



COASTAL VALUATION

Economic Evaluation of Coastal Land Loss in Louisiana

PURPOSE

Quantify and present the economic importance of coastal Louisiana to the nation and the state and the magnitude of risk to coastal assets (natural and manmade) and commerce posed by the land loss crisis



PROJECT GOALS

Estimate assets and economic activity at risk in a future without action:

1. Direct effect of land loss
2. One-time losses due to increased storm risk
3. Impact on other states and the nation



KEY MEMBERS OF PROJECT TEAM

Louisiana State University

- Stephen Barnes
- Stephanie Virgets
- Ben Vincent
- Chris Schmidt

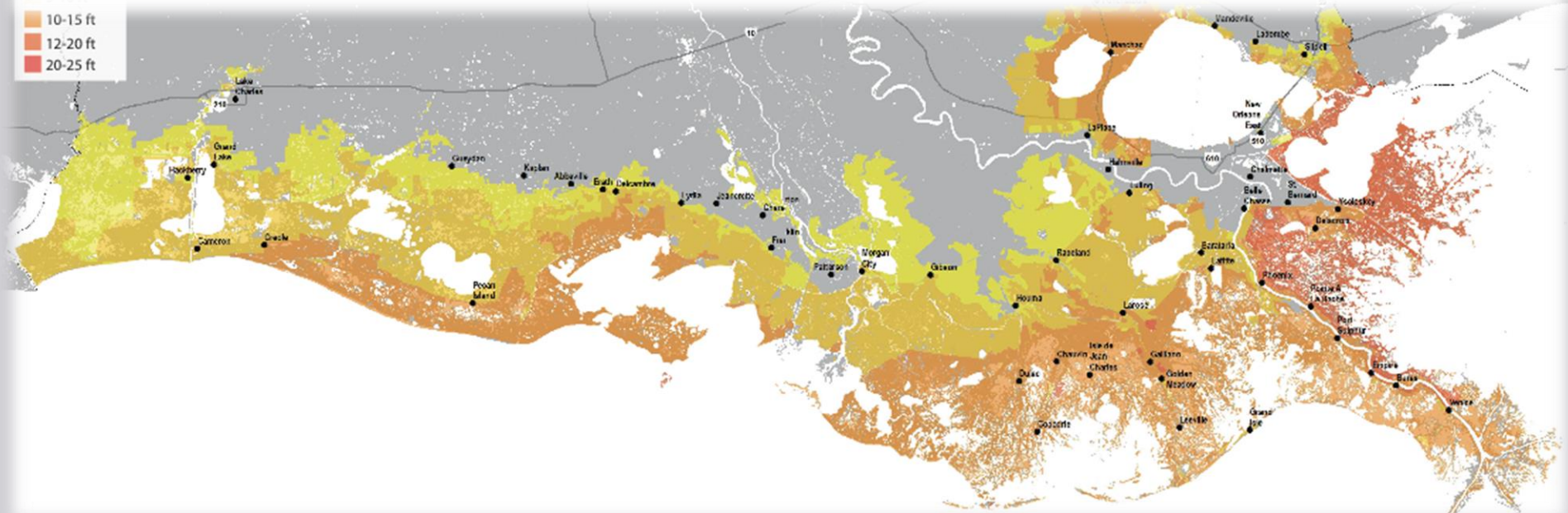
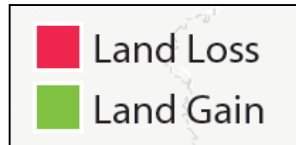
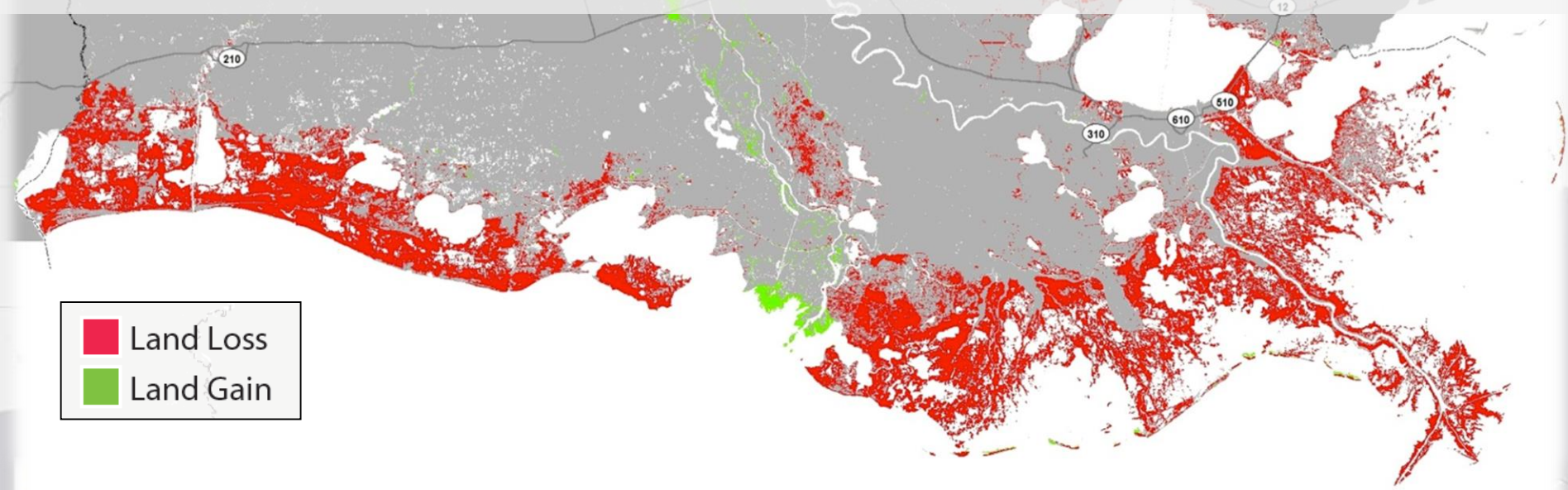
RAND Corporation

