



2015

Harvest Reduction Estimate

August 5, 2015

Striped Bass Technical Committee

2015 Harvest Reduction Estimate



- The Board approved Addendum IV in 2014 which established new coastwide reference points and required states to reduce removals in order to reduce F to a level at or below the new target
 - Commercial fisheries reduced removals through quota reductions
 - Recreational fisheries reduced removals through bag limit and size limit restrictions

2015 Harvest Reduction Estimate



Addendum IV required reductions by:

- 25% for coastal states
- 20.5% for Chesapeake Bay states/jurisdiction

Region	Sector	Reference Harvest Estimate	2015 Harvest Estimate	Percent Reduction From Reference Harvest
Chesapeake Bay	Recreational	784,298	610,247	22.2%
	Commercial	659,963	524,671	20.5%
	Subtotal	1,444,261	1,134,918	21.4%
Coastal	Recreational	2,105,069	1,480,306	29.7%
	Commercial	182,541	162,992	10.7%
	Subtotal	2,287,610	1,643,298	28.2%
Total		3,731,871	2,778,215	25.6%

Noncompliance



- Board members tasked the TC to include some noncompliance rate to the harvest reduction estimate
- TC recommends a 100% compliance rate for the 2015 harvest reduction estimate due to:
 - different state-by-state regulations
 - unpredictable angler behavior

Noncompliance



Noncompliance harvest:

- Number of trips by catch frequency
- Summed catch frequency of 3 fish or greater

Year	2011	2012	2013	Total
*Harvest (number of fish)	2,137,688	1,229,921	849,931	4,217,540
noncompliant harvest	90,790	79,640	125,607	296,037
Percent noncompliant harvest	4%	6%	15%	7%

*calculations are based on the historical MRFSS weighting and do not include the MRIP re-estimation methodology



Striped Bass Fleet-Specific Reference Points

August 5, 2015

Striped Bass Technical Committee

Background



- 2013 Stock Assessment used 3 fleets in the model:
 - Chesapeake Bay fleet
 - Ocean fleet
 - Commercial discard fleet
- Commercial discards could not be separated into Bay and Ocean removals, so were modeled as a single fleet

Background



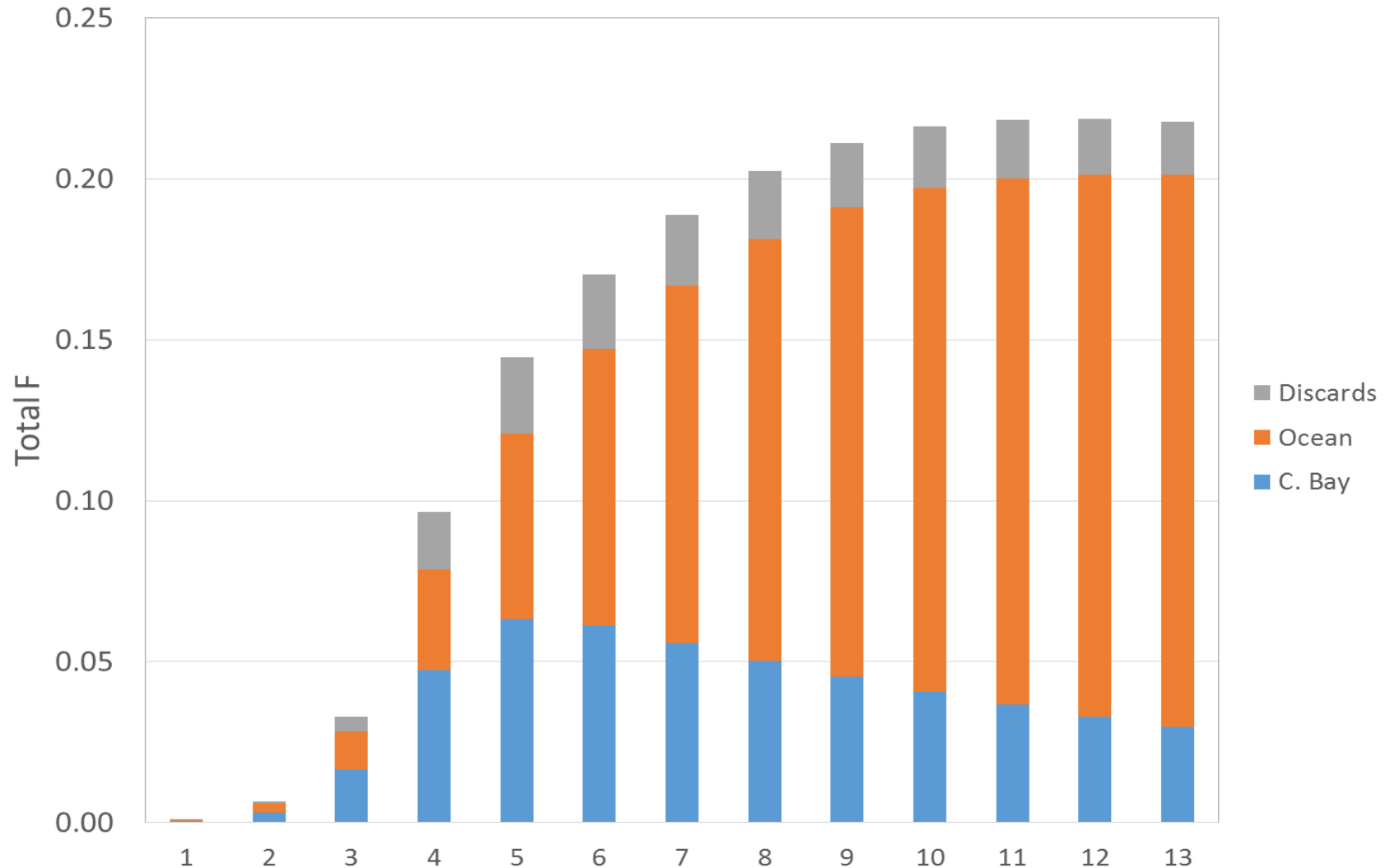
- 2013 Stock Assessment recommended coastwide reference points for F and SSB
- BRPs were developed using a composite selectivity that represented the selectivity of all three fleets, weighted by how much they contributed to total F over the last five years

