Science – Strategic Goal
Vision Blueprint for the Snapper Grouper Fishery

SCIENCE

GOAL: 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.**	**Strategy 1.1**	**Evaluate existing data collection, monitoring, and reporting programs affecting fisheries managed by the Council.**
	Actions:	**A.** Evaluate fishery dependent and independent data programs. **B.** Evaluate SEDAR. **C.** Validate data collection programs. **D.** Identify sampling resources needed to support data programs. **E.** Improve the timeliness of SAFE reports. **F.** Consider utilizing third party analysis and assessments using a standard stock assessment process.
	Strategy 1.2	**Encourage consistency in data collection programs that incorporates standardized methods, reporting requirements and formats across the South Atlantic region.**
	Actions:	**A.** Utilize ACCSP standards for data collection. **B.** Support efforts to create a uniform, efficient reporting mechanism for trip tickets and logbooks (C,FH).
	Strategy 1.3	**Support improvement and expansion of fishery independent programs.**
	Actions:	**A.** Identify alternative sources of funding to support expansion of fishery independent surveys. **B.** Work with management partners to secure long-term funding for the MARMAP survey. **C.** Support creation of a comprehensive data portal that provides access to all fishery independent data. **D.** Coordination and consistency in data collection with Mid-Atlantic for overlapping species management (fishery independent).
Objective 2. **Encourage development of mechanisms to effectively engage and collaborate with stakeholders on cooperative research, data collection and analysis.**	**Strategy 2.1**	**Promote and expand opportunities for cooperative research and surveys in the South Atlantic region.**
	Actions:	**A.** Identify sources of funding (both traditional and non-traditional) for cooperative research and surveys. **B.** Improve partnerships between potential researchers and fishermen. (ALL) **C.** Support partnerships to enhance habitat and ecosystem mapping in the region.

		D. Support a multi-disciplinary body to oversee and guide cooperative fishery independent surveys, monitoring, and research. **E.** Consider use of an industry research set-aside funding program to support fishery research and monitoring needs. (C) **F.** Utilize fishing vessels and captains as alternative observer platforms. (ALL)
	Strategy 2.2	**Support development of citizen science programs for data collection needs in the snapper grouper fishery.**
	Actions:	**A.** Support a volunteer angler training program to collect specific data to address a science or management need. (ALL) **B.** Develop methods to incorporate volunteer data for use in stock assessments, and other management measures. (ALL) **C.** 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.). **D.** Utilize fishing vessels and captains as alternative data collection platforms.
Objective 3. **Improve knowledge about the social and economic elements of the snapper grouper fishery in the South Atlantic.**	**Strategy 3.1**	**Support collection of relevant economic and social data to produce analyses that allows Council to consider effects of management on fishing communities.**
	Actions:	**A.** Support data collection that considers economics when determining allocation strategies. **B.** Evaluate broad cumulative social and economic impacts of proposed and existing management measures and alternatives to assess how management actions affect other fisheries. **C.** 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.
Objective 4. **Support improved and expanded monitoring and reporting programs for the snapper grouper fishery.**	**Strategy 4.1**	**Consider a wide range of monitoring options for the snapper grouper fishery that will meet a specific management objective.**
	Actions:	**A.** Consider the use of observers in the fishery to monitor for a specific management issue. **B.** Support the use of observer data to improve discard rate estimates. **C.** Consider development and use of appropriate electronic monitoring methods (scale, cost, approach, etc.) **D.** Support for law enforcement to enforce monitoring requirements.
	Strategy 4.2	**Support further development of reporting mechanisms for all sectors in the snapper grouper fishery.**

