Proposed Resolution #I
Requires 2/3 Majority

Submitted by: Travis White, Individual Member
Proposed: December 2, 2023 Conservation Policy Board Meeting
Title: Protecting the High-Quality Lake Trout Fishery of Stannard Rock

WHEREAS: Stannard Rock is an isolated reef complex in Central Lake Superior, comprising 9 square miles or 0.03% of Lake Superior, which is home to a finite population of wild, native lake trout with unique population dynamics of higher quality (particularly a broad size distribution), compared to other parts of Lake Superior [1]. The reef complex features rock formations and bathymetric characteristics that concentrate fish in certain areas, making vertical jigging and shallow water casting effective and preferred angling methods, and;

WHEREAS: Stannard Rock has the highest catch rates measured in Lake Superior for lake trout [2], and the catch rate of trophy-size fish (Michigan's Master Angler Program defines this as lake trout greater than 34 inches in length) is markedly greater at Stannard Rock than elsewhere in Lake Superior [1], and;

WHEREAS: Michigan's state record lake trout, weighing 61.5 pounds at 49 inches in length, was caught jigging at Stannard Rock in 1997. For these reasons, Stannard Rock is a world-renowned fishery for trophy lake trout, described by many anglers as the best lake trout fishing destination in the Great Lakes, and;

WHEREAS: Although the status of Stannard Rock lake trout is healthy, a modest increase in mortality could threaten sustainability [3]. Progressive anglers have voiced an interest in developing protective measures for offshore Lake Trout, and establishing a special status for these sites would be logical [2], and;

WHEREAS: at Stannard Rock the water temps are very cold during most of the year and the lake trout are a slow-growing, late-maturing species with generally low reproductive potential [5]. Though long-lived, both males and females, on average, do not reach sexual maturity until six to eight years of age [6]. Length-at-age studies have found that lake trout at Michigan's Master Angler minimum size of 34 inches range from 15 to more than 40 years of age in Lake Superior [7]. The population of lake trout at Stannard Rock is one of few in Lake Superior that presently includes fish of this caliber; the high relative abundance over a small geographic area results in high catchability of this caliber of fish at Stannard Rock, surpassing other fisheries around the lake [1], and;

WHEREAS: the Stannard Rock Lake Trout are wild, native strains, including all four major

ecotypes found in Lake Superior (lean, siscowet, humper, and redfin). Stannard Rock has ample suitable spawning habitat and supports natural reproduction. Tagging studies have shown that there is little migration of fish between Stannard Rock and nearshore fisheries [1]. If stocking is needed in the future this would alter the genetic makeup of the population at this fishery, and;

WHEREAS: the Stannard Rock Lake Trout population is largely isolated from other populations in Lake Superior and has experienced significant increases in exploitation by charter and recreational anglers in recent years, resulting in higher angling effort and harvest [1]. Non-charter angling effort is increasing, but to what extent is largely unknown [1]. External factors such as social media, improved marine forecasting, and fishing technologies such as live sonar (LiveScope) have made this fishery more accessible than ever before. The mortality rate for lake trout at Stannard Rock has been found to be higher than popular nearshore fishing areas, which points to the impact of concentrated angling pressure [1], and;

WHEREAS: DNR tagging studies have found a higher tag return rate from fish tagged at Stannard Rock compared to nearshore fisheries, suggesting a high level of fishery exploitation [1]. Charter boat reporting data has shown a concerning trend in the past 5 years of a rapid decline in lake trout catch rates at Stannard Rock [1]. This brings into question this population's ability to sustain the qualities that make it unique, including the size and age distribution of its members, and also its total population, and;

WHEREAS: In a recent DNR survey of more than 1100 anglers, 85% of charter and 79% of non-charter favored stronger regulations to protect the fishery at Stannard Rock [1][2]. The current Michigan DNR lake trout fishing regulations have the Stannard Rock area lumped inside a zone that is part of the highest limit of lake trout, the 5 fish a day limit area, and currently allows for harvest of any size fish (limiting each angler to one fish over 34 inches; per day). High catch rates at Stannard Rock are possible, thus significant harvest is allowed under current regulations, and;

