

Quarterly Progress Meeting: Blue Crab

Step 1: Summarize your outcome.

Outcome:

Blue Crab Abundance: Maintain a sustainable blue crab population based on the current 2012 target of 215 million adult females. Refine population targets through 2025 based on best available science.

Blue Crab Management: 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.

Lead and Supporting Goal Implementation Teams (GITs): Sustainable Fisheries GIT

Participating Partners:

Participating partners include:

- Maryland Department of Natural Resources
- Virginia Marine Resources Commission
- Potomac River Fisheries Commission
- Chesapeake Bay Stock Assessment Committee (workgroup under Sustainable Fisheries GIT)
- NOAA Chesapeake Bay Office

Progress:

Step 2: Explain the logic behind your work toward an Outcome.

The attached logic table (available as an Excel spreadsheet) explains the reasoning behind our work toward an Outcome. The table indicates the status of our management actions and denotes which actions have or will play the biggest role in making progress.

Step 3: Craft a compelling narrative.

What are our assumptions?

(1) Are you on track to achieve your Outcome by the identified date?

a. What is your anticipated deadline? What is your anticipated trajectory?

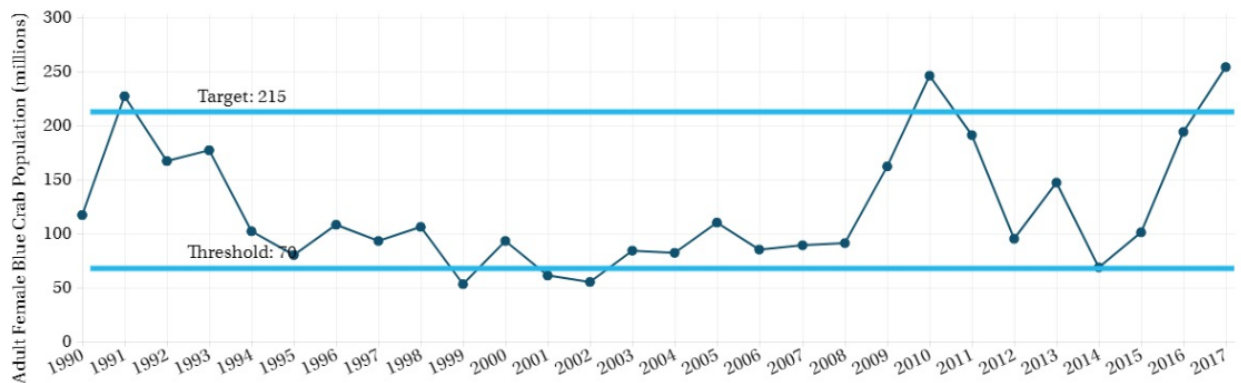
- Abundance: Deadline N/A for annual monitoring. Monitor blue crab abundance relative to the reference points each year. A blue crab stock assessment originally planned for 2016-2017, but the jurisdictions have put this action on hold.
- Management: 2018 deadline for evaluation of the allocation-based management

framework. Ahead of schedule—evaluation completed in mid-2017. See allocation summary document summarizing stakeholder input and the jurisdictions' (MD, VA, PRFC) conclusions from the evaluation.

