

Key Stocks and Alternative Assessment Scheduling

March 2018

This information was initially presented to the SSC in October 2017.

This version includes additional information on the landings and ACLs for SAFMC managed stocks (Tables 4-7), in support of recommended key stocks.

Approach Summary

- Identify 12-15 key stocks, defined as those that drive the management program.
 - The focus should be on stocks with the leverage to influence decisions on when or how to fish, such as Red Snapper, Black Sea Bass, Vermilion Snapper, and Cobia.
 - Consult with SEFSC, the SSC, and APs to develop the key stocks list.
 - Consider existing Council priorities, currently assessed stocks, and the NMFS prioritization tool (results of these shown in tables 1-3)
- Develop a regular long-term assessment schedule for the key stocks.
 - For example, if 12 stocks assessed by the Beaufort/SEFSC team are identified as key stocks requiring regular, timely updates, 3 could be assessed per year while leaving at least one of the 4 SAFMC planning slots available for benchmarks and other assessment needs.
- Develop preliminary (interim) analyses addressing data indicators or “rumble strips” for each of these stocks to use in evaluating stock and fishery performance through annual or bi-annual fishery report cards.
 - The indicators would be built around metrics that are available on a timely basis, to facilitate their use in guiding management actions.
 - These analyses would consist of updated projection analyses that were used for establishing ABC's. The most recent data on landings, discards, FI indices, and age composition could be included in the analysis. Parameters to be estimated would include F's and recruitment, depending on data types updated. All other aspects would remain fixed based on last stock assessment.
 - ABC's could be updated from these interim analyses.
 - Provide a fishery report card for each key stock during years when the stock is not assessed. This may start as biannual information, with a goal of annual information in the future.

Current Status

- SEFSC draft of possible changes in the SEDAR process, incorporating the key stocks and interim analysis concepts, will be reviewed by the SEDAR Steering Committee in May 2018. Further review by all cooperators will follow, if the approach is supported by the Steering Committee.
- SAFMC supports the key stocks approach as described previously. The next step is to identify the key stocks and develop a way to integrate with existing assessment schedules.

Potential Benefits

- More timely information on the stocks that drive fishery trends
- Opportunity to set aside some resources for long term priorities
- Improved and more efficient assessment planning
- Improved and more efficient planning for data and life history (ageing) demands
- Improved ability to manage assessment resources and balance workloads
- Improved planning for council management action timing

Table 1. Assessed Stocks.

Stock	Age in 2017	Status ¹	Terminal Data Year ³	Next Assessment	
				Terminal Yr	Terminal Year Completed
Gray Triggerfish	NA	4	NA		2021
Greater Amberjack	11	3	2006	2016	2018
Black Grouper	9	3	2008		
Spiny Lobster	8	3	2009		
Yellowtail Snapper	7	3	2010	TBD	2020
Wreckfish ²	7	3	2010		
Vermilion Snapper	6	3	2011	2016	2018
Red Porgy	6	1	2011	2017	2019
Spanish Mackerel	6	3	2011		2020
Cobia	6	3	2011	2017	2019
Mutton Snapper	6	3	2011		2021
Black Sea Bass	5	3	2012		2021
King Mackerel	5	3	2012	2017	2019
Snowy Grouper	5	1	2012	2017	2019
Gag	5	3	2012		2020
Hogfish (East FL)	5	1	2012		
Hogfish (NC-GA)	NA	4	2012		
Red Snapper	3	1	2014		2020
golden Tilefish	3	3	2014	2017	2019
Goliath Grouper	NA	4	2014		
Red Grouper	2	1	2015		2021
Blueline Tilefish	2	2	2015		

¹. Status according to the prior assessment: 1 = overfished or in rebuilding, 2 = overfishing, 3 = neither overfished nor overfishing, 4 = assessments attempted but rejected by peer review.

². Wreckfish was assessed by an outside contractor funded by fishery participants. It was reviewed by the SSC, per Council policies developed to accommodate assessments provided outside the SEDAR process.

³. Reported for the current assessment – not ones indicated in the “next assessment” columns.

Table 2. Results of the NMFS Prioritization Tool.