WHEREAS: High catch and release mortality suggests that a length-based regulation may be ineffective in reducing harvest because of this mortality; lowering possession limits could be more effective in protecting the fish population [1]. The same recent DNR survey found that of those that targeted Lake Trout, anglers preferred to harvest Lake Trout between 20-25 inches (62%), followed by 15-20 inches (25%), 25-30 inches (11%), and 30+ inches (2%), which could help inform potential changes to size limits or the design of slot limits to reduce harvest [2]. Party fishing is difficult or impossible to enforce here, and as such party limits might also be considered as an alternative to individual angler limits. This could afford the opportunity to reduce total harvest and harvest of many trophy fish by a single party, and;

WHEREAS: recent studies have shown that hooking mortality is a high factor on the survival of released lake trout [4]. Total mortality rates are comprised of not only angler harvest but also delayed mortality post-release. This combination of harvest and practicing catch and release angling might yield excessively high mortality rates for lake trout at Stannard Rock. To date, no studies have been done to evaluate catch-and-release methods (such as the use of deep-water release devices) to reduce catch-and-release mortality, and;

WHEREAS: Jigging and shallow water casting are preferred fishing methods over trolling, and the average water temperature is cooler year-round at Stannard Rock. Angler education and behaviors may prove to be important to achieving goals to manage the Stannard Rock fishery, in light of our current understanding of factors contributing to catch and release mortality, and;

WHEREAS: there are other unique offshore fisheries across the Great Lakes that might also benefit from special designations as “trophy fishing areas”. There are already areas in Lakes Huron and Michigan have special “lake trout refuge”; designations in place that completely restrict fishing. Lake Superior has none of these areas but could benefit from having areas with special regulations to conserve its historic lake trout fisheries. “Refuge” areas that are closed to fishing are not being advocated for on Lake Superior as part of this resolution but rather an alternative designation that allows fishing while also conserving the high-quality fishery, and;

WHEREAS: The DNR conducts periodic surveys of its lake trout stock and fisheries across Lake Superior. Stannard Rock was most recently surveyed between 2011 and 2015, and prior to that the most recent survey was conducted circa 1975. The more recent survey found a slightly lower relative abundance of lake trout than the prior survey, but overall the population metrics indicate that Stannard Rock is a high-quality lake trout fishery, exhibiting broad size distribution and high relative abundance of lake trout [3]. Many fish were sampled that would meet or exceed Master Angler size, including individuals greater than 40 inches in length (a benchmark widely accepted by the North American fishing community as trophy size for lake trout). This caliber of fish has been captured at a much lower frequency in other sampling areas across Lake Superior[1]. DNR sampling does not effectively capture the largest fish in a population due to gear limitations, and;

WHEREAS: the draft Lake Superior Fisheries Management Plan 2023–2033 establishes “Objectives for Lean Lake Trout: Maintain populations of Lake Trout that support high-quality recreational fisheries at Stannard Rock, Big Reef, and Isle Royale; Management Actions and Evaluations: Continue to survey and assess the status of offshore Lake Trout populations (Isle Royale, Stannard Rock, Big Reef, and Klondike Reef-Caribou Island complex). Work with anglers and citizen advisory committees to develop appropriate regulations to achieve

population objectives." [2], and;

WHEREAS: the 2023 Great Lakes Decree resolves that the portions of Lake Superior Grids 1130, 1131, 1230, and 1231 known as Stannard Rock will be closed to Commercial Fishing, specifically, the area that is east of a line of longitude at -87.28 degrees, south of a line of latitude at 47.27 degrees, west of a line of longitude at -87.11 degrees, and north of a line of latitude at 47.13 Degrees, NOW;

THEREFORE BE IT RESOLVED: that MUCC work with the DNR to educate the public on Catch and Release to protect the high-quality Lake Trout fishing destination that is the legendary Stannard Rock fishery, and;

BE IT FURTHER RESOLVED: that MUCC encourage and support the DNR to conduct more frequent, regular biological assessments in addition to social science to better understand and quantify the attributes that make Stannard Rock a unique fishery on the Great Lakes, and;

BE IT FURTHER RESOLVED: that MUCC work with the DNR to study the effectiveness of deep water release methods to increase survivability over surface release and explore other methods of maintaining the Stannard Rock lake trout population dynamics. This might include defining baseline population metrics and establishing management criteria to maintain or improve on those metrics over time through available management tools, regulations, and angler behaviors, and;

BE IT FURTHER RESOLVED: that MUCC work with the DNR and NRC to create a zone and designation to recognize and protect the Stannard Rock fishery, potentially with different regulations informed by science, to protect its high-quality status against increasing angling exploitation, consistent with the management objectives established by the draft Lake Superior Fisheries Management Plan 2023–2033.

References

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