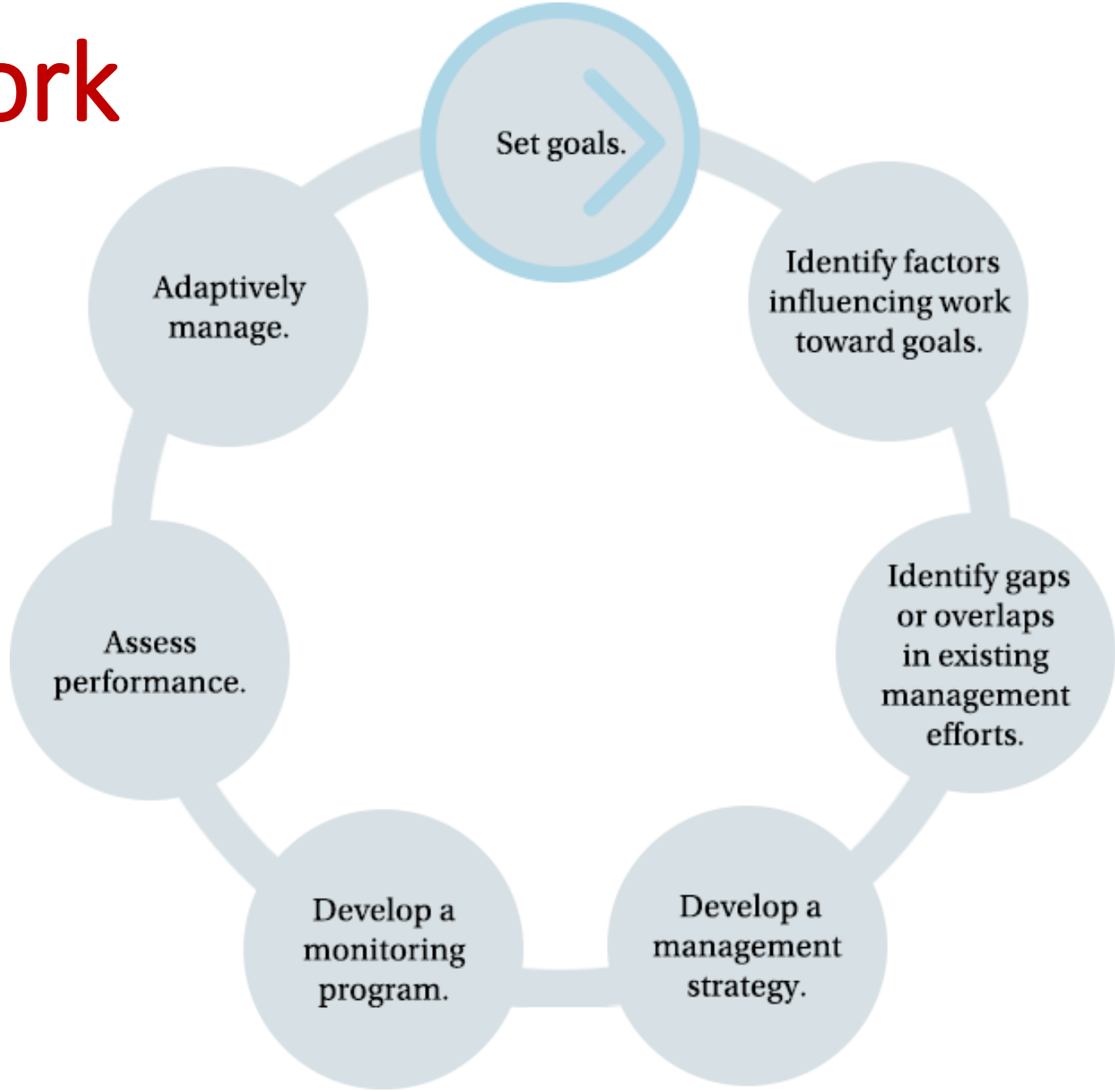
- Overview of CBP Agreement
  - Carin Bisland
- Decision framework
  - Carl Hershner
- Indicators to assess progress
  - Doreen Vetter
- Science to support decision making
  - Scott Phillips