	Target	Threshold
SSB	72,032 mt	57,626 mt
F	0.18	0.22

Total F=Bay F + Ocean F + Comm disc F



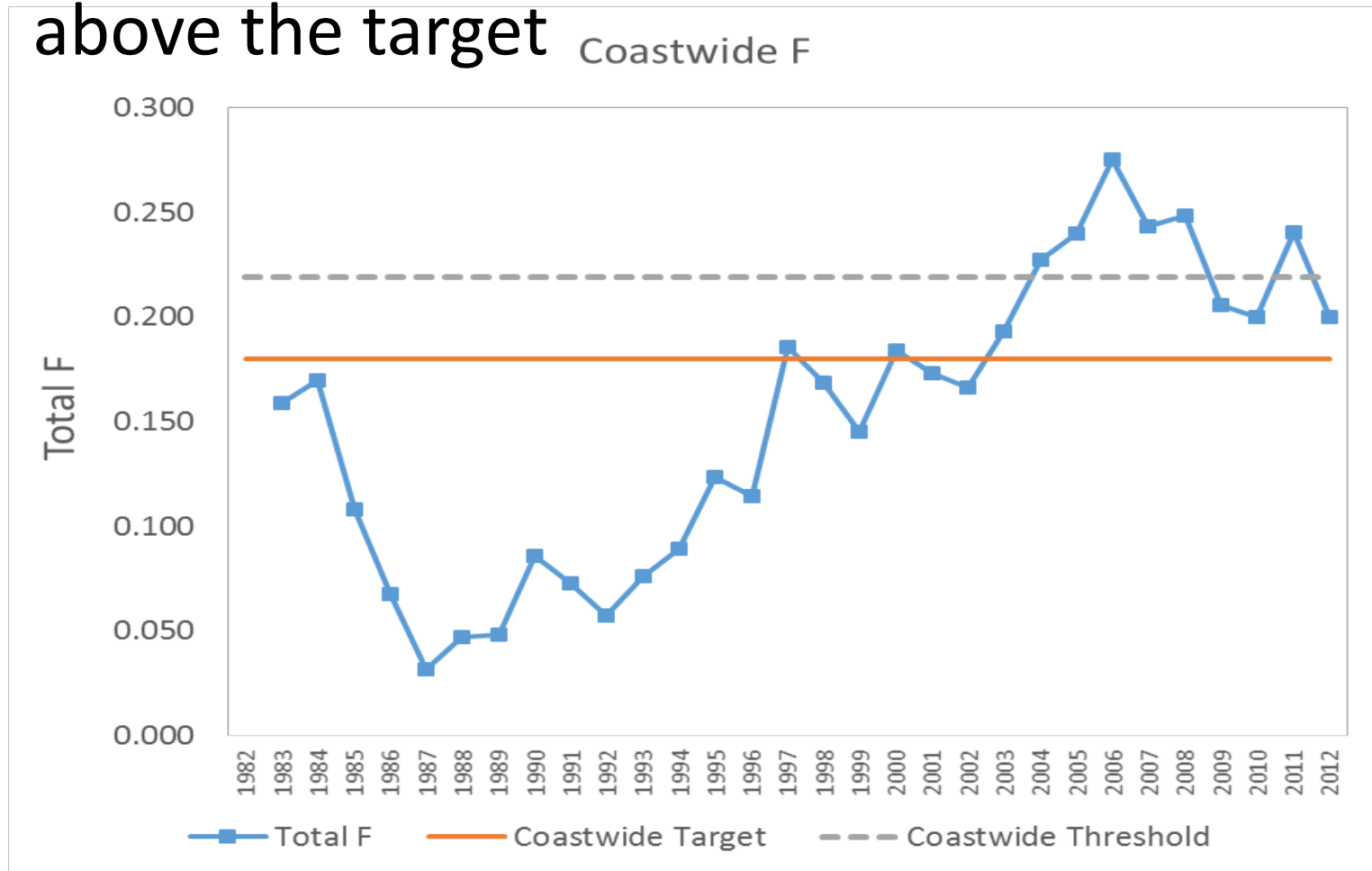
Total F-at-Age by Fleet (5 year average)



