

Wetland Assimilation Workshop

October 25 and 26, 2016

Agenda

Should natural wetlands be used to assimilate treated municipal wastewater in Louisiana?

Southeastern Louisiana University
War Memorial Student Union
Southeastern Louisiana University
SLU 10290
303 Texas Avenue
Hammond, LA 70402



Sponsors- \$1,000



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Planning Committee Members

Theryn Henkel, *Lake Pontchartrain Basin Foundation*

Eva Hillmann, *Lake Pontchartrain Basin Foundation*

John Lopez, *Lake Pontchartrain Basin Foundation*

Giovanna McClenachan, *Coalition to Restore Coastal Louisiana*

Andy Nyman, *Louisiana State University*

Stacy Ortego, *Louisiana Wildlife Federation*

Aaron Pierce, *Nicholls State University*

Matt Rota, *Gulf Restoration Network*

Christopher Schulz, *Southeastern Louisiana University*

Rebecca Triche, *Louisiana Wildlife Federation*

October 25

8:30 am – Registration

9:00 am – 10:10 am – Understanding LDEQ and LDNR Programs

9:00 am – Theryn Henkel, Opening remarks

9:10 am – **Todd Franklin**, Louisiana Department of Environmental Quality - Louisiana Pollutant Discharge Elimination System (LPDES): Wetland Assimilation Projects

9:40 am – **Karl Morgan**, Louisiana Department of Natural Resources – Permitting in Louisiana’s Coastal Zone

10:10 am – Break

10:20 am – 12:30 pm – Habitat Shifts and Land Change

10:20 am – **Robert Lane**, Louisiana State University - Hydrology and Water Budget Analysis of the East Joyce Wetlands: Past History and Prospects for the Future

10:40 am – **Yvonne Allen**, U.S. Fish and Wildlife Service - Remote Sensing of the North Joyce Wetlands from 1952 to 2015

11:00 am – **Jay Huner**, Louisiana Ecrevisse - Impact of Four-Mile Marsh Sewage Assimilation Wetland on Red Swamp Crawfish

11:20 am - **John Day**, Louisiana State University and Comite Resources, Inc. - Flotant Marsh Establishment at the Thibodaux Assimilation Wetland

11:40 am – **Gary Shaffer**, Southeastern Louisiana University - Nutria and Nutrients

12:00 pm – **Ed Bodker**, LADOTD Environmental Program Manager (Retired) - Questions About the Causal Linkages Between Sewage Effluent and Nutria Herbivory in Natural Wetlands Altered by Municipal Effluent

12:20 pm - Discussion

12:30 pm – Lunch

1:30 pm – 2:20 pm – Economy of Wetland Assimilation

1:30 pm – **Jae-Young Ko**, Jackson State University - A Dual Approach for Valuation of Wetlands Assimilation: Monetary-Based and Energy-Based Cost-Benefit Analyses

1:50 pm – **Christopher Brantley**, U.S. Army Corps of Engineers - Long-term discharge of treated effluent into wetlands - The Mandeville Assimilation Wetland

2:10 pm – Discussion

2:20 pm – Break with refreshments

2:40 pm – 4:50 pm - Nutrients and Wetland Assimilation

2:40 pm – **Robert Lane**, Louisiana State University - The Controversy Regarding Nutrients & Wetlands: A Brief History of the Scientific Literature

3:00 pm – **R. Eugene Tuner**, Louisiana State University - Nutrient-Enhanced Decomposition of Belowground Biomass in a Freshwater Wetland

3:20 pm – **John Day**, Louisiana State University and Comite Resources, Inc. - A Review of Ecological Studies at the Hammond Assimilation Wetland

3:40 pm – **Christopher Schulz**, Southeastern Louisiana University - Effects of Nutrient Loading on Methane Production and Microbial Communities in the Hammond Wetland Assimilation Project and Neighboring Marshes

4:00 pm – **Lauris Hollis**, Louisiana State University - The Tensile Root Strength of *Spartina patens*: Response to Nutrient Addition and Flood Duration

4:20 pm - **R. Eugene Turner**, Louisiana State University - The Belowground Intersection of Nutrients and Buoyancy in a Freshwater Marsh Converted to Open Water

4:40 pm – Discussion

4:50 pm – Closing Remarks

5:00 pm - End

October 26

9:00 am – 11:20 pm – Treatment Plant, Environment, and Human Health

9:00 am – **Matt Rota**, Gulf Restoration Network - Permitting and Compliance of Wetlands Wastewater Assimilation in Louisiana

9:20 am – **Tiong Gim Aw**, Tulane University - Metagenomic Analysis of Viruses in Wastewater: A Potential Application for Evaluating Wetland Treatment Efficiency and Risk Assessment

9:40 am – **Robert Reimers**, Louisiana State University - Wetlands Restoration: Wastewater Disinfection/Tertiary Processing - Environmental Impacts

10:00 am - Break

10:10 am – **Ann Wilson**, Sewage and Water Board of New Orleans - An Overview of the Central Wetland Assimilation Demonstration Project Sewerage and Water Board of New Orleans

10:30 am – **Gary Childers**, Southeastern Louisiana University - Evaluation of Storm Water Impact on the City of Hammond's Aerated Lagoon Treatment System and General Microbiological and Discharge Characteristics

10:50 am – **Ed Bodker**, LADOTD Environmental Program Manager (Retired), Considerations for Health Risks to Humans and Animals Regarding Natural Wetlands Used to Receive Municipal Sewage Effluent

11:10 am – Discussion

11:30 am - Lunch

12:30 pm – 1:40 pm – Forested Assimilation Wetlands

12:30 pm – **Aaron Pierce**, Nicholls State - Forested Freshwater Wetland Responses to
Secondarily Treated Municipal Effluent Discharge

12:50 pm – **Gary Shaffer**, Southeastern Louisiana University - Baldcypress and Water Tupelo
Seedling Growth at Six Assimilation Wetlands

1:10 pm – **R. Eugene Turner**, Louisiana State University - Bottomland Hardwoods Response to
Wetlands Receiving Partially-Treated Sewage Systems in Louisiana

1:30 pm – Discussion

1:40 pm – Break with refreshments

2:00 pm – 4:00 pm – Expert Panel

- **Should natural wetlands be used to assimilate treated municipal wastewater in Louisiana?**
- **If yes, what, if anything, needs to change?**

Moderator: Tim Carruthers, The Water Institute of the Gulf

Panelists:

Archie Chaisson, Director of Public Works at Thibodaux

Ronny Carter, Lake Pontchartrain Basin Foundation

James Pahl, Coastal Protection and Restoration Authority

David deGeneres, Director of Public Works, Mandeville

Sammy King, Louisiana State University

4:00 pm - Closing Remarks