



**MID-ATLANTIC**  
FISHERY MANAGEMENT COUNCIL

# Summer Flounder



Management Measures for 2014-2016  
October 9, 2013

## Specifications Timeline

- September 10: Advisory Panel meets to develop fishery performance reports
- September 18: SSC meets to recommend ABCs
- September 19: Monitoring Committee meets to recommend ACTs and management measures

# Regulatory Review

- Multi-year specifications currently in place for 2013 and 2014
  - 2014 measures need revision due to new stock assessment
- Specifications through 2015 for all three species would line up multi-year specifications timeline



# Assessment

- SAW/SARC 57 and peer review (2013)
  - Stock assessment was accepted
- Assessment Summary Report included in Tab 6 (SAW/SARC)
- Draft full assessment report and peer review summary posted online



# Assessment

- Age-structured assessment program (ASAP)
- Updated biological reference points
- Updated estimates of F, SSB, and recruitment
- Projections for 2014-2016



# Assessment

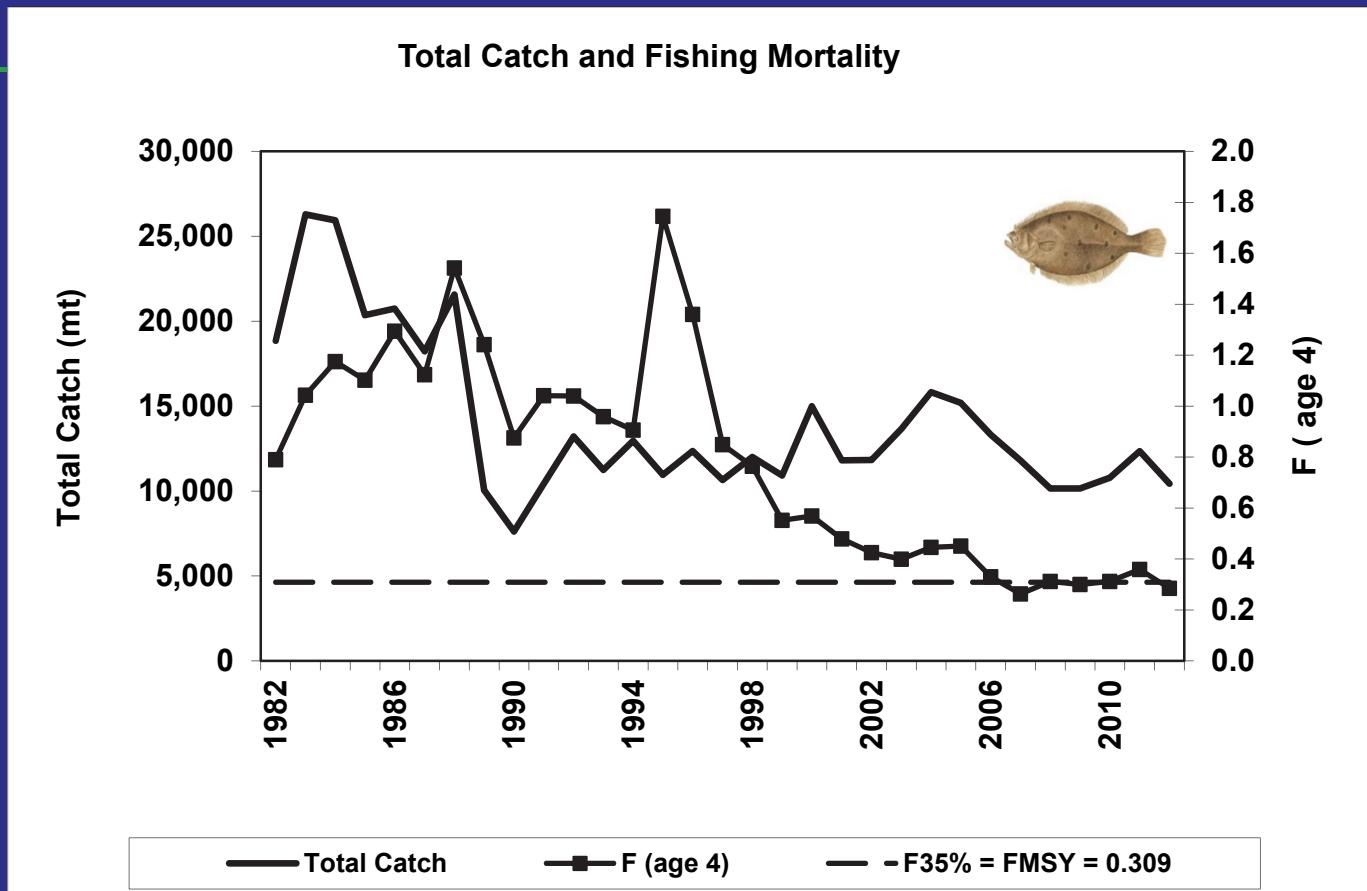
- Accepted model not sex-disaggregated
  - Implementing will require sex-specific data not currently available for the recreational catch
- Retrospective pattern not strong
- Decline in mean length and weight-at-age for all seasons, sexes combined
- Northward shift in center of distribution

