



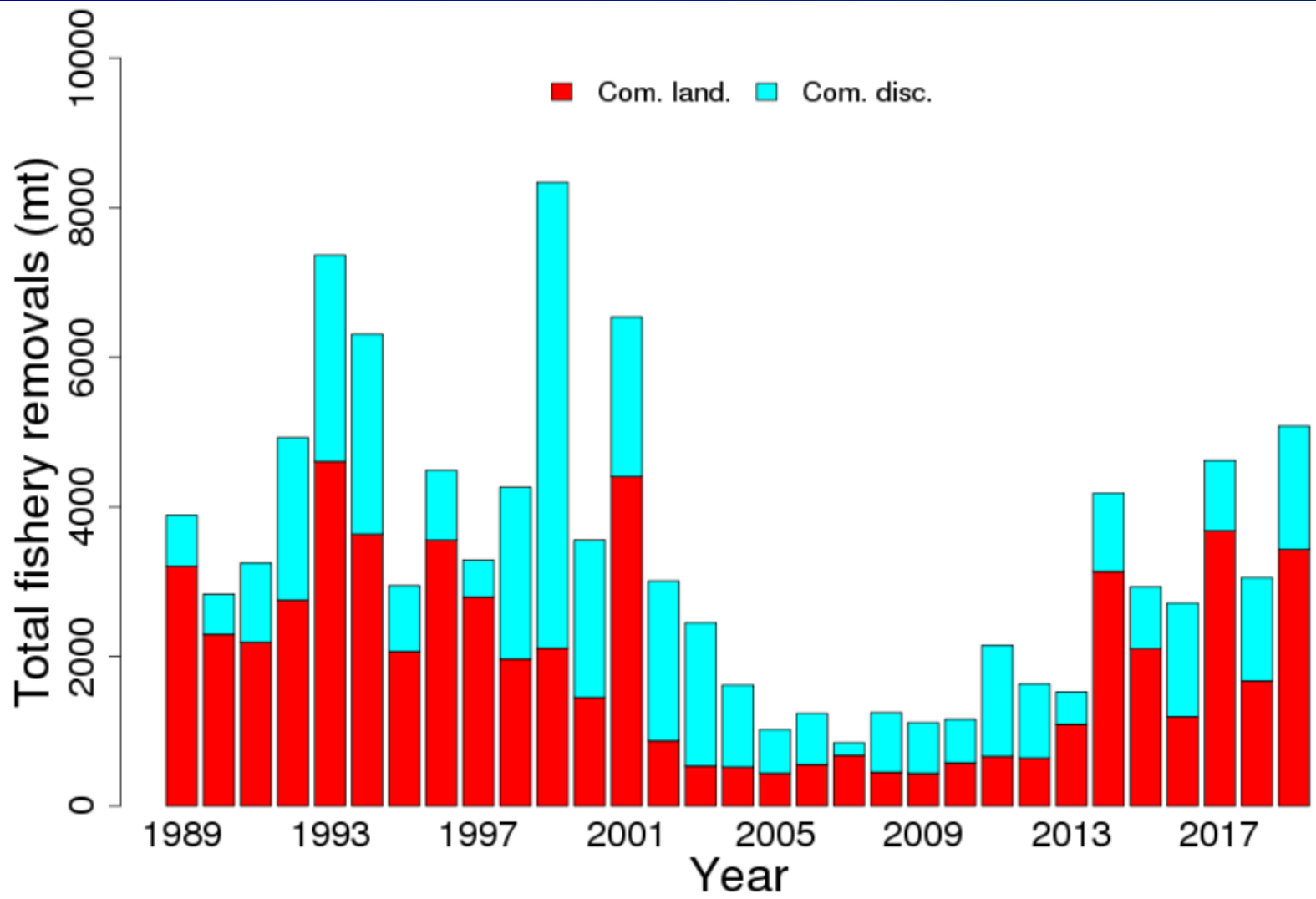
# ***Butterfish***

*August 2020*

# Overview

- Center/Assessment
- Current Specifications
- Info Doc Highlights
- FPR Highlights
- Staff recommendation
- SSC

