- Use of Adaptive Management to Enhance Restoration and Conservation of the Chesapeake Bay Ecosystem

- National Conference on Ecosystem Restoration
- Session 7

Chesapeake: Nation's Largest Estuary

- What it provides…
  - Biodiversity
  - 18 M people
  - Economic benefits

- Degraded conditions
  - Declining fish and wildlife
  - Ecosystem pressures

- Caused by…
  - Population growth
  - Climate variability
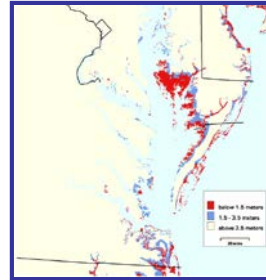 - Land to water ratio

- Restoration effort

Ecosystem Pressures

Population growth

Development
Habitat loss
Land use

Climate Change

Sea level rise
Warmer temperatures
Storm intensity

Air & Water Pollution

Nutrients
Sediment
Chemical Contam.

Natural Variability

High temperatures
River flows

Consumption

Over-harvesting
Fish, wildlife
Resources

Invasive Species

Nutria
Phragmites
Blue catfish

Chesapeake Bay
Program

CONCEPTUAL DIAGRAM OF CHESAPEAKE BAY ECOSYSTEM

POPULATIONS

FISHERIES	WILDLIFE	PEOPLE
• Crabs • Oysters • Finfish • Freshwater (Brook Trout)	• Waterbirds (Black Ducks)	• Stewardship • Access • Literacy • Diversity

CONDITIONS

WATER QUALITY	HABITATS	LANDS
• Oxygen/Clarity • Nutrients • Sediment • Contaminants	• Wetlands • SAV • Streams • Forests	• Healthy Watersheds • Protection • Land Use

INTERVENTIONS

MANAGEMENT STRATEGIES/PRACTICES

DRIVERS OF ECOSYSTEM CHANGE
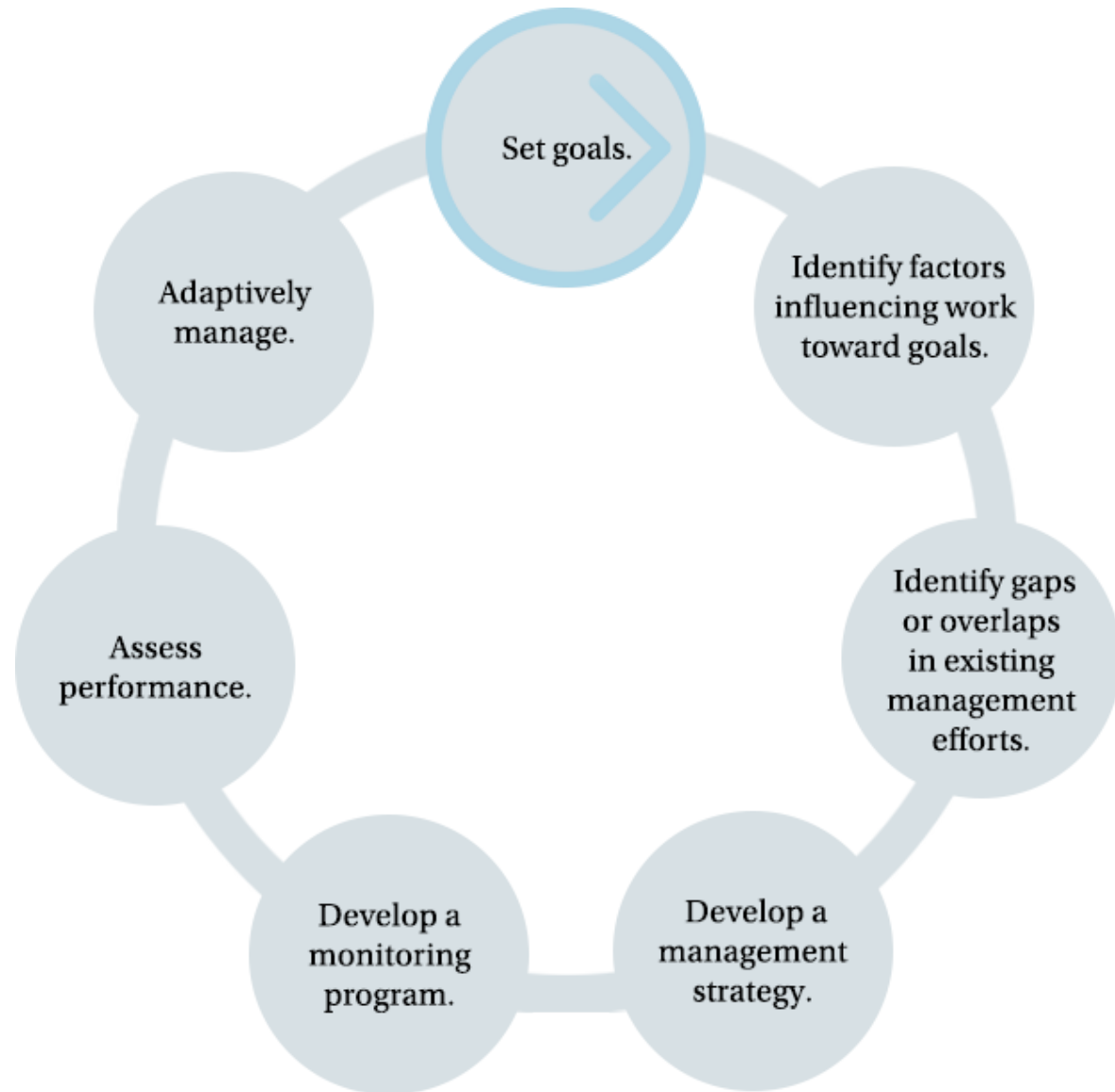
CLIMATE CHANGE AND VARIABILITY

POPULATION GROWTH: CONSUMPTION AND LAND CHANGE

Decision Framework

- Goals
- Factors
- Existing efforts/gaps
- Stategy
- Monitoring
- Assess
- Adapt

Topics and Speakers

- Overview of CBP
  - Carin Bisland
- Decision framework
  - Carl Hershner
- Indicators to assess progress
  - Doreen Vetter
- Science to support decision making
  - Scott Phillips

The Chesapeake Bay watershed lies within the heart of the Atlantic Flyway.

70–90 percent of the striped bass in the Atlantic Ocean spawn in the Bay.