

A faint, light-colored map of the Albemarle-Pamlico estuary system serves as the background. It shows the extensive network of waterways, including the Roanoke, Tar, Pamlico, and other rivers and sounds, extending from the inland regions towards the Atlantic Ocean. The map is centered on the text of the slide.

Role of APNEP's Ecological Flows Action Team

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Albemarle-Pamlico National Estuary Partnership

Ecological Flows Action Team Meeting

DEQ Green Square, Raleigh

30 October 2018

Figure 2: APNEP's adaptive management cycle.

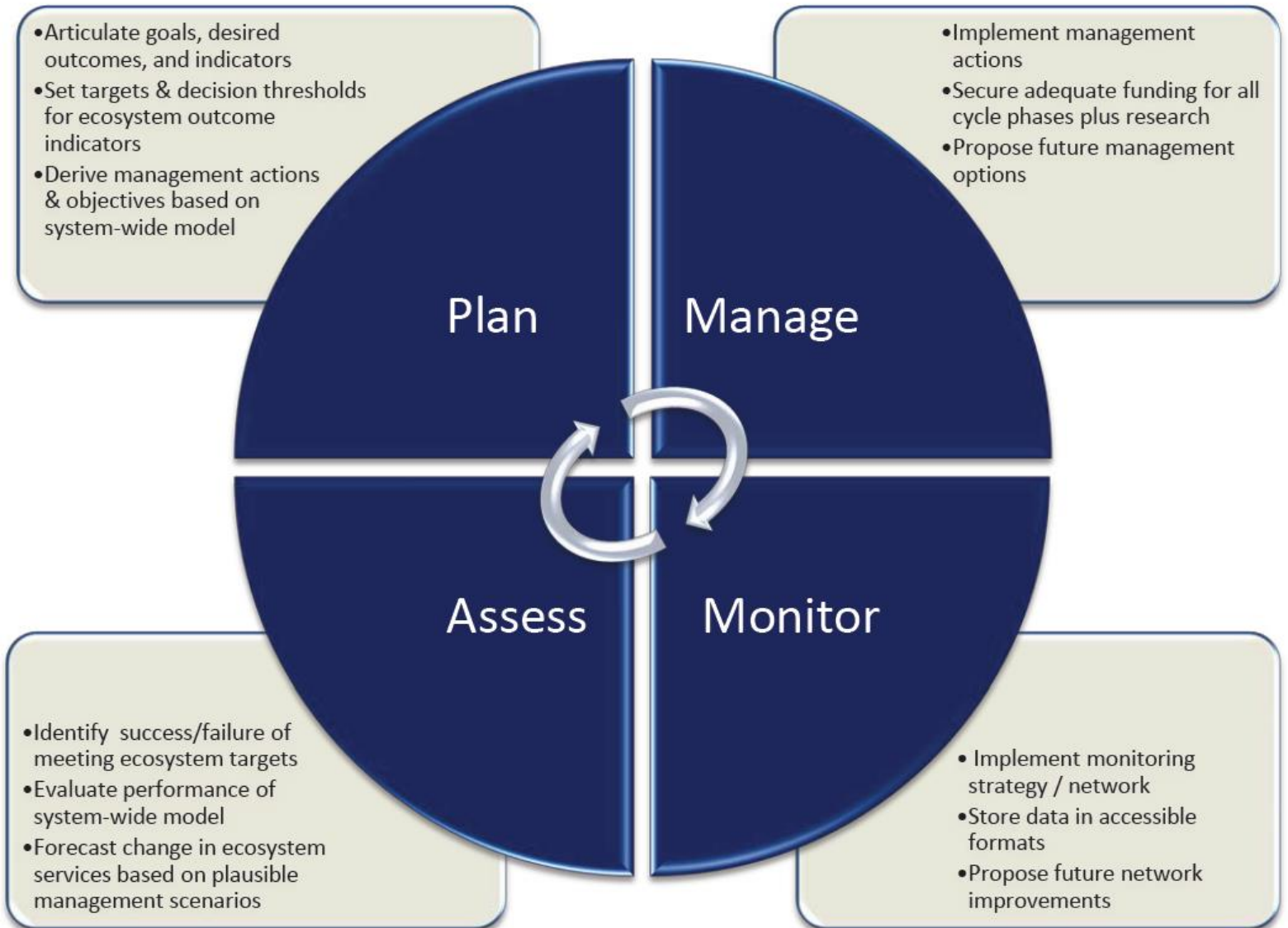
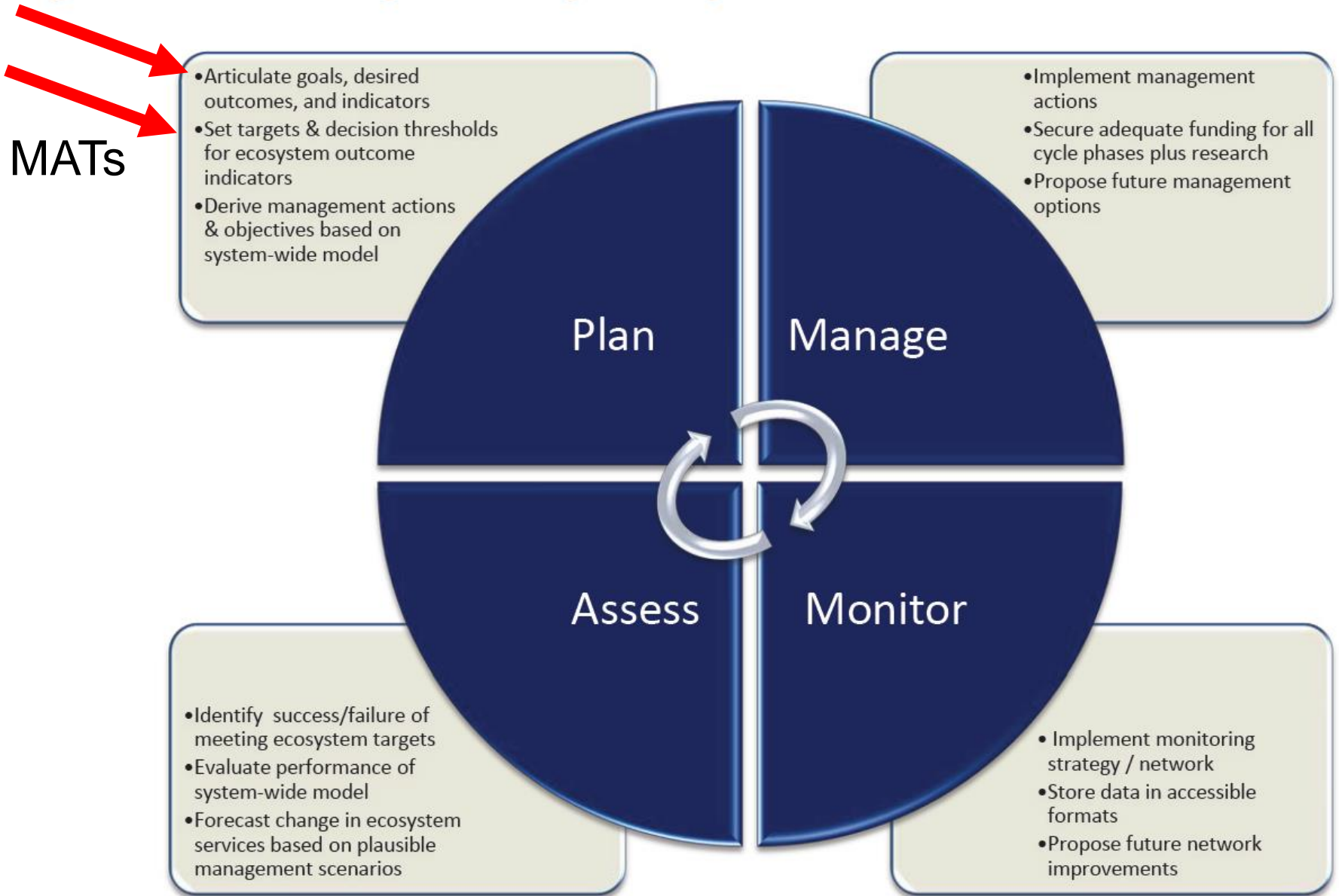


