2014 Annual Review of Stock Rebuilding Performance

ASMFC

August 2014

Background

- 2014-2018 Strategic Planning
- Commissioners Requested more frequent reviews
- Task in the 2014 Action Plan

Objective

- Validate Status/Rate of Progress
- In not acceptable: Identify corrective action
  - Direction/feedback to species management boards
- Input into the 2015 action planning process

5 Categories

- Rebuilt
- Viable/Rebuilding
- Concern
- Depleted
- Unknown

Rebuilt

- Stock biomass is equal to or above the biomass level set by the FMP to ensure population sustainability
- Stock is still rebuilt if it drops below the target but remains above the threshold

Viable

- Stock exhibits stable or increasing trends.
- Biomass is approaching the target level set by the FMP to ensure population sustainability

Rebuilt and Viable/Rebuilding

Rebuilt

- GOM/GBK Lobster
- Atlantic Herring
- Black Sea Bass
- Bluefish
- Scup
- Spanish Mackerel
- Spiny Dogfish
- Summer Flounder

Viable/Rebuilding

- Red Drum

Concerned: Stocks developing emerging issues, e.g. increased effort, declining landings, or impacts due to environmental conditions

- Croaker
- Menhaden
- Striped Bass
- Coastal Sharks
- Horseshoe Crab
- Spotted Seatrout
- Winter Flounder-GOM

Atlantic Croaker

- Not experiencing overfishing
- Biomass increasing and F decreasing
- Biomass unknown due to uncertainty in shrimp trawl discards
  - Workshop on shrimp discards conducted by SEDAR
- Traffic Light approach to monitor stock outside of assessment recommended and being considered by Board

Menhaden

- Overfishing but unknown if stock is overfished
- Exploring uncertainty in the assessment through the benchmark
- Set interim reference points to increase SSB and availability for ecosystem services
- Established TAC in 2013 to end overfishing
  - Under the TAC in 2013

Striped Bass

- Stock is not overfished and overfishing is not occurring, SSB approaching overfished threshold (2013 assessment)
- Projections show SSB likely fall below threshold due to poor year classes from 2005-2010
- Advice to reduce F across all sectors

Coastal Sharks

Species or Complex	Overfished	Overfishing
Porbeagle	Approaching	Yes
Dusky	Yes	Yes
Large Coastal Sharks	Unknown	Unknown
Blacktip (Atlantic)	Unknown	Unknown
Sandbar	Yes	No
Atl. Sharpnose	No	No
Blacknose	Yes	Yes
Bonnethead	No	No
Finetooth	No	No
Smoothhound Sharks	In progress	In progress

