



# **2018 Annual Review of Stock Rebuilding Performance**

ASMFC

August 2018



# Background

- 2014-2018 Strategic Planning
- Commissioners Requested more frequent reviews
- Initiated in 2009
- Task in the 2018 Action Plan



# Objective

- Validate Status/Rate of Progress
- If not acceptable: Identify corrective action



# Outcome

- Direction/feedback to species management boards
- Input into the 2019 action planning process



# Categories

- Rebuilt/Sustainable
- Recovering/Rebuilding
- Concern
- Depleted
- Unknown



# Rebuilt/Sustainable and Recovering/Rebuilding Stocks

## Rebuilt/Sustainable

- GOM/GBK Lobster
- Atlantic Herring
- Menhaden
- Black Drum
- Black Sea Bass
- Bluefish
- Cobia
- Scup
- Spanish Mackerel
- Spiny Dogfish

## Recovering/Rebuilding

- Striped Bass
- Red Drum
- Tautog (MARI)



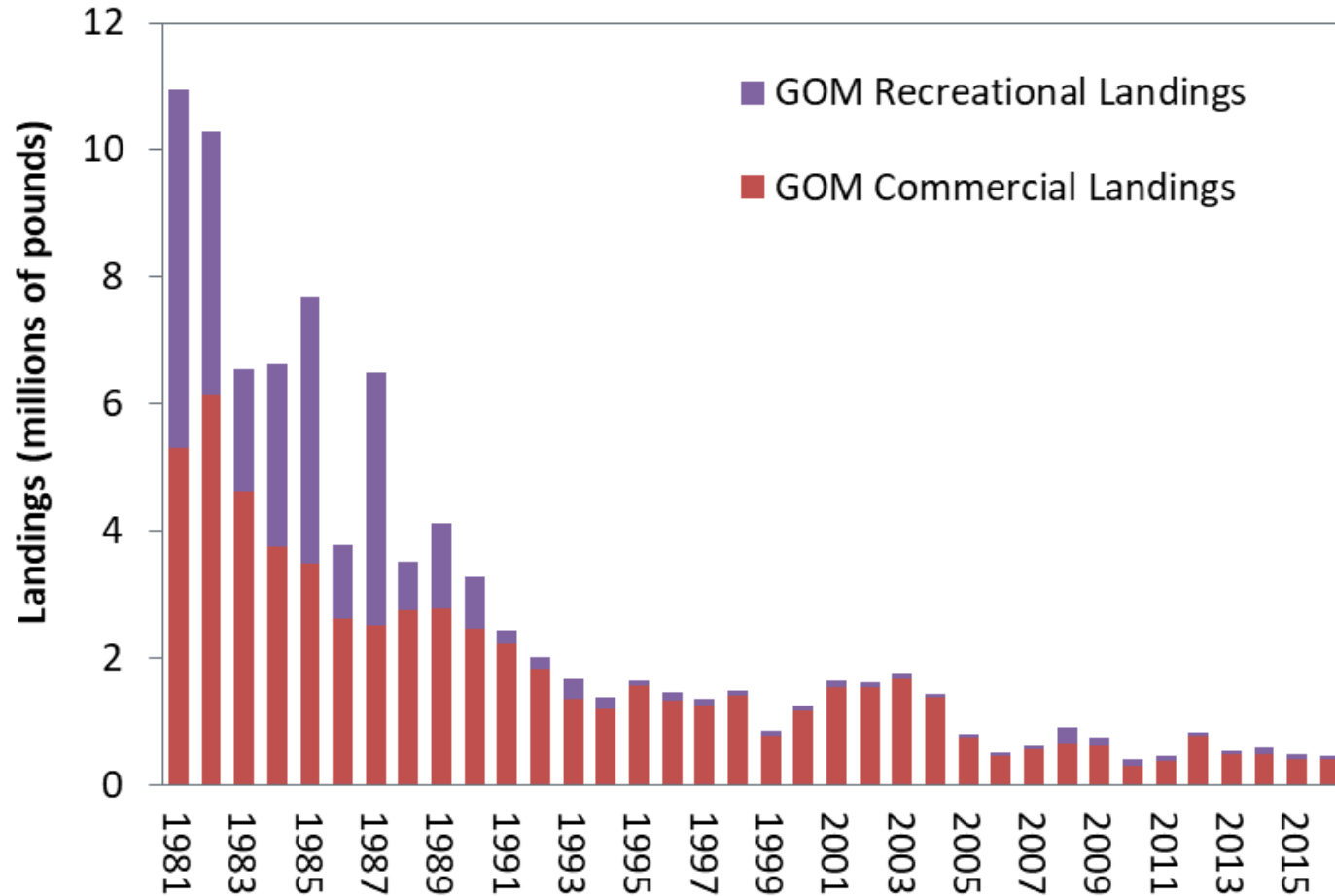
# Species of Concern

- Coastal Sharks
- Horseshoe Crab
- Summer Flounder
- Winter Flounder (GOM)

