APNEP SAV Monitoring Plan: Final Development Phase

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STAC Meeting
1 December 2019

Background

- Pilot plan evolution
- Case study for other MAT monitoring plans
- APNEP monitoring framework

SAV MONITORING PLAN

LOW SALINITY SAV

TECHNIQUE / STATUS (2010-2020)

HIGH SALINITY SAV (SEAGRASS)

STATUS INDICATOR REPORT (2006-2013)
NEW ACQUISITIONS (2015, 2019, 2020)

CHPP REVISION PROCESS

NUTRIENT CRITERIA DEVELOPMENT

FORMALIZE A PLAN

LOW SALINITY COMMITTEE

HIGH SALINITY COMMITTEE

Albemarle - Pamlico National Estuary Partnership

Component	Metric	Spatial Scale (Grain & Extent)	Temporal Scale (Grain & Extent)	Method	MAT Lead
Mesohaline to Polyhaline Waters: Bogue, Back, Core, Eastern Pamlico Sounds	SAV areal extent by cover class	0.3 m-resolution census of targeted Sound in annual rotation	Bi-seasonal (May and mid-Sept. to mid-Oct.) every 3-5 years	Aerial survey via DMC, 4-band color Cover class interpretation, manual	SAV
	Deep-water edge	0.3 m-resolution census of targeted Sound in annual rotation	Bi-seasonal (May and mid-Sept. to mid-Oct.) every 3-5 years	Aerial survey via DMC, 4-band color Edge interpretation, manual	SAV
	SAV relative abundance	75-150 stations randomly assigned and spatially balanced, majority at targeted Sound in annual rotation, minority at non-targeted Sounds	Bi-seasonal (May and September), majority every 3-5 years, minority annually	Braun-Blanquet, 4 replicate quadrats per station	SAV
	SAV species composition	75-150 stations randomly assigned and spatially balanced, majority at targeted Sound in annual rotation, minority at non-targeted Sounds	Bi-seasonal (May and September), majority every 3-5 years, minority annually	Species identification during Braun-Blanquet survey	SAV
Oligohaline Waters: Neuse Estuary, Pamlico Estuary, Western Pamlico Sound, Albemarle Sound, Currituck Sound, Back Bay	SAV linear extent	Five equal sections of total shoreline for each waterbody, one targeted section per waterbody in annual rotation	Seasonal (Months TBD)	Sonar at two shore-parallel isobaths (0.75 m and 1 m) plus shore-normal sonar transects past deep-water at each station	SAV
	Deep-water edge	Five equal sections of total shoreline for each waterbody, one targeted section per waterbody in annual rotation	Seasonal (Months TBD)	Determined from shore-normal sonar transect data	SAV
	SAV relative abundance	75-150 stations randomly selected and spatially balanced along shoreline, majority at targeted sections in annual rotation, minority at non-targeted sections	Seasonal (Months TBD)	Braun-Blanquet, 4 replicate quadrats per station, possible near-shore (< 0.5 m depth) UAV survey shore-normal from each station	SAV
	SAV species composition	75-150 stations randomly selected and spatially balanced, majority at targeted sections in annual rotation, minority at non-targeted sections	Seasonal (Months TBD)	Species identification during Braun-Blanquet survey	SAV