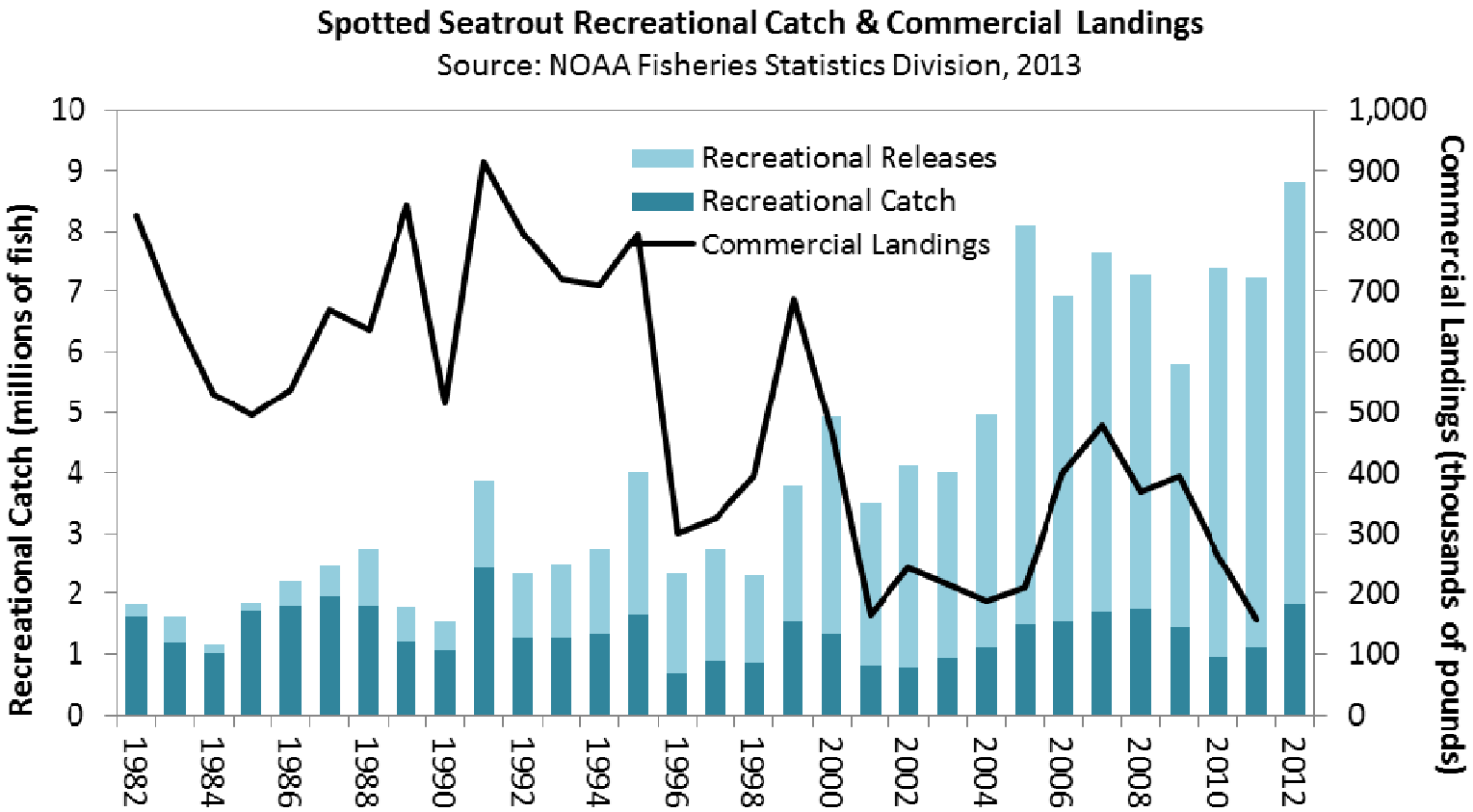
Horseshoe Crab

Regional Trends in Horseshoe Crab Abundance

Region	Time series duration of longest dataset	Conclusion about population change
New England	1978 - 2008	Declined
New York	1987 - 2008	Declined
Delaware Bay	1988 - 2008	Increased
Southeast	1993 - 2009	Increased

- Need a mechanism to include biomedical landings in regional assessments
- Set precautionary cap on harvest
- Loss of abundance index without trawl survey

Spotted Seatrout



Winter Flounder GOM

- Last assessment not accepted-no F and SSB targets generated
  - Proxy F threshold, overfishing not occurring
- 2014 maintained 2013 measures

Depleted: Reflects low levels of abundance though it is unclear whether fishing mortality is the primary cause for reduced stock size

- Eel
- Lobster-SNE
- American Shad
- River Herring
- Tautog
- Weakfish
- Winter Flounder-SNE/MA

American Eel

- Trend analysis show decline
- At or near low levels
- Decreasing trend in yellow eel stages
- Significant fisheries occurring
  - Addendum addressing
  - Approved 9”size, reduced rec bag, restrictions on pigmented eels
- Improve passage