# Winter Flounder



Winter Flounder GOM Commercial & Recreational Landings  
NEFSC Operational Assessment of 19 Groundfish Stocks, 2017



- Overfished Unknown; Overfishing not Occurring





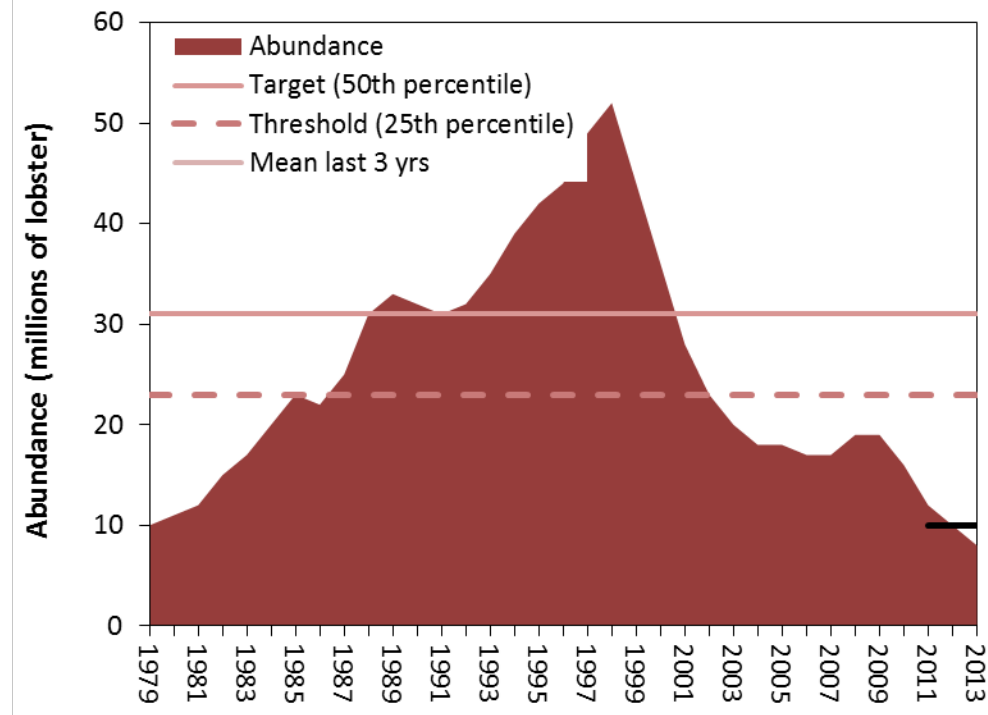
# Depleted Species

- American Eel
- American Lobster (SNE)
- American Shad
- Atlantic Sturgeon
- Northern Shrimp
- River Herring
- Tautog (LIS, NJ/NY Bight, DelMarVa)
- Weakfish
- Winter Flounder (SNE/MA)

# SNE Lobster



- The inshore portion of the stock shows a dramatic decline in spawning stock abundance
- The stock has not rebuilt and is in recruitment failure
- TC advised to use output controls, Board continues to use input measures
- TC advised 50-75% reductions in SNE LCMAs; Board approved 10% reduction
- Board did approve reporting recommendations over a 5 year timeframe

