

NATURAL RESOURCES BOARD AGENDA ITEM

SUBJECT: Request authorization for public hearings on Board Order FH-14-11, revisions to ch. NR 25 related to commercial fishing gill nets

FOR: MAY BOARD MEETING

TO BE PRESENTED BY / TITLE: Michael Staggs

SUMMARY:

This proposed rulemaking pertains to commercial gill netting in Wisconsin waters of Lake Michigan. It is in response to a petition for rule-making submitted November 5, 2010, by five of Wisconsin's licensed commercial fishers. The petitioners seek changes in the allowable mesh sizes in gill nets used to catch bloater chubs and yellow perch on Lake Michigan and yellow perch on Green Bay. Current rules provide minimum and maximum allowable mesh sizes and specify procedures for how compliance is to be assessed. The petitioners are requesting a 1/8 inch variance in the allowable mesh sizes. This may mean changes in the minimum and/or maximum mesh sizes or a change in how compliance is assessed.

Under s. 227.12 (3), Stats., the Department must either deny the petition in writing or proceed with the requested rule making. A petition may be denied because it is legally defective or because the NRB does not agree with the rule proposal on public policy grounds. In this case, despite minor legal deficiencies, the petition can be considered to be legally sufficient, and the Department will proceed with rule-making subject to NRB concurrence with the attached Rule Agenda/Board Action Checklist.

The primary policy issues are 1) the protection of young yellow perch and bloater chubs from commercial exploitation and 2) the development of gear restrictions that are realistic and enforceable. Department biologists believe that current gear restrictions are appropriate and necessary to protect young fish through early development and maturation.

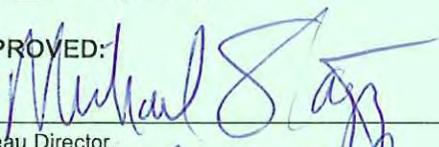
RECOMMENDATION: Deny authorization of public hearings on NRB Order FH-14-11

LIST OF ATTACHED MATERIALS:

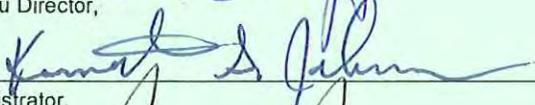
- No Fiscal Estimate Required
- No Environmental Assessment or Impact Statement Required
- No Background Memo

- Yes Attached
- Yes Attached
- Yes Attached

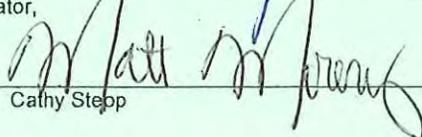
APPROVED:


Bureau Director,

4/19/2011
Date


Administrator,

4/21/2011
Date


Secretary, Cathy Stepp

5/4/2011
Date

- cc: NRB Liaison
- DNR Rules Coordinator
- Russ Rasmussen - AD/8
- Mike Staggs - FH/4
- Bill Horns - FH/4

- Randy Stark - LE/8
- Chris Groth - Green Bay
- Chuck Weier - WF/GLSFC
- Dale Maas - GLSC
- Rick Johnson - LMCFB

- Mike LeClair - Susie-Q Fisheries
- Kathleen Strasbaugh - LS/8

DATE: April 25, 2011

TO: Natural Resources Board

FROM: Cathy Stepp

SUBJECT: Authorization of public hearings on NRB Order FH-14-11 regarding commercial gill nets on Lake Michigan and Green Bay

1. Why is the rule being proposed?

This proposed rulemaking pertains to commercial gill netting in Wisconsin waters of Lake Michigan. It is in response to a petition for rule-making submitted November 5, 2010, by five of Wisconsin's licensed commercial fishers. The petitioners seek changes in the allowable mesh sizes in gill nets used to catch bloater chubs and yellow perch on Lake Michigan and yellow perch on Green Bay. Current rules provide minimum and maximum allowable mesh sizes and specify procedures for how compliance is to be assessed. The petitioners are requesting a 1/8 inch variance in the allowable mesh sizes.

