Long-term action in the Vision Blueprint for the Snapper Grouper Fishery

In December 2012, the Council began a three-year long stakeholder-driven visioning process to identify long-term strategies for managing the snapper grouper fishery. The 2016-2020 Vision Blueprint for the Snapper Grouper Fishery (Vision Blueprint) includes objectives and actions that were prioritized as "short-term" and were approved by the Council at their December 2015. Remaining objectives and actions under each of the four strategic goals that were considered long-term and were *not prioritized* for inclusion in the 2016-2020 Blueprint are listed in **Table 1**. Actions that have been nevertheless completed or are being addressed are indicated in *italics*.

Goal 1 (Science): Management decisions for the snapper grouper fishery are based upon robust, defensible science that considers qualitative and quantitative data analyzed in a timely, clear, and transparent manner that builds stakeholder confidence.		
Objective 1: Promote collection of quality data to support management plans and programs considered by the Council	 Improve the timeliness of SAFE reports Consider utilizing third party analysis and assessments using a standard stock assessment process Utilize ACCSP standards for data collection Work with management partners to secure long-term funding for the MARMAP survey Support creation of a comprehensive data portal that provides access to all fishery-independent data 	
Objective 2: Encourage development of mechanisms to effectively engage and collaborate with stakeholders on cooperative research, data collection and analysis	 Support a multi-disciplinary body to oversee and guide cooperative fishery independent surveys, monitoring, and research Consider the use of volunteer angler tagging programs and partnerships with fishing clubs and others to train and promote programs (traditional catch and release, etc.) 	
Objective 3: Improve knowledge about the social and economic elements of the snapper	 Support data collection that considers economics when determining allocation strategies Evaluate broad cumulative social and economic impacts of proposed and existing management measures and alternatives to assess how management actions affect other fisheries Develop partnerships with research institutions, agancies and other 	

Table 1. Long-term management actions in the Vision Blueprint for the Snapper Grouper Fishery.

management issue

grouper fishery in

the South Atlantic

Support improved

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Objective 4:

and expanded

monitoring and

Develop partnerships with research institutions, agencies and other

social and economic data to support the data needs of the Council

Support the use of observer data to improve discard rate estimates

Consider the use of observers in the fishery to monitor for a specific

organizations with appropriate expertise to collect relevant and timely

reporting programs for the snapper grouper fishery.	 Consider development and use of appropriate electronic monitoring methods (scale, cost, approach, etc.) Support law enforcement to enforce monitoring requirements Reporting mechanisms that could be improved and considered include: Use of electronic reporting mechanisms for all sectors of the fishery (mobile apps, cellphones, web-based, etc.) Consider the use of swipe cards Establish a recreational fishing stamp/permit/license for the snapper grouper fishery Increase dockside biological sampling for the recreational sector Catch card reporting program for specific species Improvements to existing logbook programs (better resolution on logbook grids, Vessel Trip report in discard logbook, etc.) Incentives for reporting in all sectors Consequences for lack of reporting Support for law enforcement to enforce reporting requirements Increase bycatch/discard reporting Support for law enforcement to enforce reporting requirements Need better data collection from dive boat operators (recreational)
Objective 5: Promote data collection and analysis to support ecosystem and habitat considerations for the snapper grouper fishery.	 Improve understanding and consider species interaction with habitats and ecosystems Study the non-fishing ecosystem drivers Consider how to utilize ocean monitoring to support management decisions Improve understanding of the effects of contaminants on habitat/ecosystems Improve timeliness, accuracy, and coverage of bottom mapping Determine how habitats (naturally occurring and man-made) contribute to production of managed species and the distribution of different life stages Evaluate the effectiveness of artificial reefs (both shallow water and deep water) as a management tool Evaluate habitat/ecosystem damage from disturbance (anchors, gear, fishing activity, etc.) Improve understanding of the impacts of offshore energy development on habitats and ecosystems that support the snapper grouper fishery Support the development of metrics to evaluate climate change Evaluate the impact of sea level rise on the fishery Evaluate the impacts of cold-water intrusion on the fishery Use climate change impacts on species in assessments Support a simulation model showing ecosystem impacts between fisheries Evaluate the expansion of the geographical boundary of the snapper grouper Fishery Management Unit as species spread

