# **Report From Agency**

REPORT TO LEGISLATURE

NR 25, Wis. Adm. Code

Board Order No. FH-02-20 Clearinghouse Rule No. 21-099

### Basis and Purpose of the Proposed Rule

A harvestable surplus of lake whitefish currently occupies Green Bay, and commercial fishers would like to make use of the surplus to better adjust to the changing dynamics of the whitefish population in Green Bay and Lake Michigan. This rule will revise the total allowable commercial harvest for Green Bay and Lake Michigan based on two whitefish population models, and will establish allowable harvest allocations (quotas) to each zone based on a total allowable commercial harvest (TAC) of 1,176,889 pounds for Green Bay and 800,407 pounds for Lake Michigan in the 2022 and 2023 license years, with future rules of the Lake Michigan and Green Bay population models to inform the establishment of future TACs and zone-specific allocations. This rule will also implement harvest limits that allow commercial fishers flexibility in their fishing operations while ensuring that the overall level of commercial harvest will not exceed sustainable levels. The rule will also improve the information that the department receives on the locations of trap nets and time that these nets spend in the water between lifts (soak time). This rule will also establish provisions for commercial fishers in southern Green Bay to prevent bycatch issues from arising in this area that is also popular with sport fishers while allowing commercial fishers to fish anywhere in this area without needing a permit. Finally, this rule will require electronic reporting for all commercial fishers in Lake Michigan, Green Bay and Lake Superior to provide more timely access to reporting data that is used to manage fisheries.

### Summary of Public Comments

During the EIA comment period the department received 42 comments on this rule, with 35 in favor, 5 opposed, and 3 not explicitly stating a position. During the comment period accompanying the hearing, the department received 132 written comments on this rule, with 60 in support, 6 generally in support but opposed to the restricted area in the rule, 62 in opposition or expressing concern (and of these, 1 was in support of the electronic reporting requirements in the rule), and 3 not specifically stating a position. In addition, of the 53 non-DNR hearing attendees, 6 registered in support, 28 registered in opposition, and 19 did not state a position or attended for information only. 19 people testified at the hearing (4 in support, 14 in opposition, and 1 not explicitly stating a position). The themes of comments received during all comment periods and department responses are presented below. Comments can also be found on the Lake Michigan whitefish page (dnr.wi.gov, search "Lake Michigan whitefish").

### Will daily bag limits for whitefish for non-commercial fishers change with this rule?

No, this rule does not impact sport fishing regulations such as size and bag limits for whitefish or other species.

Commercial fishing allows some individuals to harvest many more fish than anglers using nets and associated gear and sell the fish for profit. Commercial fishing should be restricted so that commercial fishers can only take as many fish as anglers, to maintain the fishery for future generations.

The department and Wisconsin legislature manage commercial fisheries through licensing, commercial harvest limits, gear restrictions, individual licensee catch quotas, restricted areas, reporting requirements, and other regulations. Nets are a more efficient gear type than hook and line, and therefore can catch many more fish at a time. The legislature has directed that Wisconsin shall maintain a viable commercial fishery, which would not be possible if each licensee was restricted to recreational size and bag limits. However, the commercial fishing quotas and regulations in effect and those proposed through this rule ensure that commercial harvest remains sustainable in the long-term.

Electronic harvest reporting for commercial fishers will help improve management of the fishery, improve the accuracy of catch records, and provide more timely access to harvest information. Over the long-term, the paper reporting option if fishers are unable to access the electronic system should be eliminated.

All commercial fishers will have to report electronically using our EFHRS system. They can either report via smartphone immediately after their last net is lifted or write down that information on paper and then enter the information into EFHRS by 11:59 p.m. on the same day.

Commercial fishing regulation is needed to allow sustained regulated harvest that benefits the public, fishers, and fish. The alternative is population reductions and collapse of the fishery. If Green Bay can be sustainably fished, it should be open to both commercial and sport fishing.

Changes in the whitefish population and fishery require updated rules, and the 50/50 allocation of the Green Bay whitefish quota between sport and commercial fishers is appropriate and will allow more commercial harvest without threatening the whitefish population.

This rule proposes regulations to do just that—allow for sustainable commercial harvest while providing a deliberate and specific allocation of the harvestable surplus of whitefish to the sport fishery in Green Bay. This equal allocation of the whitefish surplus between the sport and commercial fisheries takes into account the additional whitefish that can be commercially harvested in Green Bay to provide fish to local markets, while also recognizing the increasing popularity of the whitefish sport fishery during the ice and open water seasons. Both sport and commercial fishing activities centering on whitefish benefit the local economy.

Commercial fishing of whitefish is an important part of the Door County economy, providing jobs with good wages that contribute to the local and state economy. Fishing companies are small businesses that have been impacted by the pandemic, and other businesses rely on commercial whitefish harvest to provide fish to tourists. Commercial fishers should have equal access to Zone 1 whitefish fishing along with sport fishers.

This rule allows for additional commercial harvest in Zone 1 to allow commercial fishers to take more fish in the areas where the whitefish population has grown. An emergency rule implemented a shorter-term Zone 1 quota increase to help commercial fishers recover from the economic effects of the pandemic. The opportunity to harvest additional whitefish is likely to benefit commercial fishers, but the exact amount of economic benefit to each commercial fisher and the local economy is unknown at this time, as the actual level of harvest may differ from the harvest limits proposed in the rule.

Restricting commercial fishing would impact businesses that sell fish to markets in Wisconsin and out of state. This would make it harder to compete with other fish suppliers and would affect employees of commercial fishing businesses and fish supplier businesses. Demand for whitefish continues to increase for local businesses, including those in the tourism industry, and among the public.

While this rule will provide the opportunity for additional commercial harvest of whitefish in Green Bay, the actual availability of whitefish for markets will depend on the commercial fishing effort as well as variable conditions affecting whitefish population distribution. Additionally, while this rule contains an allocation for Zone 2 that is lower than the previous allocation, actual harvest has not reached the proposed allocation in recent years. The majority of the benefit to markets from the Green Bay whitefish commercial harvest limit increase will stem from the Zone 1 increase.

