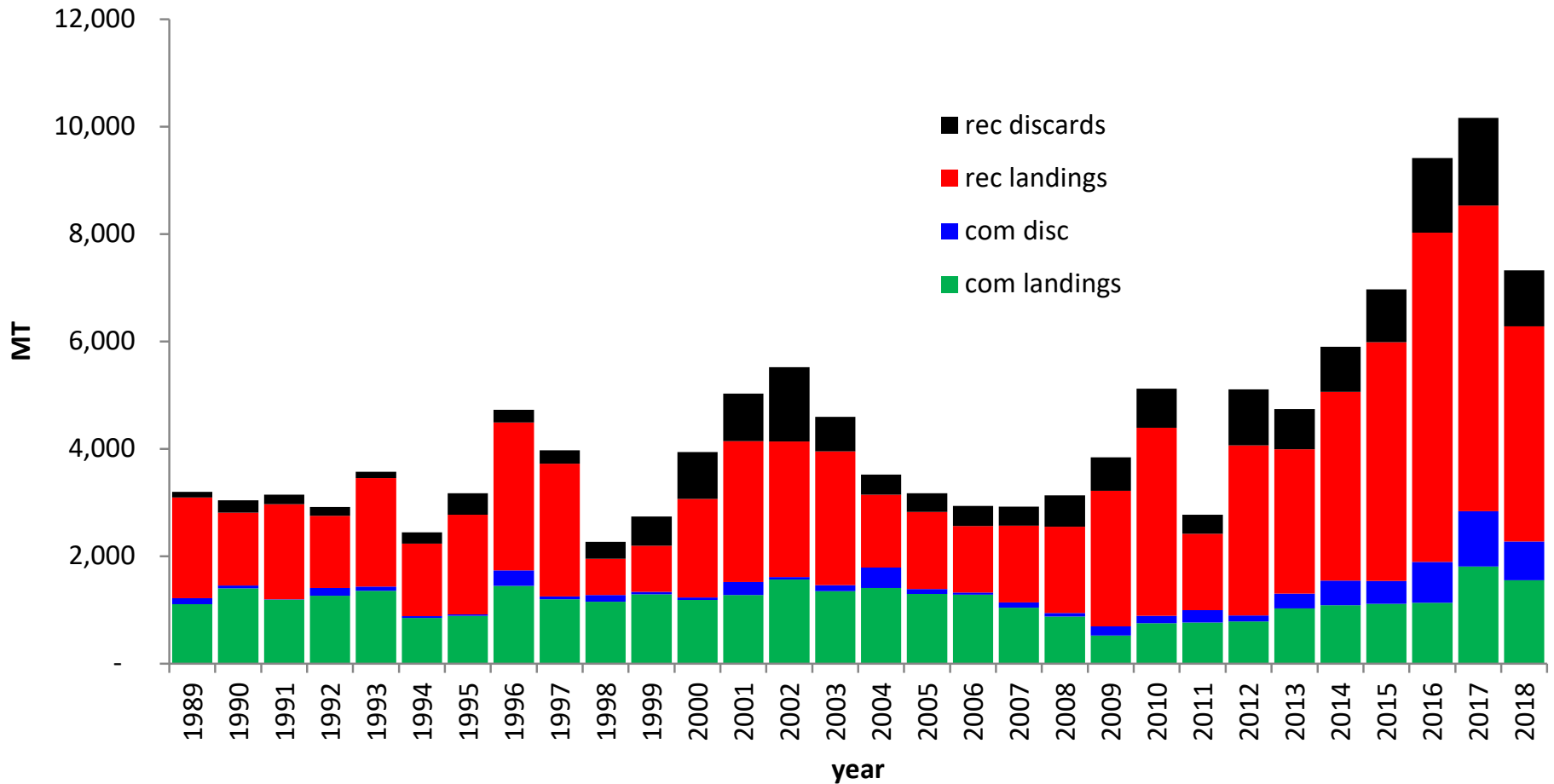


# Black Sea Bass

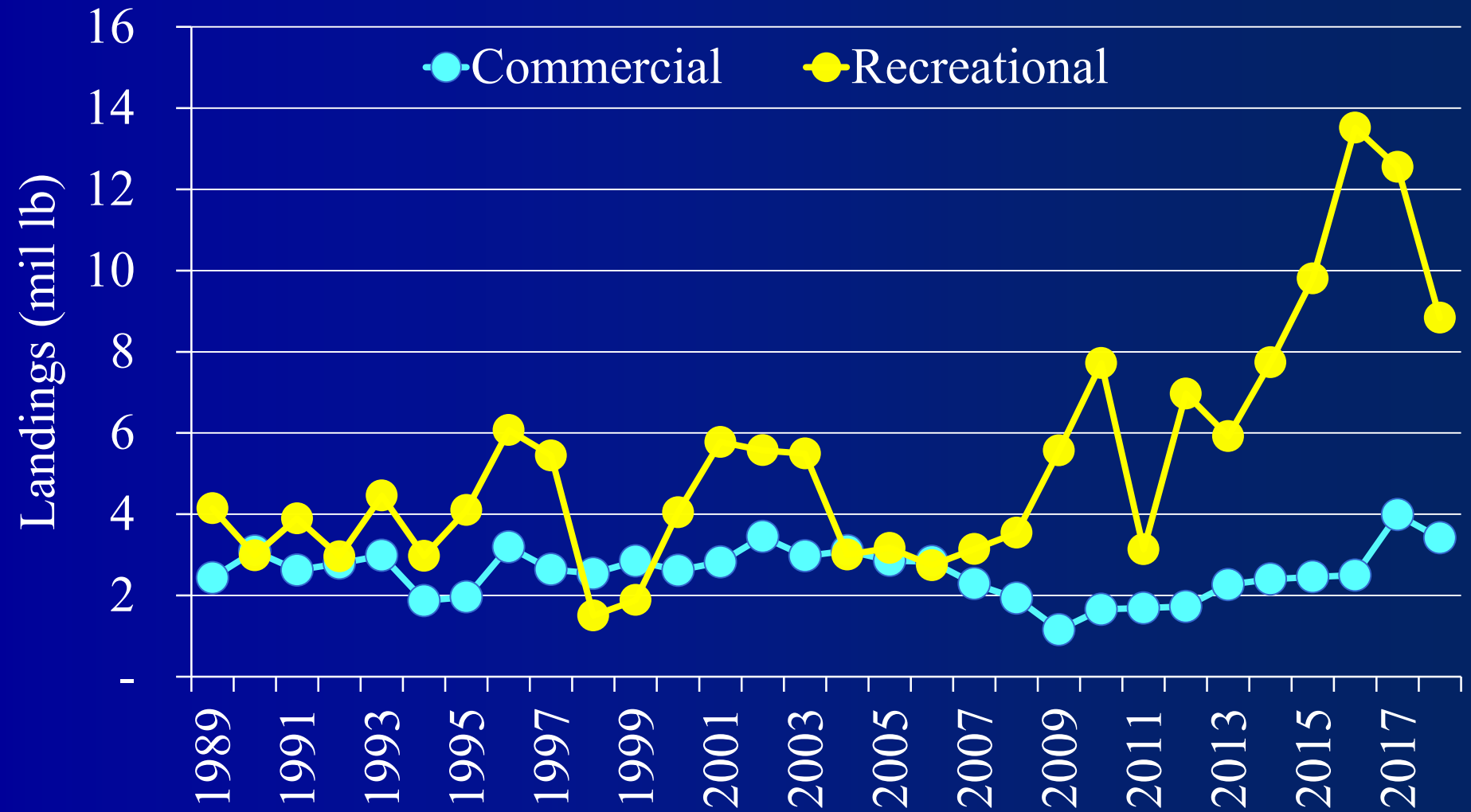


SSC Meeting  
*September 10, 2019*

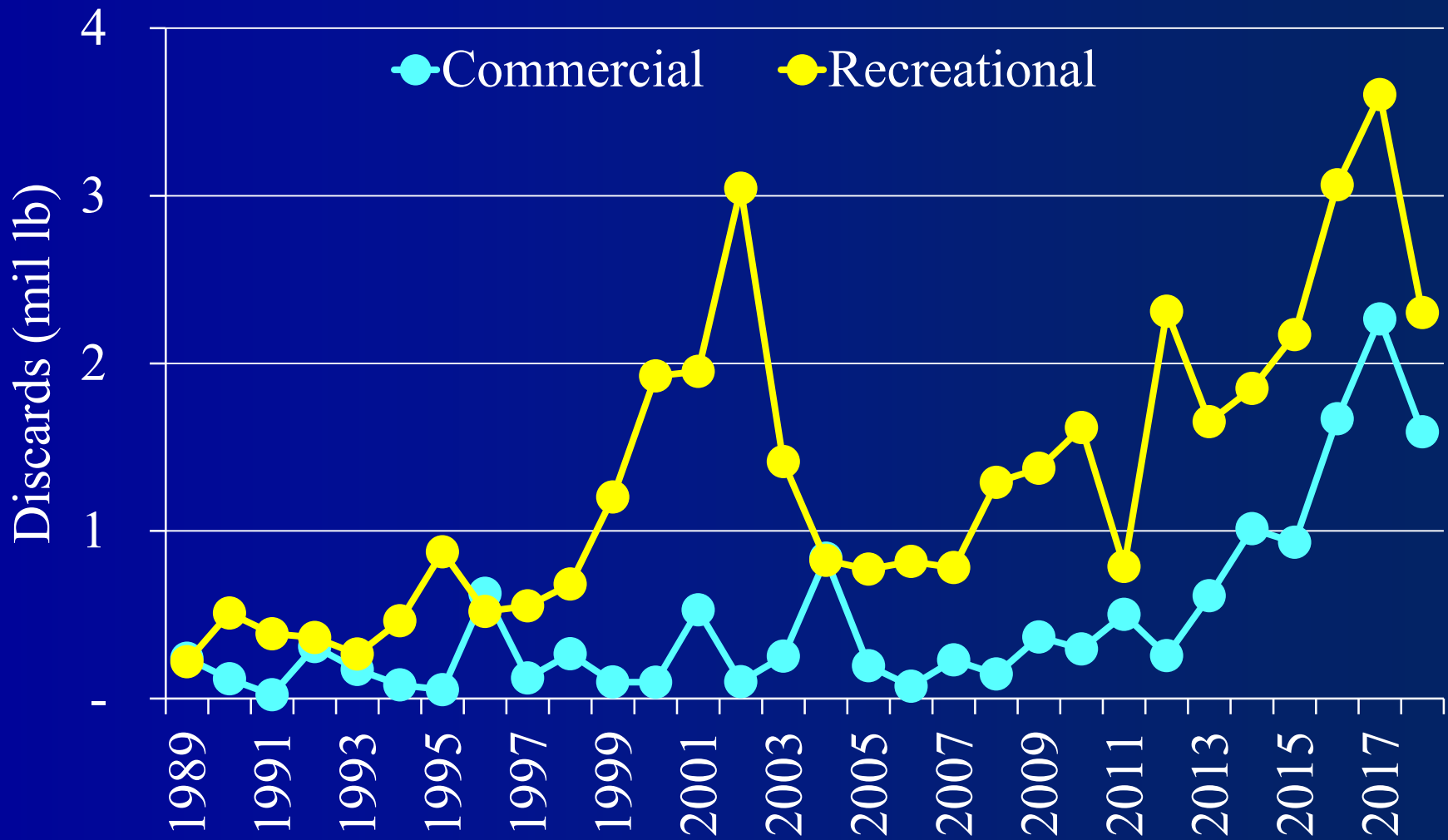
# Fishery Performance



# Landings



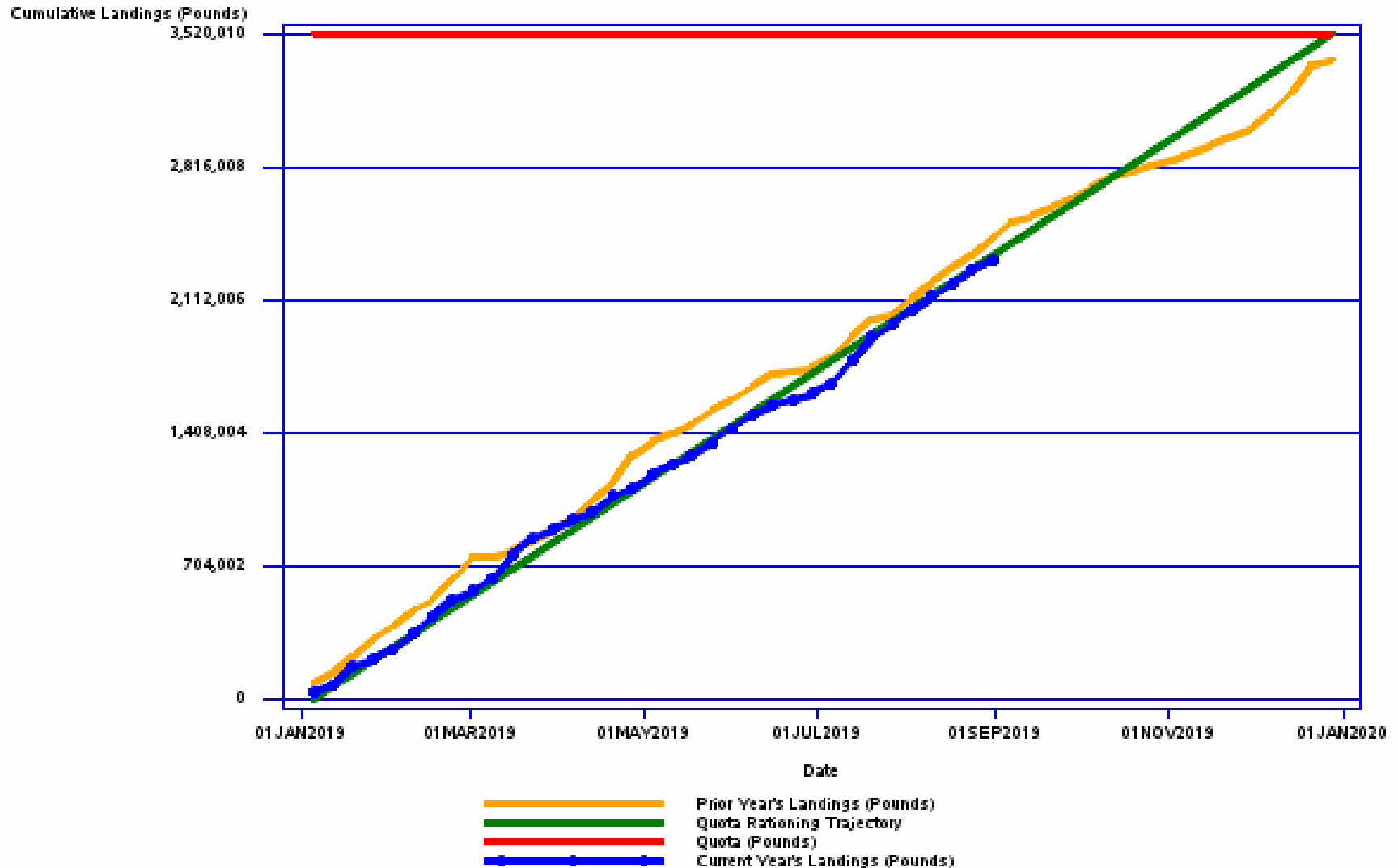
# Discards



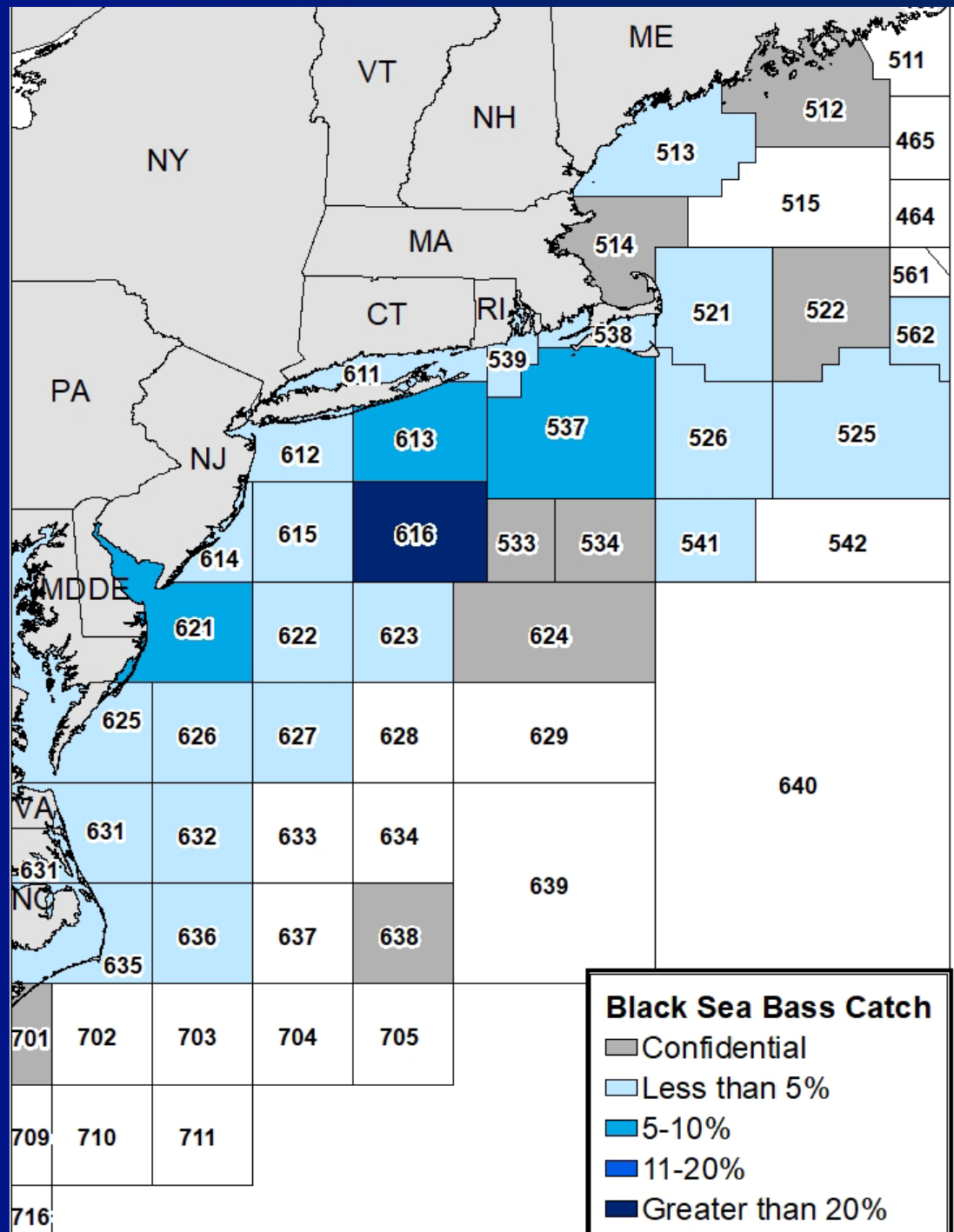