maintain fishery resou	 Monitor changes in species distribution and abundance (in conjunction with management partners) Address impacts of non-indigenous species on the fishery and habitats that support the fishery (in conjunction with management partners) Analyze the impacts of management on non-targeted species Improve understanding of predator-prey interactions on snapper grouper species (in conjunction with management partners) Consider species habitat models Consider external sources of recruitment the snapper grouper fishery that rebuild and and and the regional differences in the fishery, and consider the social and the regional differences in the fishery, and consider the social and the regional differences in the fishery.
economic needs of fis Objective 1: Develop management measures that consider sub- regional differences and issues within the fishery.	 Consider effort control strategies such as establishing alternating 2- week windows for fishing (by sub-region) Consider aggregate trip limits for the commercial sector (# of boxes
Objective 2: Develop innovative management measures that allow consistent access to the fishery for all sectors.	 Consider aggregate trip minits for the commercial sector (# of boxes with no size limit)* Implement a limited number of days for fishing for deep-water species Manage effort/permits in the commercial and <i>for-hire sectors (consider limited entry)</i> Evaluate the use of days-at-sea for the commercial sector Evaluate the level of overcapitalization in the fishery (carrying capacity) Explore options for a privately-funded buy-out program for the commercial sector <i>Consider alternative approaches to managing traditional, multi-day SG bandit boats/fishery (e.g., permit stacking, multi-day trip endorsement, sector/community shares, etc.)</i> <i>Consider seasons for co-occurring species and staggered seasons (use depth as criteria – mid-shelf and deep-water)</i> Adjust the seasonal spawning closure for shallow-water grouper and consider shortening by 1 month; allow fishing but reduce the bag limit; or a rolling closure throughout the region Shift sector allocations in-season Ensure more data-poor species use alternative data-poor assessment approaches Investigate expansion of fisheries for under-utilized species Evaluate the use of harvest tags for specific snapper grouper species Use depth to set zones for recreational harvest of snapper grouper species Consider measures to simplify regulations for both sectors (i.e, limits, aggregates, etc.)

	* also applies to Objective 4 (reducing discards)
Objective 3: Ensure that management decisions help maximize social and economic opportunity for all sectors.	 Consider market availability when making management decisions Consider new entrants to endorsement programs Consider mechanisms based on abundance and availability of easily accessible species Consider development of artificial reefs or special management zones for the recreational sector only Consider development of species complex specific permits (similar to existing HMS permit)
Objective 4: Develop management measures that reduce and mitigate discards	 Use Special Management Zones Use time-area closures (either by region or a specific area) Consider a spawning closure for all snapper grouper species with a low ACL Set a fishing season at the beginning of the fishing year with known open and close dates Set a season for deep-water species and shallow-water species by area Consider time-area closure for all snapper grouper species (whole region or area-specific) Consider full-retention of deep-water species Establish a season for deep-water species Consider removal of size limits for deep-water species Consider alternative electronic monitoring methods for all sectors to obtain data on depth to monitor catch composition and location Use zone management that is set by depth Re-evaluate and change size limits on a species by species basis Consider no size limits for research, development, and evaluation of gear and technology to reduce bycatch (i.e., hook type/use, gear competitions, descending devices). Consider gear requirement using "weak gear" or degrading hooks. Create an incentive program for avoiding bycatch in the recreational sector and consider development of a Bycatch Avoidance Network for the commercial sector (to communicate "bycatch hot spots"). Allow a bycatch set-aside limit per commercial trip. Consider use of Annual Catch Targets to minimize discards in commercial sector.
Objective 5: Support management measures that incorporate ecosystem and habitat considerations for	 Create new habitat using artificial reefs. Evaluate the use of artificial reefs as a mechanism to improve fishery production. Consider artificial reefs with limited or no fishing allowed. Consider the impacts of human population growth and distribution on habitats. <i>Consider the use of sunset clauses for existing and newly created Marine Protected Areas.</i>