Background



- 2013 Assessment found F was below the threshold (overfishing not occurring) but above the target



Background



- The Striped Bass Board asked the TC to develop reference points for the Chesapeake Bay, Delaware Bay and Hudson River
- The TC concluded:
 - viable option and within the scope of an assessment update to develop a CB F_{RP}
 - viable option but NOT within the scope of an assessment update to develop a DB F_{RP}
 - currently not possible to derive F_{RP} for the HR using the SCAA methodology

Background



- TC developed fleet-specific F reference points that are intended to ensure that the impact of each fleet on the total coastwide striped bass population remains sustainable.
- When each fleet fishes at its target F reference point, the total F -at-age on the population is equal to the coastwide F target

Fleet Reference Points



- Each fleet's target and threshold is set at the proportion of its full F-at-age over the last 5 years to the coastwide target and threshold F at that age

$$F_{Bay\ target} = \frac{\sum F_{Bay\ Age\ 5}}{\sum F_{Total\ Age\ 5}} \cdot F_{Coastwide\ target\ Age\ 5}$$

$$F_{Ocean\ target} = \frac{\sum F_{Ocean\ Age\ 12}}{\sum F_{Total\ Age\ 12}} \cdot F_{Coastwide\ target\ Age\ 12}$$

$$F_{Comm.\ discard\ target} = \frac{\sum F_{Discard\ Age\ 5}}{\sum F_{Total\ Age\ 5}} \cdot F_{Coastwide\ target\ Age\ 5}$$

Fleet Reference Points



Fleet	F target	F threshold	F 2012	% Difference from target in 2012
Ocean	0.141	0.172	0.141	0%
Chesapeake Bay	0.052	0.064	0.059	10.8%
Commercial Discard	0.019	0.024	0.041	52.8%

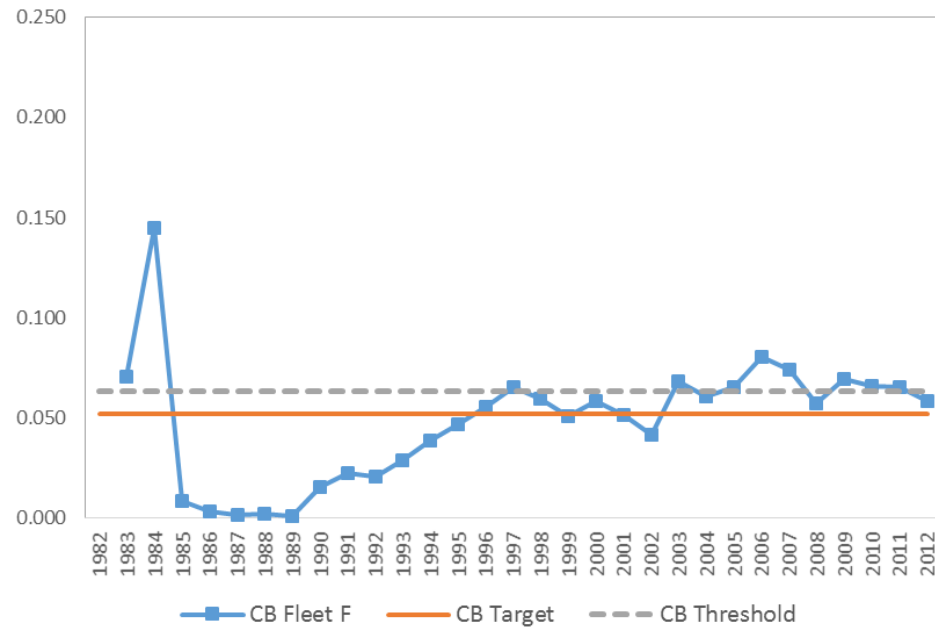
- The Ocean fleet is at the target in 2012
- The Chesapeake Bay fleet is 10.8% higher
- Commercial discard fleet is 52.8% higher