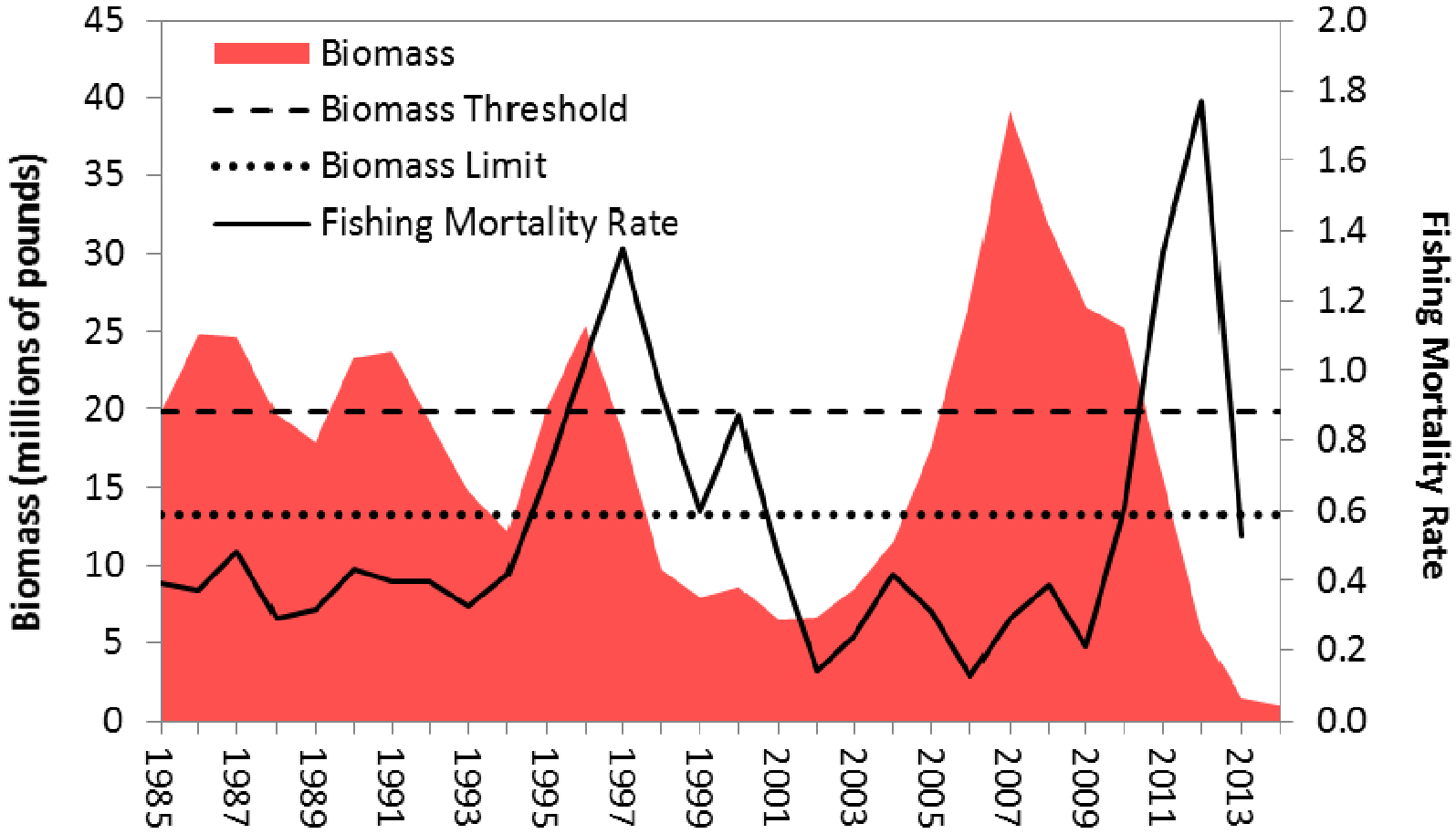
American Lobster SNE

- SSB at 58% of Target (09 Assessment)
- Overfishing Not Occurring
- Abundance Lowest Since 1980's
- TC Recommended 5-Year Moratorium
- Rebuilding Goal of 2022
- Approved 10% reduction in exploitation
  - Not all LCMAs met reduction after 2 years of implementation
- Approved trap cuts for LCMA 2 and 3

Shad

State	River	Trend
ME	Saco and Kennebec	Declining
NH	Exeter	Declining
MA	Merrimack	Low, Stable
RI	Pawcatuck	Declining
CT/MA	Connecticut	Stable
NY	Hudson	Declining
NY/PA/NJ/DE	Delaware River and Bay	Low, Stable
PA	Susquehanna	Declining
DC/MD/VA	Potomac	Increasing
MD	Nanticoke	Low
VA	York	Increasing
	James	Declining
	Rappahannock	Stable
SC	Santee	Increasing
	Edisto	Declining
GA	Altamaha	Declining
FL	St. Johns	Declining