<b>Year</b>	<b>Com. land.</b>	<b>Com. quota</b>	<b>Com. land. vs. quota</b>	<b>Rec. land. (old MRIP)</b>	<b>RHL</b>	<b>Rec. land. vs. RHL</b>	<b>Rec. land. (new MRIP)</b>
<b>2014</b>	<b>2.18</b>	<b>2.17</b>	<b>0%</b>	<b>3.67</b>	<b>2.26</b>	<b>+62%</b>	<b>6.93</b>
<b>2015</b>	<b>2.46</b>	<b>2.21</b>	<b>+11%</b>	<b>3.79</b>	<b>2.33</b>	<b>+63%</b>	<b>7.82</b>
<b>2016</b>	<b>2.59</b>	<b>2.71</b>	<b>-4%</b>	<b>5.19</b>	<b>2.82</b>	<b>+84%</b>	<b>12.05</b>
<b>2017</b>	<b>3.99</b>	<b>4.12</b>	<b>-3%</b>	<b>4.16</b>	<b>4.29</b>	<b>-3%</b>	<b>11.48</b>
<b>2018</b>	<b>3.41</b>	<b>3.52</b>	<b>-3%</b>	<b>3.82</b>	<b>3.66</b>	<b>+4%</b>	<b>7.92</b>

# 2019 Commercial Landings

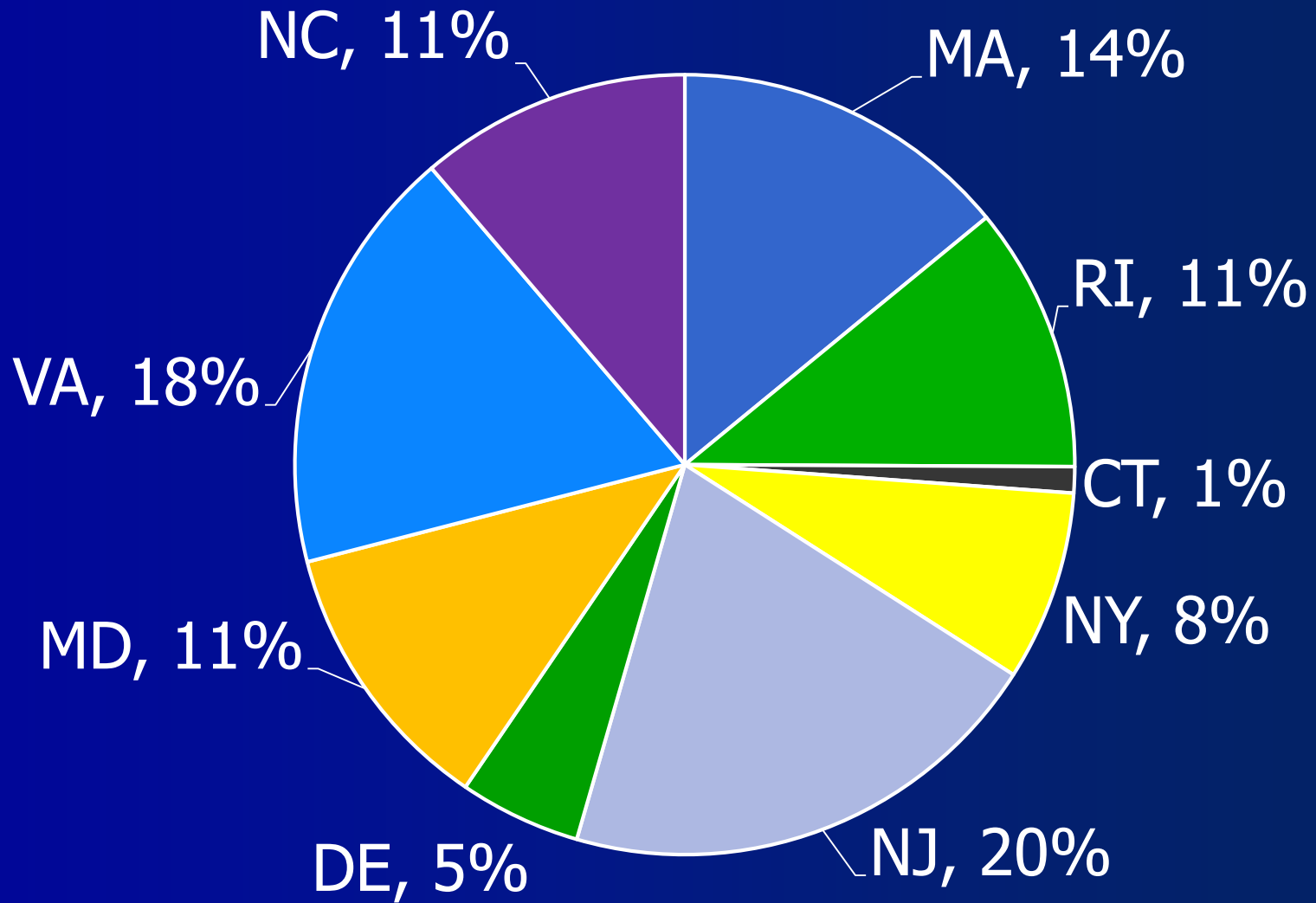
## Black Sea Bass Quota Monitoring Report



