

31st Annual Louisiana Remote Sensing and GIS Workshop
May 12-13, 2015
Pennington Biomedical Research Center, Baton Rouge, Louisiana

Tuesday, May 12, 2015

8:00 – 2:00 **Registration**

8:45 - 9:00 **Welcome and Announcements**
Fran Fetzer Harvey

9:00 – 10:20 **Session 1: Geologic Mapping**
Moderator: Brad Mooney

1) *Research and GIS Development of the "Base of Holocene" for the Louisiana Coastal Plain and Adjacent Continental Shelf*

Robert Paulsell, Paul Heinrich, John Snead, Riley Milner,
Hampton Peele
Louisiana Geological Survey

2) *Aquifers, Faults, Subsidence, and Lightning Databases*

Kathleen S. Haggard, Les R. Denham, H. Roice Nelson, Jr.
Dynamic Measurement LLC

3) *Mapping of Late Quaternary Paleovalleys on the Outer Continental Shelf Offshore Louisiana*

Paul V. Heinrich¹, Richard P. McCulloh¹, Michael Miner²,
Robert Paulsell¹ and Riley Milner¹
¹Louisiana Geological Survey

²Marine Minerals Program, Bureau of Ocean Energy Management, Gulf of Mexico Region

4) *Louisiana Geological Survey 30 × 60 Minute Surface Geologic Map Coverage of Louisiana*

R. Hampton Peele, Richard P. McCulloh, Paul V. Heinrich, John Snead,
Robert L. Paulsell, Lisa Pond
Louisiana Geological Survey

10:20 – 10:45 **Break**
Vendor showcase area

10:45 – 11:45 **Keynote Address**
Introduction – DeWitt Braud

Dynamic Changes in the Louisiana Coastal Plain Projected for the Next Century

Dr. Harry Roberts
Boyd Professor Emeritus, Louisiana State University
Former Director, LSU Coastal Studies Institute

11:45 - 12:45 **Lunch – provided by sponsors and exhibitors**
LA URISA meeting
ASPRS Mid-South Region Membership Meeting

12:45 – 2:05 **Session 2: Emergency Response**
Moderator: Aimee Preau

1) *Quest for the Holy Grail: Current Water Management and Protection Systems
Data for Coastal Louisiana*
Maurice Wolcott, Louisiana State University Agricultural Center

2) *Regional GIS for Emergency Response*
William Meyers, LEO, LLC

3) *Southeast Louisiana Risk Assessment Map*
Andrew Lade, University of North Carolina Wilmington

4) *The First Ever “Louisiana Geographic Response Plans”*
David Gisclair, Louisiana Oil Spill Coordinator’s Office

2:05 – 2:25 **Break**

2:25 – 3:25 **Session 3: Coastal Mapping**
Moderator: Kathrine Cargo

1) *Methodology Used to Summarize Channel Dimensions in Mardi Gras Pass, a
Recently Formed Tributary of the Mississippi River*
Felix Cretini, Lake Pontchartrain Basin Foundation

2) *Using Landsat Imagery to Monitor the Colored Dissolved Organic Matter
Absorption Coefficient in Barataria Bay*
Ishan Joshi, Eurico D’Sa
Department of Oceanography and Coastal Sciences, School of the Coast and
Environment, Louisiana State University

3) *Spatial and Temporal Trends in Storm Surge Dynamics in Lakes
Pontchartrain and Maurepas*
Ezra Boyd¹, John Lopez¹, Hal Needham², Joe Suhayda³

¹Lake Pontchartrain Basin Foundation
²Louisiana State University Climate Center
³Independent Consultant

3:25 – 3:40 **Break**

3:40 – 4:30 **Plenary Address**
Introduction – Chris Cretini

The use of Remote Sensing and GIS Systems on a Changing Coastal Ecosystem

Tim Osborn
NOAA Office of Coast Survey

4:30 – 6:00 **Sponsor/Exhibitor “Speed Dating” and Reception**
Vendor showcase area

Moderator: Kathrine Cargo
Please join all conference attendees for a fun, informative session hosted by RS/GIS Workshop exhibitors. This will be similar in format to Ignite sessions. This sponsor “speed dating” session will allow all participants to get to know the players in the GIS/RS regional arena.

