EXHIBIT D

Drownings highlight the hazards of gill nets

ST. IGNACE — While this tragedy was just waiting to happen, it's likely no one will ever know how the 17-foot outboard boat Pinky Lee became entangled in an Indian fisherman's gill net and sank in St. Martin Bay last Sept. 4.

The three men on board are dead.

A statement released recently by Mackinac County prosecutor Dan Dowdell said that when it was hauled up from 29 feet of water, the boat had nylon net wrapped so tightly around its trolling motor, the propeller couldn't be turned. The net was 1,800 feet long and 35 feet deep.

ERIC SHARP

Outdoors

My guess is James Swikoski of Kalkaska, his son Marty, 18, and brother Daniel were trolling for salmon when the boat hit the net.

There are conflicting weather reports. A videotape relatives made of the boat leaving a Carp River dock at the west side of the bay shows calm water. Indian fishermen, who said they were driven in by high seas, reportedly warned the men not to launch. A spokesman for the Indians admitted that report hadn't been confirmed, but people on the east side of the bay reported big seas.

If any kind of sea was running, Pinky Lee would soon have swung stern to the waves as the net acted like a big sea anchor. And I suspect there had to be something of a seaway — and perhaps with the added weight of someone in the stern trying frantically to pull the net loose — or the small boat wouldn't have been pooped by waves breaking over her transom.

Whatever happened was quick. The U.S. Coast Guard station at St. Ignace later discovered it had taped a radio distress call from St. Martin Bay at 1:15 p.m. Sept. 4. No one noticed at the time because the 10-second call was masked by a stronger transmission from another boat.

Something else that makes me suspect rough conditions is that fact that none of the men swam to shore, not even Marty, who was wearing a life jacket. Northern Lake Huron is near its warmest in early September, and I suspect at least one would have made it if the water was calm.

They aren't the first sport fishermen to run into a gill net in the area. What's so infuriating is that it took three deaths to get state officials and Indian fishermen to admit gill nets are more than a mere inconvenience in St. Martin Bay.

Phil Pittman at the Le Chenaux Club in Cedarville said, "We've been screaming about this since 1985," when modifications to Indian fishing rights concentrated large numbers of nets in St. Martin Bay. Sept. 4, about a dozen Native American fishermen laid more than 30 nets in the bay, each more than 1,500 feet long.

"The federal government and the state won't listen to us," Pittman said. "There was even a case where three tribal fishermen drowned when they were caught in their own nets. There have been at least eight reports of boats being caught in the nets in the last two years, and I know of some other cases that weren't reported. At one point, the Indians laid so many nets right in front of the Coast Guard station that the Coast Guard boats couldn't get out."

The nets are hard to see if there's a chop. And a friend and I learned that when we ran into one as we were returning from Bois Blanc Island to Carp River two years ago. We didn't get tangled, but we checked both ends of the net for warning flags. There weren't any.

Pittman said a major problem is that some fishermen don't put the required flag at one end of the net. Even if the net is marked, it's almost impossible to see at night.

John Hatch, a spokesman for the Chippewas in Sault Ste. Marie, said, "We've made every effort to mark those nets properly, but in light of the tragedy, the whole system is under review."

Hatch said some of those nets are not set by Indians but by others fishing illegally. He suggested that might explain the lack of markers, adding "we want to know about unmarked nets as quickly as possible" so that tribal officials can attempt to catch the people setting them.

But Hatch admitted unmarked nets are "a communitywide problem" and said a new mechanism will be on hand to prevent further tragedies by the time the next salmon run starts in late August.

The more I think about it, the more I lean toward a solution that involves sport fishermen and Indian fishermen working it out between them. After all, we can look at the government's record so far in the whole Indian fishing controversy, and it has been abysmal.

It was a federal court that oversaw the 1985 consent decree that created this most recent problem. And it was largely a failure by the state to negotiate seriously with the Chippewas 20 years ago that started the whole mess.

