

White Hake Rebuilding Strategies Groundfish Plan Development Team Report

Scientific and Statistical Committee meeting

August 24, 2020



New England
Fishery Management Council

NMFS/GARFO Letter

March 5, 2020

“White hake is now considered overfished. Based on the 2019 assessment, the spawning stock biomass dropped to 49.9 percent of the biomass target (B_{MSY}). While this is only 23 mt below the threshold for overfished, this stock was in a rebuilding plan that ended in 2014, and the stock has not yet rebuilt. The Council must, therefore, implement a new rebuilding plan for this stock within 2 years of this notification, consistent with section 304(e)(3) of the Magnuson-Stevens Fishery Conservation and Management Act. We intend to work with the Council through the Plan Development Team to develop this rebuilding plan.”

Council

June 25, 2020

Added white hake rebuilding to the list of items for inclusion in Framework Adjustment 61, which is currently under development.

Groundfish Plan Development Team

August 13 and 20, 2020

Proposed Approach:

- Follow the most recent SSC advice for the development of rebuilding plans by basing Frebuild on a fixed fishing mortality rate, and
- Avoid developing new plans based on achieving an SSB target in a particular year

Groundfish Plan Development Team

August 13 and 20, 2020

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August 13 and 20, 2020

Assumptions/setting up the projections:

- Bridge Year – update CY2019 catch estimate
- Year One – 2021
 - Use ACL + Canadian catch estimate for 2020 and 2021
 - Assume no change to ABCs
- Recruitment – use of full time-series and recent low recruitment period (1995-2016)
- Fishing Mortality/Rebuild – F_0 , F_{25} , F_{50} , F_{70} , F_{75} , and F_{MSY}

White Hake OFLs and ABCs

FY2020 to FY2022

Implemented in Framework Adjustment 59

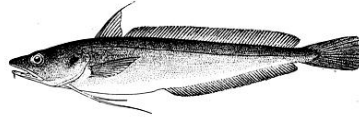
Table 1- OFLs and ABCs (mt) for FY2020- FY2022 for white hake. Projected F and SSB provided. For reference, $SSB_{MSY} = 31,828\text{mt}$, $F_{MSY} = 0.1677$.

Year	OFL	ABC	F	SSB
2020	2,857	2,186	0.13	19,758
2021	2,906	2,186	0.12	20,308
2022	2,986	2,186	0.12	20,826

For Today

The PDT requests SSC feedback on the proposed approach and assumptions.