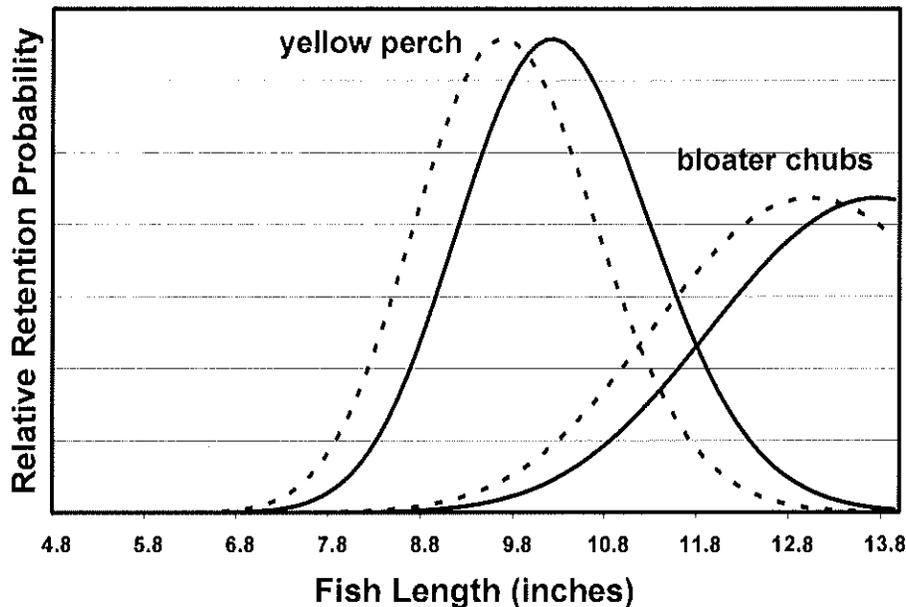
Under s. 227.12 (3), Stats., the Department must either deny the petition in writing or proceed with the requested rule making. A petition may be denied because it is legally defective or because the NRB does not agree with the rule proposal on public policy grounds. In this case, despite minor legal deficiencies, the petition can be considered to be legally sufficient, and the Department will proceed with rule-making if the Natural Resources Board authorizes public hearings.

The primary policy issues are 1) the protection of young yellow perch and bloater chubs from commercial exploitation and 2) the development of gear restrictions that are realistic and enforceable. Department biologists believe that current gear restrictions are appropriate and necessary to protect young fish through early development and maturation.

Gill nets are highly selective, with the size of fish captured strongly affected by the size of meshes in the net. By specifying allowable mesh sizes the Department is able to control the size and age of fish harvested. Mesh size is measured by the "stretch measure", the diagonal distance across a square of netting subjected to one-pound of strain. Current rules provide minimum and maximum mesh sizes for commercial gill nets used to capture bloater chubs and yellow perch, with the mesh size ranges varying by area and depth. For example, the allowable range is 2 3/8 inch to 2 3/4 inch in the southern chub fishing zone. Nets are considered to be in violation if a majority of 10 randomly selected meshes in a net are illegal.

Yellow perch and bloater chub populations in Lake Michigan and Green Bay are currently in a state of decline. Growth rates of bloater chubs are currently low in Lake Michigan. This reflects ecological changes that are usually attributed to the proliferation of quagga mussels. The enforcement of minimum gill net mesh requirements is one way of helping young fish survive to adulthood and replenish the populations. A decrease in the minimum allowable mesh size or tolerance of a larger fraction of non-conforming nets would place the struggling yellow perch and bloater chub populations at greater risk. On the other hand, the petitioners report that it is difficult to obtain gill netting that conforms to the regulations, and hence are asking for an increase in the allowable variance in mesh sizes.

The following figure¹ illustrates relative retention probability (an index of the likelihood that a fish that encounters the net will be captured) for yellow perch and bloater chubs as a function of fish length and gill net mesh size. Solid lines represent gill nets with 2 3/8 inch stretch-measure meshes. Dotted lines represent gill nets with 2 1/4 inch stretch-measure meshes. Notice that for small fish the likelihood of capture roughly doubles as mesh size is reduced from 2 3/8 to 2 1/4 inches. For both species the great majority of individual fish would be within the affected size range.



For yellow perch in southern Green Bay the size range placed at increased risk of harvest (7 to 9 inches) is the range taken by recreational anglers, and includes yellow perch that are smaller than the minimum allowable size (7.5 inches) for commercial harvest.