	Actions:	Reporting mechanisms that could be improved and considered include: **A.** Use of electronic reporting mechanisms for all sectors of the fishery (mobile apps, cellphones, web-based, etc.) **B.** Consider the use of swipecards. **C.** Establish a recreational fishing stamp/permit/license for the snapper grouper fishery. **D.** Increase dockside biological sampling for the recreational sector. **E.** Catch card reporting program for specific species. **F.** Improvements to existing logbook programs (Better resolution on logbook grids, Vessel Trip Report in discard logbook, etc.) **G.** Incentives for reporting in all sectors. **H.** Consequences for lack of reporting. **I.** Support for law enforcement to enforce reporting requirements. **J.** Increase bycatch/discard reporting. **K.** Implement Standard Bycatch Reporting Methodology **L.** Develop a model to improve discard rate estimates for all sectors. **M.** 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.**	**Strategy 5.1**	**Consider assessment of ecosystem and habitat data needs for the snapper grouper fishery.**
	Actions:	**A.** Improve understanding and consider species interaction with habitats and ecosystems. **B.** Study the non-fishing ecosystem drivers. **C.** Consider how to utilize ocean monitoring to support management decisions. **D.** Improve understanding of the effects of contaminants on habitats/ecosystems. **E.** Improve timeliness, accuracy, and coverage of bottom mapping. **F.** Determine how habitats (naturally occurring and man-made) contribute to production of managed species and the distribution of different life stages. **G.** Evaluate the effectiveness of artificial reefs (both shallow water and deep water) as a management tool. **H.** Evaluate habitat/ecosystem damage from disturbance (anchors, gear, fishing activities, etc.) **I.** Improve understanding of the impacts of offshore energy development on habitats and ecosystems that support the snapper grouper fishery.
	Strategy 5.2	**Consider climate change impacts when developing management decisions for the snapper grouper fishery.**
	Actions:	**A.** Support development of metrics to evaluate climate change. **B.** Evaluate the impact of sea level rise on the fishery. **C.** Evaluate impacts of cold water intrusion on the fishery. **D.** Evaluate impacts of ocean acidification on the fishery.

	Strategy 5.3	**Support modeling efforts that incorporate habitat and ecosystem considerations for management of the snapper grouper fishery.**
	Actions:	**A.** Use climate change impacts on species in assessments. **B.** Support a simulation model showing ecosystem impacts between fisheries. **C.** Evaluate the expansion of the geographical boundary of the Snapper Grouper Fishery Management Unit as species spread. **D.** Monitor changes in species distribution and abundance (in conjunction with management partners). **E.** Address impacts of non-indigenous species on the fishery and habitats that support the fishery (in conjunction with management partners). **F.** Analyze the impacts of management on non-targeted species. **G.** Improve understanding of predator-prey interactions on snapper grouper species (in conjunction with management partners). **H.** Consider species habitat models. **I.** Consider external sources of recruitment.

Management – Strategic Goal
Vision Blueprint for the Snapper Grouper Fishery

MANAGEMENT

GOAL: Adopt management strategies for the snapper grouper fishery that rebuild and maintain fishery resources, adapt to regional differences in the fishery, and consider the social and economic needs of fishing communities.		
Objective 1. Develop management measures that consider sub-regional differences and issues within the fishery.	**Strategy 1.1**	**Consider development of different types of quota-based management systems.**
	Actions:	**A.** Consider species specific quota-based management such as, • *state-by-state commercial and/or recreational quotas (e.g., vermilion snapper, black sea bass, etc.)* • *sub-regional management for deepwater species to include but not limited to snowy grouper, blueline tilefish and golden tilefish.*
	Strategy 1.2	**Identify the design elements needed for development of different types of quota-based management systems.**
	Actions:	**A.** Consider different design elements for quota-based management systems such as, • *quota transfer by subregion* • *using average landings over a certain time period as a system design element;* • *developing criteria by species.* **B.** Consider different management elements for quota-based management systems such as, • *allowing the sub-region (however defined) to set landings limits and/or openings/closures;* • *managing sub-regions by effort.* **C.** Set management boundaries based on the biogeography of the fishery (i.e., species or categories).
	Strategy 1.3	**Consider use of alternative sub-regional management strategies that are not quota-based.**
	Actions:	**A.** Use staggered spawning season closures to address latitudinal differences in spawning activity. **B.** Set regulations based on designated sub-regions (areas/zones), not on quota allocations. **C.** Set state-by-state regulations for either sector. **D.** Apply sub-regional management strategies seasonally based on fish availability. **E.** Consider effort control strategies such as establishing alternating 2-week windows for fishing (by sub-region)
Objective 2. Develop innovative	**Strategy 2.1**	**Support development of management approaches that address retention of snapper grouper species.**