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the snapper grouper fishery.	 Consider no new MPAs. Establish clear goals/objective and evaluation of any new closed areas to help determine when objective has been met and area could re-open. Consider expansion of Snapper Grouper Fishery Management Unit to address environmental changes. Consider innovative technology (surveillance buoys, drones, etc.) to monitor fishing activity in all sectors. Consider development of managed areas (only spawning SMZ sites
	being considered under SG Amendment 36) and additional new artificial reefs that prohibit harvest of snapper grouper species.
	 Consider additional restrictions on existing managed areas (MPAs, etc.).
	• Evaluate areas that may be suitable for spawning Special Management
	 Zones (SMZs). Establish clear goals for creation of Habitat Areas of Particular Concern (HAPCs).
	• Create no-anchor zones to protect fragile habitat.
	Consider separate allocation for charter/headboat sectors.
	• Evaluate existing sectors and current harvest to help determine allocation strategies.
	• Truncate the recreational allocation time series from 2007 onwards due to the economy.
	• Consider time-based approaches for allocation decisions. (E.g., , reallocation every 'X' number of years (TBD) based on the past 'X' number of years (TBD).)
	 Manage by economic levels (primary, secondary, tertiary) in the fishery (1-harvesters, 2-dealers, 3- support industries).
	 Incorporate fairness and economics as part of the allocation equation.
Objective 6:	• Evaluate use of a mutual allocation pool (allocation is shared between sectors) for possible use for certain species.
Develop management	• After evaluation of existing sectors and current harvest consider options to:
measures that support optimal sector allocations for the snapper grouper fishery.	 set multiple ACLs/allocation set only 1 ACL/allocation
	Consider setting ACLs/allocations for multiple years.
	 Consider individual quotas based on individual allocations or harvest levels
	• Consider revising allocations on a species-by-species basis.
	• Consider longer timeframe for developing allocations.
	 Consider allocations by gear type.
	 Develop an allocation review plan.
	• Consider changes in the use of the fishery when considering allocation to account for future growth of fishery (sectors, resource, etc.).
	 Consider sub-allocation shifts (for example, golden tilefish sectors).
	• Consider allocation shifts for species not reaching Optimal Yield (gag, vermilion, etc.).
	• Consider framework for in-season allocation shifts.
	• Examine reallocation for species with low ACLs.

