



**NJ Water Monitoring & Assessment Technical Workshop**  
**Rutgers EcoComplex, Columbus, NJ**  
**April 20, 2006**

*Theme: Integrated Monitoring to Enhance Water Resource Management*

**FINAL AGENDA**

- 8:30-9:00am**      **Registration & Posters**
- 9:00-11:10am**      **Plenary Session & Keynote**  
9:00-9:05 AM      **Welcoming Remarks** - Rick Kropp (*USGS/NJ Water Science Center*)  
9:05-9:45 AM      **Water Monitoring in the Age of Information** (*Keynote*)  
- Tracy Mehan (*The Cadmus Group, former EPA Office of Water Assistant Administrator*)  
9:45-10:05 AM      **Monitoring: Use & Coordination in NJ Water Resource Management** – Leslie McGeorge (*NJDEP/Water Monitoring & Standards*)  
10:05-11:10 AM      **Panel: Water Monitoring in NJ – Current & Future Directions**  
*Moderator:* Robert Tudor (*Delaware River Basin Commission*)  
*Speakers:* David Stedfast (*USGS/NJ Water Science Center*), Karl Muessig (*NJDEP/NJ Geological Survey*), Alfred Korndoerfer (*NJDEP/Water Monitoring & Standards*), Robert Connell (*NJDEP/ Water Monitoring & Standards*), Debra Hammond (*NJDEP/Water Monitoring & Standards*)
- 11:10-11:30am**      **Break & Posters**
- 11:30am-12:45pm**      **Breakout Session #1**  
Topics: Emerging Technologies – Water Quality  
Stormwater  
Mercury: Impacts, Sources & Monitoring
- 12:45-1:45pm**      **Lunch (with speaker)**  
*EcoComplex Welcome* – Keith Cooper (*Executive Vice Dean of Agriculture and Natural Resources and Executive Director of the Rutgers EcoComplex*)  
*Lunch Topic: IOOS: Linking Resource Management to Monitoring*  
Speaker: J. Frederick Grassle, *Rutgers Institute for Marine & Coastal Sciences*
- 1:45-3:00pm**      **Breakout Session #2**  
Topics: Emerging Technologies – Water Quantity/Flow  
Nutrients/Biocriteria  
Microbial Source Trackdown
- 3:00-3:30pm**      **Break & Posters**
- 3:30-4:45pm**      **Breakout Session #3**  
Topics: Emerging Contaminants  
Ecological Monitoring  
Recreational Beach Monitoring
- 4:45pm**      **Depart**

## Breakout Sessions

### Session 1

#### **A. Emerging Technologies: Water Quality**

*Robert Connell, NJDEP/Water Monitoring & Standards - Moderator*

- Integrated Approaches for Coastal Monitoring ([Robert Connell](#), NJDEP/Water Monitoring & Standards)
- The Evolution of the NJ Observing System: The Potential for Water Quality Management ([Oscar Schofield & Scott Glenn](#), Rutgers Institute for Marine & Coastal Sciences)

#### **B. Stormwater Monitoring**

*Kirk Barrett, Passaic River Institute/Montclair State University - Moderator*

- Monitoring Stormwater for Development of TMDLs ([Chris Obrupta](#), Rutgers Cooperative Extension/Cook College, Department of Environmental Sciences)
- Monitoring Urban Stormwater Best Management Practices: Why is it Important and What to Monitor ([Dr. Scott Struck](#), EPA National Risk Management Laboratory, Edison)
- Monitoring Stormwater from Industrial Sites for Permit Compliance and Environmental Effects: a 10 Year Review ([Brian McLendon](#), NJDEP/Division of Water Quality)

