

Biennial Strategy Review System: Logic Table and Work Plan

Instructions: The following Logic Table should be used to articulate, document, and examine the reasoning behind your work toward an Outcome. Your reasoning—or logic—should be based on the Partnership’s adaptive management [decision framework](#). This table allows you to indicate the status of your management actions and denote which actions have or will play the biggest role in making progress.

Some Management Strategies and Work Plans will not immediately or easily fit into this analytical format. However, **all GITs should complete columns one through four** to bring consistency to and heighten the utility of these guiding documents. The remaining columns are recommended for those who are able to complete them. If you have any questions as you are completing this table, please contact SRS Team Coordinator Laura Free (free.laura@epa.gov).

The instructions below should be used to complete the table. An example table is available on the [GIT 6 webpage](#) under “Projects and Resources”.

1. For the first round of strategic review (2017-2018): Use your existing Work Plan actions to complete the **Work Plan Actions** section first. Make sure to number each of the actions under a high-level Management Approach, as these numbers will provide a link between the work plan and the logic table above it. Use color to indicate the status of your actions: a **green** row indicates an action has been completed or is moving forward as planned; a **yellow** row indicates an action has encountered minor obstacles; and a **red** row indicates an action has not been taken or has encountered a serious barrier.
2. **Required:** In the column labeled **Factor**, list the significant factors (both positive and negative) that will or could affect your progress toward an Outcome. The most effective method to ensure logic flow is to list all your factors and then complete each row for each factor. Consult our Guide to Influencing Factors (Appendix B of the Quarterly Progress Meeting Guide on the [GIT 6 webpage](#) under “Projects and Resources”) to ensure your list is reasonably comprehensive and has considered human and natural systems. Include any factors that were not mentioned in your original Management Strategy or Work Plan but should be addressed in any revised course of action. If an unmanageable factor significantly impacts your outcome (e.g., climate change), you might choose to list it here and describe how you are tracking (but not managing) that factor.
3. **Required:** In the column labeled **Current Efforts**, use keywords to describe existing programs or current efforts that other organizations are taking that happen to support your work to manage an influencing factor but would take place even without the influence or coordination of the Chesapeake Bay Program. You may also include current efforts by the Chesapeake Bay Program. Many of these current efforts may already be identified in your Management Strategy; you may choose to link the keywords used in this table to your Management Strategy document for additional context. You may also choose to include some of these efforts as actions in your work plan; if you do, please include the action’s number and hyperlink.
4. **Required:** In the column labeled **Gap**, list any existing gap(s) left by those programs that may already be in place to address an influencing factor. These gaps should help determine the actions that should be taken by the Chesapeake Bay Program through the collective efforts of Goal Implementation Teams, Workgroups, and internal support teams like STAR, or the actions that should be taken by individual partners to support our collective work (e.g., a presentation of scientific findings by a federal agency to a Chesapeake Bay Program workgroup). These gaps may already be listed in your Management Strategy.
5. **Required:** In the column labeled **Actions**, list the number that corresponds to the action(s) you are taking to fill identified gaps in managing influencing factors. Include on a separate line those approaches and/or actions that may not be linked to an influencing factor. To help identify the action number, you may also include a few key words. Emphasize critical actions in **bold**.
6. **Optional:** In the column labeled **Metric**, describe any metric(s) or observation(s) that will be used to determine whether your management actions have achieved the intended result.
7. **Optional:** In the column labeled **Expected Response and Application**, briefly describe the expected effects and future application of your management actions. Include the timing and magnitude of any expected changes, whether these changes have occurred, and how these changes will influence your next steps
8. **Optional:** In the column labeled **Learn/Adapt**, describe what you learned from taking an action and how this lesson will impact your work plan or Management Strategy going forward.

Blue Crab Abundance Logic Table and Work Plan

Primary Users: Goal Implementation Teams, Workgroups, and Management Board | **Secondary Audience:** Interested Internal or External Parties

Primary Purpose: To assist partners in thinking through the relationships between their actions and specific factors, existing programs and gaps (either new or identified in their Management Strategies) and to help workgroups and Goal Implementation Teams prepare to present significant findings related to these actions and/or factors, existing programs and gaps to the Management Board. | **Secondary Purpose:** To enable those who are not familiar with a workgroup to understand and trace the logic driving its actions.

Reminder: As you complete the table below, keep in mind that removing actions, adapting actions, or adding new actions may require you to adjust the high-level Management Approaches outlined in your Management Strategy (to ensure these approaches continue to represent the collection of actions below them).

Long-term Target: (the metric for success of Outcome):

Two-year Target: (increment of metric for success):

KEY: Use the following colors to indicate whether a Metric and Expected Response have been identified.

