GROUNDFISH MANAGEMENT TEAM REPORT ON QUILLBACK ROCKFISH BIENNIAL HARVEST SPECIFICATIONS FOR 2025-26

The draft rebuilding analysis for quillback rockfish off California (<u>Agenda Item E.2, Attachment</u>]) provides the minimum time for rebuilding (T_{MIN}), the maximum time for rebuilding (T_{MAX}), and alternative harvest strategies to achieve rebuilding by T_{MAX} . Quillback rockfish are a longlived species, and the rebuilding analysis identified that with no fishing mortality (F=0) the T_{MIN} is 2045. T_{MAX} determined based on T_{MIN} plus one mean generation time (26 years) is 2071. The Groundfish Management Team (GMT) overwinter analysis will evaluate alternative rebuilding strategies with the goal of determining the harvest strategy that rebuilds the stock as soon as possible while factoring in the socioeconomic needs of fishing communities.

The draft rebuilding analysis presents a range of spawning potential ratios (SPRs) that would successfully rebuild the stock by 2071 or earlier. The GMT notes that the rebuilding strategy that applies an SPR of 0.50 is an untenable option for consideration since it is predicted to not rebuild the stock by T_{MAX} (2071). The GMT recommends analyzing 'bookends' of the rebuilding strategies shown in Table 1, F=0 ($T_{target} = 2045$), which represents the minimum time to rebuild, and the ABC Rule ($T_{target} = 2060$), which represents the maximum time to rebuild. These two values result in a range of 2025 annual catch limit values (0 - 1.30 mt) and are predicted to rebuild the stock between 2045-2060. The "ABC (acceptable biological catch) Rule" where the ABC is set equal to management risk tolerance (P*) and the scientific uncertainty (sigma) reduction applied to the overfishing limit, is predicted to rebuild the stock by 2060. Of the two bookends considered, the "ABC Rule" represents the strategy that is closest to the maximum time to rebuild, but does not result in an annual catch limit (ACL) that exceeds the overfishing limit (OFL). The GMT may investigate other SPR runs as applicable over winter. The values in Table 1 below are from Table 2 from Agenda Item E.2 Attachment 1, November 2023 which used the GMT's recommended removal mortality of 10.62 mt.

	F=0	ABC Rule
2021 assumed removals (mt)	15.58	
2022 assumed removals (mt)	18.11	
2023 assumed removals (mt)	11.12	
2024 assumed removals (mt)	10.62	
2025 OFL/ACL	1.52/0	1.52/1.3
2026 OFL/ACL	1.81/0	1.81/1.5
SPR	1	-
T _{target}	2045	2060
T _{max}	2071	2071
Probability of recovery by T _{max}	0.999	0.736

Table 1. Quillback rockfish off of California rebuilding strategies proposed for analysis by th	e
GMT.	