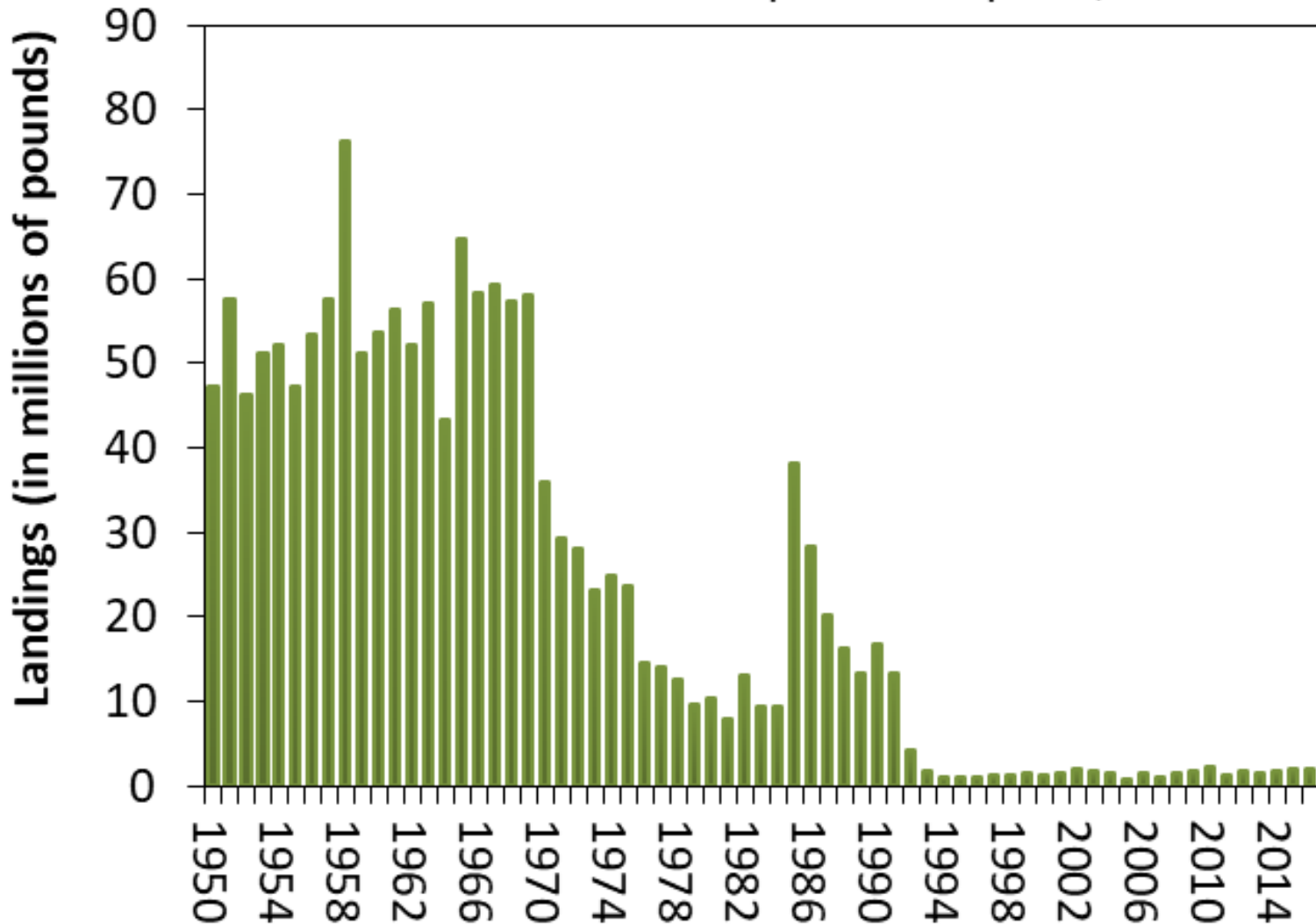


# River Herring



## River Herring Commercial Landings

Source: ASMFC State Compliance Reports, 2017

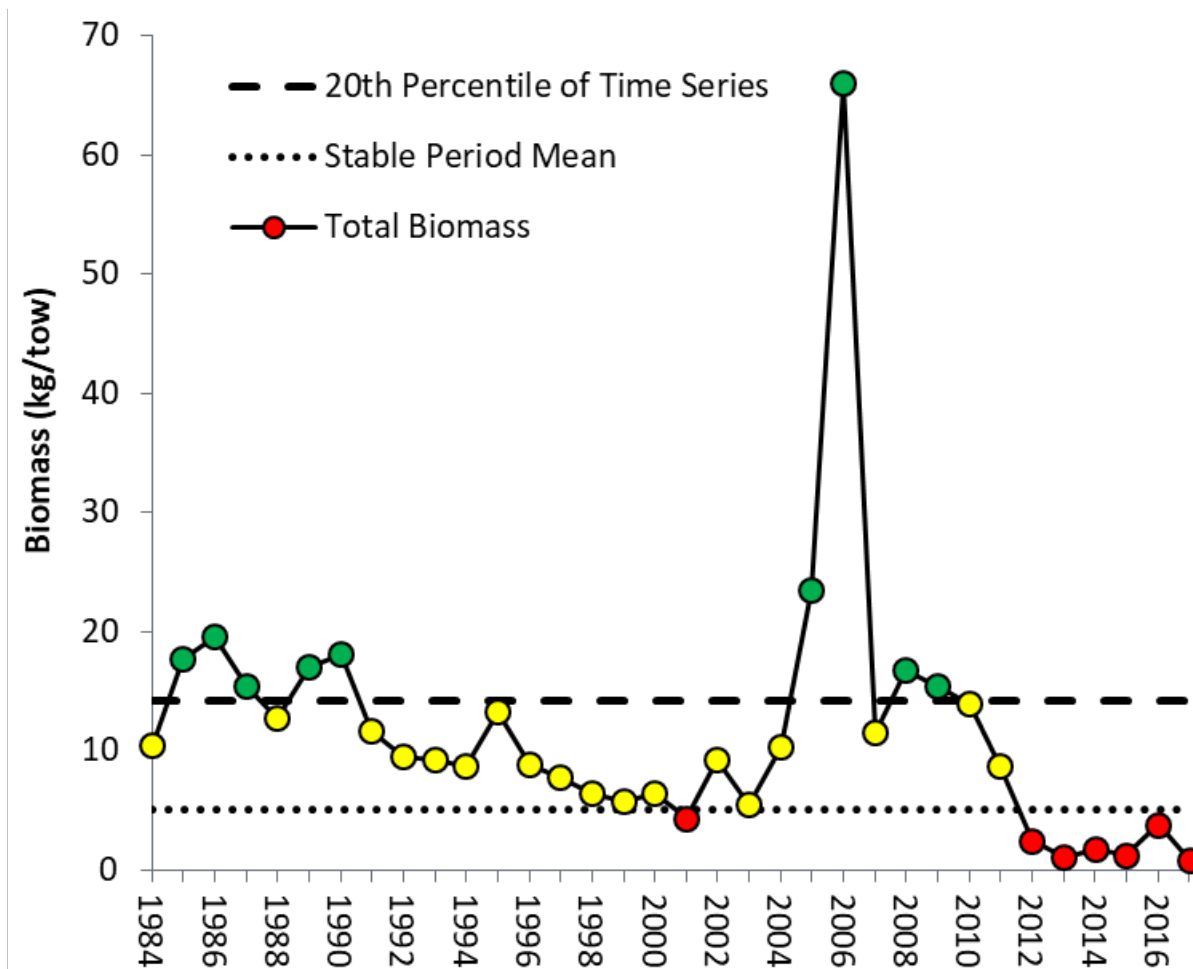


# Northern Shrimp



- Following TC advice, moratorium in place since 2015

**Total Biomass of Northern Shrimp from the Gulf of Maine Summer Shrimp Survey**



## **2016 Stock Assessment Update**

- The LIS and NJ/NY Bight regions indicate overfishing
- LIS, NJ/NY Bight and DelMarVa regions are overfished

