

**24<sup>th</sup> Annual Louisiana Remote Sensing and GIS Workshop**  
**April 8, 9, and 10, 2008**  
**Lindy C. Boggs Conference Center**  
**New Orleans, Louisiana**

**Agenda**

**Tuesday, April 8, 2008**

8:00 –2:00                   Registration

8:30 - 8:40                   **Welcome and Housekeeping**  
                                  Welcome – Craig Johnson

                                  Housekeeping — Craig Johnson

8:40 - 9:20                   **Plenary Speaker – Introduction, Tony Lewis**

***Rigid Designs in a Resilient Landscape: New Orleans and Floods***

Dr. Craig Colten, Carl O. Sauer Professor of Geography, Department of Geography and Anthropology, Louisiana State University, Baton Rouge, Louisiana

9:20 – 10:20               **Session 1**  
**Planning and GIS**  
**Moderator -- John Sheehan**

*Leading Louisiana...Baton Rouge G.I.S.*

Warren L. Kron, Jr. and Justin Priola, City-Parish Planning Commission, Baton Rouge, LA

*A GIS Assisted Hydrological Regionalization Project for East Baton Rouge Parish to Help with the Environmental Planning Process*

Jose E. Villalobos-Enciso, LSU, Baton Rouge, LA, and Quang Tran, City-Parish Planning Commission, Baton Rouge, LA

*The Louisiana Proposed “Elevation for the Nation” Business Plan Components*

David Gisclair, Louisiana Oil Spill Coordinator’s Office, Baton Rouge, LA

10:20 – 10:40

**Break**

10:40 – 12:00

**Session 2**

**Habitat Assessment**  
**Moderator, Bo Blackmon**

*Habitat Characteristics of the Ivory-Billed Woodpecker in Louisiana:  
Analysis of 1938 Aerial Photography*

Christopher Wells and Lawrence Handley, USGS, and Jason Dugas, IAP World Services, National Wetlands Research Center, Lafayette, LA

*Temporal and Spatial Change in a River Delta*

Molly McGraw, Southeastern Louisiana University, Hammond, LA

*The Delta Research and Global Observation Network*

Cindy Thatcher, IAP World Services, Inc., Dr. Gregory Smith and Dr. Scott Wilson, USGS, National Wetlands Research Center, Lafayette, LA

*Land-Cover and Land-Use Change Process Mining*

Fei Wang, Louisiana Tech University, Ruston, LA

12:00 - 1:00

**Lunch**

**Luncheon Presentation -- Inner Corridor Technologies (Teach-ME-GIS), Houston, TX** – Jennifer Harrison

1:00 - 2:40

**Session 3**

**Student Session**

**Moderator, Joe Holmes**

*Remote Sensing and Privacy Issues*

Lynn F. Brien, Department of Geography, University of New Orleans, New Orleans, LA

*Grassroots: Policy & Planning*

Caitlin M. Heckathorn, University of New Orleans, New Orleans, LA

*New Orleans after Katrina: GIS and Cultural Resources Recovery*

Aram Parrish Lief, School of Urban Planning and Regional Studies, University of New Orleans, New Orleans, LA

*GIS Analysis of Continuous Patterns of Landloss in the Louisiana Wetlands, as a Result of Human Activity Post Katrina 2005*

Jacquole Landry, Southern University, Baton Rouge, LA

*Creation of a Current Resource for Different Variables in Southern Louisiana and Analysis of the Change in Each Variable over Time*

Mykel D. Delandro, Southern University, Baton Rouge, LA

2:40 – 3:00

**Break**

3:00 – 3:40

**Plenary Session – Introduction, DeWitt Braud**

*Delta Z: New Orleans' Ambivalent Relationship with its Topographic Elevation*

Richard Campanella, Tulane University's Center for Bioenvironmental Research, New Orleans, Louisiana

3:40 - 5:20

**Session 4  
Remote Sensing Applications  
Moderator, Fran Harvey**

*Tree Species Differentiation in Northwest America using LIDAR Technology*

Sooyoung Kim, University of Washington

*Robust Multi-scale Image Matching for Deriving Surface Velocity Field from Sequential Satellite Imagery*

