

Nutrient Criteria Development for Albemarle Sound: Phase I Proceedings



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Phase I Proceedings Document

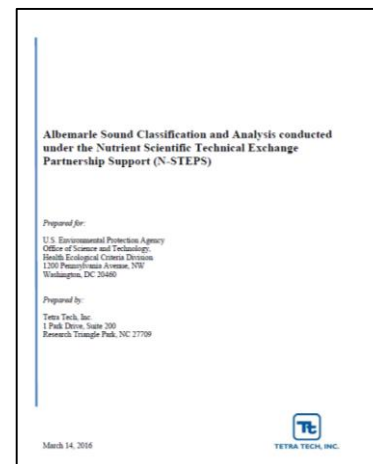
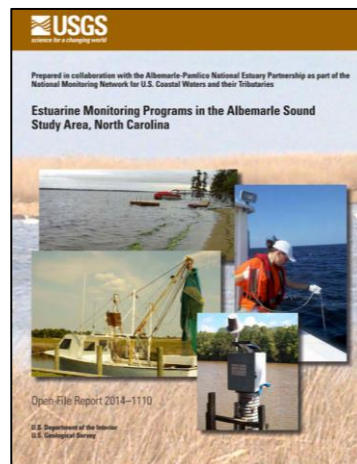
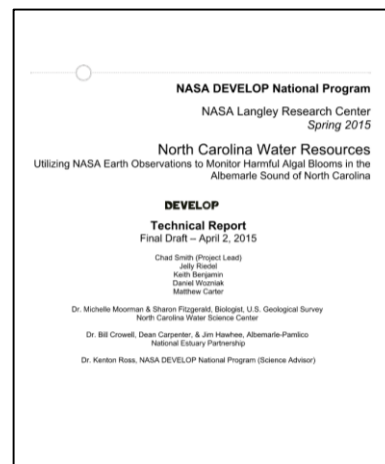
- Phase I proceedings summarized by DWR
- Target audience: SAC/CIC
- Document includes:
 - Executive summary
 - Overview of meetings (topics discussed)
 - Overview of supporting materials
 - Prioritized research recommendations and status
 - Appendices include meeting minutes, reports, and research proposals.

Phase I Summary

- Open, APNEP-facilitated workgroup
- 9 meetings from 2014 to 2016
- Parameters considered: pH, DO, clarity, TSS, turbidity, phytoplankton and cyanotoxins, chlorophyll a, nitrogen, and phosphorus
- Original slate of supporting projects undertaken in 2015-2016

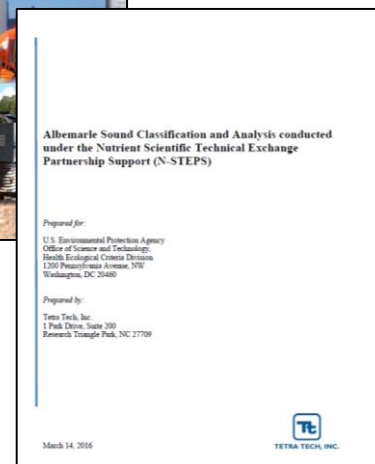
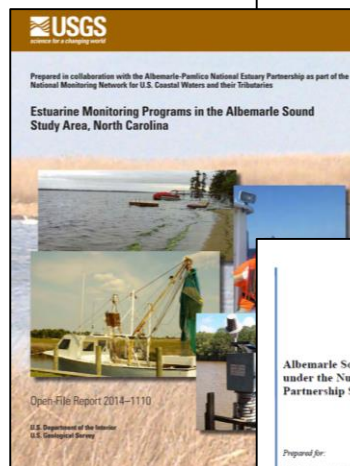
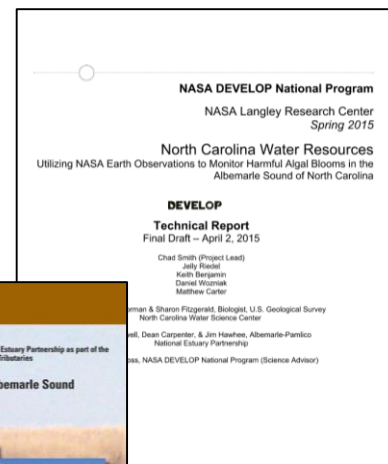
Phase I Supporting Projects

- Remote sensing evaluation (NASA)
- Data classification and analysis (Tetra Tech)
- National law and policy review (Sea Grant)



Phase I Supporting Projects

- Literature compilation (Tetra Tech)
- USGS Albemarle Sound initiatives
- DWR supplementary data analyses
- Criteria development case studies



Phase I Summary, Continued

- Workgroup fact-finding in early 2016
- Member-generated criteria proposals evaluated by workgroup in late 2016
- Where limitations were evident, further research was proposed and ranked

Prioritized Research for Phase II

- Additional algal toxin surveys
 - Status: some surveys underway
- Clarity optical model
 - Status: not underway, TSS data now being collected for calibration purposes
- Evaluate and summarize historical clarity data
 - Status: preliminary evaluation by DWR staff

Prioritized Research for Phase II

- Nutrient bioassays
 - Status: grant proposal submitted but not funded
- Quantify historical SAV coverage
 - Status: APNEP mapping efforts largely complete, further evaluation of SAV habitat potential not underway
- Evaluate correlations between oxygen-sensitive fish species, habitat utility and seasonality.
 - Existing NOAA resources, but may require further evaluation

What's next?

- Advancement of ongoing research and data evaluation efforts
- Consideration of criteria by SAC and CIC in Phase II
- Potential areas for discussion:
 - Application and implications of a clarity standard?
 - Chlorophyll *a* as a seasonal average?
 - N & P criteria: whether and how to set?
 - Bioconfirmation approach?

APNEP Nutrient Workgroup Website

Committees

- Policy Board
- Science & Technical Advisory Committee
- Implementation Committee
 - Contaminants Workgroup
 - Education & Engagement Workgroup
 - Flows Workgroup
 - Freshwater Habitats & Fish Passage Workgroup
 - Monitoring Networks Workgroup
 - **Nutrients Workgroup**
 - Oyster Workgroup
 - Submerged Aquatic Vegetation Workgroup
- Past Committees

Nutrients Workgroup

[Overview](#) [Meetings](#)

[Sign up for the Nutrient Workgroup's listserv](#)

[View supporting files through Google Drive](#)

Overview

APNEP is facilitating a working group to study and recommend appropriate nutrient standards for North Carolina's estuaries. This work will advance according to North Carolina's [Nutrient Criteria Development Plan](#) using the Albemarle Sound as a pilot study area.

APNEP staff support: [Jim Hawhee](#) (primary), [Dean Carpenter](#)

Meetings

Meeting	Agenda	Notes	Meeting Materials
2015			
*Note: Nutrient-related work prior to April 2015 occurred as part of APNEP's Contaminants Workgroup. Contaminants Workgroup notes are included below for reference and continuity.			
April 23, 2015 WebEx Webinar Connection information on agenda			link
2014			
October 21, 2014 USGS Water Sciences Center 3916 Sunset Ridge Rd., Raleigh, NC			link
August 5, 2014 Kinston-Lenoir Public Library 510 Queen Street, Kinston, NC			link

<http://apnep.org/web/apnep/nutrients>

Questions?



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