Additional Slides

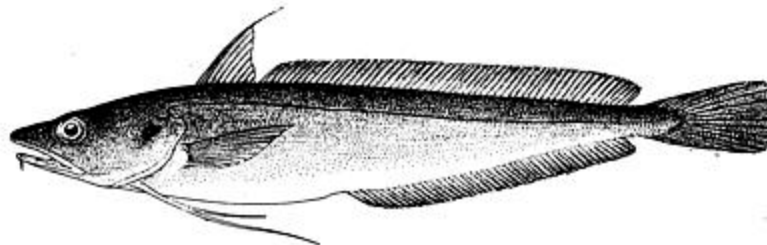


White Hake

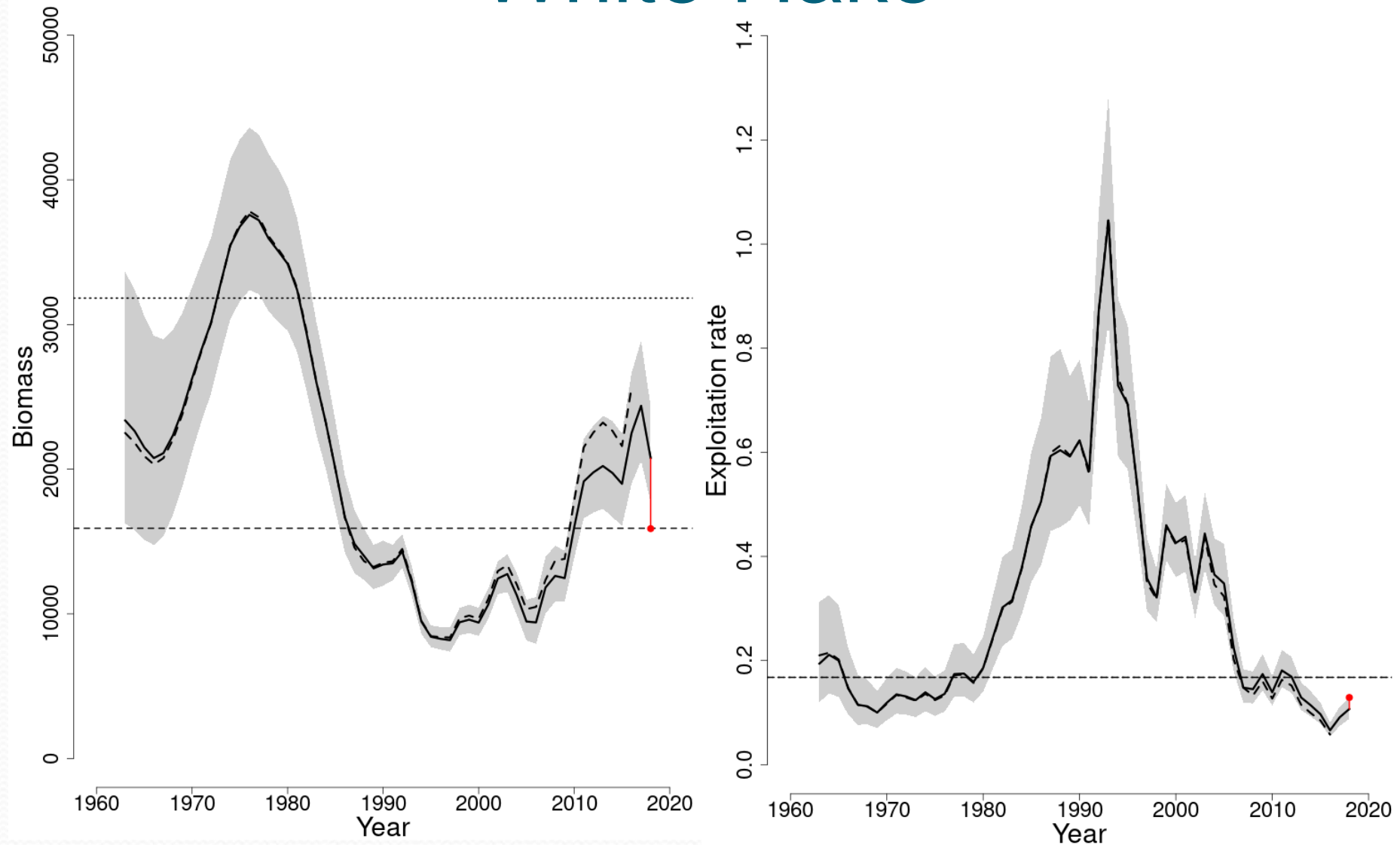
MODEL	ASAP (Level 2)
STOCK STATUS	Overfished & Overfishing is not occurring
REBUILDING	2014 (Did not rebuild)
RETROSPECTIVE ADJUSTMENT	Yes
UNCERTAINTIES	Species mis-identification, recent addition of an extra-large market category causing possible bias in the age composition, no commercial catch data prior to 1989 catchability of older age classes in surveys is low, pooled age length key used in 1963-1981 and 2003.
ASSESSMENT/ REVIEWER COMMENTS	Estimates of commercial landings and discards have decreased over time, but the white hake stock does not show age structure truncation. Species mis-identification impact recruitment, and market category conflation may impact cohort signals.