Fleet Reference Points

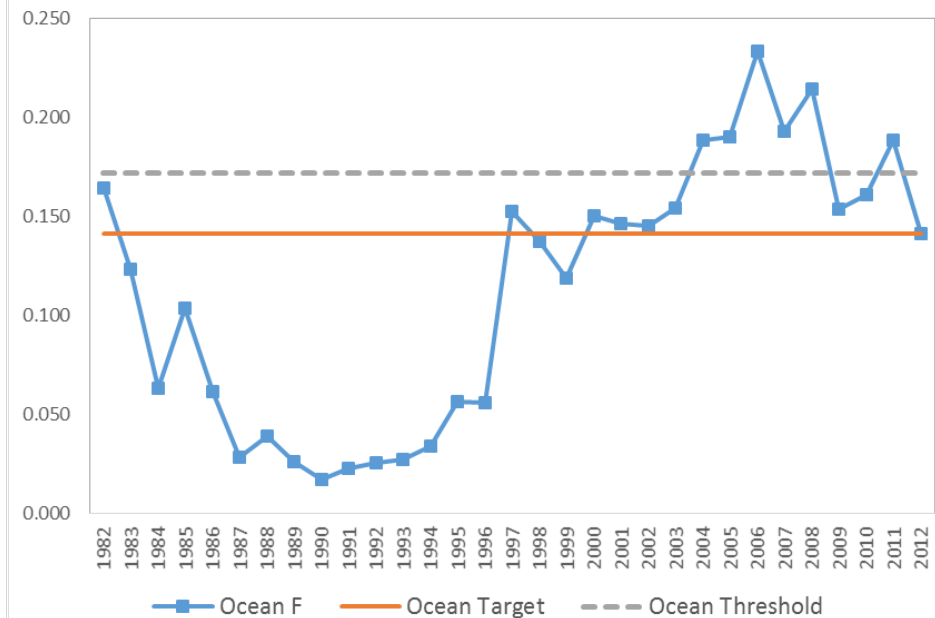


- F in the ocean has declined faster than F in the Bay over the last 5 years

Chesapeake Bay Fleet



Ocean Fleet



Potential Management Issues



- A lot of uncertainty in discard estimates
- Discarding appears to be primarily regulatory:
 - size limits
 - closed seasons
 - quotas
 - gear restrictions
- Difficult to control F in the discard fleet
 - Strong year classes lead to higher discards
 - Looser regulations will shift F to the directed fleet
 - Restrictions implemented for biological reasons

Potential Management Issues



- A target and threshold for the commercial discard fleet may not be meaningful for management
 - The population could still experience overfishing even with the Bay and the ocean fleets fishing at their targets if discard F is not controlled

Potential Management Issues



Management triggers:

- Board action required when “the” fishing mortality reference points are exceeded

Specifically:

- If the fishing mortality threshold is exceeded in any year, the Board must reduce F to the target within one year.
- If the fishing mortality target is exceeded in two consecutive years and the female SSB falls below the target within either of those years, the Board must reduce F to the target within one year.

