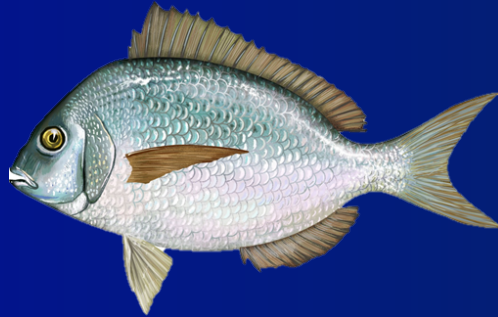


# Scup Specifications

## 2020-2021



Council and Board  
October 8, 2019  
Durham, NC



**MID-ATLANTIC** | FISHERY  
MANAGEMENT  
COUNCIL



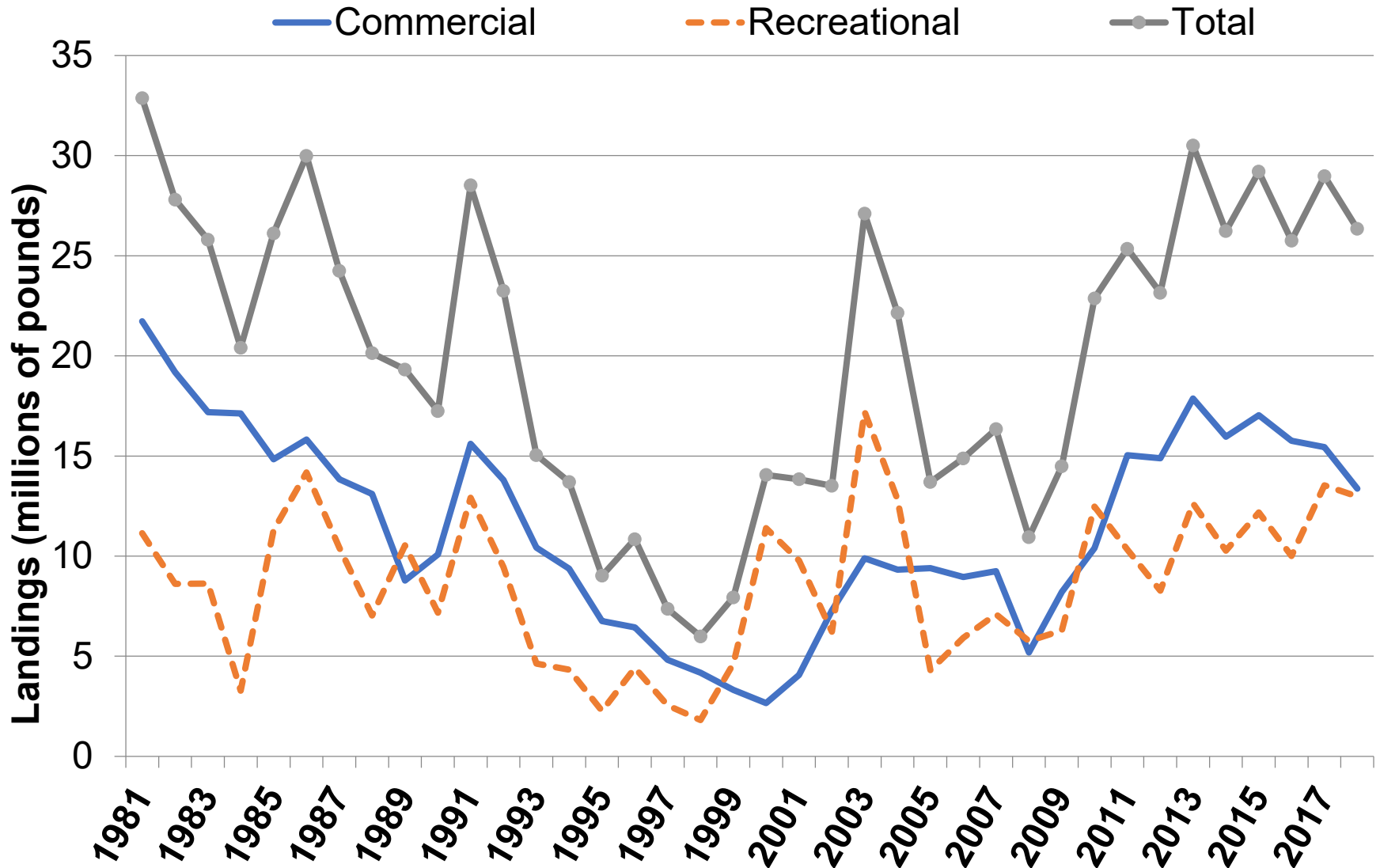
# Outline

- Stock status
- Recent fishery performance and AP Fishery Performance Report
- SSC recommendations (Dr. Boreman)
- Monitoring Committee recommendations
- AP comments on specifications

# Stock Status

- Based on 2019 Operational Assessment
- 2018
  - Not overfished (198% of  $B_{MSY}$ )
  - Overfishing not occurring (27% below  $F_{MSY}$ )
- Below average recruitment 2016-2018

# Landings (with revised MRIP)



# Commercial Quota and Landings

<b>Year</b>	<b>Quota (mil lb)</b>	<b>Landings (mil lb)</b>	<b>% of quota landed</b>
<b>2014</b>	<b>21.95</b>	<b>15.96</b>	<b>72%</b>
<b>2015</b>	<b>21.23</b>	<b>17.03</b>	<b>80%</b>
<b>2016</b>	<b>20.47</b>	<b>15.76</b>	<b>77%</b>
<b>2017</b>	<b>18.38</b>	<b>15.44</b>	<b>84%</b>
<b>2018</b>	<b>23.98</b>	<b>13.37</b>	<b>55%</b>

# RHL and Landings

<b>Year</b>	<b>RHL (mil lb)</b>	<b>Harvest (old MRIP, mil lb)</b>	<b>% of RHL harvested (old MRIP)</b>	<b>Harvest (new MRIP, mil lb)</b>
<b>2014</b>	<b>7.03</b>	<b>4.43</b>	<b>63%</b>	<b>10.27</b>
<b>2015</b>	<b>6.80</b>	<b>4.41</b>	<b>65%</b>	<b>12.17</b>
<b>2016</b>	<b>6.09</b>	<b>4.26</b>	<b>70%</b>	<b>10.00</b>
<b>2017</b>	<b>5.50</b>	<b>5.42</b>	<b>98%</b>	<b>13.54</b>
<b>2018</b>	<b>7.37</b>	<b>5.61</b>	<b>76%</b>	<b>12.98</b>

# AP Fishery Performance Report

## *General Management Issues (All 3 Species)*

- “No faith” in MRIP data, particularly revised estimates
  - Perceived inaccuracies, especially proportions by mode
  - Concern with high PSEs
  - Confusion about how MRIP scales up catch estimates from raw data