White Hake

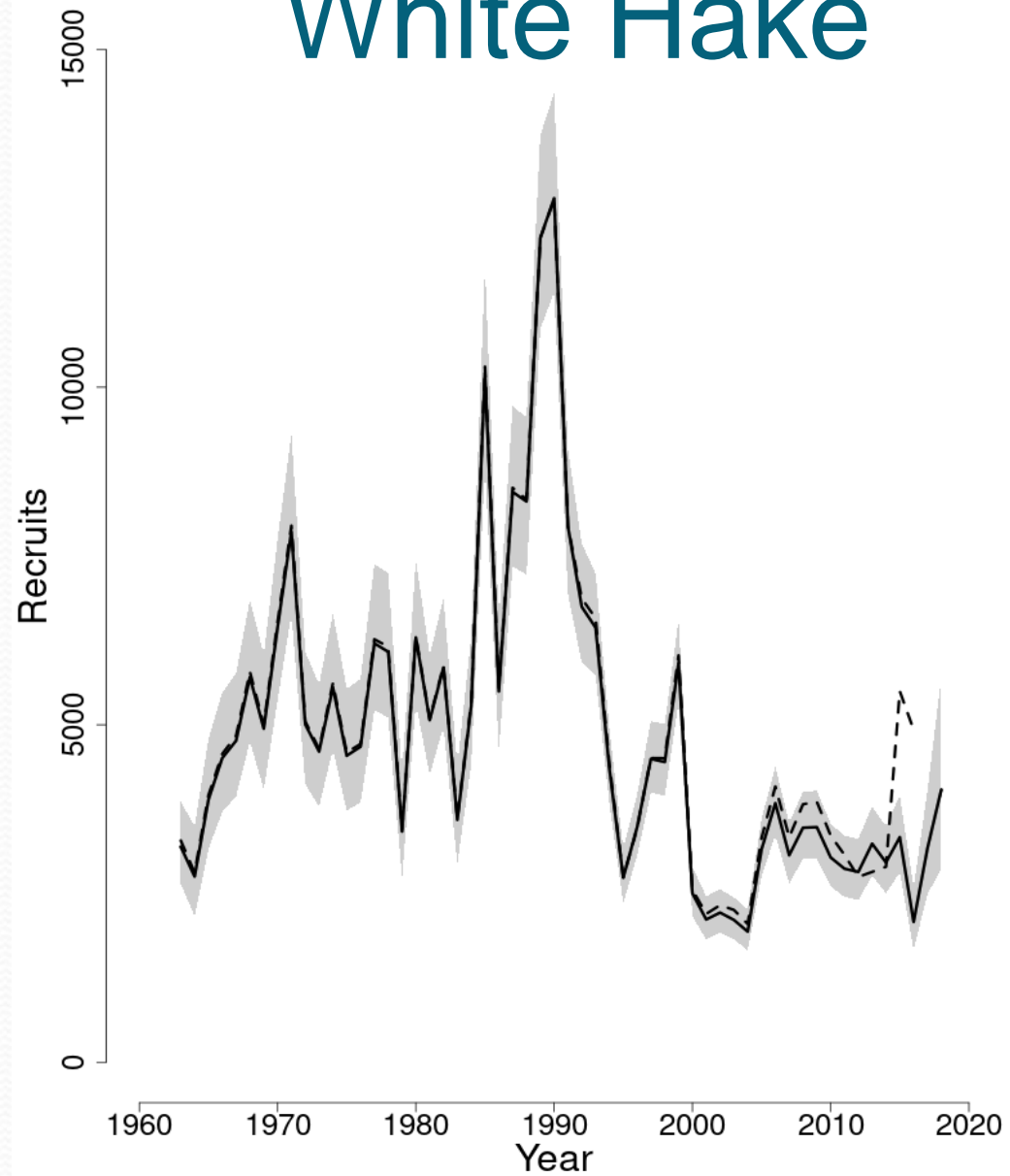
	2017	2019
F_{MSY} proxy	0.1839	0.1677
SSB_{MSY} (mt)	30,948	31,828 (25,398 - 40,317)
MSY (mt)	4,867	4,601 (3,665 - 5,828)
Median recruits (age 1) (000s)	4,616	4,471
<i>Overfishing</i>	No	No
<i>Overfished</i>	No	Yes