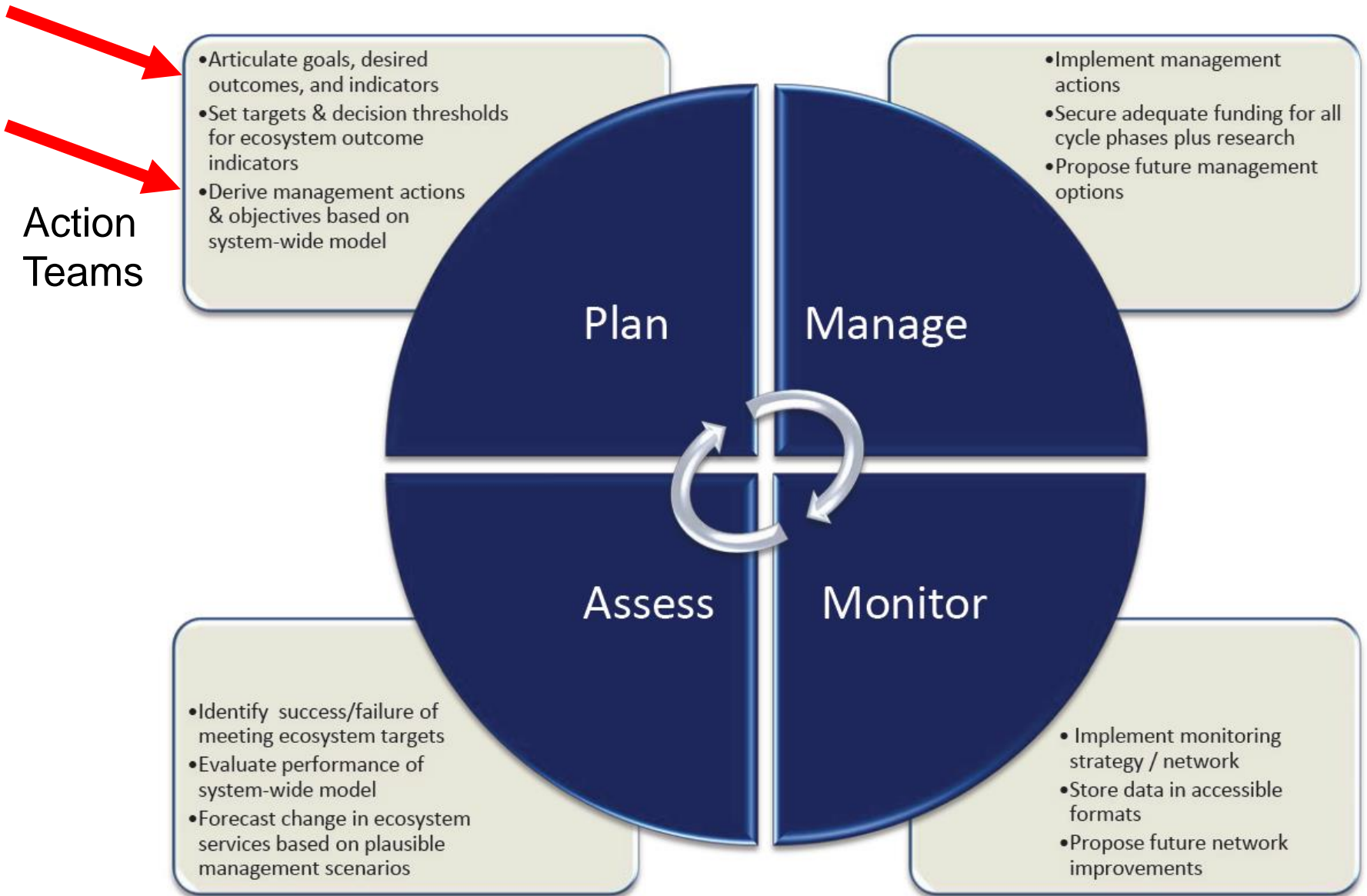
Figure 2: APNEP's adaptive management cycle.



