

# 2004 WATERSHED & WETLANDS WORKSHOP

OCTOBER 25 - OCTOBER 28, 2004

ATLANTIC CITY, NEW JERSEY

## MONDAY AFTERNOON, OCTOBER 25

- 10:00 am  
to  
5:00 pm      **Registration** - Victoria Ballroom, Howard Johnson
- 12:30 pm      **Welcome and Workshop Logistics: Ralph J. Spagnolo**  
U.S. Environmental Protection Agency, Region III
- 12:40 pm      **Opening Remarks:**
- Jon Capacasa**, Director  
Water Protection Division  
U.S. Environmental Protection Agency, Region III
- John R. Pomponio**, Director  
Environmental Assessment and Innovation Division  
U.S. Environmental Protection Agency, Region III

## SESSION I: PLANNING AT THE WATERSHED LEVEL

- Moderator:    **Dominique Lueckenhoff**, U.S. Environmental Protection Agency, Region III
- 1:00 pm      **Josephine Axt**, Northern Ecological Associates, Inc., *Ecosystem Restoration Site Screening Analysis for the Upper Rockaway River Watershed, Morris County, New Jersey*
- 1:15 pm      **Nancy Palmstrom**, ENSR International, *Screening Level Ecological Risk Assessment of Contamination in Wetlands Considered for Restoration in Hackensack Meadowland District.*
- 1:30 pm      **Kelly P. Neff**, Maryland Department of the Environment, *Priority Areas for Wetland Restoration, Preservation, and Mitigation in Maryland's Coastal Bays*
- 1:45 pm      **Christina Gray**, Army Research and Development Center Environmental Technology Division, *Watershed Planning and Decision Making*

- 2:00 pm **Sarah Watts**, Northern Ecological Associates, Inc., *Passaic River Analysis of Environmental and Economic Benefits for the Passaic River Flood Damage Reduction Project, Preservation of Natural Flood Storage Areas, New Jersey*
- 2:15 pm **Questions and Answers**
- 2:30 pm **Break**

## **SESSION II: ECOLOGICAL AND WATERSHED-SCALE PROCESSES**

Moderator: **Jay Springer**, New Jersey Department of Environmental Protection

- 3:00 pm **M.R. Williams**, University of Maryland, *Evidence for a Significant Effect of Intertidal Marshes on the Biogeochemistry of N and P in the Patuxent River Estuary*
- 3:15 pm **Kirk R. Barrett**, Montclair State University, *Chemical and Biological Assessment of a Brackish Tidal Marsh in the Hackensack Meadowlands*
- 3:30 pm **Andrew Stephen Rogers**, AOT, Inc., *The Influence of Landscape Position on Coastal Marsh Loss*
- 3:45 pm **James McNair**, Academy of Natural Sciences, *A Watershed Approach to Determine the Benefits of Riparian Reforestation*
- 4:00 pm **Questions and Answers**

## **SESSION III: COASTAL MARSH PROTECTION**

Moderator: **Frank Reilly**, Watersheds and Wetlands Workgroup

- 4:15 pm **The Swamp Gemstone Team**, *A Survey to Explore Landowners' Experiences in Installing Shoreline Erosion Control Projects*
- 4:30 pm **Christine Hobble**, New Jersey Meadowlands Commission/Meadowlands Environmental Research Institute, *Spatially Integrated Coastal Permitting Assistant System (SICOP) for the Hackensack Meadowlands District, New Jersey*
- 4:45 pm **Questions and Answers**
- 5:00 pm **Social Hour** - Scribbles Café, Holiday Inn

**TUESDAY MORNING, OCTOBER 26**

**SESSION IV: WATERSHED RESTORATION – INITIATIVES AND CASE STUDIES**

Moderator: **Gene McColligan**, New Jersey Department of Environmental Protection

9:00 am **Stephen Williams**, Delaware Department of Natural Resources and Environmental Control, *Delaware's Ecological Restoration Initiative*

9:15 am **Richard Mogensen**, EarthMark Companies' Mid-Atlantic Mitigation, *North Carolina Ecosystem Enhancement Program – A Private Mitigation Providers Perspective*

