



# Fisheries Leadership & Sustainability Forum

## *Managing Fisheries in a Changing Environment*

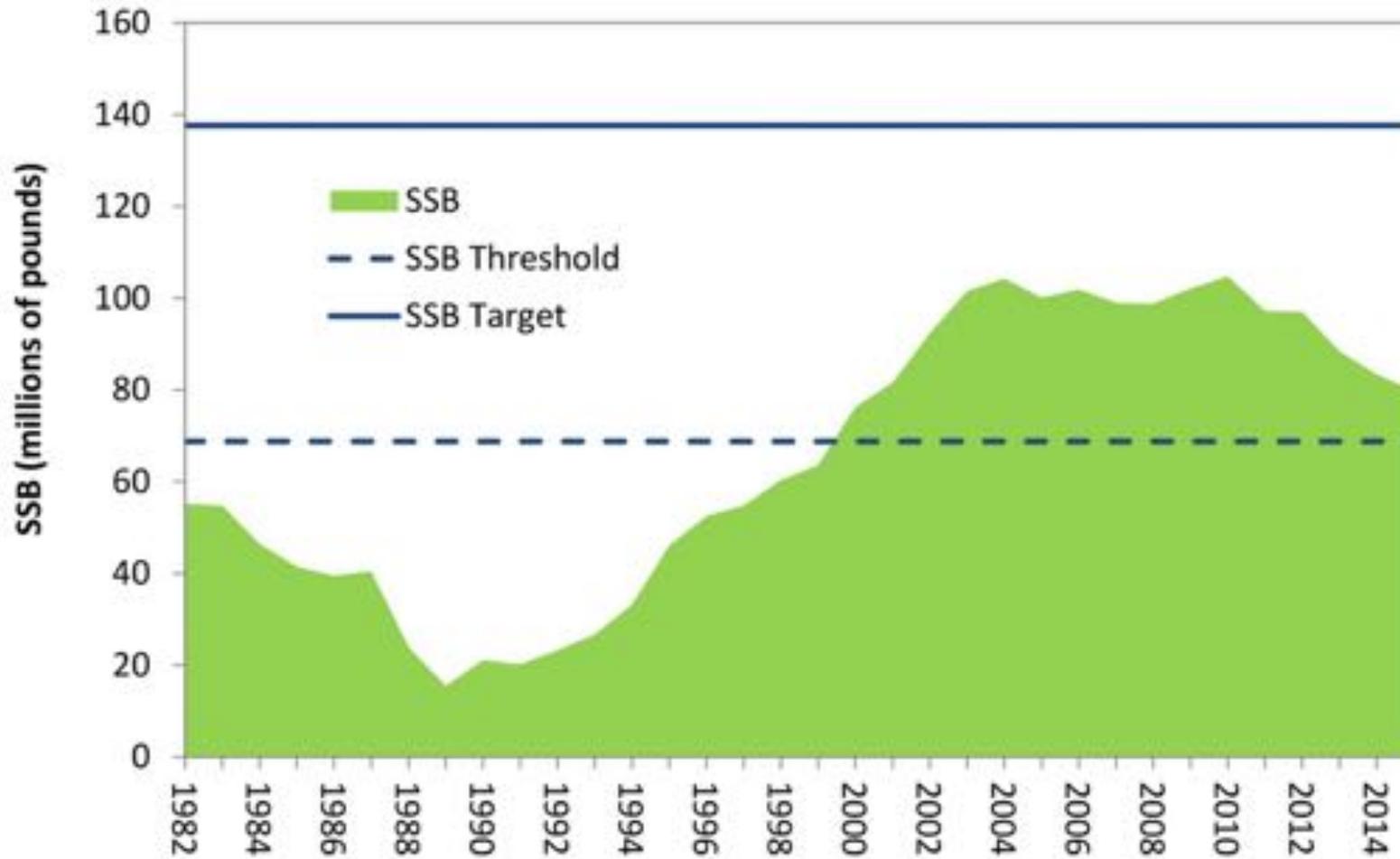
Session: Changes to Fishery Availability

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Mid-Atlantic Fishery Management Council  
May 1, 2017