# Biological Reference Points

- $F_{35\%} = F_{MSYproxy} = 0.309$
- $SSB_{MSYproxy} = 137.6 \text{ mil lb}$   
 $(62,394 \text{ mt})$
- Not overfished and overfishing is not occurring in 2012

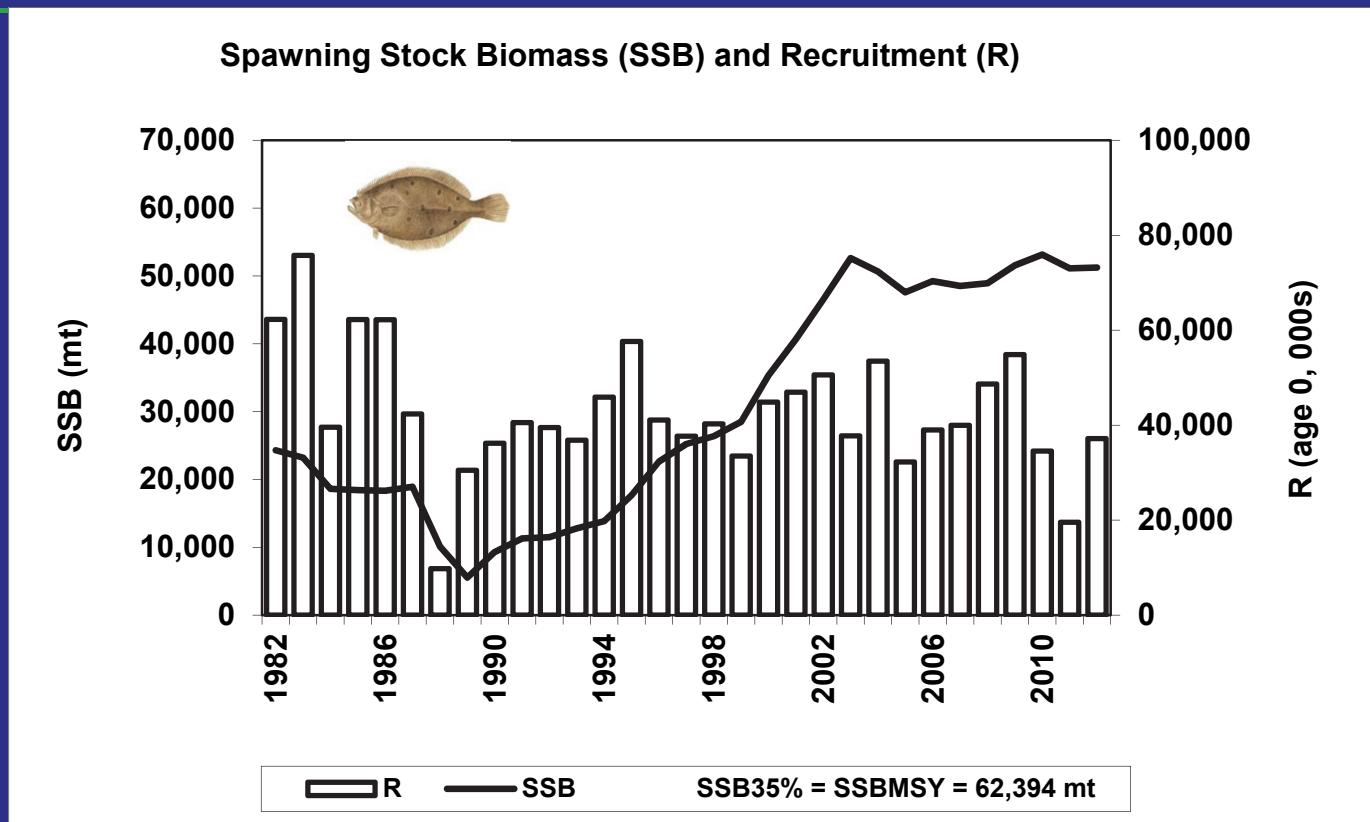


# Fishing Mortality



- 2012 F = 0.285
- Below F<sub>35%</sub> = F<sub>MSYproxy</sub> = 0.309

# Biomass



- 2012 SSB = 113.0 mil lb (51,238 mt)
- ~82% of SSB<sub>MSY</sub> = 137.6 mil lb (62,394 mt )

# 2012 Fishery Performance

- Commercial landings
  - 13.33 mil lb (6,047 mt)
  - ~5% over commercial quota
- Recreational landings
  - 6.29 mil lb (2,853 mt)
  - ~26% under rec. harvest limit

# AP Fishery Performance Report

- Concerns about proposed quota reduction (original proposal in staff memo)
  - Greater reduction from 2013 to 2014 than expected
- Biomass estimates do not reflect on the water observations of high abundance/availability
- Asked SSC to consider elevation of assessment Level and use of different CV

# AP Fishery Performance Report

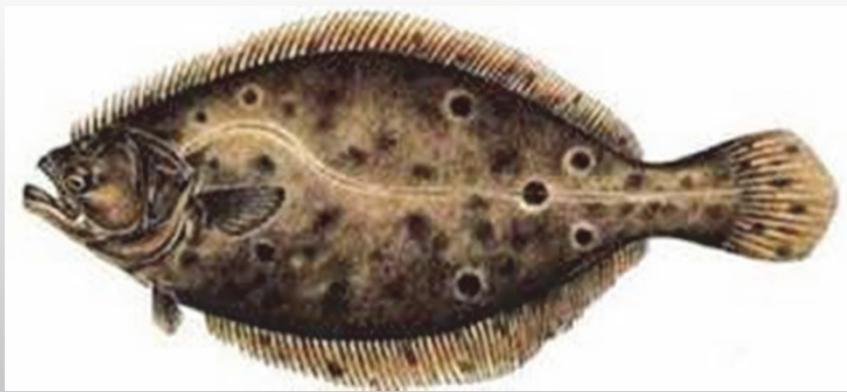
- Effects of Hurricane Sandy continue to negatively impact fishery in NJ/NY
- Observed shift in biomass to northeast