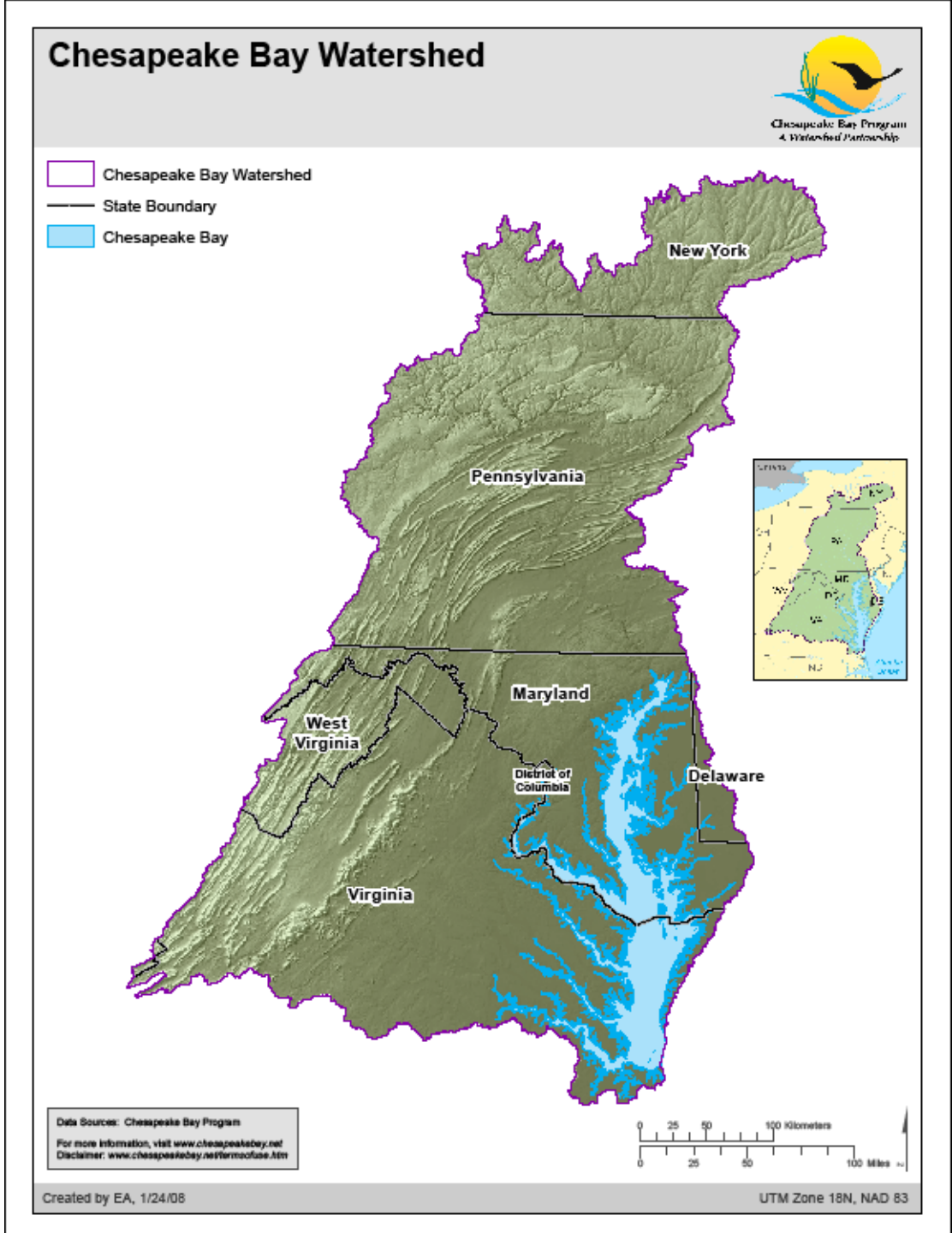
Decision Framework

1. Goals
2. Factors
3. Existing efforts/gaps
4. Stategy
5. Monitoring
6. Assess
7. Adapt



Why?

- accountability
- management
- learning



accountability

- what are we doing?
- why are we doing it?
- is it working?

management

- what needs to be done?
- what’s it going to take?
- who’s doing it?

learning

- what do we expect?
- what’s happening?
- now what?

