



**NOAA  
FISHERIES**

# 2015 MRIP Estimates Review

**John Foster**

ASMFC Joint Meeting of the Summer Flounder,  
Scup, and Black Sea Bass and Bluefish Management  
Boards

July 6, 2016

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# Overview

- Review of MRIP estimation
- Issues in 2015 New York charter boat (CH) mode estimates
- Next steps to address issues

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# MRIP Estimation

- Differences between preliminary and final estimation
- Incorporation of Federal vessel trip reports (VTR)

# MRIP Estimation

- Total Catch = Mean catch per angler-trip  
X Total angler-trips
  - Mean catch per angler-trip (APAIS)
  - Total angler-trips (CHTS,FHS,APAIS)
- Standard MRIP estimation domains
  - Spatial: Sub-region, state, area fished
  - Temporal: Year, 2-month wave
  - Mode of fishing
  - Species
  - Catch disposition

# MRIP Estimation – Charter mode

- Preliminary estimates
  - 45 days after end of 2-month wave
  - CH effort estimates from FHS, no VTR data
  - CH effort estimates include coverage correction from APAIS
- Final estimates
  - By April 15<sup>th</sup> of following year
  - CH effort estimates include FHS and VTR data
  - CH effort includes adjusted APAIS coverage correction that reflects VTR incorporation

# MRIP Estimation – Charter mode

- Incorporation of VTR data
  - VTR vessels (also covered by FHS or VTR-only)
    - Vessels also covered by FHS are entirely removed from FHS frame, sample data, and estimates
    - VTR data treated as census of trips for all VTR vessels
  - FHS-only vessels
    - No changes to sample data for FHS-only vessels
    - FHS-only domain effort estimate produced for these vessels
  - Final CH effort estimate =  
FHS-only estimate (with any VTR vessel data removed)  
+ census trip counts from VTR vessels

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# 2015 New York CH Estimates

- Effort estimates
- Black sea bass
- Bluefish

# 2015 New York CH Estimates - Effort

- Large increases from preliminary to final
- Final estimates in line with recent years

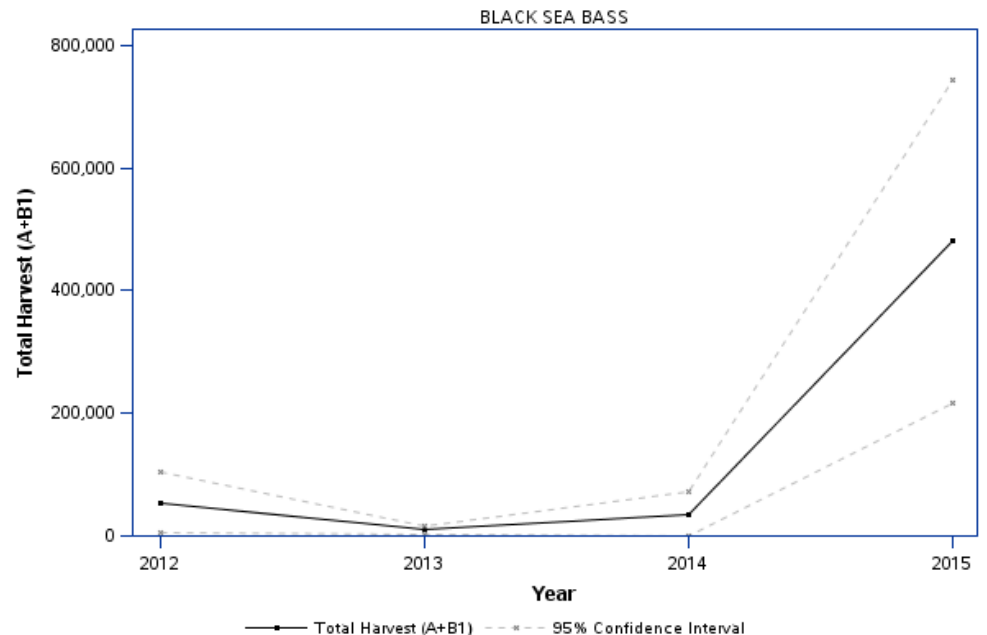
Year	Wave 3 (May/Jun)	Wave 4 (Jul/Aug)
2015	87,757	155,347
2014	67,395	139,769
2013	94,410	169,855

- Preliminary 2015 estimates were lower than expected
  - FHS response rates lower for VTR vessels
  - VTR vessels higher trip rates



