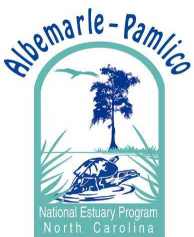


SAV Mapping Cycle 2 Albemarle-Pamlico Region 2012-2016

Dean Carpenter
Albemarle-Pamlico National Estuary Partnership

SAV Monitoring Workshop
26 February 2016



CCMP's Four Questions

- What is a **healthy** Albemarle-Pamlico Estuarine System?
- What is the **status** of Albemarle-Pamlico Estuarine System?
- What are the **biggest threats** to Albemarle-Pamlico Estuarine System?
- What **actions** should be taken that will move us from where we are today to a healthier Albemarle-Pamlico Sounds by 2022?

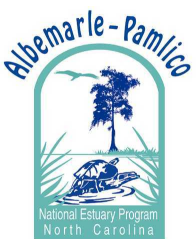
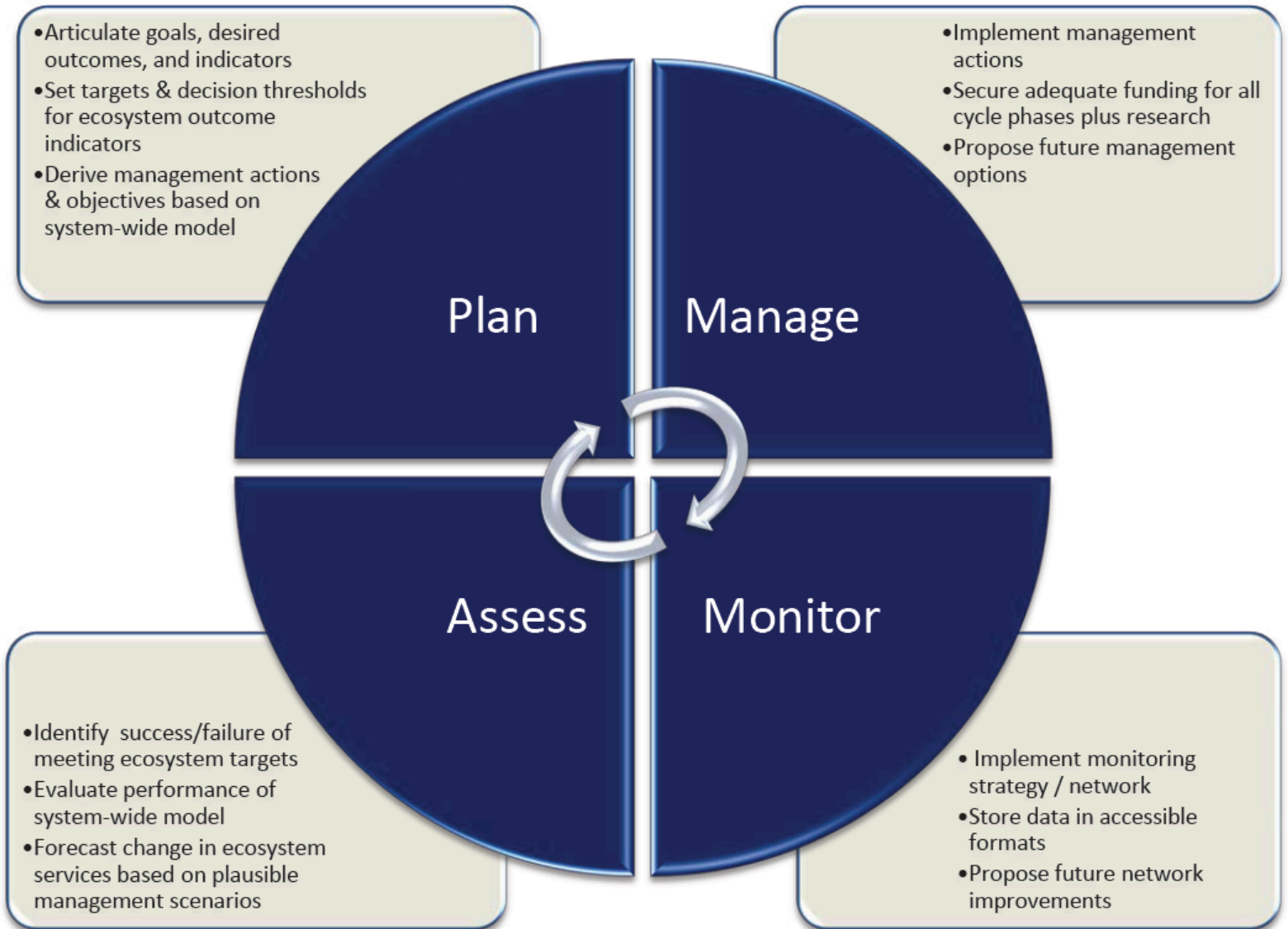
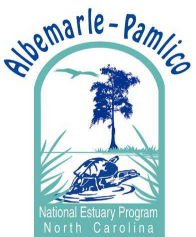


