Meeting Notes Minnesota 1837 Ceded Territory Fisheries Committee 10:00 a.m. July 19, 2018 Eddy's Resort

1. Agenda Approval and Introductions

A. New MN37FC members (GLIFWC and MnDNR)

Introductions were made. Brad H. welcomed everyone to the Mille Lacs Reservation. The agenda was approved as presented. Mic Isham was noted as the new GLIFWC Executive Administrator (not in attendance).

2. 2018 Spring Band Harvest Summary (GLIFWC)

Ben Michaels reviewed the spring Band Harvest summary. Harvest totals for the 2018 fishing season so far were 27,483.5 pounds of walleye, 665.2 pounds of northern pike, and 33.2 pounds of yellow perch. Cedar Creek was the landing with the most walleye harvest. Some harvest also occurred on other inland waterbodies. North Garrison was the landing with the highest spearing effort. Cedar Creek was the landing with the highest netting effort. There was some discussion about the average size of fish in the harvest and the most prevalent year-classes. Average weight of harvested walleye was 1.9 lb. Preliminary aging results (FDL) suggest that spring Walleye harvest was dominated by the 2013 year class.

3. 2018 Mille Lacs Angler Harvest Update (MnDNR)

Eric Jensen gave the harvest update through June 30. So far, walleye kill is 21,329 lbs. Yellow perch harvest was 2,284 lbs, and northern pike harvest was 5,497 pounds so far. There was some discussion about harvest this year compared to harvest last year. Catch rates are a bit lower so far in 2018, but the walleye are a bit larger when compared to 2017. Joe Dan Rose noted that total kill last year was about 31,000 lbs at the end of the same time period. John Hoenig requested a graph comparing current year harvest to previous year harvest. Eric Jensen noted that more fish were harvested in the winter time in the 2017 season than the 2018 season. Summer fishing mortality levels so far are reasonably comparable. Average size of walleye caught and released in the creel so far is about 3 lbs. Anglers are catching larger fish on average than the Bands did during the spring fishery. Larger fish may be biting better in the State fishery due to lower relative weight. Current water temperatures are close to average or slightly above average (about 0.5 degrees). Eric J. noted that winter spearing is included in the northern pike harvest totals, and that winter spearers had a more difficult season in 2018 due to lower water clarity.

4. 2018 Spring Electrofishing Survey for Juvenile Walleye in Mille Lacs Lake (GLIFWC)

Mark L. presented the GLIFWC spring juvenile walleye survey report and a graph showing the time series of catch rates for age 0 and age 1 walleye. Catch of the 2017 year class at age 1 is similar to what the 2016 year class was at age 1. Indices for both the 2016 and 2017 year classes are considerably lower than the 2013 year class at comparable ages. For the 2018 survey, sampling zone 5 and part of zone 6 were not sampled due to weather conditions. This may be influencing this year's indices. There was a discussion about the current sampling protocol, and whether the whole shoreline needs to be surveyed. GLIFWC plans to review the various sections to determine whether a survey of the whole shoreline is necessary.

5. Modeling Sub-Committee Updates

A. Where we left off

Parties were to discuss in groups what goals and management actions were acceptable. Jon and Missy had planned to convene some meetings outside of the main group meeting. This has not yet occurred.

B. Development of Recovery Plan - Identify Tasks and Discuss How to Move Forward

The modeling subcommittee will meet in person to review management options and scenarios. Subgroup will lay out biology of the lake, identify areas where there is agreement on data interpretation and where there is disagreement about how the data are interpreted. These initial steps will be used to inform the operating model for evaluation of a variety of management strategies. Preferred strategies will be those that perform well under a variety of alternative lake states. The subgroup will also continue discussing management options and goals with leadership and outside the MNFC. Population estimate and new data should be available in the fall to help further inform the analyses.

John H. suggested that a management strategy evaluation could be used to evaluate management strategies under a range of possible states of the lake (i.e., different recruitment patterns, different productivity conditions) to see which strategies work under different conditions. A potential goal is to identify strategies that are adequate under wide range of dynamics vs strategies that only work under very specific conditions. The subgroup will explore developing and evaluating adaptable management strategies.

6. Data Exchange and Review

A. Mille Lacs Lake

1. Creel Survey Report for 2017 Open Water and 2017-18 Winter Seasons (MnDNR)

Eric Jensen noted that the reports will be emailed to Mark Luehring. The large lake report is currently available online. Mark will put the reports into the dropbox.