	 Consider reallocation for commercially/recreationally important species. Specify the allocation focus for each sector (Commercial-offshore; Recreational-nearshore). Examine recreational harvest for species that are not reaching their recreational ACL. Consider other methods for establishing sub-allocations (gear sectors, fishery sectors, etc.). Before reallocation, consider increasing bag limits or other management measures first for the recreational sector.
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	• Before reallocation, consider increasing bag limits or other
	management measures first for the recreational sector.
	• Before reallocation, consider managing for abundance of recreationally important and easily accessible species.
	• Increase the bag limit if the recreational sector does not reach their ACL.
Goal 3 (Communica	tion): Employ interactive outreach strategies that encourage continuous
	port two-way engagement between managers and snapper grouper fishery
stakeholders while bu	ilding a greater understanding of science and management.
	• <i>Expand the format for public hearings through the use of web-based hearings facilitated by staff.</i>
	• Change the format of in-person public hearings to match the format of the visioning port meetings (interactive, less formal, less staff).
	 Utilize web-based tools (webinars, video conferencing, etc.) and other
	<i>technology to collect public comment</i> and provide educational workshops.
	 Provide a comment box on the website for stakeholders to submit comment
	after viewing the recorded scoping presentation.
	• Consider hosting webinars just for snapper grouper permit holders on
	various topics.
	• On the Constant Contact sign-up form, add a check-off box for indication
Objective 1:	of the sector they participate in.
Develop communication	• Training for stakeholders on how to use web-based communication tools (webinars, etc.)
approaches that provide streamlined	 Consider use of staff-moderated chat boards for each sector on the Council website.
and timely	
information to increase awareness	• Establish a comment and suggestion box on the website that allows users to provide comments on a specific topic or constructive comments on the Council's activities and process.
and engage	 Consider using Public Service Announcements via VHF radio and/or local
stakeholders.	• Consider using Fublic Service Announcements via VIIF radio ana/or local radio stations for meeting/issue announcements and regulation changes.
	 Consider use of informal polls/surveys to take input on a specific
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	remain active in the management process.
	• Determine how to use web-based surveys to solicit input on specific
	management topics.
	 management action or direction being considered by the Council (before Council starts to develop and take action). Work with existing on-line fishing forums to collect input on a specific topic. Send posters/flyers to fish houses to announce meetings/issue announcements and regulation changes. Consider creation of an incentive rewards program for stakeholders that remain active in the management process.

	 Collaborate with local port agents to serve as community liaisons to convey management information to stakeholders. Barticia ate in group fortunals on a needlaw having
	 Participate in area festivals on a regular basis. Consider using paid angler focus groups to solicit input on specific management issues.
	 Consider the use of an outreach tool for polling the public about needs for habitat improvements as it relates to the snapper grouper fishery.
Objective 2: Ensure that Council communication encourages and supports engagement with a diverse audience of stakeholders.	 Consider use of direct mailings/other communication strategies targeting snapper grouper permit holders for significant management/regulatory actions. Develop a list of key industry stakeholders in the snapper grouper fishery and basic community profiles for the region. Develop and maintain a database of snapper grouper fishery related contacts for use in communication and outreach programs to include: recreational fishing focused groups (fishing clubs, bait/tackle shops, dive clubs, etc.), seafood dealers/retailer and other commercial fishing businesses. Develop 1-page fishery management resources (print and electronic) for distribution to targeted audiences/sectors. Consider use of appropriate outreach materials that meet the needs of a wide generational range of stakeholders.
Objective 3: Improve awareness and understanding of fishery science and research and how these inform management.	 Continue traditional means of communication Consider developing youth outreach materials (electronic) and educational field trips related to fisheries and fisheries management. Develop targeted outreach programs aimed at all sectors about the Council process, including the role of the Scientific & Statistical Committee. Develop angler education programs about fisheries science, stock assessments and data collection. Expand the use of educational webinars to convey information about stock assessments, data collection, and other fishery science concepts. Develop training for new SAFMC Advisory Panel members. <i>Continue Council support of the Marine Resource Education Program South East.</i>
· · · · · · · · · · · · · · · · · · ·	 Work with MREP partners to add a seafood and fishing business marketing module to the annual MREP-SE Management Workshop. Provide informational resources to fishermen about marketing of alternative/ underutilized species. Commit to a transparent, balanced, and timely decision-making process that
allows flexible yet we Objective 1: Create an	ll-defined protocols and strategies for managing the snapper grouper fishery.
accountable and flexible decision- making process for development and	 Evaluate the current Council process. Ensure timely access of amendment documents and other materials to the Council and the public.

evaluation of management measures. Objective 3: Improve communication with stakeholders to insure the needs of the fishery are understood and considered throughout the Council process.	 Provide information to stakeholders that is timely and in an appropriate format about proposed management actions Consider alternative methods for collecting public input. Evaluate the composition of advisory panels, committees, etc. to ensure representation meets the interests and needs of the fishery. Establish clear ground rules and process for public meetings held by the Council to improve stakeholder engagement.
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