Minutes Minnesota 1837 Ceded Territory Fisheries Committee January 18-19, 2023

Meeting attendance sheet was circulated.

Welcome - Missy welcomed everyone and provided details about the facility and lunch.

- 1. Introductions were made
- 2. Agenda was reviewed it was suggested that we make sure we get to walleye harvest levels before the end of day 1.
- 3. Past meeting minutes are included in the 2023 1837 FC "book"
- 4. Update on 2022 harvest.
 - a. State page 20 in the booklet. Walleye kill was estimated at 15,783 pounds, yellow perch at 1,719 pounds, and northern pike at 3,142 pounds.
 - i. It was noted there has been some ice fishing since mid-December, and that anglers are finally getting trucks on the ice with single axel trailers. No creel data has been obtained yet for this year (fishing year 2023). Anecdotal reports are that catch rates have been ok, small fish are being caught, and that pressure (effort) is low with less-than-ideal ice conditions (variable).
 - ii. The Bands asked how the observed harvest in 2022 compared with the pre-season harvest projections for the 2022 fishing year. Missy provided a handout with a rerun of projections with known data instead of the pre-season assumptions. The median of these runs was 18,000 lb (estimated creel ~16K). Resulting SCAA estimated WAE abundance was reasonable compared to what updated projection provides. There was discussion about the benefit of the post-hoc updated model runs which provide validation that the model works and that differences between projected and observed kill is more related to assumptions used in initial projections.
 - b. Tribal A handout was provided; walleye harvest was 48,875 lbs, northern pike was 3,435 lbs, yellow perch was 486.2 lbs, tullibee was 615 lbs, and burbot was 21.5 lbs. Harvest also occurred at 2 lakes aside from Mille Lacs Lake (Green L and Rush L (east)).
 - i. Tribal smallmouth bass (SMB) harvest in 2022 was very low. However, it was also noted that the catch of SMB by anglers is estimated at +/- 300K. A discussion followed as to whether this reflects an overabundance of SMB. The State indicated that angling regulations were changed several years to allow more harvest of SMB. Although the state survey nets are not considered to be a reliable indicator of SMB abundance, these net catches do suggest that numbers may be increasing, particularly in offshore areas of the lake.
 - ii. Tribal gillnet effort has generally increased in recent years.
 - iii. The Bands inquired about what the state does with gillnet assessment fish mortalities. It was explained that these fish are donated to approved organizations on a rotating basis. Question asking if the Tribes could be added to this list. Brad Parsons said he would look into this.
- 5. 2022 Assessment Data

- a. Annual fall assessment these results were reviewed at the fall meeting and are summarized in the State book. Eric gave multiple examples suggesting 2021 gillnet survey catchability was low (numbers at age bounced back in 2022, year class strength model diagnostics, etc.).
 - i. An inquiry was made regarding the condition of forage fish. An observation is that age-0 Yellow Perch were 100 mm in length (usually more like 75 mm). State does not calculate a condition factor for Yellow Perch.
 - ii. An inquiry was made regarding the future population abundance of Tullibee (Cisco) considering the decline (lack of) Tullibee year classes. There are not many young Tullibee in the pipeline.
- b. GLIFWC Electrofishing Assessments a handout was circulated with results of fall 2022 electrofishing surveys.
 - i. Appears to be a general increase in age-0 CPE from the previous year.
 - ii. The State requested the historic mean size of age-0 to be included in future summaries.

6. Walleye modeling reports

- a. Mark updated the group (via PowerPoint) for more information refer to individual model reports.
- b. All models showed increase in spawning stock biomass (SSB; by a similar magnitude) and indicate that the 2013 and 2017 YCs make up more than 50% of SSB. All models show the same trend.
 - i. John Hoenig asked where the 2 strong year classes were in relation to State's harvest slot limits. Graph of year classes by length was shown. The 2017 YC is still mostly smaller than the current harvest slot. The 2013 YC, especially females, overlap some with the harvest slot.
 - ii. Slow growth has contributed to smaller than average size for females in the 2013 year class.

