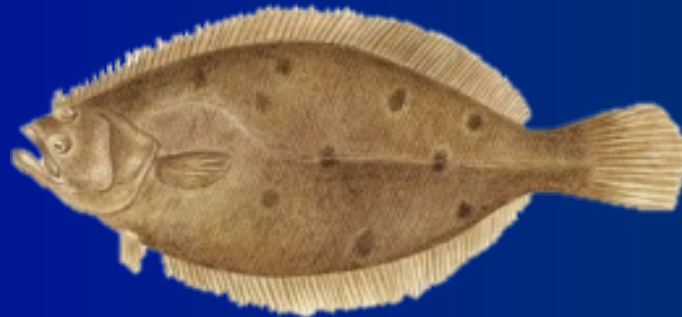


Summer Flounder



2019 Specifications

August 15, 2018

Virginia Beach, VA

2019 Specifications

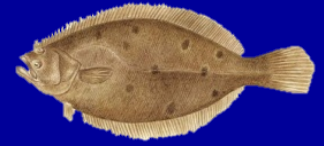
- No 2019 specifications in place for summer flounder
- Benchmark assessment in development for November 2018 SARC
- Need interim 2019 specifications for likely revision in Spring 2019
 - Possible consideration by Council/Board in February

Stock Status



- Last benchmark assessment:
SAW/SARC 57 (2013)
 - Age-structured assessment program (ASAP)
- 2015 and 2016: assessment updates
- 2014, 2017 and 2018: data updates

Stock Status: 2016 Update



SSB

- 2015 SSB = 36,240 mt
- **58%** of $SSB_{35\%} = SSB_{MSY} = 62,394$ mt
- **16%** above MSST = $\frac{1}{2} SSB_{35\%} = 31,197$ mt
- **Not overfished in 2015**

F

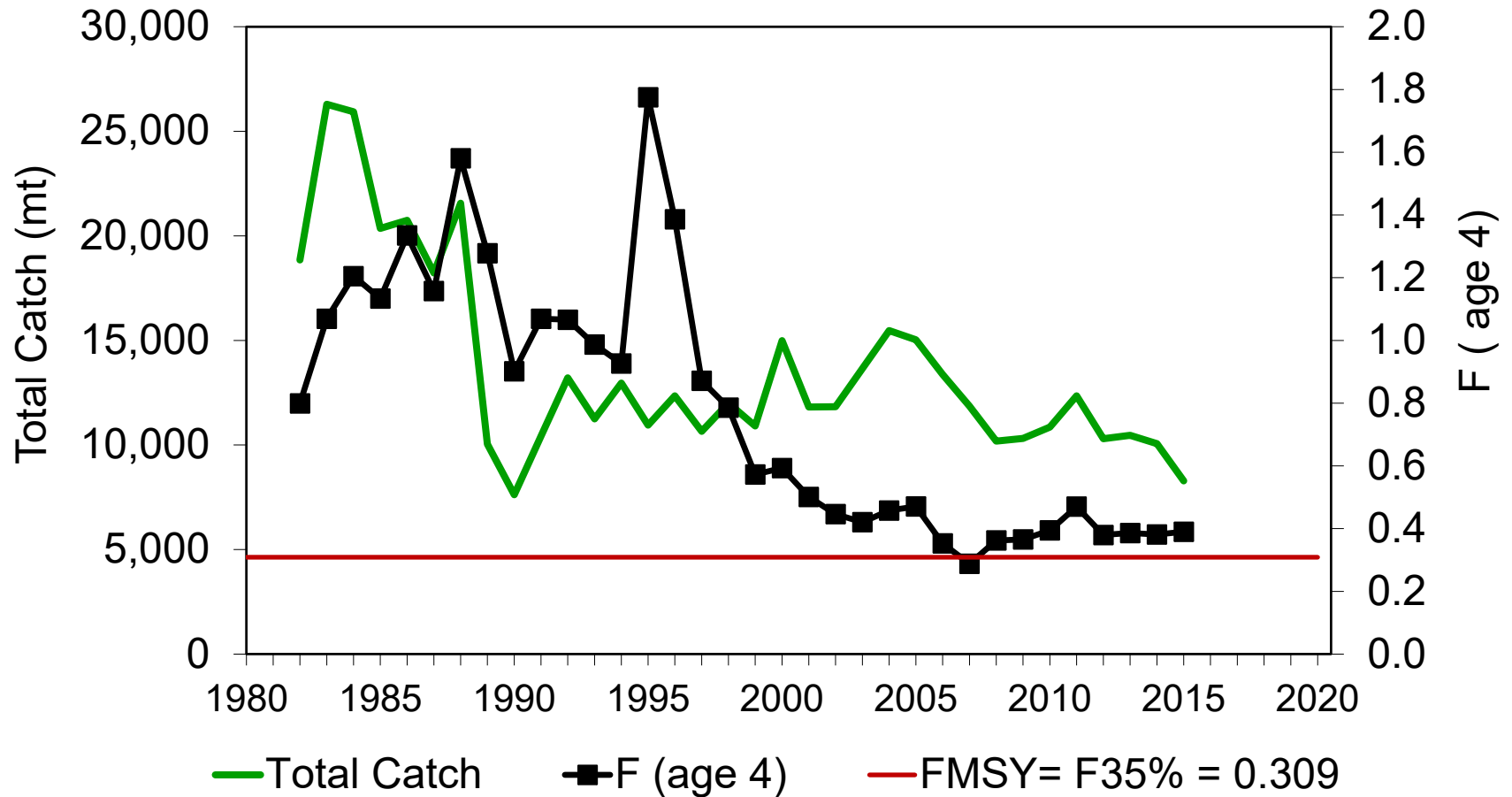
- 2015 $F = 0.390$
- **26%** above $F_{35\%} = F_{MSY}$ proxy = 0.309
- **Overfishing occurring in 2015**

Fishing Mortality

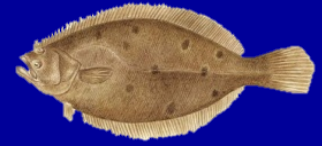


Total Catch and Fishing Mortality (F)