- Competition for prey with sand sharks, dogfish, skates



# AP Fishery Performance Report

- High size limits resulting in increased pressure on large females
- Lack of confidence in MRIP estimates, particularly for effort
- Ask SSC to consider different assumptions about 2013 harvest levels when calculating ABCs for 2014 and beyond



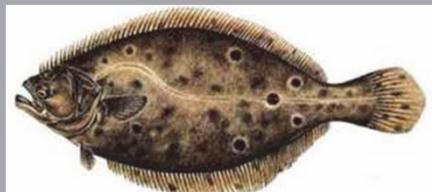


# MAFMC SSC ABC Recommendations

Summer Flounder  
2014 - 2016 Fishing Years

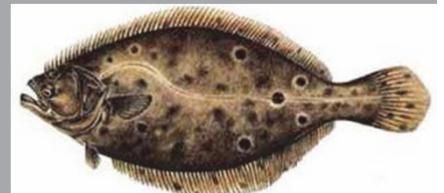
## Level 3

- In a Level 1 assessment, the SSC would use the uncertainty around the OFL directly from the assessment. In a Level 2 assessment, the assessment provides an alternative level of uncertainty. In a Level 3 assessment, the SSC provides its own estimate of uncertainty.
- The SSC was not comfortable with defining the assessment as Level 1. Because no alternative level of uncertainty in OFL was provided in the assessment, the SSC is constrained to determine the Summer Flounder assessment as Level 3.



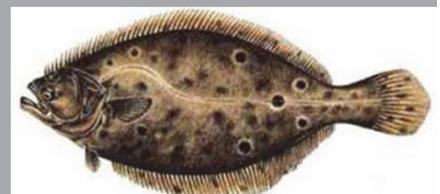
# OFL

The OFL for 2014 is **12,138 mt**, based on an  $F_{MSY}$  proxy of  $F_{35\%} = 0.309$ .