7. Walleye harvestable surplus level for 2023

- a. Review 2023 harvest level effects on projected 2024 SSB Missy circulated a handout summarizing projections, and also presented a PowerPoint.
 - i. There was a discussion regarding the discrepancy between calculations of the juvenile index that were related to the inclusion of the age-0 equivalents. Gillnet catch puts the population in Category 5, but the juvenile index value came in at 0.96, which places the status into Category 4.
 - ii. Missy explained the operating model assumptions used for these projections (selectivity 21-23 inches winter; 20-23 inches summer; winter kill assumed to be 15,000 lbs.; tribal fisheries 95%-5% in spring-fall; assumes both take full share.
 - iii. RESULTS: one-year results (tradeoffs between kill and 2024 SSB); multi-year results—claw
 - 1. Compared no fishing (5K ceremonial), 9, 11, 13, 15% exploitation rates (% SSB removed).
 - 2. There was a lot of discussion about the specifics of the graphical presentation took some discussion to clarify what the graphics showed;

- some interest in seeing SHLs instead of exploitation rates. Clarified that x-axis on tradeoff plots was the harvest level at each exploitation rate.
- 3. Exploitation rates evaluated were based on rates that corresponded to recent agreed upon harvest levels. This was an attempt to start making the decision tree more functional.
- 4. There was discussion about the trajectory of male and female SSB in the multi-year projections. The exploitation levels that were evaluated initially declined and then moved back towards the 2023 levels or higher. There was discussion about the lack of feedback in the multi-year projections. Lack of feedback was intentional to see the influence of applying the same rate for multiple years. There was discussion about the possibility of incorporating feedback into future projections. This would require development of agreed upon feedback mechanisms.
- b. Determination of 2023 harvestable surplus:
 - 1. The Bands noted that the 135,000-150,000 pound harvestable surplus (HS) levels that were agreed to in recent years have led to an increase in SSB over time. Recognizing the slight increase in SSB from 2022 to 2023, the Bands initially proposed a harvestable surplus level of 150,000 lbs, which is 15,000 pounds higher than the amount that was agreed to last year. The Bands expressed a concern about increasing the HS too far because population is projected to go down in 2024, and also indicated a preference for the population to go to Category 5 rather than Category 4 or lower
 - 2. MNDNR indicated that the 135,000 lb quota in 2022 was precautionary because of poor gillnetting survey results, but that 150,000 lb would likely have been acceptable in 2022. MNDNR noted that the most recent multi-year projections assume constant harvest rates for 5 years, and do not result in a large decline in the SSB. An update to the 'claw' graph was later presented that showed the effect of reducing the exploitation rate when the population was lower. MNDNR also noted that future harvest levels can and would be adjusted if necessary. The State made an initial proposal of a harvestable surplus level of 200,000 lbs.
 - 3. MNDNR discussed wanting to get input from the public, so the State is not yet ready to propose specific length restrictions. State sideboards for regulation selection are the quota and maintaining the agreed upon harvest principles (let them grow, let them spawn, protect mega-spawners).
 - 4. After much discussion and deliberation, the committee agreed to set the HS level at 175,000 lb for the 2023 fishing season. The Bands expressed concern that the harvest level was higher than they preferred, but that they were willing to agree to with the expectation that the State and Bands will adjust 2024 harvest levels if the walleye population declines further than expected. The Bands were especially concerned about the possibility of the population status falling to category 3, and did not want to be adversely affected in the future by the harvestable surplus value in 2023. MNDNR noted that with the spawning stock biomass at higher levels, more

opportunity could be provided for both fisheries. MNDNR indicated that the intention was to act in good faith in the setting of harvestable surplus.