Figure 2: APNEP's adaptive management cycle.



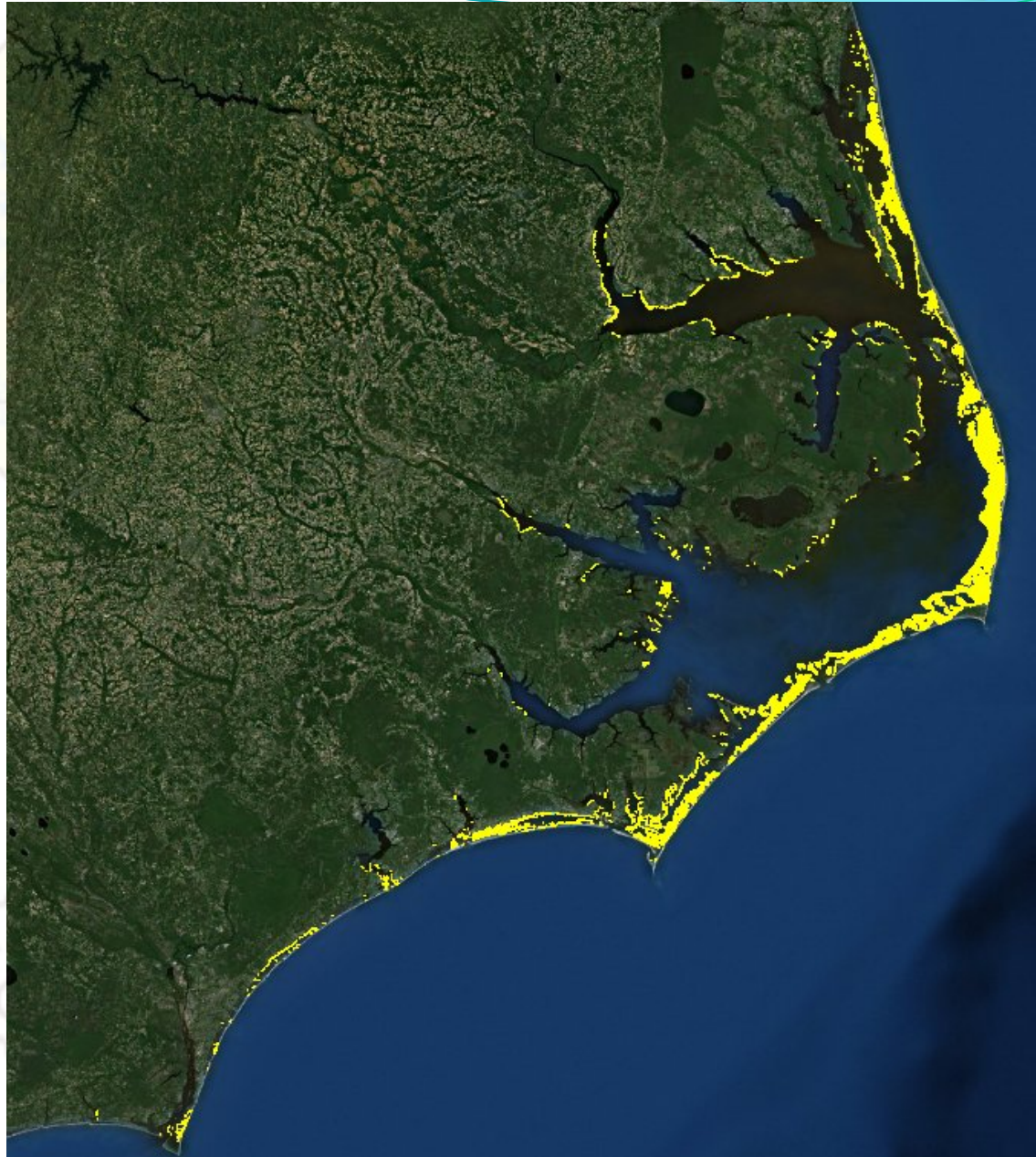
SAV Planning & Management

- Partner funding/planning issues
- APNEP SAV Action Team
 - CCMP Action B2.2: Develop and implement a SAV protection strategy
 - CCMP Action C3.3: Develop and implement a SAV restoration strategy
 - CCMP Action D1.1: Communicate the importance of stewardship and offer opportunities for volunteerism to further APNEP's mission
- Activity tracking and plan review