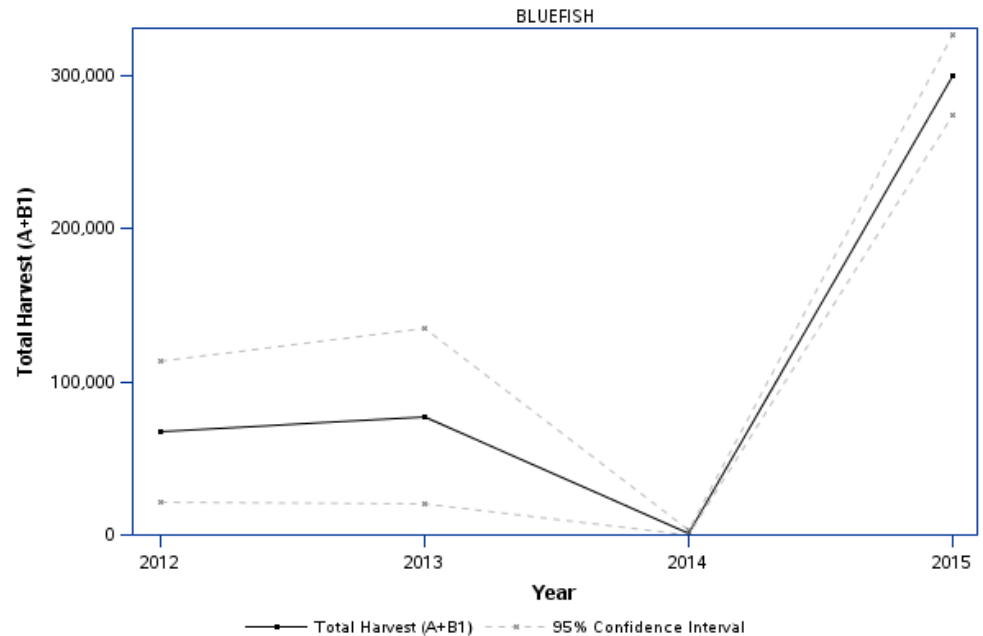
# 2015 New York CH Estimates - BSB

- Large annual harvest estimate driven by wave 4
- Small APAIS sample sizes
  - Wave 4:
    - 35 CH angler-trips total
    - 18 CH w/ any bsb
    - 15 CH w/ bsb harvest



# 2015 New York CH Estimates - Bluefish

- Large annual harvest estimate driven by wave 3
- Small APAIS sample sizes
  - Wave 3:
    - 8 CH angler-trips total
    - 5 CH w/ any bluefish
    - 5 CH w/ bluefish harvest



## 2015 New York CH Estimates - Summary

- Large increases in black sea bass and bluefish landings from MRIP preliminary to final estimates
- Two primary effects
  - Large increase in effort from VTR incorporation
  - Small sample sizes of APAIS intercepted angler-trips

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# Next Steps

- VTR
- Small sample sizes

## Next Steps - VTR

- Direct incorporation in preliminary estimates
  - Technical issues to work through:
    - Formatting
    - Coding fields (area fished)
    - Completeness
- Incorporate a fully or partly modeled VTR effect into preliminary estimates
  - Not preferred
  - Address completeness issues

## Next Steps – Small Sample Sizes

- Address small sample sizes directly
  - ACCSP, State partners
  - Targeted outreach
  - APAIS design adjustments
- Explore alternatives to standard estimation
  - Collapsing estimation domains
  - Small area estimation techniques



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# **ASMFC Summer Flounder, Scup, Black Sea Bass and Bluefish Boards Meeting**

## **Review of Final 2015 MRIP Harvest Estimates**

10:00 a.m. – 12:30 p.m.

July 6, 2016

Conference line: 1-888-394-8197

Passcode: 815277



# Agenda



- Welcome/Call to Order
- Board Consent
  - Approval of Agenda
- Public Comment (for items not on the agenda)
- Review of Revised 2015 MRIP Harvest Estimates (MRIP Staff)
- TC Report on Revised 2015 MRIP Black Sea Bass Estimates (G. Wojcik)
- Consider Changes to Black Sea Bass Recreational Management **Action**



# MRIP Staff Presentation



# TC Report on 2015 Black Sea Bass Estimates

- Background
- Review of Revised Harvest Estimates
- Data Issues
- Process Issues
- Questions

# Background



- Dec 2015- Preliminary 2015 Harvest estimates through wave 5
- TC submitted recreational measures proposals January 2016
- Feb 2016: Board approved proposals methodology
  - Following meeting, multiple states (MA,RI,NY,NJ) submitted revised proposals
  - DE-NC (N. of Hatteras) adopted recommended federal waters regulations: 12.5” TL minimum size, 15 fish possession limit, season of May 15-September 21 and October 22-December 31
- June 2016
  - June 13<sup>th</sup>- revised MRIP estimates released
  - NOAA considering precautionary default measures: **14” TL minimum size, 3 fish possession limit, season of July 15-September 15**

