

# **2008 National Monitoring Conference Atlantic City, NJ**

## **Panel Discussion**

### **National Water Quality Monitoring Network for U.S. Coastal Waters and their Tributaries**

**Moderator**

**Tracy C. Hancock**

**USGS**

# National Water Quality Monitoring Network for U.S. Coastal Waters and their Tributaries

- Facilitated discussion: pilot study phase
- Focus: design refinements and future directions
  
- Introduction
- Topical presentations by Panelists followed by questions and discussion
- Wrap-up/Summary

# Session B-1 Panelists

## Representing Workgroups of the National Water Quality Monitoring Network

### **Nutrients Workgroup:**

Jane Caffrey  
University of West Florida  
Center for Environmental Diagnostics and Bioremediation  
Pensacola, FL

### **Contaminants Workgroup:**

Chuck Spooner  
US Environmental Protection Agency (EPA)  
Office of Water  
Washington, DC

### **Biology & Wetlands Workgroups:**

Jawed Hameedi  
National Oceanic and Atmospheric Administration (NOAA)  
Center for Coastal Monitoring and Assessment  
Silver Spring, MD



# Priority Issues, Needs, and Suggestions for the National Water Quality Monitoring Network

- How to monitor:
  - Link results with climate change (changing weather patterns)
  - multiple hydrologic media (greater emphasis on GW and atmosphere)
  - off-shore components, link with NOAA IOOS and NWLON
- How to connect data and results to models for forecasting/anticipating changing conditions
- What products can we use or create to do environmental monitoring in the future

## Priority Issues, Needs, and Suggestions for the National Water Quality Monitoring Network

- Need good data management tools
  - Interactive web query
  - Downloadable to excel
  - Comparable with state systems
  - Avoid repetition, use a central organizer (portal)
- Use remote sensing techniques to understand parts of the system which are not being monitored. Do forecasting models, but be careful about affects on public perception and economy.

## Priority Issues, Needs, and Suggestions for the National Water Quality Monitoring Network

- Look for opportunities to partner for collaboration and financial assistance
- Outreach: which activities are worth pursuing and where (or to whom) should we direct our efforts?
- How do we (or should we) meet state water info needs?
- Should we be monitoring for emerging contaminants, hormones, personal care products? Start a sub-group within the Methods Board to investigate.

## Priority Issues, Needs, and Suggestions for the Nutrients Workgroup of the National Water Quality Monitoring Network

- Do not expect to need to expand nutrient analytical schedule to move from pilots to larger scale
- Need analytical performance standards between labs
- Investigate interaction of climate change & phytoplankton
- Need dissolved silica for N/Si ratio
- Use automatic sensors
- Investigate river flow and nutrient concentrations

# Priority Issues, Needs, and Suggestions for the Contaminants Workgroup of the National Water Quality Monitoring Network

- Investigate which emerging contaminants to include in national monitoring
  - start a sub-group of Methods Board, example products: develop a proposed structure on how to deal with these and summarize previous work
  - Link with USGS toxics program 2<sup>nd</sup> round
  - Consider land use for source to help narrow choices, especially for fresh water
  - Look for additional funding and try to partner/collaborate
- Characterize/develop indicator species for target classes of contaminants
  - Look at environments where these accumulate
  - Allow for more reconnaissance studies
  - Look for case studies which Pilots are already doing on specific compounds or classes

## Priority Issues, Needs, and Suggestions for the Biology Workgroup of the National Water Quality Monitoring Network

- How to take results to managers in a clear and understandable format with standard methods and explanations?
- Use high resolution mapping to explain environmental changes related to biology
- Greater emphasis on water-quality issues of coastal systems