

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

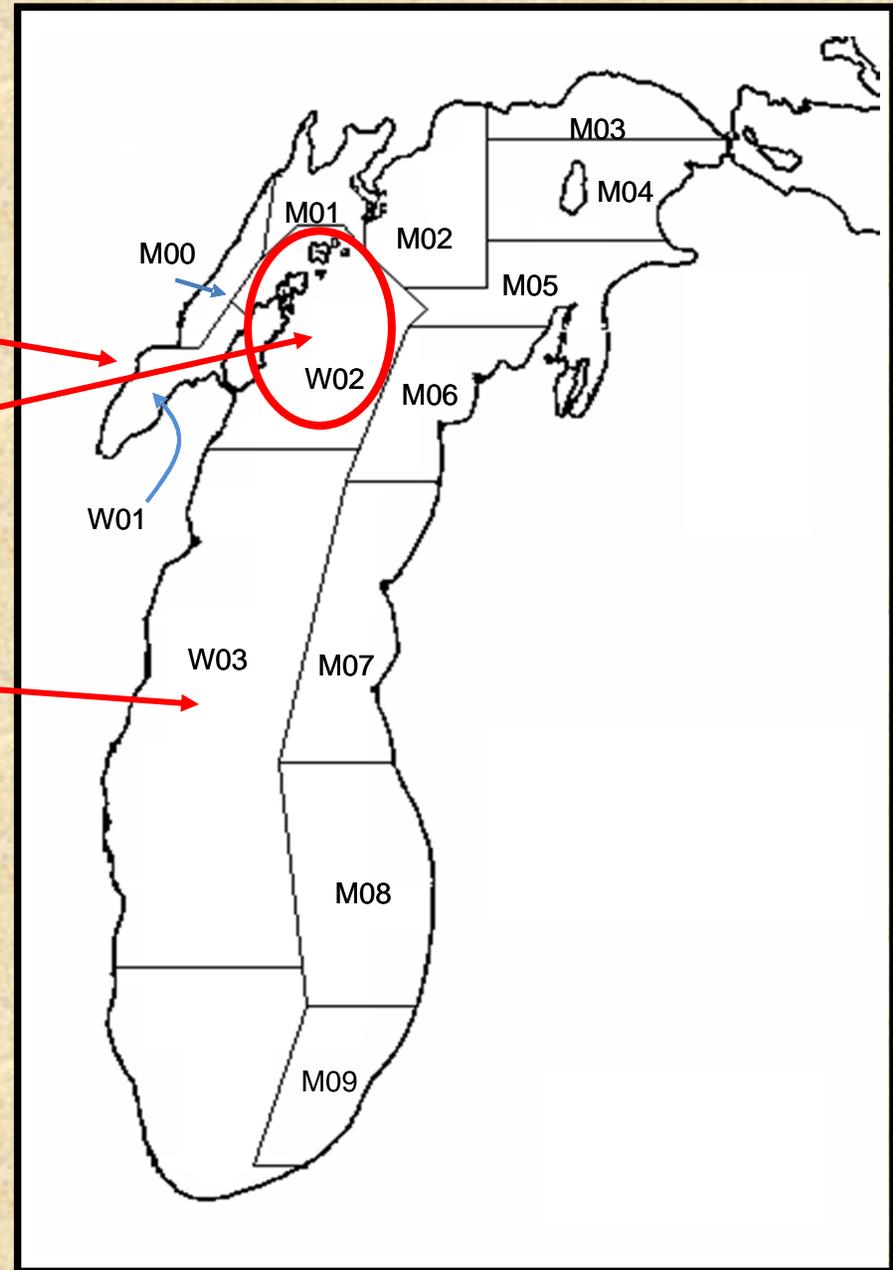
- Concern about long-term viability of spawning population in NE Door County
- Concern about impacts to commercial fishers from reduced seasons or other restrictions in NE Door County
- Concern about the uncertainty of various survey and catch monitoring data -- there are a lot of unknowns as always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

