

**AGENDA - Minnesota 1837 Ceded Territory Fisheries Committee**  
**Northland Arboretum, Brainerd, MN**  
**Wednesday January 23, 2019 at 1:00 pm & Thursday January 24<sup>th</sup>, 2019 at 8:30am**

1.) Introductions

The group was welcomed by DNR. Introductions were made.

2.) Review and approve agenda

The agenda was approved.

3.) Distribute past meeting minutes – October 2018 FC meeting

No questions were raised on October meeting minutes.

4.) Update 2018 Harvest

State – Two sets of harvest numbers were presented. One with Tribal angling harvest included and one without. The estimates without Tribal angling harvest are used for determining the State's total kill. The State total kills for the 2018 fishing season were: walleye 45,680 lb, perch 3025 lb, northern pike 12963 lb. Tables were provided in DNR book.

Band – Tribal harvest totals for the 2018 fishing season were: walleye 28,088 lb, perch 39 lb, and northern pike 750 lb. The highest Tribal harvests occurred at Cedar Creek, North Garrison, and Liberty Beach. Handouts provided.

Jon Gilbert noted that total harvest was only about 74,000 lb in 2018.

5.) Update of 2018 assessment data

Annual Fall Assessment (MNDNR) - Short recap of information provided at the October meeting. More details provided in DNR book.

Gillnet catches increased, largely due to females in offshore nets. The 2013 year class (YC) is still the dominant year class. The 2016 YC appeared near the 2002-13 median while the 2017 YC was about twice the 2002-13 median. The 2014 YC was caught at near the 2002-13 median level. This is up from previous years, possibly from lack of exploitation.

Electrofishing catch of YOY walleye was consistent with forage net catches. Catch of age 1 walleye were at about the median level for the time series.

Walleye condition was below average with small and medium walleye condition down about 5%, large walleye condition down 8%.

Forage nets suggest that forage is generally low except spottail shiners, but spottails were not found to be a major walleye forage species during the diet study.

Northern pike numbers were down a little. Combined northern pike harvest in 2018 was the lowest since 2009.

Yellow perch catches in assessment gillnets were low with most ages below median CPE, except age 1.

Cisco catches in assessment gillnets were low and burbot have been very low for quite a few years.

Zebra mussel densities peaked in 2012 and appear to have stabilized at a density of around 500-700 individuals per square foot. Spiny waterflea densities are still increasing. Zooplankton densities increased somewhat, but mostly copepods, not Daphnids.

GLIFWC Assessments (Electrofishing) – handout provided. No changes since October meeting.

2018 Spring Population Estimate - Report provided in DNR book. Preferred estimate is 727,000 walleye 14 inches or greater in length. This estimate was stratified by sex only. Several other estimates were

calculated but viewed as less reliable either due to likely biases, or high variability in some stratifications.

#### 6.) Walleye modeling reports

Modeling subcommittee presented a synthesis of the estimates from the three models. All models indicated that spawning stock biomass has increased from lows estimated in 2013-2016, and that spawning stock biomass is similar to 2018 levels. The models had widely varying estimates on the size of the 2017 year-class. The estimated strength of the 2017 year-class should improve in the next model run as these fish will be 2+ in the fall gillnet assessment. Estimates of the abundance of walleye 14 inches and greater from the various population estimates match up well with model estimated abundances, including the 2018 population estimate and the 2018 model estimates. Powerpoint attached.

#### 7.) Review terms of 2017- 2020 Consensus and Overage Plan.

The overall long term goal listed in the Plan is 20 lb of mature walleye per gillnet lift with a more immediate goal to protect 2013 YC.

The Plan also states that harvest strategies will be intended to direct population towards these goals. Specific goals are that male SSB at the start of 2020 will be 103% of 2017 SSB males and female SSB at the start of 2020 will be 173% of 2017 SSB females.

SHL will be split 70/30 for first 64,000 lb and 50/50 after that.

Hooking mortality methods based on 2016 data.

2019 State overage cap is 110% of the State allocation.

The State's underage for the 2018 fishing season (27,111 lb/42,111 lb) have offset the State's overages for 2016 (6,800 lb) and 2017 (9,250 lb) fishing season so that the State begins the 2019 fishing season with no remaining overage. The magnitude of the State's remaining underage is greater than the allowed 2019 overage cap based on either a 120,000 or 150,000 SHL for the 2018 fishing season.

#### 8.) Operating model results

Results from the operating model analyses completed by the modeling subgroup were presented. The operating model was used to project changes in male and female spawning stock from 2019 to 2021 under different harvest levels. Harvest by the State and Tribal fisheries under the various harvest levels were allocated based on the 2017 Consensus Plan (CP). The starting population for the projections was the 2019 population estimates from the State's split-sex SCAA model. The male and female SSB estimates from the 2019 SCAA exceeded the 2018 SCAA estimates suggesting that the population was larger than what we estimated it to be last year. This increase in estimated abundance shifted the 2017-19 male and female SSB trajectory up and to the right on "claw" diagram. As per the Consensus Plan male and female SSB goals for 2020 were adjusted to reflect 103% of the current 2017 males SSB and 173% of the current 2017 female SSB. These updated goals are the "blue dot" on the projection graphs. The projected changes in male and female SSB following projected 2019 and 2020 harvest levels were compared to these updated male and female SSB goals.