Bloater chub biomass in Lake Michigan, as reflected in lakewide bottom trawl surveys conducted by the USGS², has declined over 95% since the early 1990's. Department biologists are currently reviewing the status of that population and considering the possibility of capping future harvests. Over 90% of the remaining population is made up of small individuals younger than four years old. Those fish are not highly vulnerable to either mesh size under consideration here (four year old males average 7.6 inches and four year old females average 8.3 inches), but the proposed reduction in minimum gill net mesh size would have the effect of doubling the risk of capture of virtually all of the relatively few older chubs remaining in Lake Michigan.

Some of the commercial interest in changing the minimum mesh size for chubs stems from the fact that, while growth rates have slowed, small female chubs continue to mature well before they are fully vulnerable to commercial nets. Therefore small female chubs have high commercial value even if they

¹ The figure was developed using methods described in Spangler, G.R. and J.J. Collins. 1991. Lake Huron fish community structure base on gill-net catches corrected for selectivity and encounter probability. *North American Journal of Fisheries Management*. 12: 585-597.

² Madenjian, C.P. D.B. Bunnell, J.D. Holuszko, T.J. Desourcie, and J.V. Adams. 2010. Status and trends of prey fish populations in Lake Michigan, 2009. Report prepared by the USGS Great Lakes Science Center and presented to the Lake Michigan Committee, March, 2010. 15 pp.

are not sold as smoked products. Unfortunately, a reduction in mesh sizes would result not only in increased harvest of small females, but would also increase the harvest of small males with little commercial value. We have heard from one commercial fisher and one fish wholesaler expressing opposition to the proposed change on the grounds that it would not only inhibit recovery of the bloater chub population but also yield fish that are difficult to market.

The policy alternatives include 1) reducing the minimum allowable mesh sizes and/or increasing the maximum mesh sizes, 2) changing the fraction of randomly-selected meshes that must conform with the regulations, and 3) maintaining current regulations. NRB Order FH-14-11 reflects the first option. Department biologists recommend the third option. Any reduction in allowable mesh sizes or relaxation of criteria defining compliance would result in an increased harvest of undersized fish.

2. Summary of the rule as presented for consideration of authorization of public hearings.

SECTION 1 of the Order changes the minimum mesh size from 2 3/8 inch to 2 1/4 inch for gill nets in southern Green Bay only.

SECTION 2 of the Order changes the minimum mesh size from 2 3/8 inch to 2 1/4 inch for gill nets in the southern chub fishing zone in water deeper than 150 feet.

SECTION 3 of the Order changes the minimum mesh size from 2 1/2 inch to 2 3/8 inch for gill nets set for chubs in the northern chub fishing zone only.

3. How does this proposal affect existing policy?

This proposal is consistent with existing policies regarding the management of Great Lakes commercial fisheries, which allow the adjustment of fishing seasons, fishing areas, allowable gear, and harvest limits from time to time as needed. NR 1.04 (Great Lakes fisheries management) states, "Management measures may include but are not limited to seasons, bag and harvest limits, limitations on the type and amount of fishing gear, limitations as to participation in the fisheries and allocation of allowable harvest among various users and the establishment of restricted areas."

4. Has the Natural Resources Board dealt with these issues before? If so, when and why?

The current mesh size regulations have been in effect for many years. The most recent change to gill net mesh size requirements on Lake Michigan was adopted in 1989 as part of NRB Order FM-40-88. At that time the minimum mesh size for gill nets in the southern chub fishing zone was reduced from 2 1/2 inch to the current 2 3/8 inch. That change was made at a time when the bloater chub population was recovering from a decline similar to the decline we are experiencing today. The background information provided to the NRB at that time states, "Gill net mesh restrictions are set to protect chubs from commercial harvest until they reach adult size and can spawn at least once. During the early years of chub stock recovery, chubs grew rapidly to a large size before reaching maturity at 3 years of age. The minimum allowable mesh size was initially set at 2 1/2 inches to protect large but still immature chubs. In recent years as chub stocks have recovered, chub growth rates have declined to historical averages. Chubs still mature at 3 years of age, but are a smaller size at first maturity than previously seen. A minimum 2 1/2 inch mesh size now protects a larger portion of the adult chub stock [than previously]. Commercial fishers' harvests success has declined as chub growth rates slowed, and they have requested rule revisions to allow a 2 3/8 minimum gill net size . . . Staff surveys indicate a 2 3/8 inch minimum mesh size will protect younger chubs until they mature while making a larger portion of the adult chub stock

susceptible to harvest. Staff also agree that chub stocks are abundant and can sustain increased harvest that will likely occur with a change to a smaller mesh size. . .”