Lei Wang, Department of Geography and Anthropology, LSU, Baton Rouge, LA, Hongzong Liu, Texas A& M University, College Station, TX, and Ken Jezek, The Ohio State University, Columbus, OH

*Delineating Coastal Wetland Forest Removal in South Louisiana from 2000 through 2006 Using Landsat TM Data*

Dr. Anthony J. Lewis and DeWitt H. Braud, Department of Geography and Anthropology, LSU, and GIS Center, Louisiana Department of Environmental Quality, and John Sheehan, GIS Center, Louisiana Department of Environmental Quality, Baton Rouge, LA,

*Everyone Does It Different!" Using Ethnography, GIS, and Remote Sensing to Map Regional Variations of Chicken and Sausage Gumbo Recipes in the Acadiana Parishes of Louisiana*

Corey David Hotard, Natural Resource Professionals, LLC., Baton Rouge, LA

*Port Security Protection Using Kinetically Propelled Chemical Microsensors Combined With RFIDS Using Critical Infrastructure GIS and Plume Dispersion Modeling*

George Lane, Emergency Response Technology, Louisiana Technology Park, Baton Rouge, LA

5:30 -

**Vendor Reception**

**Wednesday, April 9, 2008**

8:30 – 8:40

**Housekeeping – Craig Johnson**

8:40 – 10:00

**Session 5      Ag and GIS**  
**Moderator, Maurice Wolcott**

*Use of Geographical Information Systems in the Battle against Formosan Termites*

Dr. Frank S. Guillot, Alan R. Lax, and Pedro Levy, USDA ARS Southern Regional Research Center, New Orleans, and Dennis R. Ring, LSU Agricultural Center, Baton Rouge, LA

*Agricultural Autoguidance – Fact, not Fiction*

Dr. Keith Morris, LSU Agricultural Center, Baton Rouge, LA

*Development of Hurricane Rita Sugarcane Disaster Map for the U.S. Department of Agriculture*

Thomas Hymel and Maurice Wolcott, LSU Agricultural Center and Louisiana Sea Grant Program, Jeanerette, LA and Baton Rouge, LA

*Adapting Spatial Technologies in Cotton Management in Louisiana*

Maurice Wolcott, LSU Agricultural Center and Louisiana Sea Grant Program, LSU, Baton Rouge, LA

10:00 – 10:20

**Break**

10:20 – 12:00

**Session 6      Web Mapping Applications**  
**Moderator, Josh Kent**

*Virtual Louisiana*

Brant Mitchell, GOHSEP, Baton Rouge, LA

*Applications of a Pipeline GIS Database for the Northern Louisiana Parishes*

Dr. Michael Camille, University of Louisiana at Monroe, Monroe, LA

*Lincoln Parish GIS Online*

Shane Breland, Lincoln Parish, Ruston, LA

*LouisianaMAP 2.0 (Beta)*

Joshua Kent, Louisiana Geographic Information Center (LAGIC), Baton Rouge, LA

*A Web-enabled, GIS-Integrated Coastal Restoration Information Management System*

Michael Turner, Louisiana Department of Natural Resources, Baton Rouge, LA

12:00 - 1:10

**Lunch**

**Luncheon presentation – Navigation Electronics, Inc., Lafayette, LA,**  
William Poche  
**ASPRS Mid-South Business Meeting, Michael Camille, President**

1:10 – 2:50

**Session 7**  
**Public Health and GIS**  
**Moderator, Aimee Preau**

*Multilevel Spatiotemporal Dual Changepoint Models for Relating Alcohol Outlet Destruction and Changes in Neighborhood Rates of Assaultive Violence*

Dr. Qingzhao Yu, Richard Scribner, Brad Carlin, Katherine Theall, Neal Simonsen, Bonnie Ghosh-Dastidar, Deborah Cohen, and Karen Mason, School of Public Health, LSU Health Sciences Center, New Orleans, LA

