## **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*.

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

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	<ul> <li>Improve the timeliness of SAFE reports</li> <li>Consider utilizing third party analysis and assessments using a standard stock assessment process</li> <li>Utilize ACCSP standards for data collection</li> <li>Work with management partners to secure long-term funding for the MARMAP survey</li> <li>Support creation of a comprehensive data portal that provides access to all fishery-independent data</li> </ul>
Objective 2: Encourage development of mechanisms to effectively engage and collaborate with stakeholders on cooperative research, data collection and analysis	<ul> <li>Support a multi-disciplinary body to oversee and guide cooperative fishery independent surveys, monitoring, and research</li> <li>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.)</li> </ul>
Objective 3: Improve knowledge about the social and economic elements of the snapper grouper fishery in the South Atlantic	<ul> <li>Support data collection that considers economics when determining allocation strategies</li> <li>Evaluate broad cumulative social and economic impacts of proposed and existing management measures and alternatives to assess how management actions affect other fisheries</li> <li>Develop partnerships with research institutions, agencies and other organizations with appropriate expertise to collect relevant and timely social and economic data to support the data needs of the Council</li> </ul>
Objective 4: Support improved and expanded monitoring and	<ul> <li>Consider the use of observers in the fishery to monitor for a specific management issue</li> <li>Support the use of observer data to improve discard rate estimates</li> </ul>

reporting programs	<ul> <li>Consider development and use of appropriate electronic monitoring</li> </ul>
for the snapper	methods (scale, cost, approach, etc.)
grouper fishery.	<ul> <li>Support law enforcement to enforce monitoring requirements</li> </ul>
	<ul> <li>Reporting mechanisms that could be improved and considered include:</li> </ul>
	<ul> <li>Use of electronic reporting mechanisms for all sectors of the</li> </ul>
	fishery (mobile apps, cellphones, web-based, etc.)
	<ul> <li>Consider the use of swipe cards</li> </ul>
	<ul> <li>Establish a recreational fishing stamp/permit/license for the</li> </ul>
	snapper grouper fishery
	<ul> <li>Increase dockside biological sampling for the recreational</li> </ul>
	sector
	<ul> <li>Catch card reporting program for specific species</li> </ul>
	<ul> <li>Improvements to existing logbook programs (better resolution</li> </ul>
	on logbook grids, Vessel Trip report in discard logbook, etc.)
	<ul> <li>Incentives for reporting in all sectors</li> </ul>
	<ul> <li>Consequences for lack of reporting</li> </ul>
	<ul> <li>Support for law enforcement to enforce reporting requirements</li> </ul>
	<ul> <li>Increase bycatch/discard reporting</li> </ul>
	Implement standard bycatch reporting methodology
	<ul> <li>Develop a model to improve discard rate estimates for all</li> </ul>
	sectors
	Need better data collection from dive boat operators
	(recreational)
	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
Objective 5:	Determine how habitats (naturally occurring and man-made) contribute    Contribute
Promote data	to production of managed species and the distribution of different life
collection and	stages
analysis to support	• Evaluate the effectiveness of artificial reefs (both shallow water and
ecosystem and	deep water) as a management tool
habitat	• Evaluate habitat/ecosystem damage from disturbance (anchors, gear,
considerations for	fishing activity, etc.)
the snapper grouper	• Improve understanding of the impacts of offshore energy development
fishery.	on habitats and ecosystems that support the snapper grouper fishery
	Support the development of metrics to evaluate climate change      Figure 2 the import of any level rice on the figure.
	Evaluate the impact of sea level rise on the fishery  For last the impact of seal depotential and the fishery  The seal of the impact of seal depotential and the fishery  The seal of the impact of seal depotential and the fishery  The seal of the impact of seal depotential and the fishery  The seal of the impact of seal depotential and the fishery  The seal of the impact of seal depotential and the seal of the seal depotential and the se
	Evaluate the impacts of cold-water intrusion on the fishery  Figure 1
	Evaluate the impacts of ocean acidification 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

	<ul> <li>Monitor changes in species distribution and abundance (in conjunction with management partners)</li> <li>Address impacts of non-indigenous species on the fishery and habitats that support the fishery (in conjunction with management partners)</li> <li>Analyze the impacts of management on non-targeted species</li> <li>Improve understanding of predator-prey interactions on snapper grouper species (in conjunction with management partners)</li> <li>Consider species habitat models</li> <li>Consider external sources of recruitment</li> <li>Adopt management strategies for the snapper grouper fishery that rebuild and arces, adapt to regional differences in the fishery, and consider the social and thing communities.</li> </ul>
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)
Objective 2: Develop innovative management measures that allow consistent access to the fishery for all sectors.	<ul> <li>Consider aggregate trip limits for the commercial sector (# of boxes with no size limit)*</li> <li>Implement a limited number of days for fishing for deep-water species</li> <li>Manage effort/permits in the commercial and for-hire sectors (consider limited entry)</li> <li>Evaluate the use of days-at-sea for the commercial sector</li> <li>Evaluate the level of overcapitalization in the fishery (carrying capacity)</li> <li>Explore options for a privately-funded buy-out program for the commercial sector</li> <li>Consider alternative approaches to managing traditional, multi-day SG bandit boats/fishery (e.g., permit stacking, multi-day trip endorsement, sector/community shares, etc.)</li> <li>Consider seasons for co-occurring species and staggered seasons (use depth as criteria – mid-shelf and deep-water)</li> <li>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</li> <li>Shift sector allocations in-season</li> <li>Ensure more data-poor species use alternative data-poor assessment approaches</li> <li>Investigate expansion of fisheries for under-utilized species</li> <li>Evaluate applicability and develop policies for aquaculture of snapper grouper species in the region</li> <li>Evaluate the use of harvest tags for specific snapper grouper species</li> <li>Use depth to set zones for recreational harvest of snapper grouper species</li> <li>Consider measures to simplify regulations for both sectors (i.e, limits, aggregates, etc.)</li> </ul>