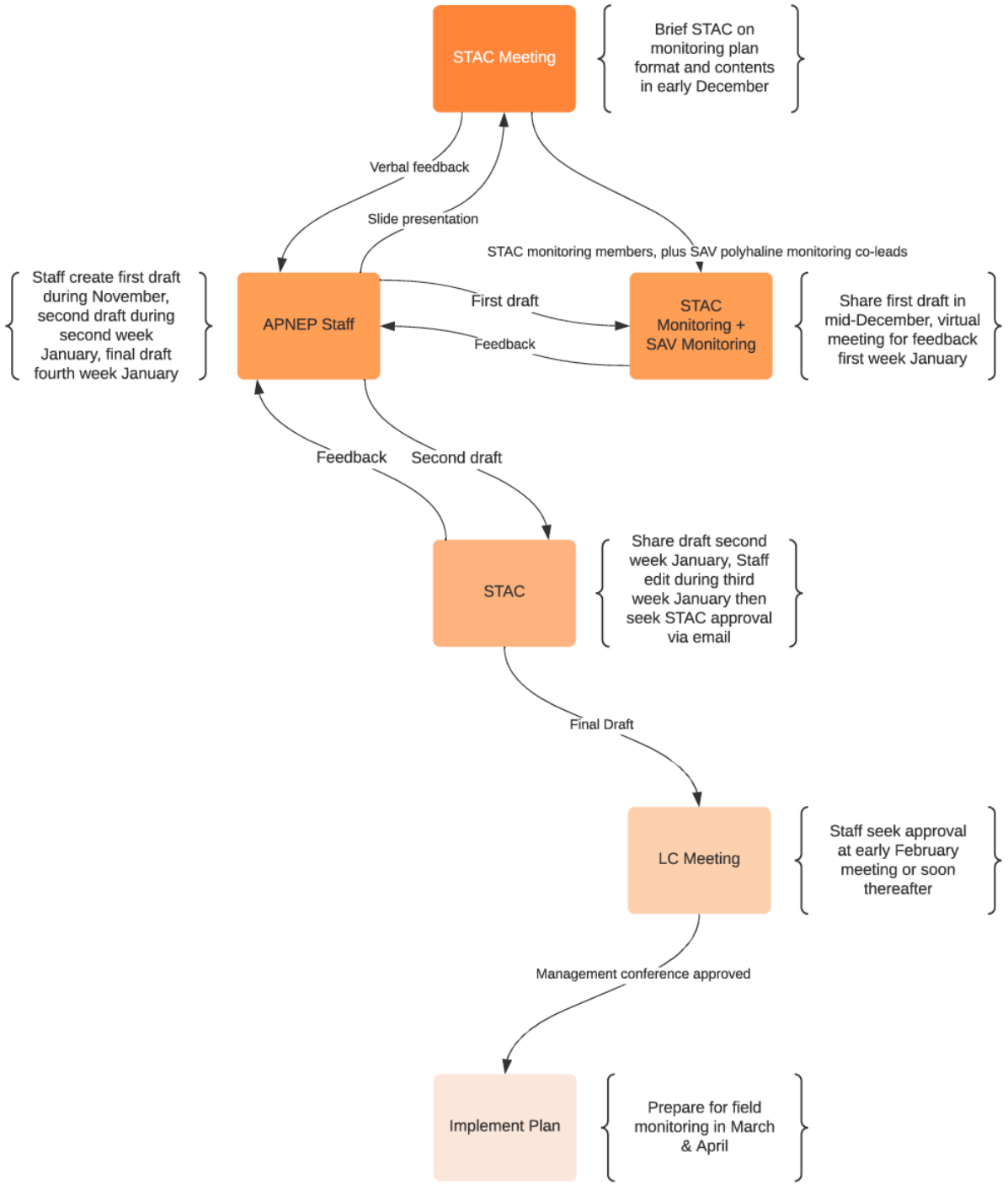
STAC Meeting
Brief STAC on monitoring plan format and contents in early December
Verbal feedback
Slide presentation
STAC monitoring members, plus SAV polyhaline monitoring co-leads
Staff create first draft during November, second draft during second week January, final draft fourth week January
APNEP Staff
First draft
Feedback
STAC Monitoring + SAV Monitoring
Share first draft in mid-December, virtual meeting for feedback first week January
Feedback
Second draft
STAC
Share draft second week January, Staff edit during third week January then seek STAC approval via email
Final Draft
LC Meeting
Staff seek approval at early February meeting or soon thereafter
Management conference approved
Implement Plan
Prepare for field monitoring in March & April

Figure 2: APNEP's adaptive management cycle.