# Data Review



2016 Recreational Harvest Limit: 2.82 million pounds

- Preliminary 2015 Harvest estimate (Dec 2015):  
3.64 million pounds (2.08 million fish)
  - Needed Reduction: 22.5% coastwide or 23.2% if taken by northern states only to achieve the 2016 RHL
  
- Revised 2015 Harvest estimate (June 2016):  
3.96 million pounds (2.37 million fish)
  - Needed Reduction: 28.9% coastwide or 30.2% if taken by northern states only to achieve the 2016 RHL

# Data Review Cont'd



2015 BSB Harvest	Harvest Difference FINAL-PRELIMINARY		Percent Difference FINAL/PRELIMINARY - 1	
	STATE	Number of Fish	Weight (pound)	Number of Fish
MA	-8,871	-43,874	-2.5%	-5.8%
RI	682	11,373	0.3%	2.6%
CT	71,763	60,361	27.2%	13.6%
NY	296,421	409,041	40.4%	31.7%
NJ	-81,858	-156,357	-20.9%	-26.7%
DE	3,387	4,804	17.4%	21.8%
MD	45,266	61,090	366.1%	360.2%
VA	570	2,511	1.5%	4.1%
NC	826	8	43.0%	0.2%
<b>TOTAL</b>	<b>328,186</b>	<b>348,957</b>	<b>16.0%</b>	<b>9.6%</b>

# Data Issues



- New York For-hire mode during Wave 4 2015
  - 10x higher estimate from this wave and mode than next highest estimate over last 10 years
  - Weighting of intercepts increased by a factor of  $\sim 4$
- For-hire vessel census in NY & CT vs MRIP estimate
- Unclear how weighting of intercepts change when VTR data is added
- Delay incorporating VTR changes harvest estimates from preliminary to final numbers
  - Regularly an issue in MD, in addition to NY & CT this year

# Change in Harvest Reduction



State	2016 Management Measures	Reduction from <u>Preliminary</u> MRIP data	Reduction from <u>Final</u> MRIP data
MA	15" TL minimum size limit Season/Possession Limit: May 21- Aug 31, 5 fish	<b>23.9%</b>	<b>25.1%</b>
RI	15" TL minimum size limit Season/Possession Limit: June 24 - Aug 31, 3 fish; Sept 1 - Dec 31 7 fish.	23.4 %	23.4%
CT	15" TL minimum size limit Possession Limit/Season: (Private & Shore) 5 fish; 8 fish (party charter boats)May 1-Dec 31	<b>25.1%</b>	<b>27.6%</b>



# Change in Harvest Reduction



State	2016 Management Measures	Reduction from <u>Preliminary</u> MRIP data	Reduction from <u>Final</u> 2015 MRIP data
NY	15" TL min size limit  Bag limit/Season: 3 fish for June 27-Aug 31; 8 fish for Sept 1-Oct 31; and 10 fish for Nov 1-Dec 31	<b>23%</b>	<b>27.7%</b>
NJ	12.5" TL min size limit  Bag limit/Season: 10 fish May 23-June 19; 2 fish July 1-Aug 31  13" TL min size limit  Possession limit/Season: 15 fish October 22-December 31	<b>23.2%</b>	<b>16.8%</b>

# Process Issues



- Annual timetable to adjust rec management measures
  - Measures developed from prelim estimates in January
  - Two month delay in releasing final estimates in 2016

**Recommendation:** Move towards setting multi-year measures to reduce annual variability
  
- When VTRs are included in harvest estimates
  - Incorporated in final estimates since 2005
  - Due the 15th day of month following last trip

**Recommendation:** Include VTR effort data in the preliminary estimates to avoid significant changes in final harvest estimates

# Process Issues



- Timetable for implementing different measures mid season
  - Significant harvest takes place during wave 4
  - States would not be able to make changes until after wave 4 was over
  - Any changes after wave 4 will have little impact on harvest
- Unclear what harvest reduction from precautionary default measures would be for remainder of 2016
  - 2016 Precautionary Default based on most restrictive 2015 measures
  - Timing of final rule would impact reduction

# Summary



- 5 to 10 fold increase in effort and harvest from one year to the next within a single stratum unlikely
- Harvest estimates need to be further explained to understand effectiveness of 2015 measures
- Magnitude of change, ~7%, is likely below the TCs ability to effectively measure



**Questions?**

# Next Steps



Consider Changes to 2016 Black Sea Bass  
Recreational Management Measures