5. Who will be impacted by the proposed rule? How will they be impacted? Commercial fishermen will benefit in the short run by increased harvests of the smaller fish. The effects on the depleted bloater chub population and on the still-struggling Green Bay yellow perch population are unclear, however, so the long-term implications for commercial fishing are not known.

6. Environmental assessment. This is a Type III action under Chapter NR 150, Wis. Admin. Code. No environmental assessment is required.

7. Small business analysis. Initial regulatory flexibility analysis. No additional compliance or reporting requirements will be imposed as a result of these rule changes. A state fiscal estimate is attached.

Fiscal Estimate — 2011 Session

- Original Updated
 Corrected Supplemental

LRB Number	Amendment Number if Applicable
Bill Number	Administrative Rule Number FH-14-11

Subject

Commercial gill nets on Lake Michigan and Green Bay

Fiscal Effect

- State: No State Fiscal Effect
 Indeterminate

Check columns below only if bill makes a direct appropriation or affects a sum sufficient appropriation.

- Increase Existing Appropriation Increase Existing Revenues
 Decrease Existing Appropriation Decrease Existing Revenues
 Create New Appropriation

- Increase Costs — May be possible to absorb within agency's budget.
 Yes No
 Decrease Costs

- Local: No Local Government Costs
 Indeterminate

1. Increase Costs
 Permissive Mandatory
2. Decrease Costs
 Permissive Mandatory

3. Increase Revenues
 Permissive Mandatory
4. Decrease Revenues
 Permissive Mandatory

5. Types of Local Governmental Units Affected:
 Towns Villages Cities
 Counties Others
 School Districts WTCS Districts

Fund Sources Affected

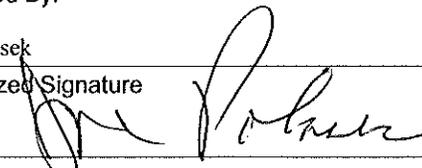
- GPR FED PRO PRS SEG SEG-S

Affected Chapter 20 Appropriations

Assumptions Used in Arriving at Fiscal Estimate

The proposed rule changes the minimum gill net sizes allowed in the commercial harvest of bloater chubs and yellow perch from Lake Michigan. The rule will have no fiscal impact at either the state or local level.

Long-Range Fiscal Implications

Prepared By: Joe Polasek	Telephone No. 266-2794	Agency Department of Natural Resources
Authorized Signature 	Telephone No. 266-2794	Date (mm/dd/ccyy) 04-21-11

**ORDER OF THE STATE OF WISCONSIN NATURAL RESOURCES BOARD
AMENDING AND CREATING RULES**

The Wisconsin Natural Resources Board proposes an order to amend NR 25.09(2)(a)2, 3, and 4, relating to commercial fishing in outlying waters.

FH-14-11

Analysis Prepared by Department of Natural Resources

- 1. Statutes interpreted.** ss. 29.041, 29.014(1), and 29.519(1m)(b), Stats.
- 2. Statutory authority.** ss. 23.11(1), 29.041, 29.014(1), 29.519(1m)(b), and 227.11(2)(a), Stats.
- 3. Explanation of agency authority to promulgate the proposed rules under the statutory authority.** Section 23.11 (1), Stats., grants the department such powers as may be necessary or convenient to enable it to exercise the functions and perform the duties required of it by ch. 23, Stats., and by other provisions of law.

Section 29.014 (1), Stats., directs the department to establish and maintain conditions governing the taking of fish that will conserve the fish supply and ensure the citizens of this state continued opportunities for good fishing, and s. 29.041, Stats., provides that the department may regulate fishing on and in all interstate boundary waters, and outlying waters.

Section 29.519 (1m) (b), Stats., authorizes the department to limit the number of Great Lakes commercial fishing licenses, designate the areas in the outlying waters under the jurisdiction of this state where commercial fishing operations are restricted, and designate the kind, size and amount of gear to be used in the harvest.

Section 227.11 (2) (a), Stats., expressly confers rulemaking authority on the department to promulgate rules interpreting any statute enforced or administered by it, if the agency considers it necessary to effectuate the purpose of the statute.