management measures that allow consistent access to the fishery for all sectors.	**Actions:**	**A.** Consider bag limit and trip limit adjustments such as, • *Use a step-down approach when a species is approaching the ACL for either sector;* • *Institute commercial trip limits and recreational bag limits for those snapper grouper species that do not have limits.* • *Use a bag limit step down as a post-season accountability measure for the recreational sector.* **B.** Re-evaluate the grouper aggregate and manage based on area. **C.** Consider aggregate trip limits for the commercial sector (# of boxes with no size limit)* **D.** Implement a charter boat limit instead of a per person limit on charter trips.* **E.** Consider alternative approaches to managing traditional multi-day SG bandit boats/fishery (e.g. permit stacking, multi-day trip endorsement, sector/community shares, etc.) **F.** Evaluate retention of recreational bag limit when commercial season closed. ***NOTE:** These actions also apply to Objective 4 (reducing discards).
	Strategy 2.2	**Support development of management approaches that address the amount of effort in the snapper grouper fishery.**
	Actions:	**A.** Consider a recreational stamp/license for the snapper grouper fishery. **B.** Implement a limited number of days for fishing for deepwater species. (R, FH) **C.** Manage effort/permits in the commercial and for-hire sectors (consider limited entry). **D.** Evaluate the 2-for-1 permit requirement in the commercial sector. **E.** Evaluate the use of days-at-sea for the commercial sector. **F.** Evaluate the level of overcapitalization in the fishery (carrying capacity); *What are actual profits? How much resource is available? What is the gap?* **G.** Explore options for a privately-funded buy-out program for the commercial sector. **H.** Consider alternative approaches to managing traditional multi-day SG bandit boats/fishery (e.g. permit stacking, multi-day trip endorsement, sector/community shares, etc.)
	Strategy 2.3	**Support development of management approaches that account for the seasonality of the snapper grouper fishery.**
	Actions:	**A.** Consider a recreational season for harvest of deepwater species by region. **B.** Consider a "time-out" period of no fishing for the recreational fishery.

		C. Expand the use of split seasons for the commercial fishery. **D.** Consider seasons for co-occurring species and stagger the seasons (use depth as a criteria – mid-shelf and deepwater). **E.** Adjust the seasonal spawning closure for shallow water grouper and consider, shortening by 1-month; allow fishing but reduce bag limit; or a rolling closure throughout the region.
	Strategy 2.4	**Support development of management approaches that consider flexibility in setting Annual Catch Limits.**
	Actions:	**A.** Shift sector allocations in–season. **B.** Use adaptive management for almaco jack and rudderfish to slowly increase the ACL. **C.** Use multi-year ACLs that use blocks of years to manage the ACL for a species (multi-year catch specifications). **D.** Ensure more data-poor species use alternative data-poor assessment approaches.
	Strategy 2.5	**Consider development of alternative management approaches to expand access to the fishery.**
	Actions:	**A.** Investigate expansion of fisheries for under-utilized species. **B.** Evaluate applicability and develop policies for aquaculture of snapper grouper species in the region. **C.** Evaluate the use of harvest tags for specific snapper grouper species. **D.** Use depth to set zones for recreational harvest of snapper grouper species. **E.** Consider measures to simplify regulations for both sectors. (i.e. limits, aggregates, etc.)
Objective 3. **Ensure that management decisions help maximize social and economic opportunity for all sectors.**	**Strategy 3.1**	**Consider development of management approaches that assist fishery-dependent businesses to operate efficiently and profitably.**
	Actions:	**A.** Consider market availability when making management decisions. **B.** Consider predictability in for-hire business planning when making management decisions. **C.** Consider non-traditional stakeholders/ businesses when making management decisions (chefs, eco-tourism operators, bait/tackle shops, marinas) **D.** Consider new entrants to endorsement programs. **E.** Consider diversity of harvest operations in the fishery when making management decisions (owner-operator, multiple vessels, etc.) **F.** Consider options to establish permit bank to address new entrants.
	Strategy 3.2	**Consider development of management approaches that support recreational fishing and allow increased opportunity for trip satisfaction.**