## **Scientific Advice Based on Assessment Findings**

- The assessment proposed new reference points for each region

## **Board Adherence to Scientific Advice**

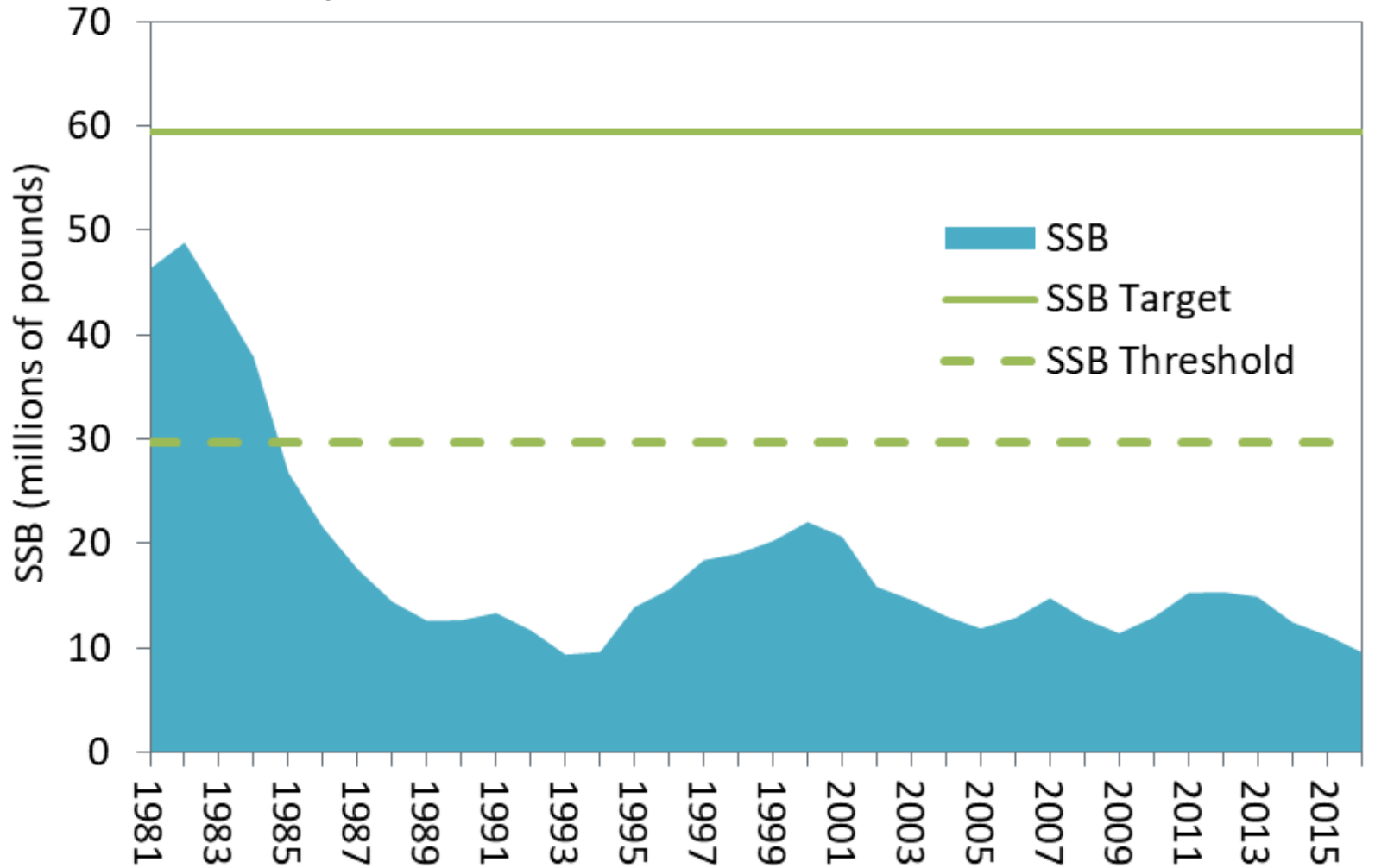
- Board approved lower harvest reduction for LIS (20.3% vs 47%) than recommended by TC