#### **C. Mercury: Impacts, Sources & Monitoring**

*Leslie McGeorge, NJDEP/Water Monitoring & Standards - Moderator*

- Why Monitor for Mercury: Overview of Bioaccumulation, Concentrations, Fish Advisories and Criteria in NJ ([Gary Buchanan](#), NJDEP/Division of Science, Research & Technology)
- Sources of Mercury to New Jersey's Environment and TMDL Development: What's New? ([Michael Aucott](#), NJDEP/ Division of Science, Research & Technology)
- Low Level Mercury Monitoring; Part A: Method 1631E- Mercury Laboratory Analysis ([Anthony Carroll](#), EPA Region 4, Science and Ecosystems Support Division); Part B: Field Procedures and Preliminary Water Results ([Thomas Vernam](#), NJDEP/ Water Monitoring & Standards)

### Session 2

#### **A. Emerging Technologies: Water Quantity/Flow**

*Richard Kropp, USGS NJ Water Science Center - Moderator*

- New Technologies for Measuring Stream Flow ([Timothy Reed](#), USGS/NJ Water Science Center)
- Measuring Evapotranspiration in the Pinelands ([Robert Nicholson](#), USGS/NJ Water Science Center)

#### **B. Nutrients/Biocriteria**

*Thomas Belton, NJDEP/Division of Science, Research & Technology - Moderator*

- Diatom-Based Models and Indices for Monitoring Nutrient Enrichment in NJ Streams ([Dr. Don Charles](#), The Philadelphia Academy of Natural Sciences)
- A Nutrient Biotic Index (NBI) for Use with Benthic Macroinvertebrate Communities ([A.J. Smith](#), NYDEC/Stream Monitoring)
- Nutrient TMDL Development for New Jersey - New York Harbor Estuary ([Marzooq Al-Ebus](#), NJDEP/Division of Watershed Management)
- Delaware Estuary Nutrient Approach ([Edward Santoro](#), Delaware River Basin Commission)

#### **C. Microbial Source Trackdown**

*Robert Connell, NJDEP/Water Monitoring & Standards - Moderator*

- New Jersey's Strategy for Microbial Source Tracking ([Eric Feerst](#), NJDEP/Water Monitoring & Standards)
- Monmouth University's MST Work ([John Tiedemann](#), Monmouth University)
- Shoreline Surveys and an Innovative CEHA Laboratory ([William Simmons](#), Monmouth County Health Department)

### Session 3

#### **A. Emerging Contaminants**

*Richard Kropp, USGS NJ Water Science Center - Moderator*

- Pesticide Degradates ([Jeffrey Fischer](#), USGS/NJ Water Science Center) • Tentatively Identified Compounds (TICs) by State-of-the-Art Solid Phase Extraction: Mining the Preliminary Results ([Lee Lippincott](#), NJDEP/Division of Science, Research & Technology) • Emerging Contaminants in our Water Resources ([Herb Buxton](#), USGS/NJ Water Science Center)

#### **B. Ecological Monitoring**

*Alfred Korndoerfer, NJDEP/Water Monitoring & Standards - Moderator*

- Bioassessment Integration Study: Systems Ecology Evaluation of USEPA Rapid Bioassessment Protocols in New Jersey (Macroinvertebrates, Periphyton, Fish and Habitat) ([Dr. Richard Horwitz](#), The Philadelphia Academy of Natural Sciences) • Assessing Ecological Impairment in NJ's Estuarine and Coastal Marine Waters: Problems and Solutions ([Michael Kennish](#), Rutgers Institute for Marine & Coastal Sciences/[Nancy Immesberger](#), NJDEP/Water Monitoring & Standards) • Ecological Monitoring in NJ Harbor Waters ([Charles Strobel](#), EPA Office of Research and Development – Atlantic Ecology Division)

#### **C. Recreational Beach Monitoring**

*Becky Cosgrove, Monmouth County Health Department - Moderator*

- NJDEP Cooperative Coastal Monitoring Program ([Virginia Loftin](#), NJDEP/Division of Watershed Management) • 2006 EPA Water Quality Monitoring Program ([Helen Grebe](#), EPA Region 2, Monitoring and Assessment Branch) • County Beach Monitoring Program ([Becky Cosgrove](#), Monmouth County Health Department)