	Actions:	**A.** Consider effort control strategies that include: • Setting fishing seasons with post-season adjustments for the following season.* • In-season/post-season bag limit adjustments instead of closures.* • Set fishing seasons for co-occurring species.* • Set bag limits that support participation (aggregate bag limits).* **B.** Consider mechanisms based on abundance and availability of easily accessible species. **C.** Consider development of artificial reefs or special management zones for the recreational sector only. **D.** Consider development of species complex specific permits (similar to existing HMS permit). **E.** Consider number of days allowed to fish vs. bag limits for the recreational sector. **F.** Consider an aggregate daily bag limit for the recreational sector.* **Also applies to Strategy 2.1 (retention strategies) and Objective 4 (reducing discards).*
Objective 4. **Develop management measures that reduce and mitigate discards.**	**Strategy 4.1**	**Consider management approaches that consider catch limits, seasons, and the biology of the fishery in order to minimize bycatch of snapper grouper species.**
	Actions:	**A.** Use spawning Special Management Zones. **B.** Use time-area closures (either by region or a specific area). **C.** Consider a spawning closure for all snapper grouper species with a low ACL. **D.** Set a fishing season at the beginning of the fishing year with known open and close dates. **E.** Set a season for deepwater species and shallow water species by area. **F.** Consider time/area closure for all snapper grouper species (whole region or area specific)
	Strategy 4.2	**Consider management approaches that address the impact of depth on bycatch of snapper grouper species.**
	Actions:	**A.** Consider full retention of deepwater species. **B.** Establish a season for deepwater species. **C.** Consider removal of size limits for deepwater species. **D.** Consider alternative electronic monitoring methods for all sectors to obtain data on depth to monitor catch composition and location. **E.** Use zone-based management that is set by depth.
	Strategy 4.3	**Reconsider management strategies that use size limits to reduce bycatch.**
	Actions:	**A.** Re-evaluate and change size limits on a species by species basis. **B.** Consider no size limits for snapper grouper species. **C.** Use differential size limits by area.

	Strategy 4.4	**Develop management approaches that support "Best Fishing Practices" to help avoid bycatch and reduce discard mortality.**
	Actions:	**A.** Promote opportunities for research, development, and evaluation of gear and technology to reduce bycatch (i.e., hook type/use, gear competitions, descending devices). **B.** Consider gear requirement using "weak gear" or degrading hooks. **C.** 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").
	Strategy 4.5	**Support development of management approaches that consider the use of bycatch quotas and allowances.**
	Actions:	**A.** Allow a bycatch set-aside limit per commercial trip. **B.** Consider a bycatch allowance of up to 5% for species with a low ACL (C, FH) **C.** Consider multi-year catch specifications (averaged for accountability measures). **D.** Consider use of Annual Catch Targets to minimize discards in commercial sector.
Objective 5. **Support management measures that incorporate ecosystem and habitat considerations for the snapper grouper fishery.**	**Strategy 5.1**	**Support the enhancement of habitat for the snapper grouper fishery.**
	Actions:	**A.** Create new habitat using artificial reefs. **B.** Evaluate the use of artificial reefs as a mechanism to improve fishery production. **C.** Consider artificial reefs with limited or no fishing allowed.
	Strategy 5.2	**Evaluate biologicial, economic, and social impacts when developing ecosystem and habitat management approaches.**
	Actions:	**A.** Consider the impacts of human population growth and distribution on habitats. **B.** Consider the use of sunset clauses for existing and newly created Marine Protected Areas. **C.** Consider no new MPAs. **D.** Establish clear goals/objective and evaluation of any new closed areas to help determine when objective has been met and area could re-open. **E.** Consider expansion of Snapper Grouper Fishery Management Unit to address environmental changes.
	Strategy 5.3	**Consider management approaches that support monitoring and enforcement of managed areas established to protect and conserve ecosystems and habitat.**
	Actions:	**A.** Consider innovative technology (surveillance buoys, drones, etc.) to monitor fishing activity in all sectors.
	Strategy 5.4	**Consider spatial management approaches to protect and conserve ecosystems and habitats for the snapper grouper fishery.**

	Actions:	**A.** 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. **B.** Consider additional restrictions on existing managed areas (MPAs, etc.). **C.** Evaluate areas that may be suitable for spawning Special Management Zones (SMZs). **D.** Establish clear goals for creation of Habitat Areas of Particular Concern (HAPCs). **E.** Create no-anchor zones to protect fragile habitat.
Objective 6. Develop management measures that support optimal sector allocations for the snapper grouper fishery.	**Strategy 6.1**	**Support management approaches that consider the mechanics of designing allocation strategies (who, what, how, and social/economic considerations).**
	Actions:	**A.** Consider separate allocation for charter/headboat sectors. **B.** Evaluate existing sectors and current harvest to help determine allocation strategies. **C.** Truncate the recreational allocation time series from 2007 onwards due to the economy. **D.** 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).)* **E.** Manage by economic levels (primary, secondary, tertiary) in the fishery (1-harvesters, 2-dealers, 3-support industries). **F.** Incorporate fairness and economics as part of the allocation equation. **G.** Evaluate use of a mutual allocation pool (allocation is shared between sectors) for possible use for certain species. **H.** After evaluation of existing sectors and current harvest consider options to: *i. set multiple ACLs/allocation* *ii. set only 1 ACL/allocation* **I.** Consider setting ACLS/allocations for multiple years. **J.** Consider individual quotas based on individual allocations or harvest levels (C, FH). **K.** Consider revising allocations on a species-by-species basis. **L.** Consider longer timeframe for developing allocations. **M.** Consider allocations by gear type. **N.** Develop an allocation review plan. **O.** Consider changes in the use of the fishery when considering allocation to account for future growth of fishery (sectors, resource, etc.).
	Strategy 6.2	Identify alternative methods for determining allocation shifts and managing allocations within the fishery.
	Actions:	**A.** Consider sub-allocation shifts (for example, golden tilefish sectors).