# Winter Flounder SNE/MA



## Winter Flounder SNE/MA Spawning Stock Biomass

NEFSC Operational Assessment of 19 Groundfish Stocks, 2017





# Unknown Species

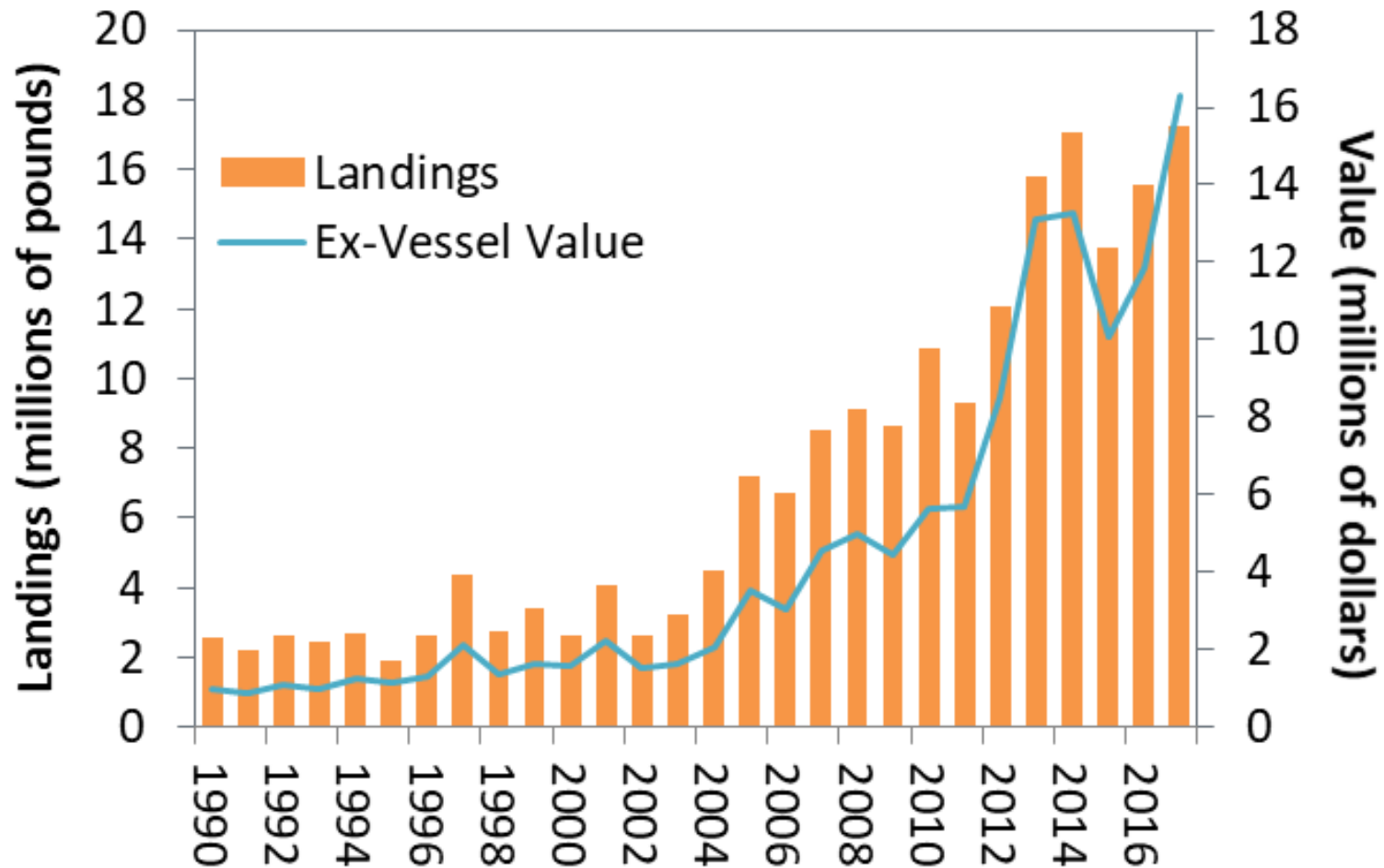
- Atlantic Croaker
- Jonah Crab
- Spot
- Spotted Seatrout