APNEP's Ecosystem Health Goals

- A region where **human communities** are sustained by a functioning ecosystem
- A region where aquatic, wetland, and upland habitats support viable populations of **native species**
- A region where **water quantity** and quality maintain ecological integrity
 - Outcome 3a: Appropriate hydrological regimes support ecological integrity

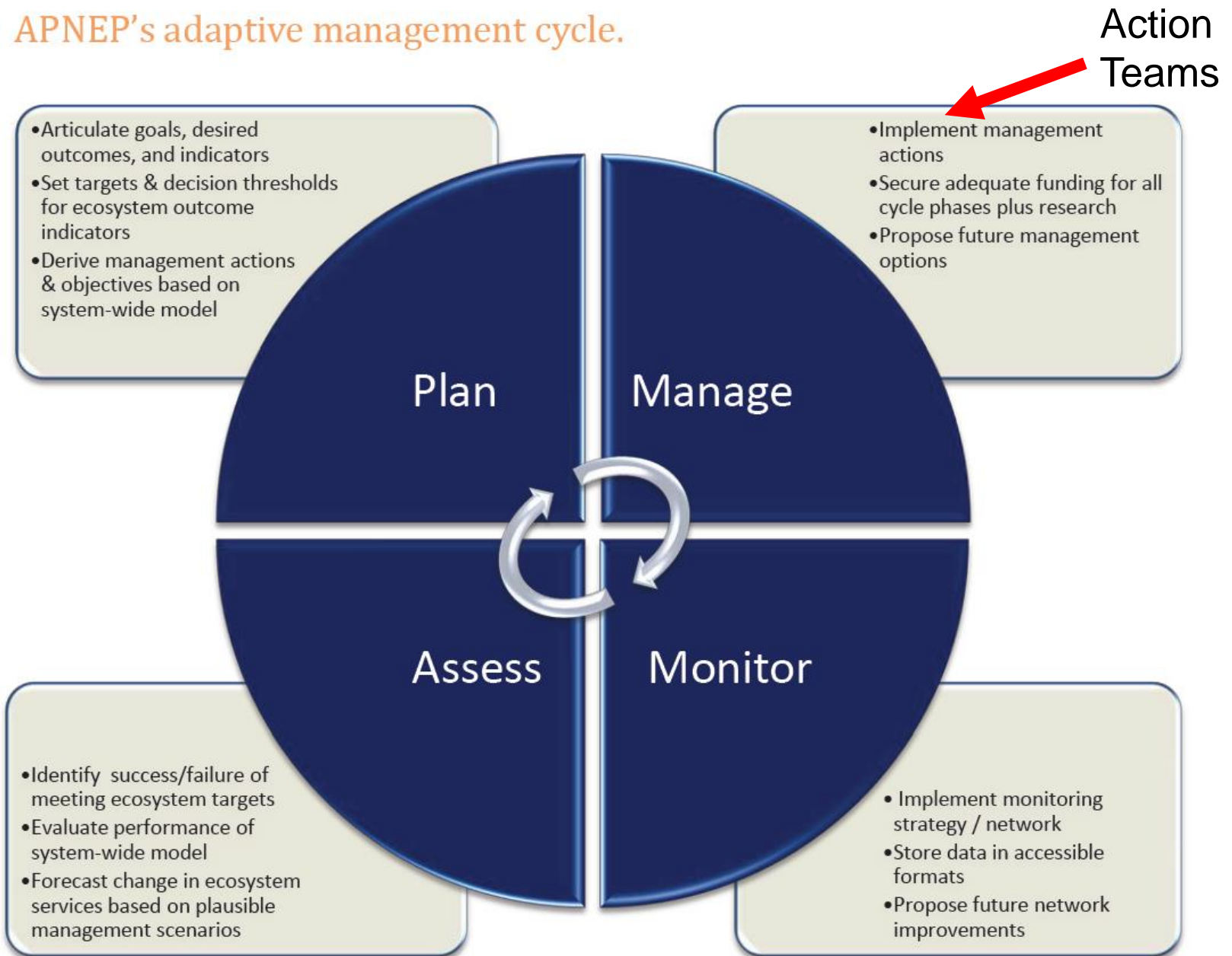
Figure 2: APNEP's adaptive management cycle.