# AP Fishery Performance Report

## *General Management Issues (All 3 Species)*

- Concern that MRIP estimates do not reflect catch by anglers going back to private docks
- Request for use of mobile app reporting for anglers
- MRIP intercept survey appears to disproportionately sample Montauk area at expense of rest of NY



# AP Fishery Performance Report

## *General Management Issues (All 3 Species)*

- Permitting, monitoring and reporting process should be overhauled for both sectors
- Latent permits should be addressed at state and federal levels (commercial and for-hire)
- Concern about “for-hire guides” on private vessels in New York that are not properly reporting

# AP Fishery Performance Report

## *General Management Issues (All 3 Species)*

- Enhanced reporting needed for the recreational fishery; comments included:
  - Rec. fishery should have same level of reporting as commercial
  - Electronic reporting should be required for private anglers
  - 1 disagreed with mandatory private angler reporting since most “fish for fun” and reports would be less accurate

# AP Fishery Performance Report

## *Scup: Market/Economic*

- Competition with croaker/tilapia.
- Changing seasons and closures affects market.
- In RI, efforts to increase the market for scup and try to make it more appealing.
- Winter commercial fishery: predictable and relied on, higher demand and better prices helpful for NJ scup fishermen.

# AP Fishery Performance Report

## *Scup: Management*

- 2018 quota period change:
  - no effect due to market price.
  - may have reduced discards.
- 50,000 lb trip limit:
  - positive for trawlers in NJ and NY.
- Email comments:
  - consider 5% allowance for undersized scup.
  - consider increasing minimum size.

# AP Fishery Performance Report

## *Scup: Recreational Fishery*

- Angler interest is driving harvest, bag limit is high.
- Charter boats use for striped bass bait, party boats target scup.
- Fishing season is shorter than the open season because in October the scup move to deeper water.
- Winter fishery important to party boats in RI.
- 2018 Shore mode estimate of 43% too high.

# AP Fishery Performance Report

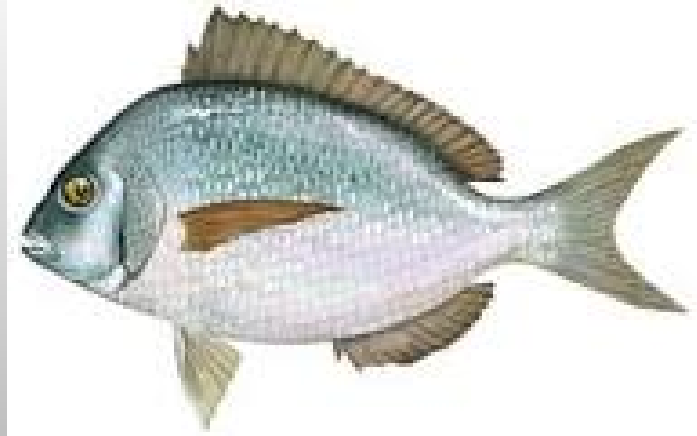
## *Scup: Environmental*

- Why SSB decreasing with high 2015 year class?
- In 2019, statistical area 626 (off of VA) had high scup catch for the first time in 18 years. Potential for northeast migration to reverse.
- Mild fall, fish were never driven offshore.

# AP Fishery Performance Report

## *Scup: Research Priorities*

- MSE for scup is not a priority.
- Look at why the stock is doing so well compared with others.
- Research the long-term effects of management.
- Scup aquaculture.



# MAFMC SSC ABC Recommendations

Scup

2020-21 Fishing Years



# Assessment Information Content Category

## SSC-modified OFL probability distribution

- Operational assessment OFL approved by peer review panel
- Based on the acceptance of the operational assessment by the peer review panel, there is adequate basis to specify an OFL
- Important uncertainties in OFL not captured in assessment model.



# Overfishing Limit = 21,350 mt for 2019

## New Process for OFL CV Category Determination

- Based on nine decision criteria with non-binding guidelines for three CV levels (60%, 100%, or 150%)
- SSC species lead proposes justification to OFL CV working group, working with NEFSC and MAFMC staff
- WG agrees on draft matrix to be posted prior to SSC meeting
- Full SSC reviews WG recommendation at meeting and modifies, if necessary



# CV for Overfishing Limit = 60%

## Justification

- Largely based on high data quality and giving high weight to that OFL CV criterion, as well as consistency of signals from surveys, catch-at-age, and model results; the data agree with theory throughout
- Relatively low effect of revised MRIP estimates
- Only minor retrospective patterns in the statistical catch-at-age model;



# Recommended ABCs

## Variable ABCs

Year	ABC	$B/B_{MSY}$	$p^*$
2020	16,227 mt	1.75	0.40
2021	13,913 mt	1.62	0.40

## Constant ABCs

Year	ABC	$B/B_{MSY}$	$p^*$
2020	15,070 mt	1.75	0.349
2021	15,070 mt	1.63	0.450



# Recommended ABCs

## Interim Metrics

- Updated landings and discard data
- Survey indices
- Fishery Performance Report



# Most Significant Sources of Scientific Uncertainty

- Following the record 2015 year class, recruitments in 2016, 2017, and 2018 have all been below the time series mean
- The Scup SCAA uses multiple selectivity blocks. The final selectivity block (2006-2018) is the longest in the model. The applicability of the most recent selectivity block to the current fishery condition is uncertain.