# 2018 Commercial Catch

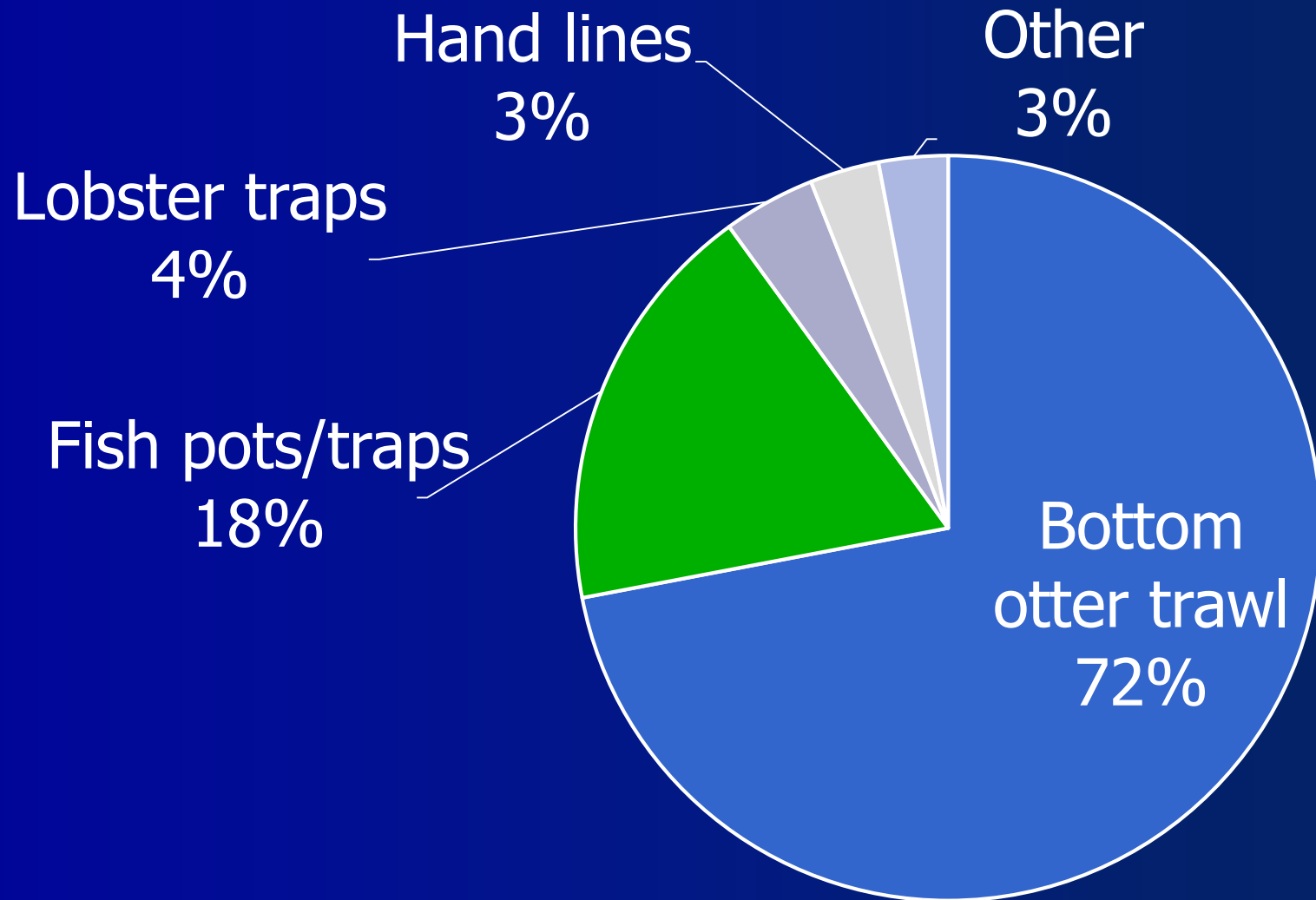


# 2018 Commercial Landings





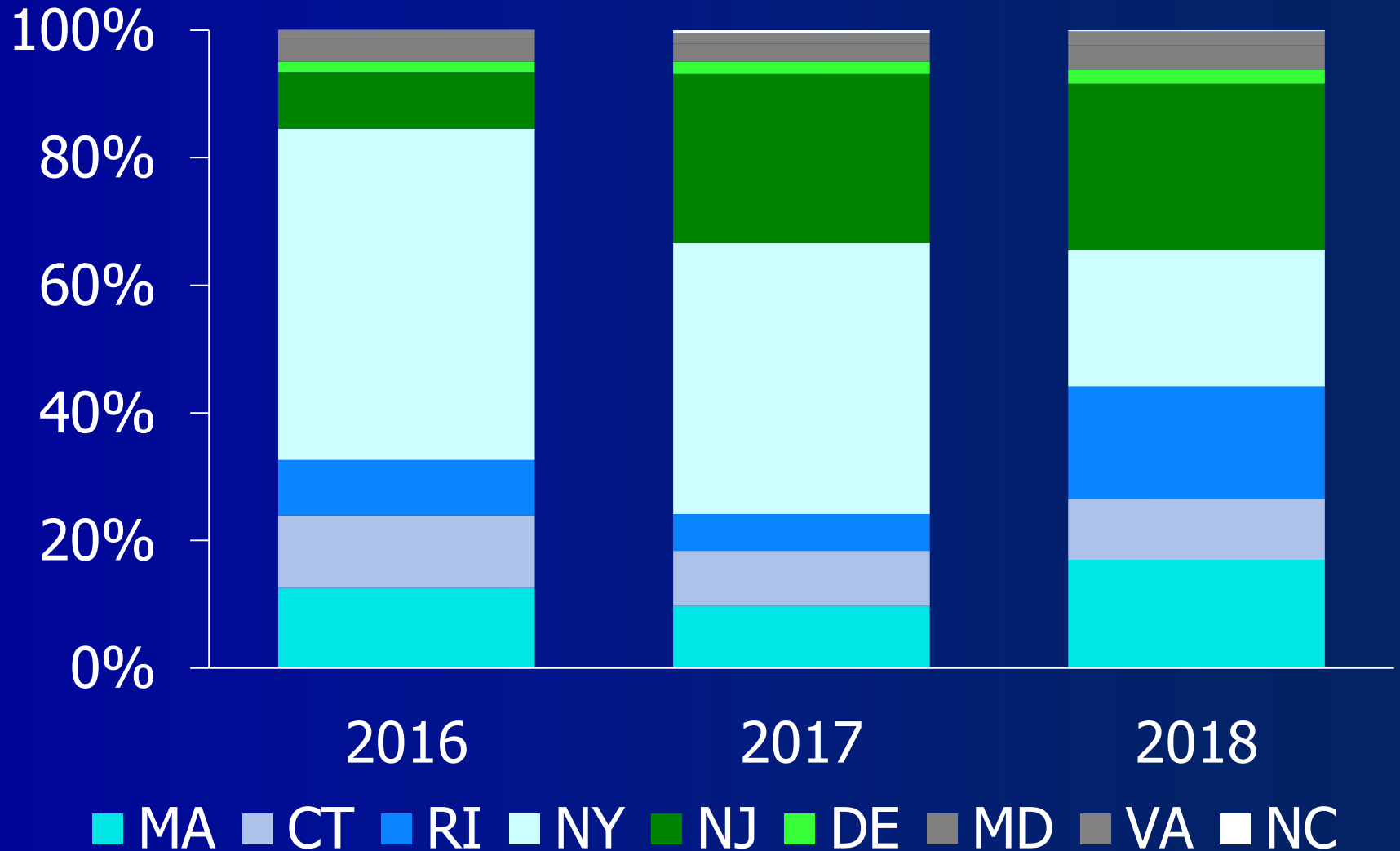
# 2018 Commercial Landings by Gear Type



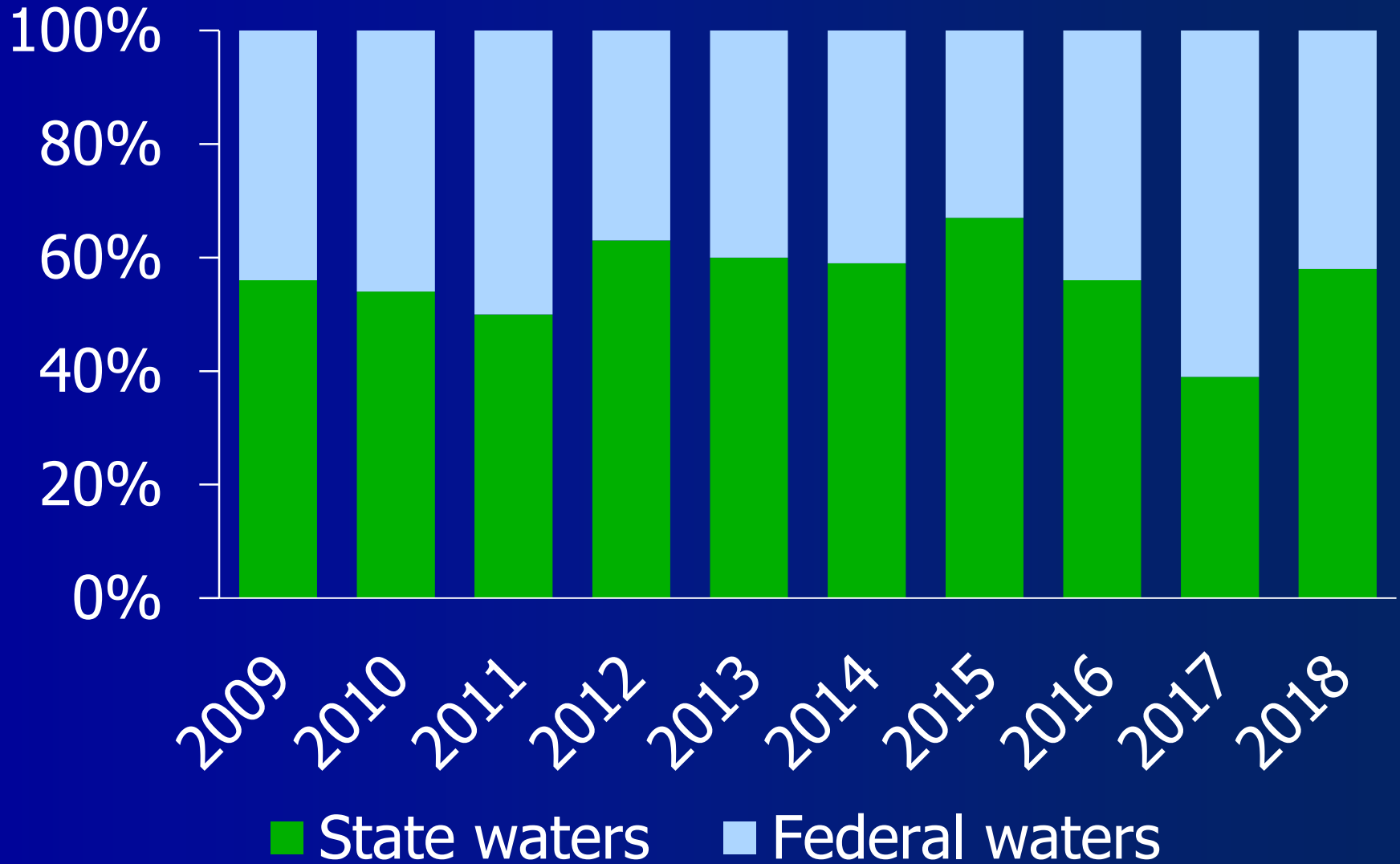
# 2019 Rec. Landings, W1-3

State	Harvest (lb)
ME	0
NH	0
MA	690,355
RI	15,153
CT	166,702
NY	135,165
NJ	586,821
DE	11,613
MD	67,412
VA	29,970
NC (north of Cape Hatteras)	3,353