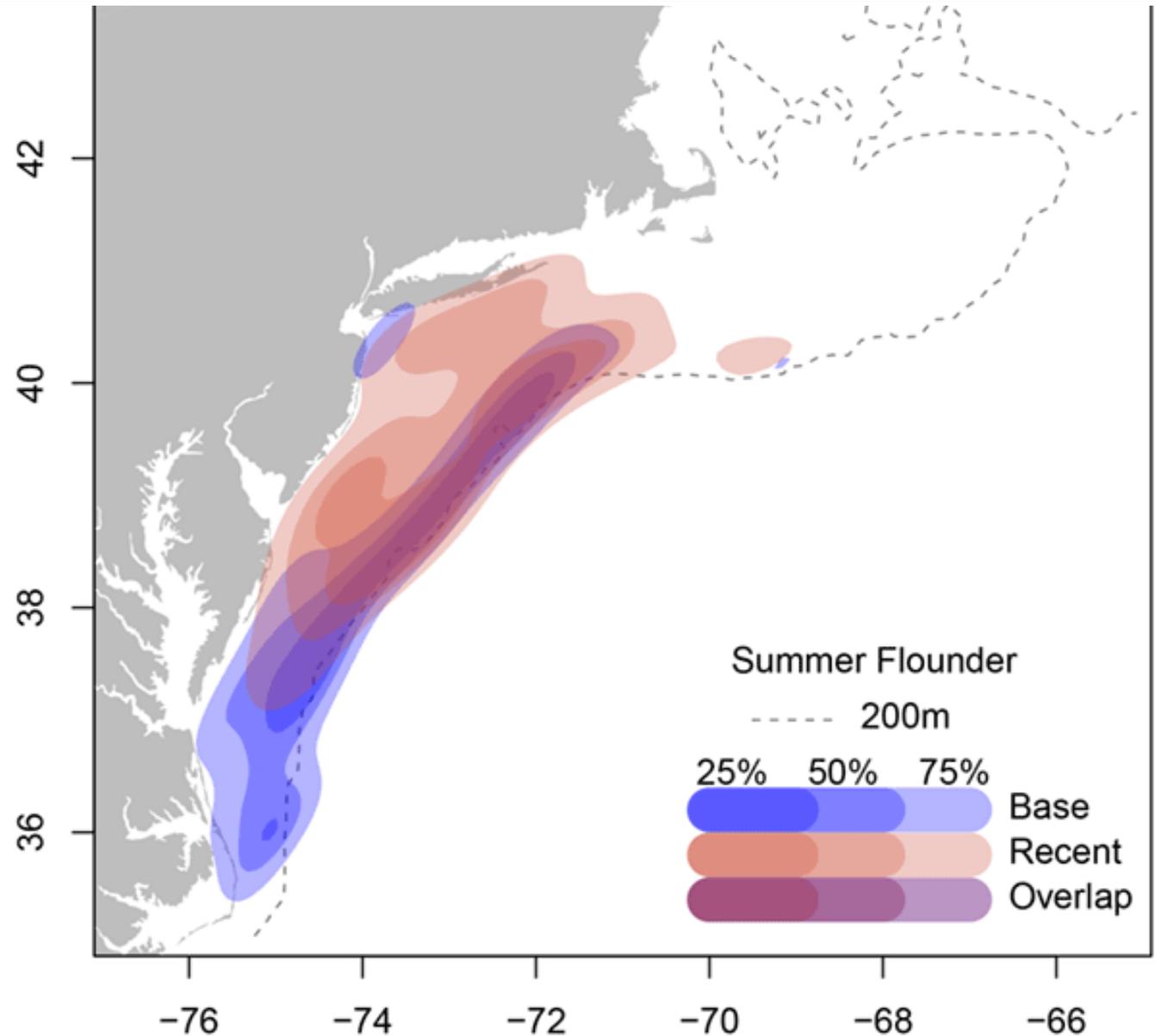
## Summer Flounder Spawning Stock Biomass (SSB)

