



NOAA
FISHERIES

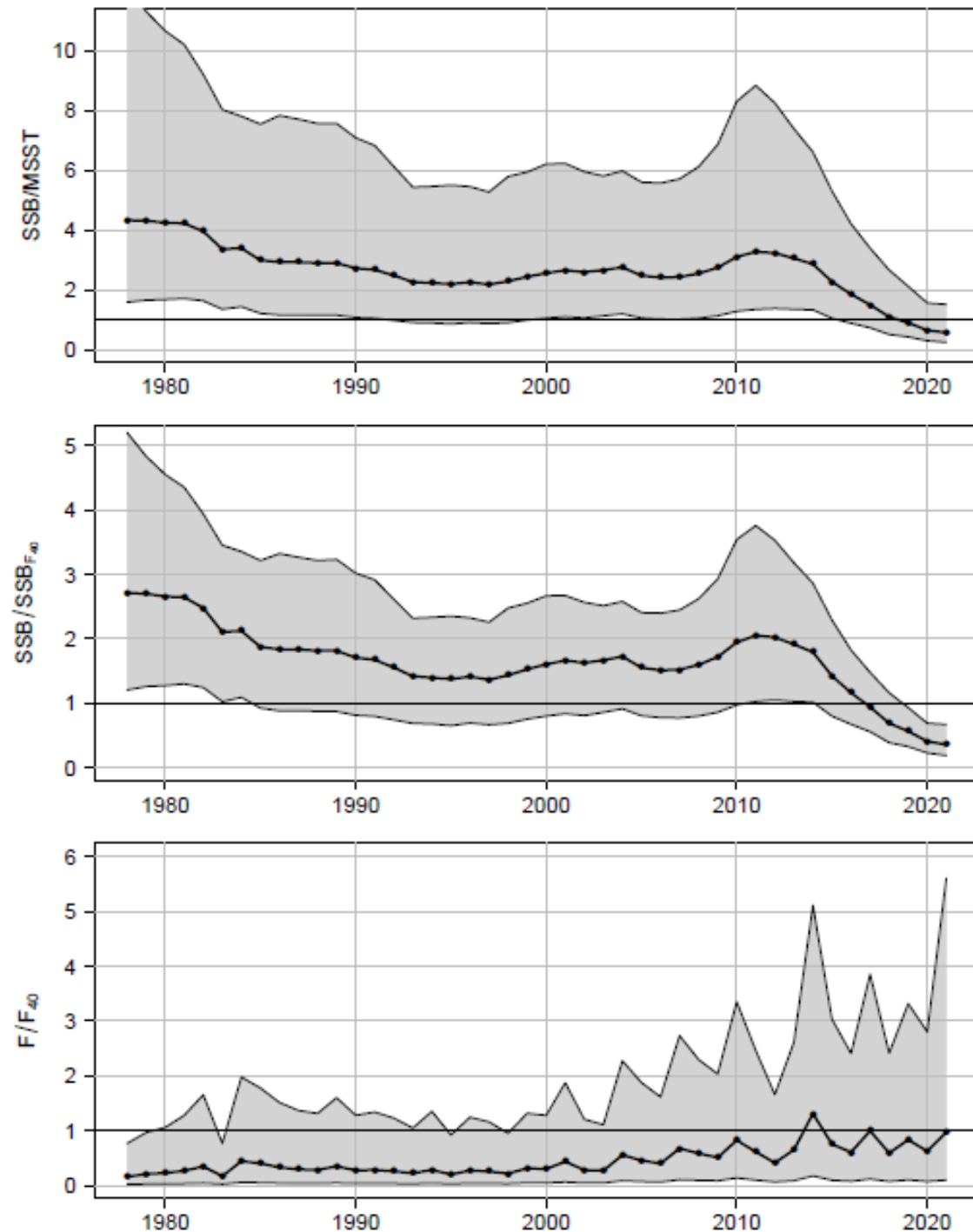
SEDAR 76 Black Seabass projections

South Atlantic Fisheries Management Council

March 2024

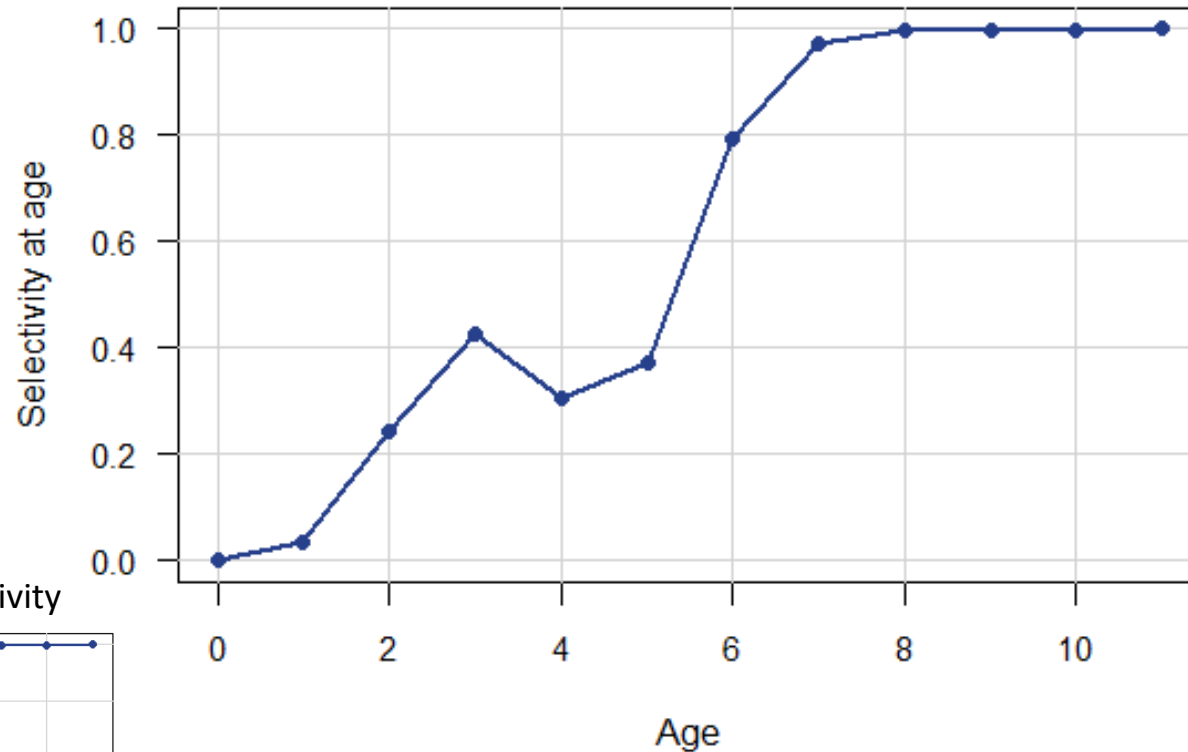
Stock Status

- Majority show stock is currently overfished and below the MSST
- 100% are below optimal stock size of $SSB_{F_{40\%}}$
- Majority show that fishing mortality is below $F_{40\%}$ and not undergoing overfishing but highly uncertain

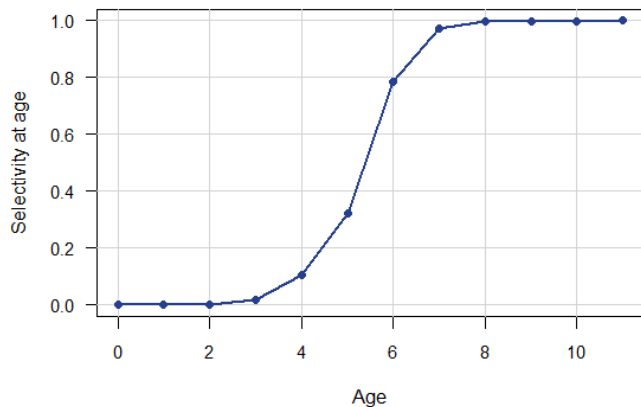


Reference points and projections based on recent (2019-2021) landings and discards