Metric	Specific metrics have not been identified
	Metrics have been identified
Expected Response	No timeline for progress for this action has been specified
	Timeline has been specified

Factor	Current Efforts	Gap	Actions (critical in bold)	Metrics	Expected Response and Application	Learn/Adapt
<i>What is impacting our ability to achieve our outcome?</i>	<i>What current efforts are addressing this factor?</i>	<i>What further efforts or information are needed to fully address this factor?</i>	<i>What actions are essential to achieve our outcome?</i>	<i>Optional: Do we have a measure of progress? How do we know if we have achieved the intended result?</i>	<i>Optional: What effects do we expect to see as a result of this action, when, and what is the anticipated application of these changes?</i>	<i>Optional: What did we learn from taking this action? How will this lesson impact our work?</i>
Scientific and Technical Understanding of the current blue crab population	Annual Winter Dredge Survey (WDS) estimates	Full stock assessments are needed to establish or revise targets/thresholds	1.1, 1.2		These actions will provide intermittent data to inform blue crab	

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	the number of over-wintering crabs by age and sex. Current blue crab stock assessment update is targeting selected terms of reference between full stock assessments.	for abundance and harvest levels to inform management decisions.			monitoring, and establish the schedule for future stock assessments.	
Government Agency Engagement at the Federal, State and/or Local Levels, coordination in planning and funding a benchmark stock assessment.	Terms of Reference have been discussed and agreed upon for future benchmark assessment.	In order to complete a benchmark stock assessment, a funding mechanism must be identified.	1.1 , 1.2			
Public engagement/comprehension of a complex fishery and presenting data in an intelligible way	Blue crab advisory report is published each year, which analyzes the WDS results and gives an estimation of the population.	It is important to differentiate between benchmark stock assessment and update. Determining how to present uncertainty to stakeholders and developing management triggers will help the public	1.3 , 1.5			

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		understand specific management actions.				
Scientific and Technical Understanding of harvest impacts and fishery conditions	All Chesapeake Bay management jurisdictions have ongoing efforts to improve the quality of catch and fishing effort information submitted by commercial and recreational harvesters. Daily harvest reports (with information on the water body fished, the gear type used, the amount of gear, sex and size specific harvest amounts, etc.) are required.	Data is still needed to better understand how harvest levels change from year-to-year and within each year to inform management decisions. Improving commercial and recreational harvest reporting would provide managers with an improved accounting of harvest and reduce uncertainty surrounding exploitation rates.	1.5			
Scientific/technical understanding of the ecosystem	The Winter Dredge Survey examines overwintering	Many factors may influence blue crab health and survival at	1.4			

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factors that may impact the blue crab population.	mortality, which may elucidate the effects of climate on the blue crab population.	various life stages. Juvenile and molting adult blue crabs obtain refuge from predation by use of key habitats, such as SAV. Understanding how these habitats are changing with climate, sea level rise, variations in salinity and temperature, and low dissolved oxygen. Studies on seasonal oceanic flow, storm events, and current patterns are useful in determining larval retention in coastal waters and post larval settlement.				

WORK PLAN ACTIONS

Green - action has been completed or is moving forward as planned **Yellow** - action has encountered minor obstacles

Red - action has not been taken or has encountered a serious barrier

Action #	Description	Performance Target(s)	Responsible Party (or Parties)	Geographic Location	Expected Timeline
1.1	Continue planning stock assessment update with selected terms of reference	Report progress on stock assessment update at Winter 2018 Chesapeake Bay Stock Assessment Committee meeting. <ul style="list-style-type: none"> Resolve issues with catchability / relative abundance of juveniles and adults. Review life history parameters (e.g. -variable M –by age, sex) Incorporate commercial CPUE as tuning index (Co-op dataset: 14 years // CPUE by gear, region, size, sex)	CBSAC	Baywide	January 2018
		Conduct stock assessment update on above selected terms of reference.	CBSAC	Baywide	February 2019
1.2	Evaluate timing, planning, and funding for the next benchmark stock assessment (full analysis and review of the stock condition, focusing on consideration of new data sources and new/improved assessment models)	Revisit terms of reference and evaluate when the next benchmark stock assessment is needed.	CBSAC, GIT Executive Committee	Baywide	January 2019
		Develop options for funding a benchmark stock assessment in coordination with the CBP Budget and Finance Workgroup.	CBSAC, Budget and Finance Workgroup, GIT Executive Committee	Baywide	February 2019
		Plan timeline, terms of reference, and expectations for the next benchmark stock assessment.	CBSAC, GIT Executive Committee	Baywide	February 2019
1.3	Analyze the Winter Dredge Survey results and develop annual Advisory Report.	Conduct annual Winter Dredge Survey.	MD DNR, VIMS	Baywide	December – March 2018 and 2019
		Analyze results of Winter Dredge Survey, develop management recommendations, and develop annual Advisory Report.	CBSAC	Baywide	March – April 2018 and 2019 (complete analysis); July 2018 and 2019 (report)

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Action #	Description	Performance Target(s)	Responsible Party (or Parties)	Geographic Location	Expected Timeline
1.4	Complete the ecosystem factors affecting blue crab study.	Complete the ecosystem factors affecting blue crab study and present results at the Spring 2018 Sustainable Fisheries GIT Meeting.	UMCES	Baywide	February 2018 (complete study); June 2018
		Evaluate results of ecosystem factors affecting blue crab study and discuss how they will be applied to current management framework.	CBSAC	Baywide	June 2019
1.5	Respond to recent research and issues in the blue crab fishery.	Evaluate how to present uncertainty around estimate of exploitation. Consider how to present information to stakeholders and managers.	CBSAC	Baywide	Ongoing
		Provide technical review of "Ecological and Economic Effects of Derelict Fishing Gear in the Chesapeake Bay" to GIT Executive Committee	CBSAC	Baywide	Spring 2018
		Discuss options for developing blue crab management triggers.	CBSAC	Baywide	February 2019