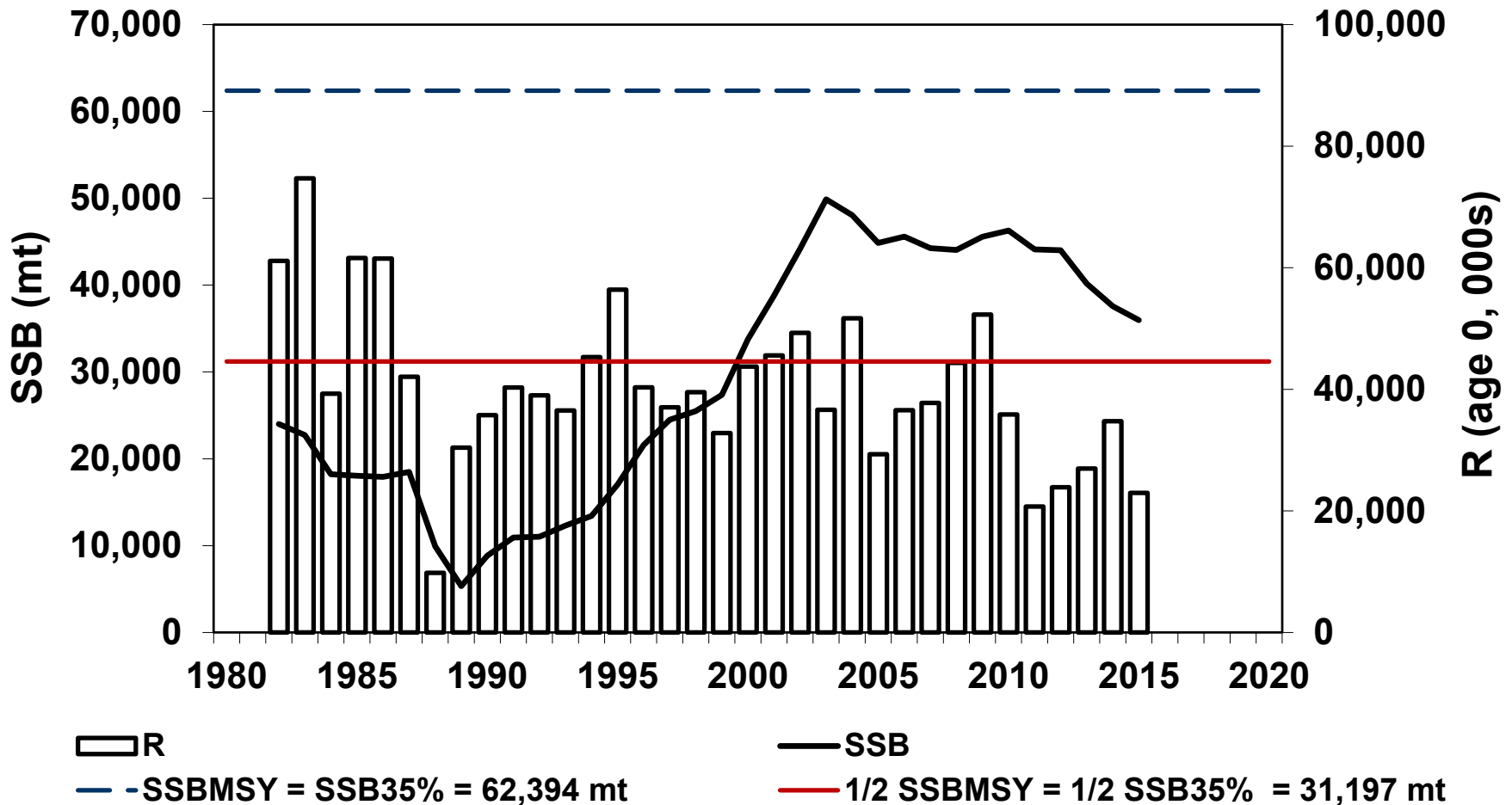
2016 Update



SSB and Recruitment

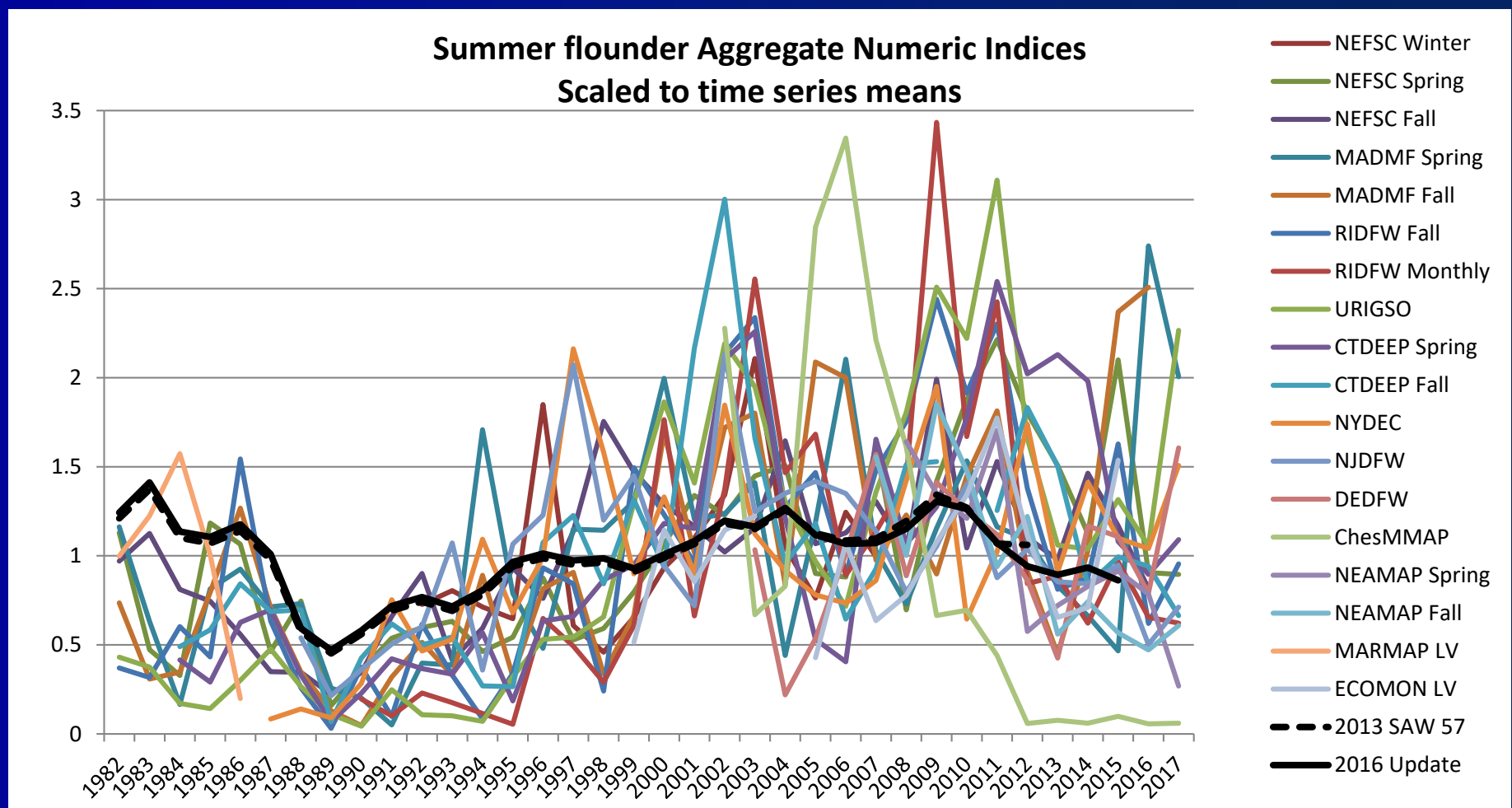


Spawning Stock Biomass (SSB) and Recruitment (R)
2016 Update