Lake Whitefish Biology and Management Overview

Commercial Fishery - Whitefish

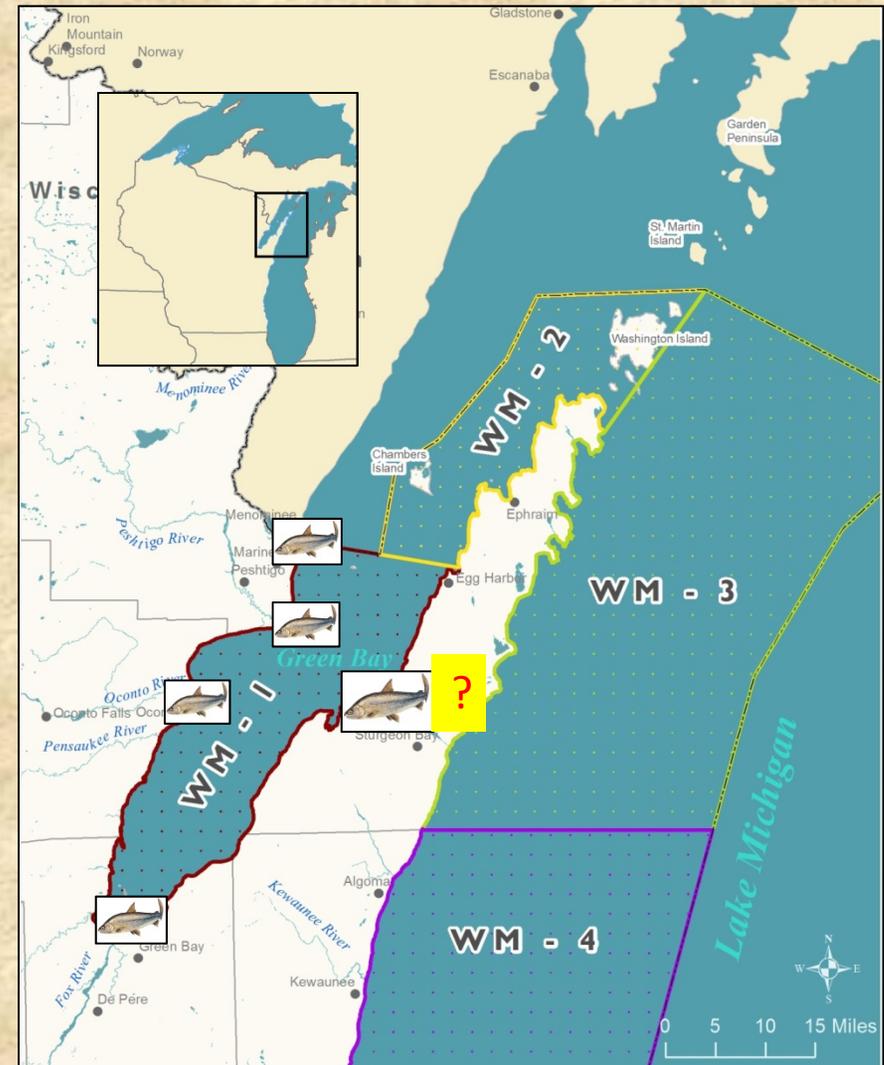
WI Zone Quota Management

- Zone 1: 9%
- Zone 2: 82%
- Zone 3: 9%
- Individually Transferrable Quotas
 - Buy/rent within Zone only
 - WI quota = 2.88 million pounds