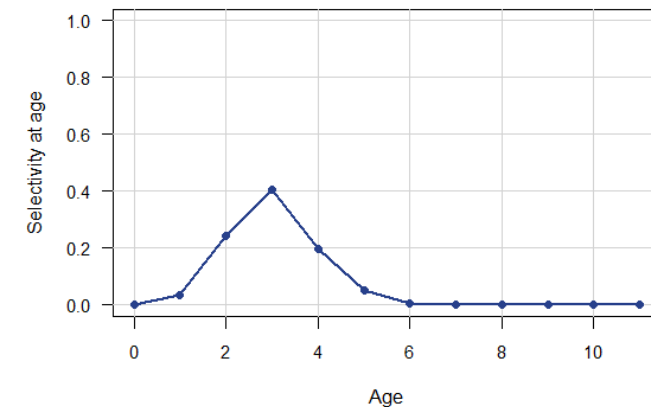
Total weighted Selectivity



Landings weighted Selectivity



Discards weighted Selectivity



Higher fishing mortality rates result in greater discards and fewer landings under equilibrium

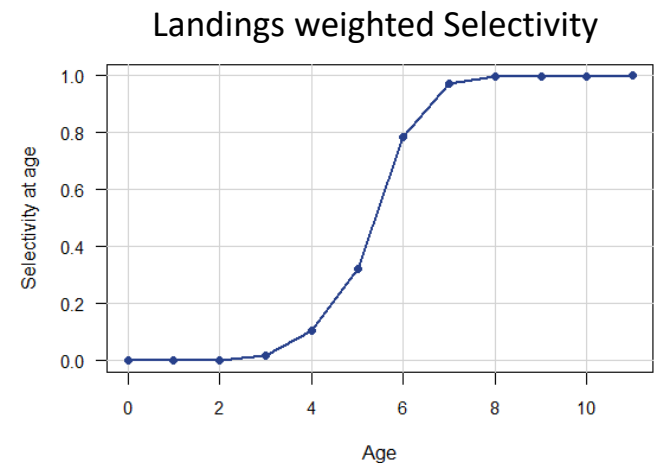
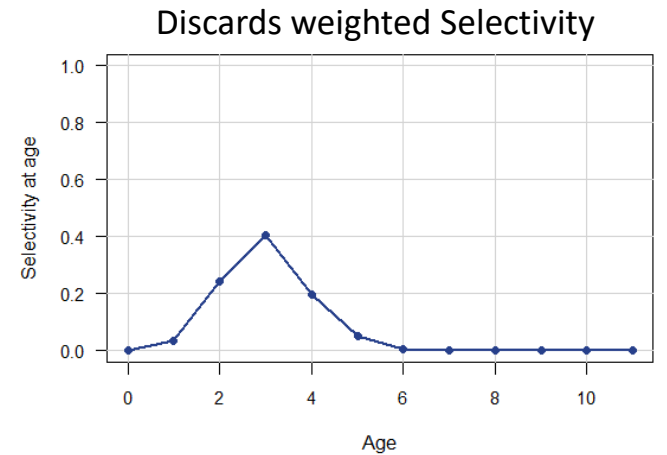
- Landings are maximized at a low F of 0.43
- $F_{40\%}$ (1.178) results in $\frac{3}{4}$ of the mortality allocated to the discards
- Current F is 0.936
- Recreational sector are 99.92% of discard mortality

F	Landings (klb)	Discards (klb)
0.1	572	251
0.43	960	931
0.936	784	1654
1.178	674	1901

$F_{40\%}$

OFL projections

- Discard fishing mortality based on discard selectivity and average F for 2019-2021
 - Assumes fishing effort remains constant
- Landings fishing mortality determined by 70% probability of rebuilding within 10 years
- Recruitment based on long-term average



