Green Bay & Lake Michigan Lake Whitefish Commercial Fisheries Rule Development

Public Meeting Sturgeon Bay
May 12, 2016

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WDNR Sturgeon Bay Fisheries
Meeting Outline

• Introduction

• Biological & Management Background

• Management / Rule Alternatives

• Discussion & Questions
Meeting Logistics

What this meeting is

• Open discussion of commercial whitefish management and potential rule changes
• DNR to receive initial feedback from interested stakeholders
• Respectful dialogue and chance for us to all hear others’ points of view
• Clarify and inform stakeholders of biological background and rule change intent
Meeting Logistics

What this meeting is not

• Not a discussion about legitimacy of commercial or sport fisheries – both are Legislatively mandated in Wisconsin
• Not a discussion of ancillary issues
• Not an official rule hearing – a specific rule has not yet been developed; that will come in the future
Meeting Logistics

Additional Logistics

• Meeting being recorded for posting on website
• Comments and questions tonight will be noted and considered in developing draft rule language
• Comments will not be part of the official rule making hearing record
• Please sign in if you have not done so already
Introductions
Proposed Timeline

• Early 2015 – Scope statement signed by Governor; approved by NR Board in August 2015
• Late Summer 2015 thru current: Discussed at meetings with LM Fisheries Forum, LM Commercial Fishing Board, Federation, and local sport groups
  • Received a wealth of feedback – diverse array of opinions and concerns from commercial fishers, anglers, and others
• May 2016: Pre-rule public meeting – this meeting
• May-June 2016: Additional follow up meeting
• June-July 2016: Draft rule language
• Late summer 2016: Public rule hearings and public review
• Fall 2016: Natural Resources Board review
• Fall/Winter 2016: Governor review
• Early 2017: Legislature review
2015 Rule Scope Statement

• Signed by Governor in early 2015; approved by NR Board during summer 2015
• Not a specific rule proposal – it is a step to give DNR authority to develop a specific rule proposal
• We are in the process of developing a specific rule proposal

Three components:

1. Overall Wisconsin commercial quota adjustment – not pursuing at this time
2. Protective measures for North-Moonlight Bay spawning population
3. Adjusting commercial fishing zone whitefish allocations
Initial Feedback – Allocations

• Concern from various commercial fishers about changing quota allocations or zone boundaries
  • Some adamantly opposed to doing so
• Concern about impacts to lower Green Bay whitefish populations and sport fishing opportunities in lower Green Bay
Initial Feedback – NE Door County Spawning Populations

• Concern about long-term viability of spawning population in NE Door County
• Concern about impacts to commercial fishers from reduced seasons or other restrictions in NE Door County
• Concern about the uncertainty of various survey and catch monitoring data -- there are a lot of unknowns as always with natural ecosystems
Lake Whitefish Biology and Management Overview
Commercial Fishery - Whitefish

WI Zone Quota Management

- Zone 1: 9%
- Zone 2: 82%
- Zone 3: 9%

- Individually Transferrable Quotas
  - Buy/rent within Zone only
  - WI quota = 2.88 million pounds
North and Moonlight Bay Whitefish Stock (NMB)

Rowley Bay
North Bay
Moonlight Bay
Green Bay Whitefish Fishery

- Considerable changes over the past 15-20 years
- Re-colonization of tributaries
  - And Green Bay proper?
- Strong recruitment events
- Changing fisheries
  - Increased commercial catches
  - Substantial recreational fishery
- Increased stock complexity
Whitefish Harvest – All Zones
Green Bay Whitefish Sport Harvest

Poor Ice

Photo: Alexander's Sport Fishing
Trawl Assessments – Green Bay

• Mostly “bycatch” from yellow perch assessments

• Primarily catch young-of-year and yearling whitefish

• Whitefish more concentrated in lower half of Green Bay and deep sites
  • Low catches north
Juvenile Assessment Results
Spring Juvenile Assessment

- Historically juvenile assessment was on the Lake
  - Juvenile sampling on Lake gradually diminished

- 3 “new” index juvenile sampling sites in Green Bay:
  - Lime Kiln Road
  - Little Harbor
  - Egg Harbor

- Graded Mesh Gill Nets 2 - 3 1/2”
- 1200’/Box, 2 – 4 Boxes/Site
- CPE (catch per 1000’)

Legend:
- Historic sites
- New sites
2001 Lake Whitefish Report:

“The spring graded mesh gill net (GMGN) juvenile whitefish survey conducted over the past two years has been a near bust. Overall CPE of whitefish in the spring survey dropped from 59.4 whitefish per 1,000 feet of net in the spring of 1998 to a CPE of 12.0 in the spring of 1999, and a CPE of 4.6 in the spring of 2000. This survey typically provides the first indication of whitefish year class strength, two or more years before they show up in the commercial fishery.”
Adult Surveys
North-Moonlight Bay Area

- Primary spawning location
- Focus of commercial fishing area in fall (other times too)
  - Long-term commercial monitoring data set
- Historical WDNR fall whitefish spawner surveys (Cardy’s Reef)
  - During November spawning
Fishery Dependent Assessments (i.e. commercial catch monitoring)

- Lake whitefish management
  - Bi-weekly reports
    - Commercial catch, effort, location, etc.
  - Dockside/Onboard monitors
  - Length/Weight data
  - Ageing structures
  - Fecundity, age at maturity, VFI
West Shore Tributary Spawning Whitefish

• Menominee sampled annually since 2009
  – Fox, Oconto, and Peshtigo since 2013

• Biodata
  – Length, weight, gender
  – Scales/Otoliths for age composition

• Tagging
  – 2500 in Menominee in 2010
  – ~1300 in Menominee, Fox, Peshtigo, Oconto in 2015
  – Acoustic tags (30) in Green Bay and Menominee (UWSP)

• “Whitefish” elevator in 2015
  – Modest success (mostly n=0)
  – One lift n=24
  – Possibly better during pm
Fall Gill Net Survey (Spawners) Size Composition History - NMB

Bar chart showing the size composition history from 2006 to 2015. The chart indicates the percentage distribution of lengths in millimeters for each year. Key lengths marked on the chart are 17" and 20" and 24".
Size Distribution Between Tributaries

- Fox River tend to be largest

- Cardy’s Reef = North/Moonlight Bay stock (Lake MI)
  - Limited recruitment in recent years

- Sport harvest size similar to river spawning fish
# Whitefish Allocation:

<table>
<thead>
<tr>
<th>Lake whitefish commercial harvest limits</th>
<th>Pounds per year</th>
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</thead>
<tbody>
<tr>
<td>Zone 1 – Southern Green Bay</td>
<td>362,185</td>
</tr>
<tr>
<td>Zone 2 – Northern Green Bay and Northern Lake Michigan</td>
<td>2,166,329</td>
</tr>
<tr>
<td>Zone 3 – Southern Lake Michigan</td>
<td>351,487</td>
</tr>
<tr>
<td>Total Allowable Harvest Limit</td>
<td>2,880,000</td>
</tr>
</tbody>
</table>

![Graphs showing harvest and quota limits for each zone over different years.](chart)
Wisconsin Whitefish Population Summary

- **Overall** WI population appears to be stable
- Re-colonization of tributaries and Green Bay spawning means changes in population structure (now multiple populations)
- Green Bay population stable or growing w/ample recruitment
- Lake Michigan North-Moonlight Bay population lacking recruitment – we are concerned
- Substantial increase in sport harvest/new fishery has developed
- Whitefish are growing slower
Management/Rule Development
Potential Alternatives
 Potential Alternatives – Protection of NE Door County spawning population

1. Return this area of Lake Michigan to the closure of October 25\textsuperscript{th}

2. Return this area of Lake Michigan to an earlier closure date (e.g., October 20\textsuperscript{th})

3. Return this area of Lake Michigan to the closure of October 25\textsuperscript{th} and add effort restrictions for earlier in October
Potential Alternatives – Protection of NE Door County spawning population

4. Close season earlier but open it back up again at an earlier date (currently opens back up on Dec. 1st)

5. Rely on effort restrictions alone

6. No changes – Status Quo; Season closed for November

7. Others?
Potential Alternatives – Commercial Zone Allocations

1. LMCFB Proposal – Roll over quota / unused quota from Zone 2 is reallocated as a “bonus” quota in Zones 1 & 3 the following year

2. Straight allocation changes; take from Zone 2 and give to Zone 1

3. Dissolve boundaries or change boundaries between Zones 1 & 2
Potential Alternatives – Commercial Zone Allocations

4. Allow limited use of Zone 2 quota in Zone 1

5. Temporary quota changes coupled with an evaluation or studies

6. No Changes – Status Quo;

7. Others?
Questions and Discussion