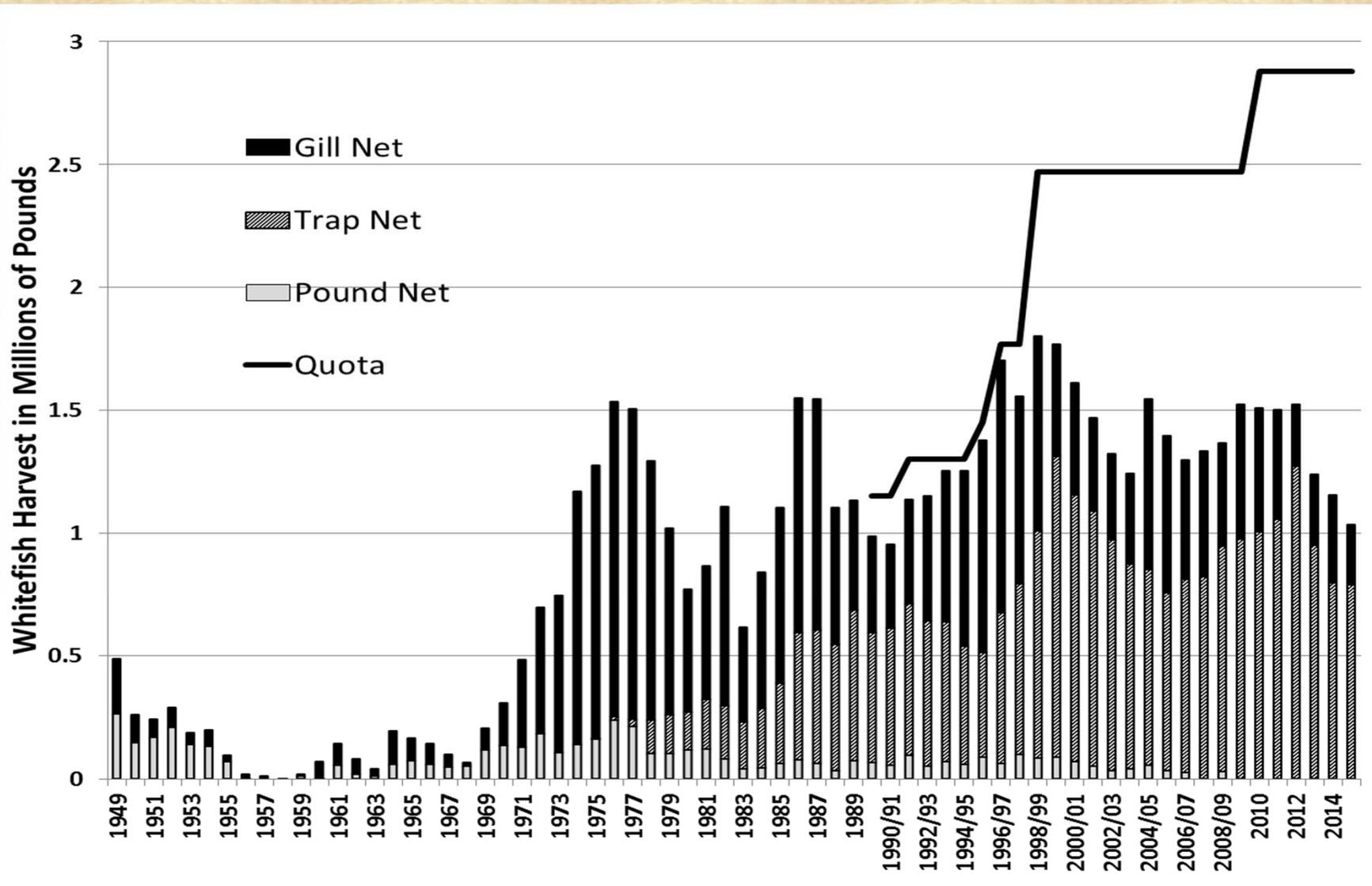


Green Bay Whitefish Fishery

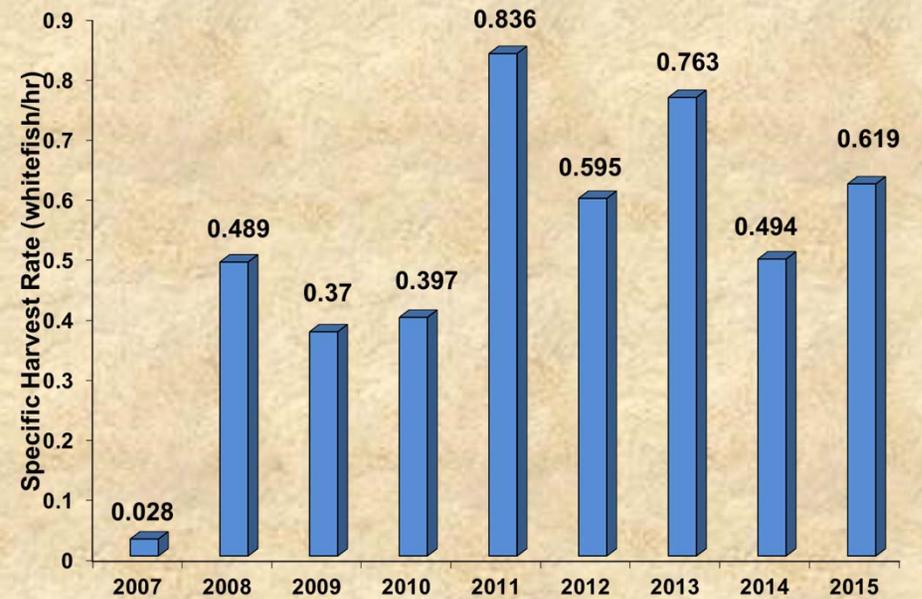
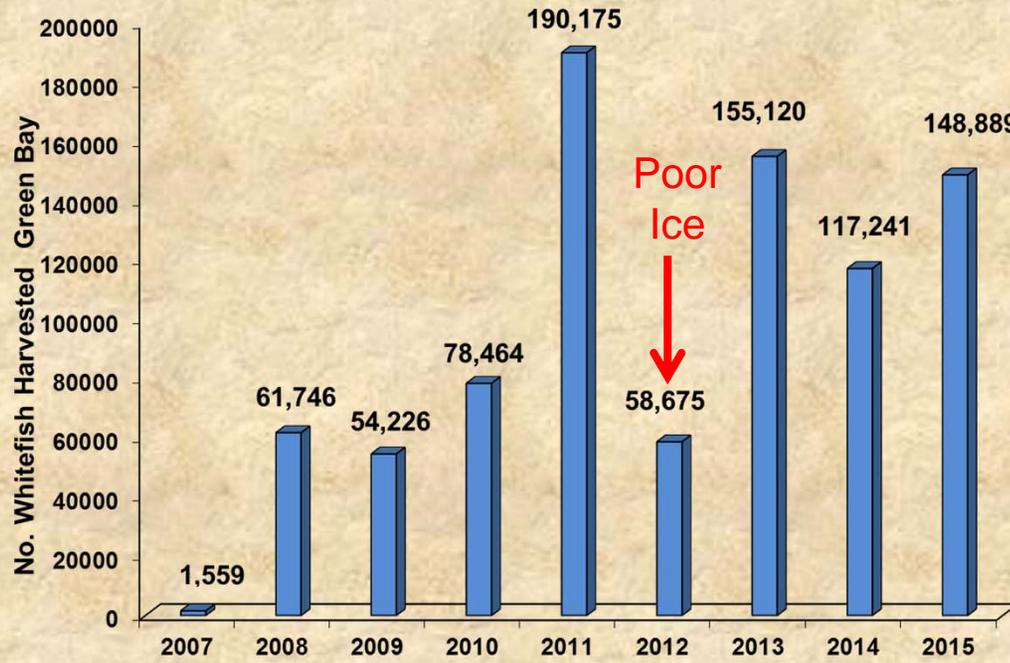
- Considerable changes over the past 15-20 years
- Re-colonization of tributaries
 - And Green Bay proper?
- Strong recruitment events
- Changing fisheries
 - Increased commercial catches
 - Substantial recreational fishery
- Increased stock complexity