Northern Shrimp



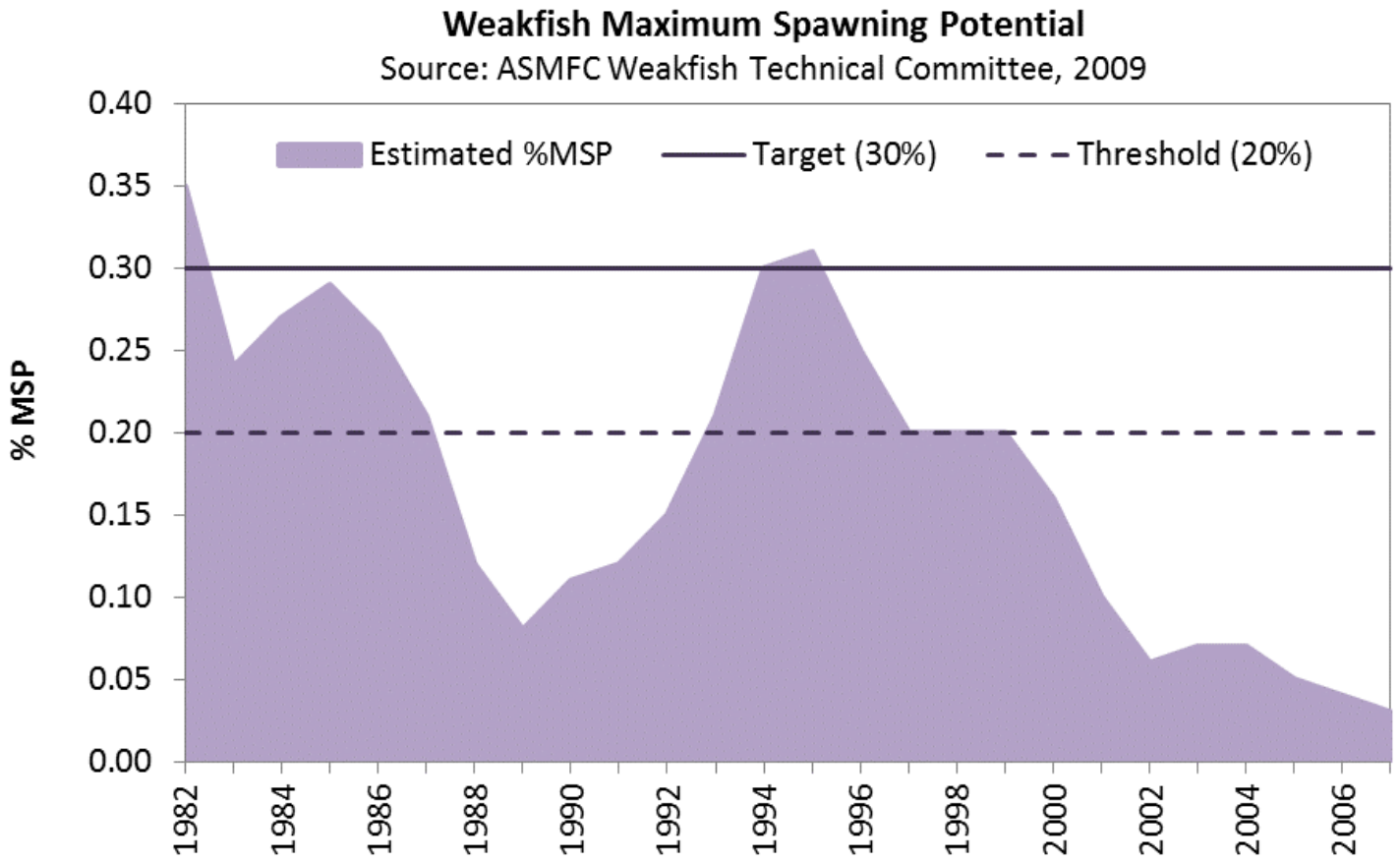
River Herring

- Depleted to near historic lows (2012)
- Overfishing status unknown
- Most Surveys Flat or Decreasing
- Available Run Estimates Decreasing
- Approved monitoring programs
- Approved sustainable fishery management plans
- TEWG identifying conservation efforts, critical data gaps, monitoring and evaluating progress towards rebuilding

Tautog

- SSB at 39% of Target (11 Assessment)
- Overfishing Occurring
- Board Approved F=0.15 Target
- States Implemented Regulations to achieve the target F
- On-going benchmark assessment

Weakfish


Weakfish Maximum Spawning Potential
Source: ASMFC Weakfish Technical Committee, 2009
Estimated %MSP
Target (30%)
Threshold (20%)
% MSP
0.40
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0.00
1982
1984
1986
1988
1990
1992
1994
1996
1998
2000
2002
2004
2006

Winter Flounder

- Overfished, but overfishing not occurring
- Followed TC and established low limits to discourage a directed fishery and dead discards
- No Assessment on the schedule

