Outcome: Blue Crab Abundance and Management

Goal: Sustainable Fisheries-Protect, restore and enhance finfish, shellfish and other living resources, their habitats and ecological relationships to sustain all fisheries and provide for a balanced ecosystem in the watershed and Bay.

Outcome: Manage for a stable and productive crab fishery including working with the industry, recreational crabbers and other stakeholders to improve commercial and recreational harvest accountability. By 2018, evaluate the establishment of a Bay-wide, allocation-based management framework with annual levels set by the jurisdictions for the purpose of accounting for and adjusting harvest by each jurisdiction. Maintain a sustainable blue crab population based on the current 2012 target of 215 million adult females. Refine population targets through 2025 based on the best available science.

Long term Target: Maintain a sustainable blue crab population according to targets determined by the best available science and evaluate an jurisdictional allocation framework.

2 year Target: Provide support for the annual winter dredge survey and the 2017 comprehensive stock assessment. Analyze the data from the dredge survey and stock assessment to determine the new target for blue crab abundance.

Management Approach 1: Planning and implementing the next stock assessment.

Key Action** *Description of work/project. Define each major action step on its own row. Identify specific program that will be used to achieve action.*	**Performance Target(s)** *Identify incremental steps to achieve Key Action.*	**Participating Entity** *Identify responsible partner for each step.*	**Geographic Location**	**Timeline** *Identify completion date (month & year) for each step)*	**Estimated Project Cost** *Best estimate of total project cost (needed)*	**Available funding by Partner**	**Factors Influencing and/or Gap** *Identify related factor or gap in Management Strategy*
Finalize plans for the next stock assessment.	Finalize the terms of reference and scope of the assessment. Determine the timeline for each component of the assessment.	Fishery Managers (MD DNR, PRFC, VMRC), UMCES, VIMS, CBSAC	n/a	early 2016	Staff time	Staff time from participating entities	Stock assessment timeline will be influenced by funding availability.
	Identify possible funding mechanisms to support the assessment.	MD DNR, PRFC, VMRC, NCBO	n/a	early-mid 2016	Staff time	**GAP - Stock assessment funding**	
	Review proposal and scope of work for the assessment and distribute funding to Principal Investigators.	MD DNR, PRFC, VMRC, NCBO	n/a	mid 2016	Staff time	Staff time from participating entities	
Totals					**Totals**		

Conduct the next stock assessment.	Complete necessary research, modelling and analyses and document in a stock assessment report.	UMCES, VIMS, MD DNR	Maryland, Virginia, Potomac River	mid 2016 through 2017	Cost TBD + MD DNR staff time	**GAP - Stock assessment funding**	Stock assessment timeline will be determined by funding availability.
	Conduct regular check-ins with the Principal Investigators. Update the Fisheries GIT Executive Committee quarterly on progress.	NCBO and CBSAC	n/a	2016 and 2017	Staff time	NCBO and CBSAC staff time	
	Coordinate a review of the assessment results by CBSAC, interested scientists and Fisheries GIT members. Compile a summary of comments for discussion.	NCBO (lead), CBSAC	n/a	2017	Staff time	NCBO and CBSAC staff time	
	Present and discuss the stock assessment results with stakeholders.	VMRC, PRFC, MD DNR, CBSAC	n/a	2017	Staff time	MD, VA, PRFC, CBSAC staff time	
					Totals		
Continue the current process of CBSAC analyzing the annual Winter Dredge Survey results and providing management advice until the stock assessment is complete.	Analyze the results of the Winter Dredge Survey and produce the 2016 and 2017 Blue Crab Advisory Reports.	CBSAC, NCBO	n/a	April-June 2016; April-June 2017	Staff time	CBSAC and NCBO staff time	
	After the stock assessment is complete, discuss if the annual process of data analysis and CBSAC report process should change based on the assessment results.	CBSAC, MD DNR, PRFC, VMRC	n/a	late 2017 and early 2018	Staff time	CBSAC, MDDNR, PRFC, VMRC staff time	
					Totals	**n/a**	

Management Approach 2: Evaluation of an Allocation-based Management Framework							
Key Action**	**Performance Target(s)**	**Participating Entity**	**Geographic Location**	**Timeline**	**Estimated Project Cost**	**Available funding by**	**Factors Influencing and/or Gap** *Identify*
Work to improve harvest accountability within each management jurisdiction.	Maryland will continue to expand their pilot commercial electronic reporting project.	MD DNR, Industry groups	Maryland waters	Ongoing	Staff time	MD DNR	High-quality harvest and effort data are essential for informing management decisions and reduce uncertainty.
	PRFC will explore options to implement commercial electronic reporting in 2016.	PRFC	Potomac River	2016	TBD	TBD	
	VMRC will continue promoting their commercial online reporting system.	VMRC	Virginia waters	Ongoing	Staff time	VMRC	
	Continue the discussion on recreational harvest and its impact on the fishery. Utilize ongoing scientific studies and existing reports.	MD DNR, PRFC, VMRC, CBSAC	Maryland, Virginia, Potomac River	Ongoing	Staff time	MD DNR, PRFC, VMRC, CBSAC staff time	
	Evaluate the need for developing standards for harvest accountability to improve the accuracy of any future allocation framework.	MD DNR, PRFC, VMRC, CBSAC	Maryland, Virginia, Potomac River	Ongoing	Staff time	MD DNR, PRFC, VMRC, CBSAC staff time	
					Total		
Develop a framework to assess the feasibility of using and calculating a Baywide Total Allowable Catch (TAC) of blue crabs.	Compile the available, necessary, harvest data from the three jurisdictions.	MD DNR, PRFC, VMRC	Maryland, Virginia, Potomac River	mid 2016	Staff time	MD DNR, PRFC, VMRC staff time	
	Work with CBSAC to determine how to calculate a TAC based on the current reference points, harvest data and abundance data.	CBSAC, MD DNR, PRFC, VMRC	Maryland, Virginia, Potomac River	late 2016	Staff time	MD DNR, PRFC, VMRC, CBSAC staff time	
					Total		

Explore the feasibility of allocating a percentage of the Baywide TAC to the jurisdictions.	Compile a list of potential allocation methods.	CBSAC, MD DNR, PRFC, VMRC	Maryland, Virginia, Potomac River	early 2017	Staff time	CBSAC, MD DNR, PRFC, VMRC staff time	Completion of the stock assessment is a fundamental step toward exploring the feasibility of an allocation-based framework.
	Determine which of the above methods have sufficient data to support them and discuss the pros and cons of each method.	CBSAC, MD DNR, PRFC, VMRC	Maryland, Virginia, Potomac River	early 2017	Staff time	CBSAC, MD DNR, PRFC, VMRC staff time	
	Engage stakeholders, including jurisdictional advisory committees, to obtain public feedback on potential allocation methods. The three jurisdictions will coordinate their outreach and messaging to reach industry stakeholders and the broader public.	MD DNR, PRFC, VMRC, CBSAC	Maryland, Virginia, Potomac River	early and mid 2017	Staff time	MD DNR, PRFC, VMRC, CBSAC staff time	
	Identify available economic information and consider future data collection to better understand the quantitative value of the fishery and impacts of regulatory changes	Economists, MD DNR, PRFC, VMRC	Maryland, Virginia, Potomac River	2016 and 2017			
					Totals		