Wednesday, May 13, 2015

8:50 **Announcements**
Fran Fetzer Harvey

9:00 – 10:20 **Session 4: Geospatial Applications and Technology**
Moderator: Steve Hartley

- 1) *The 3D Elevation Program*
Chris Cretini, U.S. Geological Survey
- 2) *A Geographic Information Systems Based Location Information Correction Framework for Crash Data*
Omer M. Soysal, Highway Safety Research Group, Louisiana State University
- 3) *Edward Wisner Donation: Using GIS for Land Management*
Mark Mitchell, Pond & Company
- 4) *Live Demo of the The Nature Conservancy's Louisiana Freshwater Assessment*
David Harlan, The Nature Conservancy

10:20 – 10:45 **Break**

10:45 – 11:45 **Session 5: Health and Environment**

Moderator: Rusti Liner

- 1) *Health Applications in GIS: Exploring Maps to Guide Health Actions*
Ryan Bilbo¹, Clay Trachtman², Johan Forsman³, Kate Streva²
Louisiana Department of Health and Hospitals Office of Public Health
¹Center for Population Health Informatics
²Section of Environmental Epidemiology & Toxicology
³Louisiana Safe Drinking Water Program
- 2) *Associations Between Childhood Obesity and Food Environment in China*
Peng Jia, Department of Geography and Anthropology, Louisiana State University
- 3) *Ethnography, Historical GIS, and the Narrative of the Shifting Nightlife Landscape of West Baton Rouge Parish, Louisiana*
John W. McEwen, Independent Scholar

11:45 – 12:45 **Lunch – provided by sponsors and exhibitors**

12:45 – 2:05 **Session 6: Public Safety**

Moderator: Craig Johnson

- 1) *Cleaning up your GIS Data for NextGen911*
Sandi Stroud, Michael Baker Jr., Inc.
- 2) *GIS for Day to Day and Large Scale Emergencies in West Baton Rouge Parish*
Anthony Summers, West Baton Rouge Parish Communication District
- 3) *Achieving Location Accuracy in 9-1-1 GIS*
John Adams, Orleans Parish Communication District
- 4) *Surveying the Louisiana 911 Community*
Kathrine Cargo, Orleans Parish Communication District

2:05 – 2:45 **Poster Session**

2:45 – 3:45 **Session 7: Mapping the Landscape**

Moderator: Andy Venuto

- 1) *Mapping the Spatial Distribution of Bottomland Hardwoods in the Tensas River Basin, Louisiana: 1829 - 1855*
Heather Q. Baldwin¹, Wylie C. Barrow, Jr.¹, Jennifer K. DiMiceli², Kelly Purkey³, Chuck Hunter⁴
¹U.S. Geological Survey, National Wetlands Research Center
²Independent Scholar, Malahide, Co. Dublin, Ireland

³U.S. Fish & Wildlife Service, Tensas River National Wildlife Refuge
⁴U.S. Fish & Wildlife Service, Planning and Resource Management,
Southeast Region

2) *Surface Salinity in Lake Pontchartrain Basin Foundation's Hydrocoast Maps*
Aimee Preau, Lake Pontchartrain Basin Foundation

3) *Spatial Analysis of the Arctic Delta Lakes*
Molly McGraw, Southeastern Louisiana University

3:45 – 4:00 **Break**

4:00 – 5:00 **Session 8: Local Government**
Moderator: Fran Fetzer Harvey

1) *GIS Needs Assessment for Small Urbans*
Lynn Dupont, Clare Brown, Alison Maulhardt
Regional Planning Commission for Jefferson, Orleans, Plaquemines, St.
Bernard, St. Tammany and Tangipahoa Parishes

