AGENDA - Minnesota 1837 Ceded Territory Fisheries Committee InterContinental Saint Paul Riverfront Hotel, St Paul, MN Tuesday January 21, 2019 at 1:00 pm & Wednesday January 22th, 2020 at 8:30am

1. Introductions

Group welcomed by Kelly Applegate & Jon Gilbert. Introductions made & sign in sheet passed around (attached)

2. Review and approve agenda (Action)

The agenda was approved with no changes.

3. Distribute past meeting minutes (Information) – October 2019 FC meeting

No questions or changes for previous meeting minutes.

4. Update 2019 Harvest (Information)

a. State

Included in the booklet on pages 14-17. Rebecca Munter presented two sets of harvest numbers, one with Tribal angling interviews harvest and one without. Estimated angling harvest for walleye in 2019 was 34,701 fish/ 92,860 lbs. Northern Pike harvest was 2,680 fish/10,399 lbs. Yellow Perch totals were 7,028 fish/4,137 lbs. There was a question about "known tribal anglers" and the difference in totals. These were anglers identified as fishing under tribal identification. The interviews/count total for the known tribal anglers were removed for total state kill. The 2020 winter angling walleye harvest for creel period 1 (Dec. 18-Jan. 8) was 7,200 lbs of walleye, which was 2,500 lbs greater than the same period in the 2019 creel. It was also noted that the catch rate for this reporting period is double the amount observed from the same time last year.

b. Band

Ben Michaels presented results for 2019 Tribal harvest totals (handout attached). Harvest for walleye totaled 24,562 fish/45,651.1 lbs., Northern Pike harvest was 455 fish/ 2,122.8 lbs., Yellow Perch harvest was 158 fish/ 142 lbs. Length frequencies for all 3 species were presented, as well as CPE box plots for walleye, perch and incidental walleye. John Hoenig suggested a "bean plot" for the next update and to extend the years out.

- 5. Update of 2019 assessment data (Information)
 - a. Annual Fall Assessment (MNDNR)

Update information provided in booklet. There were no changes from the data presented at the October meeting. Zebra mussels are ½ of peak density in 2012. Offshore/inshore nets results for walleye appear to be becoming more similar. Forage looked okay. This is inconsistent with condition which has been low for all sizes for the last 5 years. John Hoenig asked if Northern Pike condition was also low. Pike condition does not correlate with Walleye condition.

b. GLIFWC Assessments (Electrofishing)

Information provided in handout. Stations 3, 7 & 8 were graphed separately as these stations have some degree of spatial overlap with stations sampled by the state. The CPE for the 2019 year class appears to be relatively low. John Hoenig suggested plotting age-0 vs age-1 the following year to see if age-0 CUE is telling us anything.

- 6. Walleye modeling reports (Discussion)
 - a. Modeling subgroup summary

The modeling subcommittee presented an updated walleye statistical analysis for 2020. Three stock assessment models were presented. All models predicted a decrease in spawner, 14+", age 3+

biomass and in spawner and 14+" abundance. PowerPoint attached.

- 7. Modeling subcommittee (Information and discussion)
 - a. Management Strategy Evaluation update

The modeling subcommittee presented an update of the work on the Management Strategy Evaluation since the October meeting (Attached powerpoint). Overall, several distinct management options have been evaluated at different productivity and stock-recruitment assumptions. John Hoenig suggested that goals should be more specific and provided examples related to SSB categories in the decision tree. Patrick Schmalz questioned the necessity of continuing long term evaluations.

- 8. Review terms of 2017- 2020 Consensus and overage plan.
 - a. Status of State overage

Overage update with handout. Consensus Plan does not include 2021 SSB goals. The current population represents approximately 85% of the 2020 SSB goal, due in part to low weight at age, which is $^{\sim}15\%$ lower than those assumed in CP projections. By numbers mature fish are at levels that correspond to the target levels.

It was noted that the State will start the 2020 fishing year with an underage of 6,001 lbs.

It was recommended that the modeling subgroup evaluate potential mechanisms and benefits of incorporating walleye abundance into Recovery Decision Tree.

- 9. Set 2020 walleye harvest level for Mille Lacs Lake (Discussion/Action)
 - a. 2020 walleye harvest level for Mille Lacs Lake

State: Weighing the tradeoff of harvest vs. risk, the state proposed the "13% Ramp" harvest rule (168,000 lbs) for setting the total allocation for the 2020 fishing year. The State believes this exploitation level is a reasonable trade off of risk & harvest level.

Tribes: The Tribes proposed the 8% harvest rule (105,000 lbs) for setting the total allocation for the 2020 fishing year, stating an opposition to any harvest level that is predicted to decrease adult walleye biomass.

Day 1 ended with both state & tribes proposing their harvest levels for 2020.

Day 2 both sides presented their rationale for their proposed 2020 harvest level.

