

# APNEP Comprehensive Conservation and Management Plan Update

Scott Gentry

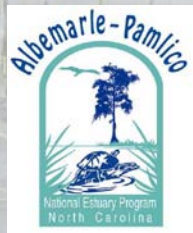
Project Manager

Albemarle-Pamlico National Estuary Program

Bill Crowell

Director

Albemarle-Pamlico National Estuary Program



# APNEP's Mission

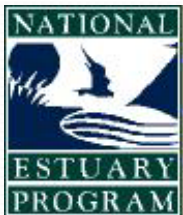
*To identify, restore, and protect  
the significant resources of the  
Albemarle-Pamlico estuarine system.*



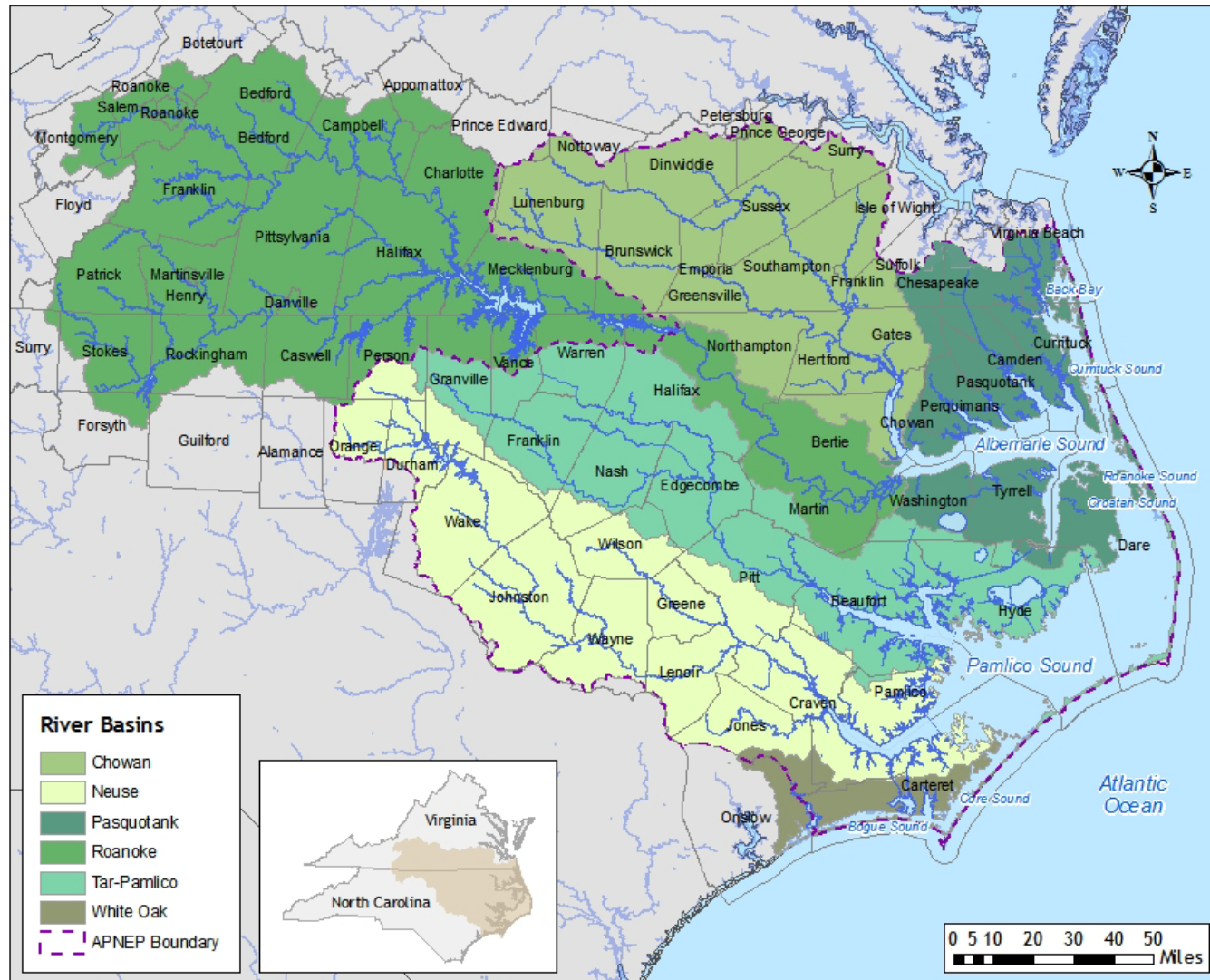


# APNEP and the National Estuary Program

- The Albemarle-Pamlico estuary was designated as an “estuary of national significance” by Congress in 1987.
- APNEP is part of the National Estuary Program, which was established by §320 of the Clean Water Act.
- APNEP is funded through an EPA grant to the the N.C. Department of Environment and Natural Resources.
- Each program establishes a **Comprehensive Conservation and Management Plan (CCMP)** to address water quality, habitat, and living resources challenges in its estuarine watershed.