Northeast Fisheries Science Center Assessment Update, 2016



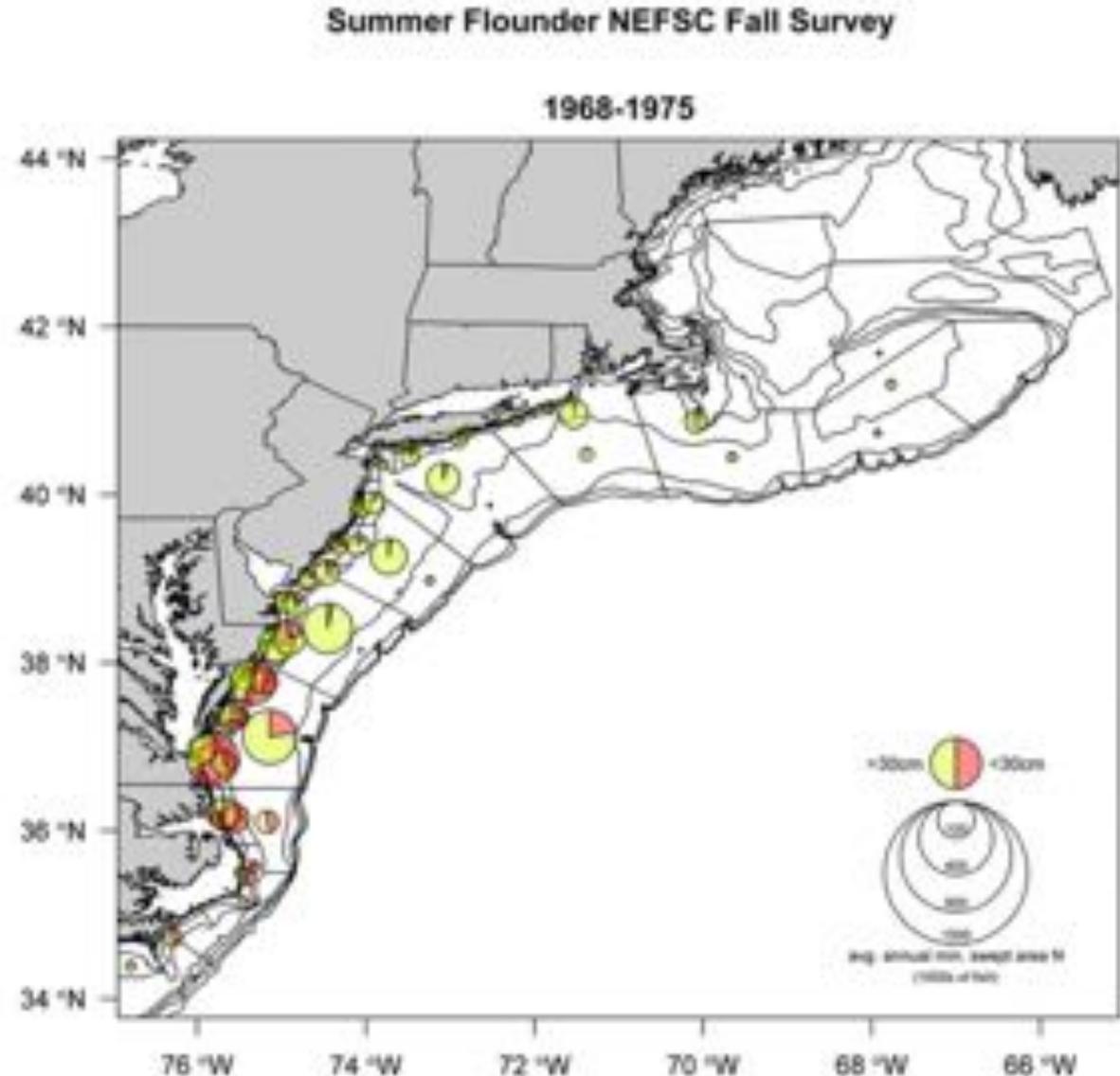
# Shifts in Summer Flounder Distribution

- Historical vs. Recent
- Spring Patterns
- Blue = 1970s distribution
- Red = 2013-2015