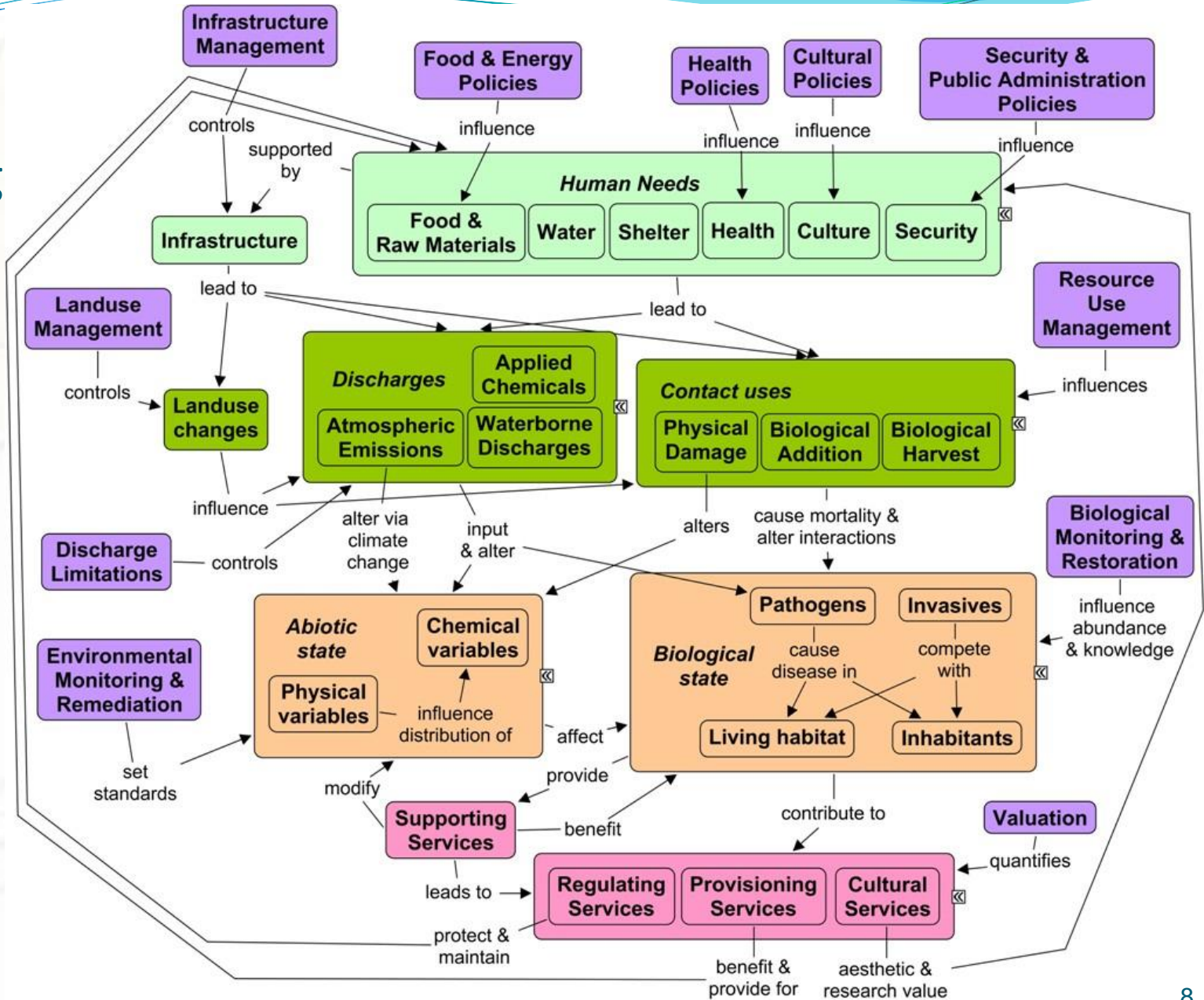
Ecological Flow Actions

- Action A3.3: Develop and refine ecological flow requirements for each major river.
 - Many of the fish, aquatic plants, and other species that live within the estuarine system depend on flowing water to survive. Identifying these ecological flows will help ensure that these species and ecosystems are protected.
- Action D3.2: : Facilitate the development and implementation of basinwide water management plans to ensure no less than minimum in-stream flows are maintained.
 - APNEP will work to provide scientific information and engage regional stakeholders to develop and implement water management plans that fully account for both human and ecological demands.

Figure 2: APNEP's adaptive management cycle.



