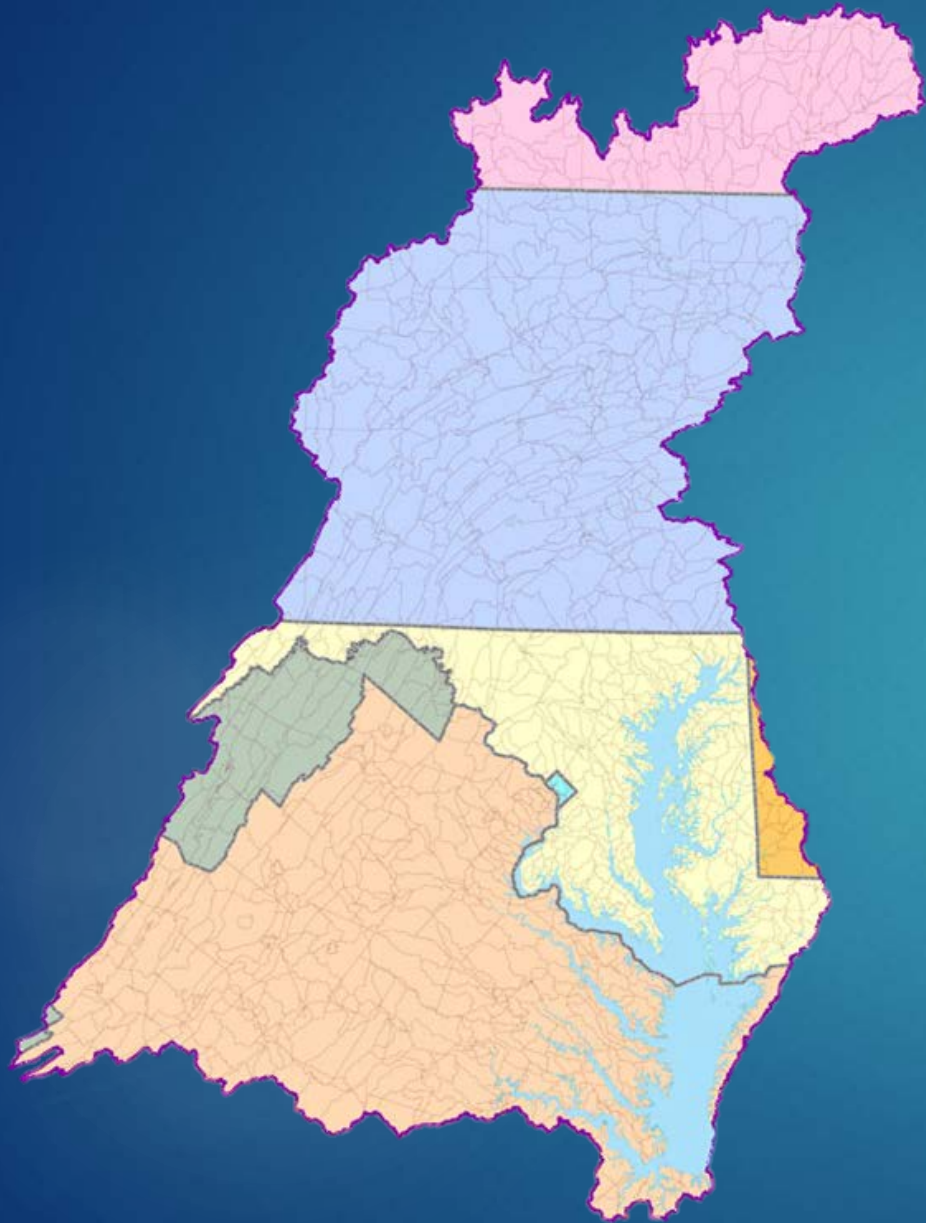




# Achieving our Outcomes

BRUCE VOGT (NOAA CHESAPEAKE BAY OFFICE)



# Chesapeake Bay Program

BRINGING PARTNERS TOGETHER TO  
IMPROVE THE HEALTH OF THE  
CHESAPEAKE BAY

# How does the Chesapeake Bay Program work?

- ▶ The Chesapeake Bay Program Partners signed the 2014 Chesapeake Bay Watershed Agreement, which:
  - ▶ Committed partners to achieve Outcomes relating to abundant life, clean water, climate, conservation and community engagement.
  - ▶ Encouraged collaboration with stakeholders to make science-based and supportive local decisions
  - ▶ Adaptively manage at all levels to foster continuous improvement

# What are the Chesapeake Bay Program's Outcomes?

## ABUNDANT LIFE

- Black Duck
- **Blue Crab Abundance**
- **Blue Crab Management**
- Brook Trout
- **Fish Habitat**
- Fish Passage
- **Forage**
- Forest Buffers
- **Oyster Restoration**
- Stream Health
- SAV
- Tree Canopy
- Wetlands