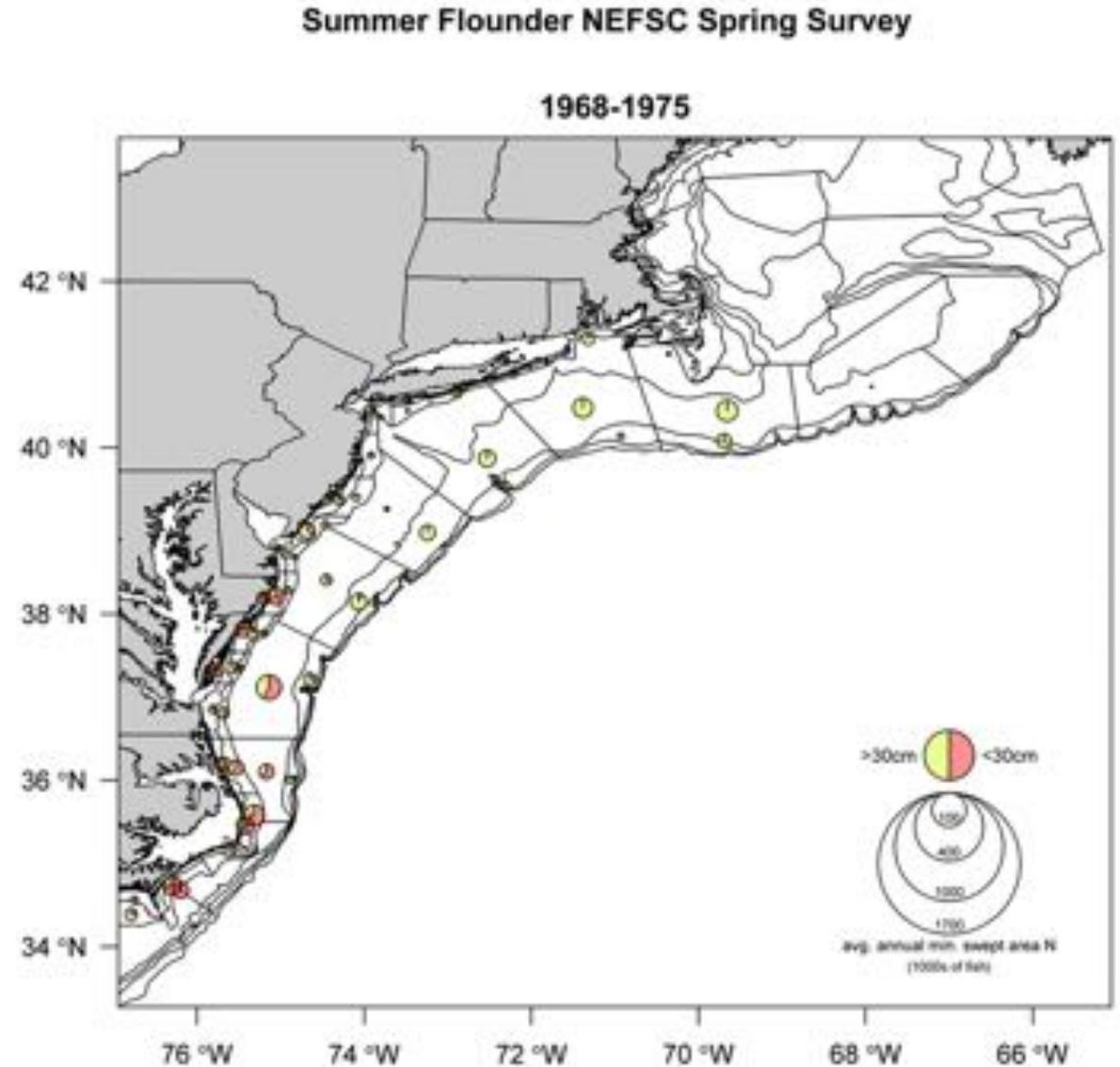
# NEFSC Fall Survey

- 1968-2012
- Center of distribution has shifted further north
- Biomass declined substantially in late 1980s-early 1990s
- Shows proportion of flounder >30 cm and <30 cm fluctuating spatially and temporally
- Age structure expands (more larger fish) during the rebuilding period (2000s)