9:30 am **Sally Brown**, University of Washington, *Restoration of a Metal Contaminated Wetland Using Biosolids Compost and Wood Ash*

9:45 am **Don Dorfman**, Monmouth University, *Dam Construction on the Senegal, and Mitigation: a Case History*

10:00 am **Questions and Answers**

10:15 am **Break**

**SESSION V: REMOTE SENSING OF NATURAL SYSTEMS**

Moderator: **Karl Szekiolda**, City University of New York

11:00 am **Vic Klemas**, University of Delaware, *Remote Sensing of Coastal Marshlands*

11:15 am **Nancy B. Rendall**, Blue Moon Environmental, Inc., *Use of GIS Data to Identify Significant Wetlands in the Moose Mountains Regional Greenway*

11:30 am **Jin Ahn**, The Graduate School and University Center, Earth and Environmental Sciences, *Recognition of Ditches in Coastal Wetlands with Aerial Photography*

11:45 am **Al Modjeski**, ENSR International, *Submerged Aquatic Vegetation Aerial Hyperspectral Imaging and Ground-Truthing Survey, Manahawkin Bay, Ocean County, New Jersey*

12:00 pm **Karl Szekiolda**, City University of New York, *Eutrophication in Coastal Marshlands and Estuaries of New York*

12:15 pm **Questions and Answers**

12:30 pm **Lunch**

### **TUESDAY AFTERNOON, OCTOBER 26**

#### **SESSION VI: TOOLS FOR ANALYZING WETLANDS I**

Moderator: **Jeff Lapp**, U.S. Environmental Protection Agency, Region III

2:00 pm **Phil Zurheide**, University of Maryland, *A Field Indicator for Anomalous Bright Loamy Hydric Soils of the Mid-Atlantic Coastal Plain*

2:15 pm **R. P. Szuch**, Blasland, Bouck & Lee, Inc., *Mapping Clay Aquitards Using Ground-Penetrating Radar – A Tool for Assessing Wetland Restoration Sites*

2:30 pm **Lenore Vasilas**, Natural Resources Conservation Service, *The Use of Electronic Soil Surveys for Wetlands and Watershed Planning*

2:45 pm **Questions and Answers**

3:00 pm **Break**

#### **SESSION VII: BREAKOUT SESSIONS - DEVELOPING STRATEGIES FOR THE IMPLEMENTATION OF MITIGATION BANKS**

3:30 pm A selected panel, including representatives from various disciplines, will lead a discussion on compensatory mitigation. The audience will be divided into groups to participate in formulating recommendations in response to questions relating to wetland mitigation.

**TOPIC I:** How can we better define “success” in compensatory mitigation projects?  
**Howard Johnson-Victoria Room-1**

**TOPIC II:** How do we develop and incorporate flexible conditions which allow for adaptive management during construction of wetland restoration, creation, and enhancement programs?

**Howard Johnson-Victoria Room-2**

**TOPIC III:** What do we mean when we talk about “taking a watershed approach” to mitigation? (Size of watershed, watershed level, prioritization of mitigation needs, greenways and conservation corridors, riparian buffers?)

**Howard Johnson-Crystal Ballroom**

5:00 pm **Adjourn**

5:15 pm **Social Hour** - Scribbles Café, Holiday Inn

7:00 pm **Evening Dinner and Musical Entertainment**  
to  
Constitution Ballroom, Holiday Inn

11:00 pm

**WEDNESDAY MORNING, OCTOBER 27**

**SESSION VIII: TOOLS FOR ANALYZING WETLANDS II**

Moderator: **Lenore Vasilas**, Natural Resources Conservation Service

9:00 am **Martin C. Rabenhorst**, University of Maryland, *Indicator of Reduction in Soil (IRIS): Evaluation of a New Approach for the Assessment of Reduced Conditions in Soil*

9:15 am **Martin C. Rabenhorst**, University of Maryland, *Use of Indicator of Reduction in Soils (IRIS) Tubes to Assess Hydric Soil Conditions: Seasonal Effects*

9:30 am **Peg McBrien**, The Louis Berger Group, Inc., *Hydrogeomorphic (HGM) Functional Assessment Model and Guidebook for Tidal Fringe Wetlands in the New Jersey Meadowlands*

