

## Program Agenda

Flood Protection and Ecosystem Restoration Conference  
Dalton J. Woods Auditorium  
Energy, Coast and Environment Building  
Louisiana State University

**January 22-23, 2009**

*Baton Rouge, LA*

### Day 1

8:00 – 8:15 am

#### **Registration**

8:15 am

#### **Welcome, Opening Remarks**

Garrett Graves, Director, Coastal Protection Restoration Authority

**8:30 am**

#### **Session 1: Comprehensive Planning**

8:30 – 9:30 am

#### **Session 1a: *Comprehensive Master Planning for Restoring Ecosystems and Protecting Communities***

Mark Davis, Senior Research Fellow and Director of the Institute on Water Resources Law and Policy, Tulane University

#### **Panel Discussion**

Panel Moderator: Mark Davis

Panel Members:

Carlton Dufrechou, Director, Lake Pontchartrain Basin Foundation  
Don Davis, Louisiana State University

- What approaches have been used for comprehensive master planning that address complex environmental problems?
- What statewide or regional examples have been used successfully to do comprehensive master planning?
- How can levee districts and other local or regional entities support comprehensive ecosystem restoration and hazard mitigation planning and implementation efforts?
- What are the benefits for approaching complex environmental issues through a comprehensive master planning initiative?
- What are some of the assumptions, tradeoffs and challenges to comprehensive ecosystem restoration and hazard mitigation planning?

9:30 – 9:45 am

Break

9:45 – 11:30 am

#### **Session 1b: Planning Resources for Communities**

Stephen D. Villavaso, FAJCP, J.D., Villavaso & Associates

#### **Panel Discussion**

Moderator: Stephen D. Villavaso

Panel Members:

Eric Shaw, Community Planning, Louisiana Office of State Planning, Louisiana Recovery Authority

Sandra Gunner, Intergovernmental Affairs and Community Development Director, Louisiana Recovery Authority

Dr. Ralph Thayer, Office of Federal State Reimbursement, Public Assistance

Manager – Office of the Mayor, City of New Orleans  
Alexandra Evans, Transportation, Coastal Protection and Environmental Adviser,  
Louisiana Recovery Authority

- What federal and state resources are available to local communities, regional authorities, or levee districts that can support comprehensive planning and hazard mitigation initiatives?
- What approaches are available that have been used in local communities to support community mitigation efforts, restoration initiatives, flood protection or planning initiatives (zoning and land use; approaches to community planning; flood plain management and FEMA's Flood Insurance Program; hazard mitigation; and comprehensive local emergency response plans)?
- What are the advantages and limitations of non-structural approaches to dealing with natural hazards?
- Why is coordination within the entire watershed so critical to flood damage reduction program efforts?

**11:30 am – 1:00 pm      Lunch**

**1:00 pm                      Session 2: Coastal Hazards and Inland Flood Risks**

1:00 pm – 2:00 pm      **Session 2a: *Non-Structural Controls***  
Dr. Melanie Gall, Assistant Professor-Research, Stephenson Disaster  
Management Institute, LSU

**Panel Discussion**

Moderator: Dr. Melanie Gall

Panel Members:

Eric Shaw, Community Planning, Louisiana Office of State Planning, Louisiana  
Recovery Authority

Sandra Gunner, Intergovernmental Affairs and Community Development  
Director, Louisiana Recovery Authority

Dr. Ralph Thayer, Office of Federal State Reimbursement, Public Assistance  
Manager – Office of the Mayor, City of New Orleans

Alexandra Evans, Transportation, Coastal Protection and Environmental  
Louisiana Office of State Planning, Louisiana Recovery Authority

Dick Grimillion, Emergency Manager, Calcasieu Parish

- What are various types of non-structural measures to mitigate flooding hazards (building codes, elevating structures, zoning restrictions, etc.)?
- What financial resources are available or needed to utilize the options that non-structural controls provide?
- What are alternative uses for repetitive flood-prone areas?
- How widely used and how difficult to implement are non-structural measures?
- What are issues associated with non-structural measures (legal, public support, etc)?

2:00 – 2:15 pm              Break

**2:15 – 3:15                      Session 2b: Coastal Hazard and Storm Surge Modeling**

Dr. Hassan Mashriqui, Hydrologist, National Weather Service. Silver Spring MD

**Panel Discussion**

Moderator: Dr. Hassan Mashriqui

Panel Members:

Dr. Ehab Meselhe, Hydrologist, University of Louisiana Lafayette, Lafayette, LA  
Dr. Joe Suhayda, Department of Oceanography and Coastal Sciences, LSU  
Windell A. Curole, General Manager, South Lafourche Levee District

- What factors influence coastal hazard models and their use in protecting our communities?
- What are the uncertainties and limitations that are inherent in coastal hazard models, the data and the outputs from these models?
- What are the appropriate uses of these models in planning, mitigation, recovery and emergency response?
- How can technology be used to ensure that the most accurate data are included in hazard models?
- How are model outputs being used to enhance coastal planning and mitigation initiatives?

