



**Chesapeake Bay Program**  
*Science. Restoration Partnership.*

# **Sustainable Fisheries GIT: Blue Crab**

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*Sustainable Fisheries GIT Chair*

*Through the Chesapeake Bay Watershed Agreement, the Chesapeake Bay Program has committed to...*

## **Goal:** *Sustainable Fisheries*

### **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.



*Through the Chesapeake Bay Watershed Agreement, the Chesapeake Bay Program has committed to...*



**Goal:** *Sustainable Fisheries*

**Outcome:** *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.*



## What We Want



We want:

- Dedicated funding strategy for future stock assessments
- Approval of allocation-based fishery management evaluation process

# 1

## Setting the Stage:

*What are our assumptions?*



## Logic Behind Our Outcome



### Following the Decision Framework:

#### Factors

- Scientific and Technical Understanding
- Monitoring/Survey Costs
- Habitat Impacts

#### Current Gaps

- Understanding of environmental impacts on crabs
- Funding for 5-year stock assessment

#### Management Approaches

- Evaluating blue crab reference points based on annual population survey
- Planning and implementing the next stock assessment
- Evaluation of a allocation-based management framework

2

## **Progress:**

*Are we doing what we said we would do?*



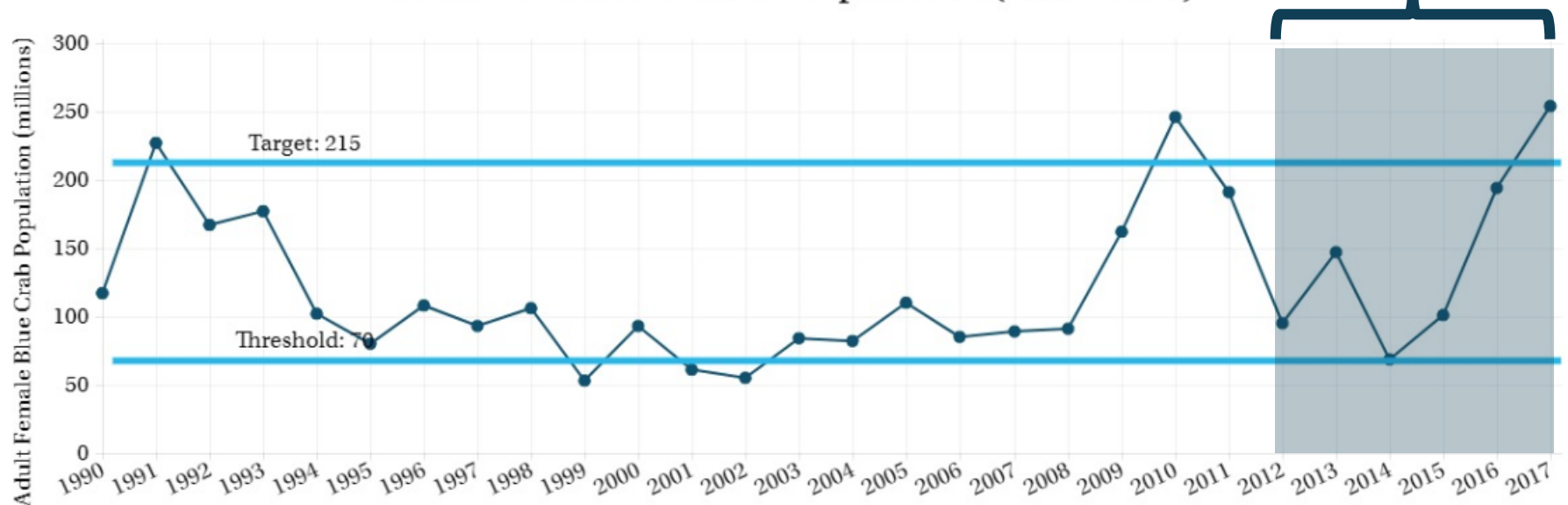
## What is our progress?

*Abundance: Maintain a target population of 215 million adult female blue crabs*

**2017:** Surpassed target population for adult female blue crabs

**Current focus:** Maintain target level, continue to monitor (juveniles decreased significantly in 2017)

Adult Female Blue Crab Population (1990-2017)



**Managing for 215M  
adult female crabs**





## What is our progress?

*Management: Manage a stable and productive crab fishery; Evaluate allocation-based management framework for blue crabs.*



The blue crab stock is not overfished and overfishing is not occurring.