<b>Total</b>	<b>1,706,544</b>

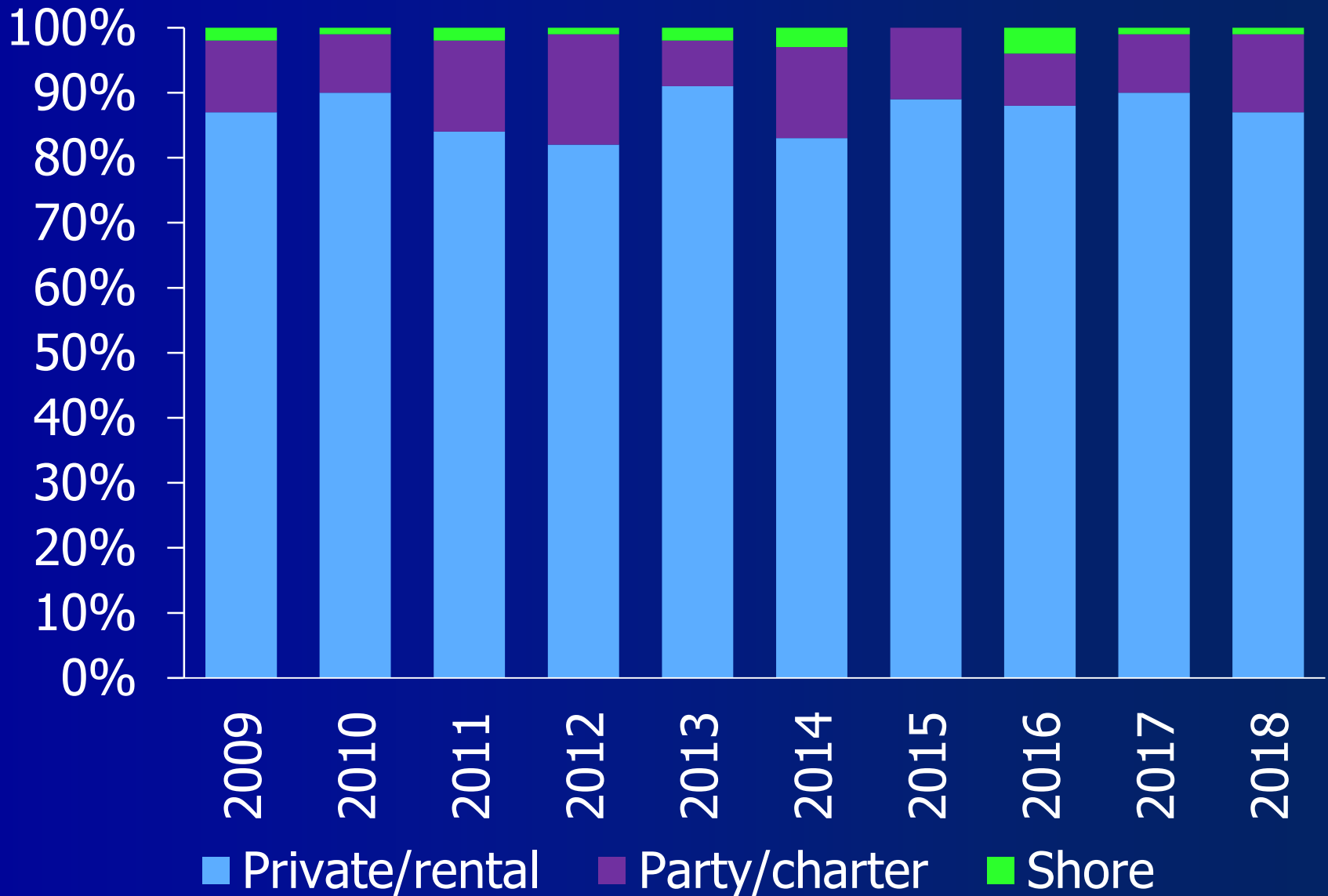
# Recreational Harvest by State



# Harvest Location



# Recreational Harvest by Mode



# AP Comments

## MRIP

- No faith in MRIP data
- Methodology hard to understand, not trusted

## Recreational Fishery Management

- For-hire guides fishing on private boats without for-hire permits
- Some for and against private rec. reporting

