

APNEP Monitoring Plan Progress

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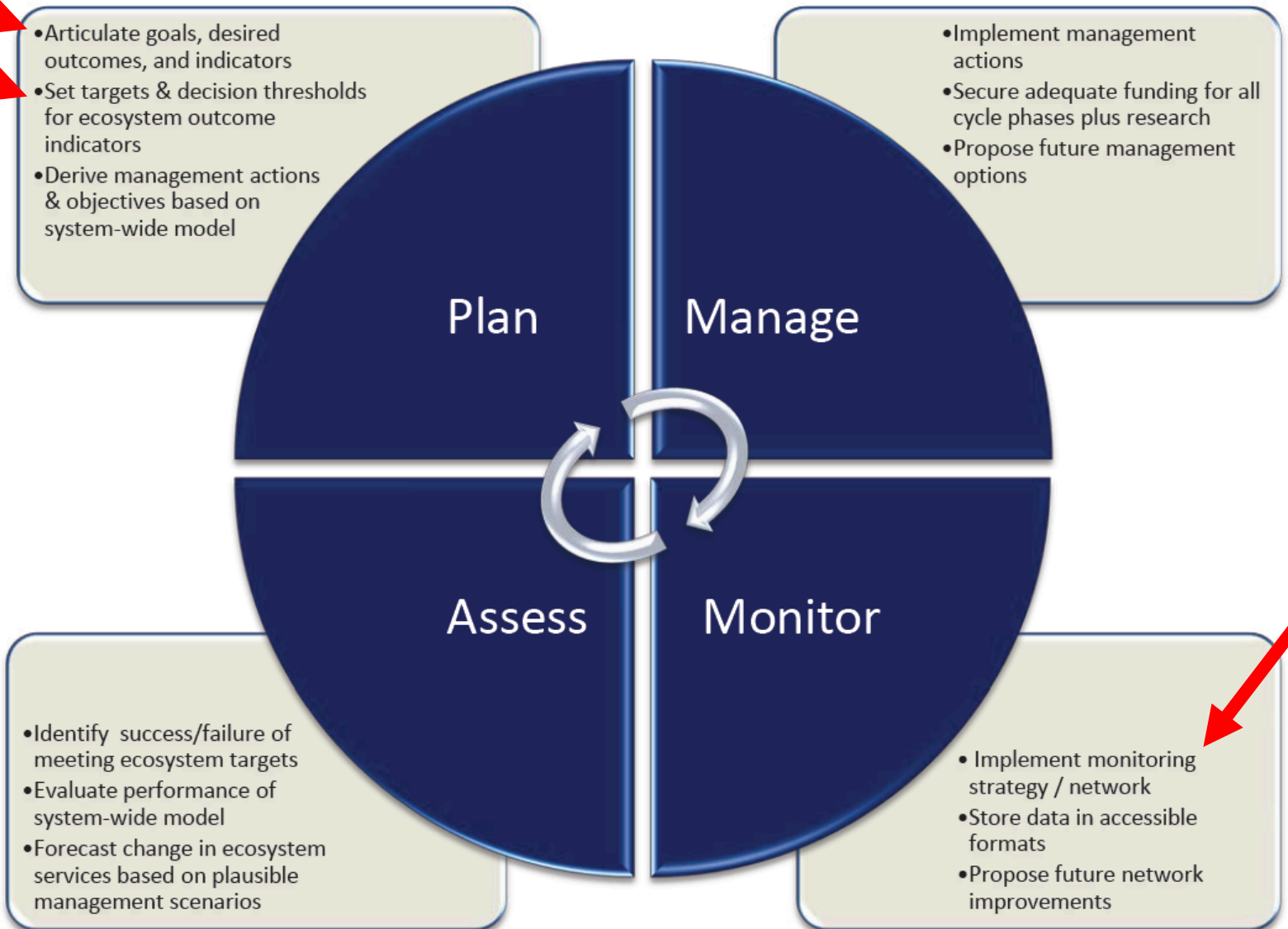
Albemarle-Pamlico National Estuary Partnership

Leadership Council Meeting

20 May 2020



Figure 2: APNEP's adaptive management cycle.



APNEP Monitoring Plan 2020 Timeline

- LC supported STAC fall 2019 recommendation for near-term focus on ecosystem components “estuarine water quality” and “submerged aquatic vegetation (SAV)” (Jan)
- STAC Monitoring provided initial guidance on focal assessment questions, indicators, and metrics (Feb)
- Staff proposed report outlines for APNEP monitoring framework and initial plan (Mar)

Monitoring Plan 2020 Scoping

- Assessment Questions
 - How is SAV condition changing in estuarine waters?
 - Are estuarine water quality conditions suitable to sustain the ecosystem services provided by SAV species?

Monitoring Plan 2020 Scoping

- Indicator: SAV
 - Areal extent by cover class
 - Deep-water edge
 - Species composition

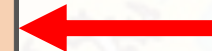
Monitoring Plan 2020 Scoping

- Indicator: Water Clarity
 - Secchi
 - Turbidity
- Indicator: Eutrophication
 - Chlorophyll-a
 - Total N & P concentrations

Monitoring Plan 2020 Scoping

- Indicator: Suspended sediments
 - TSS
- Abiotic stressors
 - Temperature
 - Salinity
 - Dissolved oxygen
 - pH

Goal	Ecosystem Outcome
<p>1: Human Communities A region where human communities are sustained by a functioning ecosystem</p>	1a: Waters are safe for personal contact.
	1b: Designated surface and ground water supplies are safe for human consumption.
	1c: Surface hydrologic regimes sustain regulated human uses.
	1d: Fish and game are safe for human consumption.
	1e: Opportunities for recreation and access to public lands and waters are protected and enhanced.
<p>2: Native Species A region where aquatic, wetland, and upland habitats support viable populations of native species</p>	2a: The biodiversity, function, and populations of species in aquatic, wetland, and upland communities are protected, restored, or enhanced.
	2b: The extent and quality of upland, freshwater, estuarine and near-shore marine habitats fully support biodiversity and ecosystem function.
	2c: Non-native invasive species do not significantly impair native species' viability or function, nor impair habitat quality, quantity, and the processes that form and maintain habitats.
<p>3: Water Quantity & Quality A region where water quantity and quality maintain ecological integrity</p>	3a: Appropriate hydrologic regimes support ecological integrity.
	3b: Nutrients and pathogens do not harm species that depend on the waters.
	3c: Toxics in waters and sediments do not harm species that depend on the waters.
	3d: Sediments do not harm species that depend on the waters.



APNEP Monitoring Plan 2020 Timeline

- Incorporate feedback on initial drafts from STAC Monitoring (Jul)
- Incorporate feedback on second drafts from STAC Monitoring (Aug)
- Incorporate feedback from STAC (Sep-Oct)
- Incorporate policy feedback from LC and other select stakeholders (Oct-Nov)
- Approve Monitoring Plan (Nov)
- Monitoring Plan implementation (Dec)