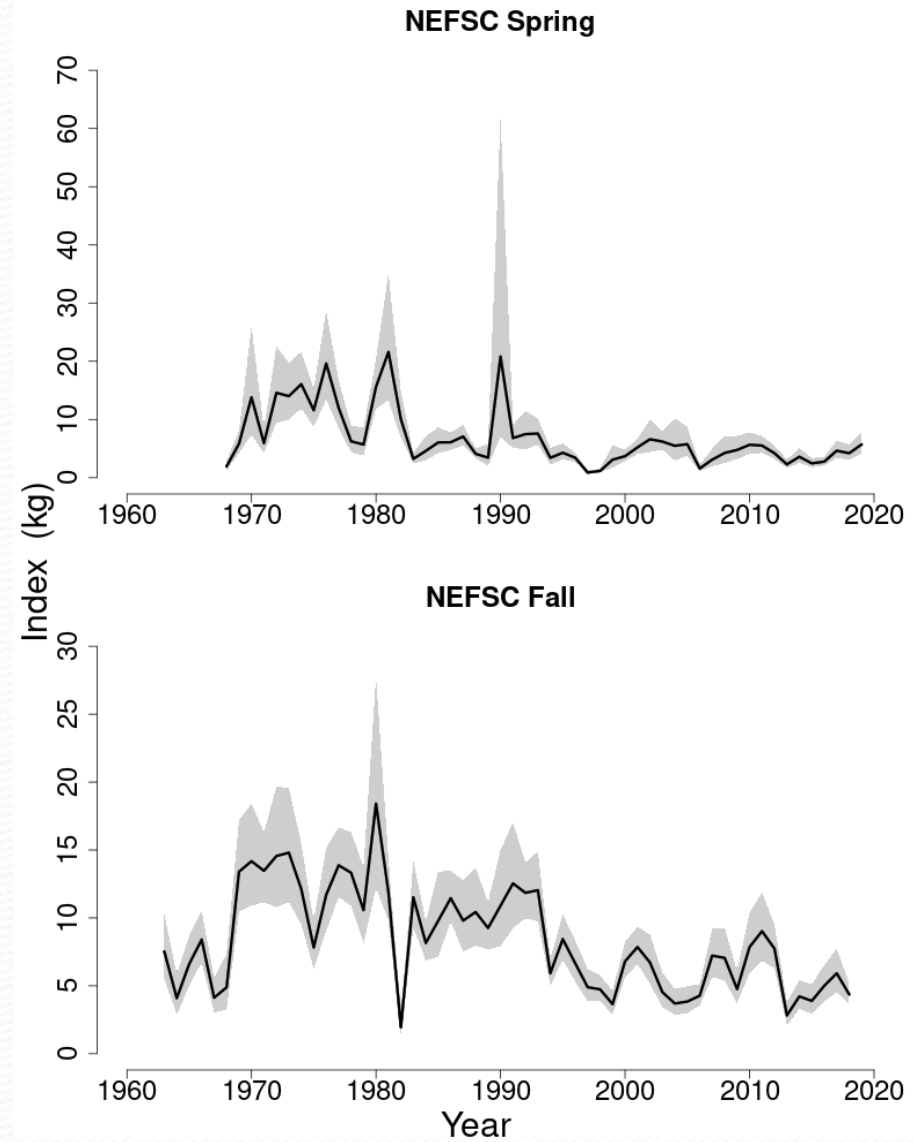
White Hake



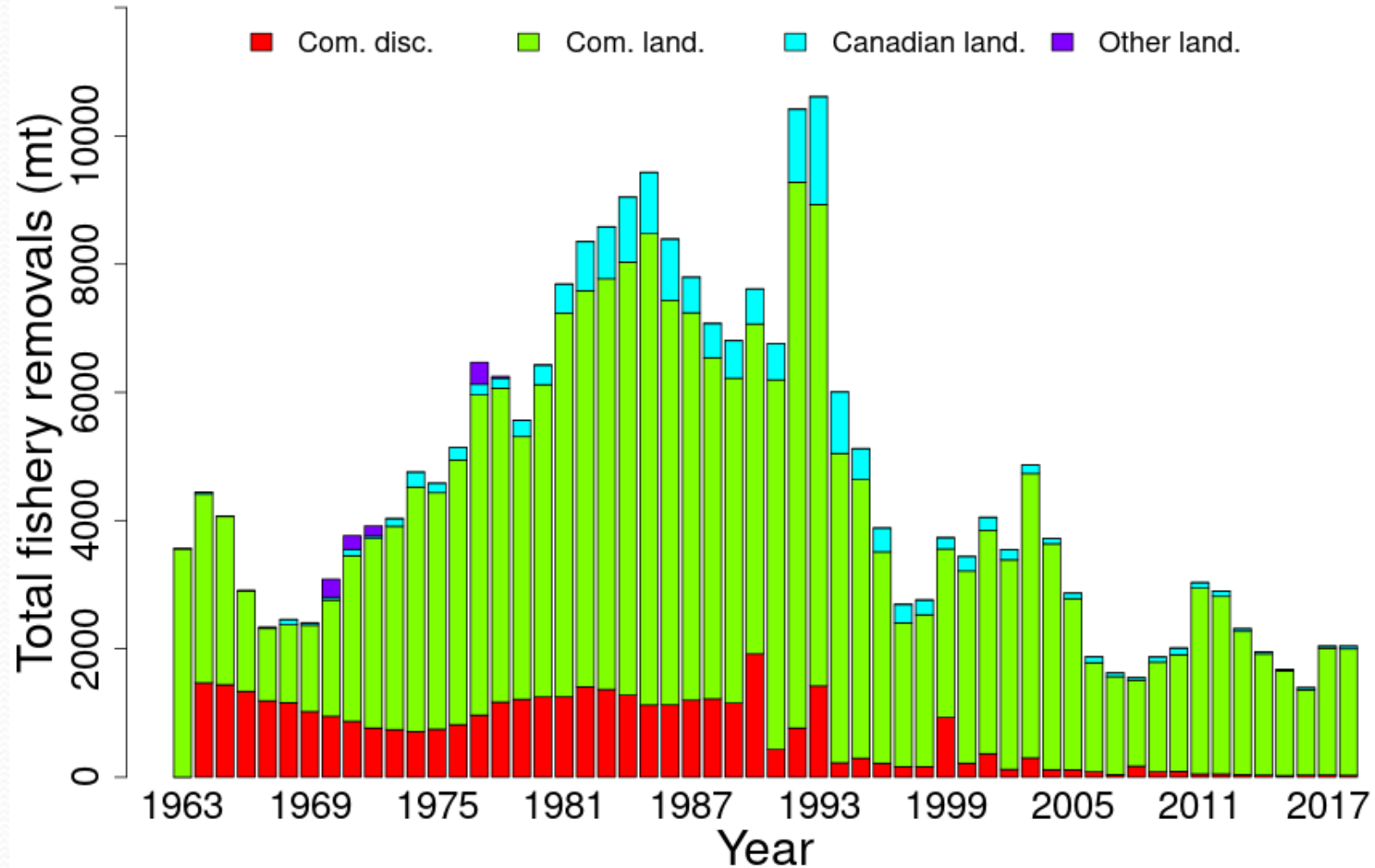
White Hake



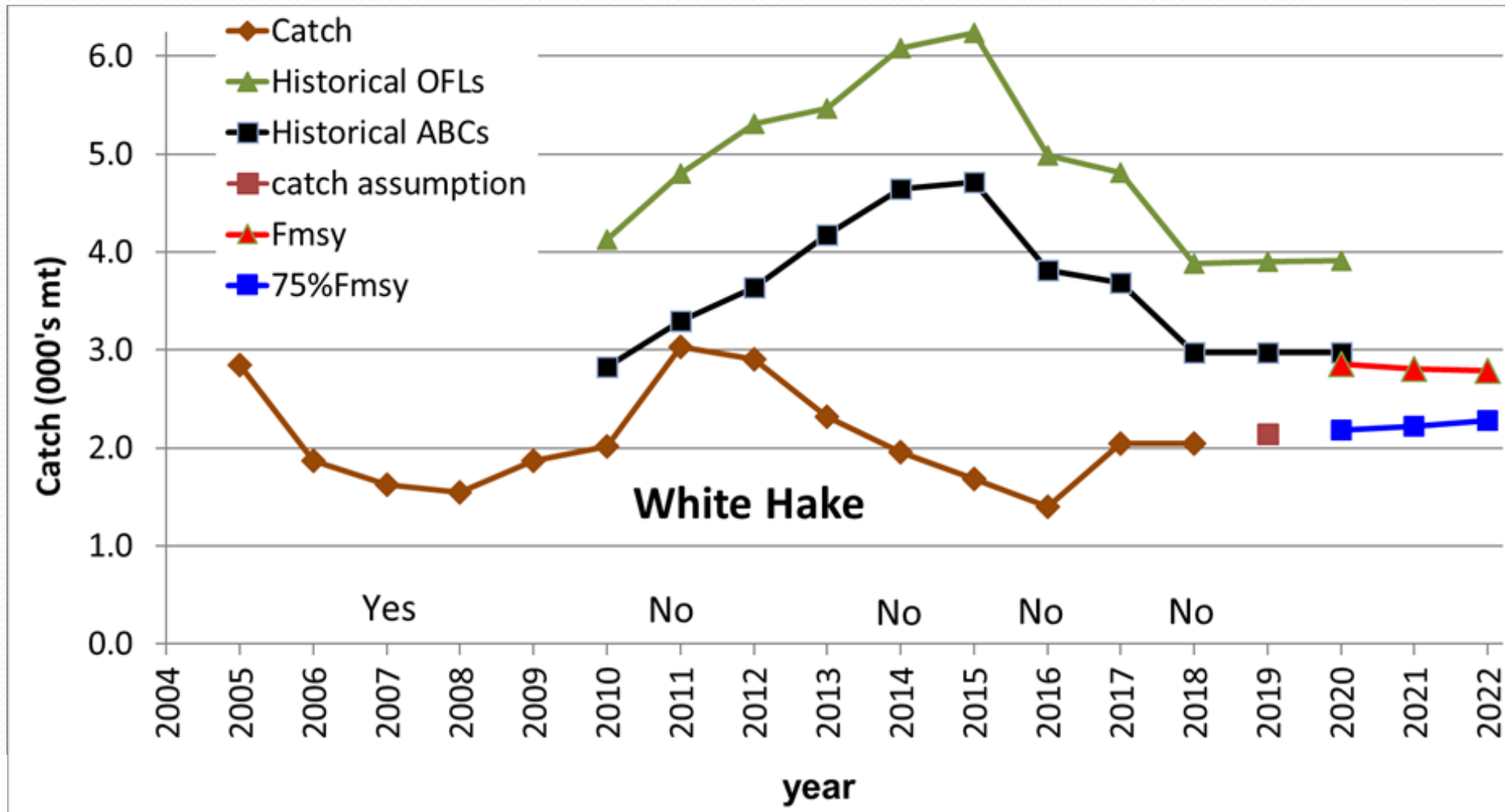
White Hake



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White Hake

Year	Catch	Historical	Historical	Catch	F_{MSY}	75% F_{MSY}
		OFLs	ABCs	Assumption		
2010	2,012	4,130	2,832			
2011	3,034	4,805	3,295			
2012	2,903	5,306	3,638			
2013	2,316	5,462	4,177			
2014	1,955	6,082	4,642			
2015	1,680	6,237	4,713			
2016	1,396	4,985	3,816			
2017	2,043	4,816	3,686			
2018	2,044	3,885	2,971			
2019		3,898	2,971	2,140		
2020		3,916	2,971		2,857	2,186
2021					2,809	2,223
2022					2,791	2,279

White Hake

75%F_{MSY} Projection

year	OFL	ABC	F	SSB
2020	2,857	2,186	0.13	19,759
2021	2,906	2,223	0.13	20,305
2022	2,980	2,279	0.13	20,746

75%F_{MSY} First Year Constant Projection

year	OFL	ABC	F	SSB
2020	2,857	2,186	0.13	19,758
2021	2,906	2,186	0.12	20,308
2022	2,986	2,186	0.12	20,826