



*American Shad Sustainable Fishery Plan
2017 Review and 2018 Management Measures*

DEPARTMENT OF ENVIRONMENTAL QUALITY

Marine Fisheries

Marine Fisheries Commission | Holly White | Nov. 15-16, 2017



Outline

- Background on the American Shad Sustainable Fishery Plan
- Evaluation of the 2013-2017 plan and changes to the 2018-2022 plan
- Review 2017 sustainability parameters by system
- Present the 2018 American shad management measures

Background

- Requirement of Atlantic States Marine Fisheries Commission since Jan. 1, 2013 under Amendment 3 to the Shad and River Herring Fishery Management Plan.
- Required by all states that have American shad fisheries (except catch and release fisheries).
- N.C.'s original plan was approved by the Atlantic States Marine Fisheries Commission Shad and River Herring Management Board in May 2012 for 2013-2017.
- Plans are to be evaluated and approved every five years.

Sustainable Fishery Plan Evaluation 2013-2017

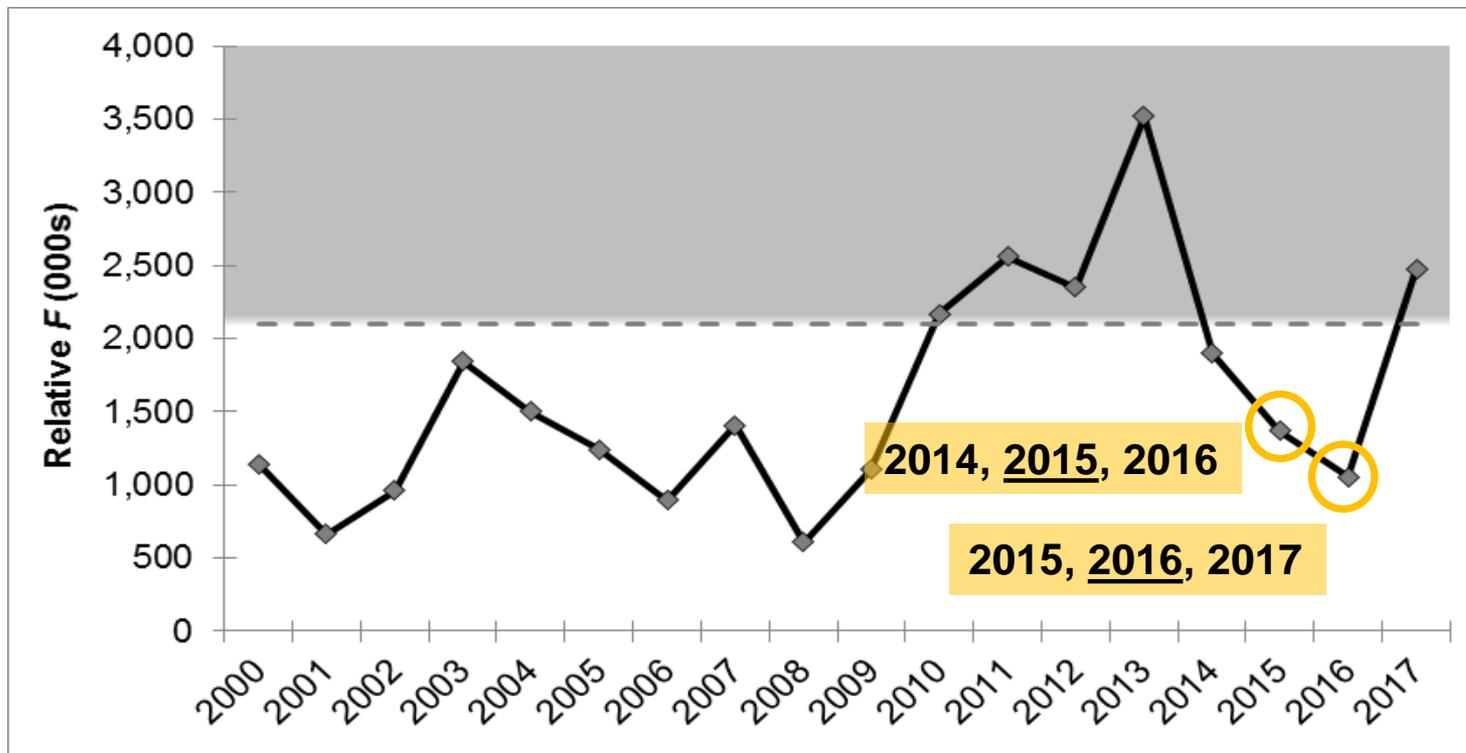
Maintain all current sustainability parameters and thresholds in each system with two technical changes:

1. Thresholds for sustainability parameters (75th and 25th percentiles) will now use a fixed time series of data through 2017.
2. Relative F will now be computed by dividing commercial landings by a hind-cast three-year average of a survey index whereas the previous plan used a centered three-year average.