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

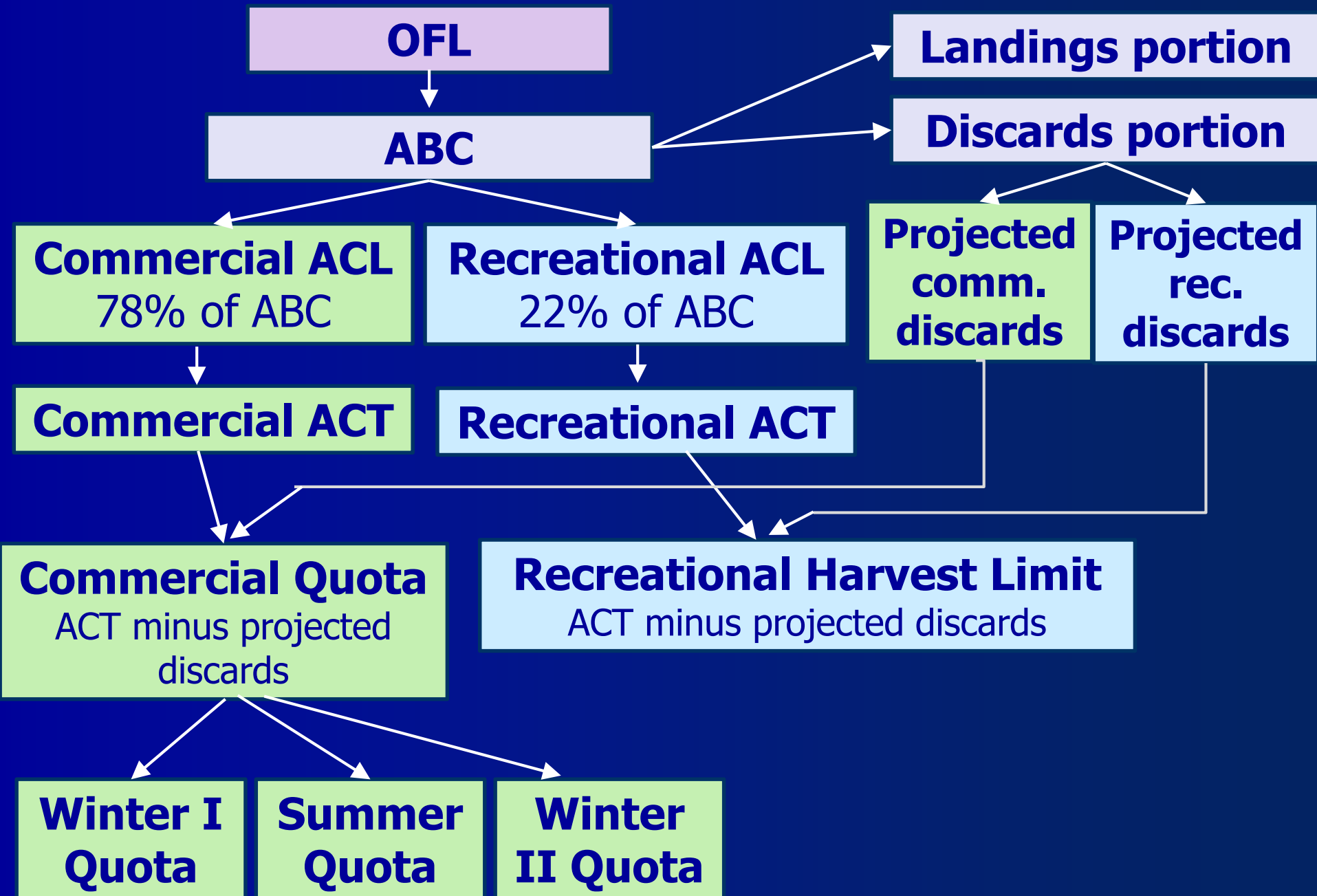
- Most of the fishery-independent indices used in the model provide estimates of the abundance of Scup < age 3. As a result, the dynamics of these older fish remain uncertain.
- The projection on which the ABC was determined is based on an assumption that the quotas would be landed in 2019, 2020, and 2021.



# 2020-2021 ABCs

<b>2019 and interim 2020 ABC</b>	<b>2020 and 2021 standard ABC approach (mil lb)</b>		<b>2020 and 2021 average ABC approach (mil lb)</b>	
<b>Current</b>	<b>2020</b>	<b>2021</b>	<b>2020</b>	<b>2021</b>
<b>36.43</b>	<b>35.77</b>	<b>30.67</b>	<b>33.22</b>	<b>33.22</b>





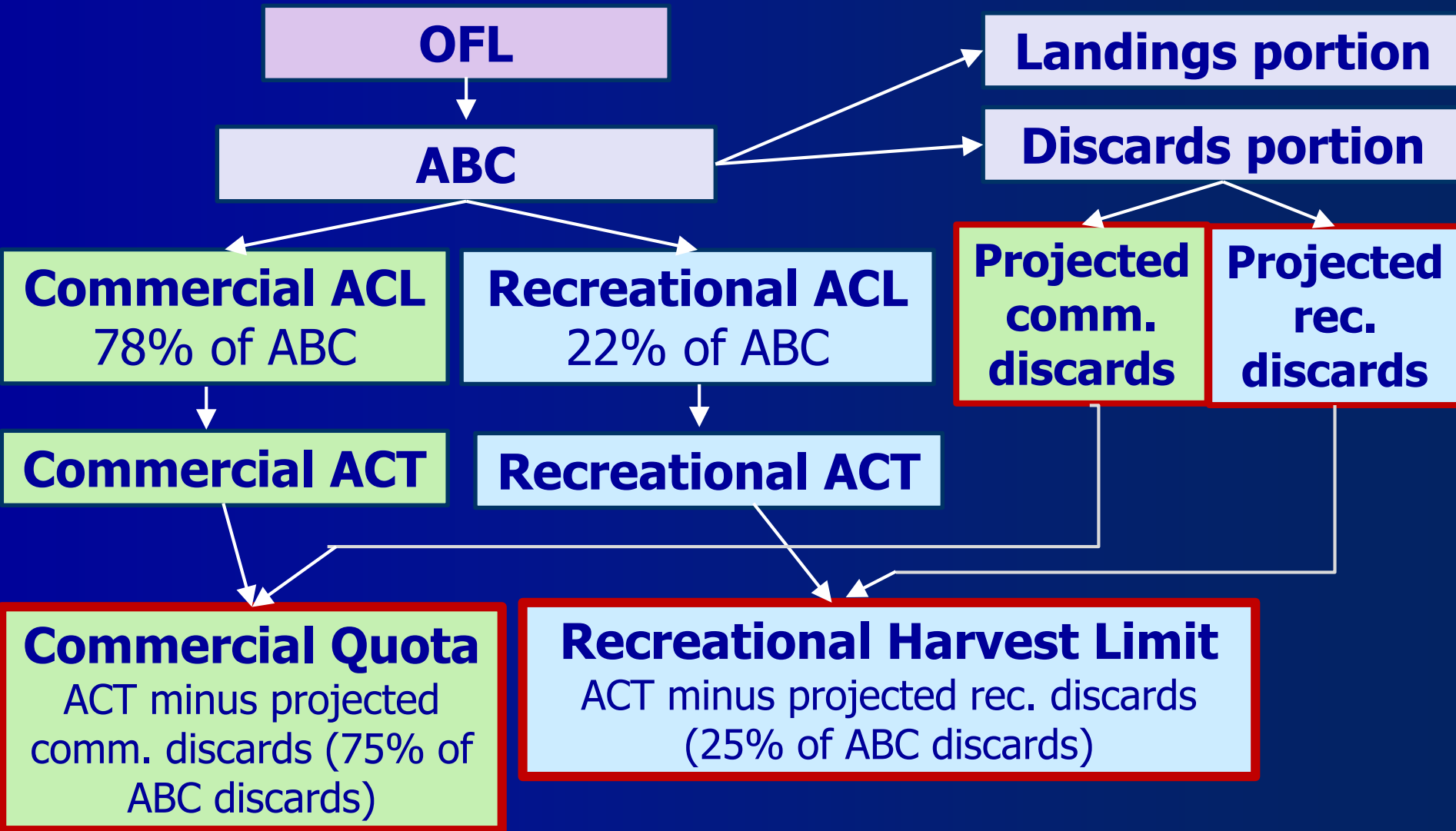
# Staff Recommended ACLs, ACTs, and Landings Limits