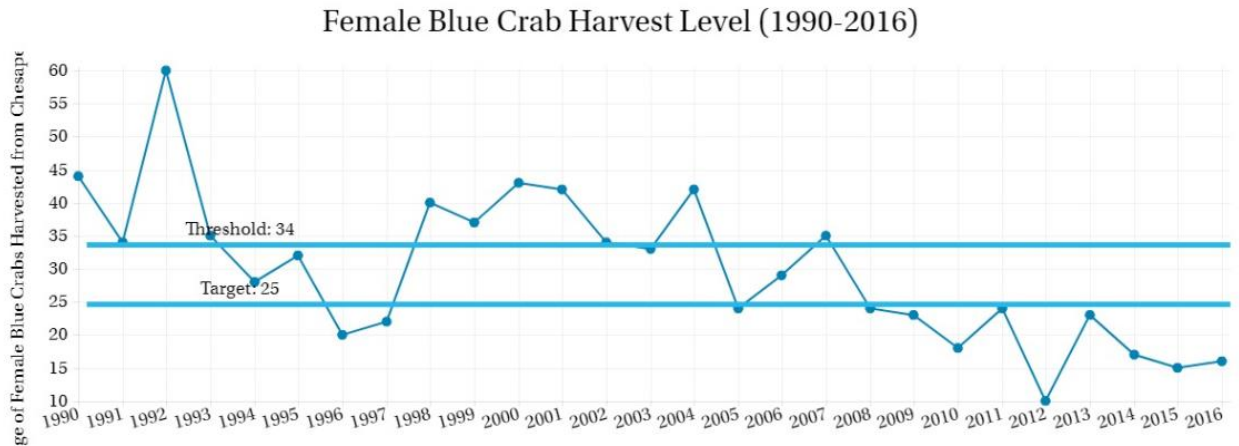
b. What actual progress has been made thus far?

- Abundance:
 - CBSAC and managers developed stock assessment terms of reference, received cost estimates and prioritized needs. Due to cost, a full benchmark stock assessment is not feasible at this time. Jurisdictions are considering approaches to complete priority analyses rather than a full benchmark assessment. In the meantime, jurisdictions will continue with the current reference points until a future stock assessment suggests otherwise. CBSAC continues to meet each year to review the Winter Dredge Survey results and provide management advice to the jurisdictions.
 - The jurisdictions have effectively managed the female abundance reference points. Between 2016 and 2017, the abundance of adult (age 1+) female blue crabs in the Chesapeake Bay increased 31 percent from 194 million to 254 million. This number is above the 70 million threshold and the 215 million target, and marks the highest amount ever recorded by the Bay-wide Blue Crab Winter Dredge Survey.

Adult Female Blue Crab Population (1990-2017)



- Management:
 - Solicited and received stakeholder input from blue crab industry advisory committees on the evaluation of an allocation-based management framework. Jurisdictions discussed the feedback received and discussed their agency concerns. All summarized in allocation summary document. Ongoing work within the jurisdictions continue to address stakeholder concerns.
 - The Blue crab stock is not overfished (below 70M adult female blue crabs) and overfishing is not occurring (below 34% exploitation of adult female blue crabs) as shown in graph below with female blue crab exploitation below the target and threshold.



c. What could explain any existing gap(s) between your actual progress and anticipated trajectory?

- The next stock assessment is on hold while the jurisdictions discuss what the focus of the next assessment should be and how to conduct the next and future stock assessments within their funding capacity.
- Funding and staff time could be limiting factors for the next stock assessment.
- Industry was not supportive of an allocation based management framework.

Are we doing what we said we would do?

(2) Which of your management actions have been the most critical to your progress thus far? Why? Indicate which influencing factors these actions were meant to manage.

- Abundance: Continuing annual CBSAC work and the jurisdictions continuing to work together to analyze the annual survey results and coordinate management response.
- Management: Asking for and receiving stakeholder feedback on the evaluation of an allocation-based management framework.

(3) Which of your management actions will be the most critical to your progress in the future? Why? What barriers must be removed—and how, and by whom—to allow these actions to be taken? Indicate which influencing factors these actions will be meant to manage.

Abundance:

- Working to improve harvest accountability within each jurisdiction.
- Using existing reports and ongoing studies to continue discussion of the recreational blue crab harvest and its impact on the fishery.
- Identifying available economic information and considering future data collection to improve understanding of the quantitative value of the blue crab fishery and impacts of regulatory changes.