Potential Management Issues



Fleet	F target	F threshold	F 2012	Difference from target 2012	Difference from threshold 2012
Coastwide	0.18	0.22	0.20	9%	-10%
Ocean	0.141	0.172	0.141	0%	-22%
Chesapeake Bay	0.052	0.064	0.059	10.8%	-8.6%
Commercial Discard	0.019	0.024	0.041	52.8%	42.7%

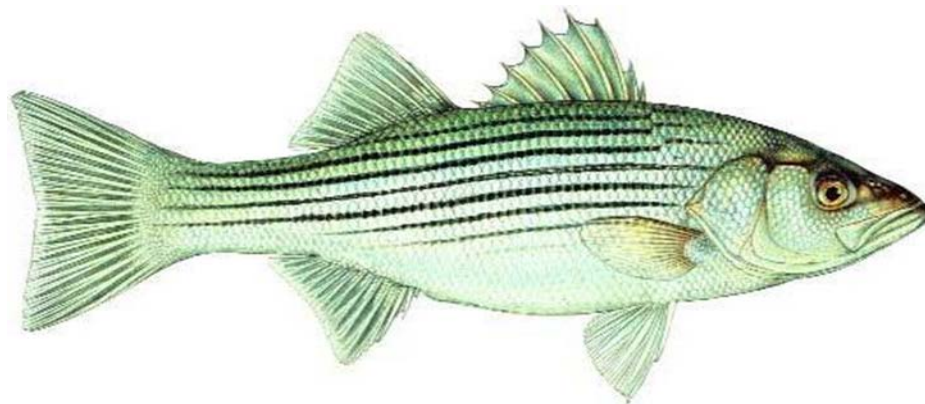
- Board to consider changes to reflect fleet-specific reference point management triggers
- Four sets of potential reference points and management triggers to consider



Questions?



2015 Striped Bass Fishery Management Plan Review



Atlantic Striped Bass Management Board
August 5, 2015

Overview



1. Status of the stock
2. Status of the fishery
3. Status of management measures
4. Compliance and PRT recommendations

Overview



- 2013 and 2014 fishing seasons
- Amendment 6 and addenda I-III
- Addendum IV was implemented in 2015