## ■ Later revised by MC

	2019 and interim	2020 and 2021 standard ABC		2020 and 2021 average ABC	
	2020	2020	2021	2020	2021
<b>ABC</b>	36.43	35.77	30.67	33.22	33.22
<b>Commercial ACL and ACT</b>	28.42	27.90	23.92	25.91	25.91
<b>Proj. comm. discards</b>	4.43	5.67	5.86	5.80	5.80
<b>Commercial quota</b>	23.98	<b>22.23</b>	<b>18.06</b>	<b>20.11</b>	<b>20.11</b>
<b>Recreational ACL and ACT</b>	8.01	7.87	6.75	7.31	7.31
<b>Proj. rec. discards</b>	0.65	1.36	1.40	1.39	1.39
<b>RHL</b>	7.37	<b>6.51</b>	<b>5.34</b>	<b>5.92</b>	<b>5.92</b>

# MC Recommendations

- Use a 10-year average instead of a 3-year average to calculate proportion of discards by sector
  - Smooth out year-to-year variability
  - Can be driven by recruitment and other factors
  - May better estimate expected discards
- ACTs = ACLs
- No changes to the commercial measures



Changing from a 3-year to 10-year average to calculate projected discards:

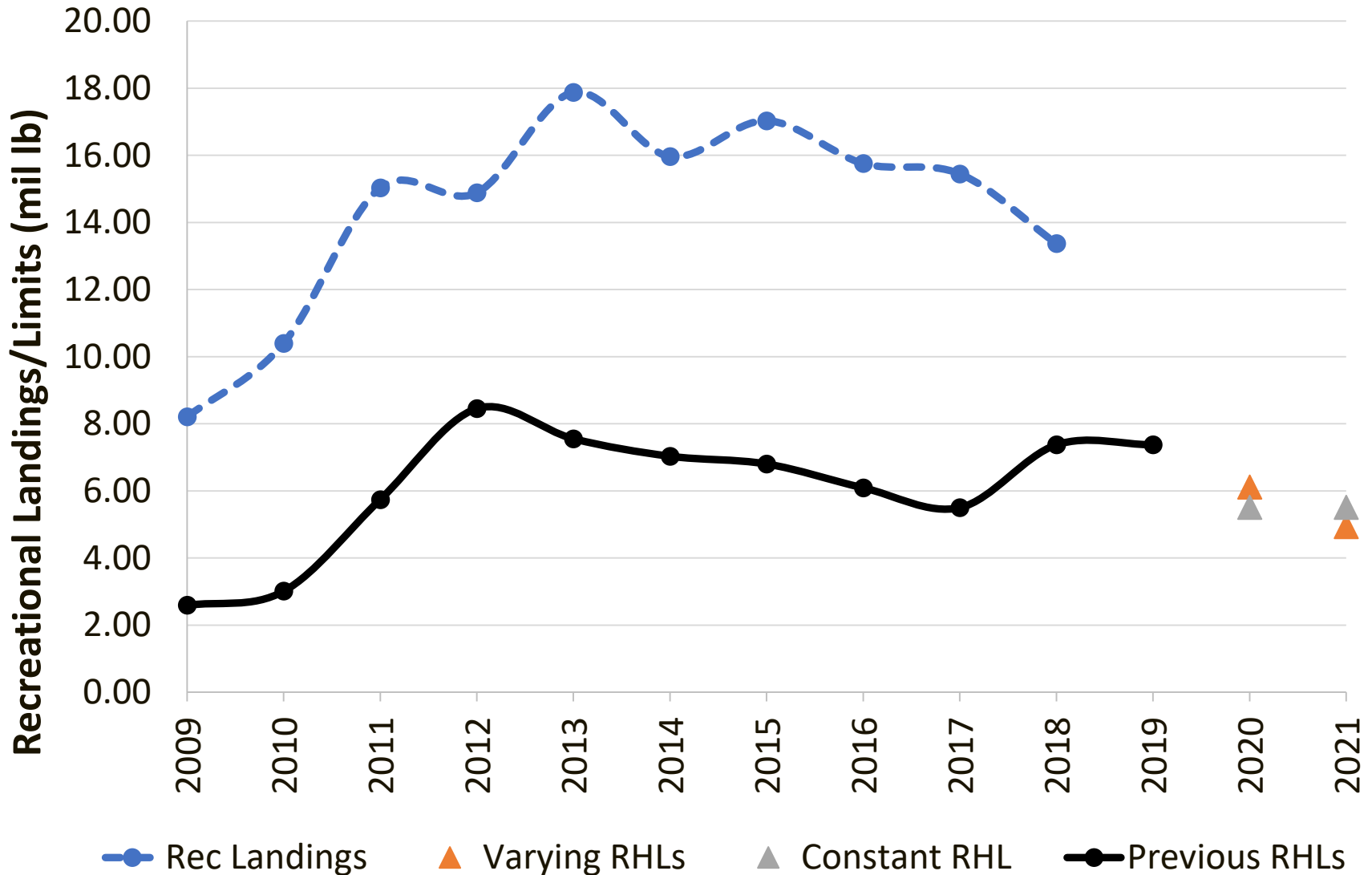
- Proportion of discards attributed to commercial sector went from 80.7% to 75%
- Rec. sector went from 19.3% to 25%

# MC Recommended ACLs, ACTs, and Landings Limits

	2019 and interim 2020	standard ABC approach		average ABC approach
		2020	2021	2020 and 2021
<b>ABC</b>	36.43	<b>35.77</b>	<b>30.67</b>	<b>33.22</b>
<b>Commercial ACL=ACT</b>	28.42	27.90	23.92	25.91
<b>Proj. commercial discards</b>	4.43	5.27	5.45	5.39
<b>Commercial quota</b>	23.98	<b>22.63</b>	<b>18.48</b>	<b>20.52</b>
<b>Rec ACL=ACT</b>	8.01	7.87	6.75	7.31
<b>Proj. rec discards</b>	0.65	1.76	1.82	1.80
<b>RHL</b>	7.37	<b>6.11</b>	<b>4.93</b>	<b>5.51</b>

# Recreational Landings vs Potential

## 2020-2021 RHLs



# AP Comments

- More outreach and education on rec. fishing methods that correspond with measures
- Lower the size limit, have a cumulative total length measure in rec. fishery
- Averaged ABC approach to promote stability
- If a stock is over 100% of  $B_{MSY}$ , more flexibility
  - underages could be applied to future years similar to overages
- What will the reduction in harvest be in 2020 to meet the RHL?