Decision Framework

accountability

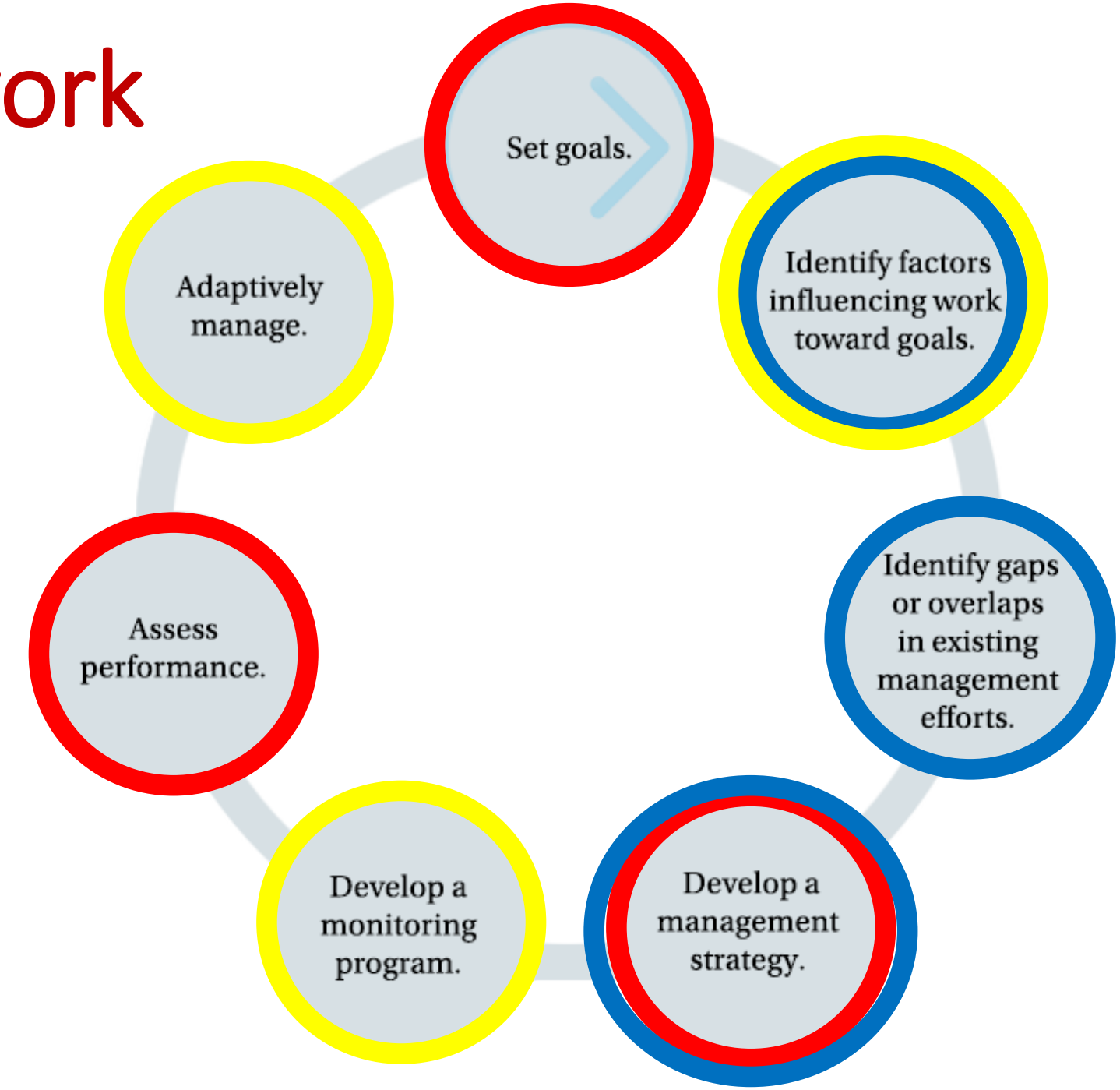
- what are we doing?
- why are we doing it?
- is it working?

management

- what needs to be done?
- what's it going to take?
- who's doing it?

learning

- what do we expect?
- what's happening?
- now what?