*Environmental Predictors of Body Mass Index at the Neighborhood Level*

Dr. Neal Simonsen, Richard A. Scribner, Karen Mason, Joseph Su, and Katherine Theall, School of Public Health, LSU Health Sciences Center, New Orleans, LA

*Tracking Patients Evacuated After Hurricane Katrina: Disease Management with GIS in Louisiana's Public Hospitals*

Dr. Ke Xiao, Dr. Ronald Harris, Dr. Michael Butler, and Dr. Michael Kaiser, School of Public Health, LSU Health Care Services Division, New Orleans, LA

*Estimating and Mapping the Direct Flood Fatality Rate from Hurricane Katrina*

Ezra Boyd, Marc Levitan, and Ivor van Heerden, LSU Hurricane Center, Baton Rouge, LA

*Bars Distribution and College Drinking Across Thirty-One College Campuses*

Richard Scribner, LSU School of Public Health, New Orleans, LA

2:50 – 3:10

**Break**

3:10 – 4:10

**Panel Discussion on Flood Mapping – Moderator, Lynn Dupont**

Zach Toups, Project Manager, Mapping Louisiana, Michael Baker and Assoc.  
Gary Zimmerer, FEMA Region VI, Denton, TX  
Dianne Calhoun, NFIP Flood Insurance Specialist, Michael Baker and Assoc.

4:10 – 5:00

**Plenary Session – Introduction, Larry Handley**

*The NASA Airborne Science Program*

Colonel Andrew Roberts, Director of the Airborne Science Program, National Aeronautics and Space Administration, Washington, D.C.

5:00                    **Special Achievement Award in Remote Sensing and GIS -- Bo Blackmon**  
**Presentation of the Distinguished Service Award – DeWitt Braud**

5:40 --                **Attitude Adjustment Session – Peristyle, New Orleans City Park**

**Thursday, April 10, 2008**

8:30 - 8:40            **Housekeeping – Craig Johnson**

8:40 – 10:00        **Session 8**  
**GIS and Storm Recovery Efforts**  
**Moderator, Craig Johnson**

*Utility of Geospatial Information during the Response and Recovery Efforts Associated with Hurricanes Katrina and Rita*

H. L. Case III, USGS, LaQuinta, CA, Nina Burkardt and Joan Ratz, USGS, Ft. Collins, CO

*Using Resettlement Patterns in a GIS for New Orleans Recovery*  
Gregory C Rigamer, GCR Inc., New Orleans, LA

*Using GIS in the Damage Assessment Process*

Jamie Miller, Governor's Office of Recovery and Renewal, State Of Mississippi, Jackson, MS

*Orleans Parish Demographic Projection Development Applications*

Stephanie Pedro, New Orleans Regional Planning Commission, New Orleans, LA

10:00 – 10:20        **Break**

10:20 – 11:40        **Session 9**

**GIS and Infrastructure Projects in Post-Katrina New Orleans**  
**Moderator, Rob Cunningham**

*The Corps' National Levee Database GIS Initiative*

Ralph A. Scheid, EGIS Team Lead, Geospatial Engineering Office, US Army Corps of Engineers, New Orleans District, New Orleans, LA.

*The Use of GIS In Prioritizing the Rebuilding of Submerged Roads*

Lynn Dupont, New Orleans Regional Planning Commission, New Orleans, LA

*Getting the New Orleans Area Infrastructure Up and Running after Katrina, GIS and Recovery*

Kevin Cruice and Tej Kour, MWH, New Orleans, LA.