		B. Consider allocation shifts for species not reaching Optimal Yield (gag, vermilion, etc.). **C.** Consider framework for in-season allocation shifts. **D.** Examine reallocation for species with low ACLs. **E.** Consider reallocation for commercially/recreationally important species. **F.** Specify the allocation focus for each sector (Commercial-offshore; Recreational-nearshore). **G.** Examine recreational harvest for species that are not reaching their recreational ACL. **H.** Consider other methods for establishing sub-allocations (gear sectors, fishery sectors, etc.). **I.** Before reallocation, consider increasing bag limits or other management measures first for the recreational sector. **J.** Before reallocation, consider managing for abundance of recreationally important and easily accessible species. **K.** Increase the bag limit if the recreational sector does not reach their ACL.

Communication – Strategic Goal:
Vision Blueprint for the Snapper Grouper Fishery

Communication

GOAL: Employ interactive outreach strategies that encourages continuous participation and supports two-way engagement between managers and snapper grouper fishery stakeholders while building a greater understanding of science and management.		
Objective 1. Develop communication approaches that provide streamlined and timely information to increase awareness and engage stakeholders.	**Strategy 1.1**	**Expand the use of innovative technology to improve stakeholder participation and to communicate the Council process.**
	Actions:	**A.** Expand the format for public hearings through the use of web-based hearings facilitated by staff. **B.** Utilize remote listening stations for public hearings and educational meetings to increase participation from remote groups of stakeholders. **C.** Change the format of in-person public hearings to match the format of the visioning port meetings (interactive, less formal, less staff). **D.** Utilize web-based tools (webinars, video conferencing, etc.) and other technology to collect public comment and provide educational workshops. **E.** Provide a comment box on the website for stakeholders to submit comment after viewing the recorded scoping presentation. **F.** Continue Q&A webinars with Council staff to discuss upcoming amendments for public hearings and scoping. **G.** Consider hosting webinars just for snapper grouper permit holders on various topics. **H.** On the Constant Contact sign-up form, add a check-off box for indication of the sector they participate in. **I.** Training for stakeholders on how to use web-based communication tools (webinars, etc.) **J.** Work with NOAA SERO to provide advance notification of ACL monitoring updates.
	Strategy 1.2	**Utilize the Council's website as a clearinghouse for easy to access information on Council news, regulations, fishery management plans, and management actions.**
	Actions:	**A.** Consider use of staff-moderated chat boards for each sector on the Council website. **B.** Incorporate a real-time calendar that displays current fishery closures for each sector. **C.** Create a separate page for educational resources/materials produced by the Council on various topics.