Exhibit C

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF MICHIGAN
SOUTHERN DIVISION

UNITED STATES OF AMERICA,

Plaintiff,

and

BAY MILLS INDIAN COMMUNITY, SAULT STE. MARIE TRIBE OF CHIPPEWA INDIANS, GRAND TRAVERSE BAND OF OTTAWA AND CHIPPEWA INDIANS, LITTLE RIVER BAND OF OTTAWA INDIANS, and LITTLE TRAVERSE BAY BANDS OF ODAWA INDIANS,

Plaintiff-Intervenors,

and

STATE OF MICHIGAN, et al.,

Defendants.
/

Case No. 2:73-cv-26

HON. PAUL L. MALONEY

AFFIDAVIT OF DAVID P. BORGESON, MICHIGAN RESOURCE STEWARDS

AFFIDAVIT OF DAVID P. BORGESON, CHAIR OF FISHERIES COMMITTEE OF MICHIGAN RESOURCE STEWARDS

STATE OF MICHIGAN)
) ss
COUNTY OF INGHAM COUNTY)

DAVID P. BORGESON, having been duly sworn and under oath, hereby avers, deposes and states as follows:

1. I live in the County of Eaton, Michigan. I am a retired Michigan Department of Natural Resources ("DNR") fishery biologist and now serve as the Chair of the Fisheries Committee of the Michigan Resource Stewards ("Resource Stewards").

2. I make this affidavit based upon my personal knowledge and belief, and if called upon to testify in a judicial proceeding, my testimony would be consistent with the averments made herein.

3. The Resource Stewards is a non-profit organization founded by natural resource and environmental professionals who spent years working or volunteering in the public and private sectors managing and protecting our natural resources and environment. The organization was formed in 1997 to continue the fight for protection of environment and natural resources within the State of Michigan ("State") by the same people who had dedicated their careers to this noble objective.

4. Since its inception, the Resource Stewards has earned a reputation as an organization that uses sound science in arriving at positions on a wide variety of conservation and environmental issues. Individual members have testified before various commissions, boards and legislative committees, and serve on a variety of work groups to share the expertise and experience they have accumulated over decades of hands-on involvement. The Members of the Resource Stewards oppose the politicization of resource management, or decisions based on unscientific principles, and are a respected and outspoken voice on behalf of the long-term use and conservation of Michigan's natural resources.

5. The Resource Stewards is an active member of the Michigan United Conservation Clubs. The Stewards bring an immeasurable amount of hands-on professional experience and credibility in all aspects of conservation and environmental protection, in both the public and private sectors.

6. The Resource Stewards was inducted into the Michigan Environmental Hall of Fame in 2019 for its 22 years of service to Michigan.

7. The mission of the Resource Stewards is to advance professional stewardship of Michigan's natural resource legacy through sound scientific principles, including our land, water, biota, and the ecosystems comprising them.

8. I received a Master's Degree in Fisheries Biology from Michigan State University in 1959. I am a 60-year member of the American Fisheries Society and a 30-year member of the Resource Stewards Board and six years as President.

9. In the summer 1957, I worked for the US Fish & Wildlife Service to help measure the impact of the Japanese gill net fishery on the spawning escapement of Sockeye Salmon to the rivers of Bristol Bay, Alaska.

10. Beginning in 1959, I worked as a fisheries biologist with the California Deptartment of Fish and Game and headed investigations on trout lake research and co-authored several research reports.

11. In 1966, the year salmon were first introduced into the Great Lakes, I was recruited by the Fisheries Division of the DNR as a Trout and Salmon Specialist. I worked in this role as a specialist from that time until my retirement. I had increasing staff responsibilities in establishing and implementing fisheries policies for Michigan's Great Lakes in my role with the DNR.

12. In the 1960's, I was involved in converting the State's large mesh gill net fishery to a trap net fishery. This move was needed to reduce the mortality rate on fish stocks that were severely depressed by sea lamprey predation and over-fishing. Lamprey control's positive results were first observed in 1966, and it was hoped that with the reduction in gill net efforts to protect from over-fishing, the protection and rehabilitation of lake trout and whitefish could be accomplished along with the new salmon introduction.