- Continuing to support the existing process through which the Chesapeake Bay Stock Assessment Committee (CBSAC) analyzes annual Winter Dredge Survey results and provides scientific and management advice through annual blue crab advisory reports.
- Determining need and next steps for stock assessment. Stock assessment funding could be a barrier to accomplishing blue crab outcome

Management:

- Jurisdictions worked with industry to evaluate an allocation based management framework. Industry was not supportive. We do not expect a new workplan or actions.

Are our actions having the expected effect?

- (4) What scientific, fiscal or policy-related developments or lessons learned have changed your logic or assumptions (e.g., your recommended measure of progress; the factors you believe influence your ability to succeed; or the management actions you recommend taking) about your Outcome?**

Abundance and Management:

- Ecosystem and climate change impacts on WDS, mortality, growth;
- Need dedicated funding for stock assessments if we require regular 5-year full benchmark stock assessment;
- Stakeholders support current fishery management framework

- (5) What would you recommend changing about your management approach? What new content will you include in your updated work plan?**

- Jurisdictions worked with the blue crab industry to evaluate an allocation based management framework. Industry was not supportive. We do not expect a new workplan or actions.

- (6) What opportunities exist to collaborate across GITs? Can we target conservation or restoration work to yield co-benefits that would address multiple factors or support multiple actions across outcomes?**

- SAV, shoreline protection and restoration, water quality (DO), land use

How should we adapt?

- (7) What is needed from the Management Board to continue or accelerate your progress?**

- Work with the Budget and Finance Workgroup to develop a 5-year stock assessment financing system that considers (and is not limited to) sources of revenue from outside any traditional or existing revenue streams; identify how existing resources can work in concert to ensure stock assessment is more effective; and identify how we will know financing efforts are successful in achieving the stock assessment.
 - The benchmark stock assessment is on hold due to lack of funding. This assessment usually occurs every 5 years. The last benchmark stock assessment was completed in 2011. The stock assessment is important to evaluating the current reference points and refining annual analyses run by the Chesapeake Bay Stock Assessment Committee for the Blue Crab Advisory Report.
 - Maryland and Virginia Management Board representatives facilitate meeting of Natural Resource Secretaries and Fisheries GIT Executive Committee Members (Sean Corson, Rob O'Reilly, Dave Blazer, and Marty Gary) to review the need for a stock assessment and identify near and long term funding strategies.
- Confirm completion of allocation-based fishery management outcome.
 - Send to PSC for final approval
 - Jurisdictions worked with industry to evaluate an allocation based management framework. Industry was not supportive. We recommend the Management Board agree that this outcome has been achieved.

What is our financial status? What are our future financial needs?

(8) What are the anticipated sources of funding/resources (monetary or non-monetary)/financing opportunities outside the CBPO that you anticipate would support this work? In other words, who else cares?

Budget:

- The management jurisdictions and NCBO contribute significant amounts of staff time to CBSAC and the Fisheries Goal Team.
- Maryland and Virginia fund the annual Winter Dredge Survey.
- GIT funding has supported a few CBSAC research priorities with short-term projects.

Finance:

- Look for innovative financing options from stakeholders

Who cares?

- Consumers
- Watermen
- Processors
- Recreational crabbers
- Chesapeake Bay community (interested in maintaining the value of an iconic species)

(9) How did those sources of financing work in concert with other financing mechanisms or funding sources?

- Maryland and Virginia coordinate their data collection efforts for the Winter Dredge Survey.
- CBSAC meets each year based on the timeline of the Winter Dredge Survey completion and the state management meetings.
- Staff time is a limiting factor, especially at the state level.

(10) What were the specific metrics used to determine project and/or funding success? Are those metrics currently incorporated into the current Management Strategy/Outcome/Workplan Action Item?

- Project is successful when it applies directly to blue crab management, either to inform the science or directly support state management efforts.
- Need funding for future stock assessments. Need a reliable source of funding to support stock assessment efforts in the future.
- Yes, the management strategy prioritizes those activities that are directly applicable to management.