3:15-3:30 pm                      Break

3:30 – 5:00 pm                      **Session 2c: *Hydrology and Inland Flooding Issues***

Dr. Ehab Meselhe, Hydrologist, University of Louisiana Lafayette, Lafayette, LA

#### **Panel Discussion**

Moderator: Dr. Ehab Meselhe

Panel Members:

Dr. Hassan Mashriqui, Hydrologist, National Weather Service, Silver Spring MD  
Dr. Joe Suhayda, Department of Oceanography and Coastal Sciences, LSU  
Windell A. Curole, General Manager, South Lafourche Levee District

- What are the issues associated with defining the nature and extent of inland flooding hazards and protecting our communities from these risks?
- What are the limitations in modeling inland flooding and the use of model results in flood plain management?
- What are the problems and issues associated with communicating the risks associated with inland flooding?
- How are flood models being used in planning and mitigation efforts?

5:00 pm                                      *Day 1 Workshop Wrap-up, Assessment and Remarks*

## **DAY 2**

8:00 – 8:15 am                      **Registration**  
8:15 am                                      **Welcome, Opening Remarks**

**8:30 am                                      Session 3: Planning Flood Protection Systems**

8:30 – 10:0 am                      **Session 3a: *Structural Controls: Why is it so difficult to design and build levees in the Gulf Coast?***

Dr. Reda M. Bakeer, P.E., Chief Engineer, Ardaman & Associates, Inc., New Orleans, LA

- Given the flooding in Louisiana in 2005 and throughout the Mid-west during 2008, what are the key factors that influence the functioning of flood protection structures (levees, I-walls, T-walls, floodgates, etc.)?
- Examine the effect of local and global settlement and ambient environmental conditions on short- and long-term performance and effectiveness.

- What role may global warming and sea level rise along with subsidence have on the performance of levees?
- What role does our natural ecological system contribute to flood protection of our communities? What are the limitations inherent in the use of multiple elements and redundancy (pumping systems/drainage is part of flood control) in drainage and flood protection systems?

10:00 – 10:20 am          Break

10:20 – 12:00              **Session 3b: *Planning of Flood Protection Systems***

Dr. J. David Rogers, P.E., R.G., Karl F. Hasselmann Chair, Dept. of Geological Engineering, University of Missouri, Rollo, MO

- Flood control systems (including dams and reservoirs, dikes and levees, retaining ponds, flood channels, and floodwalls) play critical roles in protecting property from flooding and coastal hazards. Are expectations from the public, government officials and the experts realistic? How do we deal with these expectations?
- Identify and explain the level of risk/reliability associated with different flood protection systems and structures.
- Explain the issues associated with design parameters that may impact selection of a flood protection structure (rights of way, ground elevation, factors of safety, level of protection, SWL, waves, etc.).
- What design forces, parameters and criteria are used in the design of flood protection structures?
- What are the issues associated with risk versus cost/benefit ratio based design.

12:00 – 1:00 pm              **LUNCH**

### **Session 4: Maintaining Flood Protection Systems**

1:00 – 2:00 pm              **Lessons Learned from Hurricane Gustav and Ike 2008**

Jerome Zeringue, Coastal Protection Restoration Authority

#### **Panel Discussion**

Moderator:                  Jerome Zeringue

*Panel Members:*

Rene Dolfsma, Arcadis and Mathijs van Ledden of Royal Haskoning, Netherlands

Robert A. Turner, Jr., Regional Director, Southeast Louisiana Flood Protection Authority - East

Gerald Spohrer, Executive Director, Southeast Louisiana Flood Protection Authority - West

Steven C. Wilson, President - At Large, Pontchartrain Levee District

2:00 – 2:20 pm              **Break**

### **Session 5: Enhancing Flood Protection Systems**

2:20 – 3:45 pm              **Session 5a: *Strategies for Enhancing our Flood Protection System***

#### **Panel Discussion**

Panel Members:

Dr. Reda M. Bakeer, P.E., Chief Engineer, Ardaman & Associates, Inc.  
Dr. J. David Rogers, P.E., R.G., Karl F. Hasselmann Chair, Dept. of Geological Engineering, University of Missouri, Rollo, MO

- Given the current state of our coastal and inland flood protection systems, what alternatives do we have to enhance our system?
- What resources are available that can be used in these efforts?
- If additional resources were available, how should they be used to enhance our ecological restoration and flood protection systems?
- What do the performance of the flood systems in the Mid-West in 2008 and the Hurricanes of 2005 convey about flood protection system failures?
- What issues do these flood performance systems present in ensuring that our levees meet their intended purpose and goals?

**3:00 – 3:30 pm**

**Session 5b: Community Strategies for Dealing with Risk**

Dr. Shirley Laska, Dept. of Sociology, CHART, Univ. of New Orleans,  
New Orleans, LA

**Panel Discussion**

Moderator: Dr. Shirley Laska

Panel Members:

Dr. Reda M. Bakeer, P.E., Ardaman & Associates, Inc.

Dr. J. David Rogers, P.E., R.G., University of Missouri, Rollo, MO

- What approaches should be considered in working with community partners to enhance flood and storm risk reduction activities?
- How do we successfully encourage a new storm risk-reduction culture?
- Can we learn from new culture efforts such as energy conservation how to create that culture?
- How might the tools available from government agencies such as those provided by FEMA's National Flood Insurance Program be used more effectively to achieve community-wide commitment to risk-reduction?
- What makes a difference for Louisiana public officials and residents who have created effective risk-reduction efforts?

5:00 pm

*Summary, Closing Remarks, Lessons Learned*