13. From 1980 to 1991, as Assistant Chief of Fisheries Division in charge of fishery programs, I was Michigan's representative to the Great Lakes Fisheries Commission and was a member for 11 years on the Lake Superior, Lake Michigan, and Lake Huron committees and the Council of Lake Committees and served 2 years as Chairman for each committee.

14. During the 1980's, I led the management of Michigan's commercial fisheries, including the implementation of a program to reduce excessive trap net effort by buying back trap net licenses from willing sellers. This reduced netting mortality which increased the number of older year classes in the population as well as the size of fish in the catch. The result was that fewer nets caught more fish and larger fish of greater value. I was an advisor to the state in the negotiations of the first Consent Decree in 1985 under Judge Enslen. I still have in my den the three champagne bottles signed by the parties to the agreement.

15. In managing public natural resources, it is important to protect the resources and realize the long-term benefits from them. By this measure, the proposed Consent Decree falls short in some areas. Lake trout, salmon, steelhead and walleye generate greater value when caught by sports-fishermen with hook and line than when taken by commercial nets, and trap net harvested fish are more valuable than an equal harvest by gill nets. Fish taken in trap nets can be sorted by size and species and small fish and non-target species can be released alive. For example, large lake trout females could be released for spawning. Fish taken in gill nets cannot be sorted in this way. A large portion of fish die in gill nets and are often in poor condition for sale and many targeted and non-targeted fish are wasted. Foul weather or equipment problems that delay the lifting of nets worsens this problem. As a result, fish caught in gill nets on average command lower market prices than those taken

by trap nets. Gill nets are also a threat to loons and diving ducks and constitute a negative resource impact that deserves consideration.

16. The Decree should include a provision that encourages the purchase by the State or Federal Government of catch quotas or netting effort from willing sellers in those instances where reallocation will encourage a more valuable use or offer needed protection of fish stocks or both. This provision, in my experience, would be an attractive option for tribal fishermen who would be able to realize a reliable income from a stressed resource while helping it to recover, yet not losing the option to re-enter the fishery in the future. This provision would be particularly valuable if initiated before purchases of large mesh gill nets are made. The large mesh gill net expansion is, in most cases, a move in the wrong direction. It will accommodate an easier short-term harvest but increase the mortality rate of already stressed fish populations and jeopardize the long-term sustainability of the fisheries resource, the fisheries themselves, and the fisheries-based economy they support.

Further affiant sayeth not.

Date: Jan. 17, 2023

David P. Borgeson

STACY A PARRISH
Notary Public - State of Michigan
County of Ingham
My Commission Expires Sep 1, 2028
Acting in the County of Ingham

On the 17th day of January, 2023, in Ingham County, David P. Borgeson did appear before me, subscribed and having been duly sworn and under oath did attest that the forgoing affidavit and averments contained within were true and correct to the best of his knowledge and belief and having read the same he executed the foregoing Affidavit as his free act and deed.

Stacy A. Parrish, Notary Public
County of Ingham
My commission expires: 9/1/2028
Acting in the County of Ingham

Exhibit D

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF MICHIGAN
SOUTHERN DIVISION

UNITED STATES OF AMERICA,

Plaintiff,

and

BAY MILLS INDIAN COMMUNITY, SAULT STE. MARIE TRIBE OF CHIPPEWA INDIANS, GRAND TRAVERSE BAND OF OTTAWA AND CHIPPEWA INDIANS, LITTLE RIVER BAND OF OTTAWA INDIANS, and LITTLE TRAVERSE BAY BANDS OF ODAWA INDIANS,

Plaintiff-Intervenors,

and

STATE OF MICHIGAN, et al.,

Defendants.
_____/

Case No. 2:73-cv-26

HON. PAUL L. MALONEY

AFFIDAVIT OF JAMES E. JOHNSON

STATE OF MICHIGAN)
) ss
COUNTY OF ALPENA)

JAMES E. JOHNSON, having been duly sworn and under oath, hereby avers, deposes and states as follows:

1. I am James E. Johnson, a retired Great Lakes fishery research biologist and current Chair of the Besser Museum for Northeast Michigan Fishery Heritage Project.
2. I make this affidavit based upon my personal knowledge and belief, and if called upon to testify in a judicial proceeding, my testimony would be consistent with the averments made herein.