Commercial fishing provides an important product and cultural heritage (Friday fish fries, fish boils) to the area economy, and contributes to non-profit fundraising in the community. While sport fishing also attracts tourism to the Green Bay area, commercial fishing provides fresh, local, sustainable and healthy whitefish for restaurants, farmer's markets, stores, and consumers that seek fresh fish whether living in or visiting the area.

Of note, 34 comments during the solicitation of economic impacts stage and 65 comments during the public hearing comment period touched on the themes above.

The economic impacts of both the sport and commercial fishery extend to the local hospitality and tourism industries. Commercial fishing provides fresh fish to consumers (residents and tourists alike), restaurants, fish markets, and other businesses and organizations, while sport fishing attracts anglers to the area, who patronize local resorts, establishments, and fishing guide businesses. Both sport and commercial fishers also pay for fuel, equipment, and utilities to support their fishing activities, as well as contribute sales, local, and state taxes to the economy. Sport and commercial fishing are both components of the rich cultural heritage of the Green Bay region.

The DNR uses money from sport fishing and hunting to fund monitoring of commercial fishing activities, and legislative action is needed to return these funds to sporting activities.

As noted in this comment, the legislature is ultimately responsible for developing an appropriation for an alternate funding source for monitoring commercial fishing activities, and contacting members of the legislature is the best way for Wisconsinites to make progress in this area.

Increasing commercial harvest in Green Bay could increase the number of gill nets in lower Green Bay, which could result in more bycatch. With gill nets, the chance of releasing bycatch decreases because gill nets kill the fish caught in them, whether they are commercial fish or game fish. Multiple miles of gill nets could also cause issues for other users in finding where the gill net is set.

Gill nets do result in a much higher rate of mortality to fish, whether target or non-target species compared to trap nets. However, large mesh gill nets are designed to target whitefish that are of legal size and have reached reproductive maturity, and data from the recent Lake Michigan catch composition study show that a significant majority of the fish caught in large mesh gill nets are legal-sized whitefish. In addition, other fish species were caught in gill nets and release alive so not all bycatch caught in gill nets are killed.

The sport harvest of whitefish in Green Bay also generates money for guides and resorts that should be described.

This is true. According to the Economic and Fiscal Impact of Green Bay Recreational Fishing report, sport fishing contributes \$264.3 million in direct and indirect effects to the local economy. Because none of the provisions in this rule directly affect sport fishing, this rule will not directly alter sport fishing activities or spending patterns. However, upon implementation of this rule, commercial fishers may alter their activities to focus on Green Bay to a greater extent based on the Zone 1 quota increase. The degree to which they will do so is uncertain. Whether an increase in commercial fishing activities will result in a response in sport fishing activities and associated expenditures is likely variable, and sport harvest of whitefish also depends on numerous other factors outside of user conflicts, such as weather, fuel prices, gear and bait prices and availability, and ice conditions.

What would the procedures be if the number of whitefish dramatically declines? Would closures or reductions be equitable between sport and commercial fishers? On Lake Superior, sport fishing has to close when the sport fishing quota for lake trout is reached, but commercial fishing continues past the closure of the sport fishing season.

The department can use the emergency rule process to make more immediate adjustments to seasons and regulations in the unlikely event of a sudden and dramatic decline in the whitefish population. Also, because half of the Green Bay harvestable surplus of whitefish is allocated to the sport fishery, the sport fishing daily bag limits or other regulations would only need to be addressed if the sport harvest approaches the sport fishery allocation.

Although this rule does not impact Lake Superior quotas, the structure of the Lake Superior sport and commercial fisheries are the product of years of negotiations and discussions with stakeholders. Both the commercial and sport fisheries for lake trout are limited by overall lake trout quotas. Each commercial fishing licensee is further limited by individual lake trout tag allocations. In contrast, sport fishers are not limited by tags but rather by size and bag limits and a recreational harvest trigger when the overall harvest approaches the sport fishing quota. Rather than having a lower daily bag limit for lake trout and a longer open season, sport fishers and charter captains preferred a higher daily bag limit paired with the possibility for an early season closure if harvest reached the harvest trigger prior to the regular season closure date. Therefore, because the commercial quota is managed differently, commercial fishers that haven't yet filled their lake trout tags can keep fishing during the commercial open season, even when the recreational season closes early.

More details are needed on the proposed restricted area in grids 901, 902 and 1001 (conditions for issuing permits, restrictions on number of trap nets, impacts on bycatch, etc.).

Of note, both commercial and sport fishers expressed concerns that proposed restricted area was not well described and lacked data on how it would impact both whitefish and game fish. As a result, the department removed the restricted area from this version of the rule in favor of provisions that accomplish the following:

- Require commercial fishers using trap nets in this area to notify the department before lifts to allow the
  department to better monitor and collect data from these nets.
- Limit the number of trap nets set under each license in this area at any given time.
- Require bycatch reporting by numbers through EFHRS to gain better data on bycatch levels in this
  area.

If the whitefish quota is increased, the amount of allowable bycatch (10% of the harvest) would increase, posing a threat to game fish and affecting the number of game fish in the waters of Green Bay. Any salmon or trout raised with stamp funds can only legally be harvested by sport fishers, so how will the increase in bycatch be handled short-term and long-term? It's uncertain what impact the Zone 1 quota increase will have on bycatch numbers.

It is important to consider the context of the 10% rule for bycatch in relation to quota increases. The rule requiring commercial fishers to move their gear if the amount of bycatch in their nets reaches 10% is established in administrative code (s. NR 25.09 (5) (a)), and will not change with this rule. The 10% provision requires commercial fishers using gill nets to move their nets 3 miles away from the site or to a depth that is not within 5 fathoms of the depth at which the bycatch was caught before the net can be used again that day. The 10% rule applies to the activities and fishing patterns of individual commercial fishers on a scale of days rather than annually, so even with an increase in the Green Bay (Zone 1) allowable harvest, the 10% rule engages when a commercial fisher catches at least 10% of non-target fish during the day's gill netting activities, thereby prompting a response to bycatch issues that is much quicker and more targeted than what could be implemented if the department were to evaluate the total bycatch across the commercial fishing zone.