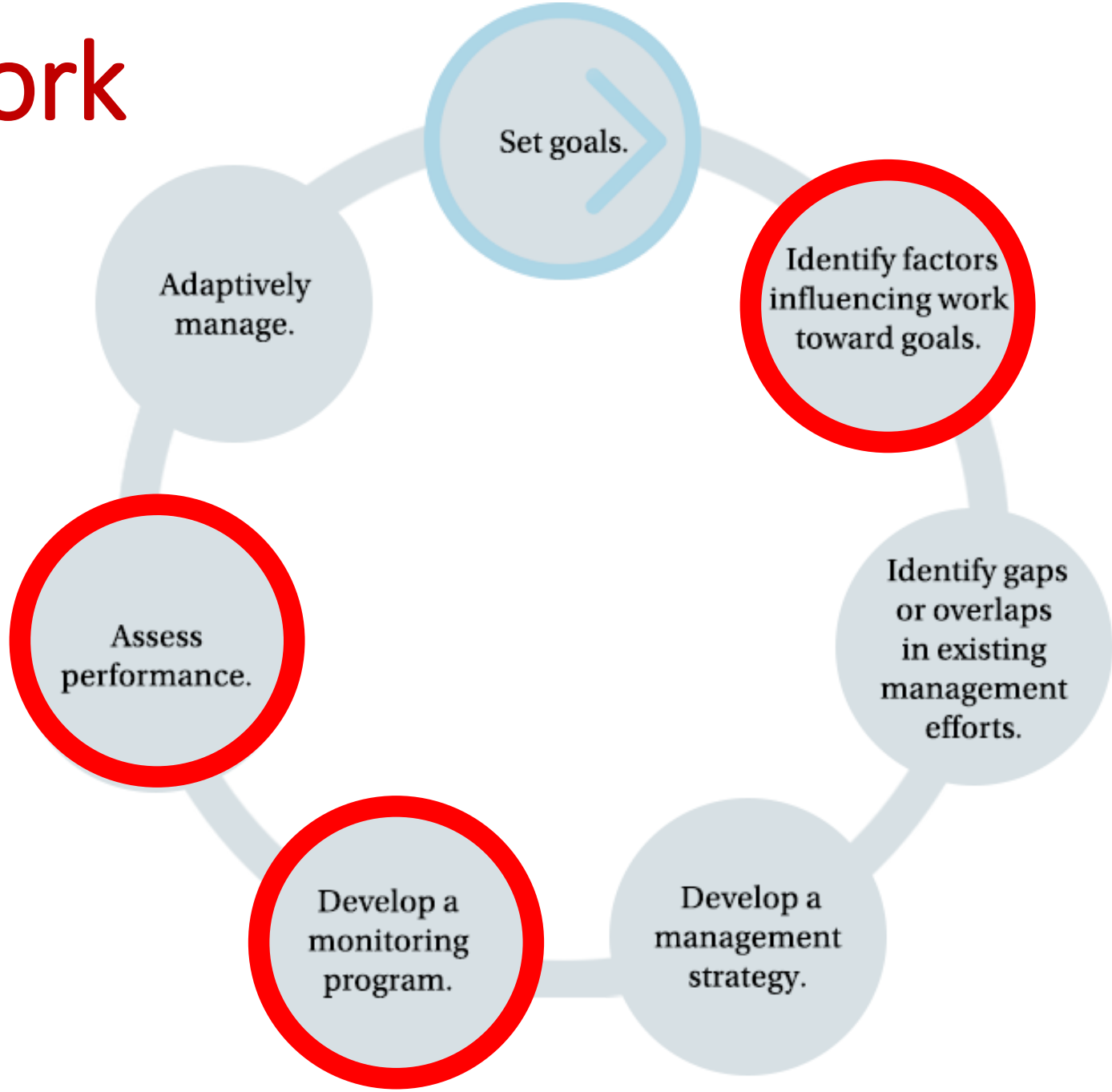


So what?

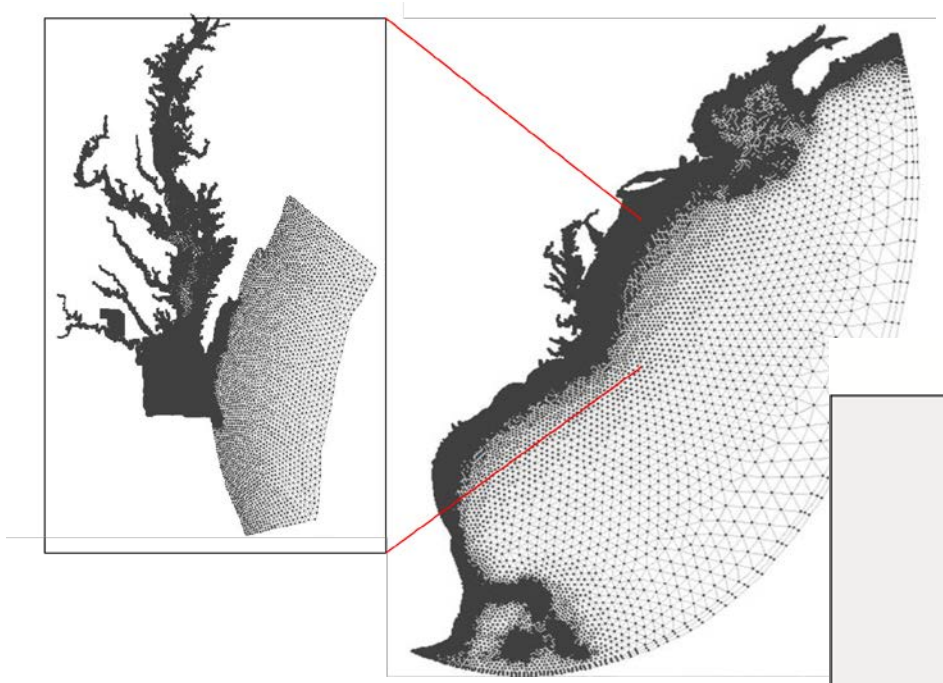
- program logic articulated
  - theory of change
  - modeling
- participatory action research
- information value
- ecosystem based management