Status of the Stock

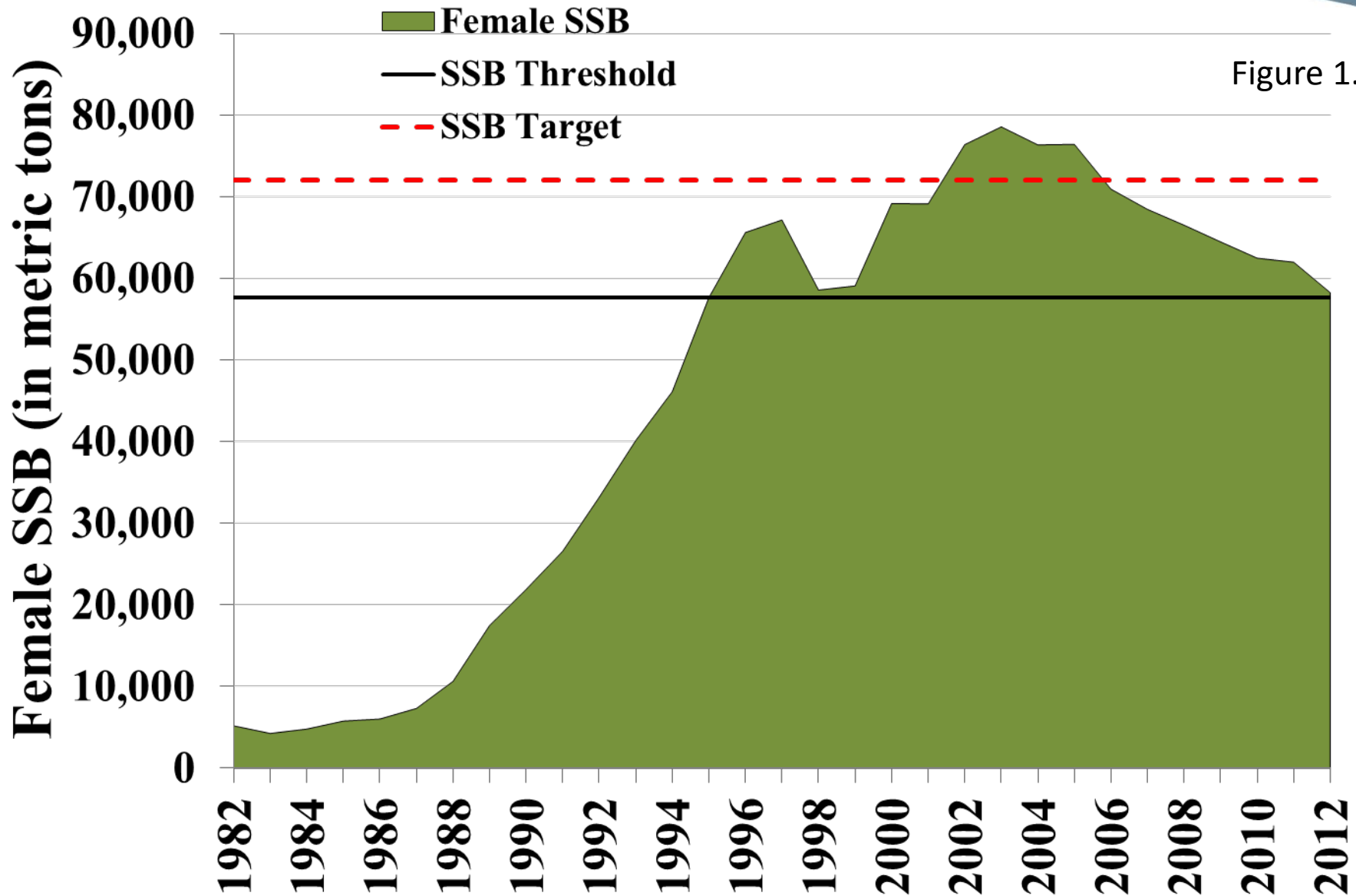


Atlantic Striped Bass stock is not overfished
and overfishing is not occurring

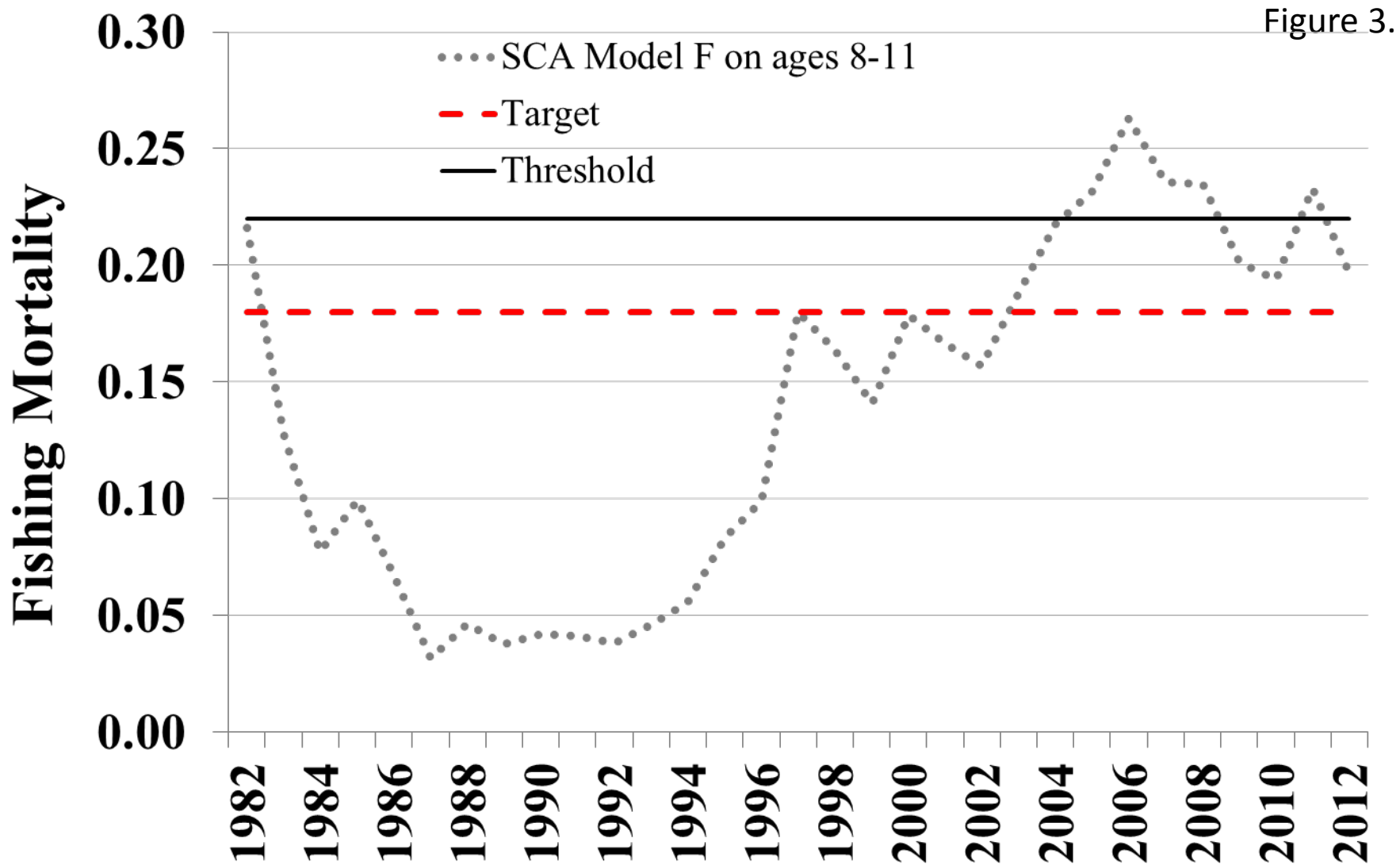
- Based on results of the 2013 benchmark stock assessment and the recommended BRPs

