Campbell SRSMB.

STDV	120.9692871	18.59230175	14.60812679	20.88968519	
МАХ	419	58	65	73	
MIN	23	3	24	4	
AVG	129.90	25.10	44.15	30.80	100
TOTAL	2598				
2018	419	26	60	14	100
2017					
2016	383	15	60	25	100
2015					
2014	272	11	61	28	100
2013					
2012	184	26	58	16	100
2011	60	7	58	35	100
2010	162	18	65	17	100
2009	279	28	61	10	100
2008	184	34	56	10	100
2007	85	37	44	19	100
2005	56	27	48	25	100
2004	83	57	27	16	100
2003	112	57	27	16	100
2002	45	18	40	42	100
2001	23	13	35	52	100
2000 2001	33 68	3	38 28	59 66	100 100
1999	45	7	31	62	100
1998	38	3	24	73	100
1997	41	51	24	26	100
1996	26	58	38	4	100
	1	< 600	600 - 850	>850	
YEAR	TOTAL CAPTURES	JUVENILE (%)		ADULT (%)	TOTAL %

**Table 1.** Summary of total captures and percentage (%) of juvenile, sub adult and adultsfor 1996 to 2018 Lake Sturgeon monitoring program.











# Manitoba Sustainable Development AIS Program Update Highlights from the 2018 open water season

December 3, 2018

### Watercraft Inspection Stations:

- The watercraft inspection stations began operating on May 10, 2018.
- There were six stations in total located at strategic points on provincial highways and at a high volume boat launch. These stations operated on a Thursday Monday basis, for 6-10 hours per day throughout the open water season. The northern stations (Grand Rapids, The Pas and Swan River) operated until October 21 and the south stations (Headingley, Selkirk and Eriksdale) operated until October 22.
- Of the 12,865 watercraft inspected, 1509 decontaminations were done and 4 mussel fouled boats were intercepted.

#### Set Fines:

- In October 2018, set fines were enacted for infractions under Part 3.1 of the Water Protection Act and the Aquatic Invasive Species Regulation.
- Set fines allow officers to issue a ticket which can be paid by the offender without incurring court time; this approach allows officers to enforce the laws more efficiently and effectively than before.
- The following is an example of some of the individual set fines. Fines for corporations are typically higher. For a complete list go to:
  - \$237 for failing to open the drain plug and valves when transporting watercraft on land,
  - \$237 for failing to remove or open drain plugs and valves and drain all water from a watercraft when leaving a water body.
  - \$486 for failing to remove AIS and aquatic plants and mud; and remove standing water from a watercraft BEFORE entering a water body
  - \$486 for failing to remove AIS and aquatic plants from watercraft when leaving a water body.
  - o \$672 for failing to stop at a Watercraft Inspection Station,
  - \$1296 for possessing, bringing into or transporting an aquatic invasive species,
  - \$2542 for depositing or releasing an aquatic invasive species in Manitoba. Corporation fines are higher.

#### **Monitoring:**

- The AIS Unit collaborated with other agencies and groups to monitor 78 water bodies.
- A number of methods were used singularly or in combination at each water body to monitor for Zebra Mussel veligers, Zebra Mussel eDNA, adult Zebra Mussels and Spiny Waterflea.

- Table 1 summarizes the number of water bodies sampled and sampling effort by agency.
- Please note, due to other Department priorities there was an overall reduction in the number of water bodies the AIS Unit sampled compared to 2017.

Table 1: Summary of water bodies sampled and sampling effort by agency.

AGENCY	WATER BODIES SAMPLED	WATER SAMPLES (for veligers)	SUBSTRATE SAMPLERS (for settled mussels)	WATER SAMPLES (for eDNA)
Sustainable	32	174	19	67
Development (SD) <sup>1</sup>				
/DFO Prairies Area AIS				
DFO Winnipeg				48
Environmental DNA	11			
Program				
Lake Winnipeg	1	62	10	-
Research Consortium				
Manitoba Hydro	4	60	8	-
Riding Mountain National Park	33	157	36	121
Swan Valley Sport Fish Enhancement	11		12	-
Saskatchewan Environment	1	-		-
Anishinaabe	4	-	5	-
Agowidiiwinan Treaty No. 2				
TOTAL	97 <sup>2</sup>	456	90	236

1. Core provincial AIS monitoring done by Sustainable Development (AIS Unit, Regional Operations and Water Science and Management) in partnership with DFO Prairies Area AIS.

2. Value higher than 78 as some water bodies (19) were sampled by more than one agency.

#### Not known to be Invaded Sampling Effort and Results:

- Seventy-four water bodies were sampled for the early detection of Zebra Mussels.
- No Zebra Mussels were detected in veliger and eDNA samples taken during the summer sampling efforts and from the fall efforts where samples have been analysed.
- There are however, a number of veliger samples yet to be analysed which were collected by the department.
- No adult Zebra Mussels were detected on substrate samplers that have been analysed or infrastructure that was checked.

- No Zebra Mussels were detected in the bioboxes monitored by Manitoba Hydro and nothing was detected in the work done through the Waterway Crews.
- Where water samples were collected for Zebra Mussel veliger analysis, the samples were also analysed for the presence or absence of Spiny Waterflea. For samples which have been analysed to date, no Spiny Waterflea were found in waterbodies where they were not already known to occur (i.e. Winnipeg River, Lake Winnipeg).

### First Detection and Response Sampling Effort and Results:

- Waterbodies that had previous detections (i.e. Cedar Lake, Singush Lake and Whirlpool Lake) were monitored but no veligers, eDNA or adult Zebra Mussels were found in samples analysed to date.
- There are veligers samples from the fall sampling effort on Cedar and Singush Lakes that have yet to be analysed.
- Manitoba will continue to monitor Cedar, Singush Lakes, and downstream of Whirlpool Lake for Zebra Mussel presence.
- Riding Mountain National Park is the responsible agency for Whirlpool Lake. It is our understanding they will continue to monitor Whirlpool Lake in 2019.

## Established Water Body Sampling Effort and Results:

- To date, the Red River and Lake Winnipeg remain the only water bodies in Manitoba with known established Zebra Mussel populations.
- In Lake Winnipeg, Zebra Mussels are considered well established in both the south basin and channel, so no further monitoring of these areas is done by the AIS Unit.
- The north basin of Lake Winnipeg continues to be monitored to follow the spread and establishment into this basin.
- While the autumn 2018 Zebra Mussel veliger samples have yet to be analysed, results from the spring and summer samples, indicate that <u>Zebra Mussel veligers</u> <u>are extending into the middle portion of the north basin.</u>
- Adults were detected for the first time on substrate samplers set at Georges Island, commercial fishing nets set off Poplar River and acoustic telemetry (i.e. fish tracking) equipment set off Grand Rapids.

Water Body	Veligers	eDNA	Adults
	# of	# of	# of
	samples	samples	substrate
	-		samplers
Cedar Lake	30	16	1
Saskatchewan River			6
@ GR Fish Plant	3		
From GS to Hwy 6		4	
At boat launch		4	

#### Northwest Region Specific Sampling Effort:

Devon Park @ The	3		
Pas			
The Pas bridge	6		
Footprint Lake	3	6	
Clearwater Lake	15	10	3
Little Limestone	4		
Moose Lake			1
Ranchers Creek			1
Summerberry River			1
Bradley Lake	4		
Namew Lake	3		