Unknown: There is no accepted stock assessment to estimate the stock status

- Sturgeon
- Black Drum
- Spot

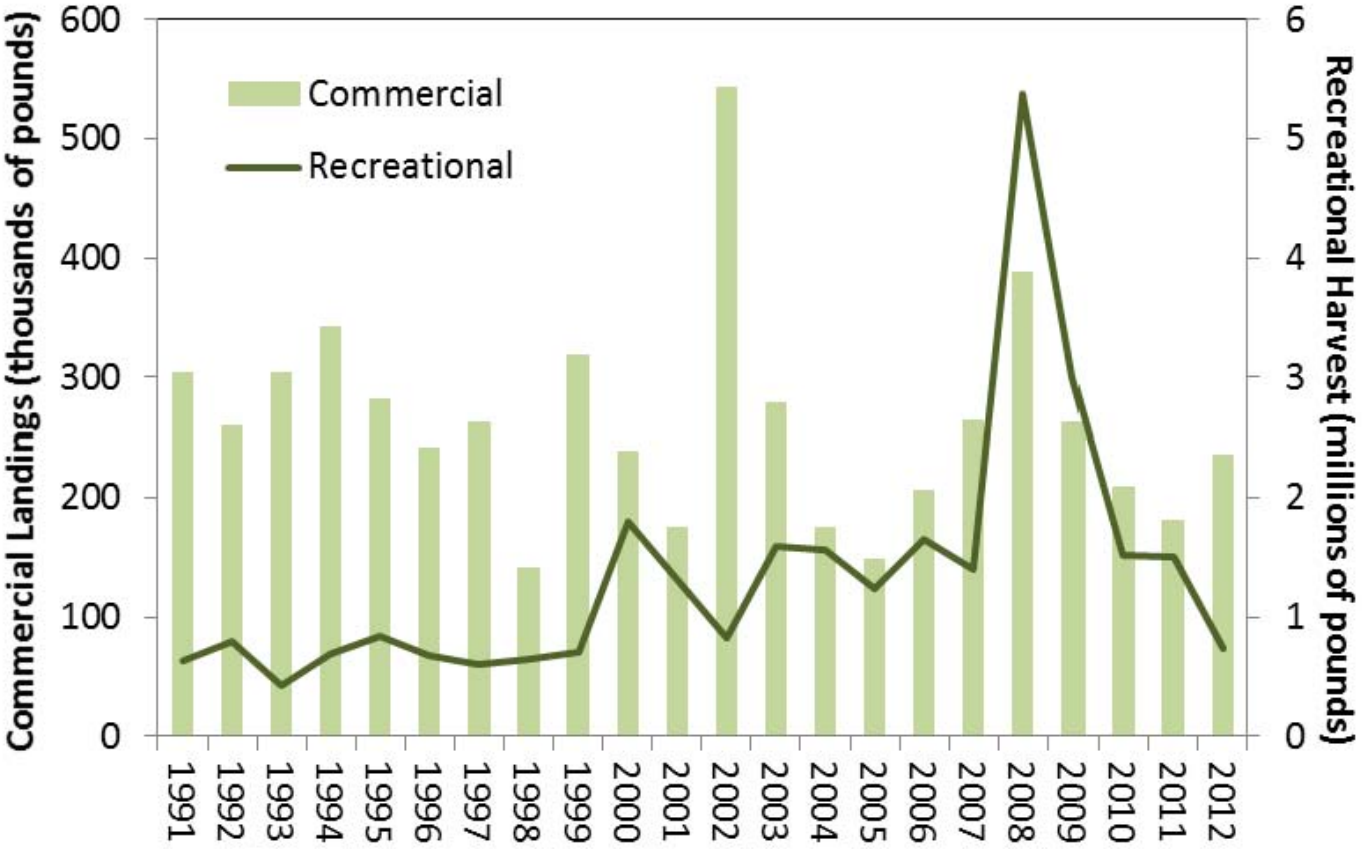
Sturgeon

- At Low Abundance
- Need River Specific Abundance Estimates
- Need Better Bycatch Information
- 4 DPS –endangered 1-threatened
- Benchmark assessment in 2015