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

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the snapper grouper	<ul> <li>Consider no new MPAs.</li> </ul>
fishery.	<ul> <li>Establish clear goals/objective and evaluation of any new closed areas</li> </ul>
	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.
	<ul> <li>Consider innovative technology (surveillance buoys, drones, etc.) to monitor fishing activity in all sectors.</li> </ul>
	<ul> <li>Consider development of managed areas (only spawning SMZ sites</li> </ul>
	being considered under SG Amendment 36) and additional new
	artificial reefs that prohibit harvest of snapper grouper species.
	<ul> <li>Consider additional restrictions on existing managed areas (MPAs, etc.).</li> </ul>
	• Evaluate areas that may be suitable for spawning Special Management
	Zones (SMZs).
	<ul> <li>Establish clear goals for creation of Habitat Areas of Particular Concern (HAPCs).</li> </ul>
	<ul> <li>Create no-anchor zones to protect fragile habitat.</li> </ul>
	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.
	<ul> <li>Consider time-based approaches for allocation decisions. (E.g., ,</li> </ul>
	reallocation every 'X' number of years (TBD) based on the past 'X'
	number of years (TBD).)
	<ul> <li>Manage by economic levels (primary, secondary, tertiary) in the fishery</li> </ul>
	(1-harvesters, 2-dealers, 3- support industries).
	<ul> <li>Incorporate fairness and economics as part of the allocation equation.</li> </ul>
Objective 6:	• Evaluate use of a mutual allocation pool (allocation is shared between
Develop	sectors) for possible use for certain species.
management	After evaluation of existing sectors and current harvest consider options
measures that	to:  o set multiple ACLs/allocation
support optimal	<ul> <li>set multiple ACLs/allocation</li> <li>set only 1 ACL/allocation</li> </ul>
sector allocations for	• Consider setting ACLs/allocations for multiple years.
the snapper grouper	<ul> <li>Consider individual quotas based on individual allocations or harvest</li> </ul>
fishery.	levels
	<ul> <li>Consider revising allocations on a species-by-species basis.</li> </ul>
	<ul> <li>Consider longer timeframe for developing allocations.</li> </ul>
	<ul> <li>Consider allocations by gear type.</li> </ul>
	<ul> <li>Develop an allocation review plan.</li> </ul>
	<ul> <li>Consider changes in the use of the fishery when considering allocation</li> </ul>
	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.).
	<ul> <li>Consider framework for in-season allocation shifts.</li> </ul>
	<ul> <li>Examine reallocation for species with low ACLs.</li> </ul>

- 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.
- 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 (Communication):** Employ interactive outreach strategies that encourage continuous participation and support two-way engagement between managers and snapper grouper fishery stakeholders while building a greater understanding of science and management.

- Expand the format for public hearings through the use of web-based hearings facilitated by staff.
- 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 technology to collect public comment 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 of the sector they participate in.
- Training for stakeholders on how to use web-based communication tools (webinars, etc.)
- Consider use of staff-moderated chat boards for each sector on the Council website
- 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.
- Consider using Public Service Announcements via VHF radio and/or local radio stations for meeting/issue announcements and regulation changes.
- Consider use of informal polls/surveys to take input on a specific 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.
- Determine how to use web-based surveys to solicit input on specific management topics.

## **Objective 1:**

Develop communication approaches that provide streamlined and timely information to increase awareness and engage stakeholders.

Collaborate with local port agents to serve as community liaisons to convey management information to stakeholders. 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. 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 Objective 2: and basic community profiles for the region. Ensure that Council Develop and maintain a database of snapper grouper fishery related communication contacts for use in communication and outreach programs to include: encourages and recreational fishing focused groups (fishing clubs, bait/tackle shops, dive supports clubs, etc.), seafood dealers/retailer and other commercial fishing engagement with a businesses. diverse audience of Develop 1-page fishery management resources (print and electronic) for stakeholders. distribution to targeted audiences/sectors. Consider use of appropriate outreach materials that meet the needs of a wide generational range of stakeholders. 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 **Objective 3:** process, including the role of the Scientific & Statistical Committee. Improve awareness and understanding Develop angler education programs about fisheries science, stock of fishery science assessments and data collection. and research and Expand the use of educational webinars to convey information about stock how these inform assessments, data collection, and other fishery science concepts. management. Develop training for new SAFMC Advisory Panel members. Continue Council support of the Marine Resource Education Program South East. **Objective 4:** Improve awareness and understanding Work with MREP partners to add a seafood and fishing business marketing of how social and module to the annual MREP-SE Management Workshop. economic issues are Provide informational resources to fishermen about marketing of linked to fisheries alternative/ underutilized species. management measures. Goal 4 (Governance): Commit to a transparent, balanced, and timely decision-making process that allows flexible yet well-defined protocols and strategies for managing the snapper grouper fishery. **Objective 1:** Create an Evaluate the current Council process. accountable and Ensure timely access of amendment documents and other materials to flexible decisionthe Council and the public. making process for development and

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.	<ul> <li>Provide information to stakeholders that is timely and in an appropriate format about proposed management actions</li> <li>Consider alternative methods for collecting public input.</li> <li>Evaluate the composition of advisory panels, committees, etc. to ensure representation meets the interests and needs of the fishery.</li> <li>Establish clear ground rules and process for public meetings held by the Council to improve stakeholder engagement.</li> </ul>