Whitefish Harvest – All Zones



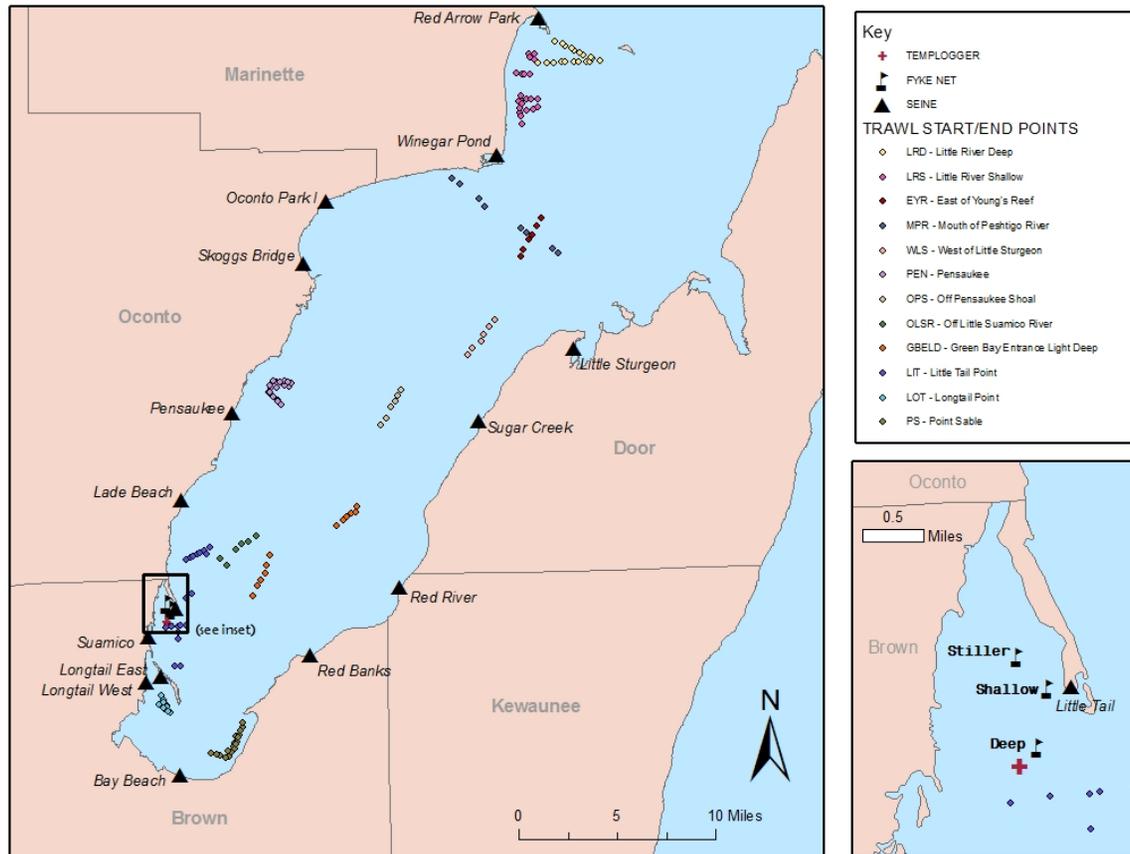
Green Bay Whitefish Sport Harvest





Recruitment

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

Lake Whitefish Juvenile Trawl Index



2011 Fox River

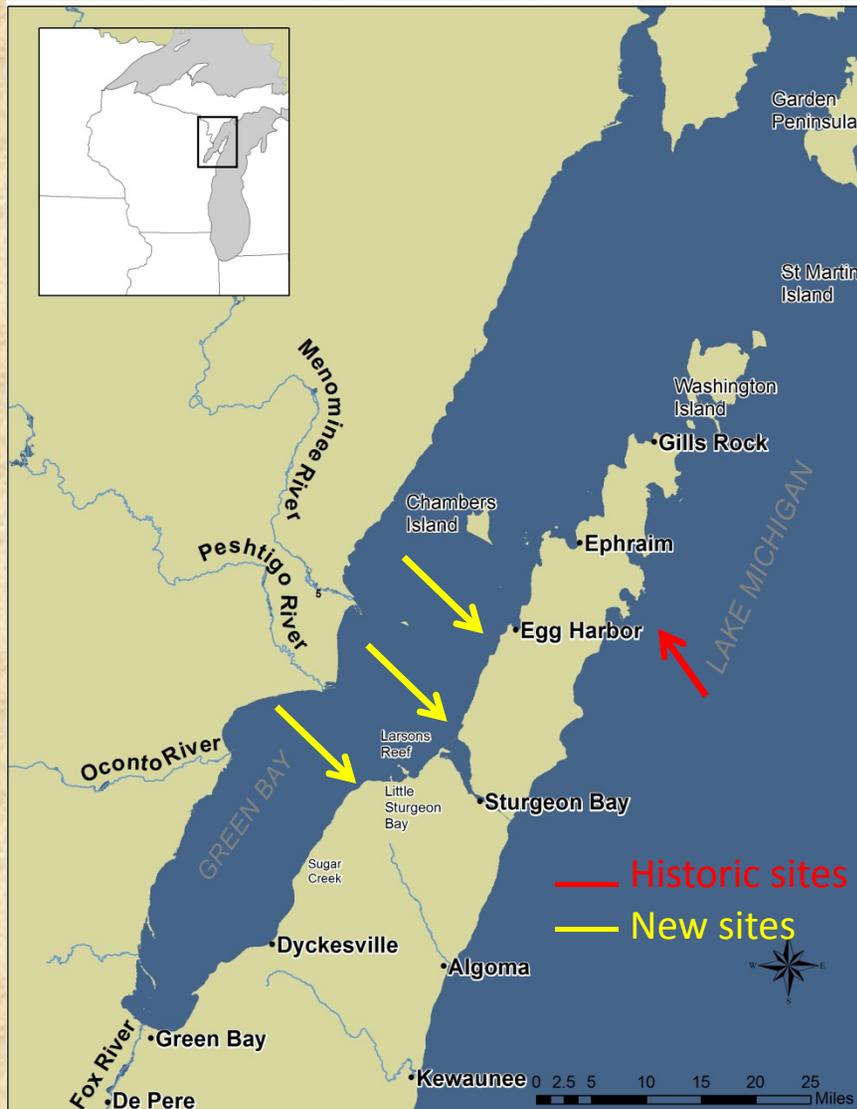
2011 Menominee River

Photos: Steve Seilo
Photodynamix

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’)

Juvenile Assessments NMB....