2) *Data Sharing Best Practices*
Warren Kron, City of Baton Rouge and Parish of East Baton Rouge

3) *Crash Analysis for Regional Planning*
Clare Brown, Regional Planning Commission for Jefferson, Orleans,
Plaquemines, St. Bernard, St. Tammany and Tangipahoa Parishes

5:00 – 5:30 **Awards Ceremony**
Moderator: DeWitt Braud

Student Poster Contest Awards
Presenter: Brent Yantis

Special Achievement Award
Presenter: Craig Johnson

Distinguished Service Award
Presenter: Kathrine Cargo

5:30 **Workshop Social Event**
Pennington Lower Level Patio

Thursday, May 14, 2015

Post Workshop Training

These workshops are free to RSGIS attendees. Sign-up sheets will be at the registration table. The workshops will be held at the Galvez Conference Center of the Louisiana Department of Environmental Quality, 602 North Fifth Street, Baton Rouge, LA 70802

8:30 – 12:00 *Preparing for your GISP Certification*
Buck DeFee

The workshop is intended for those looking to get their GIS Professional certification from GISCI. This is a working session meant to get you started on your application, so attendees should bring a laptop and are encouraged to create an account on the GISCI website (<http://www.gisci.org>) before the workshop. Participants should bring application materials, including transcripts, evidence of workshop/conference attendance, letters confirming employment, etc.

8:30 – 12:00 *Trimble TerraFlex / Truly Mobile Data Collection*
Eric Bock, Navigation Electronics Inc.

This workshop will detail how to import and update existing data for up-to-the-minute information, keep your data organized, work anywhere with streamlined data management, access free Google and ESRI basemap layers to create contextually meaningful background maps for your projects, and use the TerraFlex ArcMap plugin and benefit from a streamlined data exchange between TerraFlex and ArcMap.

Posters

10 Years of the Louisiana Coastwide Nutria Control Program

Leslie A. Couvillion¹, Edward Mouton², Jennifer Manuel², Mitch Tinsley², Quin Kinler³, Brad Miller⁴

¹Coastal Environments, Inc.

²Louisiana Department of Wildlife and Fisheries

³SDA Natural Resources Conservation Service

⁴Coastal Protection and Restoration Authority

A Comprehensive Assessment of Deltaic Baldcypress-Water Tupelo Forested Wetland Condition in Louisiana's Coastal Zone

Brandon L. Edwards¹, Richard F. Keim¹, DeWitt H. Braud²

¹School of Renewable Natural Resources, Louisiana State University Agricultural Center

²Coastal Studies Institute, Louisiana State University

Hot-Spot Analysis of Racial/Ethnic Diversity in Louisiana: 2000 to 2017

Mark Schafer, Huizhen Niu

Louisiana State University Agricultural Center

Road Home Recovery and Reinvestment in the Lower Ninth Ward/Holy Cross

Michelle M. Thompson, Derreck Blake

University of New Orleans Department of Planning & Urban Studies

Estimating Suspected Sediment Loading in the Bayou Des Cannes Watershed using ArcSWAT

Andy Venuto, John Sheehan

Louisiana Department of Environmental Quality - Nonpoint Source Pollution

Student Poster Competition

Analyzing the Spread of Black Willows through Terrestrial LiDAR Survey

Yirui Deng, Department of Geography & Anthropology, Louisiana State University

A Pilot Study of Nationwide Spatio-temporal Distribution of Human Brucellosis in China

Peng Jia, Department of Geography & Anthropology, Louisiana State University

Investigation of the Spatial Distribution of Water Stress in Bottomland Hardwoods Using 7 Years of MODIS Thermal Infrared Imagery

Mary Grace Lemon, Richard F. Keim, Brandon Edwards, Scott T. Allen

School of Renewable Natural Resources, Louisiana State University

Analysis of Urban sprawl and its effect on Urban Environmental characteristics using spectral reflectance and Landsat Data

Gilbert Saah, Texas Southern University