9:45 am Questions and Answers

10:00 am **Break**

**SESSION IX: WETLAND CREATION AND RESTORATION IMPROVEMENT STRATEGIES**

- Moderator: **Tom Slenkamp**, U.S. Environmental Protection Agency, Region III
- 10:30 am **Balci Pinar**, Ecology & Environment, Inc. and Boyd Gunsalus, South Florida Water Management District, *Development of Performance Measures for Watershed Wetland Restoration: Loxahatchee Watershed*
- 10:45 am **Eugene McColligan**, New Jersey Department of Environmental Protection, *Exotic Species Management Issues in an Urbanizing Watershed: Establishing a Linkage Between Stressors and Impairments*
- 11:00 am **Robert E. Meadows**, Delaware Division of Fish & Wildlife, *The Native Reserve Program, a Landscape Approach to Controlling Introduced Populations of Phragmites in Mid-Atlantic Tidal Marsh Systems.*
- 11:15 am **Bruce J. French**, Gannett Fleming, Inc., *Salinity Control as a Mitigation Strategy for Habitat Improvement of Impacted Estuaries*
- 11:30 am **Questions and Answers**
- 11:45 am **Lunch Speaker:**  
**Bill Sheehan**, Hackensack Riverkeeper, *Turning the Tide in the Meadowlands: How Science Effects Change*

### **WEDNESDAY AFTERNOON, OCTOBER 27**

#### **SESSION X: RESTORATION: LANDOWNERS' PERSPECTIVES**

Moderator: **Tom Barthelmeh**, Delaware Department of Natural Resources and Environmental Control

Presenters are private landowners who have implemented restoration projects on their properties and have contributed to restoring aquatic systems in their watersheds. Panelists include:

- 1:15 pm **David Smith**, Seaford, Delaware
- 1:30 pm **Latte Hoch**, Ellendale, Delaware
- 1:45 pm **Joyce Webber**, Kenton, Delaware
- 2:00 pm **William Battista**, MaryDel, Delaware
- 2:15 pm **Questions and Answers**
- 2:30 pm **Break**

## **SESSION XI: WAYS TO IMPROVE THE SUCCESS OF COMPENSATORY MITIGATION**

Moderator: **Jeff Thompson**, Maryland Department of the Environment

3:00 pm **Peter R. Taylor**, U.S. Environmental Protection Agency, Region II,  
*Factors Affecting Wetland Habitat Restoration Outcomes in the Lake Ontario Basin and Recommendations for the Future: a Watershed Level Analysis*

3:15 pm **Mary Anne Thiesing**, U.S. Environmental Protection Agency, Region II,  
*When Does Mitigation in the Mid-Atlantic Work? And If Not, Why Not?*

3:30 pm **Mary Anne Thiesing**, U.S. Environmental Protection Agency, Region II,  
*Improving the Success of Wetland Mitigation in the Mid-Atlantic: Improving the Odds and Improving the Process*

3:45 pm **Questions and Answers**

## **SESSION XII: ROVER REPORTS**

Moderator: **Rich Pepino**, U.S. Environmental Protection Agency, Region III

4:00 pm A panel of four “rovers” will critically review the presentations of the Workshop in light of their own interests and disciplines. Rovers will be selected to ensure representation of resource managers, regulators, non-governmental organizations, the regulated public, resource users, and researchers. This session should be of great interest, as the rovers will comment on information gaps and needed scientific information; as well as help to focus subsequent research and efforts in the fields needed to adequately protect and manage the watersheds and wetlands.

5:00 pm **Closing Remarks**

5:15 pm **Adjourn**

## **POSTER PRESENTATIONS**

**T. Barthelmeh, M. Biddle**, Delaware Department of Natural Resources and Environmental Control

**A. Rizzo**, U.S. Fish and Wildlife Service

**T. Canfield, C. Rhodes, and R. Landy**, U.S. Environmental Protection Agency,  
*Effectiveness of Restored Wetlands for the Treatment of Agricultural Runoff*

**Don Dorfman**, Monmouth University, *Wheat for Roads, Bangladesh: A Case History*

**THURSDAY, OCTOBER 28**

8:30 am

to

4:00 pm

**Field Trip: Wetlands of the N.J. Pine Barrens**