### Science - Strategic Goal for Draft Vision Blueprint

#### **Background:**

In December 2012, the South Atlantic Fishery Management Council (Council) began its Visioning Project to construct a long-term vision for the snapper grouper fishery through development of a strategic plan for the fishery that would guide management actions into the future. This strategic plan, called the *Vision Blueprint*, consists of four strategic goals – *Science*, *Communication, Management, and Governance*. Each strategic goal will have specific goals, objectives and action strategies that will be used by the Council to guide future management of the snapper grouper fishery.

Following an approach similar to what the Mid-Atlantic Fishery Management Council used to draft a strategic plan for its managed fisheries, the Council sought stakeholder input early in the process and held a series of 26 informal meetings to solicit stakeholder input in coastal communities throughout the South Atlantic region. Because stakeholder needs and perceptions can vary widely, the Council has been careful <u>not to exclude any input</u> pertaining to the management of the snapper grouper fishery. Therefore, at this stage of the process, items that have been considered in the past as possible management tools but have not been developed further, will continue to be included among the many tools the Council may consider for long-term management of the snapper grouper fishery in the South Atlantic region. As such, the table below encompasses management actions/strategies as suggested by stakeholders in the fishery as well as those brought forth by the Council members themselves. The goals and objectives are not in order of priority and are all considered draft at this time. As the draft Vision Blueprint for the Snapper Grouper Fishery takes shape in 2015, the Council will provide their rationale for management strategies that are eventually excluded from further consideration.

# **SCIENCE**

GOAL: Management decisions 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	Strategy 1.1Evaluate existing data collection, monitoring, and reporting programs affecting fisheries managed by the Council.			
data to support management plans and programs considered by the Council.	Actions:	<ul> <li>A. Evaluate fishery dependent and independent data programs.</li> <li>B. Evaluate SEDAR.</li> <li>C. Validate data collection programs.</li> <li>D. Identify sampling resources needed to support data programs.</li> <li>E. Improve the timeliness of SAFE reports.</li> <li>F. Consider utilizing third party assessments using a standard stock assessment process.</li> </ul>		
	Strategy 1.2 Encourage consistency in data collection programs that incorporates standardized methods, reporting requireme and formats across the South Atlantic region.			

	Actions:	A. Utilize ACCSP standards for data collection.			
		<b>B.</b> Support efforts to create a uniform 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.			
		<b>C.</b> Support creation of a comprehensive data portal that			
		provides access to all fishery independent data.			
Objective 2.	Strategy 2.1	Promote and expand opportunities for cooperative research			
Encourage development of		and surveys in the South Atlantic region.			
	Actions:	A. Identify sources of funding (both traditional and non-			
mechanisms to effectively	Actions.	traditional) for cooperative research and surveys.			
engage and collaborate with		<b>B.</b> Improve partnerships between potential researchers			
stakeholders on cooperative		and fishermen. (ALL)			
research, data collection and		<b>C.</b> Support partnerships to enhance habitat and ecosystem			
analysis.		mapping in the region.			
		<b>D.</b> 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)			
		<b>F.</b> 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>B.</b> Develop methods to incorporate volunteer data for use			
		in stock assessments, and other management measures.			
		(FH,R)			
		С.			
Objective 3.	Strategy 3.1	Support collection of relevant economic and social data to			
Improve knowledge about		produce analyses that allows Council to consider effects of			
	management on fishing communities.				
the social and economic		management on fishing communities.			
the social and economic	Actions:	<ul> <li>A. Evaluate cumulative social and economic impacts of</li> </ul>			
the social and economic elements of the snapper	Actions:				
the social and economic elements of the snapper grouper fishery in the South	Actions:	A. Evaluate cumulative social and economic impacts of			
the social and economic elements of the snapper	Actions:	<ul> <li>Evaluate cumulative social and economic impacts of proposed and existing management measures and</li> </ul>			
the social and economic elements of the snapper grouper fishery in the South	Actions:	A. Evaluate cumulative social and economic impacts of proposed and existing management measures and alternatives.			
the social and economic elements of the snapper grouper fishery in the South	Actions:	<ul> <li>A. Evaluate cumulative social and economic impacts of proposed and existing management measures and alternatives.</li> <li>B. Support data collection that considers economics when</li> </ul>			
the social and economic elements of the snapper grouper fishery in the South	Actions:	<ul> <li>A. Evaluate cumulative social and economic impacts of proposed and existing management measures and alternatives.</li> <li>B. Support data collection that considers economics when determining allocation strategies.</li> </ul>			
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the social and economic elements of the snapper grouper fishery in the South	Actions:	<ul> <li>A. Evaluate cumulative social and economic impacts of proposed and existing management measures and alternatives.</li> <li>B. Support data collection that considers economics when determining allocation strategies.</li> <li>C. Develop partnerships with research institutions, agencies and other organizations with appropriate</li> </ul>			