Furthermore, an increase in total allowable commercial harvest will not necessarily translate into an increase in the percentage or numbers of bycatch out of the total legal whitefish catch, because bycatch levels depend on a variety of factors, including fish distribution, time of day and year that nets are set, location of nets, and water depths that fish are currently occupying.

Trout and salmon are more likely to be caught in Lake Michigan than Green Bay, and existing bycatch rules require commercial fishers to move their gill net gear if they catch higher proportions of trout, salmon and other game fish. All trout and salmon caught in commercial gear must be released.

Initially, following the department's first run of the new Green Bay population model, the framework for allocating the TACs between the zones, which is proposed by this rule, resulted in a recommended Zone 1 quota allocation of 800,000 pounds. This quota for Zone 1 was biologically sustainable for whitefish, and bycatch levels remained low during the UW-Green Bay study over the period of the emergency rule, which contained a smaller Zone 1 quota increase. However, to respond to uncertainty about latent mortality of game fish caught in nets, especially in southern Green Bay, the department has updated the rule to continue the emergency rule Zone 1 quota of 569,788 pounds as the initial quota upon implementation of the rule. The department has also updated the rule to establish specific criteria to enhance monitoring and data collection on whitefish harvest and catch of bycatch, as well as to limit trap nets in this area that is highly utilized by sport fishers and spawning fish.

There should be a sport fishing board established by the legislature, DNR and NRB to represent sport fishing interests, similar to the Lake Superior and Lake Michigan commercial fishing boards.

The Lake Michigan and Lake Superior commercial fishing boards advise the department and Natural Resources Board in issues relating to commercial fisheries. Both of the commercial fishing boards and their defined roles and functions are established in state statutes, so legislation would be required to establish a sport fishing board with equivalent powers, structure and function. This would be the responsibility of the Wisconsin Legislature. The Wisconsin Conservation Congress is also statutorily established, and represents Wisconsin citizen interests in hunting, fishing, and outdoor recreation.

On issues that overlap with both the commercial and sport fisheries, the department has worked with members of the Conservation Congress and, when appropriate, *ad hoc* stakeholder groups and task forces to involve sport fishing representation in the decision-making process.

For this process, a lake whitefish sport group was established with named representatives from major sport sectors in Wisconsin. This sport group was individually invited to each informational and most Lake Michigan Commercial Fishing Board meetings and fully participated since the inception of the group in August of 2020.

Data has shown that many pounds of unmarketable whitefish harvested commercially were discarded dead into Green Bay over the period of the catch composition study. This does not indicate wise use and conservation of the resource. Game fish caught in trap nets can be killed from barotrauma when caught in deep water (water more than 25 feet deep), and doubling the allowable catch of whitefish would double the amount of gear and effort in fishing for whitefish, which could increase the amount of game fish mortality. Under this rule, thousands of walleye, whitefish, and other game fish would be killed each year in trap nets.

Over the period of the catch composition study, the projected numbers of dead whitefish from commercial fishing activity ranged from 17,439 to 22,269 whitefish. While these numbers seem high, they represent 0.11-0.15% of the total estimated fishable population of whitefish in Green Bay. Commercial fishing regulations aim to minimize whitefish discards and mortality through gear restrictions, restricted areas where higher densities of unmarketable fish are likely to occur, and other provisions. This rule contains provisions aimed at controlling the number of trap nets in southern Green Bay while allowing for better monitoring and data collection in this area, since the catch composition study showed that the number of whitefish discards and mortality increased from north to south in Green Bay.

Increasing the allowable catch of whitefish will likely increase the amount of gear and effort used to fish for whitefish; however, this will not necessarily double or even be proportional to the quota increase because a limited number of commercial fishers have individual catch quotas in Green Bay and existing rules also limit the amount of gear that can be used under one license. Similarly, the amount of mortality of game fish caught in whitefish nets may or may not increase proportionally with the quota increase in Green Bay.

However, this rule also contains the same Zone 1 increase as in the emergency rule, rather than the higher poundage discussed initially, which will also help manage commercial fishing activity in Green Bay.

While barotrauma is a concern, the speed at which a fish is lifted from deeper water as well as the species of fish and its anatomy determine the extent to which barotrauma can cause problems. However, more data on latent mortality specific to Green Bay is needed.

No commercial fishing gear should be set in the new restricted area in southern Green Bay. Commercial gear set in this area by permit on a short timeframe would result in sport fishers being unaware of the gear location and becoming entangled. The rule does not specify the justification for allowing permitted harvest in the restricted area or limitations on the number of nets or permits.

The framework for restricted areas is established in administrative code, and an earlier version of this rule added one new restricted area in southern Green Bay to the list of Lake Michigan and Green Bay restricted areas under the existing framework. Commercial fishing is prohibited in restricted areas unless the licensee applies for a permit and the department approves the permit for the specific grids and gear types. In lieu of the restricted area, the current rule proposal establishes conditions for licensees fishing with trap nets in southern Green Bay (grids 901, 902 and 1001), including limitations on the number of trap nets, a requirements to notify the department the day before trap net lifts, and a requirement for licensees to report the bycatch by number when fishing with trap nets in this area.

The department will also receive coordinates of any trap nets that fish in this area, and will notify the public of these locations accordingly. Nets are also marked with flags and buoys, and the Wisconsin hook and line fishing regulations pamphlet and DNR web page provide guidance on how to identify the positioning of nets based on how they are marked.