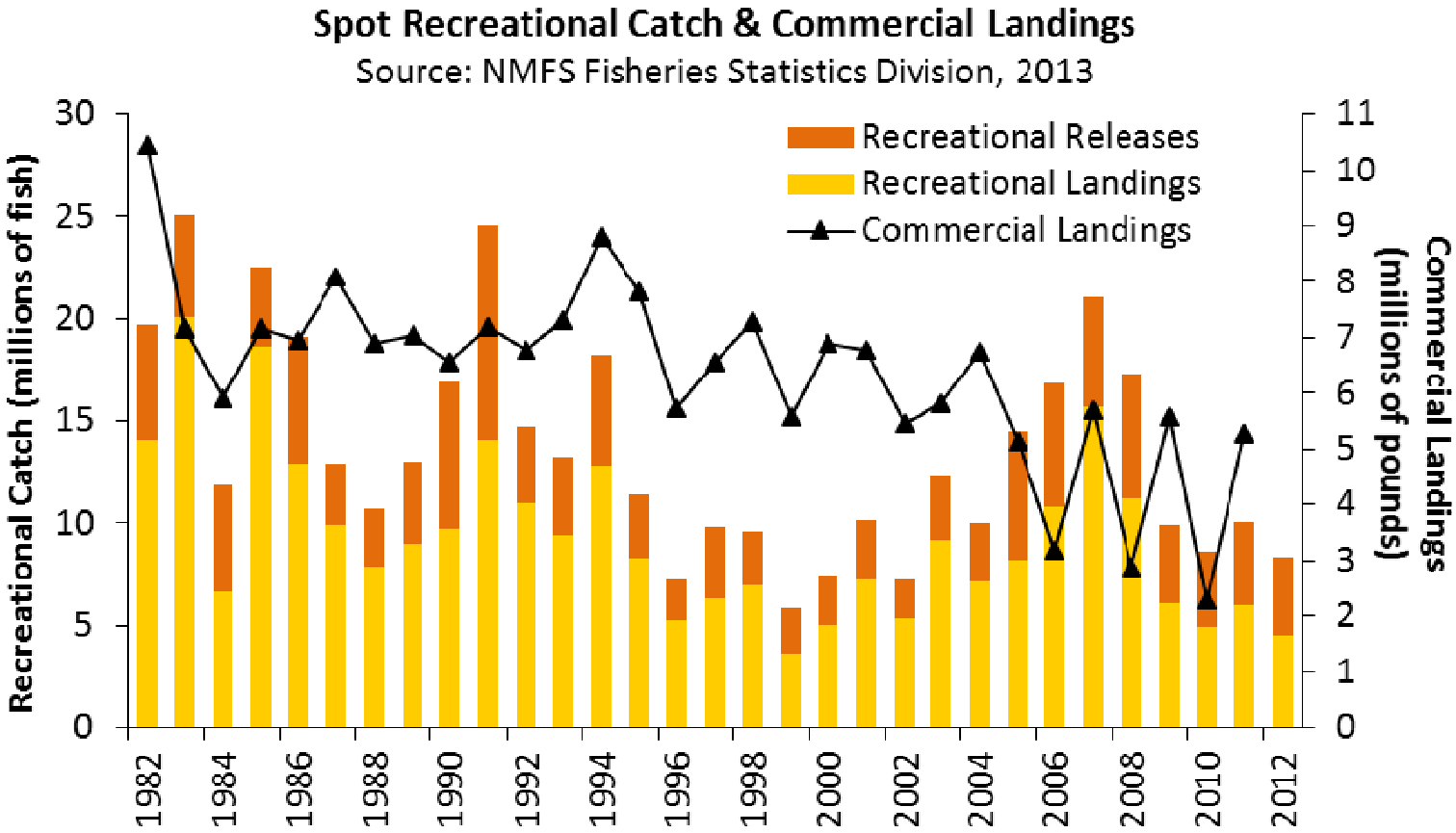
Black Drum

Recreational and Commercial Black Drum Landings

Source: ACCSP Data Warehouse and MRIP, 2013



Spot


Spot Recreational Catch & Commercial Landings
Source: NMFS Fisheries Statistics Division, 2013
Recreational Releases
Recreational Landings
Commercial Landings
Recreational Catch (millions of fish)
Commercial Landings (millions of pounds)
0
5
10
15
20
25
30
0
1
2
3
4
5
6
7
8
9
10
11
1982
1984
1986
1988
1990
1992
1994
1996
1998
2000
2002
2004
2006
2008
2010
2012

NOAA Proposed Rule on Special Management Zones

ASMFC

August 2014

Background

- Proposed rule on SMZ off the coast of Delaware for 5 artificial reef site
- NOAA is accepting comment until August 19
- Does the Commission want to submit comment on the proposed rule?

Reef Sites

- Proposed to only allow hook and line and spear fishing
- 5 sites proposed to limit gear conflicts on the reefs
- Maintain FWS SRP funding for the building and maintenance of the sites

VTRs within .46 km of Reefs

- Site 13 greater than 10 trips from 2008-10
- Site 14 greater than 20 trips in 2009
- Site 11 7-25 trip s from 2004-06; 3-8 trips in 2008-10
- Trips on site 11 and 13 dominated by pot/trap
- Trips on site 14 dominated by trawl/dredge

Gross Income Impacts
Percent of total average gross revenue (2010-2012)

	<5%	5-9%	10-19%	20-29%
Small Shellfish	6	1	1	0
Large Shellfish	1	0	0	0
Small Finfish	3	1	1	1

Impacts

- Increased availability fish to hook and line and spear fishing
- Commercial fishing effort shift to other area
  - Fixed gear shifts may result in increased gear conflicts forced to move to areas with mobile gear
  - Other sites could be less productive
- Difficult to determine full impacts

