

Risk of Overexploitation				Hogfish (FLK/EFL)				
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	(SEDAR 94 DW) Natural mortality-at-age scaled to age 3 with max age of 23 years, M = 0.235	2	2	2	
Age at maturity	≥ 4 years	2-4 years	≤ 2 years	(SEDAR 94 DW) Age at 50% maturity: 1.09 - 2.08 years - protogynous hermaphroditism; age at transition ranges from 1-11 years and is socially mediated	3	3	3	
Final Biological Score					2.5	2.5	2.5	
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	Neither sector ACL exceeded from 2020-2025 (source: SERO ACL monitoring page)	3	3	-	
Potential for discard losses	Dead discards are a significant proportion of the total catch (> 40%)	Dead discards are a moderate proportion of the total catch (20%-40%)	Dead discards very small component of total catch (< 20%)	Commercial: exclusion of commercial discard data due to high uncertainty and low sample size, and industry input about low levels of discards (SEDAR 94 DW) Recreational: Hook-and-line: 28.4% Spear: 5.4% FL-SRFS estimates of landings + discards (SEDAR 94 DW)	2	2	-	
Annual Commercial value	> 10% total annual revenue	Between 1% and 10% of total annual revenue	< 1% total annual revenue	(SEFSC Logbook Data 2018-2022) Avg % Annual Revenue: 3% Avg % Trip Revenue: 13%	2	2	-	
	> 40% of total trip revenue, on average	Between 10% and 40% of total trip revenue, on average	< 10% total trip revenue, on average		2	2		
Recreational desirability	> 5% trips report targeting this species	Between 1% and 5% of trips report targeting this species	< 1% trips report targeting this species	Hook & Line: 0.37% Spear: 23% Total: 0.76%	3	3	-	
Social concerns	>13 communities highly reliant on this species	7-13 communities highly reliant on this species	<7 communities highly reliant on this species	Use fishery performance report information - Not a heavy reliance, but can be an easy/reliable spear target; Not necessarily a market driver; Off Brouward/Palm Beach, can easily become susceptible to overfishing due to ease of targeting; Not a strong social concern due to the low trip limit	3	3	-	
Final Human Dimension Score					2.50	2.50	#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.?			Potentially vulnerable due to ease of targeting; Habitat degradation; Preference for live bottom; big hogfish north, few central, some south, not seeing much change over; more habitat degradation in south Florida but the effects aren't as strong in		1	1	
Climate change	Is this species likely to experience/be experiencing negative stock impacts due to climate change?							
Other Environmental Variables	Are other environmental variables causing negative effects on this stock, e.g. in the form of regime shifts, recruitment failure, etc.?							
Final Environmental Score					0	1	1	
Final Risk Score					2.500	2.000	#DIV/0!	

Black Grouper

PRELIMINARY

Risk of Overexploitation				Southeastern Black 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	M: 0.16 - 0.20 (SEDAR 48)	1	1	1	
Age at maturity	≥ 4 years	2-4 years	≤ 2 years	Age at 50% maturity : 6.5 years - protogynous hermaphroditism; Age at transition A50 = 16 years (SEDAR 48)	1	1	1	
Final Biological Score					1	1	1	
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	Commercial Sector 2020-2025: never exceeded Recreational Sector 2020-2025: never exceeded (source: SERO ACL monitoring page)	3	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 (< 20%)	Commercial: discard logbook data not available Recreational: 2020-2024 MRIP-FES landings and discards: 10.7% DMR = 13.9% (derived from Gag stock assessment) AP Comments: -Shark depredation contributing to dead discards; some commercial operators have stopped targeting BG because of shark depredation	3	3	-	
Annual Commercial value	> 10% total annual revenue	Between 1% and 10% of total annual revenue	< 1% total annual revenue	Average Annual Revenue (2019-2023) = 4.0%	2	2	-	
	> 40% of total trip revenue, on average	Between 10% and 40% of total trip revenue, on average	< 10% total trip revenue, on average	Average Total Trip Revenue (2019-2023) = 9.1%	3	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	Average percent of all trips (2019-2024) = < 0.1% Average percent of all SG trips (2019-2024) = < 1.0%	3	3	-	
Social concerns	>13 communities highly reliant on this species	7-13 communities highly reliant on this species	<7 communities highly reliant on this species	Social communities analysis unavailable: Use fishery performance report information AP Comments: - BG not specifically sought after, part of 'grouper' fishing trip; - regional targeting/encounter rates different depending on season - regionally and seasonally specific	n/a	3	-	
Final Human Dimension Score					2.80	2.83	#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.?							
Climate change	Is this species likely to experience/be experiencing negative stock impacts due to climate change?							
Other Environmental Variables	Are other environmental variables causing negative effects on this stock, e.g. in the form of regime shifts, recruitment failure, etc.?			AP Comments: - habitat degradation concerns: water quality issues in south FL, impervious soil runoff - coral reef habitat reductions and changes in food availability - loss of seagrass habitat, nursery ground for BG (recruitment issues)		1	1	
Final Environmental Score					0	1	1	
Final Risk Score					1.900	1.611	#DIV/0!	

