RED GROUPER

Preliminary

	Risk of Overexploitation			Red Grouper				
Biological Attributes	**High (1)**	**Medium (2)**	**Low (3)**	**Notes**	**Default Score**	**AP Score**	**SSC Score**	**Council Score**
Estimated natural mortality (M)	M ≤ 0.20	0.20-0.40	M ≥ 0.4	Natural Mortality (M) = 0.14 (SEDAR 53)	**1**			
Age at maturity	≥ 4 years	2-4 years	≤ 2 years	Age at 50% Maturity (A50) = 2.8 years (SEDAR 53)	**2**			
Final Biological Score					**1.5**	**#DIV/0!**	**#DIV/0!**	**#DIV/0!**
Human Dimension Attributes	**High (1)**	**Medium (2)**	**Low (3)**	**Notes**	**Default Score**	**AP Score**	**SSC Score**	**Council Score**
Ability to regulate fishery	fishery consistently exceeds Total ACL (ex. 3+ out of 5 years) and/or exceeds Total ACL by more than 15%	fishery mostly kept below Total ACL (ex. Exceeds ACL 1-2 out of 5 years) and/or does not exceed ACL by more than 15%	fishery consistently kept below Total ACL	Total ACL: 162,000 lbs ww **2021-2025:** 53-80% Total ACL Harvested (source: NOAA-SERO ACL Monitoring Page)	**3**			
Potential for discard losses	Dead discards are a significant proportion of the total catch (over 40%)	Dead discards are a moderate proportion of the total catch (20%-40%)	Dead discards very small component of total catch (<15%-20%)	**Recreational** Dead Discrds: Total Carch (2016-2025) = range: 11.4 - 18.3% **(average 15.1%)** (MRIP-FES) **Commercial** Dead Discards:Total Catch (1993-2015) = **<2%** (source: SEDAR 53, 2015)	**3**			
Annual Commercial value	> 10% total annual revenue	Between 1% and 10% of total annual revenue	< 1% total annual revenue	Based on SEFSC commercial logbook data from 2020-2024 (averaged 1.1% of total annual revenue for vessels landing SA red grouper; score would be a "2")	**2.5**			
	> 40% of total trip revenue, on average	Between 10% and 40% of total trip revenue, on average	< 10% total trip revenue, on average	Based on SEFSC commercial logbook data from 2020-2024 (averaged 7.5% of total trip revenue for trips where SA red grouper were landed; score would be a "3")				
Recreational desirability	> 5% trips report targeting this species	Between 1% and 5% of trips report targeting this species	< 1% trips report targeting this species	1.5% of all Trips, 2.6% not including shore (2020-2025)	**2**			
Social concerns	>13 communities highly reliant on this species	7-13 communities highly reliant on this species	<7 communities highly reliant on this species	Red grouper are usually not the primate target commercial species, but are commonly caught on multi-species trips. Commercial demand has generally decreased due to lack of access and lower yield compared to other grouper species. Recreationally, red grouper has become increasingly popular with the spearfishing community. (2023 FPR)	**3**			
Final Human Dimension Score					**2.70**	**#DIV/0!**	**#DIV/0!**	**#DIV/0!**
Environmental Attributes	**High (1)**			**Notes**	**Default Score**	**AP Score**	**SSC Score**	**Council Score**
Ecosystem importance	Does this species significantly affect other species, e.g. as a keystone predator, primary prey, habitat builder etc.?			Red grouper are habitat builders.				
Climate change	Is this species likely to experience/be experiencing negative stock impacts due to climate change?			Climate Vulnerability Analysis Score: *Very High*	**1**			
Other Environmental Variables	Are other environmental variables causing negative effects on this stock, e.g. in the form of regime shifts, recruitment failure, etc.?			SERFS Trap survey: low relative abundance/decline in recruitment since 2008 but increase in 2023-2024. Camera survey: stable	**1**			
Final Environmental Score					**1**			
Final Risk Score					**1.733**	**#DIV/0!**	**#DIV/0!**	**#DIV/0!**
					High	#DIV/0!	#DIV/0!	#DIV/0!