3. I graduated from Michigan State University in 1969 with a Bachelor of Science in Fisheries and Wildlife. I then participated in a graduate program in Fisheries and Wildlife at Michigan State University and graduated with a Master of Science in 1972.
4. Upon graduating, I worked for the Nebraska Game and Parks Commission (between 1972 and 1979) and the Utah Division of Wildlife Resources (between 1979 and 1989). I managed fishery-related projects in both of these roles.
5. I have been a member of the American Fisheries Society since 1978 and a member of the Michigan Chapter of the American Fisheries Society since 1989.
6. Beginning in 1989 (and through my retirement in 2014), I worked for the Michigan Department of Natural Resources ("MDNR") as Manager of the Alpena Fishery Research Station. In this role, I conducted research on lake trout, brown trout, Chinook salmon, steelhead trout, and lake whitefish in Lake Huron. I also served on the Lake Huron Citizen Fishery Advisory Committee, where I co-chaired the Sea Lamprey Control Funding Committee.
7. While employed with the MDNR, I coordinated fishery work with the province of Ontario, the Sault Ste. Marie and Bay Mills bands of Chippewa-Ottawa tribes, and federal partners under the umbrella of the U.S. State Department's Great Lakes Fishery Commission. I also participated in the negotiations with the 1836 Treaty Tribes that led to the 2000 Consent Decree and in managing the fishery assessment of elements of the 1985 Consent Decree. My involvement in Treaty Waters fishery management included:
    a. With others, the injunction against an unauthorized gillnet fishery in 1997.
    b. Leading a court-ordered study of a comparison of catch and bycatch and non-target species mortality of trapnets and gillnets in MH-1,2 (Johnson et al. 2004)

and conducted a related literature review on the catch and bycatch of different gear types, with emphasis on gillnets and trapnets of the Great Lakes (Johnson et al, 2004b).

c. Leading the DNR's Alpena Fishery Research Station. With Dr. Ji. X. He and others, we conducted assessments of lake trout and whitefish populations and commercial fisheries in Lake Huron from 1989-2014. The assessment work was used for, among other things, building lake trout and whitefish models for Lake Huron.

d. Participating in negotiations and providing some information resources that led to the 2000 Consent Decree.

8. I have co-authored several publications relating to the Great Lakes fishery, including:

a. Johnson, J. E., and J. P. Vanamberg. 1995. Evidence of natural reproduction of lake trout in western Lake Huron. Journal of Great Lakes Research 21 (Supplement 1):253-259;

b. Johnson, J. E., and G. P. Rakoczy. 2004. Investigations into Recent Declines in Survival of Brown Trout stocked in Lake Charlevoix and Thunder Bay, Lake Huron. Michigan Department of Natural Resources Fisheries Research Report 2075, Ann Arbor;

c. Johnson, J. E., J. L. Jonas, and J. W. Peck. 2004. Management of commercial fisheries bycatch, with emphasis on lake trout fisheries of the Upper Great Lakes. Michigan Department of Natural Resources Fisheries Research Report 2070;

d. Johnson J. E., M. P. Ebener, K. Gebhardt, and R. Bergstedt. 2004. Comparison of catch and lake trout bycatch in commercial trap nets and gill nets targeting lake

whitefish in northern Lake Huron. Michigan Department of Natural Resources Fisheries Research Report 2071;