# Council and Board Decision Points

- ABC approach: averaged vs varying
- ACLs and ACTs
- RHLs and commercial quotas
- Changes to commercial measures (if any)



# MC Recommended ACLs, ACTs, and Landings Limits

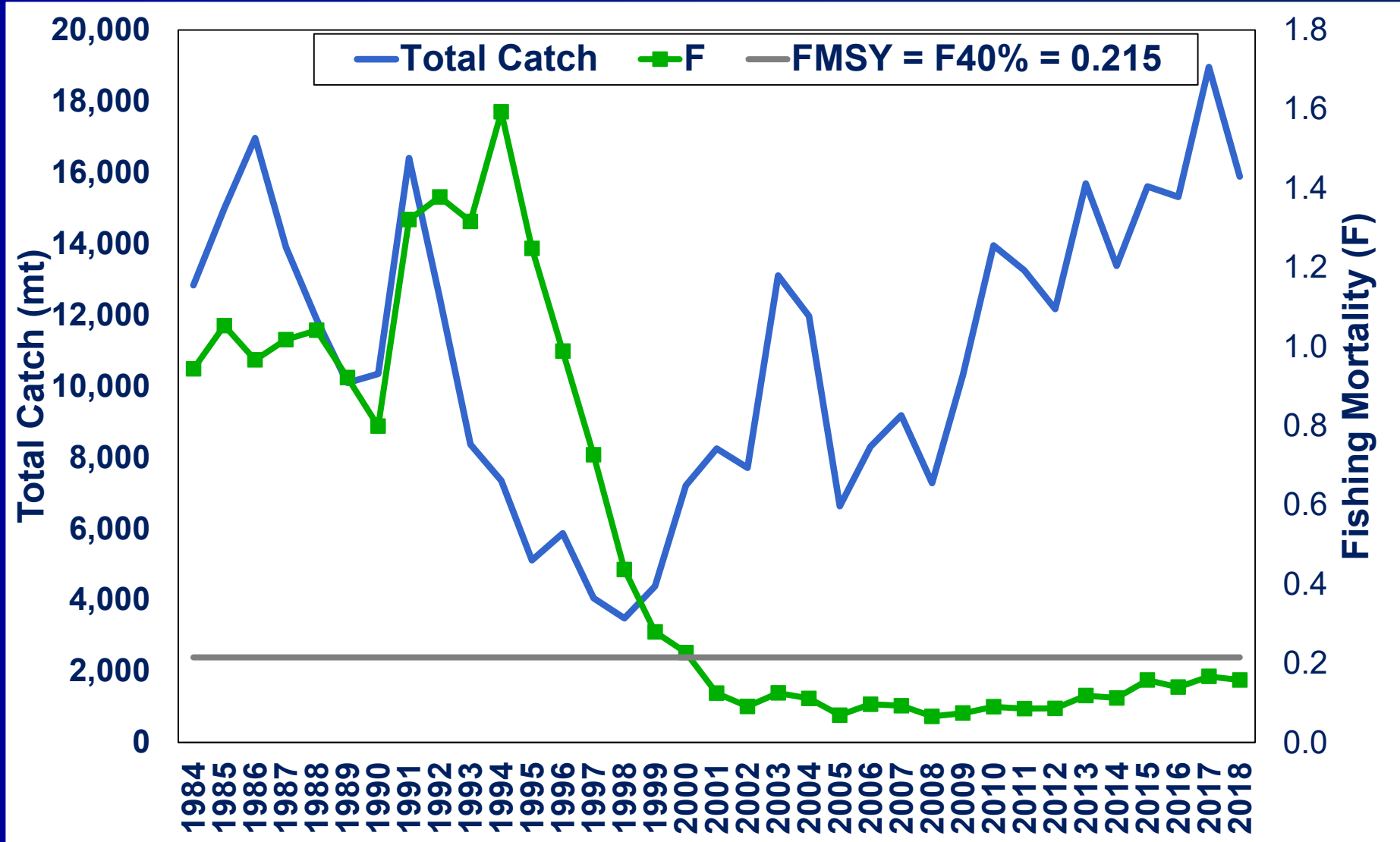
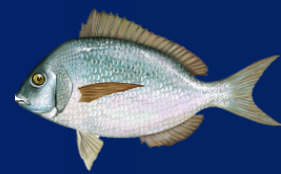
	2019 and interim 2020	standard ABC approach		average ABC approach
		2020	2021	2020 and 2021
<b>ABC</b>	36.43	<b>35.77</b>	<b>30.67</b>	<b>33.22</b>
<b>Commercial ACL=ACT</b>	28.42	27.90	23.92	25.91
<b>Proj. commercial discards</b>	4.43	5.27	5.45	5.39
<b>Commercial quota</b>	23.98	<b>22.63</b>	<b>18.48</b>	<b>20.52</b>
<b>Rec ACL=ACT</b>	8.01	7.87	6.75	7.31
<b>Proj. rec discards</b>	0.65	1.76	1.82	1.80
<b>RHL</b>	7.37	<b>6.11</b>	<b>4.93</b>	<b>5.51</b>



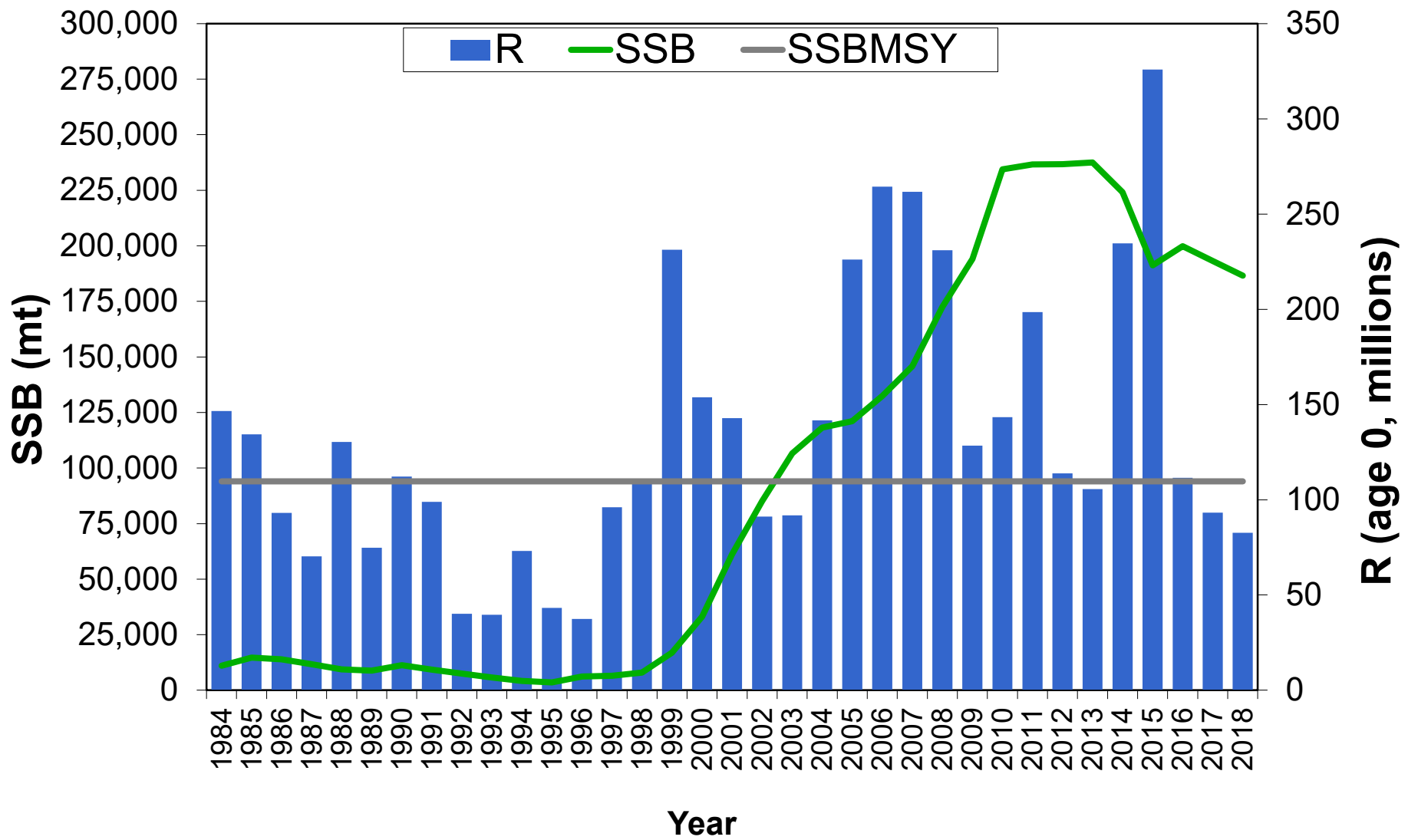
# Difference between 3- and 10-year average discards