Sustainable Fishery Plan Evaluation 2013-2017

Centered Three-Year Average

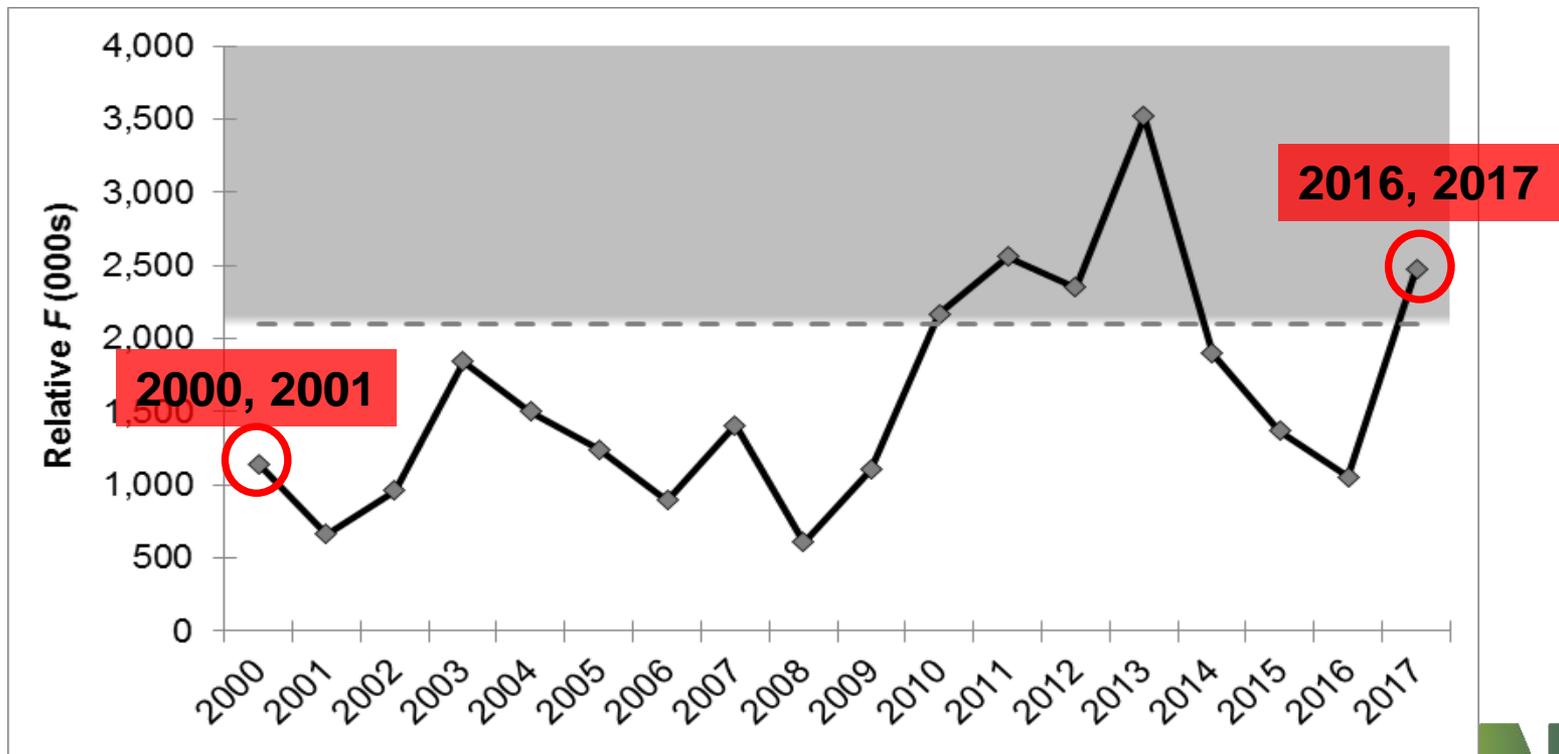
- The center year moves with the addition of the next years data.
 - 2015 index value = average of 2014, 2015, and 2016.
 - 2016 index value = average of 2015, 2016, and 2017.



