

# Public Workshop on Hypoxia in the Gulf of Mexico

October 19, 2015

LITE Center, University of Louisiana at Lafayette

*Sponsored by*

Louisiana Hypoxia Working Group

&



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## *Institute for Coastal and Water Research (ICaWR)*

- Formed in 2015
  - Restructuring of ICEE
  - Redefined mission and vision to better align with pressing environmental and social issues
- Mission *“to improve understanding and management of coastal and water resources at current and future land/sea interfaces and their interactions with society”*



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*Central organization at the University for research activity and synergy in coastal and water resources*

- Improve the knowledge base for sustainable coastal restoration, water management, and policy
- Facilitate multidisciplinary research collaborations across University Departments, Schools, and Colleges
- Partner with State and Federal agencies, nonprofit organizations, the private sector, and other academic entities to identify and resolve complex coastal and water resource uncertainties



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**Precipitation  
Inputs**

**Riverine  
Inputs**

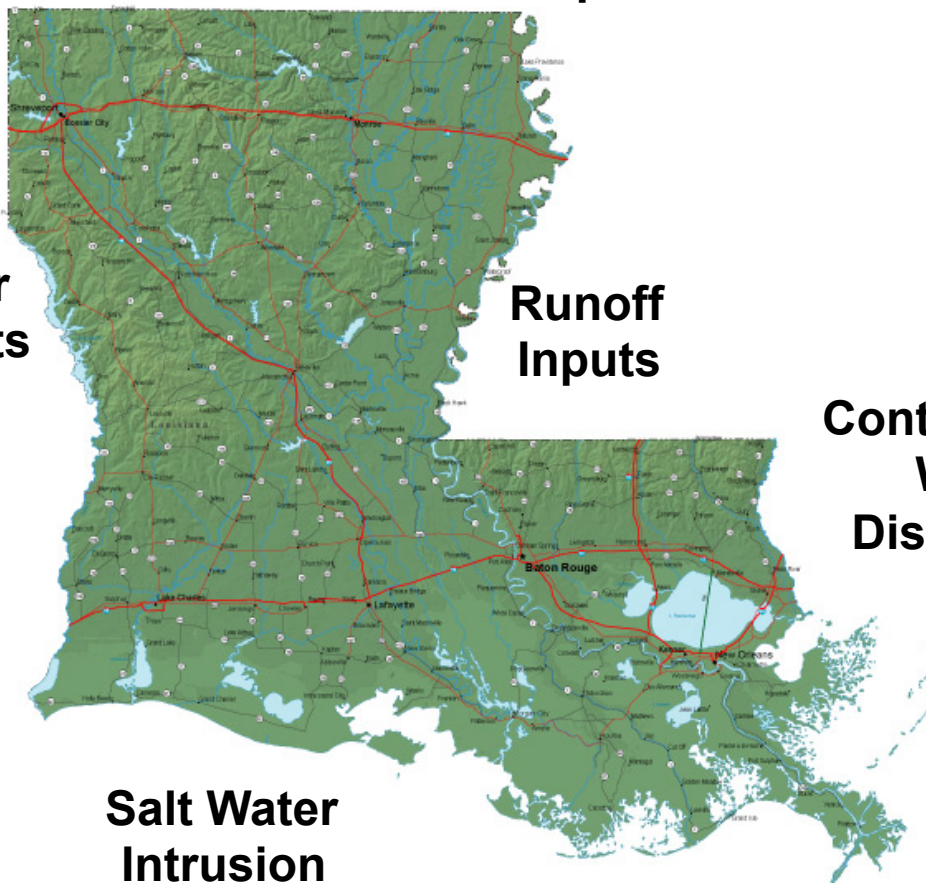
**Groundwater  
Inputs/Outputs**

**Runoff  
Inputs**

**Contaminated  
Water  
Discharges**

**Salt Water  
Intrusion**

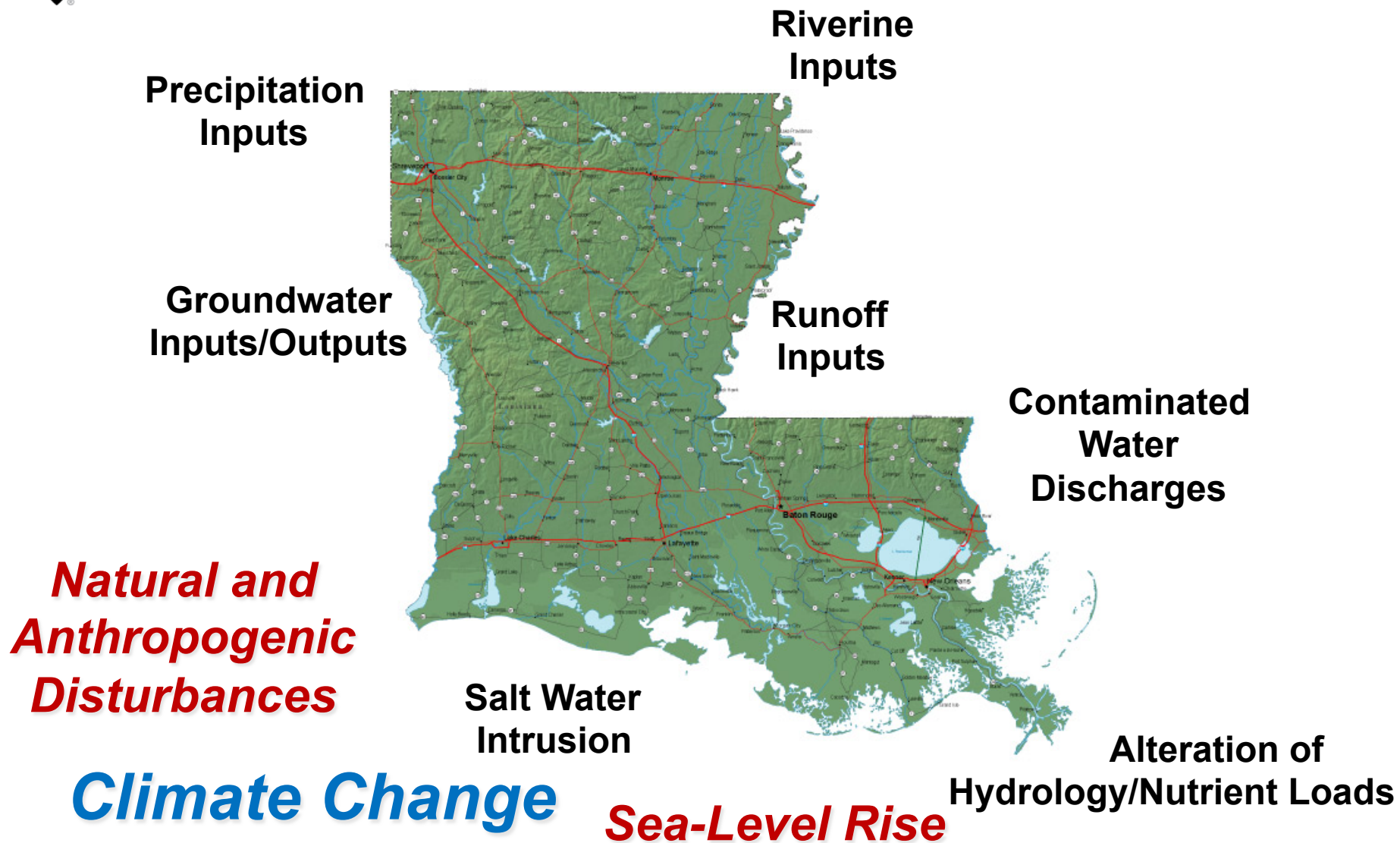
**Alteration of  
Hydrology/Nutrient Loads**