Decision Framework

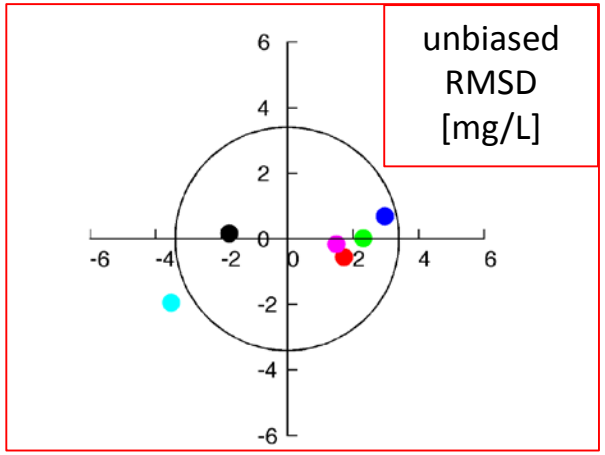
1. Goals
2. Factors
3. Existing efforts/gaps
4. Stategy
5. Monitoring
6. Assess
7. Adapt

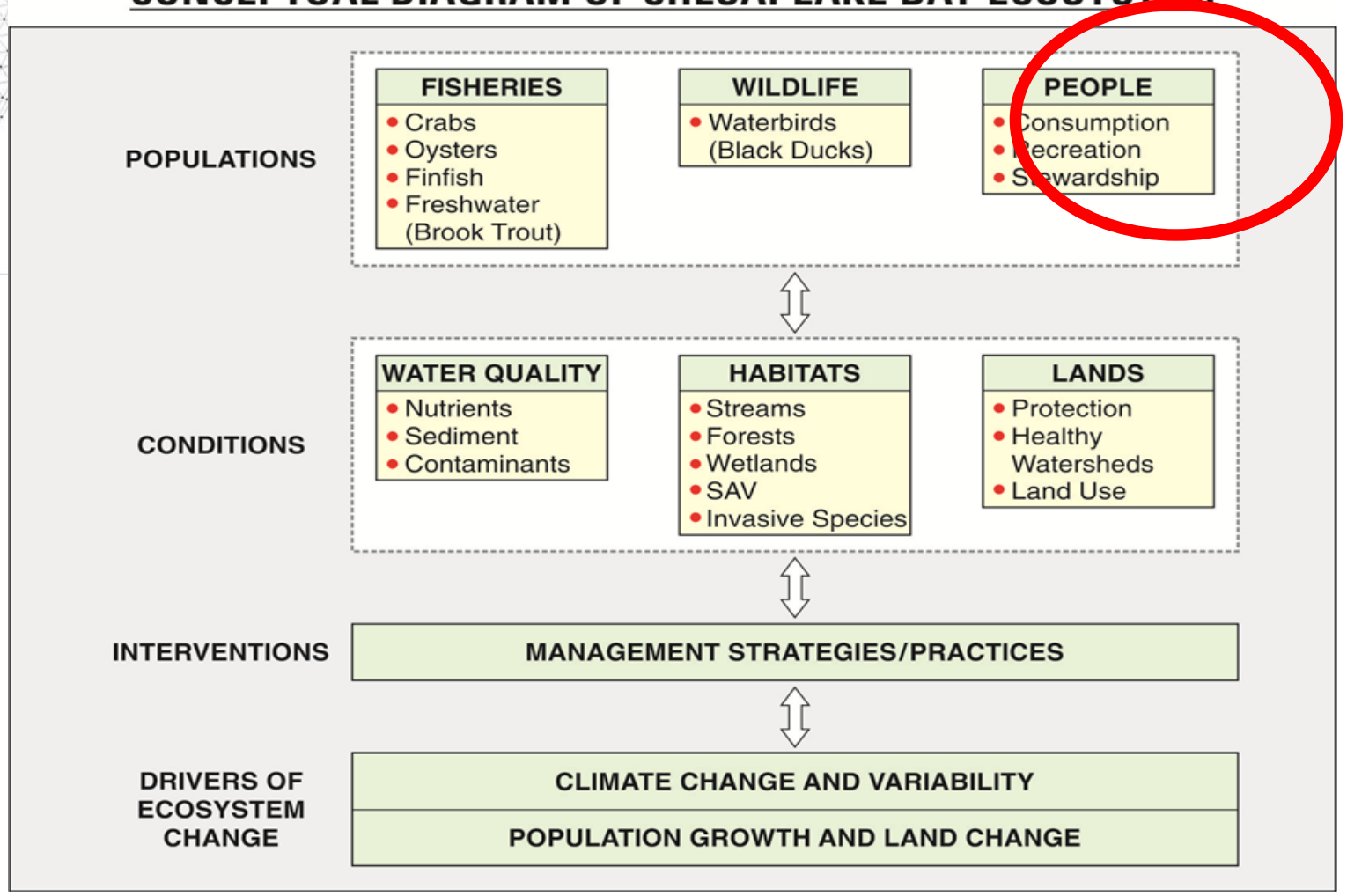


models

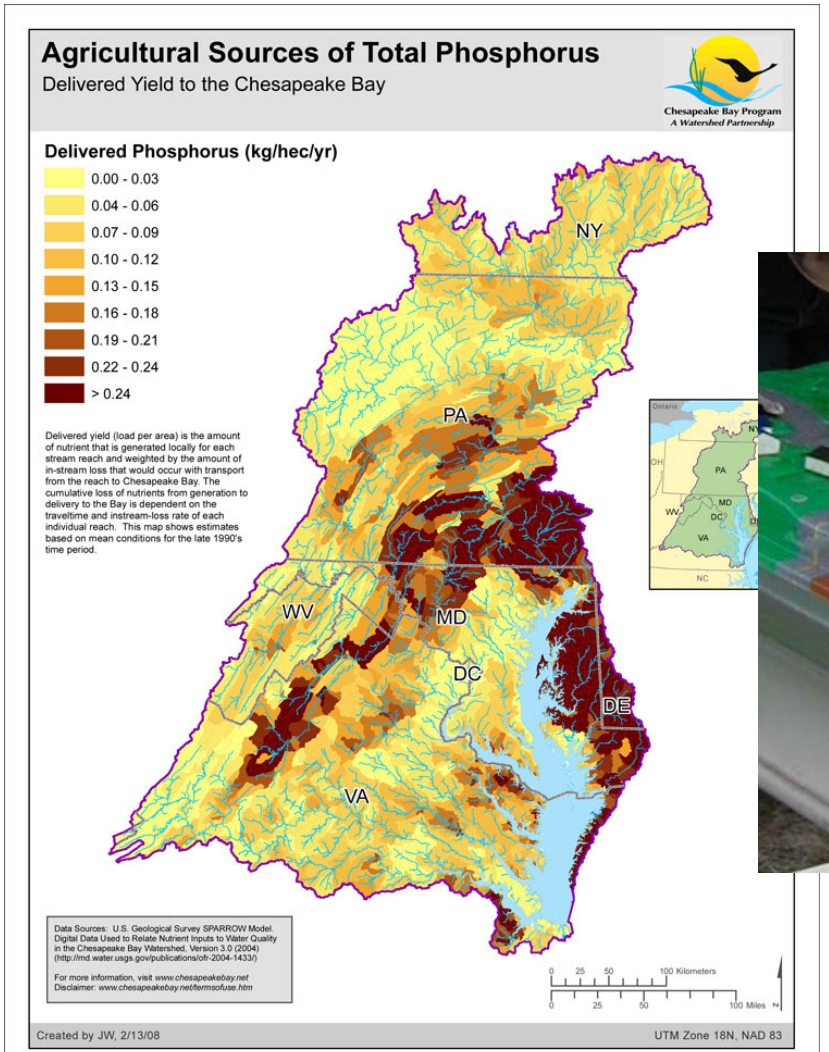


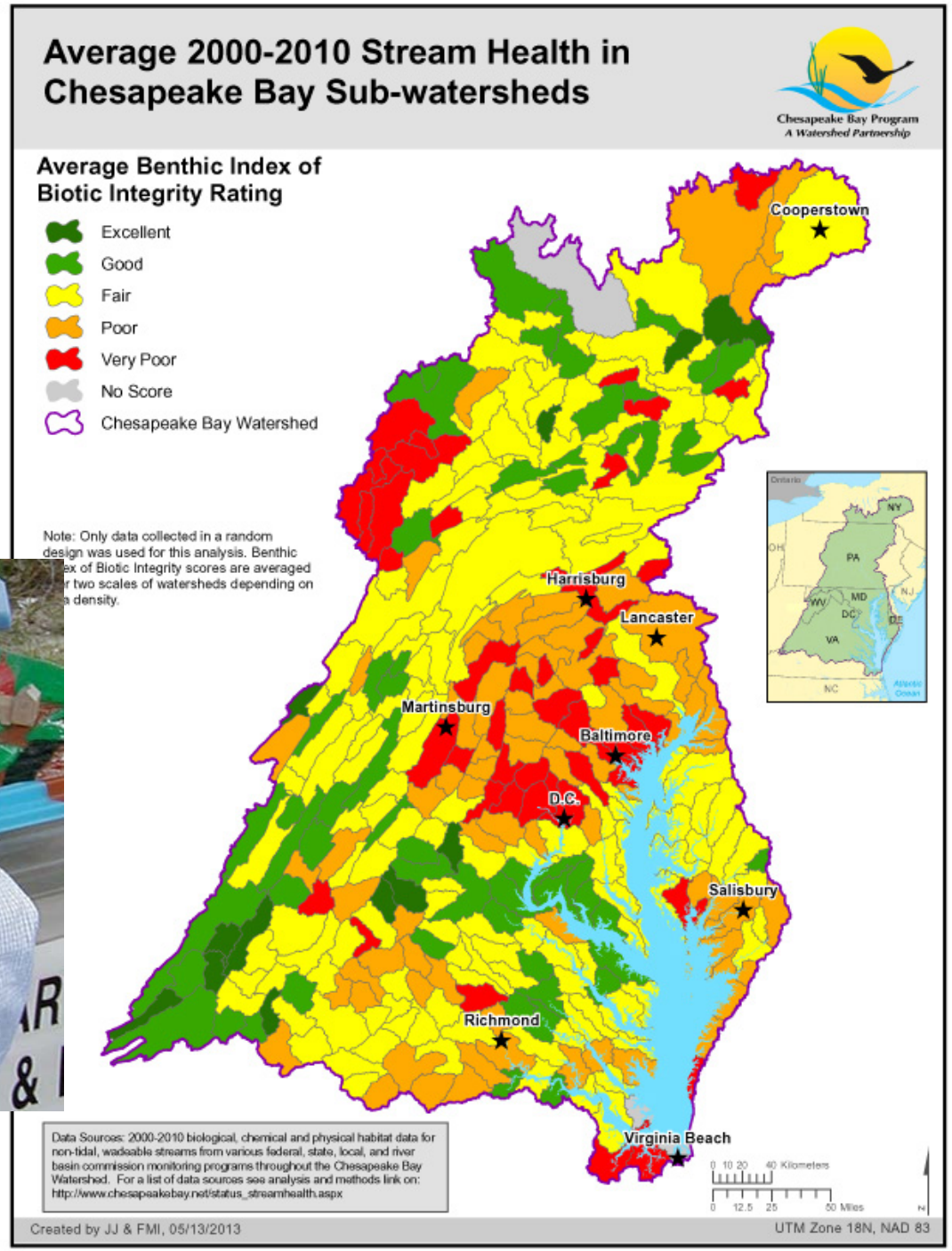
2004 Hypoxic Volume





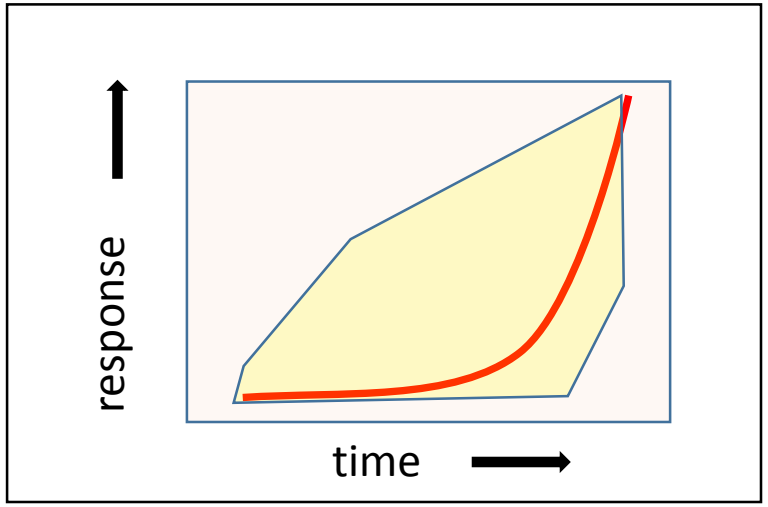
monitoring

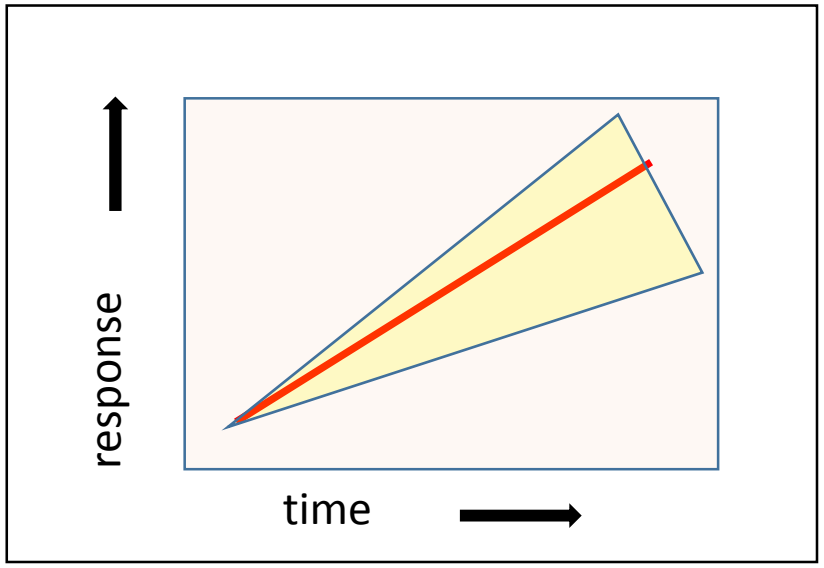

Agricultural Sources of Total Phosphorus
Delivered Yield to the Chesapeake Bay
Chesapeake Bay Program
A Watershed Partnership
Delivered Phosphorus (kg/hec/yr)
0.00 - 0.03
0.04 - 0.06
0.07 - 0.09
0.10 - 0.12
0.13 - 0.15
0.16 - 0.18
0.19 - 0.21
0.22 - 0.24
> 0.24