Sustainable Fishery Plan Evaluation 2013-2017

Centered Three-Year Average

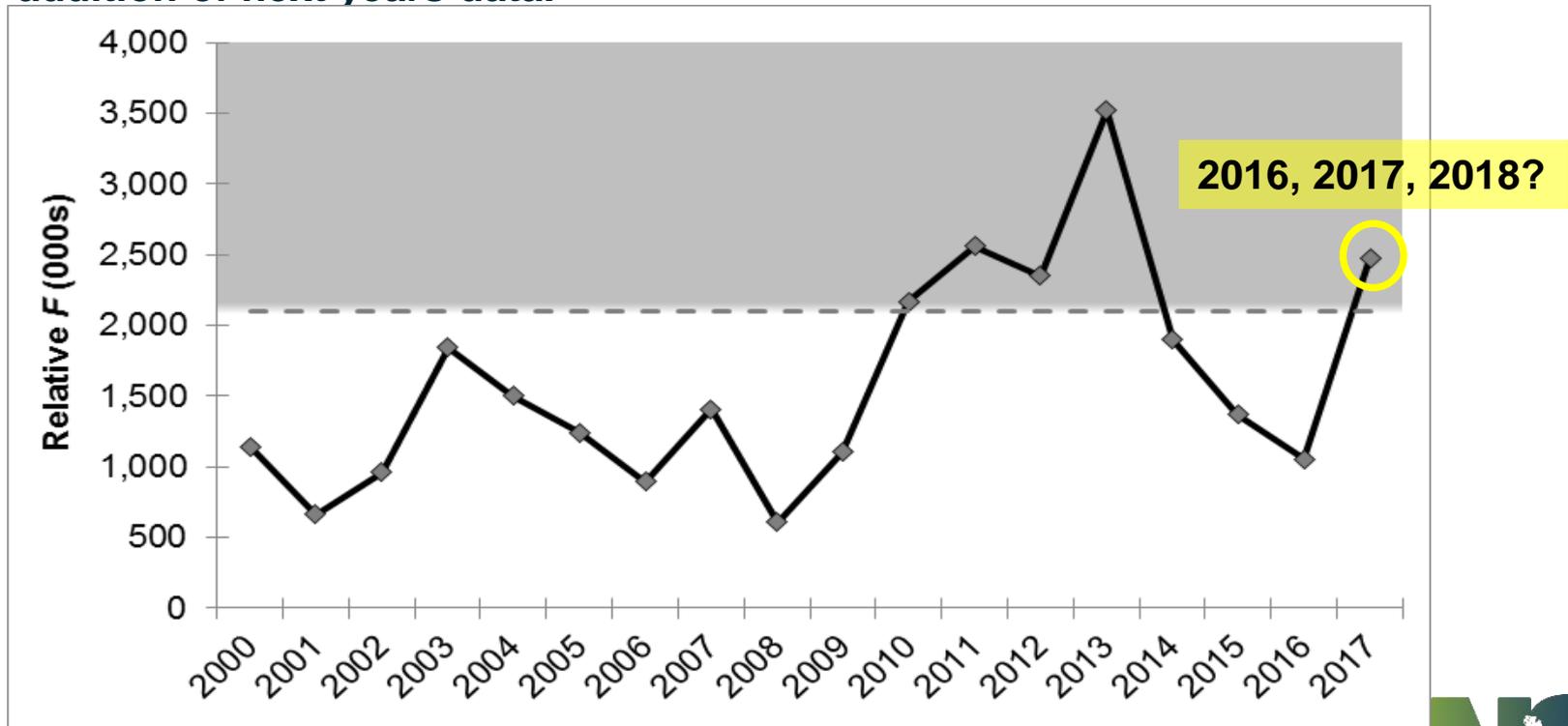
- ✓ The center year moves with the addition of the next years data.
- **First and last index value of the time series is based on 2-years of data.**