Evaluated harvest levels ranged from 64,000 lb to 250,000 lb. All scenarios assume each fishery takes its full allocation (historical median take of allocation is 70% by the Bands and 62% by the State). Harvest levels at or below 120,000 lb in 2019 and 2020 were projected to keep SSB above the CP goal in 2020 and 2021. A total harvest of 150,000 lb in 2019 was projected to keep SSB at the CP goal in 2020 with males slightly above goal in 2021 and females slightly below goal. At a harvest 175,000 lb both male and female SSB fell slightly below their CP goals in 2020 and females further below goal in 2021 but males returning to goal in 2021. At harvest levels above 175,000 lb both male and female SSB fell below goal in 2020 and 2021.

Powerpoint attached.

## 9.) Set 2019 walleye harvest level for Mille Lacs Lake

Prior to discussing the 2019 safe harvest level the Bands and State each described their goals for the fishery.

Tribes: The primary goal of the Tribes is to recover the lake. So there is a need to maintain relatively low harvest. To manage the recovery a reference point is needed. The "Blue Dot" from consensus plan provides this reference point. We could harvest all the way down to Blue Dot, or leave some excess for growth, move towards upper right quadrant in "claw" diagram. Harvest caps are required to prevent pushing population below and left of Blue Dot.

State: The State's goals are: maintain a healthy stock, minimize risk of unplanned closures, maximize angling opportunities, and provide some limited open water harvest.

Given all of the ecosystem changes that have occurred, the State believes that the overall productivity of the lake has declined. This would lower the biological expectations and the realistic expectation that SSB can return to historical levels.

SHL proposals

State proposed 175,000 lb because the State believes 2019 SHL can be higher than the 2018 SHL.

The State added that it would propose limited harvest in May and fall or something similar. Projections for this type of harvest strategy were low enough that SSB would likely stay above 2020 Consensus Plan goals.

Bands acknowledged that overages and underages must balance over the period of the Consensus Plan, and that State currently is carrying an underage that can be applied against any 2019 overage (but limited by harvest cap). Exact amount of underage depends on which 2018 SHL is used.

State allocation with SHL of 165,000 lbs with 10% overage is about equal to an allocation of 170,000 lbs with no overage.

Bands proposed a SHL of 150,000 lb. This harvest level is projected to allow the population to meet the 2020 Consensus Plan goal.

The Tribes acknowledged the pressure the State is under from the public, but stated that they are also under pressure to allow more fishing.

Tribes feel that 150,000 lbs is a nice increase from the 120,000 SHL that the Tribes accepted for the 2018 SHL, and the 10% cap on State could result in a total kill as high as 158,700 lb.

Consensus could not be reached, so the meeting was suspended without resolution on the SHL. It was decided that a conference call to continue discussion should occur the following week.

Follow up call occurred on February 1, 2019. The group agreed to a SHL of 150,000 lb. . The State's overage cap is 10% of the State's allocation as defined in the Consensus Plan. Joint talking points were drafted.

## 10.) Northern pike information (Discussion)

Results from this year's run of the Northern Pike surplus production models were presented. Handout provided.

There was discussion over reducing the northern pike population and what measures should be taken to achieve this. The rationale for the reduction would be to reduce the population to level similar to that of the mid-1990s. The State wants to preserve quality fish even if total population is reduced.

Bands proposed setting a target harvest of 35,000 lb to 50,000 lb, which if achieved would result in an eventual population size between 120,000 and 200,000. Harvest cap would remain at 100,000 lb, at least while population is still large. State consented.

11.) Harvest limits for other species in Mille Lacs Lake (Action)

Yellow Perch – 270,000 lb, 50:50 allocation.

Tullibee and Burbot – No SHL, minimal harvest.

12.) 2019 Inland Waters (Information/Discussion)

GLIFWC handout and section in DNR book.

13.) 2019 Management and research activities (Discussion)

Creel calculations - State presented a preliminary proposal on adjusting how the lengths of released fish are recorded in the creel and subsequently how mean weight of released fish is estimated. The State had been assuming anglers measure and recall fish lengths the same way the State records lengths for harvested fish. For harvested fish the State truncates lengths by inch, tallies fish within 1-inch bins, and then uses the average weight for a fish that is at the midpoint of the inch bin. Anglers however tend to round fish lengths to the nearest whole inch. As a result, mean weight of angler released fish should be based on mean weight calculated from the nearest whole inch. The State proposes basing the mean weight of released fish on the whole inch to better reflect the lengths of released fish. As described in the Protocols, the State will send a formal letter and report on this topic to the Tribes describing this change in procedure. Powerpoint attached.

Mille Lacs Band hatchery and acoustic telemetry update - MLB handout

Invasive Species Monitoring - Zebra mussels diving, regular zooplankton sampling, stable isotope study

Large Lake Assessment work - Datalogger collection in February, Spring northern pike assessment, deploy temp loggers and photo sensors (MLB has some light data as well), zooplankton and water sampling, regular fall assessment.

GLIFWC Sampling - Spring juvenile walleye survey, fall EF, may survey some inland lakes but not yet scheduled.

Modeling subcommittee assignments - Evaluate potential management strategies under a range of recruitment conditions.

Research subcommittee will look at the effects of invasive species

14.) Next meeting

July 10<sup>th</sup>. The State will host.