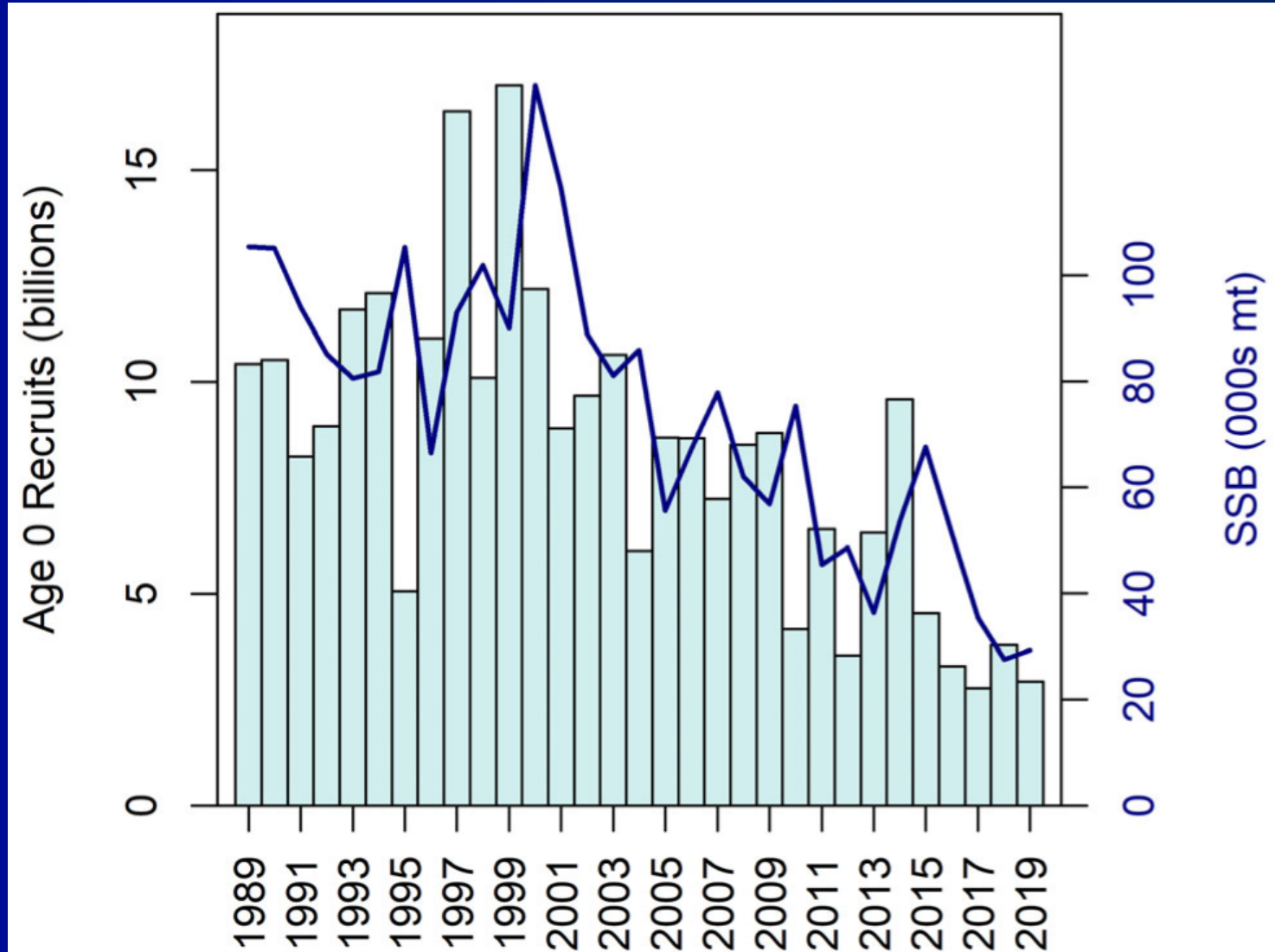
# Assessment - Catch



# Assessment - Recruits & Biomass

Bars =  
Recruitment

Line =  
Biomass



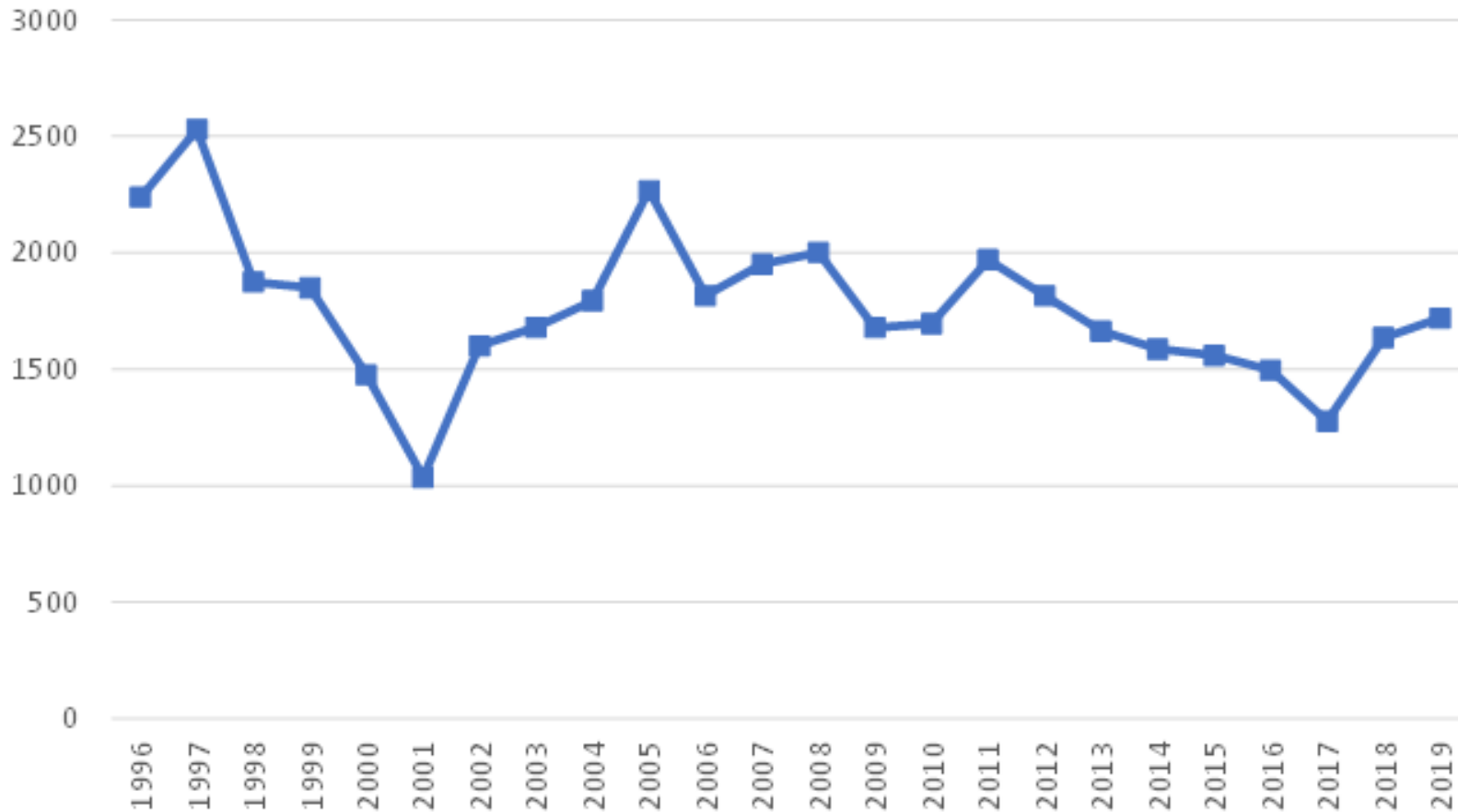
# Current Specifications (100%CV)

**Table 10. Summary of Butterfish Preferred Specifications 3b.**

	Specification	2018	2019	2020	
(a)	ABC (SSC)	17,801	27,108	32,063	
(b)	ACT Buffer	890	2,033	3,206	
(c)	ACT Buffer %	5.0%	7.5%	10.0%	
(d)	ACT	16,911	25,075	28,857	
(e)	Landings or "Domestic Annual Harvest (DAH)"	12,093	20,061	23,752	These amounts total to the ACT
(f)	Assumed discards in butterfish fishing (2.4%)	297	493	584	
(g)	Assumed other discards (highest from cap years)	637	637	637	
(h)	Butterfish Cap (longfin discards)	3,884	3,884	3,884	
(i)	Close primary directed at this amount, with 1,000 mt left; go to 5,000 pound trip limit	11,093	19,061	22,752	

# Info Doc Highlights

Butterfish Inflation-Adjusted Price \$/MT



# Info Doc Highlights

- In-year landings not published live, but trending lower than last year.