# Jonah Crab



## Commercial Landings and Ex-Vessel Value

Source: ACCSP Data Warehouse, 2018







# Outcome

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- Input into the 2019 action planning process



# Report to the Atlantic States Marine Fisheries Commission

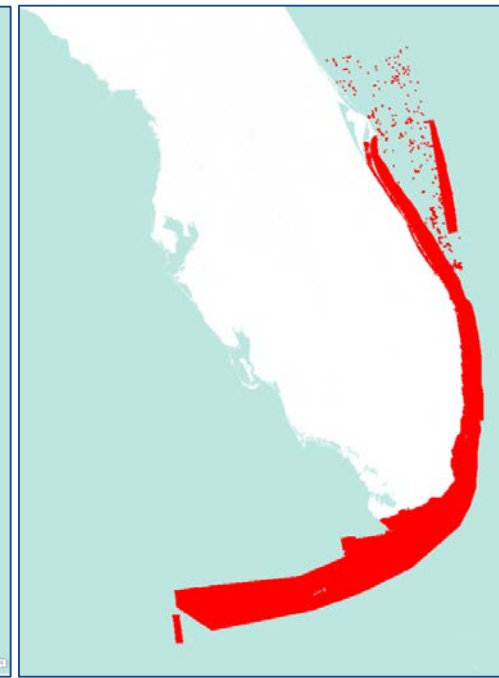
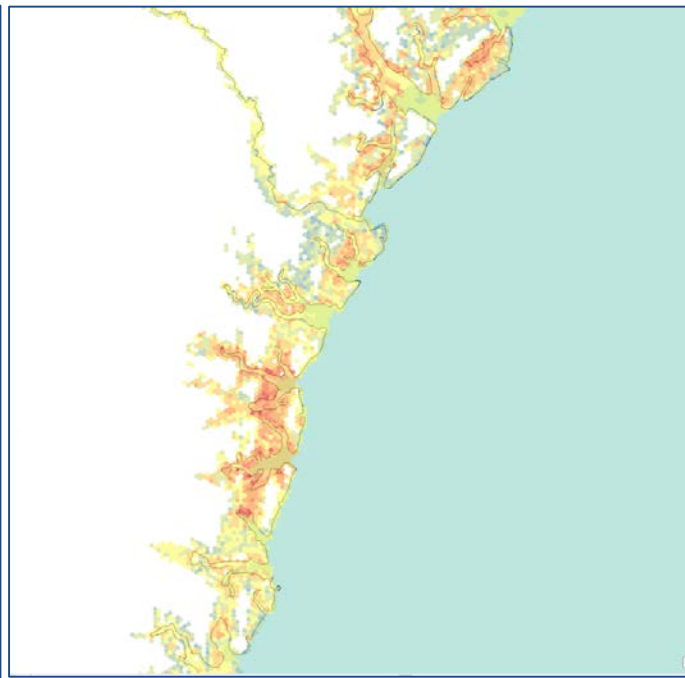
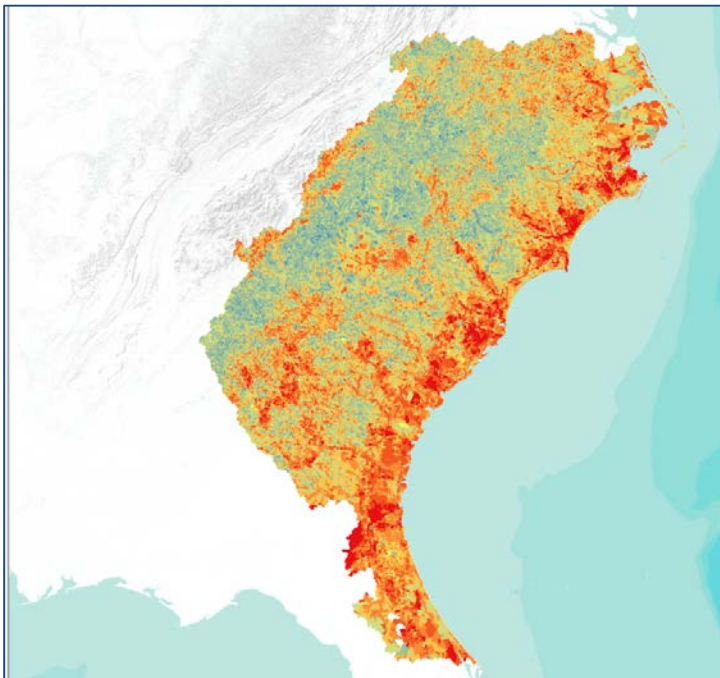
ISFMP Policy Board