## General Management Concerns

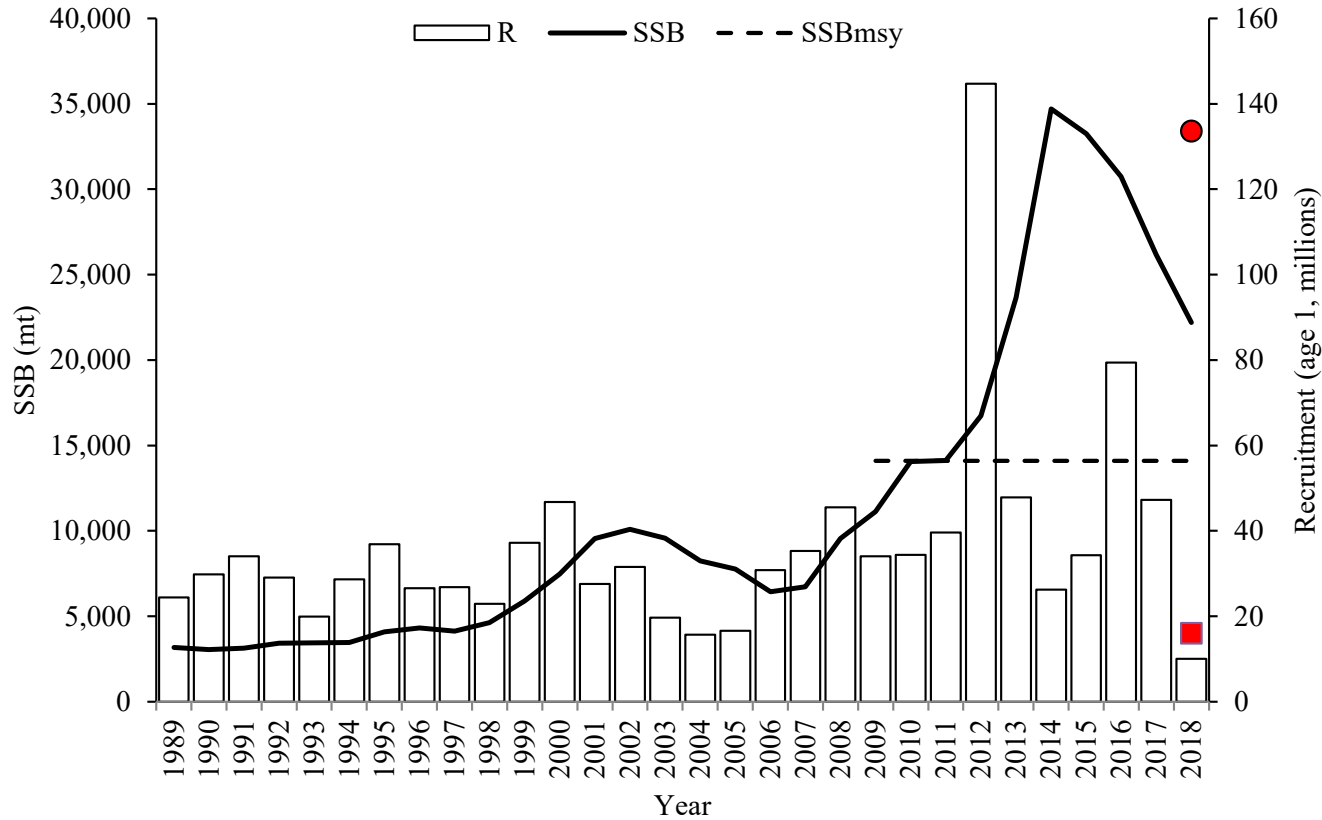
- Open access and latent permits (com and rec)

# AP Comments

## Biological Issues and Biomass Projections

- Below avg 2018 recruitment could be due to cannibalism and high abundance of large BSB.
- BSB have been caught as far as 150 miles from shore. Surveys may be missing that biomass. SSB may be under-estimated.
- Biomass very high, but SSB graph shows steep decline. ABC projections also declining. Is the stock in crisis? (No)

# Black Sea Bass Spawning Stock Biomass and Recruitment



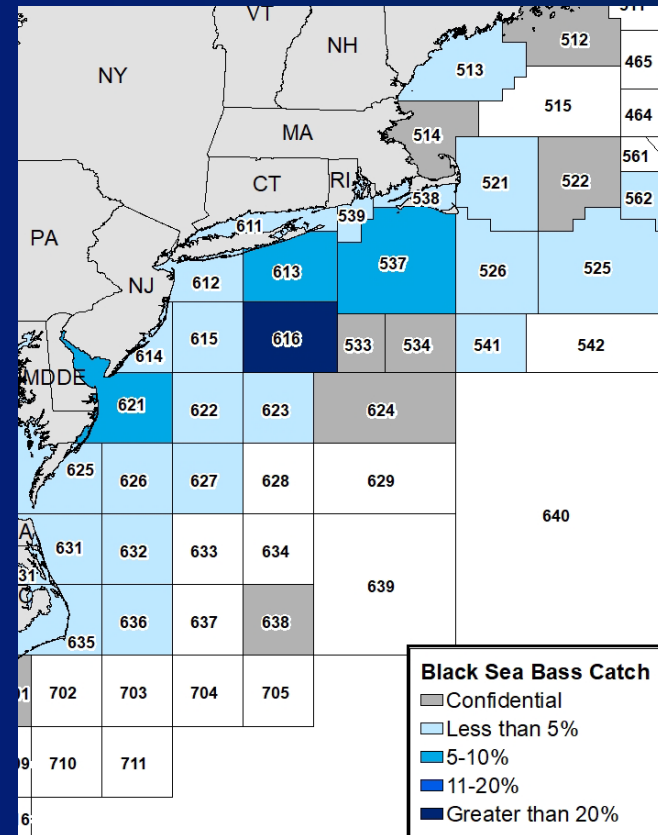
Retrospective adjusted point indicated in terminal year



# AP Comments

## Commercial Catch Locations

- High prevalence of 2011 year class in N does not mean abundance decreased in S.
- Stat area 616 – vessels travel there to target summer flounder. Target BSB on same trip. Map reflects effort, not distribution.
- Pot/trap catch locations impacted by lobster area 4 and 5 closures in spring (NY-Hatteras).



# AP Comments

## Recreational Fishery

- Despite high biomass, loosening of restrictions never seems possible.
- For-hire fishermen depend on BSB for their livelihoods.
- MRIP estimates showing higher catch from anglers on private/rental boats than for-hire boats are unbelievable.

# AP Comments

## Allocation Issues

- ABC landings portion allocated 51% rec, 49% com.
- New MRIP – rec. catches much more than 51%.
- Recreational fishery “will be thrown under the bus again” due to MRIP changes.
- Commercial fishery has also been constrained for a long time and has suffered from past rec. overages.
- If reallocated, issues with groundfish catch shares should be avoided. Rec. reporting and accountability should be improved.

# AP Comments

## Research Recommendations

- Greater sampling in inshore areas.
- Recommendation for study of genetic structure of population north of Hatteras should be expanded to include stock mixing and migration patterns.