Sustainable Fishery Plan Evaluation 2013-2017

Centered Three-Year Average

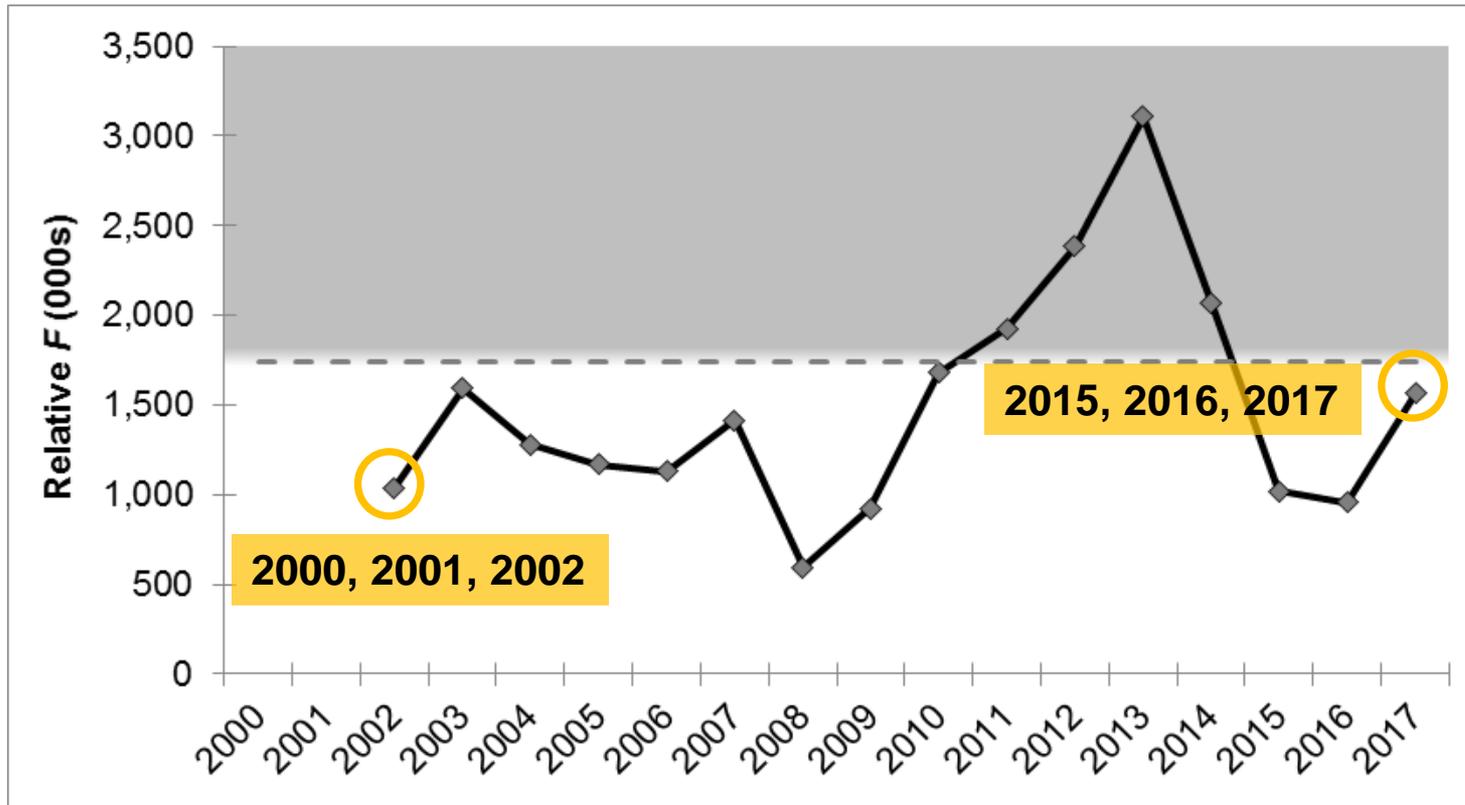
- ✓ The center year moves with the addition of the next years data.
- ✓ First and last index value of the time series is based on 2-years of data.
- **Terminal index value, on which management is based, will change with the addition of next years data.**