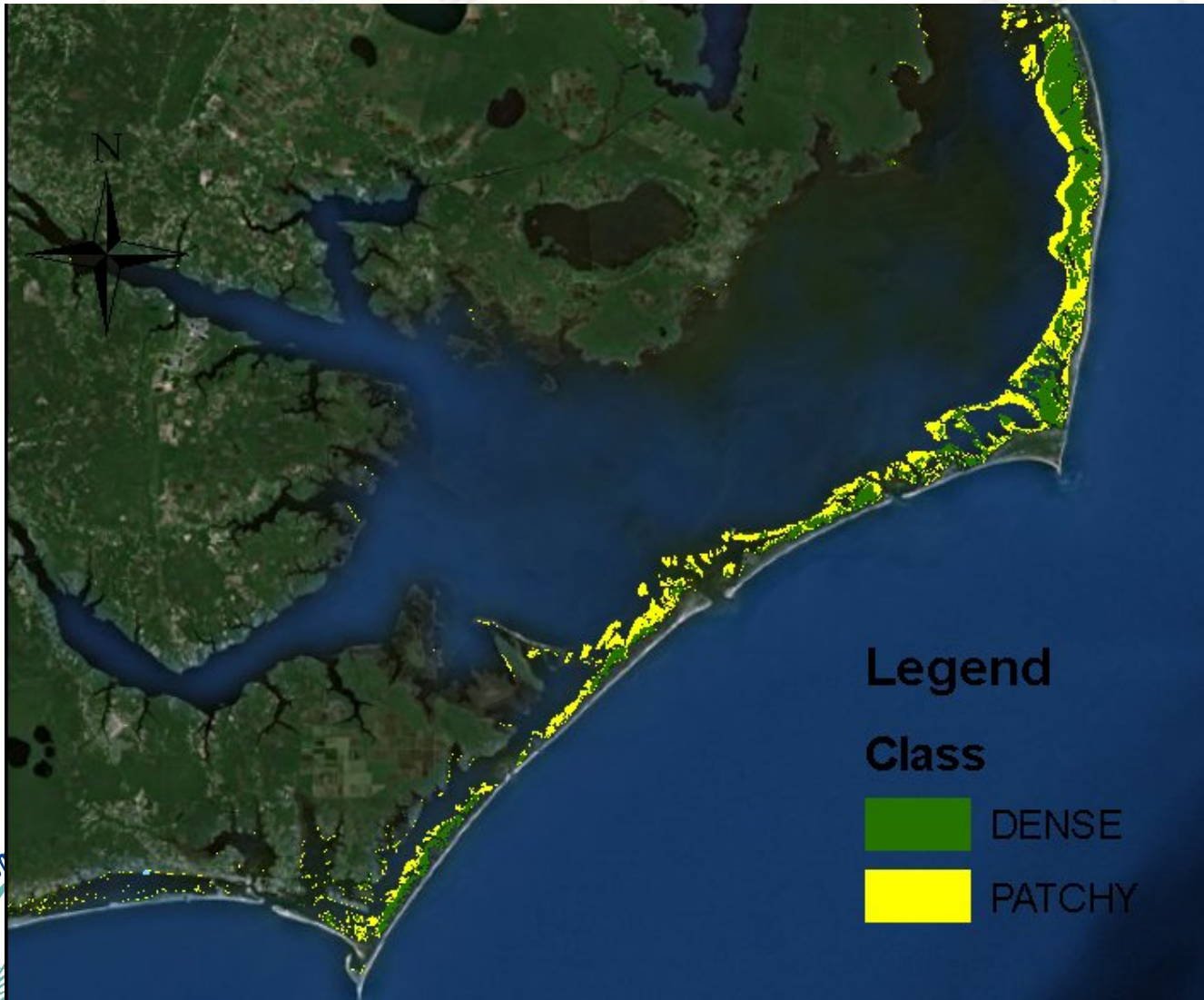


Atlantic Ocean

SAV in NC and Back Bay, VA 2006-2008



Oregon Inlet to Cape Lookout



- 86,103 acres
-71% of State
Total

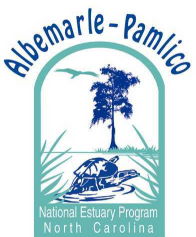


SAV Monitoring & Assessment

- Review 2012 acquisition, groundtruth, interpretation
- Image acquisition, 2013-2014 [Field]
- Groundtruth planning, 2013-2014 [Deaton]
- Sentinel and pilot boat-based monitoring, 2013-2015 (APNEP funded) [Kenworthy]
- APNEP 2016-2017 assessment

2012 Fall (Oct) Aerial Monitoring

- Image acquisition: Digital Mapping Camera
 - 10K feet above mean terrain
 - 0.3 m (1.0 foot) pixel resolution – four bands – Blue, Green Red and Near IR
 - Acquisition by NCDOT crew
- SAV Monitoring Protocols Region 1
 - Roanoke, Croatan, Eastern Albemarle, Currituck Sounds + Back Bay
 - See NCDOTmap: North subregion
- Water Clarity Network: USFWS, NCCF



2012 Groundtruthing

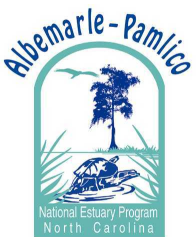
- Nine crew areas
- 6-52 stations per area, one crew-day per area