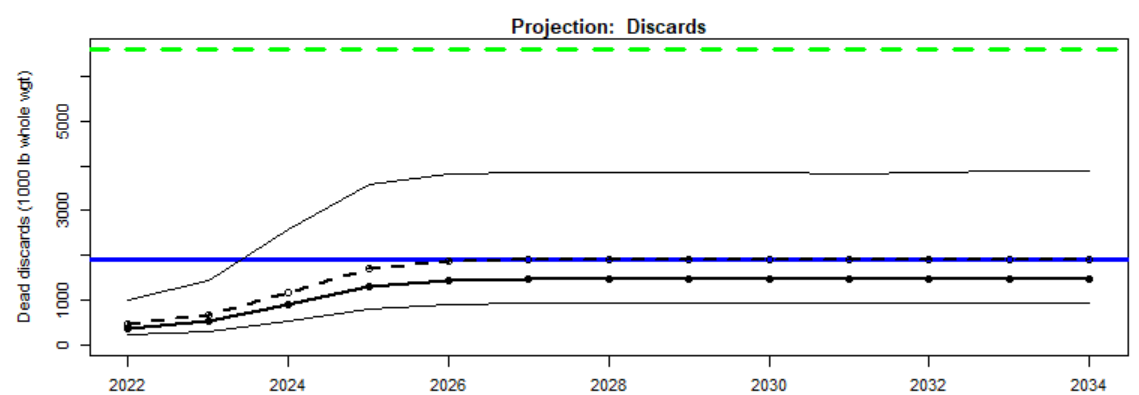
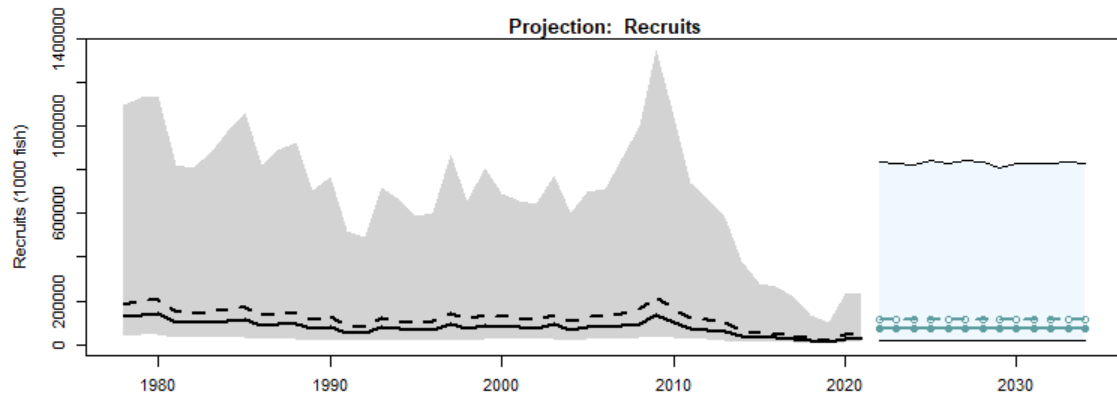
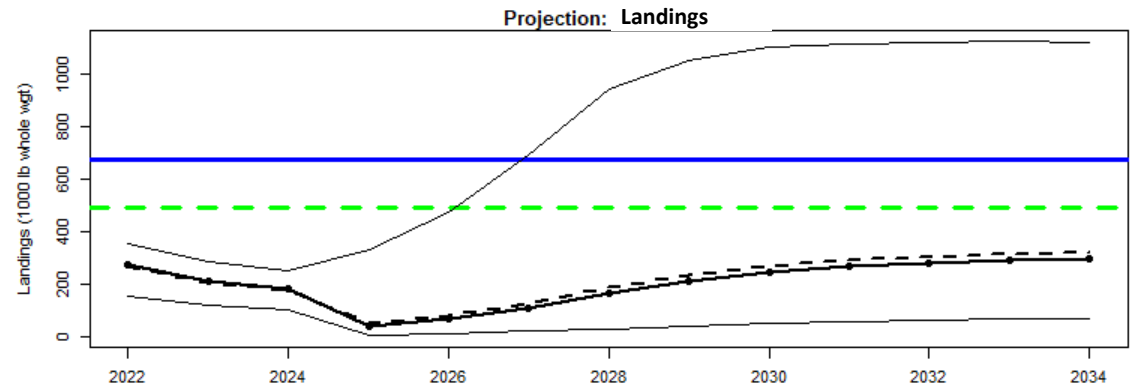