August 9<sup>th</sup>, 2018

# Science and data initiatives

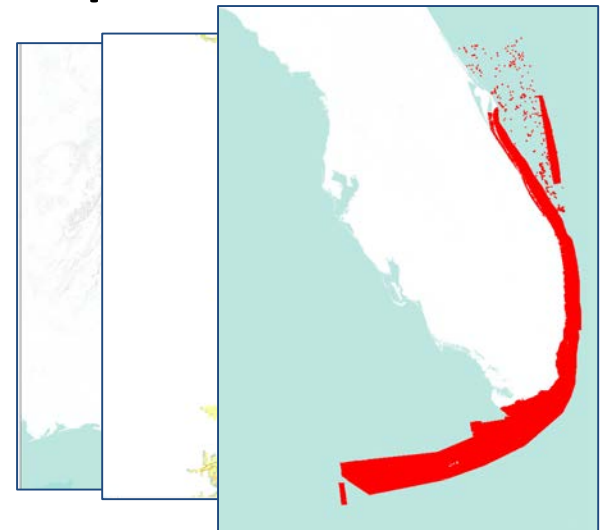


## SE Fish Habitat Mapping Project



## SE Fish Habitat Mapping Project

- Funding from NOAA: NC to FL
- Spatially prioritize fish habitat protection and restoration sites
- Variables such as habitat, threats, species diversity
- GIS mapping and analysis
  - Diadromous
  - Estuarine
  - Coastal (South Florida corals)



# Science and data initiatives



## SE Fish Habitat Mapping Project

- Results will be available online
- Static maps of each weighted variable
- Information on original datasets
- Next few weeks
- Funding from NOAA: northeast





## Website Update

- Zing Studios in Boulder, CO
- Updating all content and layout
- More information on our priority habitats and conservation projects
- Creating Species-Habitat Matrix database
  - Subregion
  - Species
  - Life stage
  - habitat



# On the Ground Conservation



## FY2018 USFWS-NFHAP funding

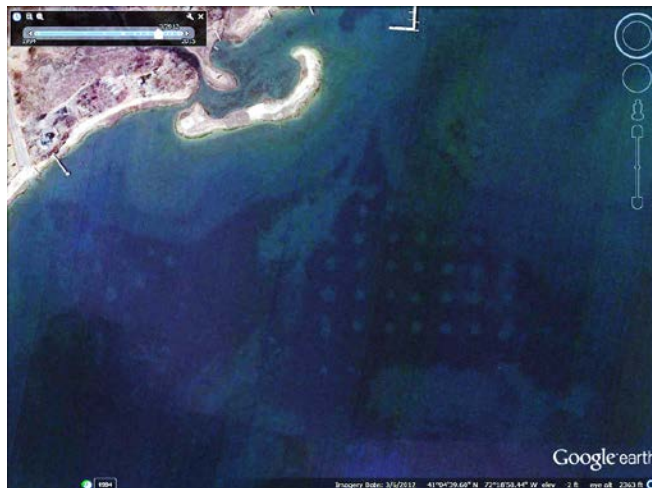
- Four conservation projects: New York, New Jersey, Maryland, North Carolina
  - First time funding conservation projects in NY and NJ
  - First year funding four projects