		D. 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. **E.** Track website analytics on presentation downloads and other documents to evaluate effectiveness and access of materials on the website. **F.** Work with NOAA SERO to provide information on the Council's website about historical closure dates.
	Strategy 1.3	**Consider use of alternative outreach approaches to further engage stakeholders in the management process.**
	Actions:	**A.** Consider using Public Service Announcements via VHF radio and/or local radio stations for meeting/issue announcements and regulation changes. **B.** Consider an advertising campaign highlighting Council activities and success stories. **C.** 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*). **D.** Work with existing on-line fishing forums to collect input on a specific topic. **E.** Send posters/flyers to fish houses to announce meetings/issue announcements and regulation changes. **F.** Consider creation of an incentive rewards program for stakeholders that remain active in the management process. **G.** Determine how to use web-based surveys to solicit input on specific management topics. **H.** Support expansion of the Marine Resource Education Program SouthEast (MREP-SE) to other areas of the region. **I.** Collaborate with local port agents to serve as community liaisons to convey management information to stakeholders. **J.** Participate in area festivals on a regular basis. **K.** Consider using paid angler focus groups to solicit input on specific management issues. **L.** Support more informal port meetings for educational purposes on relevant fishery issues/topics to include current and upcoming management issues. **M.** Diversify the locations of in-person meetings (public hearings, scoping, etc.) to allow for one-on-one interaction with Council members. **N.** Expand the Council's social media efforts to include use of YouTube and a blog. **O.** 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.**	**Strategy 2.1**	**Use targeted communication strategies to maintain and increase stakeholder engagement with the Council.**
	Actions:	**A.** Consider use of direct mailings/other communication strategies targeting snapper grouper permit holders for significant management/regulatory actions. **B.** Develop a list of key industry stakeholders in the snapper grouper fishery and basic community profiles for the region. **C.** 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.* **D.** Develop 1-page fishery management resources (print and electronic) for distribution to targeted audiences/sectors. **E.** Consider use of appropriate outreach materials that meet the needs of a wide generational range of stakeholders. **F.** Continue traditional means of communication
Objective 3. **Improve awareness and understanding of fishery science and research and how these inform management.**	**Strategy 3.1**	**Support collaboration with academic and research institutions, non-governmental organizations and agency partners on development of fishery-related outreach programs and materials.**
	Actions:	**A.** Develop recreational angler education programs about how to reduce discards (i.e., barotrauma, best fishing practices for handling/releasing fish, descending devices, etc.). **B.** Consider developing youth outreach materials (electronic) and educational field trips related to fisheries and fisheries management. **C.** Consider outreach strategies related to the connections between habitat and fisheries.
	Strategy 3.2	**Support outreach programs that address the process of a stock assessment and how results are used in management.**
	Actions:	**A.** Develop targeted outreach programs aimed at all sectors about the Council process, including the role of the Scientific & Statistical Committee. **B.** Develop angler education programs about fisheries science, stock assessments and data collection. **C.** Expand the use of educational webinars to convey information about stock assessments, data collection, and other fishery science concepts. **D.** Develop training for new SAFMC Advisory Panel members. **E.** Continue Council support of the Marine Resource Education Program South East.

Objective 4. **Improve awareness and understanding of how social and economic issues are linked to fisheries management measures.**	**Strategy 4.1**	**Work with agency partners to provide stakeholders with information on seafood and fishing business marketing strategies that may increase profits.**
	Actions:	**A.** Work with MREP partners to add a seafood and fishing business marketing module to the annual MREP-SE Management Workshop. **B.** Provide informational resources to fishermen about marketing of alternative/ underutilized species.

Governance – Strategic Goal:
Vision Blueprint for the Snapper Grouper Fishery

GOVERNANCE

GOAL: 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 accountable and flexible decision making process for development and evaluation of management measures.**	**Strategy 1.1**	**Support an efficient decision making process for development of management measures for the snapper grouper fishery.**
	Actions:	**A.** Evaluate the current Council process. **B.** Consider mechanisms for streamlining the process of amendment development. **C.** Consider alternative methods for collecting public input on proposed management actions. **D.** Ensure timely access of amendment documents and other materials to the Council and the public. **E.** Develop mechanisms for evaluating the decision making process to ensure consistency and accountability. **F.** Consider how scientific information is incorporated into management actions and provide flexibility in this process. **G.** Consider development of a regulations evaluation process.
Objective 2. **Build capacity to streamline management efforts and better coordinate with management partners.**	**Strategy 2.1**	**Enhance existing and develop new partnerships with agencies, academic institutions, and other organizations to support comprehensive management strategies for the snapper grouper fishery.**
	Actions:	**A.** Establish working relationships with non-fishery entities and agencies (offshore energy development, etc.) for future marine management issues. **B.** Strengthen relationships with existing fishery management partners to clearly establish roles, responsibilities, and accountability systems. **C.** Consider involvement with regional planning initiatives affecting the snapper grouper fishery in the region. **D.** Expand partnerships with academic and research institutions to coordinate fisheries science research to address data needs within the snapper grouper fishery. **E.** Identify non-traditional partnerships and sources of funding to support fisheries science, research and management activities (industry, NGO supported, etc.)
Objective 3. **Improve communication with stakeholders to ensure the needs of the fishery are**	**Strategy 3.1**	**Support a formal and informal process for engaging stakeholders in the snapper grouper fishery.**
	Actions:	**A.** Provide information to stakeholders that is timely and in an appropriate format about proposed management

understood and considered throughout the Council process.		actions. **B.** Consider alternative methods for collecting public input. **C.** Evaluate the composition of advisory panels, committees, etc. to ensure representation meets the interests and needs of the fishery. **D.** Establish clear ground rules and process for public meetings held by the Council to improve stakeholder engagement.