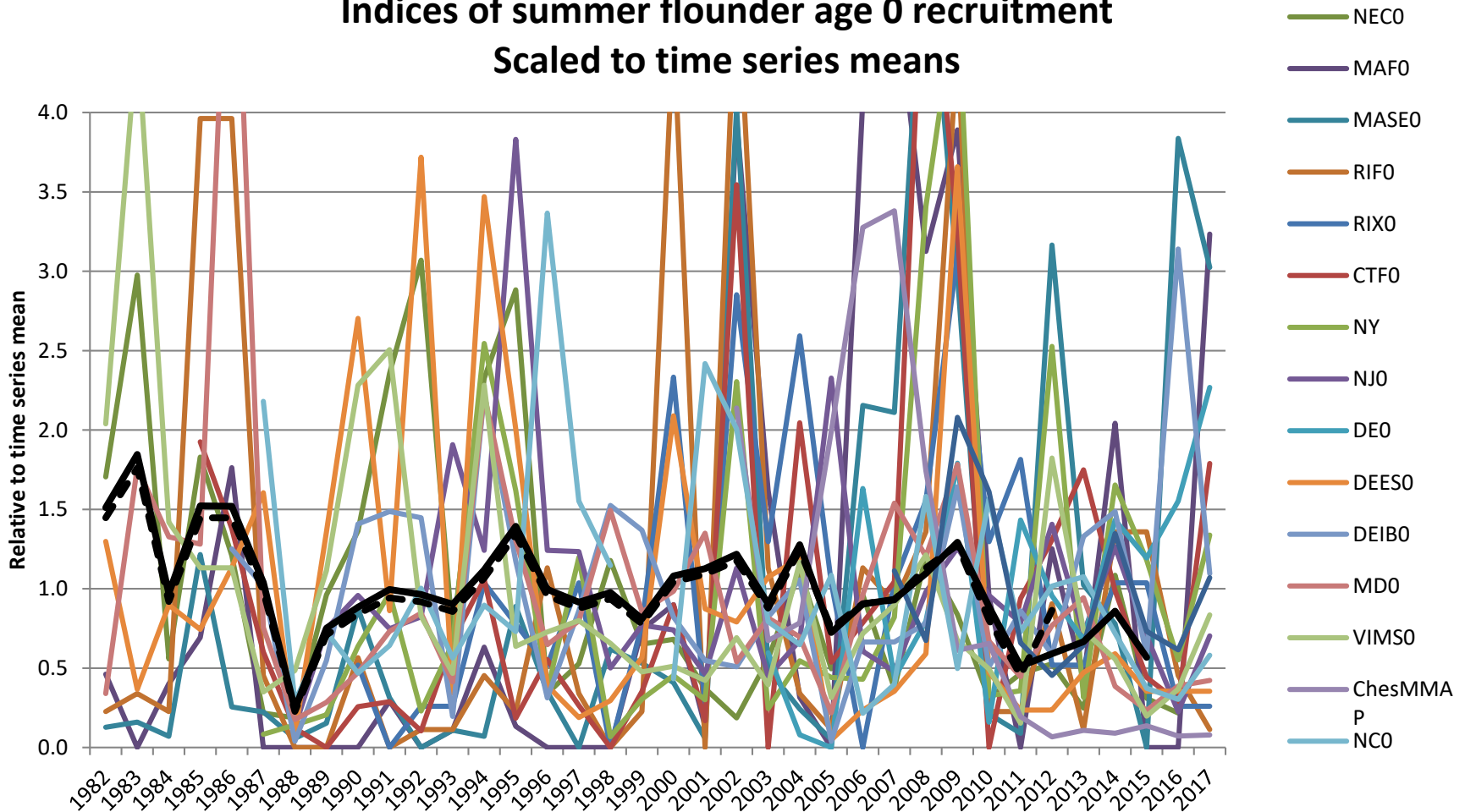
2018 Data Update

■ Trawl surveys variable in 2017



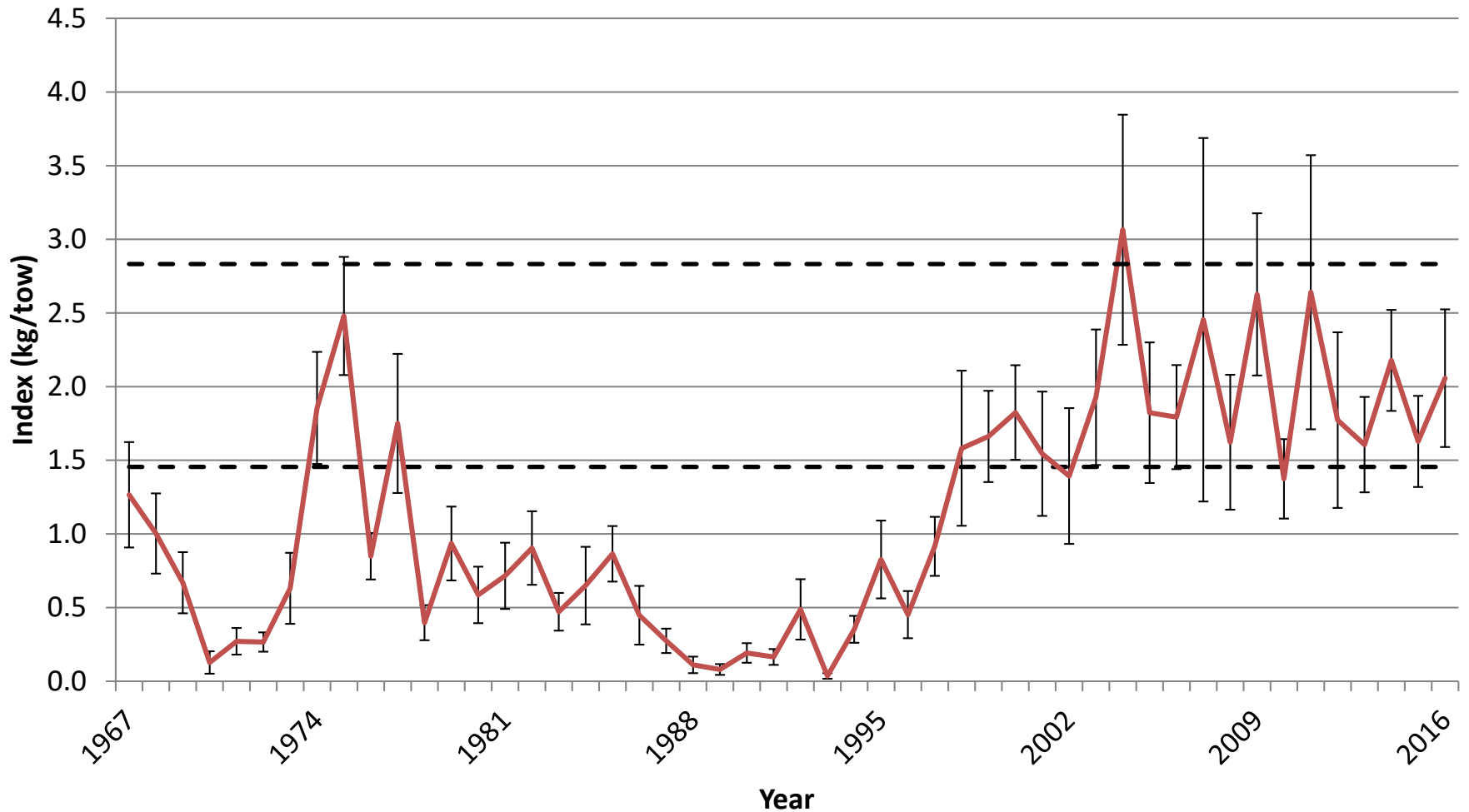
2018 Data Update

Indices of summer flounder age 0 recruitment