# Seagrass Conservation Moorings, NY



- Coecles Harbor, Shelter Island
- Most substantial eelgrass extent in any NY harbor
- Retrofit traditional chain and block moorings with bungee-like conservation moorings
- Improve eelgrass habitat extent and quality to benefit species such as bay scallop, fluke, puffers, alewife, American eel, and striped bass
- NY State DEC, Division of Marine Resources





# Columbia Dam Removal, NJ



- Opens 11 miles of river and 9 miles of tributaries for shad and river herring, American eel, and sea lamprey
- Part of a larger project to restore Paulins Kill, NJ's third largest tributary to the DE River
- Dam is first obstruction to fish migration for Paulins Kill
- Improve public safety
- The Nature Conservancy



# SAV Restoration in Freshwater and Mesohaline Region of the Chesapeake Bay, MD



- Seed collection and distribution of 3 mesohaline and 1 freshwater species of SAV
- SAV will filter polluted runoff, provide food for waterfowl, provide habitat for blue crabs, juvenile striped bass, and other species
- Help Chesapeake Bay Program reach their goal of 185,000 acres of SAV
- Maryland DNR



# Oyster Reef Restoration in Back Sound, Rachel Carson Reserve, NC



- Restore 0.11 acres of oyster reefs along Carrot Island (Beaufort)
- Use Oyster Catcher™ materials to protect over 3 acres of salt marsh
- Shoreline erosion rates are 1 – 2 m/yr
- Benefit species such as red and black drum, spotted seatrout, blue crabs, bsb, flounder, and gag grouper
- East Carolina University





**ACFHP would like to  
thank ASMFC for your  
continued operational  
support**

**Questions?**



# Diadromous Scenario

Many recommended metrics included calculating percent of reaches within a catchment. However, a catchment only represents one reach, so metrics were changed to reflect this.

Variable	Measurement	Metric	Source
Non-point source pollution	% agriculture in catchment	10 points if ranked in top 25% for least amount of agriculture	Cropscape USDA
Riparian Buffers	% of floodplain area with natural landcover	10 points if catchment is ranked top 25% for natural coverage	100 year floodplain dataset from FATHOM as boundary.
Potential for species access	# of downstream dams = 0	10 points if number = 0	SEACAP
Number of Species	Number of species in downstream network	10 points if the polygon ranks in the top 25%	SEACAP
Water Usage	Volume all reservoirs (NID_STORA in NID) per unit area of watershed (cubic meters/square km)	10 points if catchment is ranked in top 25% for lowest volume.	EPA StreamCat
Fragmentation	Density of road crossings and dams in catchment	10 points if catchment ranks in top 25% for least among of points	SARP SE Aquatic Barrier Inventory
Sturgeon Critical Habitat	Presence of critical habitat	10 points if on critical habitat	NOAA
Impervious Surface	% impervious surface above catchment	10 points if catchment is ranked top 25% for least amount of impervious	EPA streamCat
Point Source Pollution	Density of NPDES and TRI sites in catchment	10 points if catchment is ranked top 25% for least amount of sites	



# Estuarine Scenario

Variable	Measurement	Metric	Source
Seagrass and oyster reef habitat	% of polygon covered by habitat	10 points if the polygon ranks in top 25%	TNC SABMA
Wetland habitat	% of polygon covered by wetlands	10 points if the polygon ranks in the top 25%	National Wetlands Inventory
Estuarine –Marsh Water edge (Northern scenario only)	Average edge score by polygon	10 points if the polygon ranks in the top 25%	SALCC water veg edge scored raster
Proximity to protected habitat	Distance to HAPCs	10 points if the polygon is within ½ km of inlet	Marine cadastre
Proximity to development	Distance from marinas and ports	10 points if the polygon ranks in the top 25% farthest from ports.	State specific
Water Quality	% of polygon covered by 303d listed areas.	10 points if the polygon ranks in the top 25%	EPA 303D areas
Hardened shoreline	Length of hardened shoreline in polygon	10 points if the polygon ranks in the top 25%	SABMA supplemented with state data
Habitat fragmentation	Linear feet of causeway within polygon	10 points if the polygon ranks in the top 25%	Tiger roads 2017 and intersected tidal wetlands from NWI



# Southern Coastal Scenario

Variable	Measurement	Metric	Source
Proximity to protected habitat	Presence of HAPC	Protect area if it falls on HAPC	Marine Cadastre