Sustainable Fishery Plan Update 2018-2022

Hind-Cast Three-Year Average

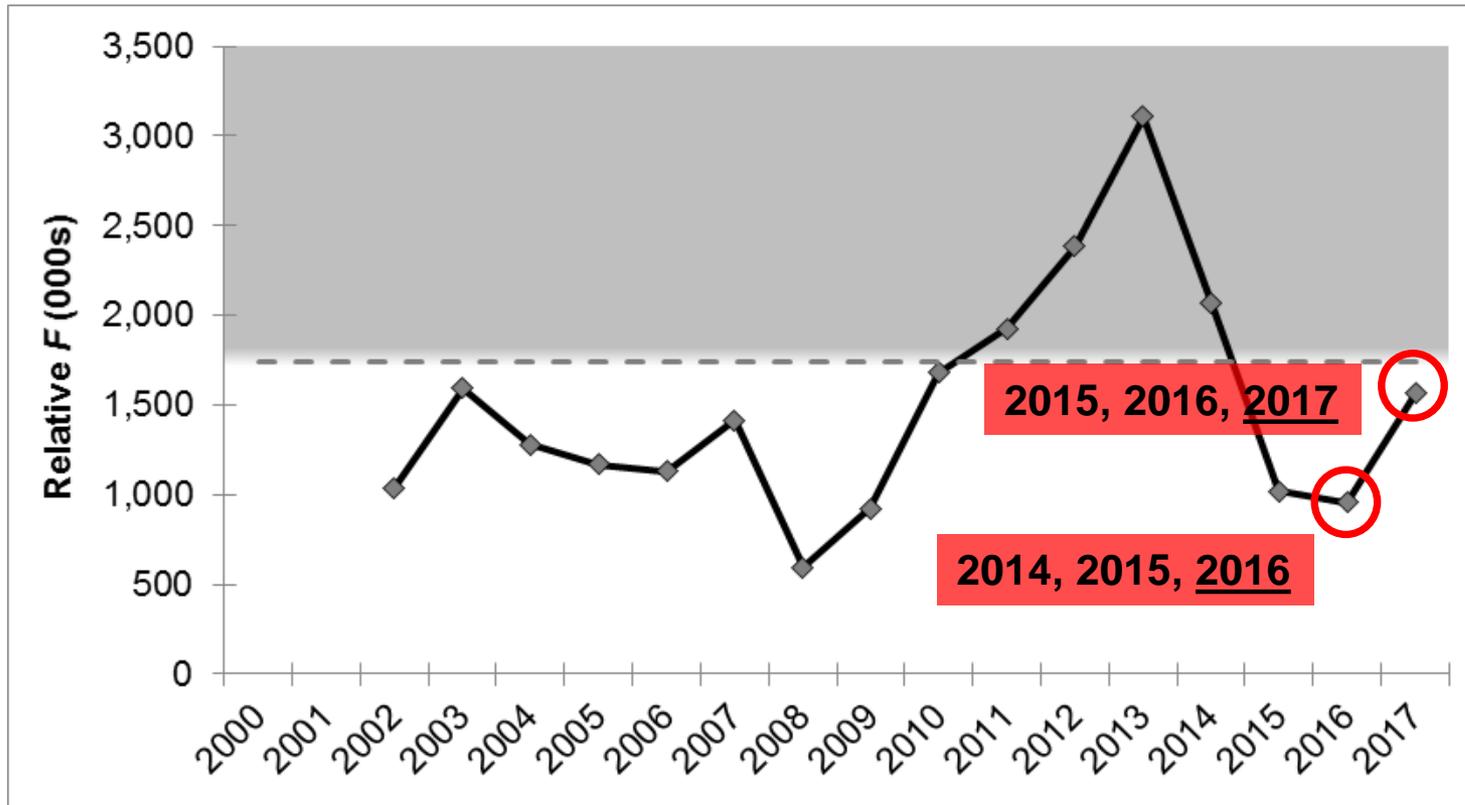
- All index values are based on three years of data.



Sustainable Fishery Plan Update 2018-2022

Hind-Cast Three-Year Average

- ✓ All index values are based on three years of data.
- **Terminal index value will not change with the addition of next years data.**