<b>ABC Average</b>	<b>3-yr</b>	<b>10-yr (MC rec)</b>	<b>% change</b>
COMM DISC	5.80	5.39	-7%
REC DISC	1.39	1.80	29%
QUOTA	20.11	20.52	2%
RHL	5.92	5.51	-7%
<b>ABC Varying 2020</b>			
COMM DISC	5.67	5.27	-7%
REC DISC	1.36	1.76	29%
QUOTA	22.23	22.63	2%
RHL	6.51	6.11	-6%
<b>ABC Varying 2021</b>			
COMM DISC	5.86	5.45	-7%
REC DISC	1.40	1.82	30%
QUOTA	18.06	18.48	2%
RHL	5.34	4.93	-8%

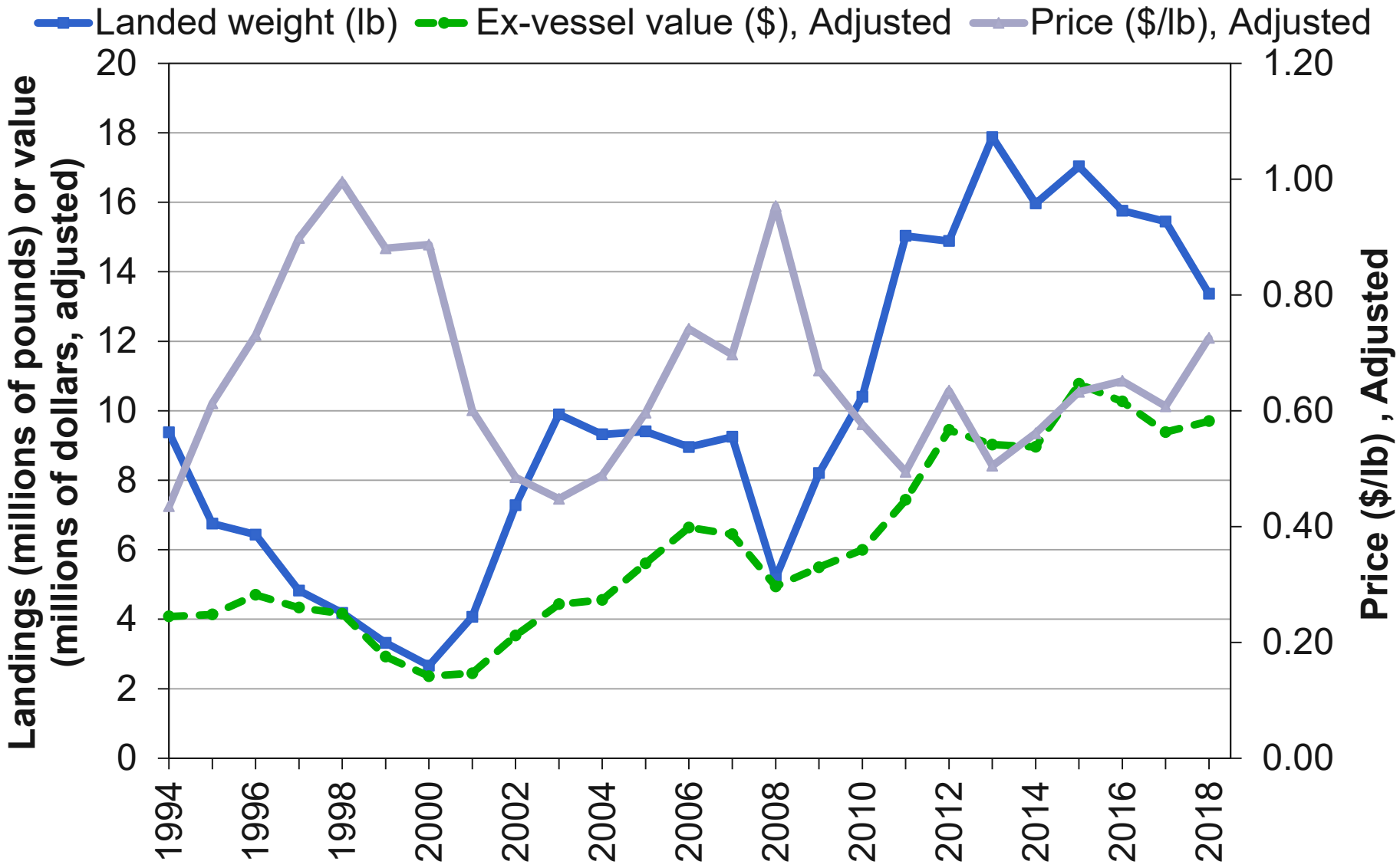