e. Johnson, J. E., J. X. He, A. P. Woldt, M. P. Ebener, and L. C. Mohr. 2004. Lessons in rehabilitation stocking and management of lake trout in Lake Huron. Pages 157-171 in M.J. Nickum, P.M. Mazik, J.G. Nickum and D.D. MacKinlay, editors. Propagated Fish in Resource Management. American Fisheries Society, Symposium 44, Bethesda, Maryland;

f. Johnson, J. E., S. P. De Witt, and D. J. A. Gonder. 2010. Mass-marking reveals emerging self-regulation of the Chinook salmon population in Lake Huron. North American Journal of Fisheries Management, 30:518–52;

g. Johnson, J. E., J. X. He, and D. G. Fielder. 2015. Rehabilitation Stocking of Walleyes and Lake Trout: Restoration of Reproducing Stocks in Michigan Waters of Lake Huron, North American Journal of Aquaculture, 77, 396-408; and

h. Johnson, J. E., and J. X. He. 2018. Lake trout where you need them—Restoring reproducing lake trout in Michigan waters of Lake Huron. Wild Trout 12:157-171.

Introduction

9. I have appended the literature research that the Coalition to Protect Michigan Resources conducted into the biological status of fish populations of 1836 Treaty Waters of the Great Lakes, with scientific literature sources upon which our description of fish stock status was based, as support for my affidavit. See **Exhibit 1**.

10. This research demonstrates that foodweb changes that have led to substantial declines in whitefish reproduction and abundance, collapse of alewives and chinook salmon that

depend on alewives for food in Lake Huron, decline in chinook salmon abundance in Lake Michigan, and the tenuous status of lake trout recovery programs in lakes Huron and Michigan. The biological information describes a resource in crisis, with lake whitefish abundance at historic low points and lake trout recovery still in early stages in lakes Huron and Michigan. The conclusion is that the tenuous status of the resource needs to be at the core of any new consent decree and that these resource limitations call for a conservative approach to harvest management, which should include measures to reduce exploitation rates on lake whitefish and lake trout.

11. I have extensively reviewed the Proposed Consent Decree and it is my opinion it does not put the tenuous status of the resource at the core and fails to conserve and preserve the Great Lakes fishery.

Biological Analysis of Proposed Consent Decree

12. The Proposed Consent Decree, rather than balance extractions with reduced resource capacity, focuses on providing new fishing opportunity, fails to address resource limitations, and proposes actions that would increase fishing pressure, when the reduced and fragile status of fish stocks call for a reduction in fishery extractions. This will do irreparable harm to Great Lakes public-trust resources and the people that depend upon their sustainability for the following reasons:

    a. The Proposed Consent Decree fails to protect and conserve the fisheries by emphasizing new fishing opportunity over resource protection. In my opinion, and based on my experience as a biologist, the decreased availability of the leading target species for recreational (salmon) and commercial (whitefish) fishing since 2000 and the tenuous status of lake trout recovery in lakes Michigan and Huron

must be considered. The appropriate biological response is to take a conservative approach to setting harvest levels in a new decree that protects the diminished whitefish stocks from overharvest while taking precautionary measures to protect lake trout as the focus of fishing shifts from whitefish to this recovering native species. The Proposed Consent Decree, however, makes available additional fishing opportunities that will heighten harvest pressure on fragile resources.

b. The Proposed Consent Decree expands gillnetting opportunities to the detriment of the Great Lakes fishery. This expansive new gillnetting will increase fishing pressure, enable more efficient targeting of lake trout and walleye, and expand gillnetting into areas and zones where they were not previously allowed. It represents a step backward from the framework of the 2000 Consent Decree, which directed $14 million to converting nonselective, lethal gillnets to trapnet fisheries.

c. The Proposed Consent Decree fails to protect recreation zones and a lake trout refuge from gillnetting. Zone management, which in the 1985 and 2000 Consent Decrees had protected recreational zones and fish refuges from gillnetting, has been diminished in the Proposed Consent Decree and gillnetting has been extended to many new areas. Recreational zones, where gillnetting is prohibited, would be greatly reduced (increasing the area of gillnetting) and one refuge would be opened to gillnetting. Lake trout mortality rates tend to be lower in gillnet-free zones and lake trout populations have thus flourished in such locations. Opening these zones to gillnetting therefore further jeopardizes rehabilitation of lake trout.