# AP Written Comments

- Recommend a dedicated black sea bass survey
- Recreational size limit has lowered spawning production – fewer small mature fish, fish are maturing later and at larger sizes
- Sound causes BSB to leave area (e.g., sub-bottom profiler, offshore energy surveys)
- Need regional winter catch limits to address site fidelity

# AP Written Comments

- Reduce dead discards (not BSB-specific)
  - Rec. saltwater angler registry a good opportunity for angler education
  - Allow a smaller size limit
  - Prohibit commercial discards, consider commercial gear modifications

# Previous SSC Recommendations

- 2016 benchmark – substantial improvements compared to previous assessments
- OFL CV of 60%
- Typical life history control rule (life history accounted for in assessment)
- Used to set 2017-2019 ABCs
- Interim 2020 ABC = 2019 ABC

# ABC Projections

- Assume 2019 catch = 7,917 mt
  - i.e., implemented ABC with expected recreational catch scaled up based on avg. ratio of new to old MRIP estimates, 2013-2017
- Projections in N and S regions at  $F_{msy}=0.46$ . Combined for total OFL and ABC calculations.
- Recruitment sampled from 2000-2018
- 60% and 100% OFL CVs
- Basic/standard/varying and average/constant



# 100% OFL CV

## Standard/Basic/Varying

Year	OFL	ABC	F	P*	SSB
2019	--	7,917	0.33	--	27,629
2020	8,795	7,112	0.34	0.40	23,497
2021	8,083	6,217	0.36	0.40	24,053

## Averaged/Constant

Year	OFL	ABC	F	P*	SSB
2019	--	7,917	0.33	--	27,629
2020	8,795	6,605	0.29	0.37	23,804
2021	8,031	6,605	0.32	0.41	22,587

# 60% OFL CV

## Standard/Basic/Varying

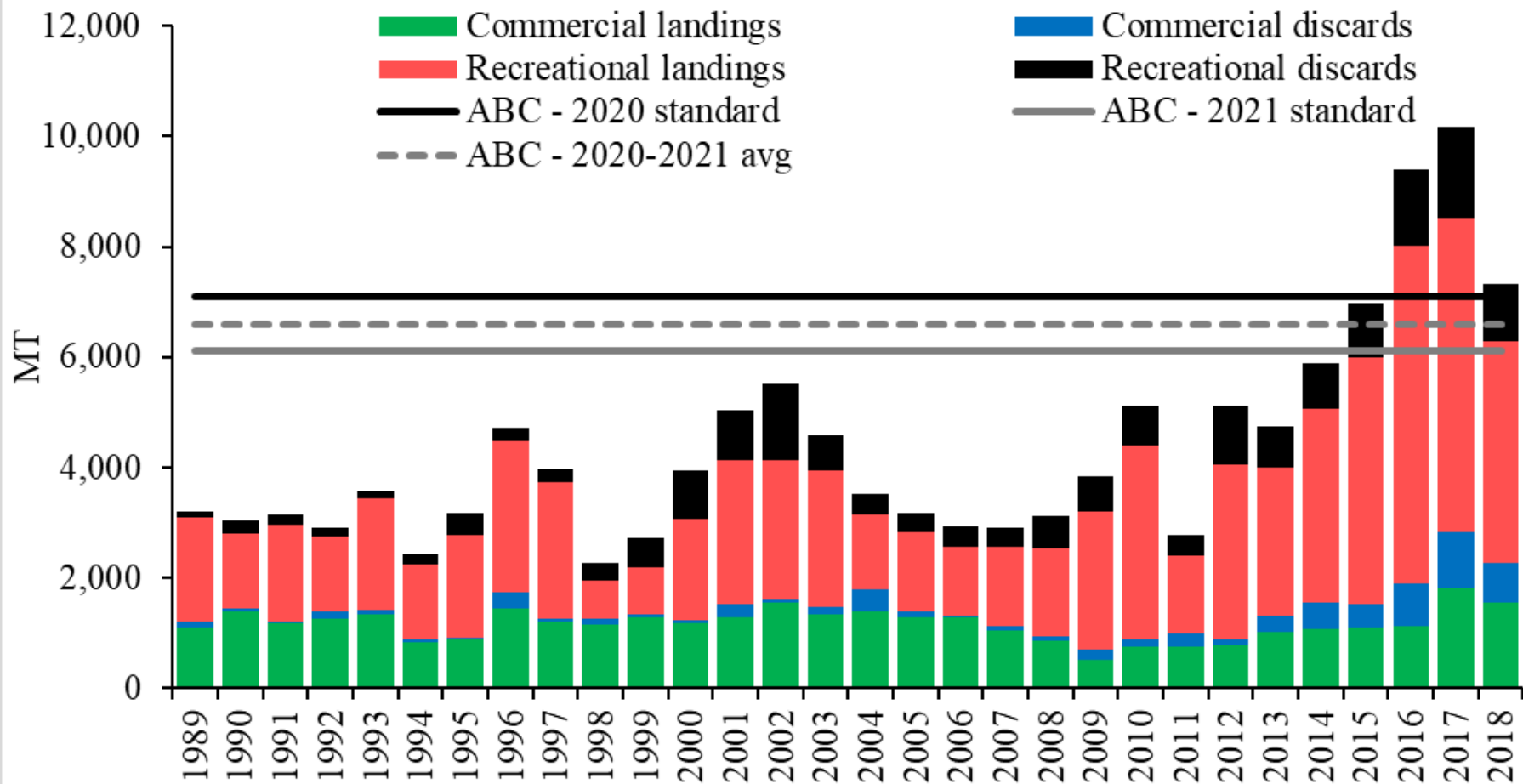
Year	OFL	ABC	F	P*	SSB
2019	--	7,917	0.33	--	27,629
2020	8,795	7,643	0.37	0.40	23,439
2021	7,928	6,831	0.39	0.40	21,754