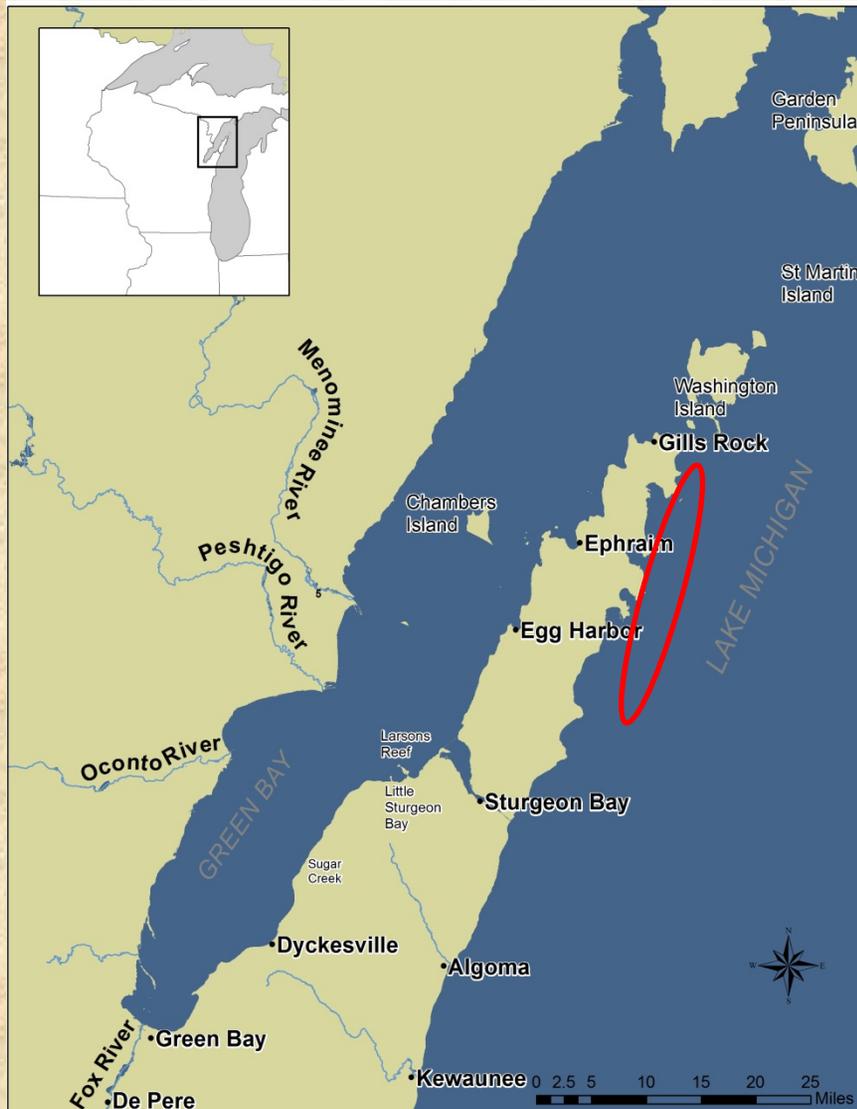
2001 Lake Whitefish Report:

“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



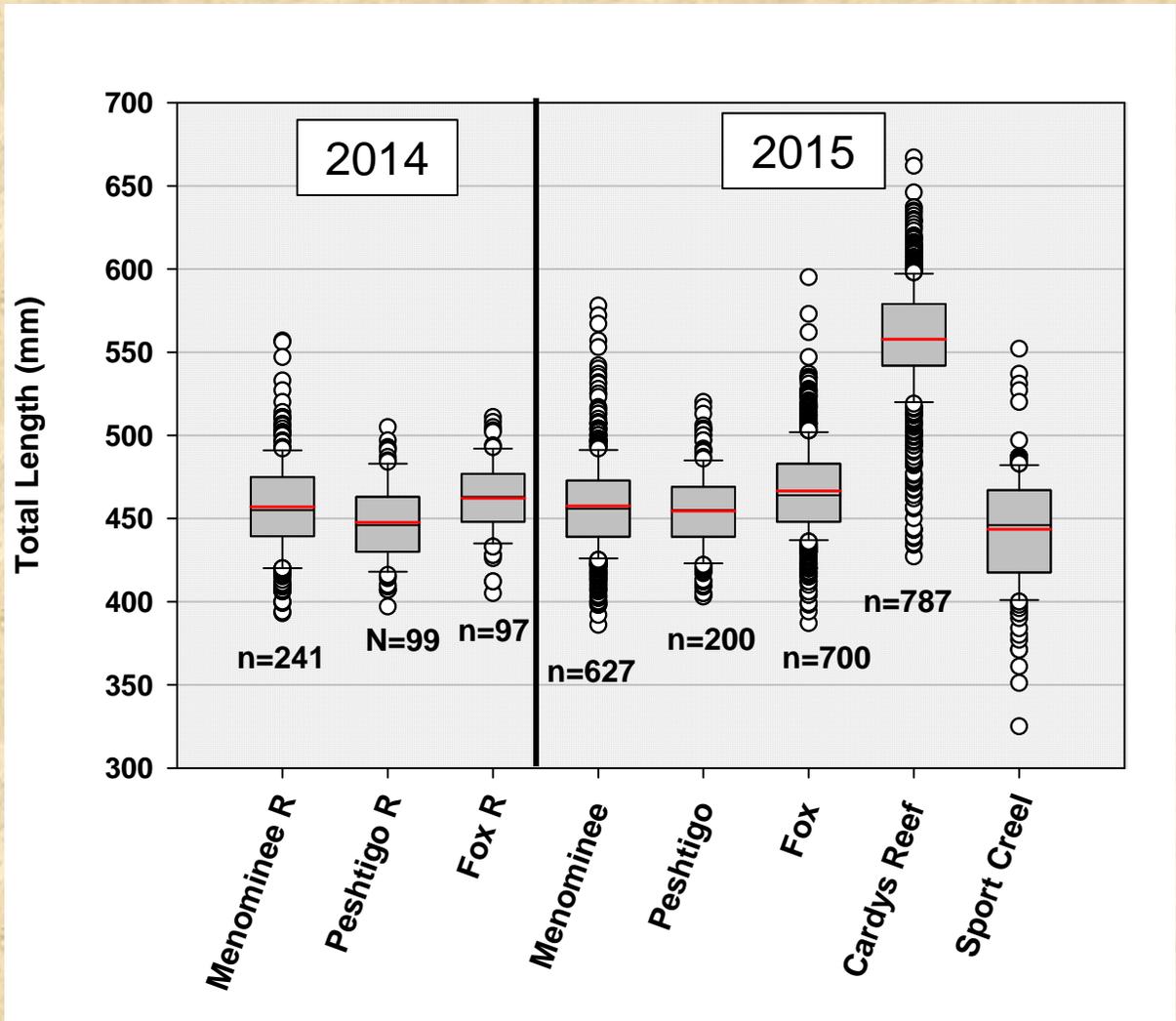
West Shore Tributary Spawning Whitefish

- 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



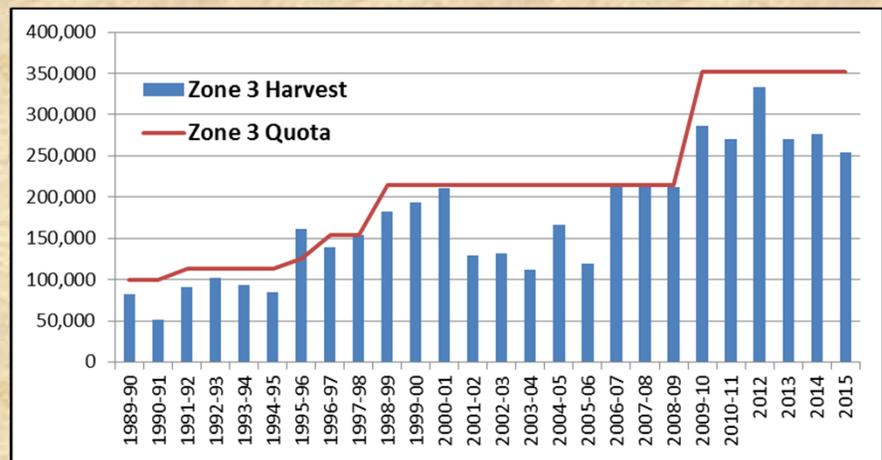
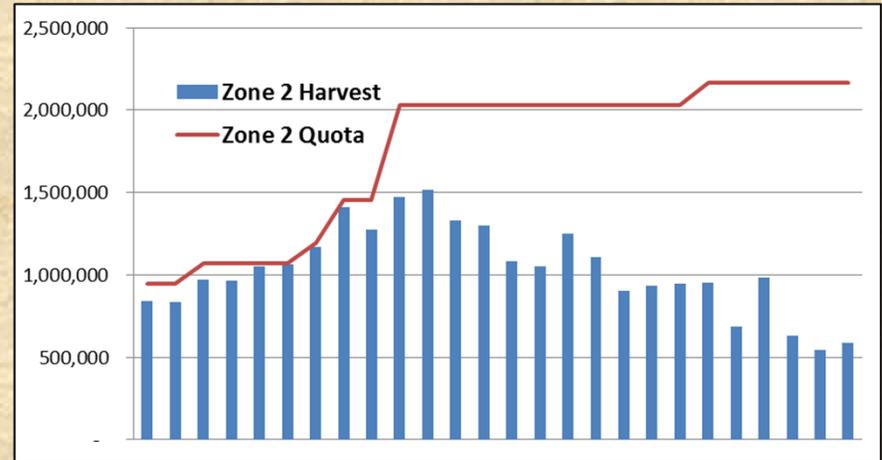
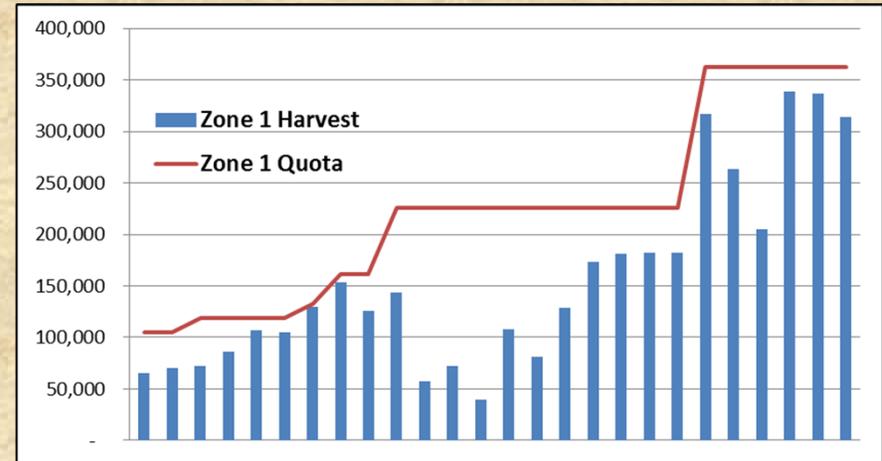
Size Distribution Between Tributaries