d. The Proposed Consent Decree calls for a vast expansion of small-mesh gillnetting, much of which is to target yellow perch and walleye. There are almost no yellow perch or walleye stocks in 1836 Treaty Waters that can sustain directed commercial fishing. The lakes are too cold and unproductive to be capable of producing fisheries of a commercial scale for either of these species and this condition has been exacerbated by the mussel invasion. Where walleyes are targeted, stocking is usually necessary to sustain populations, and numbers are so suppressed by commercial fishing as to prevent recreational fishers from engaging in those fisheries. Expanding commercial exploitation of perch and walleye will further erode the recreational fishery's ability to realize a fair allocation of harvest.

e. The Proposed Consent Decree fails to even address the status of ciscoes in the lower two lakes or the potential impact of expanded small-mesh gillnetting on their recovery. The statement: "The State and the Tribe shall manage their own respective harvests of cisco" is the only mention of cisco in the proposed Decree. Small-mesh gillnets will be effective in harvesting ciscoes, which are in early stages of recovery in Lake Michigan and are the subject of a stocking-based recovery program in Lake Huron.

f. One center of cisco recovery is the Traverse Bays of Lake Michigan. The proposal to expand both large-mesh and small-mesh gillnetting in these bays seems targeted at this recovering species.

g. The Proposed Consent Decree does not provide target annual mortality rates and delegates setting of mortality rates to the Executive Council with input from the

Technical Fisheries Committee, which leaves this critical need unresolved. A brief analysis of mortality rates for lake trout shows how a varying mortality rate will have significant consequences:

1. Mortality targets for lake trout, if set at 40% or lower, produce harvest policy that favors reproduction—that is self-sustaining lake trout populations that are less dependent or independent of stocking. Target rates can be set higher but would represent harvest policy that is dependent on costly, taxpayer supported, stocking. Mortality rates have for years been much higher than the desired 40% in northern Lake Michigan and reproduction there is minimal; northern Lake Michigan is, therefore, a put-grow-take lake trout fishery dependent on stocking.
2. Mortality rates in Lake Huron have been generally below the 40% target and reproduction is increasing, though recovery is far from complete. Dr. Ji X. He of the DNR's Alpena Fishery Research Station, in 2020 wrote in a scientific journal (https://doi.org/10.1093/icesjms/fsaa030) the following about northern Lake Huron lake trout:

> Thus, aggressive control of sea lamprey-induced mortality and fishing mortality will continue to be crucial for maintaining and further expanding the biomass and production of adult lake trout. A serious concern is whether the fixed harvest control rule, i.e. annual mortality of 40–45%, will continue to be closely implemented [*that is, whether mortality rates will continue to be managed below this level; note by J. E. Johnson*] in the future. Relaxation of the harvest control will likely lead to a downward trend in adult biomass and production, unless recruitment increases to such a level as to fully compensate for the expected increase in fishing mortality. Our findings also imply that the annual mortality might need to be further reduced unless substantial increases in recruitment occur soon.

3. Thus, Dr. He worries that an increase in mortality rate will jeopardize the status of Lake Huron's self-sustaining lake trout, but the proposed decree would do just that by expanding gillnetting opportunity and opening the area's refuge to gillnet fishing.