	<i>SSB</i>	<i>F</i>
Threshold	57,626 MT	0.22
Target	72,032 MT	0.18

Status of the Stock



Status of the Stock



Commercial Fishery



Tables 3 and 4.

Unit	Year	Total Harvest (million)	Commercial Fishery (million)	% of Total
Pounds	2013	32.23	5.824	18%
	2014	30.00	5.942	20%
	Percent difference	-7%	2%	
Fish	2013	2.917	0.765	26%
	2014	2.555	0.766	30%
	Percent difference	-12%	<1%	

- In 2014, 60% (3.58 million pounds) of commercial landings from the Chesapeake Bay fisheries

Coastal Commercial Quota



Table 8.

State	Am6 Quota (lbs)	2014 Quota	2014 Harvest	Overage	2015 Quota^ (Addendum IV)
ME	250*	-	-	-	188
NH	5,750*	-	-	-	4,313
MA	1,159,750	1,155,099	1,138,507	-	869,813
RI	243,625†	239,963	217,037	-	181,572
CT	23,750**	23,750	803	-	17,813
NY	1,061,060†	828,293	531,456	-	795,795
NJ	321,750**	321,750	3,653	-	241,313
DE	193,447	193,447	14,894	-	145,085
MD	131,560†	126,396	120,923	-	90,727
VA	184,853	184,853	183,668	-	138,640
NC	480,480	480,480	-	-	360,360

^ Addendum IV quota reduced for MD (90,727 lbs) and RI (181,572 lbs) through conservation equivalency

Recreational Fishery



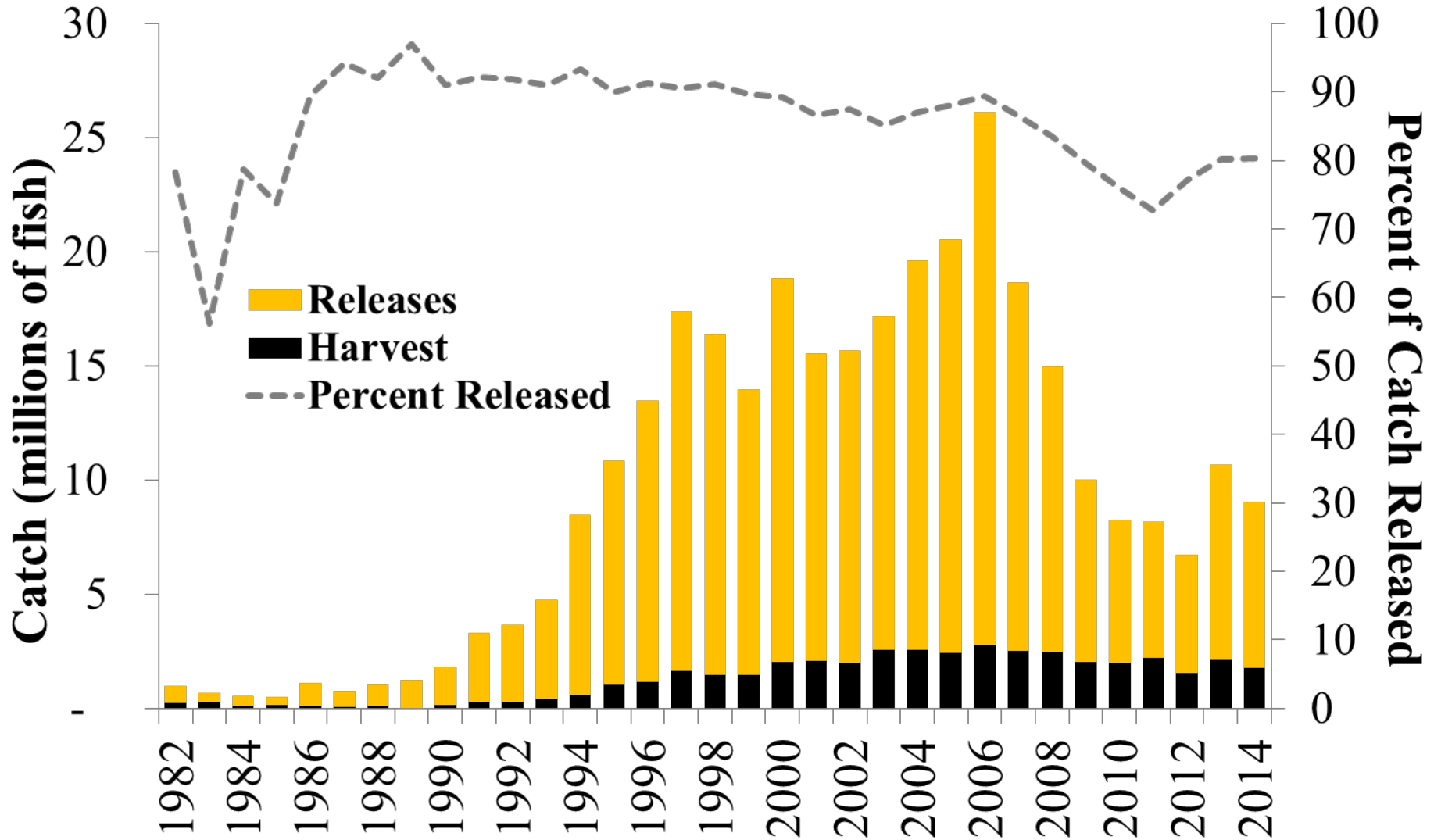
Tables 5 and 6.