# The rule does not mention incidental catch and mortality of lake sturgeon in Green Bay and ways to address it.

During the course of the Green Bay catch composition study, only one lake sturgeon was caught in commercial gear and was released alive. However, the large mesh opening size of the trap net leads can pose more of a risk for lake sturgeon entanglement. Although trap net leads from the commercial fishery were not monitored comprehensively, several sturgeon were observed to have been entangled in some of the leads that were monitored. If the bycatch of lake sturgeon became an issue, the department could pursue rules to address it.

Sport fishing contributes millions to the Green Bay-area economy annually, both directly and indirectly, and a strong sport fishery is very beneficial for economic development in the area. The winter sport fishery draws many visitors each year, and is important to the local economy, allowing businesses to stay open in the winter and allowing new small businesses to open.

According to a study by UW-Whitewater, the direct and indirect impacts of the sport fishery to the Green Bayarea economy have been estimated at about \$264.3 million annually (there is not a comparable study on the direct and indirect impacts of commercial fishing on the local economy). By equitably splitting the harvestable surplus of whitefish in Green Bay between the sport and commercial fisheries, the sport fishing community will be able to continue benefitting from the healthy Green Bay whitefish population. The department is also proposing limitations on the number of trap nets set in lower Green Bay to minimize potential bycatch issues and user conflicts.

The sport fishing bag limit for whitefish should be raised instead of the commercial limit; or, if the commercial limit is raised, the sport daily bag limit should be raised equitably. If commercial harvest takes too many fish, people will stop coming to the area to fish for whitefish, and/or it will be more difficult for sport fishers to catch whitefish. The whitefish fishery has not been the same since the last increase; it should be protected for future generations.

Half of the harvestable population of whitefish resulting from the Green Bay population model is reserved for the sport fishery. As more data is collected on sport fishing in Green Bay, the department will assess the amount of whitefish harvested under the daily bag limit of 10 and could make future adjustments to raise the bag limit if biologically and publicly supported.

Because the department has revised the rule proposal to keep the Zone 1 commercial whitefish quota at the level of the emergency rule, the changes to the current dynamic between the sport and commercial fisheries are anticipated to be minimal.

Some sport fishers think the bag limits for whitefish and walleye should be lowered, but that would be pointless if the commercial limits go up.

Any adjustments to sport fishing bag limits would require a separate rule process. The commercial harvest limits proposed in this rule are based on sound biological data indicating that the Green Bay whitefish population can support additional commercial harvest without threatening the sport fishery.

### It's unclear how commercial fishing activities will be monitored and enforced.

Commercial fishing enforcement has always been a priority for law enforcement dating back to 1879, with different organizational units monitoring the fishery over the years. Earlier in 2021, law enforcement in the Lake Michigan area reorganized and created a Green Bay/Lake Michigan-dedicated Marine Team with waterand tributary-only responsibilities. Part of the reason for the re-creation and expansion of the Marine Team was to bring back a more focused oversight of the commercial fishing industry and also ensure that law enforcement had a team of wardens who were similarly trained and knowledgeable on commercial fishing operations. Throughout 2021, the new Marine Team got underway and started to learn more about the commercial fishing industry. The Marine Team engaged in commercial fishing enforcement in 2021 by conducting net checks and observing commercial fishers setting and lifting nets. Staff also conduct independent monitoring based on their own work practices and also in some cases notifications from the public. As the Marine Team expands its knowledge, capabilities and work schedule, it will have a more visible LE presence in the industry in 2022.

More commercial fishing effort in Green Bay will lead to more commercial gear set in Green Bay, which will increase user conflicts between sport and commercial fishers. The rule does not set any limits on the number of nets allowed or commercial fishers allowed in Green Bay.

The number of commercial fishers that may fish in Green Bay is limited to the number of fishers with individual licensee catch quota allocations for Green Bay and those who may obtain a transfer of partial quota; this is generally less than 10 licensees. Also, although the proposed rule does not establish any further limitations on large mesh gill net footage or trap nets that can be used to fish for whitefish, existing rules limit the large mesh gill net footage and number of trap nets that can be used at any one time under a single license. Furthermore, new trap net limitations will reduce the risk of user conflicts in Green Bay.

The proposed restricted area does not adequately protect the unique spawning population of whitefish in tributaries of Green Bay. A restricted area should be established at the mouths of the Peshtigo and Oconto rivers to maintain a sustainable population of whitefish.

The commercial whitefish season in Lake Michigan and Green Bay is closed during the month of November, which helps protect spawning whitefish. In addition, commercial fishing is restricted within ¼ mile of Lake Michigan and Green Bay streams, including those that contain spawning whitefish.

Data has shown that night sets of gill nets cause higher mortality for bycatch, especially in August through October. Time restrictions on gill nets are needed.

While the bycatch levels for walleye tend to be higher in night sets than day sets of large mesh gill nets, overall, the vast majority of fish caught in large mesh gill nets are legal whitefish. If monitoring and data collection showed an increase in non-whitefish bycatch caught in large mesh gill nets, the department would consider additional regulations for large mesh gill net use. Also, a commercial fisher must move gill nets if the level of bycatch reaches 10% of the total legal harvest of whitefish caught in the fisher's nets.

The Zone 1 quota increase was proposed because the whitefish population has changed and commercial fishers cannot catch their quotas in northern Green Bay and Lake Michigan. Shouldn't the quotas in the other zones instead be reduced to allow the whitefish population to grow?

This rule contains a framework that would initially result in a reduction in the Zone 2 quota concurrent with the Zone 1 quota increase that is being carried over from the emergency rule, which may help the Lake Michigan population of whitefish recover. Commercial fishers have not approached the current Zone 2 quota in recent years. Because the Green Bay and Lake Michigan whitefish population dynamics differ, a reduction in Zone 2 and 3 quotas instead of an increase in the Zone 1 quota would not allow commercial fishers to fully utilize the abundant Zone 1 whitefish population, though quota reductions in Zones 2 and 3 might help the Lake Michigan whitefish population grow. Allowing commercial fishers to utilize the Zone 1 harvestable surplus of whitefish and splitting it equally with the sport fishery is also consistent with the legislature's directive to maintain a viable commercial fishery, as reductions in the Zone 2 and 3 quotas could impact these commercial fishing businesses and the availability of whitefish for local markets.