- Craig Bond
- Nick Burger
- Kate Nixon
- Sarah Weiland

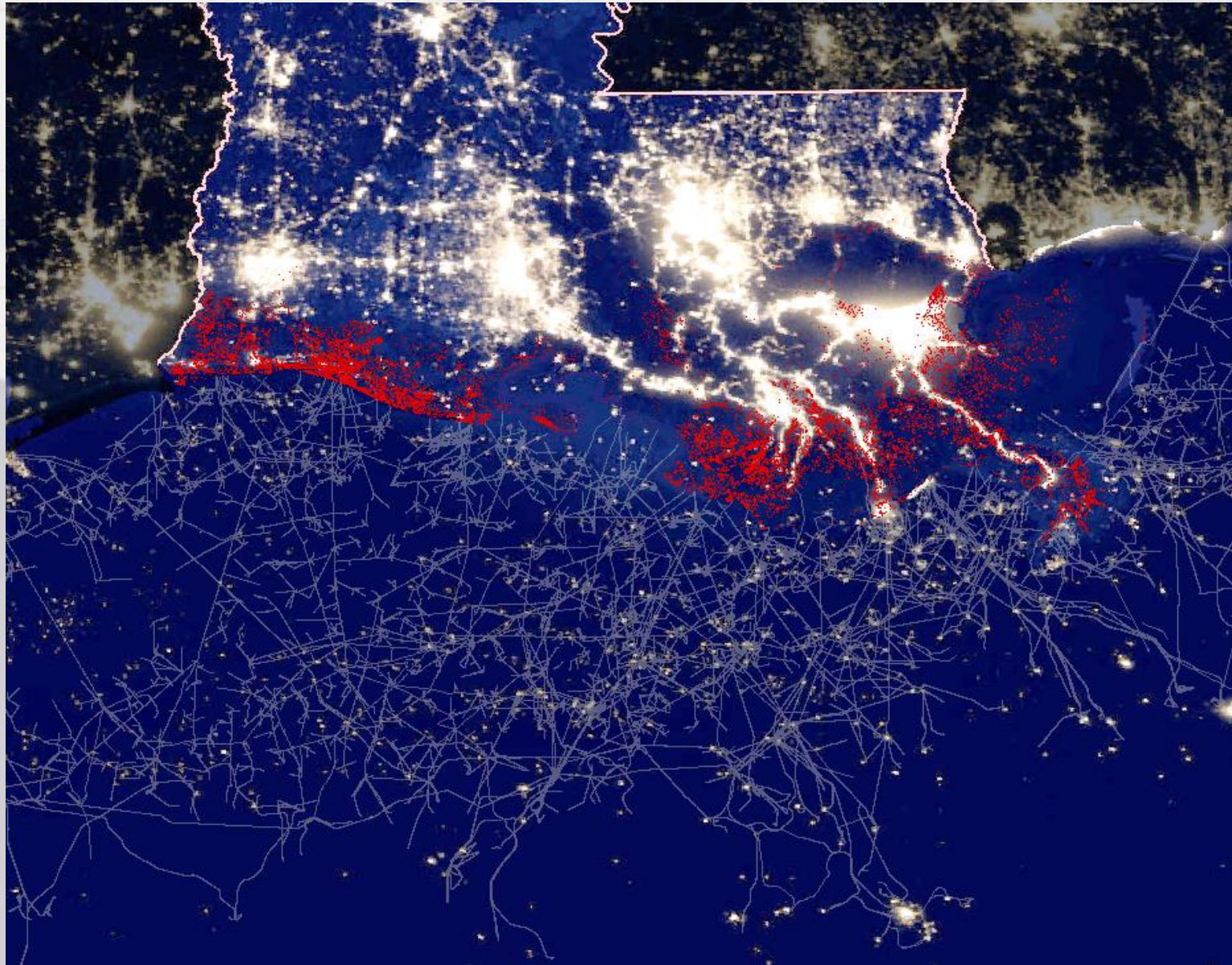
Charles Sutcliffe, Policy Adviser with Governor's Office of Coastal Activities, is providing day-to-day guidance and serves as the conduit between the Steering Committee and our group