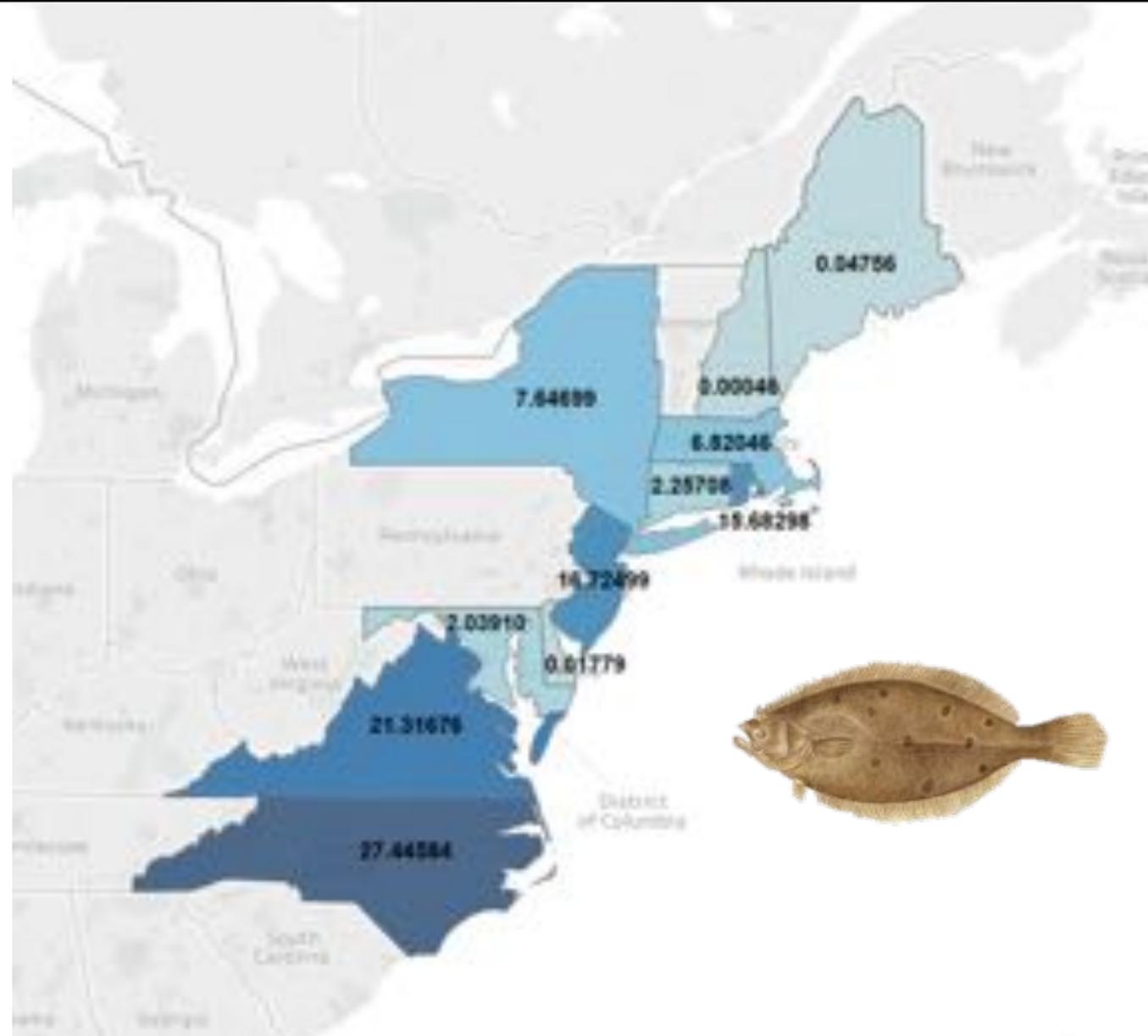
# NEFSC Spring Survey

- Similar trends in expanding age structure and increased biomass of older fish further north



# Commercial Allocations

- Unchanged since 1993
- State-by-state percentages based on 1980-1989 landings data
- Almost 50% of the quota is held by the two most southern states in the range