It is concerning to increase the Zone 1 quota again before we know the longer-term impacts on whitefish and game fish—the recent Zone 1 increase should be studied to assess the impacts on the sport fishery before raising the Zone 1 quota even more.

The proposed Zone 1 increase is more than doubling the previous quota in a very short time.

Of note, 26 commenters expressed concern about increasing the Zone 1 whitefish quota again before the impacts of the emergency rule increase can be studied, while additional comments expressed opposition to any commercial whitefish quota increase in Zone 1.

As a result of these comments, the department is proposing to change the initial Zone 1 quota that will take effect with this permanent rule to match the Zone 1 quota in the emergency rule, at 569,788 pounds instead of 800,000 pounds. This will allow commercial fishers in Zone 1 to continue benefitting from an increase as compared to the previous quota, which will present the opportunity for a potential increase in whitefish harvest

to sell to consumers and associated businesses. However, this revision will also allow more data to be collected on the impacts of commercial whitefish harvest before the next quota adjustment.

Whitefish are a forage fish for game fish that support the sport fishery, and state and federal sport fishing dollars have funded the development of the fisheries for walleye, northern pike, yellow perch, and musky. Whitefish populations are already changing with environmental factors. It's not worth the risk to the fishery to increase the quota for the personal gain of some commercial fishers—if the whitefish population crashes, the fishery may not recover.

Yes, whitefish do contribute to the food web for several popular game fish species. The sport fishery allocation of whitefish in Zone 1 will help support game fish populations as well, since the sport harvest of whitefish has not yet approached the proposed level of the Zone 1 sport fishery allocation.

An increase in whitefish quotas is not necessarily tied to a decrease in game fish numbers over time. For example, following an increase in the commercial whitefish quota in 2010, the walleye population in Green Bay continued to increase. Multiple variables aside from commercial fishing effort influence game fish populations.

The department also plans to run the new whitefish population models every three years to ensure that the most current biological information is used to make harvest recommendations and set sustainable quotas.

Data on sport harvest from the new fishing guide reporting rule should be taken into account before raising the Zone 1 commercial quota.

The Green Bay whitefish population model does not contain reliable information on the sport harvest of whitefish. Data for the models may not provide an accurate representation of the whitefish population.

The department has gathered data on the sport harvest of whitefish through routine creel surveys of Green Bay anglers, which is accounted for in the models.

A rule restructuring the fishing guide reporting requirements for Lake Michigan, Green Bay, Lake Superior and their tributaries went into effect on Jan. 1, 2022. This rule is expected to provide enhanced data on sport harvest of whitefish and other game fish in Green Bay, which will be incorporated into the population models in addition to creel survey data and the limited data that had been gathered from fishing guide reports under the previous reporting framework.

There is no state mandate for commercial fishers to harvest whitefish, and fish belong to the public, not individuals.

The Wisconsin Legislature has established that fish are a public resource and are managed by the state for the benefit of the public (s. 29.011 (1), Stats.). Furthermore, the Wisconsin Legislature has established that the state shall maintain a multi-use fishery, including an economically viable commercial fishery (Laws of 1977, Chapter 418, (37) (d)) with limitations on commercial participation and harvest through scientific management. Commercial fishers in Lake Michigan and Green Bay have harvested whitefish as the primary component of their fishing operations for decades, spanning multiple generations of commercial fishers. Over time, the number of commercial fishing licenses has been reduced and consolidated, including by commercial fishers themselves. Both sport and commercial fishing allow the general public to make use of whitefish resources harvested from Wisconsin waters. Sport fishers value whitefish fishing as a unique and challenging hook and line fishing opportunity that also provides table fare and business to fishing and hospitality industries in the Green Bay area, while commercial fishers harvest whitefish to sell directly to consumers (including nonanglers) that desire fresh fish, as well as to numerous businesses that sell fish and fish products to the public.

Wisconsin's commercial fishery has been dependent on Zone 1 whitefish for years, and the numbers in the rule proposal will benefit the fishery.

Yes, one of the goals of the rule is to allow commercial fishers to better utilize the Green Bay whitefish surplus while maintaining an equitable allocation for the sport fishing community.

However, thriving commercial fisheries still exist in areas of Zones 2 and 3 as well. These fisheries have contributed substantially to Wisconsin's commercial whitefish fishery.

Netting should not be allowed in spawning areas. It takes a long time for whitefish to mature, and excessive catch and mortality of year classes in commercial gear would cause the whitefish population to take a longer time to recover.

Existing restricted areas limit the amount of commercial fishing gear in areas with higher concentrations of spawning fish. Additional provisions in the proposed rule will also limit the number of trap nets in lower Green Bay to minimize the catch of sublegal whitefish and game fish.

The commercial fishing industry is committed to maintaining a viable fishery for the future, since it supports their livelihoods.

This comment is noted for the record.

This rule has been developed after seven years of discussion, data collection and development of the new population models. Nothing in this rule, UW-Green Bay study or UW-Whitewater economic study indicates that commercial fishing activity will harm the sport fishery. Commercial fishing is highly regulated.

The Lake Michigan Commercial Fishing Board, DNR, stakeholders, and members of the public have engaged in discussions over the past seven years to move forward with the first major update in decades to total allowable commercial harvest and zone-specific whitefish harvest limits in Lake Michigan and Green Bay. More recently, in 2020-21, the department convened a sport fishing advisory group consisting of members of key sport fishing organizations, holding public meetings to gain their input, and also participated in multiple Lake Michigan Commercial Fishing Board meetings over the past two years to discuss potential rule inclusions.

Commercial fishing is indeed highly regulated through chapter NR 25, Wis. Admin. Code to ensure equitable, sustainable use of the whitefish resource for the benefit of the public. While the commercial harvest limits in this rule are well within the bounds of what is considered biologically sustainable, provisions in this rule limit the allowable harvest in Zone 1 of Green Bay to prevent catch of non-target fish and reduce user conflicts.