*A GIS Emerges from Flood Ravaged Piping*

Benjamin Taylor, Entergy Inc., New Orleans, LA

11:40 --

**Wrap-Up and Adjournment – Larry Handley**

12:00 – 3:00

**Storm Recovery Tour – Tour Guides, Lynn Dupont, Juana Ibanez, and Dr. Patrick Haughey**

*The Rebuilding of New Orleans, a Work in Progress -- Tour of New Orleans Recovery*

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## Posters

### *Wetland Education Through Maps and Aerial Photography*

Authors: Lawrence R. Handley, U.S. Geological Survey, National Wetlands Research Center, Lafayette, LA, Catherine Lockwood, Chadron State College, Chadron, NE, Nathaniel S. Handley, Lafayette, LA, and Jean May-Brett, Louisiana Public Broadcasting, Baton Rouge, LA

### *Habitat Maps of Raccoon Island 2001-2003 With reference to maps from previous years: 1956 - 1998*

Authors: Larry Handley, Chris Wells, and Clint Jeske, USGS, National Wetlands Research Center, Lafayette, LA, Jason Dugas, Kelly Mouton, Johnson Controls, Inc., National Wetlands Research Center, Lafayette, LA, Loland Broussard and Mike Carloss, NRCS, Lafayette, LA, and Greg Linscombe, Louisiana Department of Wildlife and Fisheries, Baton Rouge, LA

### *Fifty Years of Habitat Change: Mobile Bay 1956 to 2000/01*

Authors: Larry Handley, and Chris Wells, National Wetlands Research Center, Lafayette, LA, Jason Dugas, Dennis Lichtenberg, Brandy Winch, and Kelly Mouton, IAP World Services, Inc., National Wetlands Research Center, Lafayette, LA

### *Historical Inventory of Potential Ivory-billed Woodpecker Habitats in the Singer Tract/Tensas National Wildlife Refuge, 1938 and 1998*

Authors: Larry Handley, and Chris Wells, National Wetlands Research Center, Lafayette, LA, Jason Dugas, Dennis Lichtenberg, and Kelly Mouton, IAP World Services, Inc., National Wetlands Research Center, Lafayette, LA

### *Geographic Information Systems and Stand Dynamics:*

#### *Dendroclimatology of an Urban Wooded Area*

Author: Dr. David Holt, Department of Geography, University of Southern Mississippi, Hattiesburg, MS

### *Geographic Information Systems for Natural Resources Management*

Author: Daniel Ashford, Louisiana Department of Natural Resources, Office of Conservation, Baton Rouge, LA

*Katrina's Impacts on Land/Water Changes in the Caernarvon River Diversion Region based on SPOT Imagery*

Authors: Nan Walker, Jingling Shi, and DeWitt Braud, Department of Oceanography and Coastal Sciences and Earth Scan Laboratory, LSU, Baton Rouge, LA, and Lawrence Klage, Georgia State University, Atlanta, GA

*Satellite Detection of Blue-Green Algae in Lac des Allemands using Oceansat-1 OCM data*

Padmanava Dash, Nan Walker, Ana Cristina Garcia, and Sibel Bargu-Ates, Department of Oceanography and Coastal Sciences, LSU, Baton Rouge, LA, James L. Pinckney, Department of Biological Sciences, University of South Carolina, Columbia, SC, and Nancy N. Rabalais, Louisiana Universities Marine Consortium, Cocodrie, LA

*Exploring Geographic Data in a 3-D Environment: 3-D Visualization and Analysis of Severe Tropical Cyclone Larry*

Authors: Keera Pullman, LSU, Werner Bengler and Ana Buleu, Center for Computation and Technology at LSU, Baton Rouge, and Georg Ritter, Institute for Astro- and Particle Physics, University of Innsbruck, Innsbruck, Austria

*A GOES-Eye View of 2005*

Author: Alaric Haag, LSU Earth Scan Laboratory, LSU, Baton Rouge, LA

*Geographic Suitability Analysis for Beneficial Use Dredge Disposal*

Authors: Daniel Bollich, Bert Laprarie, Sr., and Victor Leotta, C-K Associates, LLC, Baton Rouge, LA

*Use of Centrality Index*

Author: Angela Antipova, Department of Geography and Anthropology, LSU, Baton Rouge, LA

*Alternative Fuels: Ethanol (E85)*

Author: Aaron Crockett, Center for Coastal Zone Assessment and Remote Sensing (CCZARS), Southern University and A&M College, Baton Rouge, Louisiana