Glossary of Terms – *Draft Vision Blueprint*

Atlantic Coastal Cooperative Statistics Program (ACCSP): The ACCSP includes the 15 Atlantic coast states and the District of Columbia, two federal fisheries agencies (NOAA Fisheries and U.S. Fish and Wildlife Service), three regional fisheries management councils (New England, Mid-Atlantic, and South Atlantic), the Potomac River Fisheries Commission, and the Atlantic States Marine Fisheries Commission (ASMFC). These program partners work cooperatively towards the development and implementation of data collection standards and processes across jurisdictional lines.

Bycatch: Fish harvested in a fishery, but not sold or kept for personal use. Bycatch includes economic discards and regulatory discards, but not fish released alive under a recreational catch and release fishery management program.

Bycatch allowance: A portion of the allowable catch set aside to cover incidental catch of some species.

Catch Card: A reporting mechanism used in fisheries to report fish catches Fishermen are required to fill out a catch card in order to land certain species of fish. (Used in Highly Migratory Species in the recreational fishery.)

Catch Share: A fishery management program that dedicates a secure share of the total fishery catch to individuals, cooperatives, communities, or other entities. Catch share recipients are responsible for terminating fishing activity when their specific share is reached.

Charter Boat: A fishing boat available for hire by recreational anglers, normally by a group of anglers for a short time period.

Citizen Science: Research collaborations between scientists and volunteers, particularly (but not exclusively) to expand opportunities for scientific data collection and to provide access to scientific information for community members.

Cooperative Research: The partnering of the fishing industry, fishermen and other stakeholders with federal and university scientists to collect fundamental fisheries information.

Discards: Fish captured, but released at sea.

Discard Mortality Rate: The % of total fish discarded that do not survive being captured and released at sea.

Effort: The amount of time and fishing power (i.e., gear size, boat size, horsepower) used to harvest fish.

Electronic monitoring (EM) – The use of technologies – such as vessel monitoring systems, video cameras, drones, passive buoys, etc. – to passively monitor fishing operations through observing or tracking. Video monitoring is often referred to as EM.

Electronic reporting (ER) – The use of technologies - such as phones, tablets, or computers - to record, transmit, receive, and store fishery data.

Electronic technology (ET) – Any electronic tool used to support catch monitoring efforts both on shore and at sea, including electronic reporting (e.g., e-logbooks, tablets, apps) and electronic monitoring (VMS, video cameras, and sensors).

Fishery Dependent Data: Fishery data collected and reported by fishermen and dealers.

Fishery Independent Data: Fishery data collected and reported by scientists who catch the fish themselves.

Fishery Management Plan: Management plan for fisheries operating in the federal produced by regional fishery management councils and submitted to the Secretary of Commerce for approval.

Fishing Effort: Usually refers to the amount of fishing. May refer to the number of fishing vessels, amount of fishing gear (nets, traps, hooks), or total amount of time vessels and gear are actively engaged in fishing.

Head Boat: A fishing boat that charges individual fees per recreational angler onboard.

Governance: a continuing process through which governments, institutions, and stakeholders of the sector and of other interacting sectors elaborate and adopt appropriate policies, plans, and management strategies to ensure sustainable and responsible resource utilization. In the process, conflicting or diverse interests may be accommodated and cooperative action may be taken.

Magnuson-Stevens Fishery Conservation and Management Act: Federal legislation responsible for establishing the fishery management councils and the mandatory and discretionary guidelines for federal fishery management plans.

Marine Protected Area (MPA): Geographic area with discrete boundaries that has been designated to enhance the conservation of marine resources. This includes MPA-wide restrictions on some activities such as oil and gas mining and the use of zones such as fishery and ecological reserves to provide higher levels of protection.

MARMAP (MArine Resources Monitoring, Assessment, and Prediction) program: A cooperative fisheries project of the SC Department of Natural Resources, Marine Resources Research Institute and NOAA Fisheries which conducts fishery-independent assessments of reef fish abundance and life history from Cape Lookout, North Carolina to Fort Pierce, Florida.

Marine Recreational Fisheries Statistics Survey (MRFSS): Survey operated by NMFS in cooperation with states that collects marine recreational data.

National Marine Fisheries Service (NMFS): Federal agency within NOAA responsible for overseeing fisheries science and regulation.

National Oceanic and Atmospheric Administration: Agency within the Department of Commerce responsible for ocean and coastal management.