# FPR Highlights

- Shifting thermal habitat
- Tariffs
- Regulation limitations – Monument
- COVID-19 affecting everything in current year.
- Limited interest, developing markets
- State surveys may be important



# Staff Recommendation

- Trends are downward
- Projections too optimistic vs low recruitment
- Conservative approach within the standard approaches – lower recruitment and higher CV... 150%
- Averaged ABC
- 13,442 MT for 2021-2022
- SSC...

# Butterfish(100% OFL CV)



- **Highlights**

- Data updated but no changes in model parameterization
- Revised model compares well with earlier versions
- SSB and recruitment have declined since 2000
- Model estimates a high natural mortality rate  $M=1.29$  (~73% decrease/year)
- Developed OFL CV Decision Table

- **Uncertainties**

- Foundation of Fmsy proxy is ad hoc
- Conflicting trends among surveys not included in model
- Environmental effects in model dynamics
- No update of thermal habitat availability indices since 2014.
- Inability to forecast observed declining trend in recruitment in projections; preference for time varying ABC rather than average

- **Research**

- Improve methods for estimation of thermal habitat
- Study alternative Fmsy estimates
- Consider use of additional surveys

- **Based on Best Scientific Information Available**

# Council Options

- SSC – Variable
- SSC – Averaged
- Lower is also ok (Staff Recommendation)

# Council Options

- SSC – Variable (Table 3)
- SSC – Averaged (Table 4)
- Lower is also ok (Staff Recommendation)  
(Table 5)

# Council Option – SSC Variable

Table 3. Butterfish Specifications Option A – SSC Variable (SSC-Recommended) (ALL MT)

	Specification	2021	2022
a	ABC	11,993	17,854
b	ACT Buffer %	5.0%	5.0%
c	ACT Buffer	600	893
d	ACT (a-c)	11,393	16,961
e	Assumed discards in butterfish fishing (7.6% of catch)	522	945
f	Assumed other discards (highest from early cap years)	637	637
g	Set-Aside for discards in butterfish and other fisheries (e+f)	1,159	1,582
h	Butterfish Cap (longfin discards)	3,884	3,884
i	Total discard set-aside (g+h)	5,043	5,466
j	Landings or "Domestic Annual Harvest (DAH = d-i)"	6,350	11,495
k	Close primary directed at this amount, i.e. with 1,000 mt left (j-1000); go to 5,000 pound trip limit	5,350	10,495

# Council Option SSC Average

Table 4. Butterfish Specifications Option B – SSC Averaged (ALL MT)

	Specification	2021	2022
a	ABC	14,924	14,924
b	ACT Buffer %	5.0%	5.0%
c	ACT Buffer	746	746
d	ACT (a-c)	14,178	14,178
e	Assumed discards in butterfish fishing (7.6% of catch)	734	734
f	Assumed other discards (highest from early cap years)	637	637
g	Set-Aside for discards in butterfish and other fisheries (e+f)	1,371	1,371
h	Butterfish Cap (longfin discards)	3,884	3,884
i	Total discard set-aside (g+h)	5,255	5,255
j	Landings or "Domestic Annual Harvest (DAH = d-i)"	8,923	8,923
k	Close primary directed at this amount, i.e. with 1,000 mt left (j-1000); go to 5,000 pound trip limit	7,923	7,923

# Council Option Staff

Table 5. Butterfish Specifications Option C – Staff Averaged (ALL MT)

	Specification	2021	2022
a	ABC	13,442	13,442
b	ACT Buffer %	5.0%	5.0%
c	ACT Buffer	672	672
d	ACT (a-c)	12,770	12,770
e	Assumed discards in butterfish fishing (7.6% of catch)	627	627
f	Assumed other discards (highest from early cap years)	637	637
g	Set-Aside for discards in butterfish and other fisheries (e+f)	1,264	1,264
h	Butterfish Cap (longfin discards)	3,884	3,884
i	Total discard set-aside (g+h)	5,148	5,148
j	Landings or "Domestic Annual Harvest (DAH = d-i)"	7,622	7,622
k	Close primary directed at this amount, i.e. with 1,000 mt left (j-1000); go to 5,000 pound trip limit	6,622	6,622