### What model was used for the previous Zone 2 quota, and why was actual harvest so much lower?

Previously, a lakewide whitefish population model was utilized to set the Zone 2 quota, and commercial fishers also favored a higher Zone 2 quota. However, changing populations and distribution of lake whitefish resulted in more whitefish occupying Zone 1 than replenishing Zones 2 and 3, and therefore commercial fishers did not reach that quota.

This rule is based on years of research and monitoring, with 23% of trap net lifts monitored by the UW-Green Bay study. Data also show that gill nets can be efficient and intelligently used, and that bycatch concerns are minimal.

Yes, according to the UW-Green Bay study, large mesh gill nets were very effective in catching lake whitefish and very few other species, and most of the whitefish caught were able to be kept. Researchers also monitored trap nets set in areas that commercial fishers routinely fish, and provided data on the catch composition of whitefish and other species caught in these nets. While bycatch caught in trap nets make up a very small proportion of the total population of the species, bycatch levels can increase seasonally and moving north to south in Green Bay.

Electronic harvest reporting is too difficult for Lake Superior fishers in remote areas without adequate cell service, and could cause safety issues if fishers are entering reports as they are getting close to the dock (near other boats).

This rule allows commercial fishers to first record their reports on a paper form while on the water before entering the reports into the electronic fish harvest reporting system by 11:59 p.m. that same day. This will ensure accurate recording of the information while also allowing fishers some flexibility in entering the reports

electronically so that they can do so when they have cell phone coverage or computer connection and are in a safe location.

Commercial fishing could increase the spread of invasive species and disease, further harming game fish. Was this studied in the UW-Green Bay study? Also, whitefish can help control invasive species such as the round goby, so fewer whitefish could lead to more invasive species.

No, this was not studied in the UW-Green Bay study. Invasive species and certain diseases (such as VHS) have been present in Lake Michigan for many years predating this rule.

Commercial netting has had a detrimental impact on perch populations, causing substantial decline.

The subjects of this rule are Lake Michigan whitefish harvest management and Lake Michigan, Green Bay and Lake Superior commercial harvest reporting. Based on population models for lake whitefish in Lake Michigan and Green Bay, the whitefish population is stable in Lake Michigan and increasing in Green Bay, even in the presence of commercial fishing.

Increases in commercial fishing in Green Bay could impact migratory ducks, such as scaup, that use Green Bay during migration season and could get entangled in nets. Bag limits of these species for waterfowl hunters are already very limited to protect the population.

Monitoring of commercial fishing activities in Green Bay has not shown any catch of diving ducks in commercial nets. Commercial fishing gear is designed to catch fish rather than wildlife. Should the catch of migratory waterfowl become a problem, the department would work with commercial fishers and the U.S. Fish and Wildlife Service to implement appropriate measures.

The numbers of fish caught as bycatch that die after release (latent mortality) are unknown.

This comment was a common theme during the public hearing for this rule. The department recognizes that more investigation of latent mortality of bycatch is needed, especially in southern Green Bay. However, provisions in this rule aim to minimize non-target species from being caught in commercial gear in the first place.

Will future quota adjustments involve public input? Will they require that the 50/50 split remain in place? How often will quota numbers be adjusted?

Yes, for future adjustments, the department will first run the population models, then will hold public meetings and bring total allowable commercial harvest and zone-specific quota recommendations to the Natural Resources Board for approval (during which the public may also submit comments). The 50/50 split for the sport and commercial fishery in Green Bay will remain each time the total allowable commercial harvest is adjusted. The population model runs and TAC and quota recommendations will go before the Natural Resources Board every three years, if not earlier.

Data supports the increased commercial harvest in Zone 1, and many people, including sport fishers, benefit from commercial whitefish fishing. The level of opposition is surprising.

While the biological population models indicate that abundant whitefish occupy Zone 1, this rule also takes into account the perspectives of the stakeholders that fish commercially and recreationally in Green Bay.

Is overpopulation a concern in Zone 1? With lower whitefish populations in the Great Lakes, why exploit a thriving fishery? Are lower effort/fish due to commercial fishers finding the higher concentrations of fish rather than higher overall fish populations? DNR trawl numbers for young of year seem to indicate a consistent rather than increasing population.

Due to the abundance of whitefish in this area, allowing a conservative increase in commercial harvest limits will provide more equitable access to whitefish while reflecting the changes in population distribution of whitefish that have occurred over the past decade. This will help fulfill the state legislature's goal of maintaining a viable commercial fishery. There is no indication that commercial fishers are expending less

effort in fishing; the whitefish abundance in Zone 1 has been determined using biological population models that take into account weight at age, length at age, maturity schedule, trap net harvest by weight, trap net fishing effort by number of lifts, age composition of whitefish caught in trap nets, gill net harvest by weight, gill net fishing effort by number of lifts, age composition of whitefish caught in gill nets, recreational harvest by numbers, recreational fishing effort by angler hours, age composition of recreationally caught whitefish, and, in Green Bay, young-of-the-year index survey.

### Are current catch rates meeting local demand for whitefish?

Not necessarily; some stakeholders that buy whitefish to sell to markets have commented that the amount of whitefish available is not meeting public demand.

# Could DNR donate bycatch to food pantries? Could future bycatch studies be extended further into the spring?

Monitoring and data collection on whitefish and bycatch has and will continue to occur in the spring, especially in areas of interest such as lower Green Bay, where there is a significant sport fishing presence.

The idea to donate bycatch to food pantries is noted for the record. Fish and wildlife seized by law enforcement can be donated to food pantries, but in this case, many of the fish caught as bycatch in trap nets are able to swim away upon release—so they are not immediately considered to be dead and able to be collected onsite and processed for food pantries. It would also take a substantial amount of effort and resources to keep bycatch in suitable condition for donation to food pantries, especially during the warmer months of the year. In addition, the policy across programs in the department on the catch of non-target species are the same: they must be returned alive or dead over the side.