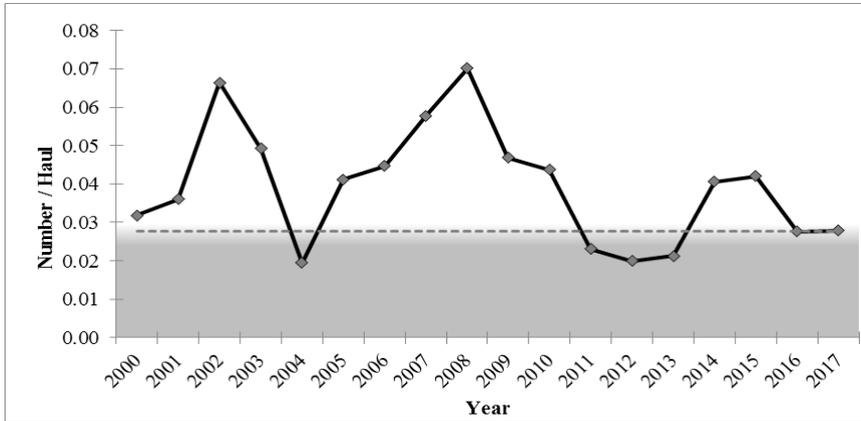


Sustainable Fishery Plan Update 2018-2022

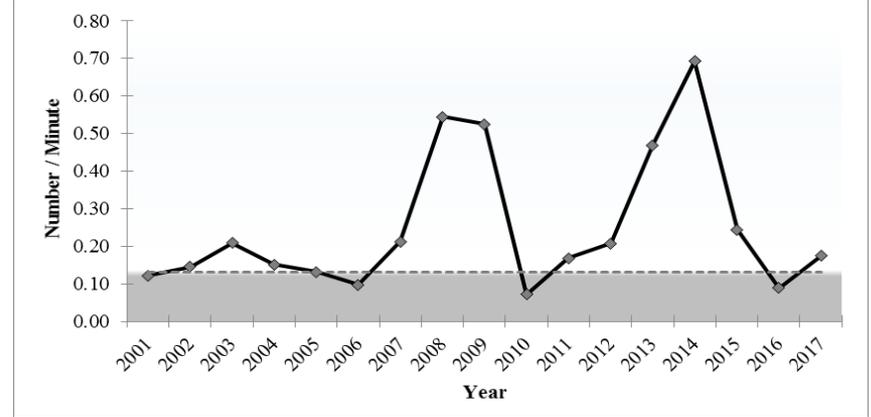
The updated plan with the technical changes was approved by the Atlantic States Marine Fisheries Commission Shad and River Herring Management Board in October 2017 for implementation in 2018.

Albemarle Sound/Roanoke System

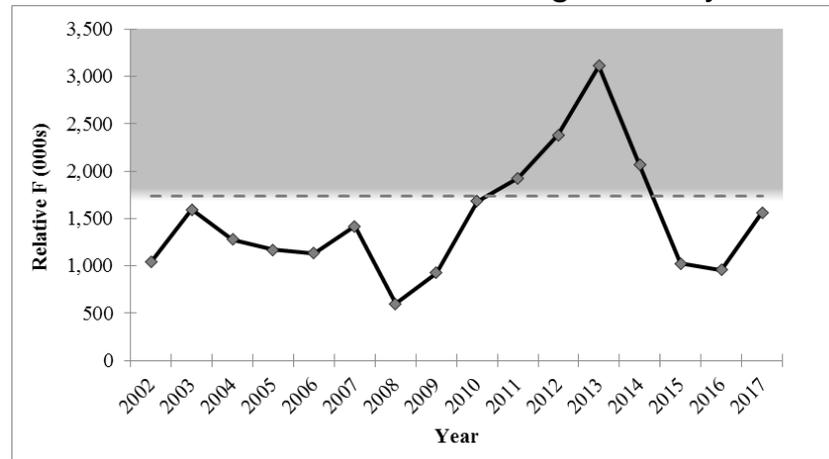
Female Catch Per Unit Effort Albemarle Sound