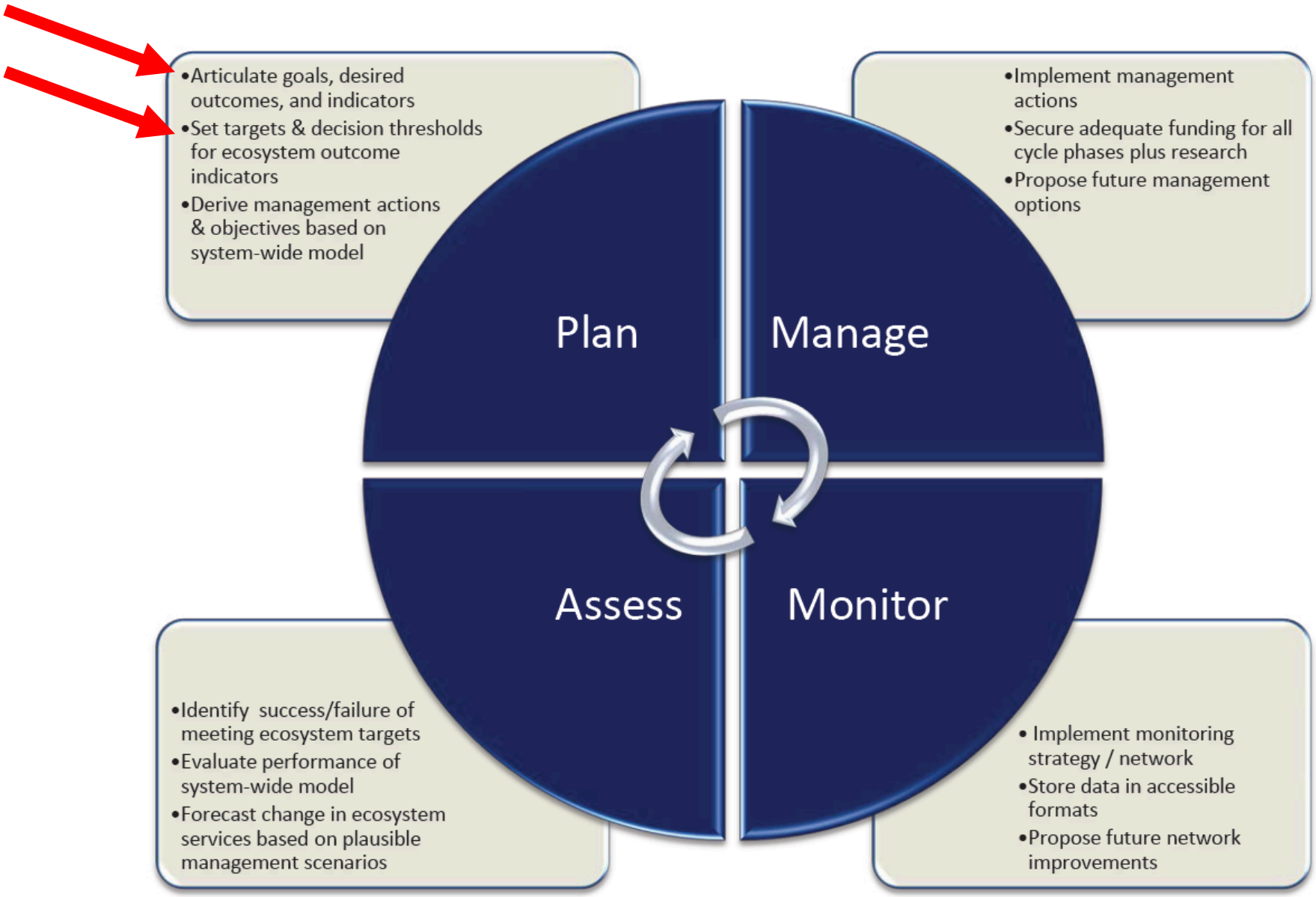

Figure 2: APNEP's adaptive management cycle.