Scaled to time series means



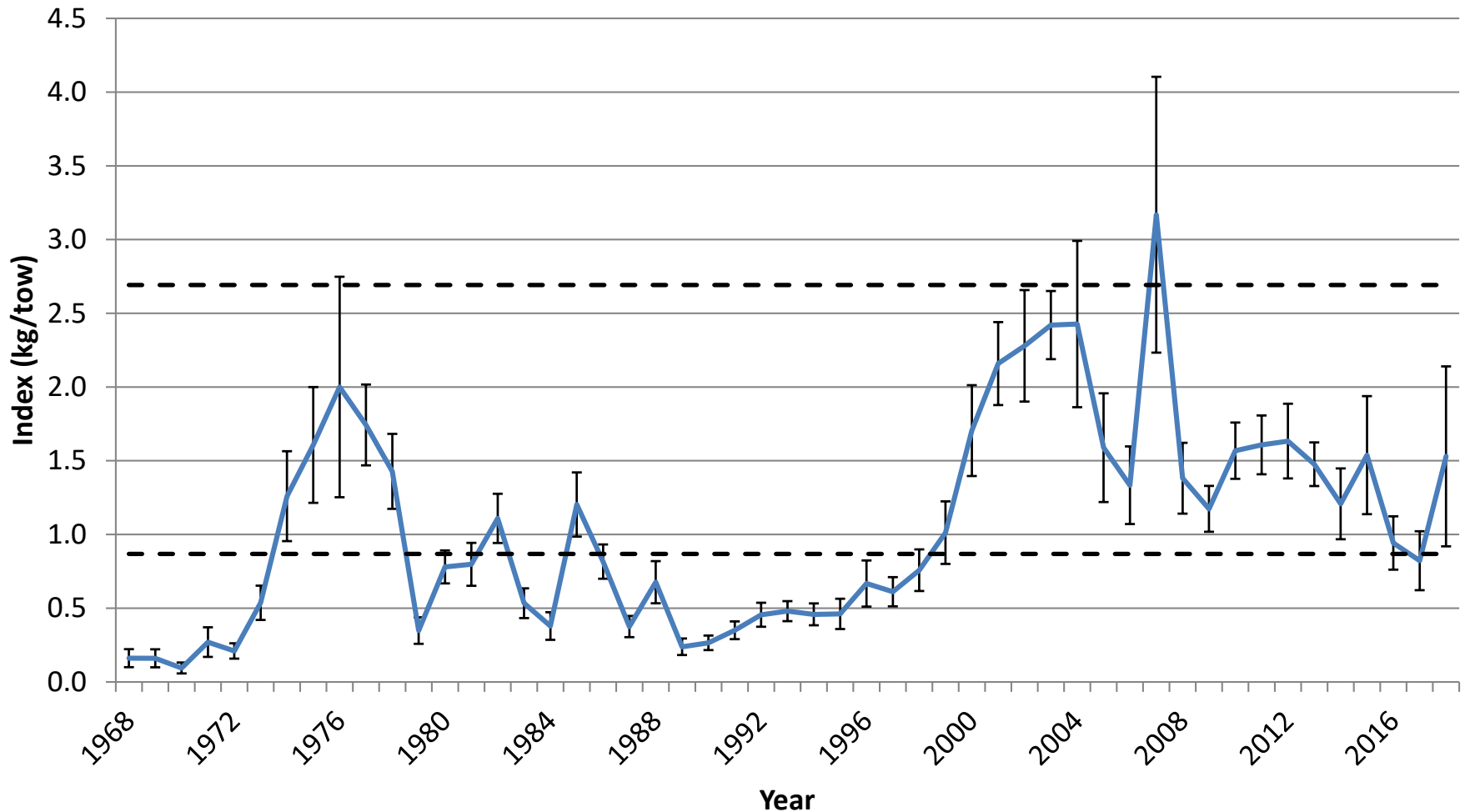
NEFSC Fall Survey

Summer flounder: Fall kg/tow Through 2016



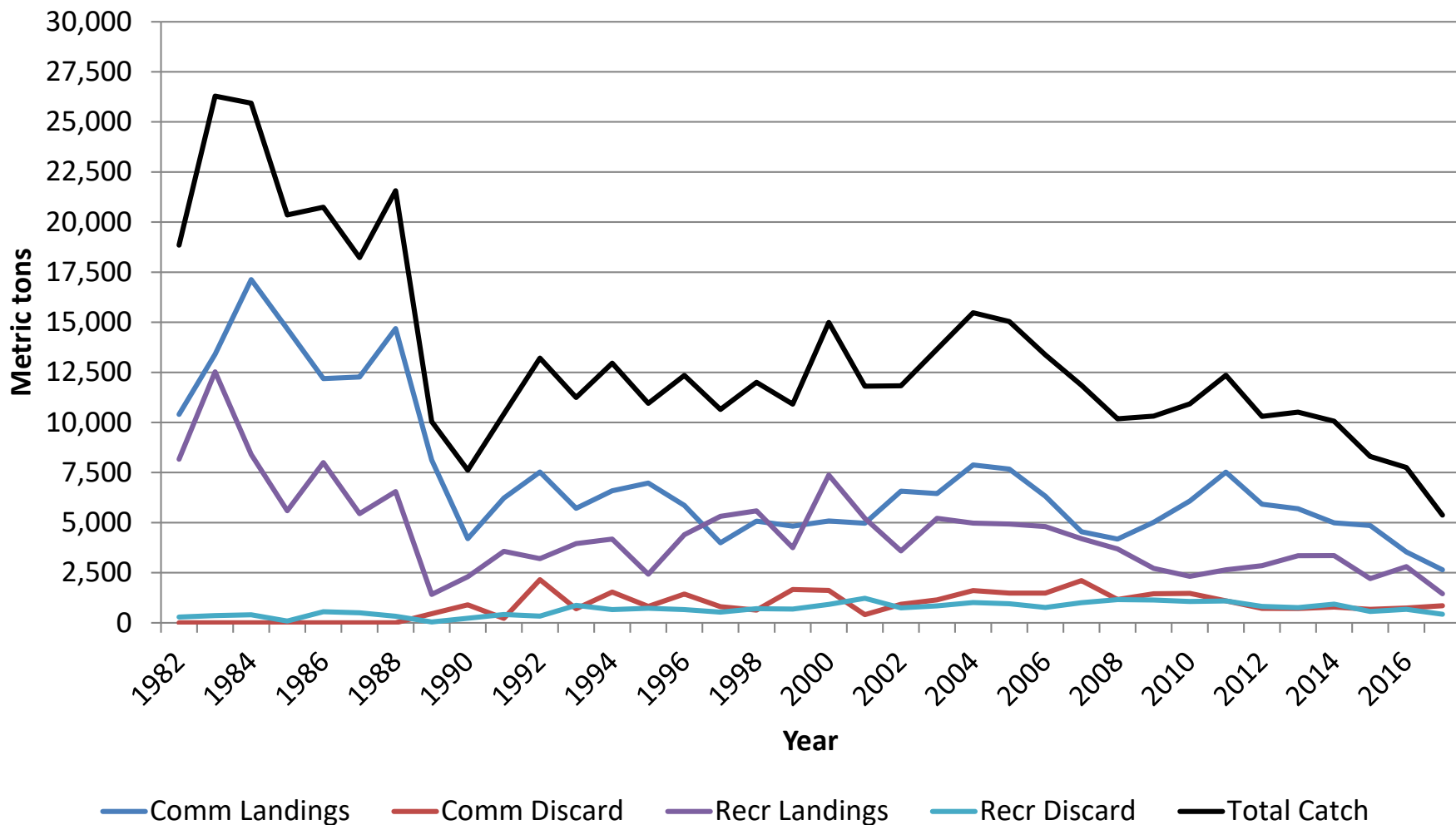
NEFSC Spring Survey