Female Catch Per Unit Effort Roanoke River



Female Relative Fishing Mortality

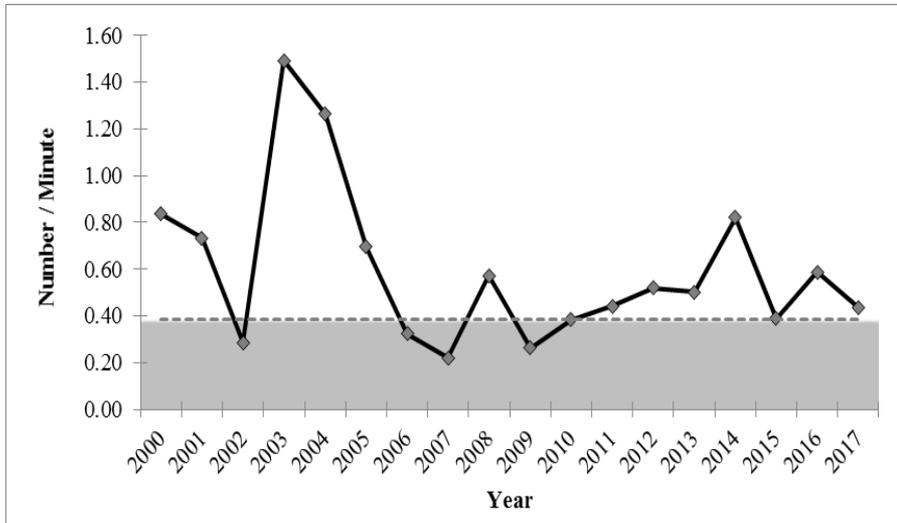


 **Exceeding the threshold**

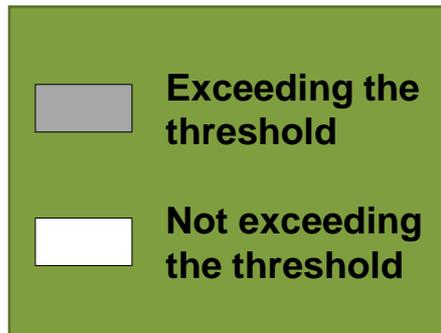
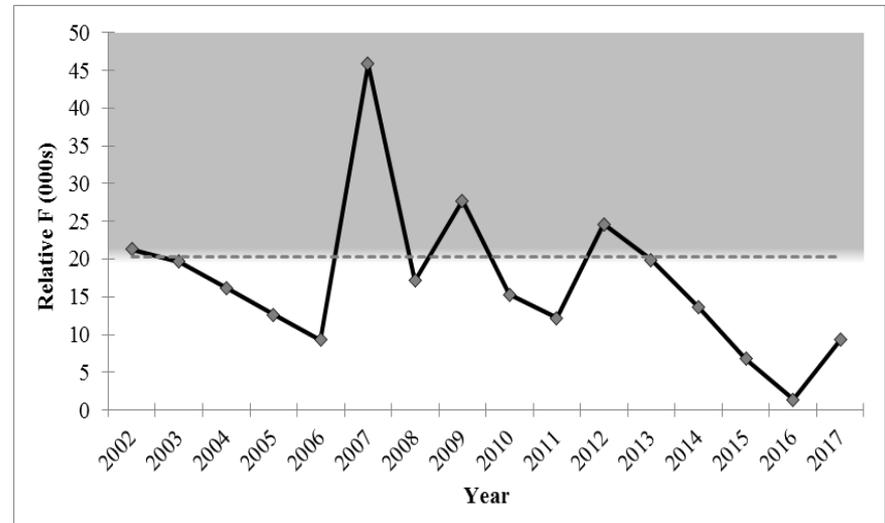
 **Not exceeding the threshold**