4. It is my opinion that excessive lake trout harvest is already being permitted around Lake Michigan's Northern Refuge. MM-1, 2, 3 and portions of MM-5 are adjacent to or near the Lake Michigan Northern Refuge. But mortality rates are already too high in MM-1, 2, 3 for the development of spawning stocks. The Proposed Consent Decree would incentivize increased gillnet fishing there, exacerbating the mortality issue. The utility of a spawning refuge is seriously compromised when spawning-age fish are scarce. The grids surrounding the Northern Refuge should be targeted for more conservative harvest management, with target mortality rates set at 40% or less and with enforcement and penalties commensurate with the importance of protecting these stocks; however, enforcement and penalties are not defined in the Proposed Consent Decree and without a set mortality rate it is impossible to judge the biological impacts that may ensue.

h. The Proposed Consent Decree will increase exploitation rates on lake whitefish while their population levels in lakes Huron and Michigan are extremely depressed, putting at risk the future of commercial fishing on lakes Michigan and Huron, where whitefish are the mainstay of the fishery. Whitefish represent a species of special cultural heritage and economic importance.

1. Eastern Lake Superior (MI-8) is realizing whitefish mortality rates that are higher than anywhere in Treaty of 1836 waters and the rates are increasing. This should be looked at with alarm because a failure of these "home waters" for Bay Mills and the Sault tribes would undermine an ancient fishery heritage. There is no effort directed to this issue. Instead, the Proposed Consent Decree seems to incentivize increasing gillnet efforts, and the decline of whitefish in lakes Huron and Michigan will likely cause gillnet fishers to focus even more effort on Lake Superior; thus, further declines in the status of whitefish in MI-8 seem likely.

i. The Proposed Consent Decree's expansion of gillnetting also compromises other Great Lakes fish populations, including lake sturgeon. Lake sturgeon number less than 1% of historical levels (Ed Baker: https://www.michiganradio.org/environment-science/2020-08-11/dead-sturgeon-found-on-lake-michigan-beaches), are State-listed as "threatened" in Michigan, and a federal court has ordered the U.S. Fish and Wildlife Service to make a determination by 2024 whether imperiled populations of lake sturgeon will be protected under the Endangered Species Act. Restoration stocking of lake sturgeon began in Bays de Noc in 2006 and these stocked fish are relatively young, meaning they are of sizes to be vulnerable to the 4.5-inch gillnets most commonly fished for lake whitefish and lake trout. Gillnets are non-selective, and their catch is often dead or moribund when landed. Thus, it is important to protect sturgeon rehabilitation sites from commercial gillnetting. The proposed decree

prohibits the possession of lake sturgeon, but prescribes no on-board monitoring of bycatch and discard rates of lake sturgeon or other "nontargeted" species. "Nontargeted" is placed in quotes because it is impossible to effectively target one bottom-oriented species over another with gillnets.

1. Common loons are listed as "Threatened" by the State of Michigan. Threats include climate change and botulism caused by foodweb changes induced by the mussel invasion. Loons drown when entangled in gillnets or captured in the pots of trapnets lacking loon-exclusion windows. While loon exclusion windows are a remedy for trapnet fisheries, to my knowledge none of the negotiating parties require loon-exclusion windows and they are not proposed in the draft consent decree.

j. The Proposed Consent Decree prescribes harvest policy and mortality targets that are vague and inadequate to protect the fishery resource. Harvest policy and status of the stocks need to be reviewed at least annually and more frequently where populations are especially depressed, yet the proposed decree would review harvest policy only every three years and mortality targets every six years. Such infrequent reviews of harvest policy could have disastrous consequences. As we have seen during the early 2000s—when alewives and Chinook salmon crashed in Lake Huron, salmon numbers declined in Lake Michigan, and whitefish reproduction began a steep decline in both lakes—much can happen to fish populations and fishing patterns in as few as one or two years.