MNDNR noted that productivity may have dropped since the 1990s and even more since 2010. To support this assertion, they cited evidence that zooplankton biomass and phytoplankton had decreased to 25% and 75% respectively, of what it had been prior to the appearance of zebra mussels and spiny waterfleas. They noted that the yellow perch population appears to be low and possibly declining. Walleye have had poor and declining relative weight in the last 4 years. The state expressed concern that 20 lbs of spawner biomass in the 52 gill nets might not be a reasonable/sustainable goal. The 8% harvest level proposed by the Tribes would be a 38% reduction of safe harvest from the state proposed harvest level for a 6% gain SSB, large cost for minimal gain. The tribal proposed harvest level would make it difficult for the state to implement a year-round open water season of catch & release.

John H. stated that the Tribes preferred scenarios that will grow the population or at least stay "status quo." He noted that it doesn't make sense to increase harvest when productivity is low. He added that maintaining a higher spawning stock might increase the odds of strong year classes.

Mille Lacs Band stated we should let the lake tell its story to us. The 105,000 lb harvest level would allow the walleye population a chance to increase, and hopefully move the population towards the next level on the decision tree. They noted that as Anishinaabe it's their duty to protect the lake.

There was much discussion about risk tolerance and goals. The Tribes noted that zooplankton production has been increasing in recent years. There appear to be some better signs with forage numbers, and that intervening with increased harvest levels at this point in time does not allow the

lake to tell its story fully.

After additional discussion about the effects of various harvest levels, the State and the Bands agreed to a 150,000 lb harvestable surplus. The Bands noted that the State must be ready to close prior to reaching their limit and provide creel information more frequently as the state angler harvest gets closer to the state's harvest limit. The Bands agreed that if the State was approaching its allocation late in the season, a closure may be unnecessary if the resulting overage was likely to be small and water temperatures were at levels associated with very low hooking mortality.

The Bands also noted that the current version of the decision tree is the one that has been agreed to, but that the State and Bands could discuss potential adjustments to it prior to the next meeting.

b. Effect of 2020 harvest on 2021 spawning stock

Available in PowerPoint slides.

10. Northern pike information (Discussion)

a. Northern Pike surplus production models – GLIFWC

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

Harvest in 2019 was about 12% of the cap, model suggests harvest cap of 100,000 lbs is adequately protective of the population in the short term, however the population would decrease to undesired levels if observed harvest reached 100,000 lbs each year over a four-year period.

b. Northern Pike harvest level goals

Discussion on NOP and the impact of increased quotas and regulation changes as potential options for getting more fisherman to take northern pike. The committee agreed to keep the target harvest goal at 35,000-50,000 lbs, and the target population size at 120,000-200,000 lbs.

c. Northern Pike 2020 harvest limit

State & Bands agreed to set Northern Pike harvest cap at 100,000 lbs.

- 11. Harvest limits for other species in Mille Lacs Lake (Action)
 - a. Yellow Perch

The consensus was to keep the same quota for perch at 270,000 lbs (135,000 lbs for each fishery).

b. Tullibee and Burbot

There was some discussion about changing the Burbot regulations to immediately release all Burbot caught since their abundance is quite low. State and Bands agreed to consider changing the regulations for Burbot, but for this year to keep tulibee and regulations the same. The State recently reclassified both species as game fish. Both will remain non-quota species.

- 12. 2020 Inland Waters (Information/Discussion)
 - a. Walleye harvestable surplus and threshold values

Tom Jones and Ben Michaels gave an update and handout with 2020 numbers.

- 13. 2020 Management and research activities (Discussion)
 - a. Proposed change in Tribal Model Code 9.14 elimination of sections 9.14(1) and 9.14(2)

No questions/comments on the proposed change of ice hole size regulation. State agreed to the change.

b. Invasive Species Monitoring

Tom Jones gave an update on invasive monitoring and a summary of case history paper that has been submitted to the journal of *Biological Invasions*. Zebra mussels monitoring will occur annually.

c. Large Lake Assessment work

State plans to continue spring Northern Pike sampling, electrofishing assessment for Smallmouth Bass in May/June, Forage gill net and electrofishing in September to be followed by the annual fall gillnet assessment. Plans of a Yellow Perch pilot assessment are in the beginning stages. This assessment would go from spring through summer, with an objective to observe patterns in Yellow Perch abundance, and identify what is limiting perch with a focus on age-0 and age-1.

d. GLIFWC Sampling

Ben Michaels gave the update. GLIFWC will be doing annual spring juvenile survey and fall walleye assessments.

e. Modeling subcommittee assignments

Incorporate number of fish into the recovery decision tree, start looking at status and management options for Burbot in Mille Lacs Lake, and evaluate the effect of varying levels of harvest by allocation for the management options that have been investigated through the MSE.

f. Research subcommittee

Aaron Shultz gave a presentation on the Mille Lacs tagging study.

14. Next meeting

a. Set date and location for summer meeting (Action)

Meeting date set to July 15, 2020, location Mille Lacs, exact venue TBD.