- 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

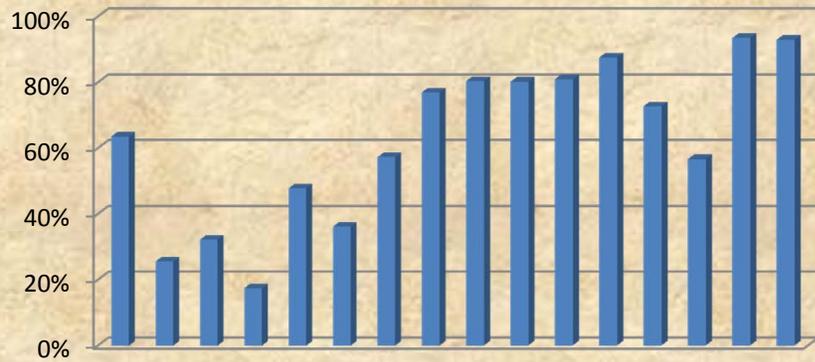


Whitefish Allocation:

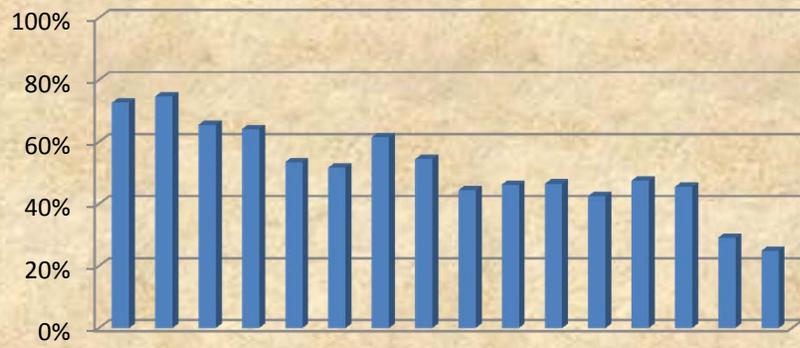
Lake whitefish commercial harvest limits	Pounds per year
Zone 1 – Southern Green Bay	362,185
Zone 2 – Northern Green Bay and Northern Lake Michigan	2,166,329
Zone 3 – Southern Lake Michigan	351,487
Total Allowable Harvest Limit	2,880,000



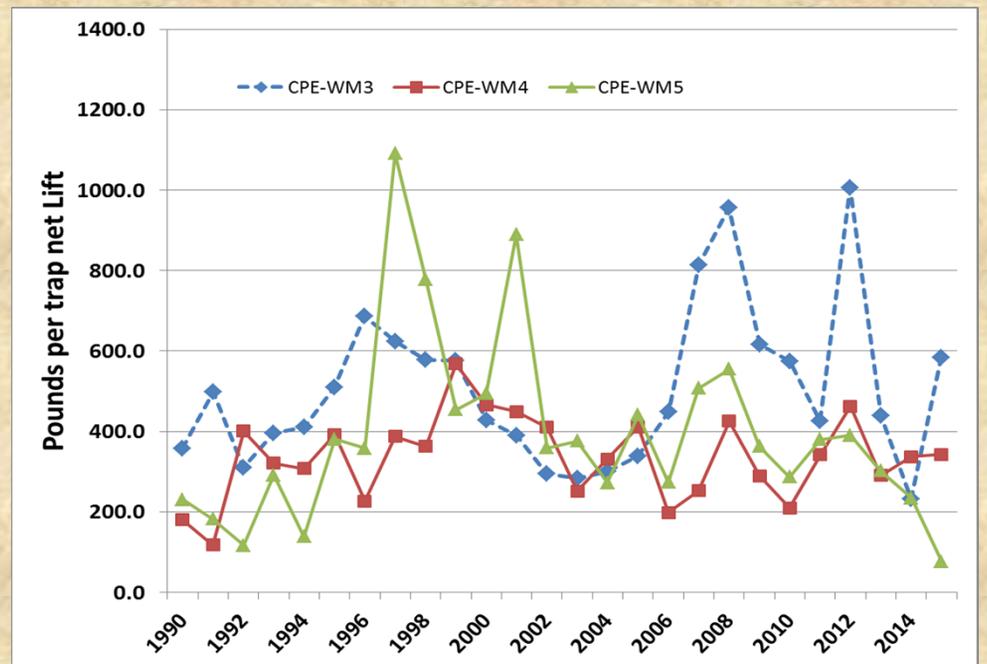
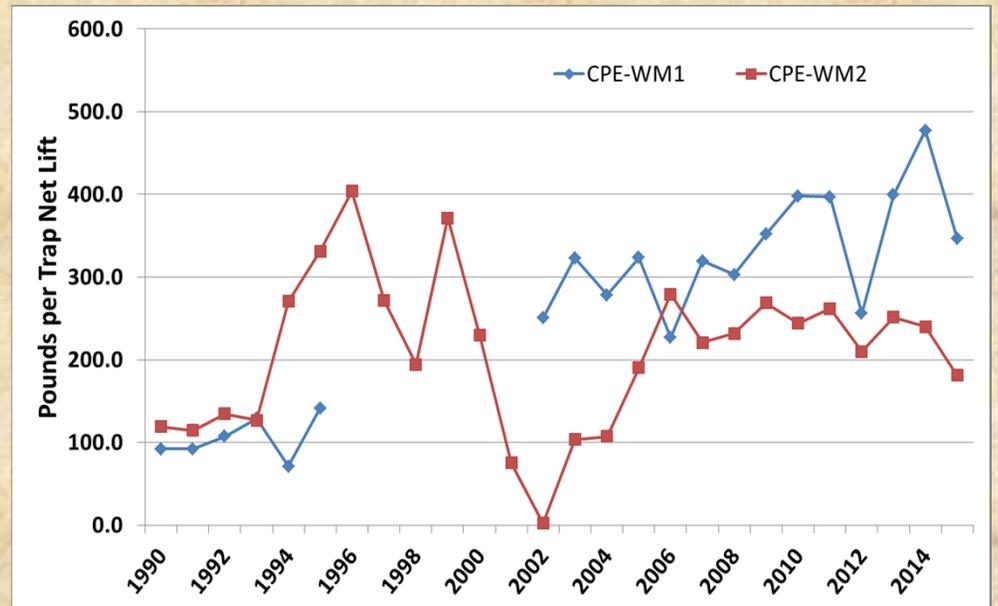
Percent Quota Harvested Zone 1