8. Midseason regulation change procedure.

- a. DNR sought legal counsel input regarding the 60-day notice to the Bands prior to any changes to management within the 1837 Ceded Territory (Protocol 4) with 30 days for the Bands to respond.
 - i. It was noted that the protocol must be followed based on legal advice.
 - ii. To follow the protocol, the State could notify the Bands of trigger criteria for enacting new regulations at any time greater than 60 days in advance.
 - iii. Jon Gilbert was surprised by the inflexibility in the legal interpretation of the Protocols and stated the Protocols were meant to provide both the State and Bands with enough time to review, think, and respond.
 - iv. The State will likely send a regulation notification along with supporting materials to the Bands prior to the start of the State's open water fishing season, most likely in late March or early April. This notification will include potential mid-season changes that would be implemented, and the levels of harvest that would trigger their implementation.
- b. Brad indicated that the State still wishes to reestablish an overage plan at some point in the future.

9. Northern Pike

- a. Surplus production model Northern Pike harvest was the lowest observed with little change in the model. Model is conditioned on yield and not effort. Some discussion about gathering more information on age. No consistently reliable aging structures or methods are currently known.
- b. The State and Bands agreed to maintain the northern pike harvest level at 100,000 lbs, to be split 50-50 by the State and Bands.

10. Other species

- a. Tullibee (Cisco) modeling report 2023 results are very similar to last year. About 80% of biomass at maximum sustainable yield (MSY) regardless of model. Tribal harvest a little higher in 2022 than recent years.
 - i. MSY is 17,000 30,000 lbs depending on surplus production model.
 - ii. Need a few more years to evaluate 5 bag so the Committee agreed to maintain the no harvest limit for tullibee that is currently in place.

b. Yellow Perch

i. Metrics – research subcommittee (RSC) has been looking at historical Yellow Perch data – there are 2 good year classes (2020, 2021) showing up in assessments. It is unclear what will happen when these year classes become vulnerable (likely next winter for 2020 year class). RSC has been working on defining an Action level – (20,000-50,000 lbs) that when reached will result in a closer look at all available data to see what we can do (if anything) – 3-5 years of evaluation period. Principles: 1)

Grow the population if we can, 2) define a safe operating space (SOS), 3) provide forage for WAE. There are no details on what a "deeper dive" looks at the YEP population.

- ii. Discussion about how to set a new harvest level (instead of 270,000 lbs).
- iii. The State and Bands agreed to set a yellow perch harvest level at 73,000 lbs based on MEI (Morpho Edaphic Index; Ryder 1965) for the time being, with a 20,000 lbs action level that would trigger a discussion to determine whether or not an adjustment should be considered.

c. Burbot

- i. Angler regulations have changed to catch and release only; population still low.
- ii. The State and Bands agreed to maintain no quota for burbot.
- 11. 2023 Inland Waters last 2 pages of state book contains information that describes the harvestable surplus and threshold harvest levels for lakes other than Mille Lacs Lake; GLIFWC also circulated a handout and they match.
 - a. In the future this can be exchanged in advance of the meeting and maintain this as just an informational item.

12. 2023 other activities

- a. Population Estimate (PE) discussion Tom Heinrich will communicate as more specific plans are developed.
- b. Tom Heinrich discussed the "Let's talk trash" program and the availability of lead free tackle donated by the Minnesota Pollution Control Agency (MNPCA) that creel clerks can give to anglers coming off the lake
- c. Smallmouth Bass electrofishing will not be conducted this year due to the high amount of sampling effort that will need to be directed towards completion of the mark-recapture population estimates for walleye and northern pike.
- d. Mille Lacs Band acoustic telemetry study a few Muskellunge tags are currently left and will be implanted this year, some habitat mapping has also been conducted.
- e. Mille Lacs Band, Fond du Lac Band, GLIFWC, and a GLIFWC subcontracted USFWS crew will help with the walleye and northern pike population estimates. GLIFWC will also conduct its post-spawning electrofishing survey.

13. NEXT MEETING

a. July 11 – MLB will host