- Groundtruth Partners: DMF, APNEP, USFWS, VA-DCR
- Independent samples for interpretation evaluation

2013-2014 Spring (May-Jun) Aerial Monitoring

- Image acquisition: Digital Mapping Camera
 - 10K feet above mean terrain
 - 0.3 m (1.0 foot) pixel resolution – four bands – Blue, Green Red and Near IR
- SAV Monitoring Protocols Region 2
 - Pamlico, Core, Back, Bogue Sounds
 - See NCDOTmaps: Central, South, and Far South subregions

2013-2015 Interpretation

- Phase 1: Currituck subregion
 - NCDOT “North”
 - February – October 2013
- Phase 2: Pamlico, Back, Bogue subregions
 - NCDOT “Central” and “Far South”
 - December – February 2014
- Phase 3: Core subregion
 - NCDOT “South”
 - August - December 2014
- Phase 4: A-P region
 - December 2015



2006 - 2008 SAV TOTALS

SAV CLASS	ACREAGE
Aquaculture	24.2
Dense	72,108.8
Patchy	68,066.8
GRAND TOTAL	140,199.8



2012 - 2014 SAV TOTALS

SAV CLASS	ACREAGE
Dense	21,756.3
Patchy	101,477.7
GRAND TOTAL	123,234.0