# Fishing Mortality



# Biomass, Recruitment



# Commercial Landings, Price, Value

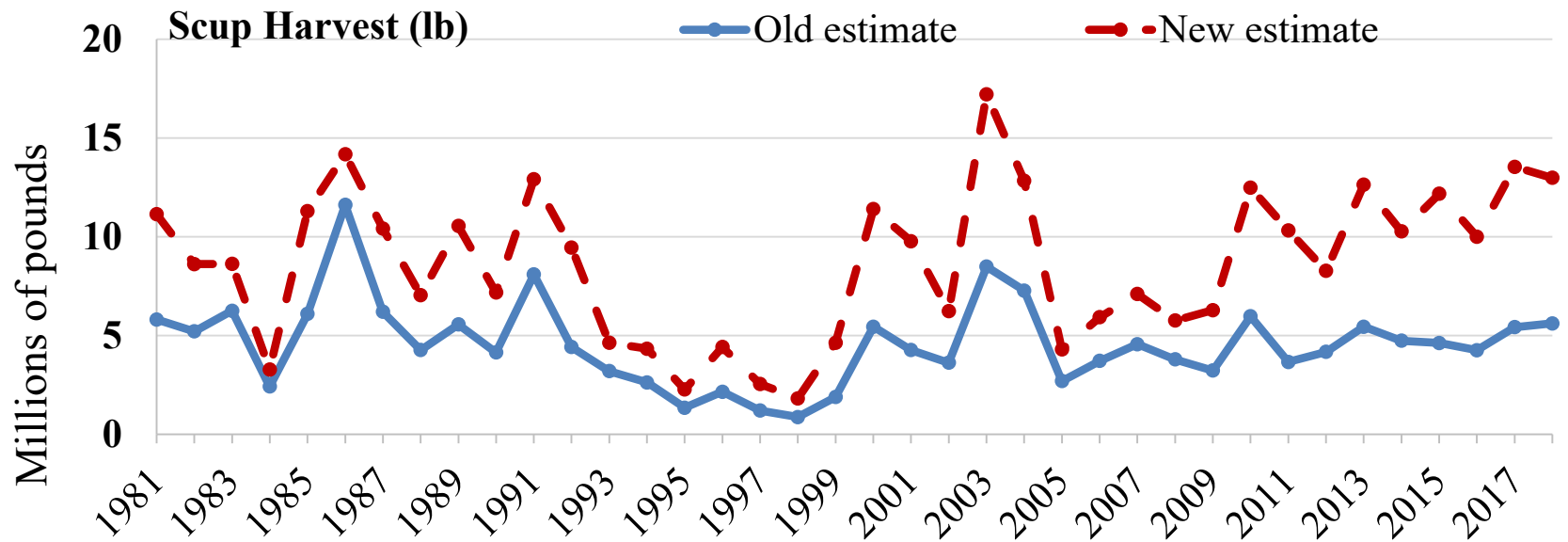
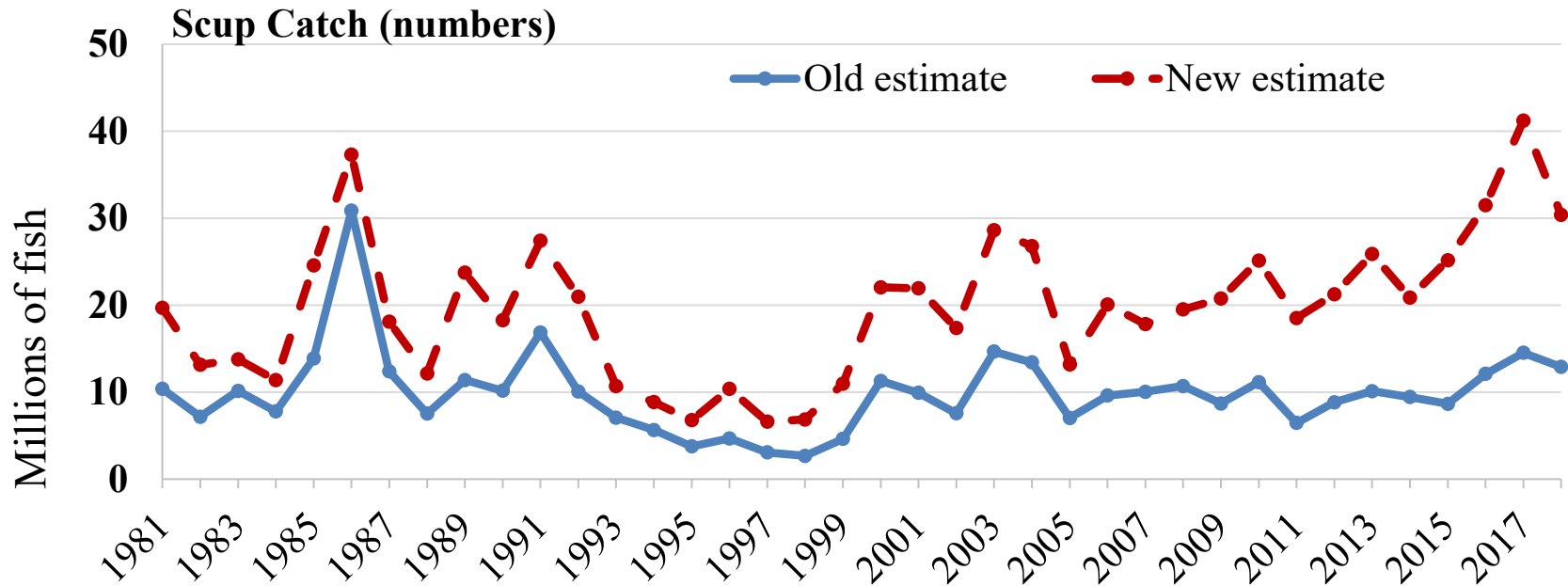


# Commercial Measures

MC recommend no changes for 2020

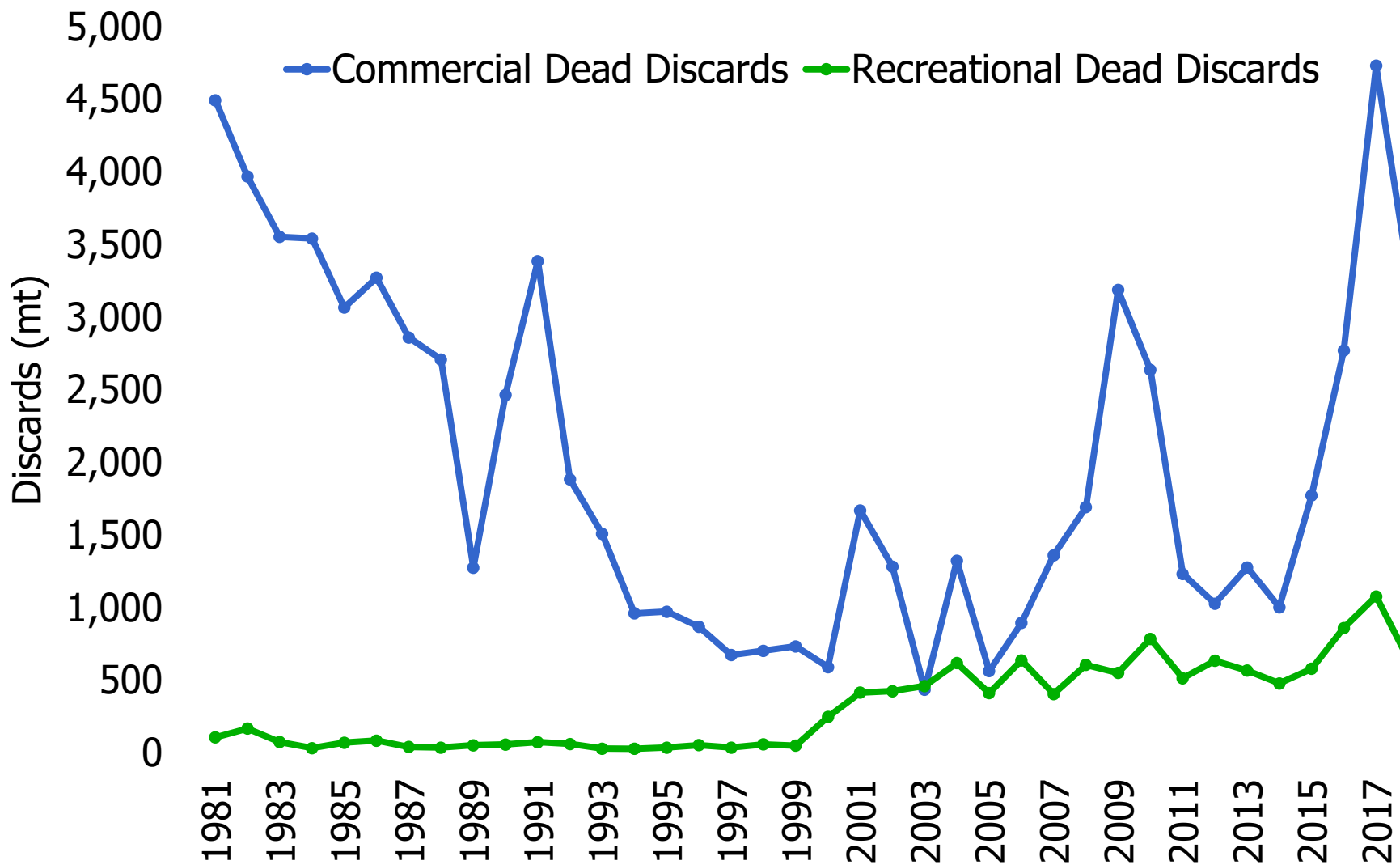
- Quota period possession limits and quota rollover provisions
- Minimum fish size
- Gear requirements
- Incidental possession limits