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- Research faculty from six Departments/Schools
  - Biology
  - Geosciences
  - Civil Engineering
  - Mathematics
  - Architecture and Design
  - Sociology, Anthropology & Child and Family Studies





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- In addition to research facilities on campus
  - Ecology Center
    - Research-support facility nested under ICaWR
    - 50 acres for research, outdoor classroom
    - Large greenhouse complex
    - Wide range of research vessels and field vehicles
  - Cade Farm
    - Affiliated field research facility
    - Aquaculture and farming legacy
    - Tidal research wetlands



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# The Ecology Center

## Facilities

Greenhouses, irrigated research plots, offices, laboratories, classroom, computing, kitchen, dormitory, boats, research equipment, and more.



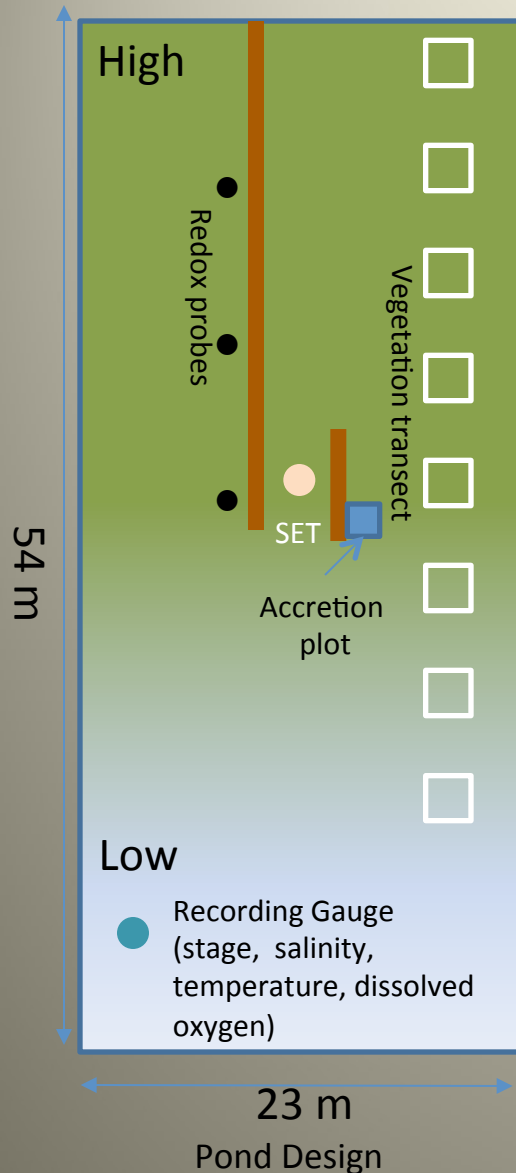


# Ecology Center: Microphysics of Rainfall Research Project

- Dense cluster of state-of-the-art rainfall sensors
- Microphysical properties of raindrop size distribution
- Unique data on small-scale variability of rainfall parameters
- Valuable for hydrologic research on remote sensing of rainfall



# Coastal Wetlands Laboratory (Cade Farm)



- 4 paired sets of Freshwater and Brackish water wetland ponds. Each pair has alternating diurnal tides (high/low; low/high)
- Monitoring design based on layout of Coastwide Reference Monitoring System
- Allows students to learn about wetland measurements and processes 20 minutes from the main campus



Freshwater tidal pond



Students installing water-level gauge



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## Summary

- University of Louisiana at Lafayette has tremendous research strength in coastal and water resources
- Facility capabilities and faculty expertise to conduct world class research on pressing issues relevant to the environment and society
- Training the next generation of scientists, policy makers, and managers for improved stewardship of coastal ecosystems and water resources
- Competitive ICaWR Doctoral Fellowships available



A man with a long white beard and a hat stands in a field of tall grass and reeds. He is wearing a light-colored short-sleeved shirt and khaki pants. The background shows a dense field of vegetation under a blue sky with some clouds.

We invite you to  
work with us!

[coastalresearch.louisiana.edu](http://coastalresearch.louisiana.edu)