DPSER Modeling

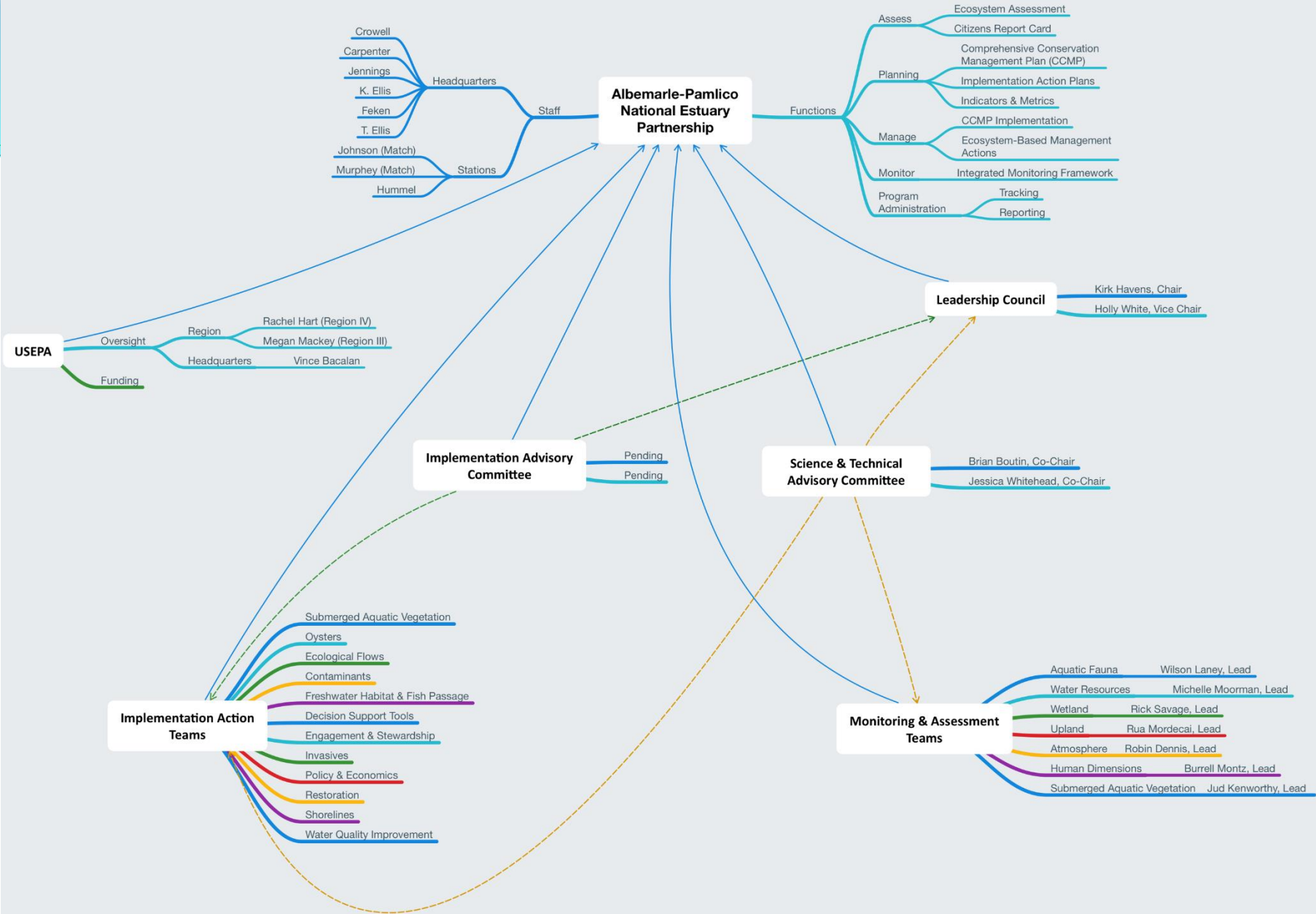


Lt. green = Drivers
 Dk. Green = Pressure
 Orange = State
 Red = Ecosystem Services
 Purple = Response

EPA-ORD-ESRP 2010



Albemarle-Pamlico National Estuary Partnership



- Staff
 - Headquarters
 - Crowell
 - Carpenter
 - Jennings
 - K. Ellis
 - Feken
 - T. Ellis
 - Stations
 - Johnson (Match)
 - Murphey (Match)
 - Hummel

- Functions
 - Assess
 - Ecosystem Assessment
 - Citizens Report Card
 - Planning
 - Comprehensive Conservation Management Plan (CCMP)
 - Implementation Action Plans
 - Indicators & Metrics
 - Manage
 - CCMP Implementation
 - Ecosystem-Based Management Actions
 - Monitor
 - Integrated Monitoring Framework
 - Program Administration
 - Tracking
 - Reporting

- USEPA
 - Oversight
 - Region
 - Rachel Hart (Region IV)
 - Megan Mackey (Region III)
 - Headquarters
 - Vince Bacalan
 - Funding

- Leadership Council
 - Kirk Havens, Chair
 - Holly White, Vice Chair

- Implementation Advisory Committee
 - Pending
 - Pending

- Science & Technical Advisory Committee
 - Brian Boutin, Co-Chair
 - Jessica Whitehead, Co-Chair

- Implementation Action Teams
 - Submerged Aquatic Vegetation
 - Oysters
 - Ecological Flows
 - Contaminants
 - Freshwater Habitat & Fish Passage
 - Decision Support Tools
 - Engagement & Stewardship
 - Invasives
 - Policy & Economics
 - Restoration
 - Shorelines
 - Water Quality Improvement

- Monitoring & Assessment Teams
 - Aquatic Fauna - Wilson Laney, Lead
 - Water Resources - Michelle Moorman, Lead
 - Wetland - Rick Savage, Lead
 - Upland - Rua Mordecai, Lead
 - Atmosphere - Robin Dennis, Lead
 - Human Dimensions - Burrell Montz, Lead
 - Submerged Aquatic Vegetation - Jud Kenworthy, Lead

Ecological Flows Team Activities

- April 2015: Team kickoff workshop
 - Objective: Team lead and “action plan”
- March 2016: Second team workshop
 - May 2016: Team action plan (two phases)
- May 2017: Third team workshop
 - Phase I update
- October 2018: Fourth team workshop
 - Determine team lead
 - Phase I progress
 - Refine and implement “course map”