4. Related statutes.

- 29.539 Sale of game or fish.
- 29.563 Fee schedule.
- 29.924 Investigations; searches.
- 29.931 Seizures.
- 29.971 General penalty provisions.
- 29.973 Commercial fish reporting system.
- 29.984 Commercial fish protection surcharge.
- 29.99 Great Lakes resource surcharge.
- 29.991 Fishing net removal surcharge.

- 5. Plain language analysis of the proposed rule.** SECTION 1 of the Order changes the minimum mesh size from 2 3/8 inch to 2 1/4 inch for gill nets in southern Green Bay only.

SECTION 2 of the Order changes the minimum mesh size from 2 3/8 inch to 2 1/4 inch for gill nets in the southern chub fishing zone in water deeper than 150 feet.

SECTION 3 of the Order changes the minimum mesh size from 2 1/2 inch to 2 3/8 inch for gill nets set for chubs in the northern chub fishing zone only.

6. Summary of and preliminary comparison with any existing or proposed federal regulation that is intended to address the activities to be regulated by the proposed rule. The department is not aware of any existing or proposed federal regulation that would govern commercial fishing in Wisconsin's waters of Lake Michigan and Green Bay or Lake Superior.

7. Comparison of similar rules in adjacent states (Minnesota, Iowa, Illinois and Michigan). In Minnesota waters of Lake Superior the minimum gill net mesh size for bloater chubs is 2 1/4 inch. There is no commercial harvest of yellow perch. Iowa has no Great Lakes fishery. In Illinois waters of Lake Michigan the minimum mesh size is 2 3/8 inch for both species. In Michigan waters of both Lake Superior and Lake Michigan the minimum mesh size for both species is 2 1/2 inch.

8. Summary of the factual data and analytical methodologies that the agency used in support of the proposed rule and how any related findings support the regulatory approach chosen for the proposed rule. The rule as drafted reflects the intent of the petitioners.

9. Analysis and supporting documentation that the agency used in support of the agency's determination of the rule's effect on small businesses under s. 227.114, Stats., or that was used when the agency prepared an economic impact report. We know that small businesses engaged in commercial fishing and wholesale fish dealing may be affected by the rule. However, we currently have no basis for quantifying the economic impacts of the rule.

10. Effects on small business, including how the rule will be enforced. This rule is of interest to commercial fishers and was initiated in response to a petition from five commercial fishers. The rule will be enforced by department Conservation Wardens under the authority of chapters 23 and 29, Stats., through routine patrols, record audits of wholesale fish dealers and commercial fishers and follow up investigations of citizen complaints.

11. Agency contact person (including e-mail and telephone number).

William Horns
Department of Natural Resources
P.O. Box 7921
Madison, WI 53707-7921
Telephone: (608) 266-8732
E-mail: William.Horns@wisconsin.gov

12. Place where comments are to be submitted and deadline for submission. Comments may be submitted in writing or by e-mail to William Horns at the address shown above. The deadline for submittal of comments is July 22, 2011.

SECTION 1. NR 25.09(2)(a)2 is amended to read:

2. With mesh size of not less than 2-3/8 2 1/4 inch and not more than 2 1/2 inch stretch measure

not exceeding 60 meshes in depth in southern Green Bay only.

SECTION 2. NR 25.09(2)(a)3 is amended to read:

3. With a mesh size of not less than ~~2 3/8~~ 2 1/4 inch and not more than 2 3/4 inch stretch measure, and not less than 24 meshes and not more than 60 meshes in height, only in the southern chub fishing zone in water more than 150 feet (25 fathoms) deep.

SECTION 3. NR 25.09(2)(a)4. (intro.) is amended to read:

4. With a mesh size of not less than ~~2 1/2~~ 2 3/8 inch and not more than 2 3/4 inch stretch measure:

SECTION 4. EFFECTIVE DATE. This rule shall take effect on the first day of the month following publication in the Wisconsin administrative register, as provided in s. 227.22(2)(intro.), Stats.

SECTION 5. BOARD ADOPTION. This rule was approved and adopted by the State of Wisconsin Natural Resources Board on _____.

Dated at Madison, Wisconsin _____

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES

By _____
Cathy Stepp, Secretary

(SEAL)