GAG GROUPE

PRELIMINARY

Risk of Overexploitation				Gag				
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	SEDAR 71 (2021): M = 0.150 SEDAR 10 (2006) M = 0.14-0.160	1	1	1	
Age at maturity	≥ 4 years	2-4 years	≤ 2 years	SEDAR 71 (2021) Female age at maturity = 4.6 yrs SEDAR 10 (2006) provided a single estimate for size and age at transition: 1,025 mm TL and 10.5 yrs for 50% transition	1	1	1	
Final Biological Score					1	1	1	
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: exceeded by >15% in 2023* and 2024. Commercial ACL: exceeded by >15% in 2023* Recreational ACL: exceeded by >15% in 2023* and 2024 *Note: 2023 was when implementation of new ACL occurred mid-season and switched from MRIP-CHTS to MRIP-FES	1	1	-	
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 Discards: from SEDAR 71 (avg: 2015-2019), DMR: 25% Proportion of Dead Discards to Total Removals = 21.0% Commercial Discards: from SEDAR 71 (avg: 2015-2019), DMR: 40% Proportion of Dead Discards to Total Removals = 2.51% Total Discards: from SEDAR 71 (avg: 2015-2019), Proportion of Dead Discards to Total Removals = 12.52%	3	3	-	
Annual Commercial value	> 10% total annual revenue	Between 1% and 10% of total annual revenue	< 1% total annual revenue	Average Annual Revenue (2019-2023) = 12.5%	1	1	-	
	> 40% of total trip revenue, on average	Between 10% and 40% of total trip revenue, on average	< 10% total trip revenue, on average	Average Total Trip Revenue (2019-2023) = 28.4%	2	2		
Recreational desirability	> 5% trips report targeting this species	Between 1% and 5% of trips report targeting this species	< 1% trips report targeting this species	Average percent of all trips (2019-2024) = 0.7% Average percent of all SG trips (not including Gray Snapper) = 3.9%	3	3	-	
Social concerns	>13 communities highly reliant on this species	7-13 communities highly reliant on this species	<7 communities highly reliant on this species	Of the communities with the highest gag landings, 2 were highly reliant on commercial and/or recreational fishing. (Sneads Ferry and Nags Head, NC)	3	3	-	
Final Human Dimension Score					2.17	2.17	#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.?			AP: nearshore water quality concerns, predation by RS at vulnerable life stages, shark depredation		1	1	
Climate change	Is this species likely to experience/be experiencing negative stock impacts due to climate change?							
Other Environmental Variables	Are other environmental variables causing negative effects on this stock, e.g. in the form of regime shifts, recruitment failure, etc.?			reliant on in-shore seagrass beds for juvenile life stages; degradation of these habitats affecting recruitment?		1	1	
Final Environmental Score					0	1	1	
Final Risk Score					1.583	1.389	#DIV/0!	