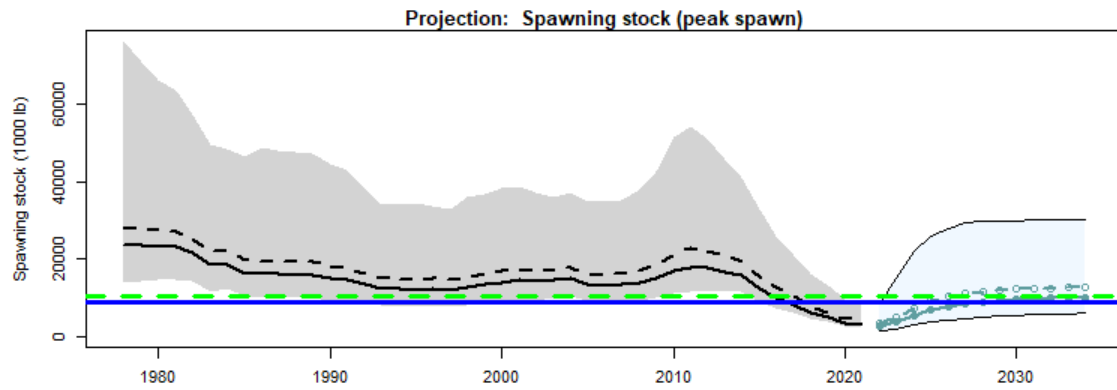
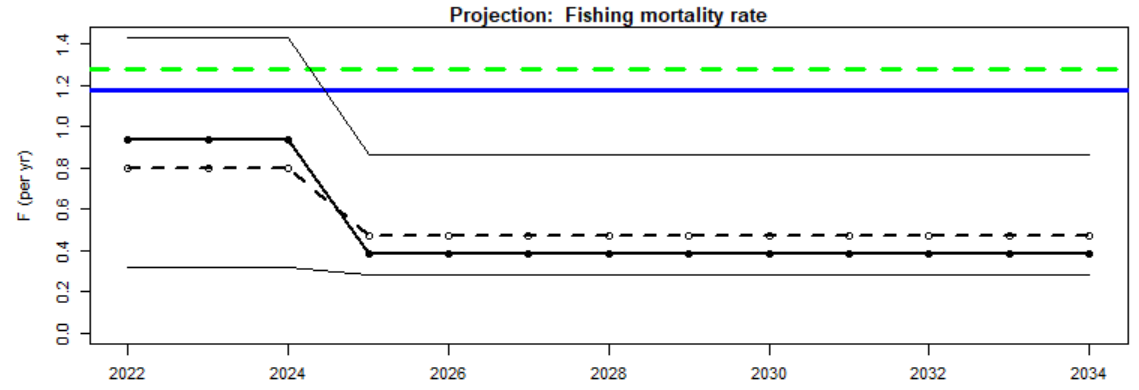
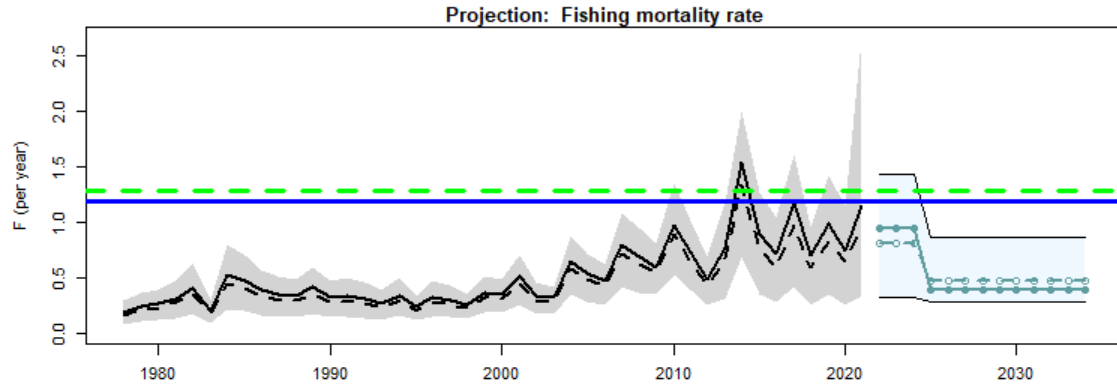
ABC projections