Summer flounder: Spring kg/tow Through 2018

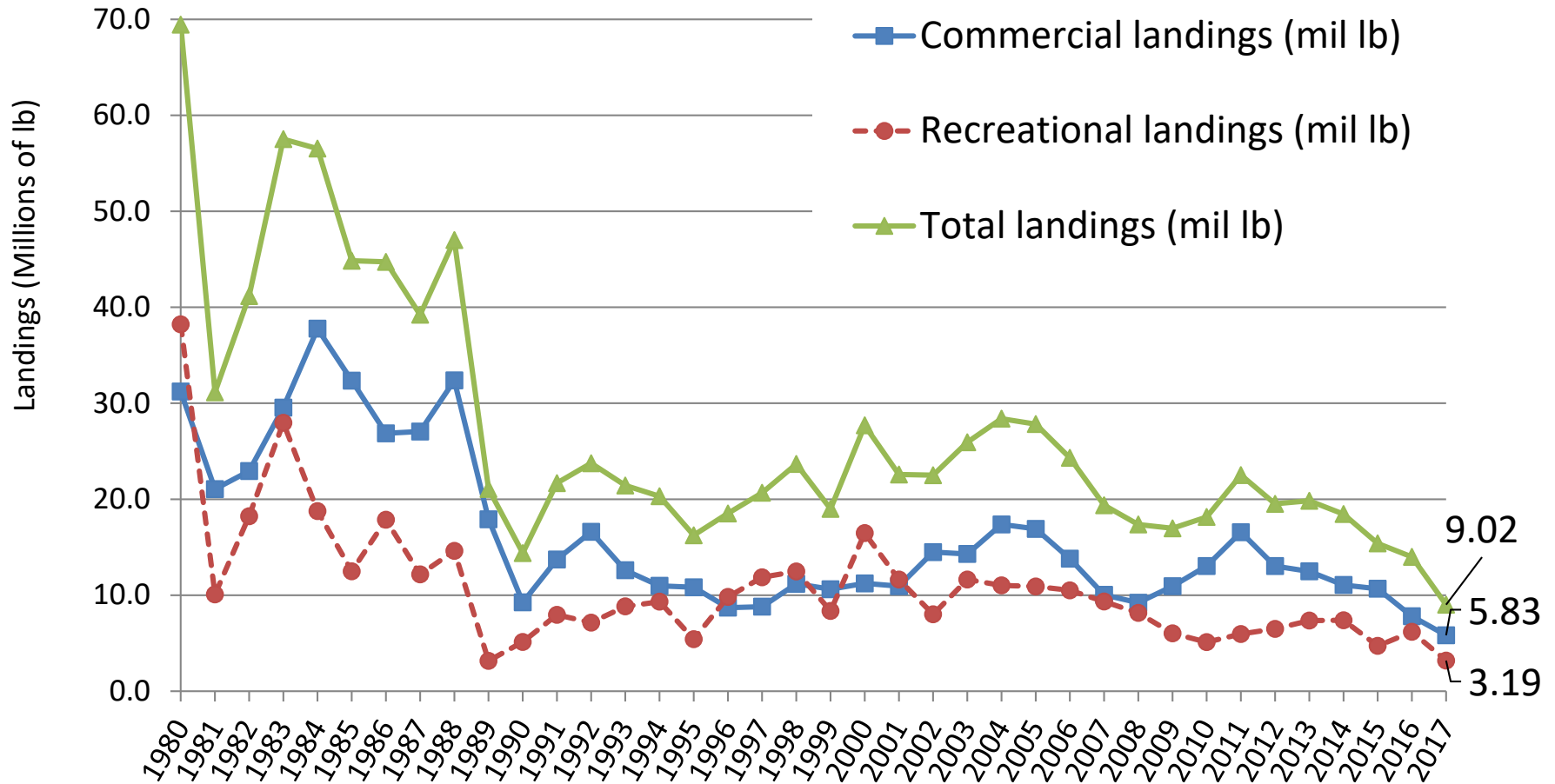


Total Catch

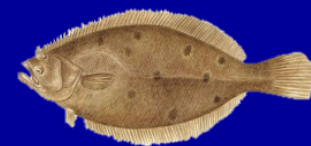
Summer Flounder Fishery Total Catch: 1982-2017



