Spring Fisheries Survey Summary
Nelson Lake, Sawyer County, 2017

The Hayward DNR Fisheries Management Team conducted a fyke netting survey on Nelson Lake from April 4-11 to assess the adult walleye population in the lake. Twelve nets were set overnight for eight nights which resulted in 93 total net-nights of effort (on three occasions a net was compromised). An electrofishing survey conducted on June 5, 2017 documented the status of bluegill, largemouth bass, and non-game species but also provided information on juvenile walleye. Six miles of shoreline were shocked. Quality, preferred, and memorable sizes referenced in this summary are based on standard proportions of world record lengths developed for each species by the American Fisheries Society.

<table>
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<th>Captured 5 per net-night ≥ 10 inches</th>
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<td>Quality Size ≥ 15”</td>
<td>88%</td>
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<tr>
<td>Preferred Size ≥ 20”</td>
<td>48%</td>
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Walleye (Adult)

Captured 23 per mile ≤ 15 inches

Walleye (Juvenile)
Summary of Results

The DNR fish survey effort on Nelson Lake in 2017 was primarily geared toward adult walleye. As such, data was not collected for northern pike, yellow perch, or black crappie and those species are not included in this report.

Walleye in Nelson Lake have not produced any significant natural recruitment for over 15 years. As a result, large-scale stocking efforts were undertaken and a more restrictive length limit was applied to try and rebuild the adult walleye population. This survey acted as a check-in on the success of those efforts. Unfortunately, the walleye population in Nelson Lake does not appear to be improving as much as expected. The walleye population in the lake is mostly large individuals, including many over the 18 inch minimum length limit, but overall abundance is considerably lower than in previous surveys. Data on juvenile walleye captured during the electrofishing portion of this survey appears to be showing only limited survival of walleye stocked in 2015 (which would be expected to be between 9-13 inches in length).

Largemouth bass demonstrated slightly higher relative abundance than the last survey in 2014. Size of largemouth bass has improved slightly since 2014. Anglers interested in harvesting
largemouth bass should focus their efforts on bass less than 14 inches long. One smallmouth bass was captured during the 2017 survey. Smallmouth bass are exceptionally rare in Nelson Lake.

Results of the 2017 survey were a mixed bag for bluegill. There were considerably more small bluegill present in the 2017 survey compared to the 2014 survey. The increase in abundance of small bluegill may be related to the struggling walleye population. But there were actually more bluegill over 8 inches in the 2017 survey compared to 2014. The size of bluegill in Nelson Lake is likely aided by the more restrictive 10-daily bag limit for panfish that is in place.

Evan Sniadajewski holds a nice Nelson Lake largemouth during the electrofishing portion of the 2017 survey. Big largemouth like this one are becoming more common in Nelson Lake. Photo by Max Wolter.

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Reviewed and Approved by