Does the smaller size of Green Bay whitefish affect whitefish egg production? Could future studies assess the sex ratio of commercially harvested whitefish? Female whitefish mature to larger sizes more quickly than males, so it would stand to reason that most harvested whitefish are female.

Fecundity (egg production) is size-dependent in whitefish. So, generally speaking, the larger the fish the more eggs it will produce. The department collects a considerable amount of data on lake whitefish during commercial fishing monitors including noting the sex of most fish, when possible. To date the data do not suggest that the sex ratio of males to females in Green Bay is heavily skewed to either sex.

# No other sport fisheries in the state have a quota. Zone 1 is smaller than Zones 2 and 3, making fish management more difficult.

Another example of a sport fishery with a quota is the Lake Superior lake trout fishery, in which a harvest trigger is established to prevent the sport fishery from exceeding the quota.

The size of the zones does not have a significant bearing on the ease of fish management.

In addition, while a portion of the total allowable catch calculated for the bay has been allocated to the sport fishery, this fishery will be regulated by size and bag limits. If over the long-term the sport harvest is continually over the allocation, discussions with stakeholders would have to be conducted to talk about regulations to bring this number under the total allowable catch for the sport fishery.

### Could the DNR consider part of the quota to be harvested by sport fishers and sold to a processor?

Wisconsin statutes specify that an appropriate commercial license is required to harvest and sell fish; sale of game fish is not legal.

### Could the department require commercial fishers to restock dead bycatch?

This concept would likely encounter great stakeholder and legislative resistance. Rather, this rule seeks to minimize the potential for bycatch issues, especially in areas of Green Bay where the sport fishery is deeply

rooted. The rule accomplishes this through a conservative Zone 1 allowable harvest allocation and provisions to minimize the impacts of trap nets in lower Green Bay while allowing for monitoring and data collection.

The average weight of an individual lake whitefish has decreased over time from 3-4 pounds to 1.5 pounds, so doesn't this mean that fishers would have to harvest more whitefish to get the same poundage?

The size at age of lake whitefish has decreased substantially over the last 15-20 years. Therefore, it is correct that more fish would be needed to achieve a certain harvest biomass. However, population management models take the size at age of whitefish into consideration when setting safe harvest levels.

### Modifications Made

Following the public hearing, the department made the following changes in consideration of commercial and sport fishing concerns presented at the hearing:

- Changes to the mechanism in the rule for allocating quotas, especially the Zone 1 quota. The initial recommendation was to allow up to 800,000 pounds of whitefish (67.9758% of the proposed Green Bay total allowable commercial harvest (TAC)) to be harvested in Zone 1. However, many sport fishers and sport fishing organizations, as well as some individual commercial fishers, commented that the Zone 1 quota should be held at 569,788 pounds (the amount in the emergency rule, EmR 2130) for 2-3 years to allow the impacts of that quota to be studied further. Therefore, this final rule directly establishes the Green Bay and Lake Michigan TACs and zone-specific quota allocations for the 2022 and 2023 license years, and allows for a future Zone 1 quota of up to 800,000 pounds or 67.9758% of the Green Bay TAC, whichever is less, which would be presented to the Natural Resources Board for approval prior to implementation for the next license year.
- Removal of the restricted area and addition of commercial fishing provisions for southern Green Bay. The draft rule included a restricted area in southern Green Bay for trap nets. Southern Green Bay is a popular location for sport fishers, who fish for both whitefish and a variety of game fish year-round. Data collected on catch composition of whitefish and game fish in commercial trap nets in 2020-21 indicated that elevated levels of bycatch of game fish and sublegal whitefish occurred moving from north to south in Green Bay. With an increased Zone 1 guota allocation, sport fishers were concerned that more commercial nets would be set in this area to harvest the greater abundance of whitefish in southern Green Bay, which sport fishers said could cause user conflicts and lead to greater incidental catch and mortality of game fish such as walleve. However, commercial fishers commented that data had not been collected specifically in the grids comprising the restricted area, so such restrictions should not be part of the rule. As a compromise, the department removed the restricted area from the rule in favor of provisions for fishing in southern Green Bay, including limiting trap net use to one trap net per license, requiring commercial fishers to notify the department of trap net lifts so the department can conduct on-board monitoring, and requiring reporting of bycatch. These provisions will provide enhanced data on trap net use in southern Green Bay while allowing anyone with individual quota to fish anywhere in Zone 1 without needing to obtain a restricted area permit.
- Changing the deadline for reporting the actual weighed catch. In the event that the commercial catch cannot be weighed that same day, this change would allow commercial fishers to report the weighed catch the next business day rather than the next day. This was a change requested by the Lake Superior Commercial Fishing Board.

### Appearances at the Public Hearing

Kevin Procknow
William Henriksen, Henriksen Fisheries
Scott Habermann
Mike Smithe
Michael Arrowood
Steven Lewins
Gary Henschel, Walleyes for Tomorrow

Wade Paffenroth

Aaron Kreicarek

Luke Valitchka

Bruce Hernke

Ken Groeschel

Thomas Hicks, Beyond The Catch Guide Service LLC

Jimmy Doering

Keith Waloway, Marinette/Menominee GLSF

Kyle Wogsland, Sturgeon Bay Charter Fishing

Steve Hogler

Karrie Frankenberg

Tom Couston

Ryan Sperber

Ralph Stock

Chuck Elliot

Paul Cochran

Zach Burgess

Bill Luer

Bill Smith

Lonney Goman

Paul Smith

**Bob Claus** 

Alex Gorske

Jason Frankenberg

Tim Kroeff

Richard Jones

Todd Stuth

Paul Witalison

Winifred Bird

Christopher Vadnais

Jay Virlee

Steve Lapin

Ashley Hoekstra

Taylor Hrabak

Jack Tong

Keith Pamperin, Wisconsin Wildlife Federation

Charles Henriksen, Henriksen Fisheries

Charles Henriksen, Lake Michigan Commercial Fishing Board

Frank Pearson, Great Lakes Sport Fishermen

Sharon Fegley Moen, Wisconsin Sea Grant

JJ Malvitz

Lauren Phillips

Tou Lee

Jerome Fetterer, Angling Adventures Outdoors LLC

Brett Schwarz

Rachel Cromell

#### Changes to Rule Analysis and Fiscal Estimate

Changes to the fiscal estimate included summarizing the public comments received during the economic comment period, clarifying that commercial fishing benefits local businesses aside from commercial fishers, though the exact amount of benefit is unknown, and clarifying that commercial fishing activities resulting from this rule may or may not influence sport fishing activities.