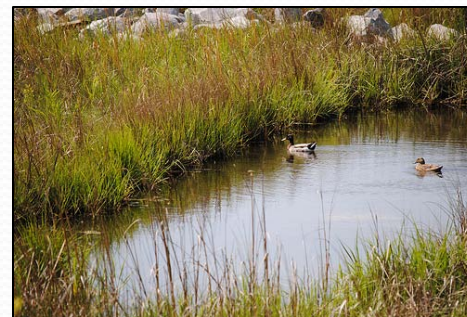


# The Albemarle-Pamlico Region



# APNEP's Management Approach

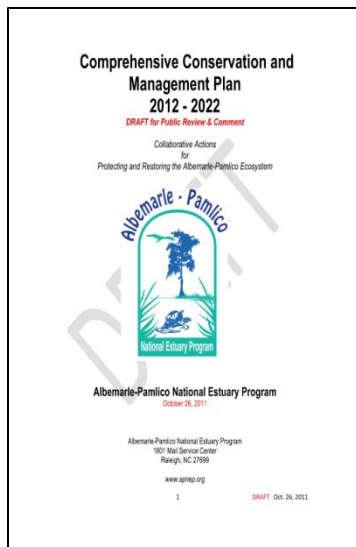
- Historically, APNEP's approach to its mission has included:
  - A watershed approach to environmental management
  - Support of applied science initiatives to support environmental decision-making
  - Inclusive, collaborative, and consensus-driven initiatives
  - Engagement and partnerships with citizens, scientists, interest groups, NGOs, and all levels of government
- Through the 2012 update to the CCMP, APNEP has incorporated the framework for ecosystem-based management:
  - Systems-based approach, including both human and environmental considerations
  - Adaptive management
  - Accountability



# Comparing the Plans

The 1994 CCMP included five priority issues (presented as individual plans): **Water Quality, Vital Habitats, Fisheries, Stewardship, and Implementation**

The new CCMP will be structured around addressing **four questions**:



**Question 1: What is a healthy Albemarle-Pamlico Estuarine System?**

**Question 2: What is the status of the Albemarle-Pamlico Estuarine System?**

**Question 3: What are the greatest challenges facing the Albemarle-Pamlico Estuarine System?**

**Question 4: What actions should be taken to move toward healthier Albemarle-Pamlico Sounds by 2022?**



# Question 1: What is a healthy Albemarle-Pamlico Estuarine System?

- Goal 1: A region where human communities are sustained by a functioning ecosystem.
- Goal 2: A region where aquatic, wetland, and upland habitats support viable populations of native species.
- Goal 3: A region where water quantity and quality maintain ecological integrity.

These goals are qualitative descriptions of what we want the environment to look like, with associated numerical indicators to be developed.

Each goal is supported by multiple environmental outcomes, which are more specific and reflect the desired status of the estuarine system.





## Question 2:

# What is the status of the Albemarle-Pamlico Estuarine System?

- The answer to Question 2 helps us understand where we are in relation to our environmental goals.
- This question is currently being addressed by APNEP's "State of the Sounds" ecosystem assessment, to be released in 2012.
- The assessment analyzes 24 environmental indicators to give a status and trends overview for the ecosystem.
- The assessment is primarily a volunteer effort, with contributions from regional scientists regarding their areas of expertise.
- Gaps and deficiencies in information will be identified as part of the assessment.





## Question 3:

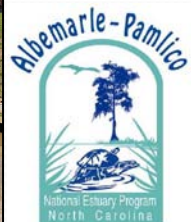
# What are the greatest challenges facing the Albemarle-Pamlico Estuarine System?

- This question was addressed by APNEP's ecosystem based management (EBM) team, who identified significant challenges in the estuarine watershed.
- Significant challenges include:
  - Alteration and loss of habitat
  - Ongoing pollution inputs
  - Land use changes
  - Increasing population in some areas
  - Relative sea level rise and other climate pressures



## Question 4: What actions should be taken to move toward healthier Albemarle-Pamlico Sounds by 2022

- Management actions are divided into five components: **Identify, Protect, Restore, Engage, and Monitor.**
- Partner organizations and agencies are identified to highlight complimentary strengths and promote accountability.
- Each management action is linked directly to one or more environmental outcome identified in Question 1.
- Indicators will be developed to track the implementation of management actions.