Overfished: A stock or stock complex is considered overfished when stock biomass falls below the minimum stock size threshold (MSST) (e.g., current biomass < MSST = overfished).

Overfishing: Overfishing occurs when a stock or stock complex is subjected to a rate of fishing mortality that exceeds the maximum fishing mortality threshold (e.g., current fishing mortality rate > MFMT = overfishing).

Quota: % or annual amount of fish that can be harvested.

Quota-based Management: A broad term for a type of sub-regional fisheries management program that designates a certain amount of quota (pounds of fish) to a specific group or individual based on a specified program design and criteria (e.g., region fished, catch history, economic qualifier, etc.). Specific types of quota-based management include but are not limited to:

- **Catch Shares (see above)**
- **Community Share program –** a portion of the quota is allocated to a specific community within a region; the community could be defined geographically (e.g., Outer Banks of NC, Florida Keys, etc.) or by some other type of common factor.
- **Individual Fishing Quota (IFQ):** Fishery management tool that allocates a certain portion of the Total Allowable Catch to individual vessels, fishermen, or other eligible recipients.
- **Sector Share program –** a portion of the quota is allocated to a specific sector; sectors could be defined as a group of interested fishermen, a specific gear type (hook and line, longline, etc.), a specific sector within a fishery (i.e., for-hire) and other types of sectors as defined by the program.
- **State-by-State quota program –** a portion of the quota is allocated to each state within a region.

Research Set-Aside Program: A funding program provided by the sale of Set-Aside allocations for quota. (Commonly used in Northeast fisheries.)

SAFE Report (Stock Assessment and Fishery Evaluation Report): A document or set of documents that provides Councils with a summary of information concerning the most recent biological condition of stocks and the marine ecosystems in the Fishery Management Unit (FMU) and the social and economic condition of the recreational and commercial fishing interests, fishing communities, and the fish processing industries.

Scientific and Statistical Committee (SSC): Fishery management advisory body composed of federal, state, and academic scientists, which provides scientific advice to a fishery management council.

Sector: There are several references to sectors in the Vision Blueprint and they are defined as follows,

- Fishery sector – referring to the different types of participants in the fishery such as commercial, recreational, for-hire, etc.
- Gear sector – referring to sectors of a fishery that use a specific type of gear such as hook-and-line, longline, pots, etc.

SEDAR (SouthEast Data, Assessment, and Review): The cooperative process by which stock assessment projects are conducted in NOAA Fisheries' Southeast Region.

Special Management Zone (SMZ): A designated area surrounding an artificial reef or fish attracting device that prohibits or restrains the use of specific types of fishing gear that are not compatible with the intent of the artificial reef or fish attracting device.

- **Spawning SMZ:** A designated area whose habitat characteristics, bottom topography and current systems provide important snapper grouper spawning habitat where fishing for or retention of snapper grouper species is prohibited and certain activities (types of fishing, anchoring, etc.) are restricted.

South Atlantic Fishery Management Council (SAFMC): One of eight regional councils mandated in the Magnuson-Stevens Fishery Conservation and Management Act to develop management plans for fisheries in federal waters. The SAFMC develops fishery management plans for fisheries off North Carolina, South Carolina, Georgia, and the east coast of Florida.

Standardized Bycatch Reporting Methodology: A standardized methodology that can be applied to estimate bycatch in fisheries. A mechanism to establish, maintain, and utilize biological sampling programs designed to minimize bias to the extent practicable, thus promoting accuracy while maintaining sufficiently high levels of precision.

Stock Assessment: The process of collecting and analyzing biological and statistical information to determine the changes in the abundance of fishery stocks in response to fishing, and, to the extent possible, to predict future trends of stock abundance. Stock assessments are based on resource surveys; knowledge of the habitat requirements, life history, and behavior of the species; the use of environmental indices to determine impacts on stocks; and catch statistics. Stock assessments are used as a basis to assess and specify the present and probable future condition of a fishery.

Swipe Card: A reporting mechanism used in fisheries to report fishery landings and transactions. Typically swipe cards are magnetic and are swiped at an established reporting station. (Used in the Maine elver fishery.)

Vessel Monitoring System (VMS) – Electronic monitoring technology that allows the tracking of fishing vessels, including their position, time at position, course, and speed.

Compiled from:
SAFMC Snapper Grouper Fishery Management Plan Glossary
NOAA Fisheries Glossary
Citizen Science Direct (http://www.birds.cornell.edu/citscitoolkit/about/definition)