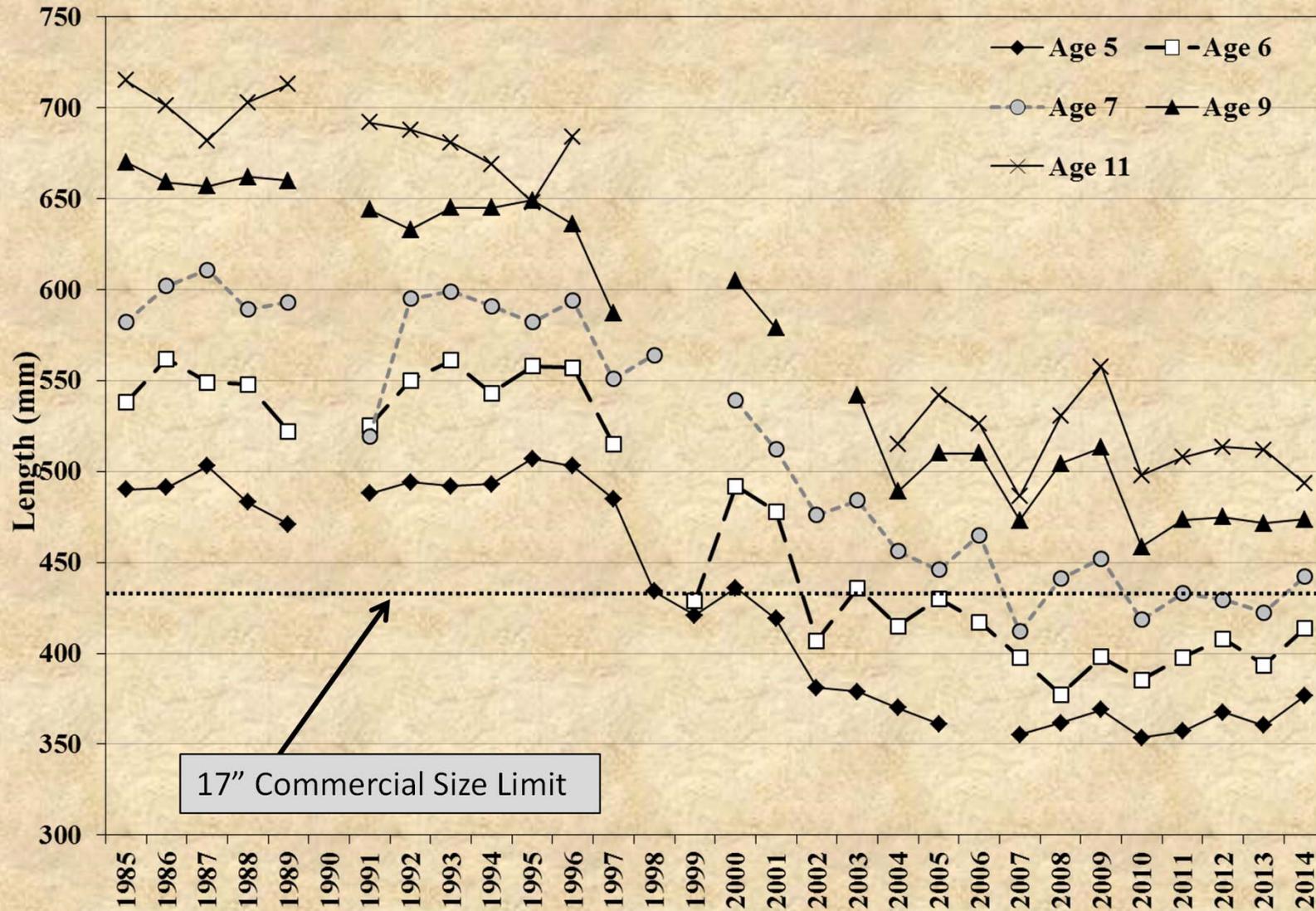
Percent Quota Harvested Zone 2



Percent Quota Harvested Zone 3



Whitefish Size At Age



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 25th
2. Return this area of Lake Michigan to an earlier closure date (e.g., October 20th)
3. Return this area of Lake Michigan to the closure of October 25th 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?

A photograph showing a large metal tray filled with numerous small fish, likely a species of sea bream, on the deck of a boat. A person wearing orange overalls and a tool belt stands to the right of the tray. In the foreground, a person's hand wearing a brown work glove is visible, and a portion of a white hat is seen at the bottom left. An orange bucket is on the ground to the right. The text "Questions and Discussion" is overlaid in yellow in the center of the image.

Questions and Discussion