- Discard and landings fishing mortality same as OFL scenario
- Recruitment based on average recruitment from 2014-2019

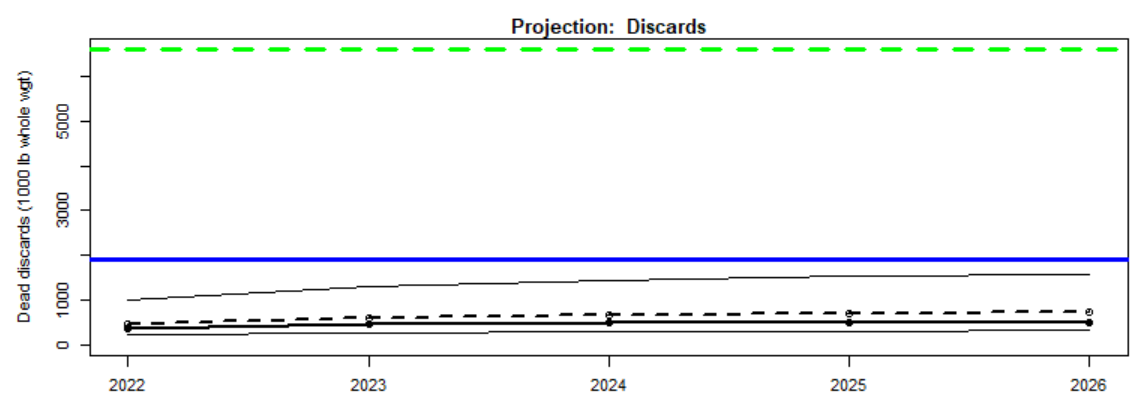
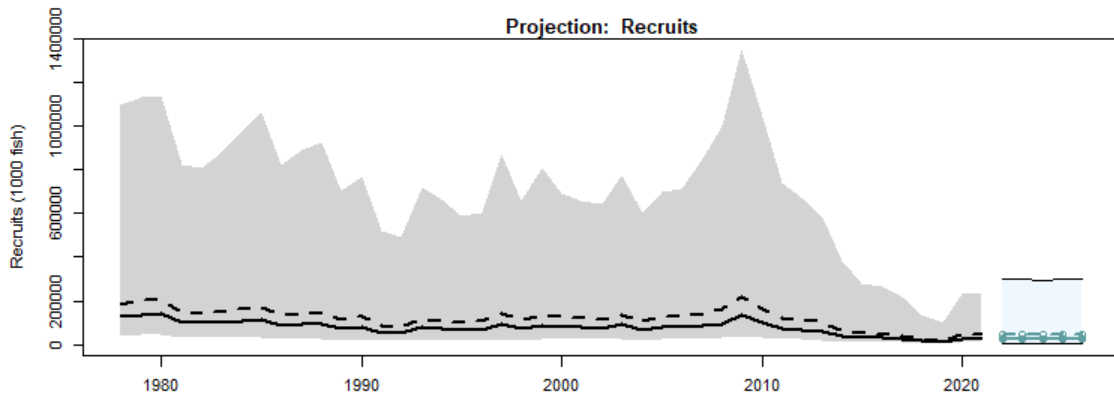
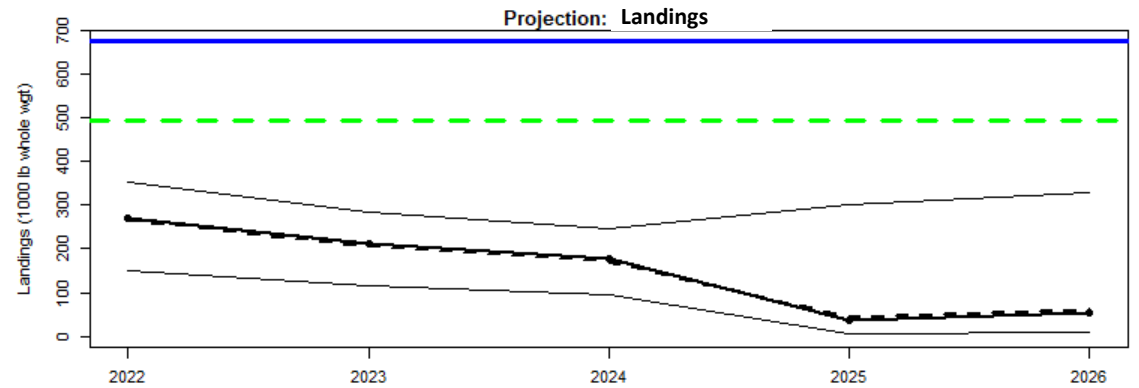
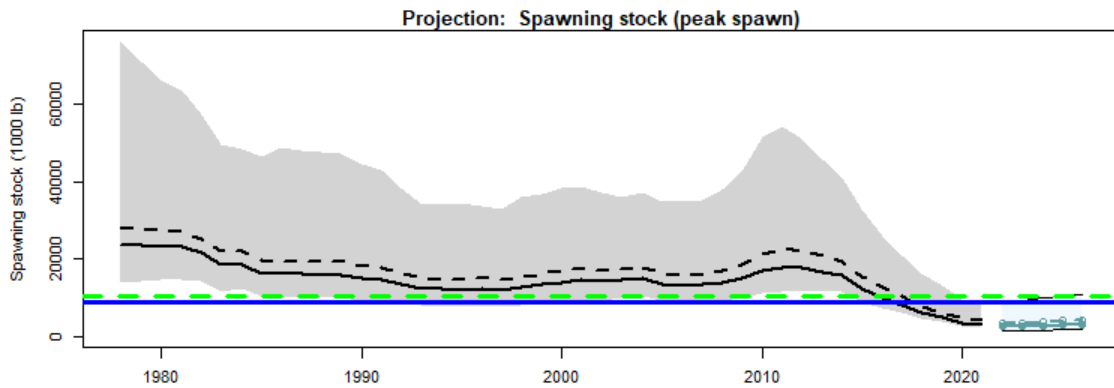
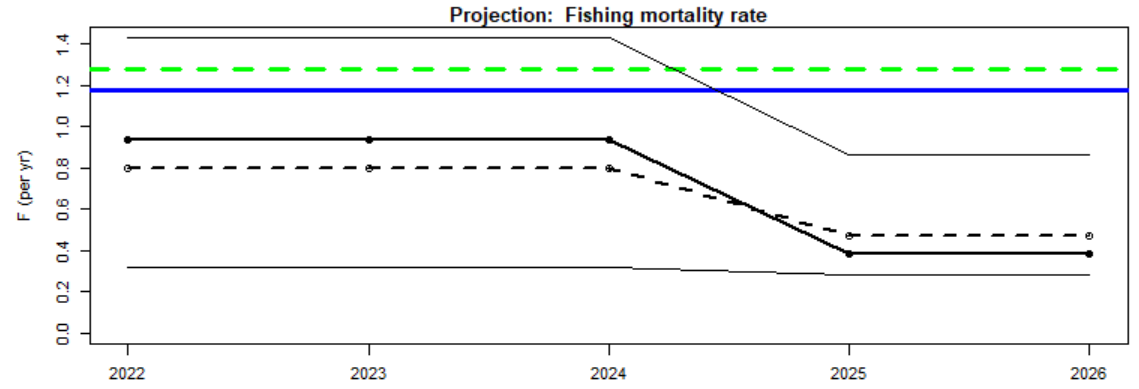
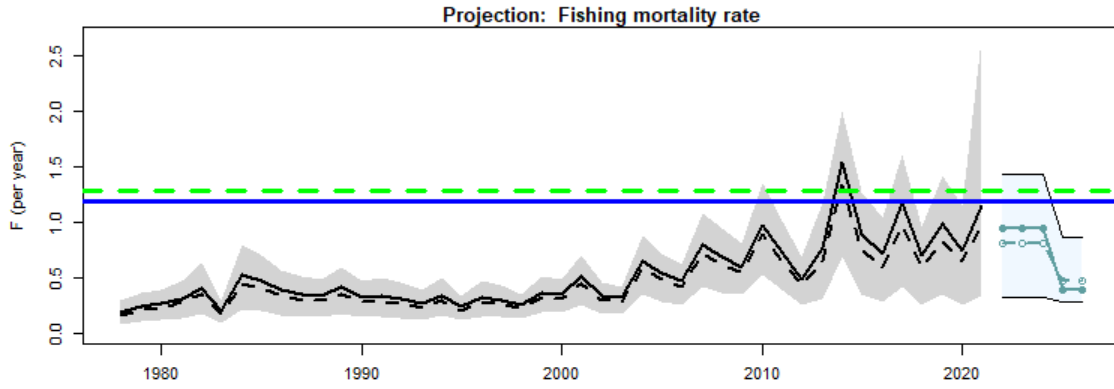
Both Scenarios

- Fishing mortality in 2022-2024 is average F from stock assessment in 2019-2021
- Management action starts in 2025

OFL Scenario



ABC Scenario



Caveats

- Projections on fish stocks are highly uncertain, particularly long term
- Projections are highly dependent on the assumptions surrounding recruitment
- Reported removals in 2022 are higher than those predicted by projections using assumed recent F , this will bias F estimates in 2022 and population size in 2023
- Reference points are based on ratio of landings to discards 2019-2021
- Discards are due to current minimum size limits and fishing effort

Thank you for your attention



Photo: Brendan Runde