## CLEAN WATER

- Healthy Watersheds
- 2017 and 2025 WIPs
- Toxic Contaminants Research
- Toxic Contaminants Policy and Prevention
- Water Quality Standards Attainment and Monitoring

## CLIMATE

- Climate Monitoring and Assessment
- Climate Adaptation

## ENGAGED COMMUNITIES

- Citizen Stewardship
- Diversity
- Environmental Literacy
- Local Leadership
- Public Access
- Students
- Sustainable Schools

## CONSERVED LANDS

- Land Use Methods
- Land Use Options
- Protected Lands



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Chesapeake Watershed Agreement

Outcome Management Strategies

2-Year Outcome Workplans

### Blue Crab Abundance and Management Outcomes

Chesapeake Bay Program  
2015-2025, v.1

### Fish Habitat Outcome Management Strategy

Chesapeake Bay Program  
2015-2025, v.1

#### I. Introduction

The Blue crab (*Callinectes sapidus*) is an icon for the Chesapeake Bay. Blue crabs are one of the most economically valuable and recreationally important species in the Chesapeake Bay. The Chesapeake Bay is a multi-species ecosystem and the Blue crab is a keystone species.

### Forage Fish Outcome Management Strategy

Chesapeake Bay Program  
2015-2025, v.1

#### I. Introduction

Forage species are an important component of the food web in the Chesapeake Bay. Many of these species are recreationally valuable to people. This Outcome addresses the Bay food web and strives to use our understanding of forage species to improve the health of the Chesapeake Bay. It is a step toward multi-species ecosystem management.

### Oyster Restoration Outcome Management Strategy

Chesapeake Bay Program  
2015-2025, v.1

#### I. Introduction

The eastern oyster (*Crassostrea virginica*) was once abundant throughout the Chesapeake Bay and its tributaries, and was a critical component of the ecology of the Bay by contributing to maintaining water quality and aquatic habitat in the Bay ecosystem. Oysters support a valuable commercial fishery today; however, harvests over the last three decades are greatly reduced from historic levels. The decline of the Chesapeake Bay's native oyster population can be attributed to several factors, including historic over-harvesting, disease and habitat loss. There is public recognition that the oyster decline has threatened a way of life for both upstream and the Bay itself.

#### II. Goal, Outcome and Baseline

This management strategy identifies an outcome:

**Sustainable Fisheries Goal**  
Protect, restore and enhance fish habitats and ecological relationships to support a sustainable and balanced ecosystem in the watershed.

**Forage Fish Outcome**  
Continually improve the Partnership's capacity to use the Chesapeake Bay, By 2025, develop a strategy for forage species in the Chesapeake Bay.

#### I. Introduction

The eastern oyster (*Crassostrea virginica*) was once abundant throughout the Chesapeake Bay and its tributaries, and was a critical component of the ecology of the Bay by contributing to maintaining water quality and aquatic habitat in the Bay ecosystem. Oysters support a valuable commercial fishery today; however, harvests over the last three decades are greatly reduced from historic levels. The decline of the Chesapeake Bay's native oyster population can be attributed to several factors, including historic over-harvesting, disease and habitat loss. There is public recognition that the oyster decline has threatened a way of life for both upstream and the Bay itself.

The Executive Order 13028 Strategy for Protecting and Restoring the Chesapeake Bay Watershed established a goal of restoring oyster populations in 20 tributaries of the Chesapeake Bay by 2025. For this goal, a team of academics and state and federal agency staff developed Baywide oyster restoration success criteria. Based on experience with current restoration implementation and resource availability, restoration partners determined that an outcome of restoring native oyster habitat and populations in 10 tributaries by 2025 is an appropriate target for the next 10 years and for the 2014 Chesapeake Bay Watershed Agreement.