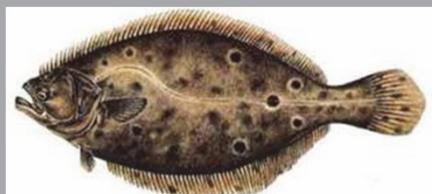
# ABC

- The SSC determined the 2014 ABC = **9,950 mt.**
- The Summer Flounder stock assessment is considerably more accurate than other assessments of mid-Atlantic stocks and, therefore, use of the default CV=100% not appropriate. Accordingly, the SSC determined that it should use a CV = 60%.



# Number of Fishing Years for ABC

- The SSC recommends a three-year ABC specification.
- The approach to specifying ABC assumes the ABC was caught in the preceding year. The SSB in the current year is then updated based on the presumed catch, and the resulting SSB estimate is multiplied by the  $F_{MSY}$  proxy to provide the OFL for the current year. The Council's risk policy is applied to the OFL by using a 60% CV to calculate the ABC.

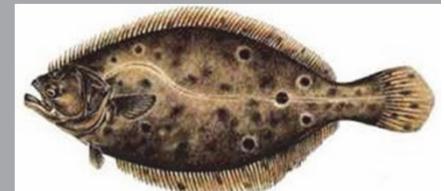


# Number of Fishing Years for ABC (cont'd)

**ABC<sub>2014</sub> = 9,950 mt**

**ABC<sub>2015</sub> = 10,329 mt**

**ABC<sub>2016</sub> = 10,999 mt**

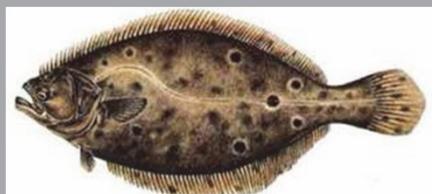


# Most Significant Sources of Scientific Uncertainty

The potential for sex-specific differences in life history parameters.

The existence of spatially distinct size distributions.

NEFSC surveys and PMAFS fishery sampling confirm sexually-dimorphic and time-varying spatial differences in growth that are not fully accounted for in the stock assessment because not all fishery and survey catches are fully and independently sampled by sex.

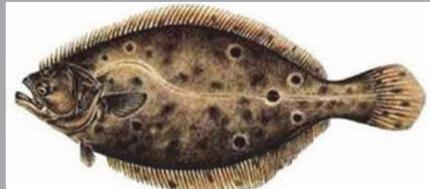


# Most Significant Sources of Scientific Uncertainty (cont'd)

Landings from commercial fishery assume no under-reporting of Summer Flounder landings and so should be considered minimal estimates.

The current assumption for M remains an ongoing source of uncertainty. M is highly influential on assessment results and impacts nearly all aspects of the assessment and evaluation of status.

The stock-recruitment relationship could not be defined internally in the model and thus an  $F_{MSY}$  proxy was used to calculate the OFL.



# MC Recommendations

- No reduction from the commercial ACL to the commercial ACT
  - Landings monitoring and closure system timely
  
- No reduction from the recreational ACL to the recreational ACT
  - Recreational fishery has under harvested in recent years

# MC Recommendations

- No changes to current mesh size or commercial fish minimum size
- No changes to SMEP or NC flynet program
- Up to 3% of TAL be made available to RSA program

# Resulting ACLs and Landings Levels

	2014	2015	2016
<b>ABC</b>	21.94 mil lb (9,950 mt)	22.77 mil lb (10,329 mt)	24.25 mil lb (10,999 mt)
<b>Commercial ACL = ACT</b>	12.87 mil lb (5,837 mt)	13.34 mil lb (6,049 mt)	14.20 mil lb (6,439 mt)
<b>Recreational ACL = ACT</b>	9.07 mil lb (4,113 mt)	9.44 mil lb (4,280 mt)	10.05 mil lb (4,560 mt)
<b>Commercial Quota (adj)</b>	10.51 mil lb (4,767 mt)	10.74 mil lb (4,870 mt)	11.38 mil lb (5,163 mt)
<b>Rec. Harvest Limit (adj)</b>	7.01 mil lb (3,178 mt)	7.16 mil lb (3,247 mt)	7.59 mil lb (3,425 mt)

# Questions?