Objective 4	Strategy 4.1	Consider a wide range of manitoring antions for the manner			
Objective 4.	Strategy 4.1	Consider a wide range of monitoring options for the snapper grouper fishery that will meet a specific management			
Support improved and		objective.			
expanded monitoring and	Actions:	A. Consider the use of observers in the fishery to monitor			
reporting programs for the	Actions.	for a specific management issue.			
snapper grouper fishery.		<b>B.</b> Support the use of observer data to improve discard			
		rate estimates.			
		<b>C.</b> 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. Development of a reporting program for the			
		recreational sector.			
		B. Use of electronic reporting mechanisms for all sectors of the fishery (mobile apps, cellphones, web-based, etc.)			
		<b>C.</b> Swipecards for the recreational sector.			
		<b>D.</b> A recreational fishing stamp/permit/license for the			
		snapper grouper fishery.			
		E. Increase dockside biological sampling for the			
		recreational sector.			
		F. Catch card reporting program for specific species.			
		G. Improvements to existing logbook programs (Better			
		resolution on logbook grids, Vessel Trip Report in			
		discard logbook, etc.)			
		H. Incentives for reporting in all sectors.			
		I. Consequences for lack of reporting.			
		J. Support for law enforcement to enforce reporting			
		requirements.			
		K. Increase bycatch/discard reporting.			
		<ul> <li>L. Implement Standard Bycatch Reporting Methodology</li> <li>M. Develop a model to improve discard rate estimates for</li> </ul>			
Objective 5.	Strategy 5.1	all sectors. Consider assessment of ecosystem and habitat data needs			
Promote data collection and	Strucesy Siz	for the snapper grouper fishery.			
analysis to support ecosystem	Actions:	A. Improve understanding and consider species interaction			
and habitat considerations		with habitats and ecosystems.			
for the snapper grouper		B. Study the non-fishing ecosystem drivers.			
fishery.		C. Consider how to utilize ocean monitoring to support			
instict y.		management decisions.			
		<b>D.</b> Improve understanding of the effects of contaminants			
		on habitats/ecosystems.			
		E. Evaluate ocean dumping and impacts to habitat/			
		ecosystems.			
		<b>F.</b> Improve timeliness and accuracy of bottom mapping.			
		G. Determine how habitats contribute to production of managed species and the distribution of different life			
		stages.			
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		Evoluato h	abitat lacosystam damaga from disturbanca			
		<b>H.</b> Evaluate habitat/ecosystem damage from disturbance				
		(anchors, gear, fishing activities, etc.)				
SI	•.	Consider climate change impacts when developing				
			ecisions for the snapper grouper fishery.			
	Actions:	• •	evelopment of metrics to evaluate climate			
		change.				
			ne impact of sea level rise on the fishery.			
		Evaluate ir	npacts of cold water intrusion on the fishery.			
		Evaluate ir	npacts of ocean acidification on the fishery.			
St	trategy 5.3	Support modeling efforts that incorporate habitat and				
	ecosystem considerations for management of the snapper					
	grouper fishery.					
	Actions:	Utilize eco	system modeling.			
			e change impacts on species in assessments.			
		Support a	simulation model showing ecosystem impacts			
		between fi	<b>.</b>			
		Consider e	xpanding the geographical boundary of the			
		Snapper G	rouper Fishery Management Unit as species			
		spread.				
		•	hanges in species distribution and			
		abundance	<b>5</b>			
		Address im	pacts of non-indigenous species on the			
			habitats that support the fishery.			
		-	e impacts of management on non-targeted			
		species.				
			nderstanding of predator-prey interactions on			
		-	ouper species.			
			pecies habitat models.			
			xternal sources of recruitment.			
		consider e				