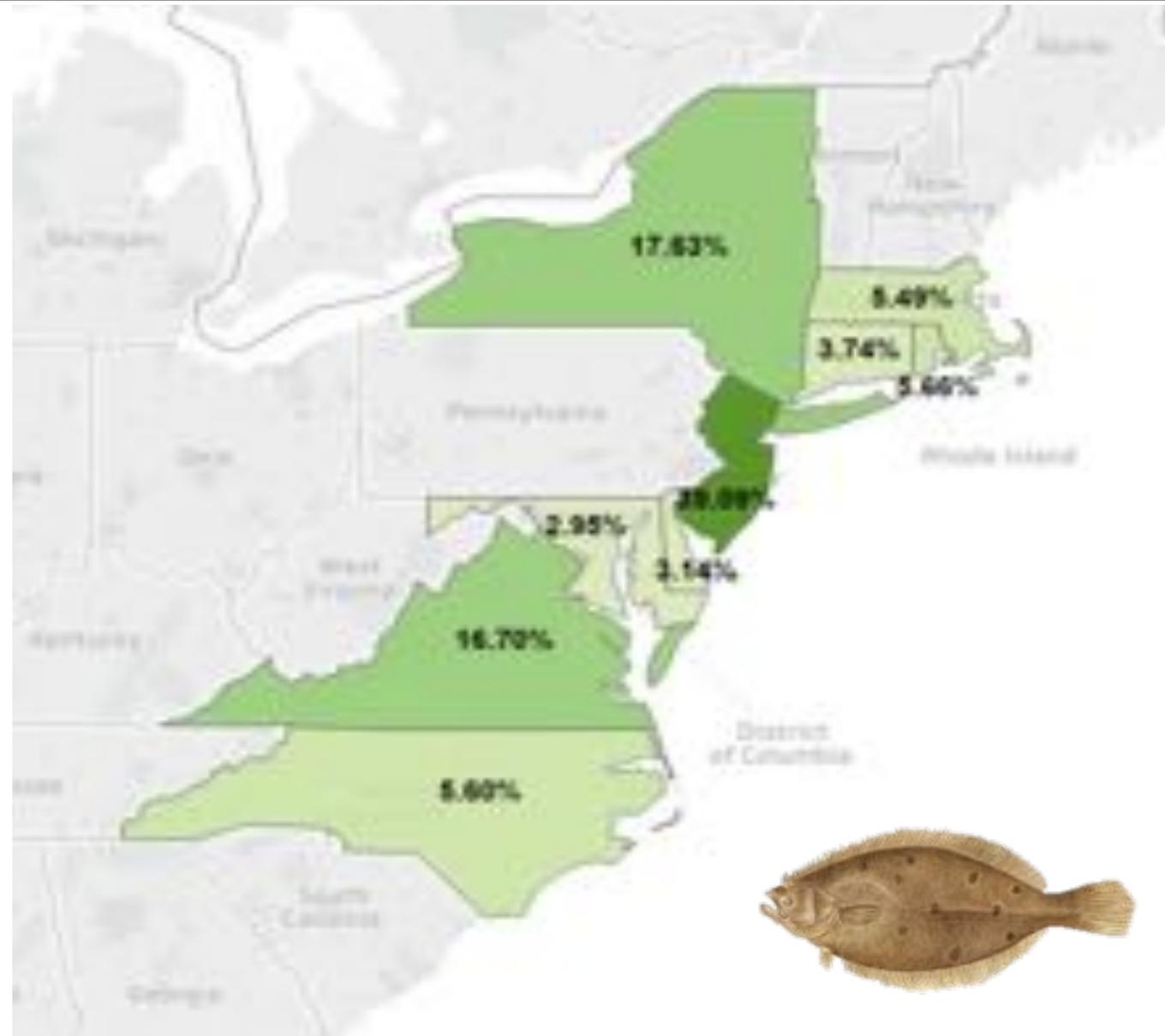


# Commercial Management Challenges

- Allocations perceived as outdated given current species distribution
- Difficult to separate effects of rebuilding vs. range expansion vs. range shift
- Importance of current distribution varies by region with varying fleet mobility (e.g., North Carolina fisheries have always been highly mobile)
- State-by-state management is constraining: many fishermen desire more flexibility to land in any port
  - Reduces steam times, fuel use, and cost to vessels
  - But: potential negative economic impacts to shore-side operations (dealers, processors, etc.) that rely on a certain amount of landings coming through a given state

# Recreational Targets

- Based on percentage of 1998 recreational landings
- Applied in each year 2001-2013
- 2014-present: moving away from these targets, toward a more flexible regional approach





## Recreational Management Challenges

- Moving away from 1998-based targets, but have not yet identified long-term recreational allocations or targets
- Varying recreational preferences by state for measures (bag, size, season) to constrain landings to harvest limits
- Recreational catch strongly driven by availability – allocations out of sync with current distribution may lead to restrictive management measures to constrain landings + high discards

Questions?

# Governance Challenges

- Joint management with states through ASMFC
- Differing legal requirements and processes
- New England states requesting additional participation as summer flounder becomes more important in the north (additional seats added to Council's Committee)



# Management Response

- Comprehensive Summer Flounder Amendment; potentially other actions taken by Council and/or Commission
- Allocations and related measures are a priority for review: Is the existing allocation appropriate for managing the summer flounder fishery? If not, how should it be revised?
- Potential revised allocations: combination of historical allocation and recent distribution?
- How do we incorporate recent distribution information into state or regional allocations?
- How and when should we reconsider allocations in the future?



## Part 1 (Changes in Fishery Availability)

- What are the potential direct and indirect consequences (biological, ecological, social, economic) of changing fishery distributions?
- How do different management approaches facilitate or constrain flexibility and adaptation to change (e.g., allocations, landing requirements, catch shares)?
- (from agenda, mostly included for reference in slide development)

## Part 2 (Governance and Coordination Challenges)

- What jurisdictional challenges and coordination needs may result from a changing environment? What's at stake?
- What are the drivers for initiating a management response? When are short-term solutions appropriate and when is longer-term coordination warranted?
- What challenges can be resolved through a management response? Through governance adaptation? Do we have the tools we need?
- (from agenda, mostly included for reference in slide development)