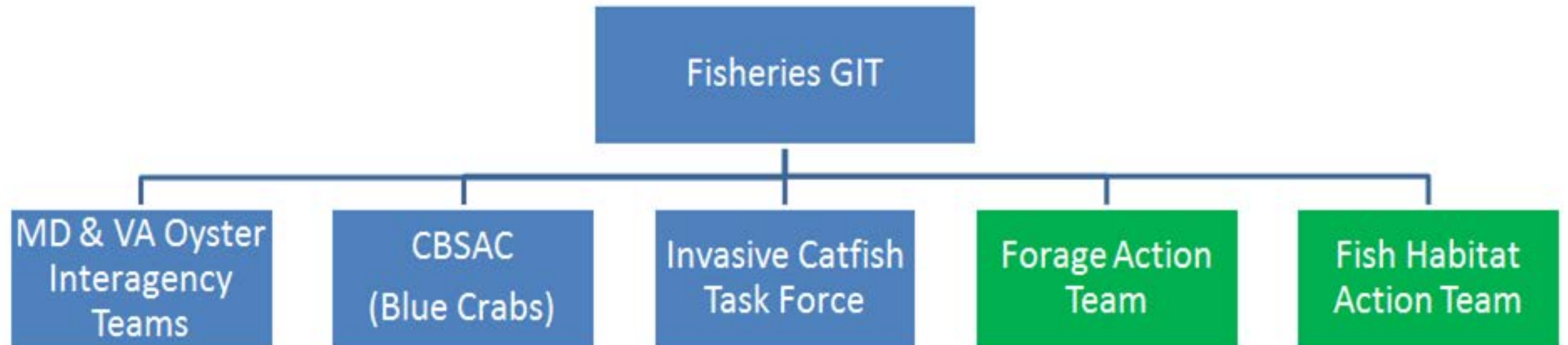
Outcome	Performance Target	Participating Agency	Management Location	Timeline	Participating Agency Role
Blue Crab Abundance	Blue Crab Abundance (Callinectes sapidus) will increase in 10 tributaries of the Chesapeake Bay by 2025.	Chesapeake Bay Program, Virginia Department of Conservation and Forestry, Maryland Department of the Environment, Pennsylvania Department of Environmental Protection	Chesapeake Bay, Potomac River, Rappahannock River, York River, James River, Pamlico River, Roanoke River, Albemarle-Pamlico Sound	2015-2025	Management and monitoring, data collection, research, and public outreach.

Outcome	Performance Target	Participating Agency	Management Location	Timeline	Participating Agency Role
Fish Habitat	Fish Habitat (measured by the number of acres of high quality habitat) will increase in 10 tributaries of the Chesapeake Bay by 2025.	Chesapeake Bay Program, Virginia Department of Conservation and Forestry, Maryland Department of the Environment, Pennsylvania Department of Environmental Protection	Chesapeake Bay, Potomac River, Rappahannock River, York River, James River, Pamlico River, Roanoke River, Albemarle-Pamlico Sound	2015-2025	Management and monitoring, data collection, research, and public outreach.

Outcome	Performance Target	Participating Agency	Management Location	Timeline	Participating Agency Role
Forage Fish	Forage Fish (measured by the number of acres of high quality habitat) will increase in 10 tributaries of the Chesapeake Bay by 2025.	Chesapeake Bay Program, Virginia Department of Conservation and Forestry, Maryland Department of the Environment, Pennsylvania Department of Environmental Protection	Chesapeake Bay, Potomac River, Rappahannock River, York River, James River, Pamlico River, Roanoke River, Albemarle-Pamlico Sound	2015-2025	Management and monitoring, data collection, research, and public outreach.

Outcome	Performance Target	Participating Agency	Management Location	Timeline	Participating Agency Role
Oyster Restoration	Oyster Restoration (measured by the number of acres of high quality habitat) will increase in 10 tributaries of the Chesapeake Bay by 2025.	Chesapeake Bay Program, Virginia Department of Conservation and Forestry, Maryland Department of the Environment, Pennsylvania Department of Environmental Protection	Chesapeake Bay, Potomac River, Rappahannock River, York River, James River, Pamlico River, Roanoke River, Albemarle-Pamlico Sound	2015-2025	Management and monitoring, data collection, research, and public outreach.