Unit	Year	Total Harvest (millions)	Recreational Fishery (millions)	% of Total
Pounds	2013	32.23	26.41	75%
	2014	30.00	24.06	80%
	Percent difference	-7%	-9%	
Fish	2013	2.917	2.152	74%
	2014	2.555	1.789	70%
	Percent difference	-12%	-16%	

Recreational Fishery Status



Figure 9 and Table 7.



Chesapeake Bay Quota



Table 9.

2014	Jurisdiction	Quota	Harvest
Commercial Fisheries	Maryland	1,925,421	1,805,698
	Virginia	1,402,326	1,169,412
	PRFC	790,484	603,068
	Subtotal	4,118,231	3,578,178
	Percent of total		49%
Recreational Fisheries	Maryland	2,604,982	3,228,369
	Virginia	1,402,325	497,152
	PRFC	526,989	*
	Subtotal	4,534,296	3,725,521
	Percent of total		51%
Chesapeake Bay Total		8,652,527	7,303,699

Albemarle Sound/Roanoke River



Reference Point	Fishing Mortality (F)	Spawning Stock Biomass (pounds)
Target	0.33	969,496
Threshold	0.41	785,150
2012	0.34	835,462

- 2014 harvest = 121,956 pounds (31,114 fish)
 - 28% from the RRMA
 - 72% from ASMA

Status of Management Measures



Juvenile Abundance Indices (JAIs)

- TC reviews JAIs from 6 juvenile surveys (Fig. 10)
- Recruitment failure = a value that is lower than 75% of all values in the dataset for three consecutive years
- TC evaluated 2012, 2013, and 2014 JAI values

No states met the criteria for recruitment failure in 2015

Status of Management Measures



Addendum III: Commercial Tagging Program

- requires all states with commercial fisheries to implement a commercial tagging program
- submit monitoring reports 60 days prior to the start of their commercial fishing season
- reports include:
 - Number of tags issued
 - Tag appearance (date,color)
 - Program changes
 - Any other issues

Status of Management Measures



Addendum III: Commercial Tagging Program

- Not all states submitted commercial tag program monitoring reports
- In 2013 and 2014, the PRT found that all states implemented commercial tagging programs consistent with the requirements of Addendum III
- Refer to Table 10

Compliance and Recommendations



- All states implemented regulations consistent with Amendment 6 and its addenda (I-III)
- All states to submit commercial tagging reports as described in Addendum III to Amendment 6
- The Plan Review Team recommends that the Board accept the 2015 Striped Bass Fishery Management Plan Review for Striped Bass.

Questions?

