

Nutrient Criteria Development for Albemarle Sound: Phase I Proceedings



Jim Hawhee
N.C. Division of Water Resources
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Department of Environmental Quality



Phase I Proceedings Document

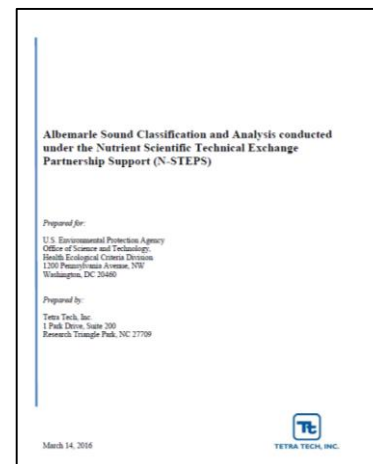
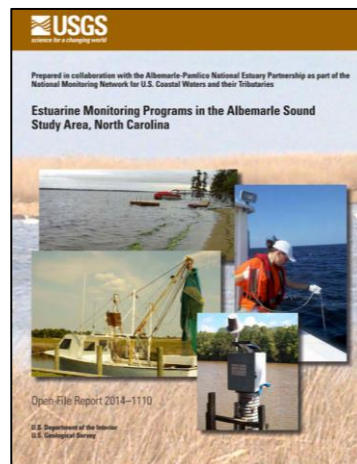
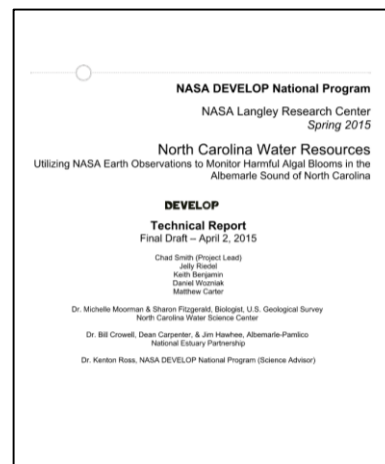
- Phase I proceedings summarized by DWR
- Accessible at:
https://files.nc.gov/apnep/documents/files/past-committees/Albemarle-Sound-Report_combined.pdf
- Document includes:
 - Executive summary
 - Overview of meetings (topics discussed)
 - Overview of supporting materials
 - Prioritized research recommendations
 - 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

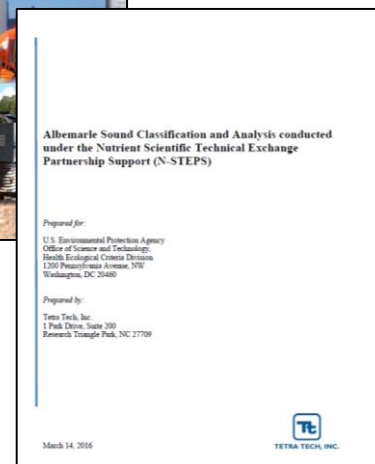
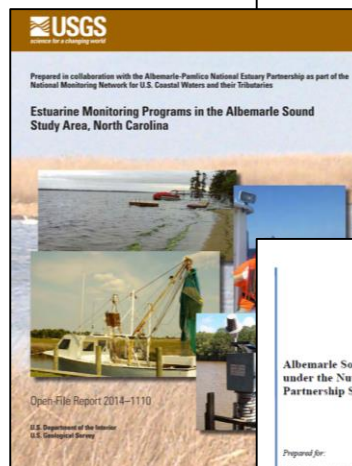
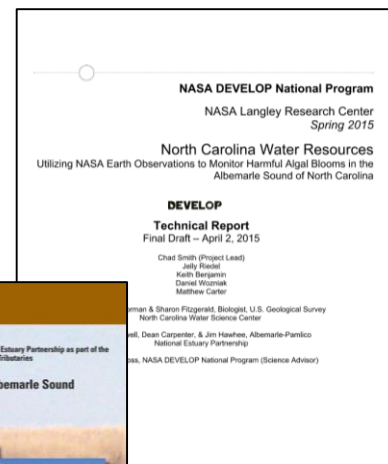
Phase I Supporting Projects

- 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
- 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?

- Consideration of criteria by DWR, 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?

Questions?



Jim Hawhee:

(919) 707-3675 | jim.hawhee@ncdenr.gov

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