NEFMC Comments

- Area 14 overlaps with scallop, skate and monkfish fishing grounds and is within the Elephant Trunk scallop rotation area
- Open since 2004 and very valuable and productive
- Found the analysis incomplete
  - No impacts to the monkfish and skate fishery
  - No overlays of management areas and SMZ

NEFMC

- VTRs likely under estimate impacts but no attempt has been made to correct such as using VMS
- The EA does not account for the inter-annual variation of the fishery due to the rotational aspect

NEFMC

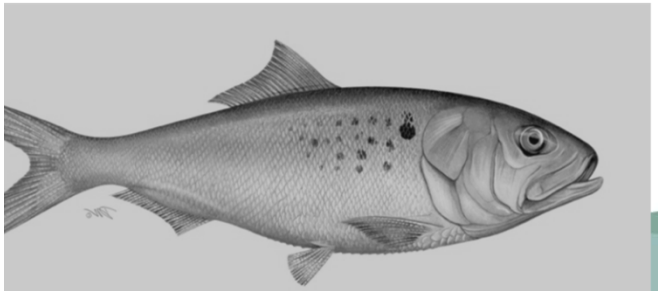
- Notes there is currently no reef site within area 14
- Closing the area would close active fishing grounds with no current reef.
  - Loss between 1 to 20 million dollars

Should the Commission Submit Comment on the Proposed Rule?

If yes, what issues should be addressed?

Vision: Sustainably Managing Atlantic Coastal Fisheries

Atlantic Menhaden Stock Assessment Progress Report August 6, 2014



Stock Assessment Progress Report

- On schedule for peer review in December 2014 (SEDAR 40)
- 12 meetings so far (9 webinars; 5 in-person):
  - Held Assessment Workshop I in June
  - Preparing to hold Assessment Workshop II August 12-15, 2014

Stock Assessment Progress Report

- Reviewed all finalized input data sources and decisions
- Reviewed all parameter and model configuration options
- Identified base vs. sensitivity model options
- Reviewed tagging data analyses
- Began initial discussions on biological reference points
- Provided feedback on development of assessment models
- Reviewed stakeholder analysis of the potential effects of menhaden migration on fishery selectivity patterns

Stock Assessment Progress Report: BERP WG

- BERP held two conference calls and met during June TCMW to finalize work on AM benchmark TOR #7:
  - Identify potential ecological reference points that account for Atlantic menhaden's role as a forage fish.
  - Provide proposed methodology, a model development plan, and example results using preliminary model configurations, if time allows.

Stock Assessment Progress Report: BERP WG

- At present, multiple ERP options and tools/models used to calculate those ERPs are under consideration in the ERP plan
- ERP plan components will be finalized at September TCMW and included in the AM assessment report
- The AM TC will review the ERP Plan in November before peer review
- Peer review panel will provide feedback on ERP options and models used to calculate ERPs and stock status relative to ERPs

Stock Assessment Progress Report

- Next steps:
  - 2014
    - August 12-15 – Assessment Workshop in Beaufort, NC
    - September – BERP WG meeting during TCMW to develop ERP plan
    - Summer/Fall additional meetings/conference calls
    - November 5-6 – AMTC meeting to approve report for peer review
    - December 9-11 – peer review workshop (SEDAR 40)
  - 2015
    - February – assessment results presented to Board

Atlantic Sturgeon Assessment

August 6, 2014

Assessment Progress

- Data Workshop – Fall 2013
- SASC subcommittees formed
  - Genetics
  - Tagging
  - Bycatch
  - Met via conference call/webinar
- Assessment Workshop – Fall 2014

Assessment Progress

- SASC has identified a number of on-going research projects, funded through federal Section 6 grants and dedicated money from NOAA
  - Acoustic tagging
  - Genetics
  - Movement, spawning, life history, mortality estimates

Assessment Timeline

- The data from these projects would greatly enhance our ability to assess Atlantic sturgeon at both the coastwide and the stock/DPS level
- Waiting until these data are available will delay the peer review of the assessment until 2017

Model Scale, Type, and Output	Timeline 1: 2015	Timeline 2: 2017
Coastwide		
Trend analysis (relative change in abundance)	●	●
Tagging model (estimates of total mortality)	●	●
Data-poor model (historical stock size, potential productivity)	●	●
SPR reference points	●	●
Historical proxy reference points for indices	●	●

Model Scale, Type, and Output	Timeline 1: 2015	Timeline 2: 2017
Trend analysis (relative change in abundance)	◖	●
Tagging model (estimates of total mortality)	○	●
Data-poor model (historical stock size, potential productivity)	○	●
SPR reference points	◖	●
Historical proxy reference points for indices	◖	●

Board Input

- The Atlantic sturgeon SASC is requesting Board input on the preferred timeline based on management needs and objectives
- This will allow us to prioritize work and develop a timeline for completion of the benchmark assessment

Progress Report for the River Herring Technical Expert Working Group (TEWG)

Presented to ISFMP Policy Board

August 6, 2014

Background

Why was the TEWG formed?