Landings



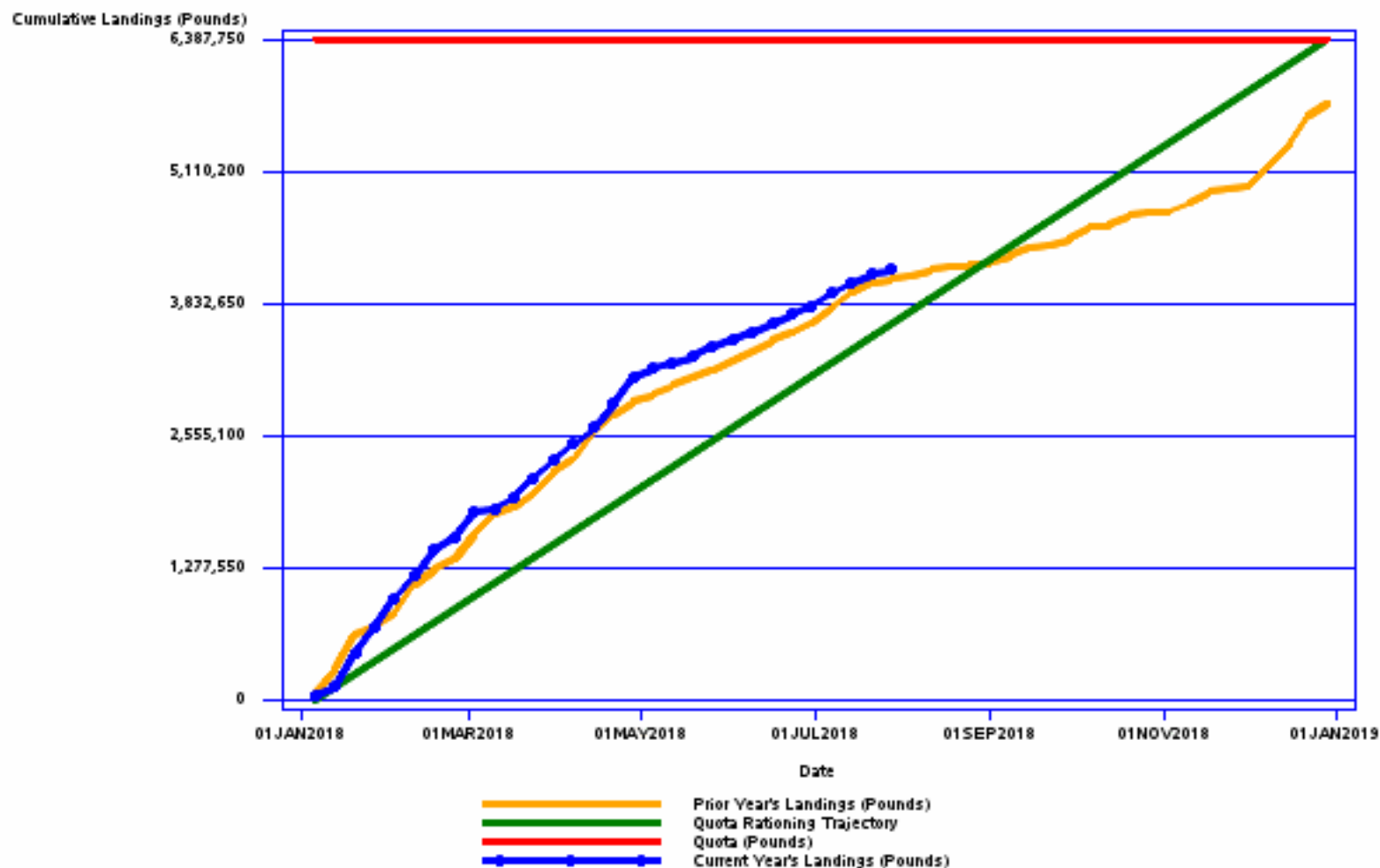
Fishery Performance



Year	Comm. Landings (mil lb)	Comm. Quota (mil lb)	Comm. % Overage (+)/ Underage(-)	Rec. Landings (mil lb)	Rec. Harvest Limit (mil lb)	Rec. % Overage (+)/ Underage(-)
2013	12.44	11.44	+9%	7.36	7.63	-4%
2014	11.00	10.51	+5%	7.39	7.01	+5%
2015	10.68	11.07	-4%	4.72	7.38	-36%
2016	7.81	8.12	-4%	6.18	5.42	+14%
2017	5.83	5.66	+3%	3.19	3.77	-15%
5-yr Avg.			+2%			-7%

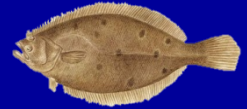
Quota Monitoring

Summer Flounder Quota Monitoring Report



65% of commercial quota harvested as of week ending July 28, 2018.

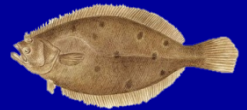
AP Fishery Performance Report



General Management Issues

- Request Council/SSC presence at AP meetings
- MRIP data fundamentally flawed; many want mobile app reporting
- Stability/predictability in specifications important
- Concerns with trawl surveys
- Support for return of RSA

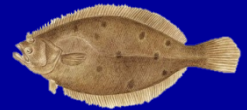
AP Fishery Performance Report



Stock Status

- “Look into numbers rather than at them” - 2015 catch was better than shown by data
- One observation of seeing more small (likely juvenile) fish lately
- Reference points need to be addressed ASAP – the biomass reference point is unattainable
- Concern that observers are not capturing useful data as they are focused on turtles

AP Fishery Performance Report



Environmental and Ecological Issues

- Climate change needs to be considered more thoroughly in terms of area/timing of trawl surveys
 - Inshore areas need to be better addressed (e.g., Nantucket Shoals and Buzzard's Bay)
 - Larger fish are observed inshore more often these days

AP Fishery Performance Report



Market and Economic Issues

- Less overlap between state open seasons = better price
- IFQ quota holders in MD make more money leasing quota than fishing it
- Not enough quota along coast to keep everyone going
- Derby conditions occur when fishery opens, driving price down