In line with the "Modifications" section above, two important changes to the rule analysis were made following the public hearing to describe the changes to the Zone 1 framework for quota allocations and the reason for establishing the TACs and quota allocations as hard numbers for the 2022 and 2023 license years, and to replace the description of the restricted area (only open to trap nets to commercial fishers that have been

issued a permit) with an explanation of the provisions for fishing with trap nets in southern Green Bay. A minor modification explained the change in timeline for weighing the catch to "next business day," so that commercial fishers are not required to weigh the catch on days that commercial fishing businesses are not open.

### Response to Legislative Council Rules Clearinghouse Report

The Legislative Council Rules Clearinghouse submitted comments on form, style and placement in administrative code, and clarity, grammar, punctuation and use of plain language.

Changes to the proposed rule were made to address all recommendations by the Legislative Council Rules Clearinghouse.

# Final Regulatory Flexibility Analysis

This rule may provide an economic benefit to some commercial fishing businesses that target whitefish in Green Bay, while having no expected economic impact to commercial fishers that fish for whitefish in Lake Michigan. This rule is likely to provide an economic benefit to small commercial fishing businesses that target whitefish in Green Bay due to the allowable harvest increase in Green Bay, and, by extension, the businesses that purchase whitefish or their parts to sell to consumers. The exact amount that each commercial fisher may gain due to the increased harvest limit is unknown, as is the economic impact to associated businesses as a result of increased whitefish harvest. However, the overall economic impact may be positive for the Green Bay commercial fishing industry because the rule would allow for more efficient harvest to make full use of the available lake whitefish commercial stocks. Currently, nine commercial fishing licensees and their employees actively fish for whitefish in Green Bay, and additional commercial fishers may be able to purchase quota in Green Bay to be able to fish, thereby benefitting from this increase. Assuming a dockside value of \$2 per pound for whitefish based on average dockside values over the past five years, a whitefish allowable harvest increase in Zone 1 of 207,603 pounds could convey up to a \$415,206 dockside value benefit to the commercial fishing industry, which would translate into additional income once the fish are sold at wholesale and retail prices, as well as benefits to associated businesses (restaurants, fish markets, taverns, grocers, fish boils, etc.), non-profit organizations that utilize whitefish, and the local economy. These businesses provide jobs and help support the economy. In Lake Michigan, however, the Zone 2 allowable harvest will decrease substantially while the Zone 3 allowable harvest will remain the same. The proposed Zone 2 allowable harvest is still greater than the actual harvest levels for Zone 2 over the past 8 years, and is greater than the 5-year average commercial whitefish harvest in Zone 2. Additionally, this rule would allow commercial fishers with Zone 2 individual licensee catch quotas to fish anywhere in Zone 2 (including the Green Bay portion, with a higher concentration of whitefish), until the Zone 2 allowable harvest is reached. Therefore, this rule is expected to have a minimal economic impact (if any) on Zone 2 fishers and Zone 3 fishers.

However, since commercial fishers in Lake Superior and Lake Michigan would be required to utilize the electronic fish harvest reporting system to report catch of whitefish and other fish where there is a need for additional catch data, this rule may have a minimal impact relating to reporting for some fishers. EFHRS will require the commercial fisher or crew member to have access to a smartphone or computer with which to enter the electronic reports, and those that do not would have to purchase such a device. According to the Pew Research Center<sup>1</sup>, an estimated 85 percent of American adults owns a smartphone. With 46 licensed commercial fishers operating in Green Bay and Lake Michigan and 8 in Lake Superior, therefore, an estimated 7 commercial fishers in Lake Michigan and 1 in Lake Superior may not have a smartphone for entering reports electronically. However, some of these commercial fishers may have a computer for entering the reports, and crew members of licensees may also have an electronic device to enter the reports for the licensee's commercial fishing operations. With this information, and estimating that a low-cost smartphone and basic data plan can be obtained for about \$120 per year, the impact to each commercial fishing licensee and the industry overall is likely to be very minimal, about \$960 per year in total at maximum.

1. Demographics of mobile device ownership and adoption in the United States. (2021, April 07). Retrieved June 28, 2021, from <a href="https://www.pewresearch.org/internet/fact-sheet/mobile/">https://www.pewresearch.org/internet/fact-sheet/mobile/</a>

Though the rule does not contain any provisions directly impacting sport fishers, sport fishers and fishing guide businesses may be indirectly impacted by the rule due to redistribution of commercial fishing effort in Lake

Michigan and Green Bay. A 2018 UW-Whitewater study, "The Economic and Fiscal Impact of Green Bay Recreational Fishing," values Green Bay sport fishing at an estimated \$264.3 million in direct and indirect contributions to the local economy, and some sport fishers are concerned that changes to commercial fishing activities in Green Bay could cause negative economic impacts to the sport fishery and local economy due to increased incidental catch of game fish and greater harvest of whitefish, as well as user conflicts. However, the degree to which sport fishers may perceive an impact will depend on the amount and distribution of commercial fishing activity, and provisions in this rule as well as existing rules limit the amount of gear that can be fished in southern Green Bay, an area with diverse game fish populations that is popular with sport fishers. This rule does not inherently increase commercial fishing effort in Green Bay.

# Response to Small Business Regulatory Review Board Report

The Small Business Regulatory Review Board did not prepare a report on this rule proposal.