- **NOAA Fisheries and ASMFC are collaborating to develop and implement a conservation plan for river herring**
  - **NOAA Fisheries has provided $95,000 to ASMFC, and plans to supplement this with an additional $200,000 to support river herring conservation planning**

Why? Continued

- **The TEWG was formed to provide individual expert opinions* to NOAA Fisheries and ASMFC to aid in the development of the plan**
  - ***Under the Federal Advisory Committee Act, the TEWG cannot make consensus recommendations**

Who is the TEWG?

- A group of individuals (~80) with expertise in river herring
  - Members from state agencies
  - Industry
  - Recreational fishing
  - Government representatives
  - Fisheries consultants (hydropower)
  - NGOs

How will the TEWG help?

- **NOAA Fisheries and ASMFC will consider TEWG input when formulating the request for research proposals**
  - **Priorities may be based on expert opinions obtained from members of the TEWG**
- **Research projects will contribute to river herring conservation plan**

TEWG Structure and Progress

Subgroups and EIC

- Climate change
- Stock status
- Habitat
- Fisheries
- Species interactions
- Genetics/Landlocked/Hybrids
- Ecosystem Integration Committee

Climate Change Subgroup

- **Subgroup will be focusing on topics directly related to climate change**
- **Data gaps:**
  - **amount of available river spawning habitat**
  - **Impacts of stream flow on passage and interactions with barriers**

Stock Status Subgroup

- **Focusing on modelling approaches for river herring**
- **Working to identify data needs for future assessments and ESA listing determination**

Habitat Subgroup

- **Largest subgroup with widest scope**
- **Developing spreadsheet which focuses on habitat research to date and current monitoring programs**

Fisheries Subgroup

- **Focusing on strengths and weaknesses of catch estimates**
- **Looking at how management actions that have been implemented could influence catch numbers**

Species Interactions Subgroup

- A large part of spp int is predator/prey relationships
- Data gaps:
  - Relationships between predators and life stage of alewives (predation pressure)
  - How predation impacts natural mortality in different regions

Genetics Subgroup

- **Subgroup has discussed utilizing molecular marker techniques from Pacific salmon**
  - **Single nucleotide polymorphisms (SNPs)**
  - **Microsatellites**
- **Standardizing genetic techniques on the East Coast (similar to West Coast) will be integral moving forward**

Ecosystem Integration Committee

- Overarching committee comprised of chairs of each subgroup
- Working to ensure an integrated approach is taken and topics that cross subgroups are addressed holistically

Next Steps

- **Full TEWG call on September 3**
- **Request for proposals will be released this fall**

Questions?

Report to the Atlantic States Marine Fisheries Commission
ISFMP Policy Board

August 6, 2014

FY14 Funded Project :

Oyster Reef and Salt Marsh Habitat Restoration, Stump Sound, NC

Restored and protected salt marsh and oyster habitat will benefit red drum, spotted seatrout, weakfish, spot, croaker, and shrimp

Partners:

- North Carolina Coastal Federation
- North Carolina Division of Marine Fisheries
- USFWS-ACFHP

FY14 Funded Project :

Barrier Removal, Westecunk Creek, Barnegat Bay, NJ

Restore access to over 13km of stream habitat for river herring, American eel, and other diadromous species

Partners:

- Barnegat Bay Partnership
- Edwin Forsythe National Wildlife Refuge
- American Rivers
- NFWF
- NOAA
- USFWS-ACFHP

FY2015 Atlantic Coastal Fish Habitat Partnership Project Application Cycle

Requesting project applications to restore and conserve habitat necessary to support coastal, estuarine dependent, and diadromous fish species.

Funds can only be used for on-the-ground habitat conservation and improvement projects and related design and monitoring activities.

To ensure available funding is being directed most effectively, projects should be geared toward meeting ACFHP's protection and restoration objectives described in its **Conservation Strategic Plan**.

The maximum amount available for an individual project is $50,000.

FY2015 Atlantic Coastal Fish Habitat Partnership Project Application Cycle

Applications must be received by Friday, September 26, 2014

For complete information and guidelines on how to apply please visit: www.atlanticfishhabitat.org/acfhpfunding/