2. 2017 Large Lake Sampling Program Assessment Report (MnDNR)

B. Other Lakes

1. 2017 Summer Assessments (MnDNR)

Tom Jones emailed these to Mark Luehring prior to the meeting. He will put them in the dropbox.

2. 2017 Creel Reports (MnDNR)

No other creel reports for smaller lakes.

7. Update on Management and Research Activities

A. Acoustic Tagging Study (Mille Lacs Band and GLIFWC)

Carl Klimah reviewed the planned methods and current progress on the acoustic telemetry study on Mille Lacs Lake. The study will use acoustic tags and receivers to track habitat overlap between juvenile and adult walleye in the lake. 20 adult walleye have been tagged so far. Additional tagging of 50 adults and 35 juveniles will take place during fall of 2018. A good discussion followed the presentation. A couple of ideas for extra things to monitor were suggested (such as shallower water habitat, additional temperature loggers and light meters to better describe thermal and optical habitat available).

B. Walleye population estimate (MnDNR)

Tom Jones reviewed the initial results of the joint walleye population estimate conducted by MNDNR, GLIFWC, FDL, and USFWS in spring 2018. Around 20,000 walleye were tagged during the marking phase, and around 6,000 were examined for tags during the recapture phase. Of the 6,000 walleye examined, 150+ walleye were marked in the recapture phase. MNDNR plans to complete data entry by early next week, and send the data to Carl Schwarz for analysis shortly thereafter. The final population estimate will be stratified by sex and length.

C. Walleye fry estimate (MnDNR)

Melissa Treml passed around a summary of the fry marking study on Mille Lacs Lake conducted during 2016 and 2017. She noted that according to this study, the fry production in Mille Lacs looks like it is at least as productive as in other large lakes where similar experiments have been conducted. Estimated fry density in 2016 was 7,000 fry per littoral acre and 13,000 fry per littoral acre in 2017. Other lakes with OTC fry estimates are around 1,000 fry per littoral acre. Fry abundance in Mille Lacs appears adequate to produce historical levels of age 0 walleye in the fall. There was much discussion about fry limitation and whether enough are being produced to increase the population. John H. brought up that we cannot conclude the lake is not fry-limited because we don't know the effect of increasing fry abundance. John H. asked if elevated juvenile mortality is behind lower recruitment, could more fry result in more walleye surviving to recruitment size?

D. Discuss Organizational Framework and Initial Tasks for Research Sub-Committee

Jonathan Gilbert suggested that research subcommittee should be formed to keep abreast of current research, identify research gaps, and find opportunities for collaboration. Aaron Shultz volunteered to pull people together to form this research team. Carl Klimah suggested that he would participate and that it would be a positive thing. Brian Borkholder agreed. MNDNR has had a similar in house committee that used to meet, but hasn't had a meeting in recent years. The current large lakes food web project came from this group. Aaron Shultz will recruit committee members and convene a meeting or phone call or the newly formed committee prior to the October meeting. May include people not involved in FTC (other DNR staff, university faculty). Once group is formed, it can work more on organizational framework and tasks.

8. Summer and Fall 2018 Survey Plans

A. MnDNR Assessments in Mille Lacs and Other Lakes

MNDNR plans to proceed with the annual suite of summer and fall surveys. There will be a zebra mussel scuba survey this summer.

B. GLIFWC Assessments in Mille Lacs and Other Lakes

GLIFWC plans to conduct the annual fall electrofishing survey of the full shoreline of Mille Lacs in September. Currently there are no plans to survey other 1837 ceded territory waters, but GLIFWC will send notice to MNDNR if some surveys are planned.

9. Planning for Mille Lacs Lake Data Exchange and 2019 Modeling

A. Identify Dates for Exchange of Modeling Data

Dates were identified for data exchange and modeling as follows:

Initial data exchange: November 9 Final data exchange: November 30 Initial model exchange: December 21 Final model exchange: January 16

B. Identify Staff Contacts for Joint Mille Lacs Lake Walleye Modeling

Mark Luehring and Pat Schmalz were identified as the main contacts for modeling and data exchange.

10. Next Meeting The next meeting is scheduled for October 25th at the FDL Natural Resources Building in Cloquet. The winter meeting was scheduled for January 23-24, likely in Brainerd.