# Example management action in plan:

**Action B1.2: Minimize the introduction of pathogens from targeted sources.** By reducing pathogens, we also improve ecosystem integrity. Aging infrastructure and rising sea levels are two challenges which must be addressed to prevent bacteria, viruses, and other microorganisms from entering public waters through identified sources. APNEP will provide support for upgrades to wastewater treatment facilities and associated infrastructure that account for future risks.

- **Lead Organizations:** APNEP
- **Key Partner Organizations:** DWQ, DEQ, DCR, DMF, DCM, EPA, CWMTE, WQIF, SRF
- **CCMP Outcomes Supported:** 1a, 1b, 1d, 2b, 3b
- **Outputs:** Pollution control measures, BMPs
- **Results:** Reduction in pathogens within targeted water bodies



# Example management action in plan:

**Action D3.3: Provide assistance to state, regional, and local governments to incorporate climate change and sea level rise considerations into their planning processes.** APNEP and its partners have made significant strides predicting and mapping future climate risks, but much work remains to be done. APNEP will support government partners that choose to integrate climate information into their planning process. Additionally, APNEP will work across sectors to identify and leverage mutually beneficial climate adaptation opportunities.

- Lead Organizations: APNEP, DCM, OCPCA
- Key Partner Organizations: DEM, EPA, SALCC, VCZM, USFWS, WRC, NOAA, NCDOT, DHHS, IOG
- CCMP Outcomes Supported: 1a, 1b, 1c, 1d, 1e, 2a, 2b, 2c, 3a, 3b, 3c, 3d
- Outputs: State, regional and local plans that address climate change and sea level rise
- Results: Improved climate resiliency for communities in the region.





# Finalizing the plan

- APNEP is making the plan available for public comment through January 17, 2012.
- Six public meetings will be held throughout the region to provide an overview of the plan and seek public comment.
- Comments can be made in writing or in person at these meetings, via email, via a web form, or mail.
- After public comments have been received and satisfactorily addressed, APNEP's Policy Board will approve the plan in early 2012.



# CCMP 2012 – Public Meetings

Monday, Nov. 21, 2011 (6 p.m. – 8 p.m.)  
Neuseway Education and Training Center  
Kinston, NC

Tuesday, Nov. 22, 2011 (6 p.m. -8 p.m.)  
N.C. DENR Regional Office  
Washington, NC

Tuesday, Nov. 29, 2011 (6 p.m. – 8 p.m.)  
Pasquotank-Camden Library  
Elizabeth City, NC

Wednesday, Nov. 30, 2011 (6 p.m. – 8 p.m.)  
Washington County Cooperative Extension Center  
Plymouth, NC

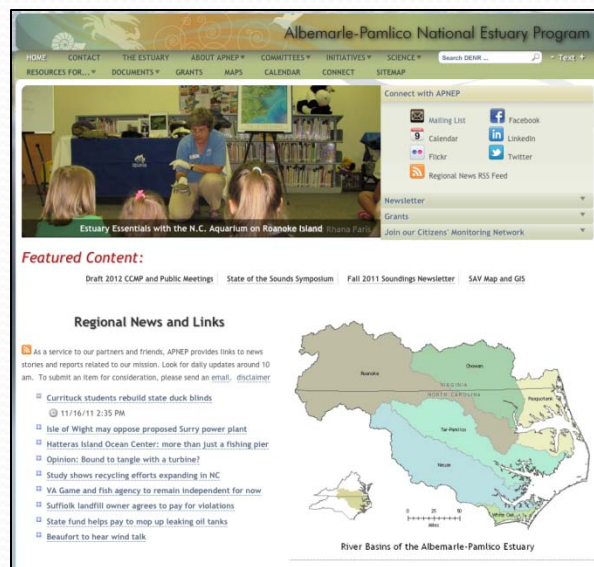
Tuesday, Dec. 6 (4 p.m. - 6 p.m.)  
Archdale Building  
Raleigh, NC

Wednesday, Dec. 7, 2011 (4 p.m. – 6 p.m.)  
Ruth Camp Campbell Memorial Library  
Franklin, VA



# Questions or Comments?

To obtain a copy of the DRAFT 2012 CCMP and provide comments, please visit [www.apnep.org](http://www.apnep.org)



Bill Crowell  
bill.crowell@ncdenr.gov  
(919) 707-8633

Scott Gentry  
scott.gentry@ncdenr.gov  
(919) 707-8631







# Partnering with APNEP

- Website: [www.apnep.org](http://www.apnep.org)
  - Resources for local governments, grant opportunities, daily news clips, newsletter, social media, staff contacts...

