

# **Breakout Group #3:**

**Urban and Aquatic Discharge of  
Reactive Nitrogen**

# BG#3: Overview

- The breakout group had a number of recommendations to better focus the INC report and emphasize the practical needs of the Agencies and States.
- Comments were made in the areas of regulation, education, technology, cap and trade, market incentives, inter-governmental cooperation, and the special needs of states.

# **Breakout Group #3: Regulatory**

Wastewater treatment plants

Stormwater

Extending regulatory authority

TMDL

Using 319 as a device

# **Breakout Group #3: Regulatory**

- EPA should push the states to make better use of water quality standards to manage nutrients

# Breakout Group #3: Educational

- Educational program must include other issues like carbon, energy, energy efficiency, green infrastructure, smart growth
- To motivate the program needs to define/describe the problem(s) in relation to human concerns
  - Example: Native American with tear in his eye
  - Pfiesteria in Chesapeake Bay

# Breakout Group #3: Technology

- Force a consideration of alternatives to standard secondary treatment
- Look for symbiotic effects
- Understand the cost of treatment technologies and their unintended consequences such as energy usage and putting N<sub>2</sub>O into the atmosphere

# Breakout Group #3: Technology

- Develop nitrogen budgets with uncertainty analyses at regional levels, address the local impacts of the various nitrogen species, and provide states with the technical help to develop cascades and budgets for their watersheds and to evaluate boundary conditions for neighboring states.

# BG#3: Technology

- INC should recommend the use of green infrastructure in new developments and retro fit it into existing areas.
- Develop a decision framework to assess and determine appropriate solutions