# Rec. Catch and Landings





# Comm/Rec Discards



# Commercial Accountability Measures

- In-season
  - State closures if state quota exceeded
  - Federal closure if inaction of one or more states will cause commercial ACL to be exceeded
- Post season
  - Commercial catch evaluated against ACL for single most recent complete year
  - Landings overages deducted from state quotas
  - Overages driven by discards
    - If overfished/rebuilding: payback of exact amount
    - If B is between target & threshold (and not rebuilding):
      - No payback required if ABC not exceeded
      - Scaled payback if ABC is exceeded
    - If B is above target: no payback required

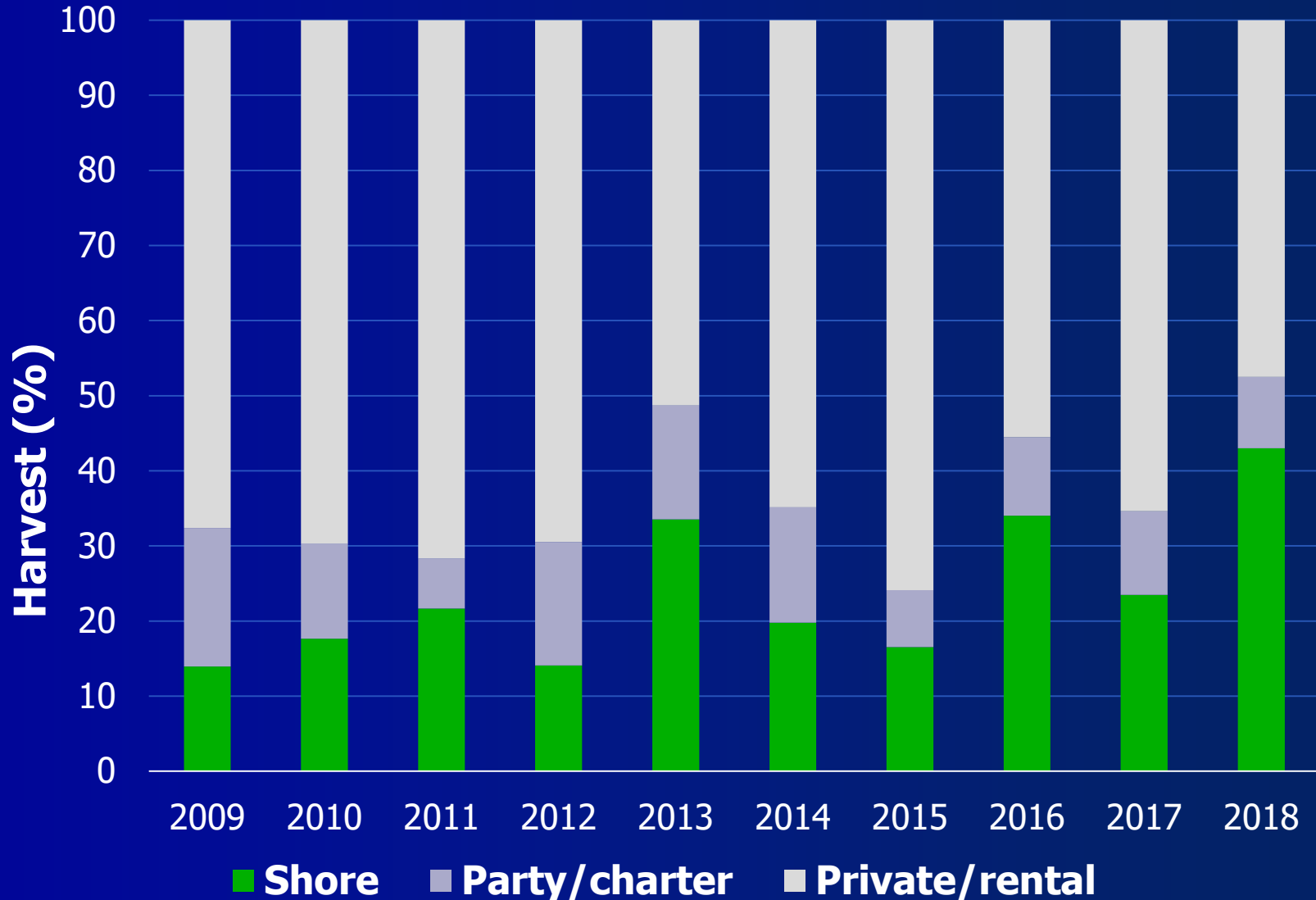
# Recreational Accountability Measures

- No in-season closure authority
- Post season
  - 3-yr avg recreational catch evaluated against 3-yr avg ACL
  - Response if triggered:
    - If overfished/rebuilding: payback of exact amount
    - If B is between target & threshold (and not rebuilding):
      - Adjustments to recreational measures the next year
      - If ABC exceeded: scaled payback and adjusted rec measures
    - If B is above target: adjustments to rec measures

# Recent Discard Estimates

	Commercial			Recreational (old MRIP)	
	Projected	GARFO	NEFSC	Projected	GARFO/NEFSC
2018	2,011	2,909	3,293	293	271
2017	1,710	3,493	4,733	339	392
2016	1,721	1,929	2,772	342	601
2015	2,318	1,027	1,774	286	339

# Harvest By Mode



# Commercial Catch