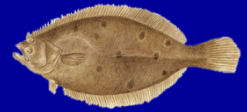
AP Fishery Performance Report



Research Recommendations

- Investigate ocean ranching of juvenile fluke to improve recruitment (as Japan has done)
- Several support reviving RSA or similar program
- More collaborative research, with focus on species in apparent decline like summer flounder

Advisor Written Comments



- Additional support for RSA program
- Support for commercial landings limits instead of possession limits (transit to offload catch in multiple states)
- Rec. fishing in CT waters of Long Island Sound has been “off” in recent years
 - Fluke fishing ends earlier in the year than it used to
- Private anglers underrepresented in the AP/public input process

Advisor Written Comments



- Different NJ recreational regulations for Delaware Bay helpful, though fishing businesses in southern NJ still suffering
- Fluke stocks appear to be at a low level in DE Bay
- Suggest additional research on both genetics and migration patterns; could help explain stock declines and/or shifts

Additional Written Comments



- Several recent comments re: recreational regulations
- High size limits putting too much pressure on large females
- Concern with higher discard mortality for larger fish
- Support for slot limits

Basis for 2019 Recommendations

- 2019 OFL projections using 2016 assessment update (described in data update)
 - Updated with realized 2016 and 2017 catch
 - No new survey or other data
- Assumes 100% of 2018 ABC will be caught
- Resulting OFL associated with $F_{MSY} = 0.309$ is 20.60 mil lb (9,343 mt)

SSC ABC Recommendation

- Consistent with staff recommendation in memo
- Using 2019 OFL projection and:
 - Lognormal distribution of OFL with 60% CV
 - Projected 2018 SSB = 78% of SSB_{MSY}
 - Typical life history
 - Resulting $P^* = 0.300$
- Resulting 2019 ABC = 15.41 mil lb (6,988 mt)

2019 SSC Recommendation with Comparison to 2018



	2018		2019	
	Mil lb.	mt	Mil lb.	mt
OFL	18.24	8,272	20.60	9,343
ABC	13.23	5,999	15.41	6,988

SSC Comments

- No information to support revising approach to setting ABC specifications
- Will re-evaluate CV associated with OFL when reviewing benchmark results
- Noted additional source of uncertainty: ABC is based on additional year's projection from the 2016 assessment

MC Recommendations



Annual Catch Limits/Annual Catch Targets

- Supports staff recommendation for interim 2019 limits
- Commercial and recreational ACTs=ACLs

MC Recommendations



ACLs/ACTs

- Some associated risk:
 - Some states well into comm. fishing year before revisions expected
 - Concern with using additional year of projections, especially given recent projection performance
- To mitigate some risk, Council and Board could consider keeping ACTs level with 2018

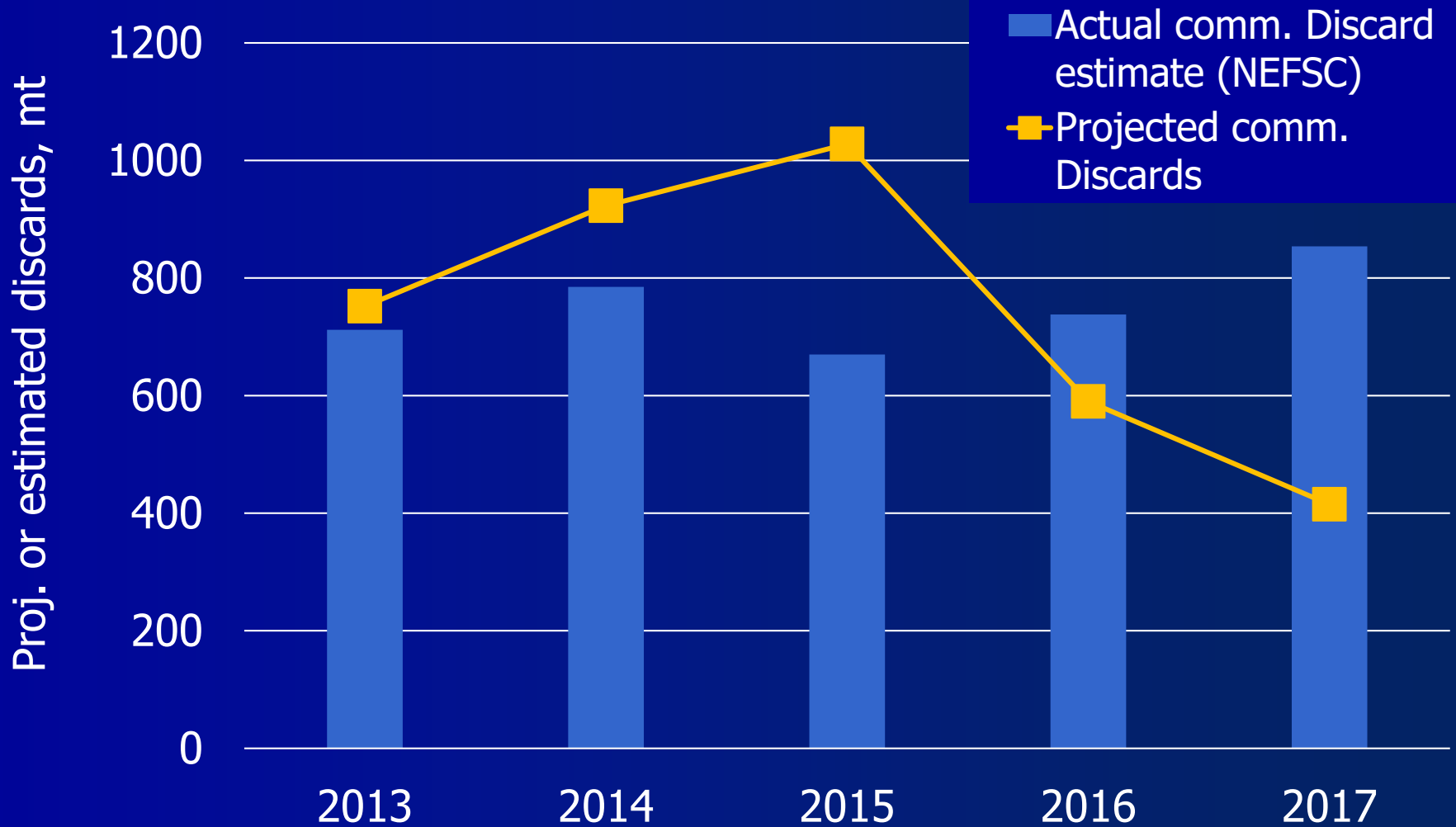
MC Recommendations



Commercial ACT

- Landings typically close to comm. quota
- Some concern with commercial discards (next slide)