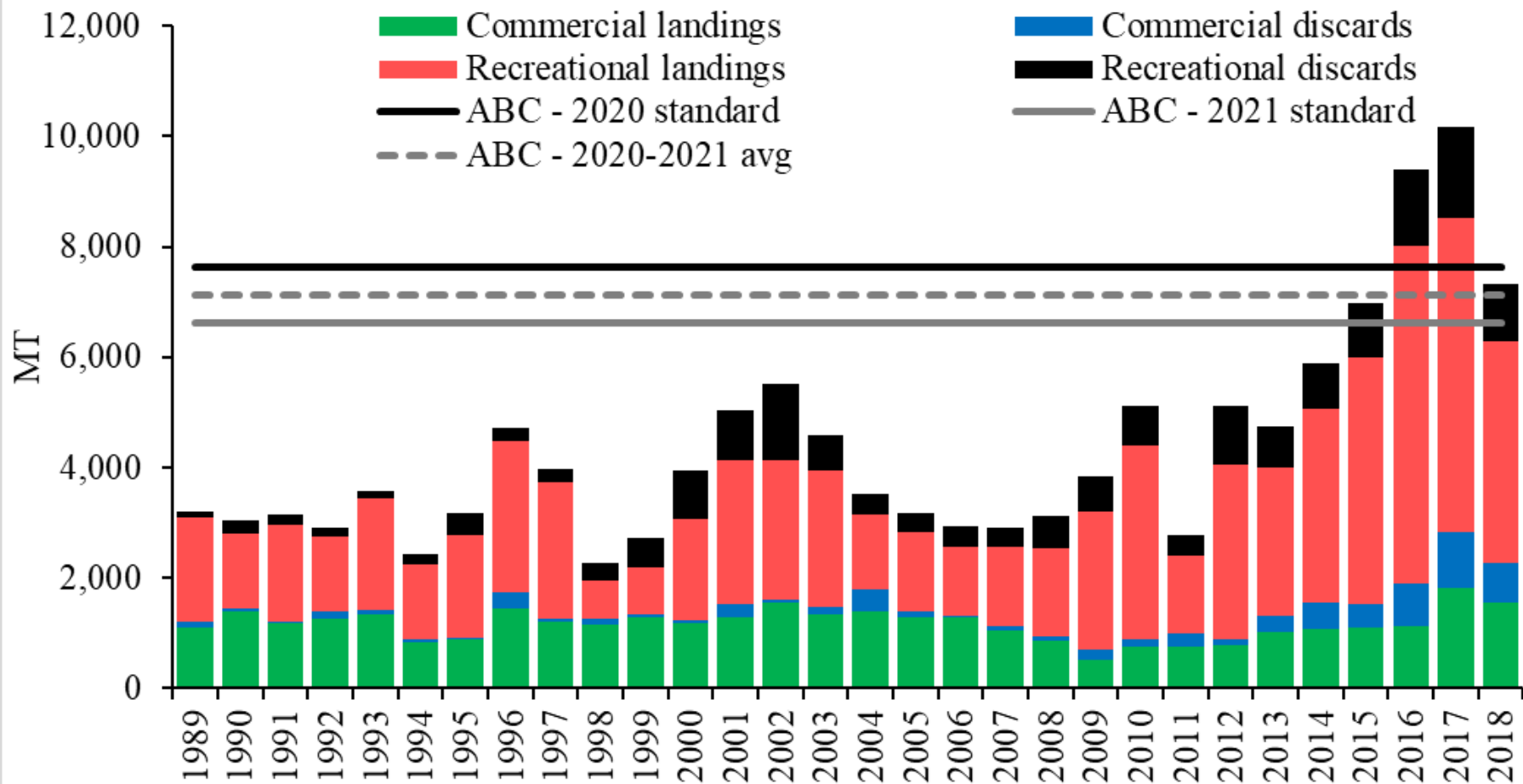
## Averaged/Constant

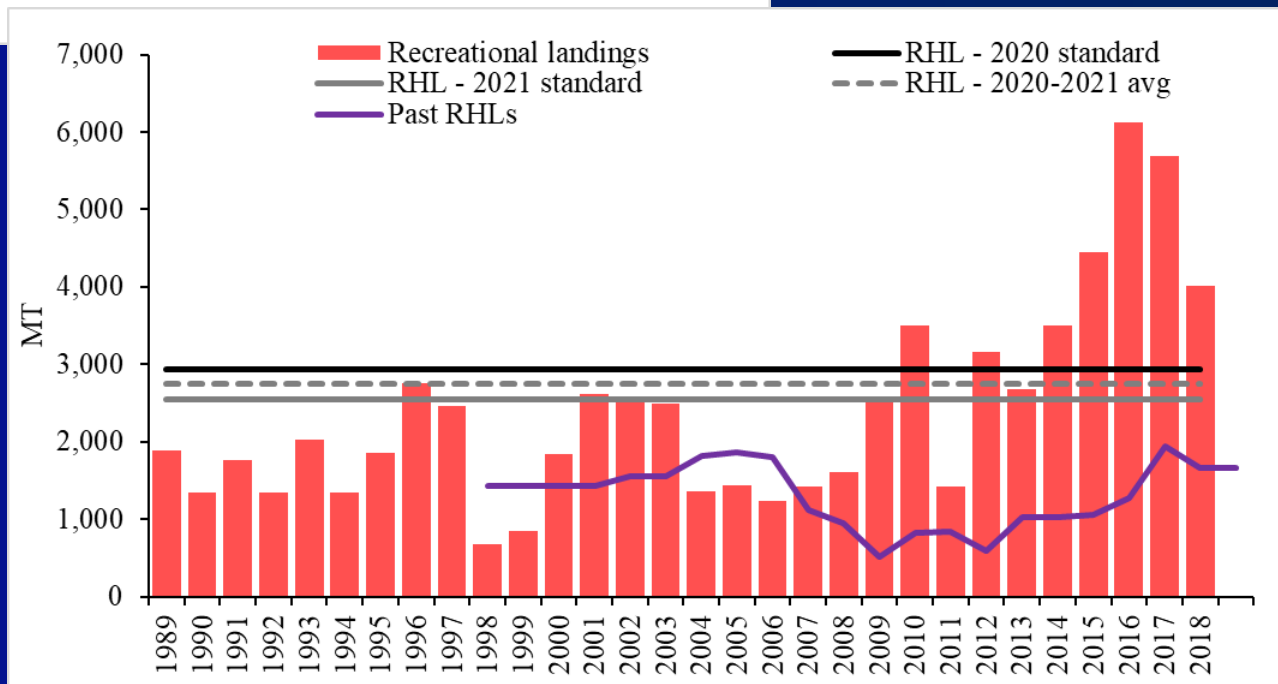
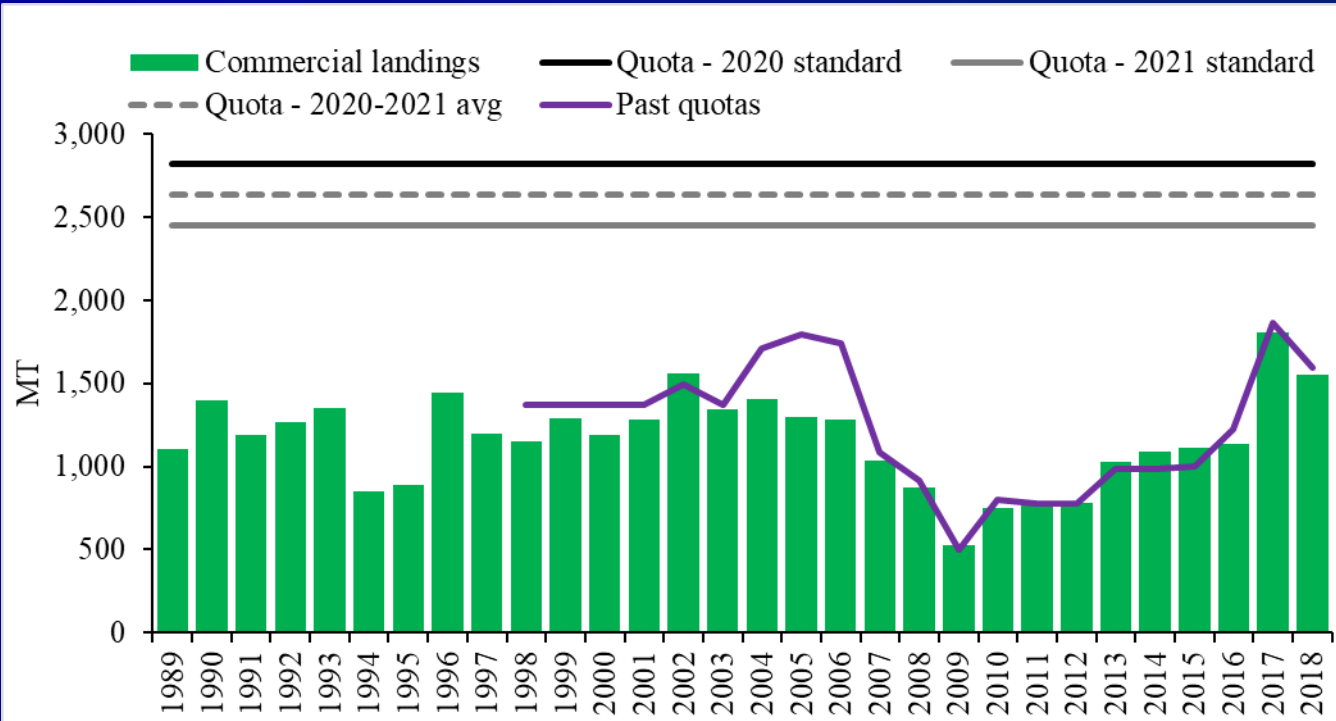
Year	OFL	ABC	F	P*	SSB
2019	--	7,917	0.33	--	27,629
2020	8,795	7,124	0.32	0.35	23,543
2021	8,072	7,124	0.31	0.41	22,864

QUESTIONS?









# Previous SSC Recommendations

## Sources of uncertainty

- Assumption of a constant natural mortality rate for both sexes
- Spatial distribution of productivity within the stock range
- Level, temporal pattern, and spatial distribution of recreational catches
- Nature of exchanges between the spatial regions defined in the assessment model