RANK	STOCK
UNASSESSED STOCKS	
4	White Grunt
5	Lane Snapper
6	Gray Triggerfish*
8	Scamp
9	Dolphin
11	Almaco Jack
13	Knobbed Porgy
14	GA-NC Hogfish*
15	Speckled Hind
16	Goliath Grouper*
18	Silk Snapper
19	Red Hind
21	Warsaw Grouper
ASSESSED STOCKS	
1	Red Snapper
2	FLK/EFL Hogfish
3	Red Porgy
7	Snowy Grouper
10	Red Grouper
12	Blueline Tilefish
17	King Mackerel
20	Spanish Mackerel
22	Black Sea Bass
23	Gag
24	Cobia
25	Tilefish
26	Vermilion Snapper
27	Greater Amberjack
28	Black Grouper
29	Mutton Snapper
30	Yellowtail Snapper
31	Wreckfish

Table 3. SAFMC assessment and data collection priority stocks by category, and recommended key stocks

BOLD: Recommended key stocks, based on those assessed by SEFSC.

Asterisk: Stock assessed by FL FWCC

Category	Primary	Secondary	Special
Stocks	Vermilion Snapper Snowy Grouper golden Tilefish Red Grouper Black Grouper* Scamp Black Sea Bass Gag Grouper Greater Amberjack White Grunt Yellowtail Snapper* Gray Triggerfish Mutton Snapper* Red Porgy Dolphin King Mackerel Spanish Mackerel Blueline Tilefish	Tomtate Knobbed Porgy Bar Jack Almaco Jack Lane Snapper Banded Rudderfish Rock Hind Red Hind Wahoo Penaeid Shrimp	Warsaw grouper speckled hind Goliath grouper* Nassau grouper Red Snapper Wreckfish Spiny Lobster* Golden Crab
Assessment Goal	Age based	Survey methods or production models	Varies due to unique management circumstances

Key Stock Considerations

- SAFMC priorities (importance to fishery and management program)
- NMFS assessment prioritization tool results (variety of metrics)
- ACL or Landings (potential to impact management and fishing activities)
- Previously assessed (past priority stock)

Table 4. Snapper Grouper FMP stocks, 2016 ACL, and assessment status. Note that OY is presented for stocks under rebuilding plans to prevent downplaying their importance in the fishery with reduced rebuilding catch limits.

ASSESS	STOCK	ACL (or OY)
Complete	Yellowtail Snapper	3,037,500
Complete	Greater Amberjack	1,937,225
Complete	Black Sea Bass	1,756,452
Complete	Vermilion Snapper	1,681,480
Complete	Red Grouper (OY)	1,095,000
Complete	Mutton Snapper	926,600
Complete	Red Porgy (OY)	810,000
Complete	Gag Grouper	610,233
Complete	golden Tilefish	560,490
Complete	Wreckfish	423,700
Complete	Snowy Grouper (OY)	407,300
Complete	Red Snapper (OY)	398,000
Complete	Hogfish (EFL)(OY)	265,000
Complete	Black Grouper	262,594
Complete	Blueline Tilefish	174,798
Complete	Hogfish (GA-NC)	33,930
Complete	Goliath Grouper	0
Attempted	Gray Triggerfish	716,999
Planned	White Grunt	643,889
Planned	Scamp	335,744
Considered	Gray Snapper	1,247,132
	Atlantic Spadefish	812,478
	Almaco Jack	302,517
	Bar Jack	62,249
Considered	Speckled Hind	0
Considered	Warsaw Grouper	0
NA-Complex	grunts (4- White)	192,136
NA-Complex	snappers (3-Gray)	266,751
NA-Complex	jacks (4 - Almaco)	154,704
NA-Complex	deepwater (6)	169,896
NA-Complex	porgy (5)	143,262
NA-Complex	shallow groupers (6)	104,190
	TOTAL	19,532,249
	assessed	14,380,302
	% assessed SG	74
	Plan to assess	1,696,632
	% assessed in future	82

Table 5. Coastal Migratory Pelagic FMP stocks, 2016 ACL, and assessment status.

ASSESSMENT	STOCK	ACL
Complete	Spanish Mackerel	6,057,000
Complete	King Mackerel	10,460,000
Complete	Cobia	670,000
Total		17,187,000
	assessed	17,187,000
	% assessed	100

Table 6. Dolphin Wahoo FMP stocks, 2016 ACL, and assessment status.

ASSESSMENT	STOCK	ACL
Considered	Dolphin	15,344,846
None planned	Wahoo	1,794,960
Total		17,139,806
	assessed	0
	% assessed	0

Table 7. Other SAFMC FMP stocks, 2016 ACL, and assessment status.

ASSESSMENT	STOCK	FMP	ACL
Completed	Spiny Lobster	Spiny Lobster	7,320,000
None planned	Golden Crab	Golden Crab	2,000,000
None planned	White Shrimp	Shrimp	14,500,000
None planned	Brown Shrimp	Shrimp	9,200,000
None planned	Pink Shrimp	Shrimp	1,800,000
None planned	Rock Shrimp	Shrimp	6,829,449