Commercial Discards



MC Recommendations



Commercial ACT

- Note that a commercial AM will be implemented in 2019 based on 2017 commercial ACL overage
 - Mostly driven by discards
 - Final catch numbers & AM magnitude still being confirmed, but expected to be large

MC Recommendations



Commercial ACT

- Observer data: 2017 discards appear driven by reasons related to low quota (see staff memo)
- MC recommends no reduction from ACL to ACT for 2019, but will revisit discards when reviewing assessment results

MC Recommendations



Recreational ACT

- Continue to address recreational management uncertainty through recreational specifications
- Recommend no liberalizations to 2019 measures until revised MRIP data incorporated into assessment and thoroughly considered

Note on Discards Split

- MC noted that sector-specific discard projection methods could likely be improved
- Discards portion of ABC: divided based on 3-year moving average of discards by sector

2013-2015	2015-2017
49% commercial; 51% recreational	58% commercial; 42% recreational

- % increases in ACLs for 2019 differ by sector

Recommendation Summary

	2018	2019
OFL	<i>18.69 mil lb</i>	20.60 mil lb
ABC	<i>13.23 mil lb</i>	15.41 mil lb
Commercial ACL	<i>7.70 mil lb</i>	9.18 mil lb
Recreational ACL	<i>5.53 mil lb</i>	6.22 mil lb
Commercial Quota	<i>6.63 mil lb</i>	7.72 mil lb
Recreational Harvest Limit	<i>4.42 mil lb</i>	5.15 mil lb

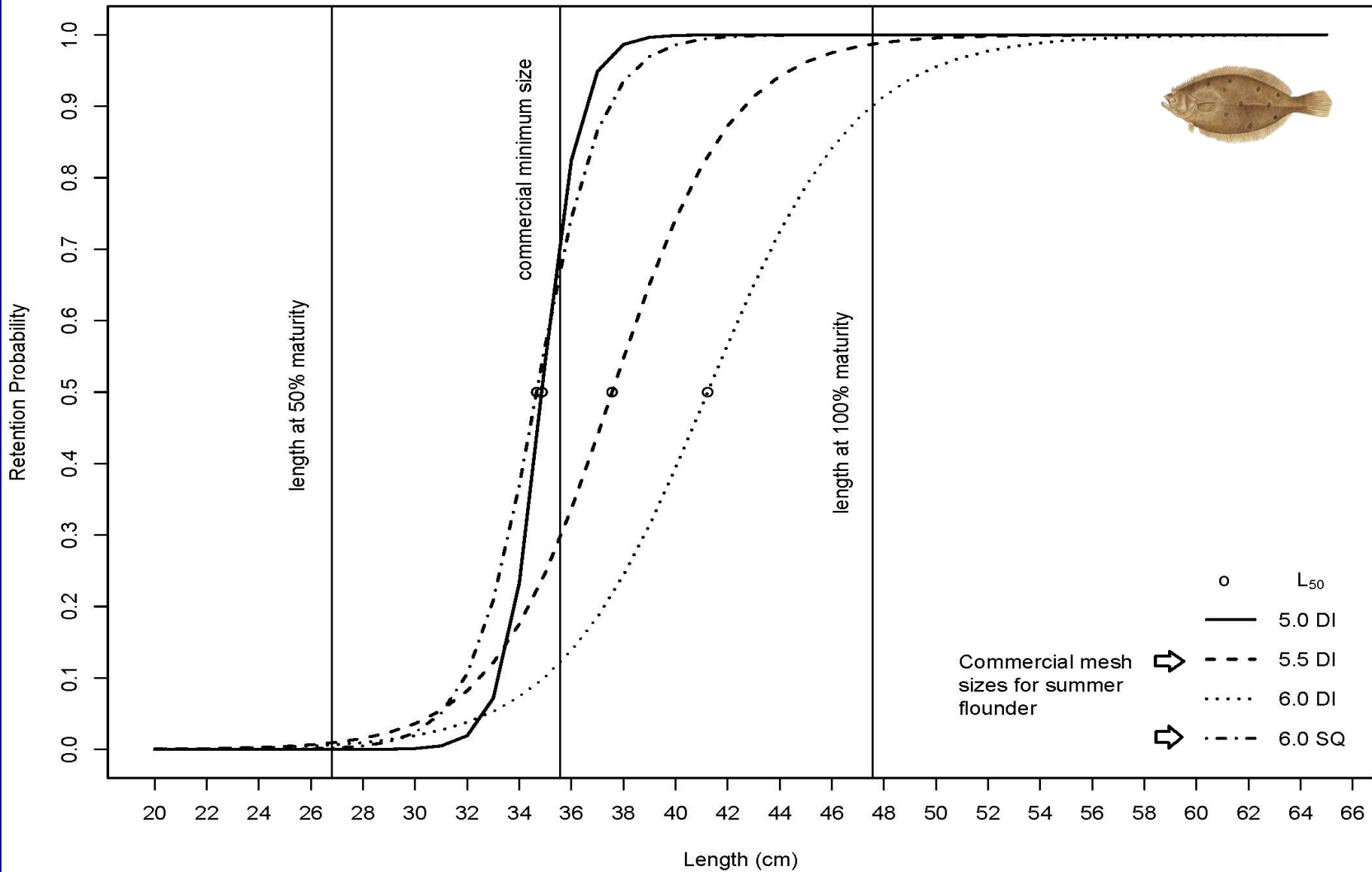
MC Recommendations



Commercial Mesh Size

- Currently required: 5.5" diamond or 6.0" square
- Mesh size study results indicate these may not be equivalent
 - 6.0" square appears closer to 5.0" diamond
- Some MC concern about retention of undersized fish with 6.0" square

(lengths at 50% and 100% are for both sexes combined)



MC Recommendations



Mesh Size

- MC: Explore phase out of 6.0" square mesh over several years?
 - Input from industry needed
 - Any changes require further analysis; should have long phase-in period to minimize economic burden

MC Recommendations



Mesh Size

- April Council meeting: discussed 13" min. size for consistent 5.0" diamond mesh for all 3 FMP species
- MC: If desired, additional biological analysis needed, particularly given stock status and below-average recruitment
- Concern about high-grading and increased disparity between rec/comm. limits


MC Recommendations



■ For 2019, no changes to:

- Minimum fish size (14")
- Minimum mesh size (5.5" diamond/6.0" square)
- Seasonal mesh size thresholds (200 lb Nov 1-Apr 30; 100 lb May 1-Oct 31)
- Exemption programs (Small Mesh Exemption Program and flynet exemption)

Recommendation Summary

	2018	2019
OFL	<i>18.69 mil lb</i>	20.60 mil lb
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