

**APNEP Scientific and Technical Advisory Committee**  
**Quarterly Meeting Agenda**  
**October 15, 2009**

North Carolina Department of Environment & Natural Resources Regional Office,  
943 Washington Mall, Washington, North Carolina 27889

- 10:00 a.m. Call to Order and APNEP Update.....Laney**  
Wilson Laney, STAC Co-Chair, will call the meeting to order.
- Welcome
  - Approval of summer meeting minutes
  - APNEP Update
- 10:15 a.m. Nutrient Modeling as a Tool to Support Ecosystem-Based Management.....Shenk**  
Gary Shenk, Modeling Specialist with the U.S. Environmental Protection Agency, will share insights on the role of nutrient models in support of ecosystem-based management based on his work in the Chesapeake Bay Program.
- 11:00 a.m. Modeling the Atmospheric Deposition of Nutrients.....Dennis**  
Robin Dennis, Senior Scientist with the U.S. Environmental Protection Agency's National Exposure Research Laboratory and STAC Executive Board member, will present findings of atmospheric modeling research in support of the Chesapeake Bay Program, whose products also address atmospheric deposition onto the A-P region.
- 11:30 a.m. Watershed Nutrient Transport Models.....Deerhake**  
Marion Deerhake, Senior Research Environmental Scientist with RTI International's Global Climate Change and Environmental Sciences Unit, will discuss the results of an U.S. Environmental Protection Agency-funded project that forecasted the effects of atmospheric nitrogen deposition on waters of the Neuse Basin and loading to the estuary through use of the SPARROW model.
- 12:00 p.m. A-P Science & Technology Issues.....Laney**  
Wilson Laney, STAC Co-Chair, will facilitate a discussion about science & technology topics raised by Committee members or other meeting participants.
- 12:45 p.m. Nutrient Modeling within the North Carolina Division of Water Quality..... Lin**  
Jing Lin, modeler in North Carolina Division of Water Quality's Modeling and TMDL Unit, will discuss the use of nutrient models to support total maximum daily load (TMDL) and other nutrient management activities in A-P watersheds.
- 1:15 p.m. Network Modeling of Estuarine Nitrogen Cycling .....Christian**  
Robert Christian, Distinguished Research Professor of Biology at East Carolina University, will discuss the role of network modeling to track the movement of nitrogen in the A-P Estuarine System.
- 1:45 p.m. Modeling and Mapping of Ecosystem Services and Human Well-Being....Angermeier**  
Paul Angermeier, Professor of Fisheries & Wildlife Sciences at Virginia Polytechnic Institute & State University, will discuss research plans of a multi-investigator, US Geological Survey-funded project that will investigate spatial linkages between biophysical ecosystem changes, capacity and flow of aquatic ecosystem services, and human well-being in the A-P region.

**2:30 p.m. Panel Discussion: Integrating Nutrient Models to Support Ecosystem-Based Management in the Albemarle Pamlico Basin.....Shenk**  
Leadoff speaker, Gary Shenk, will facilitate a panel discussion of meeting presenters on how model development and application can be applied most effectively in APNEP's ecosystem-based management framework.

**3:00 p.m. Adjourn**

Note: The scheduled times for issue topics are estimates and may vary during the meeting.