Delivered yield (load per area) is the amount of nutrient that is generated locally for each stream reach and weighted by the amount of in-stream loss that would occur with transport from the reach to Chesapeake Bay. The cumulative loss of nutrients from generation to delivery to the Bay is dependent on the traveltime and instream-loss rate of each individual reach. This map shows estimates based on mean conditions for the late 1990's time period.
NY
PA
WV
MD
DC
DE
VA
Data Sources: U.S. Geological Survey SPARROW Model. Digital Data Used to Relate Nutrient Inputs to Water Quality in the Chesapeake Bay Watershed, Version 3.0 (2004) (http://md.water.usgs.gov/publications/ofr-2004-1433/)
For more information, visit www.chesapeakebay.net
Disclaimer: www.chesapeakebay.net/termsofuse.htm
0 25 50 100 Kilometers
0 25 50 100 Miles
Created by JW, 2/13/08
UTM Zone 18N, NAD 83

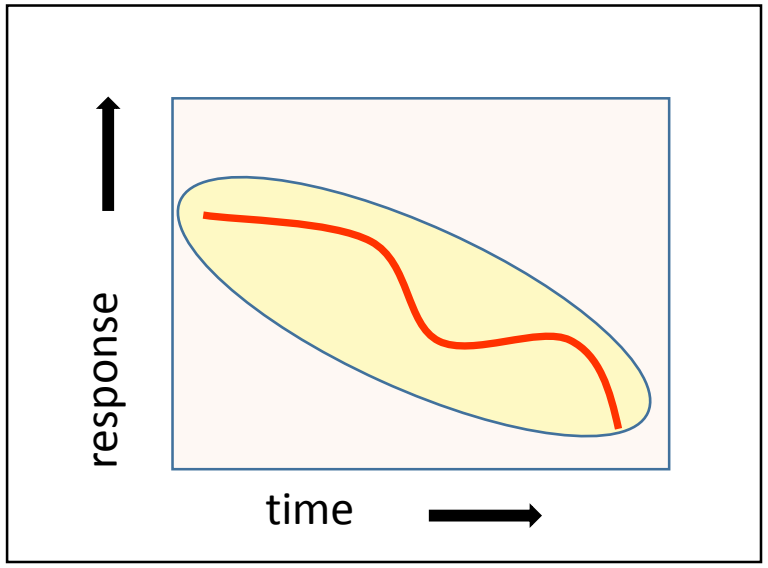

Average 2000-2010 Stream Health in Chesapeake Bay Sub-watersheds
Chesapeake Bay Program
A Watershed Partnership
Average Benthic Index of Biotic Integrity Rating
Excellent
Good
Fair
Poor
Very Poor
No Score
Chesapeake Bay Watershed
Note: Only data collected in a random design was used for this analysis. Benthic ex of Biotic Integrity scores are averaged r two scales of watersheds depending on a density.
Cooperstown
Harrisburg
Lancaster
Martinsburg
Baltimore
D.C.
Salisbury
Richmond
Virginia Beach
Data Sources: 2000-2010 biological, chemical and physical habitat data for non-tidal, wadeable streams from various federal, state, local, and river basin commission monitoring programs throughout the Chesapeake Bay Watershed. For a list of data sources see analysis and methods link on: http://www.chesapeakebay.net/status_streamhealth.aspx
0 10 20 40 Kilometers
0 12.5 25 50 Miles
Created by JJ & FMI, 05/13/2013
UTM Zone 18N, NAD 83

assessment

Establishing performance expectations







Decision Framework

1. Goals
2. Factors
3. Existing efforts/gaps
4. Stategy
5. Monitoring
6. Assess
7. Adapt