# Sustainable Fisheries GIT

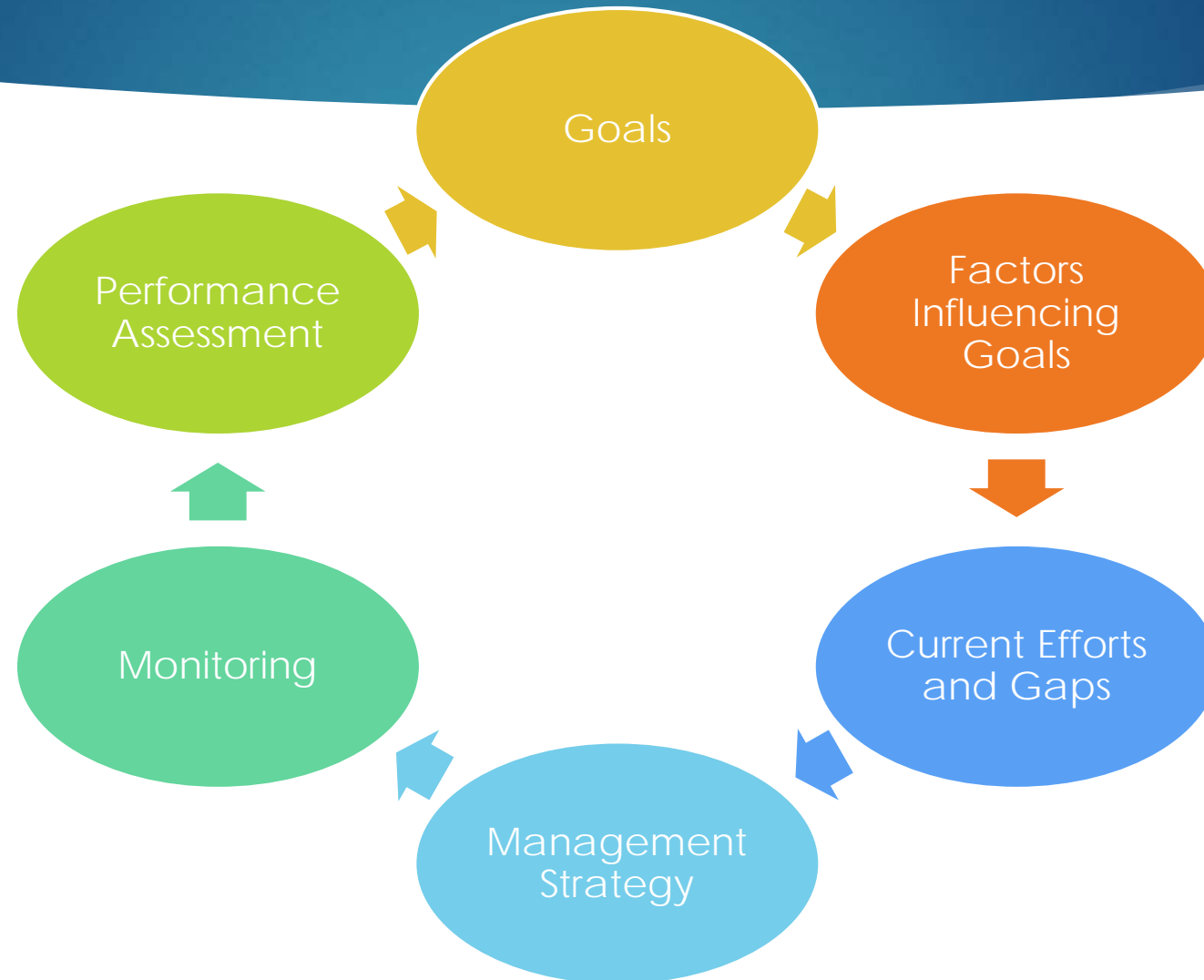


# How are we collaborating?

- ▶ Consulting stakeholders
- ▶ Engaging the public
- ▶ Supporting research
- ▶ Collaborating across agencies
- ▶ Educating students
- ▶ Promoting stewardship
- ▶ Communicating with partners



# What is adaptive management?





# How is the Chesapeake Bay Program adaptively managing the Outcomes?

Outcome teams will:

1. Evaluate their progress towards achieving the CBP Outcomes
2. Identify successes, challenges, and recommendations for overcoming roadblocks
3. Present their Outcome evaluation to the Chesapeake Bay's Management Board at a biennial meeting known as the **Strategy Review System (SRS)**
4. Work with the Management Board to improve our current methodology

# Biennial Review:

## 2017

## Strategy Review System Schedule

Jan. Feb. Mar. Apr. May Jun. Jul. Aug. Sep. Oct. Nov. Dec.

### Healthy Watersheds

- Healthy Watersheds
- Protected Lands
- Stream Health
- Brook Trout
- Fish Passage
- **Fish Habitat**

### Ecosystem Services

- **Bl. Crab Abundance**
- **Bl. Crab Mgmt**
- **Oysters**
- **Forage**
- SAV

### Stewardship

- Citizen Stewardship
- Public Access
- Diversity

## 2018

Jan. Feb. Mar. Apr. May Jun. Jul. Aug. Sep. Oct. Nov. Dec.

### Next Gen Stewards

- Stud. Env. Literacy
- Env. Lit. Planning
- Sust. Schools

### Water Quality

- Toxics Policy/Prevnt.
- Toxics Research
- 2017/2025 WIPs
- Standards Attain.
- Forest Buffers

### Change & Resiliency

- Wetlands
- Black Duck
- Climate Monitoring
- Climate Adaptation

### Local Action

- Tree Canopy
- Local Leadership
- Land Use Mthd/Metrics
- Land Use Options

# Who are the Management Board?



Christine Conn



Matt Fleming



Ann Swanson



Brianne Nadeau



Russ Baxter



Mark Bryer



David Whitehurst



Mike Slattery



Paula Jasinski



James Davis-Martin



# Adaptively managing the Sustainable Fisheries GIT outcomes

## ► Blue Crab



## ► Forage



## ► Oyster Restoration



Consider:

- Are we making progress? Are our goals achievable?
- What challenges or roadblocks are we facing?
- How do we want to convey progress/future expectations to the Chesapeake Bay Program?