1. Vigilance is required in managing gillnet effort and lack of vigilance can have disastrous consequences in as little as a few months. An example of the consequences of a targeted and unlimited gillnet fishery is illustrated by 1978-79 Michigan Department of Natural Resources assessment data from Hammond Bay–Cheboygan areas of northern Lake Huron. The DNR's assessment fishing there measured an 83% drop in lake trout density between 1978 and 1979. Survival rate was less than 2% for the 1973 cohorts of lake trout during that one-year period; these cohorts were at record high abundance levels in 1978 and their abrupt decline coincided with an intensive gillnet fishery that operated on those grounds in fall 1978 (Cruise report for the Michigan DNR Research Vessel Chinook, May 28-June 29, 1979. Michigan Department of Natural Resources, Alpena Fishery Research Station, Unpublished Report). A single fall season of gillnetting nearly eliminated the lake trout population there. Similarly, a wave of gillnet effort in Grand Traverse Bay in 1979 reduced the lake trout stock there by over 90% in a matter of months. These are examples of the "fishing up" of targeted stocks of fish: when a lucrative fishing ground is identified, the site is intensely targeted causing the stock to decline. As the stock declines, gillnet fishers respond by setting even more gillnet. Effort spirals up until the targeted stock is almost fished out and no longer attractive as a fishery. This fishing up can have disastrous effects in as little as a few

months, as shown above. These examples point to the essential need for timely review of harvest policy and mortality targets.

2. The Proposed Consent Decree does not protect vulnerable aggregates of spawning lake trout and lake trout staging for spawning. The spawning closure defined by the Proposed Consent Decree is November 7 through November 29. Most lake trout spawn in lakes Michigan and Huron beginning in mid-October and continuing until mid-November. Thus, lake trout are presently not protected during the height of their spawning and are extremely vulnerable to harvest during late October and early November. The proposed expansion of gillnet "opportunity" will enable the commercial fishery to target these aggregations efficiently, remove brood stock fish before they have the opportunity to spawn, and thus undermine progress made toward self-sustaining lake trout fisheries.

3. The Proposed Consent Decree should set initially conservative target mortality rates for recovering and stressed stocks to reverse the declining trend in the status of fisheries of lakes Huron and Michigan. It is essential that these target rates and harvest limits be reviewed annually and that corrective adjustments be made to harvest plans on a timely basis, at least until lakes Huron and Michigan begin showing signs of stabilization and self-sustainability.

4. Because gillnets are not selective for the bottom-dwelling fish they target, it is important that bycatch that is killed in nets be counted and reported. Validation of bycatch killed (discards) must be validated by

scientifically designed on-board studies of bycatch incidence by species so that the untargeted kill of important species such as ciscoes, coaster brook trout, and undersized lake trout can be estimated and accounted for in models and adjusting catch policy and harvest limits.

5. Stock assessment and harvest projection models are inexact and the whitefish models, in particular, have not been performing well. There may be modeling issues caused by incomplete reporting of harvest, inaccurate harvest reports, large uncertainties surrounding recruitment estimation, and uncertainty of several other key parameters. We see no consideration of methods to improve stock assessment and modeling in the proposed decree or to hedge against effects of uncertainty that can cause overly optimistic harvest policy. **It is my professional opinion that the models should be subjected to an independent review** by qualified stock assessment biologists elsewhere in the professional community and that, until the models are improved, harvest projections be adjusted downward in mitigation of these uncertainties and low model performance levels.

6. Law enforcement, penalties for overharvest, and data quality control measures are largely missing in the Proposed Consent Decree. In my opinion, it is unlikely that harvest management can be effective if there are no clear consequences for not reporting daily harvest, not reporting accurately, exceeding harvest limits or quotas or not reporting discards and whether discarded fish were dead. Consequences for exceeding a

party's allocated share of Total Allowable Catch that were specifically given in the 2000 Decree have been removed in this proposal.

Further affiant sayeth not.

Date: January 19, 2023

James E. Johnson

On the 19th day of JANUARY, 2023, in ALPENA County, James E. Johnson did appear before me, subscribed and having been duly sworn and under oath did attest that the forgoing affidavit and averments contained within were true and correct to the best of his knowledge and belief and having read the same he executed the foregoing Affidavit as his free act and deed.

ALCONA COUNTY, Notary Public
State of MI, County of ALPENA
My Commission Expires: 11/24/2028
Acting in the County of ALPENA

ANGELA NICOLE METHERINGHAM
Notary Public, State of Michigan
County of Alcona
My Commission Expires 11-24-2028
Acting in the County of ALPENA