Received stakeholder input from blue crab industry advisory committees on the evaluation of an allocation-based management framework



Lack of support for an allocation-based management framework



Current reference points offer protection of female crabs and appear successful



Difficult to implement and enforce



Lack of necessary harvest data to support practical allocation



Lack of support from industry

# 3

## Challenges:

*Are our actions having the expected effect?*



## Challenges



### Funding for 5-year stock assessment



# 4

## **Adaptations:**

*How should we adapt?*



**Based on what we've  
learned, we plan to...**

-  Continue current management framework
  -  Adjust harvest regulations as needed to maintain a sustainable blue crab population
-  Incorporate new research into management considerations
  -  Currently evaluating environmental impacts on blue crab population dynamics through GIT-funded study
-  Work with other Outcomes to protect important blue crab habitat (SAV)



## What We Want



We want:



**MD and VA:** Develop funding strategies for the next benchmark stock assessment



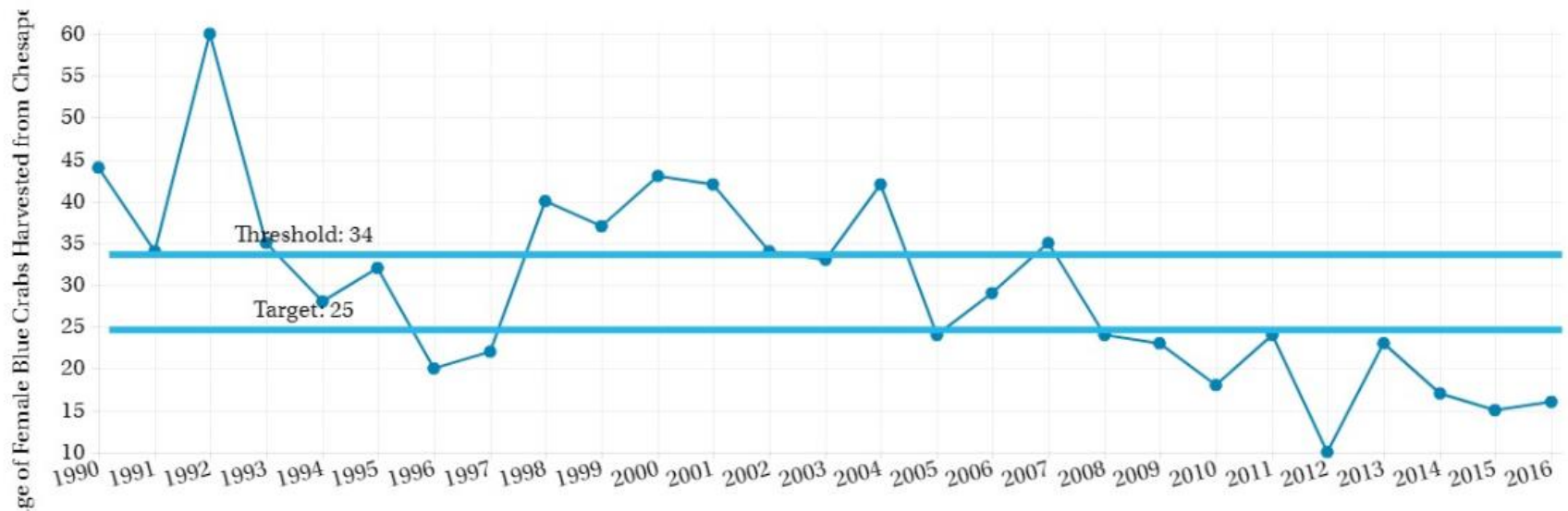
**Management Board:** Approval of allocation-based fishery management evaluation process. Outcome is complete.

# Discussion

# Extra Slides



## Female Blue Crab Harvest Level (1990-2016)



# Agreement Goals and Outcomes

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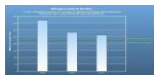
## Sustainable Fisheries

- Blue Crab Abundance
- Blue Crab Management
- Oyster
- Forage Fish
- Fish Habitat



## Vital Habitats Goal

- Wetlands
- Black Duck
- Stream Health
- Brook Trout
- Fish Passage
- Submerged Aquatic Vegetation (SAV)
- Forest Buffer
- Tree Canopy



## Water Quality Goal

- 2017 Watershed Implementation Plans (WIP)
- 2025 WIP
- Water Quality Standards Attainment and Monitoring



## Toxic Contaminants Goal

- Toxic Contaminants Research
- Toxic Contaminants Policy and Prevention



## Healthy Watersheds Goal

- Healthy Waters



## Stewardship Goal

- Citizen Stewardship
- Local Leadership
- Diversity



## Land Conservation Goal

- Protected Lands
- Land Use Methods and Metrics Development
- Land Use Options Evaluation



## Public Access Goal

- Public Access Site Development



## Environmental Literacy Goal

- Student
- Sustainable Schools
- Environmental Literacy Planning



## Climate Resiliency Goal

- Monitoring and Assessment
- Adaptation Outcome