Tar/Pamlico River

Female Catch Per Unit Effort

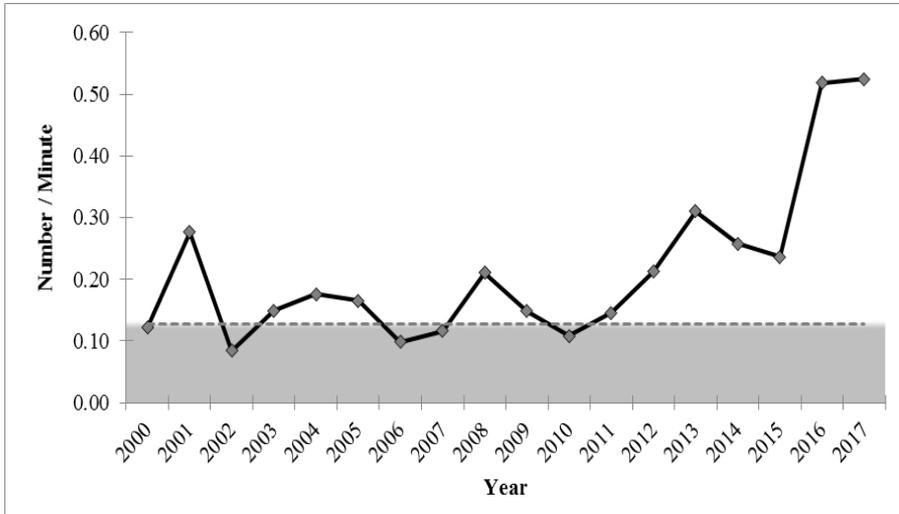


Female Relative Fishing Mortality

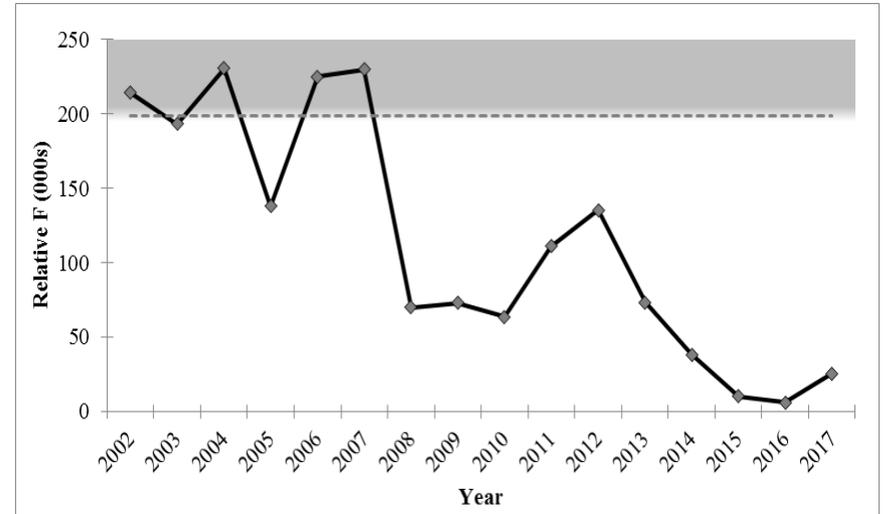


Neuse River

Female Catch Per Unit Effort



Female Relative Fishing Mortality

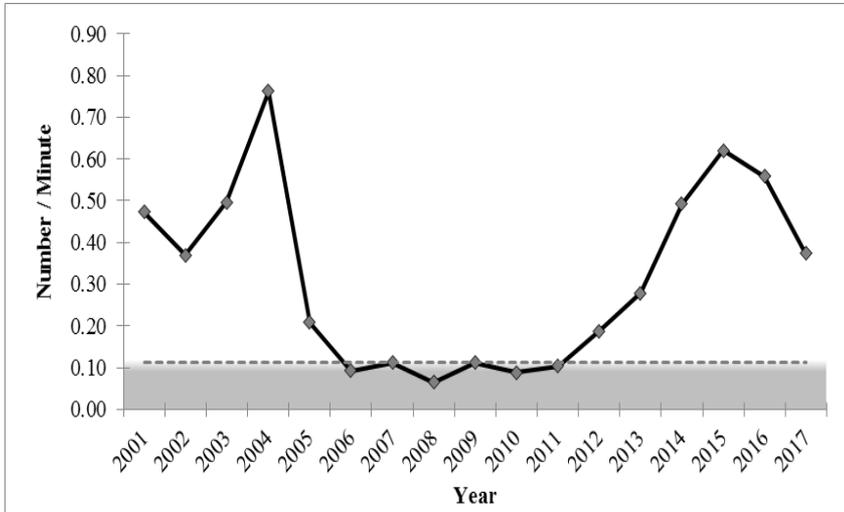


 Exceeding the threshold

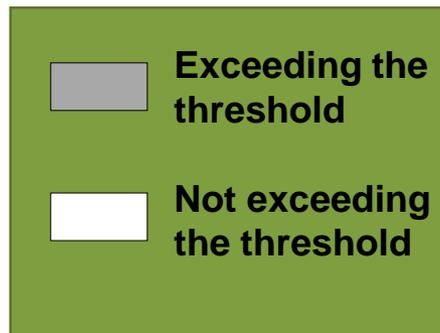
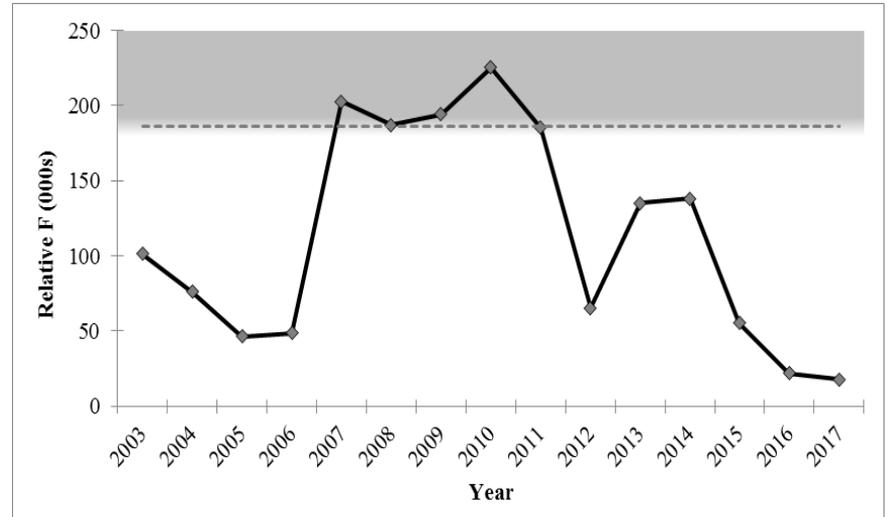
 Not exceeding the threshold

Cape Fear River

Female Catch Per Unit Effort



Female Relative Fishing Mortality



2018 American Shad Management Measures

The American Shad Work Group elected status quo for 2018 American shad management measures in all systems.

Albemarle Sound/Roanoke System

- Recreational: 10-fish shad aggregate, one American shad limit
- Commercial: March 3 – March 24

Neuse River

- Recreational: 10-fish shad aggregate, one American shad limit
- Commercial: Feb. 15 – April 14

Tar/Pamlico River

- Recreational: 10-fish shad aggregate
- Commercial: Feb. 15 – April 14

Cape Fear River

- Recreational: 10-fish shad aggregate, five American shad limit
- Commercial: Feb. 20 – April 11

All Other Areas

- Recreational: 10-fish shad aggregate
- Commercial: Feb. 15 – April 14

Questions?



American shad eggs. © 2010 Jay Fleming/iLCP