2012 MASTER PLAN: FUTURE WITHOUT ACTION

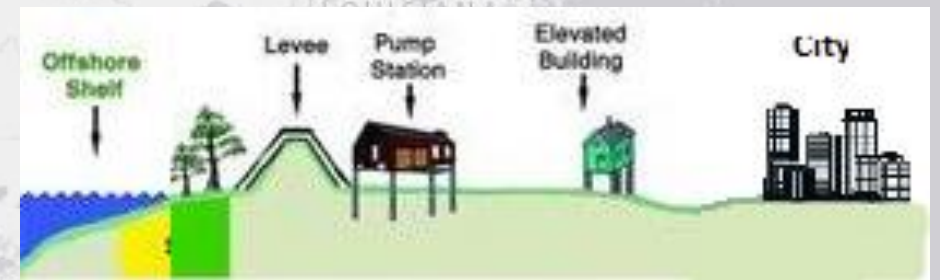


ECONOMIC ACTIVITY AND LAND LOSS



E. J. Ourso College of Business
Division of Economic Development

ECONOMIC IMPACT FROM: DIRECT LAND LOSS



- Most land loss is marsh land
- Limited lower-elevation assets (people build on highest land available)
- Permanent losses



ECONOMIC IMPACT FROM: INCREASED STORM RISK

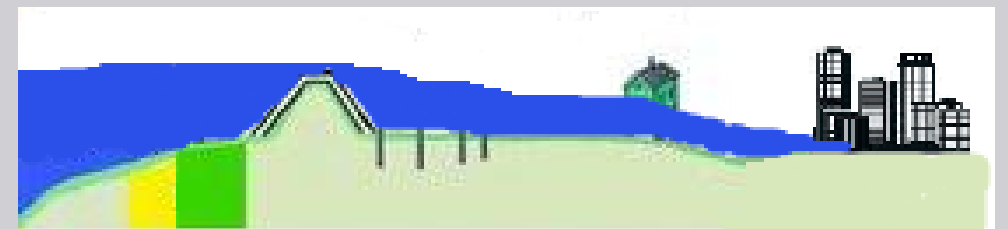
Non-Storm Condition, 2014



Storm Surge, 2014



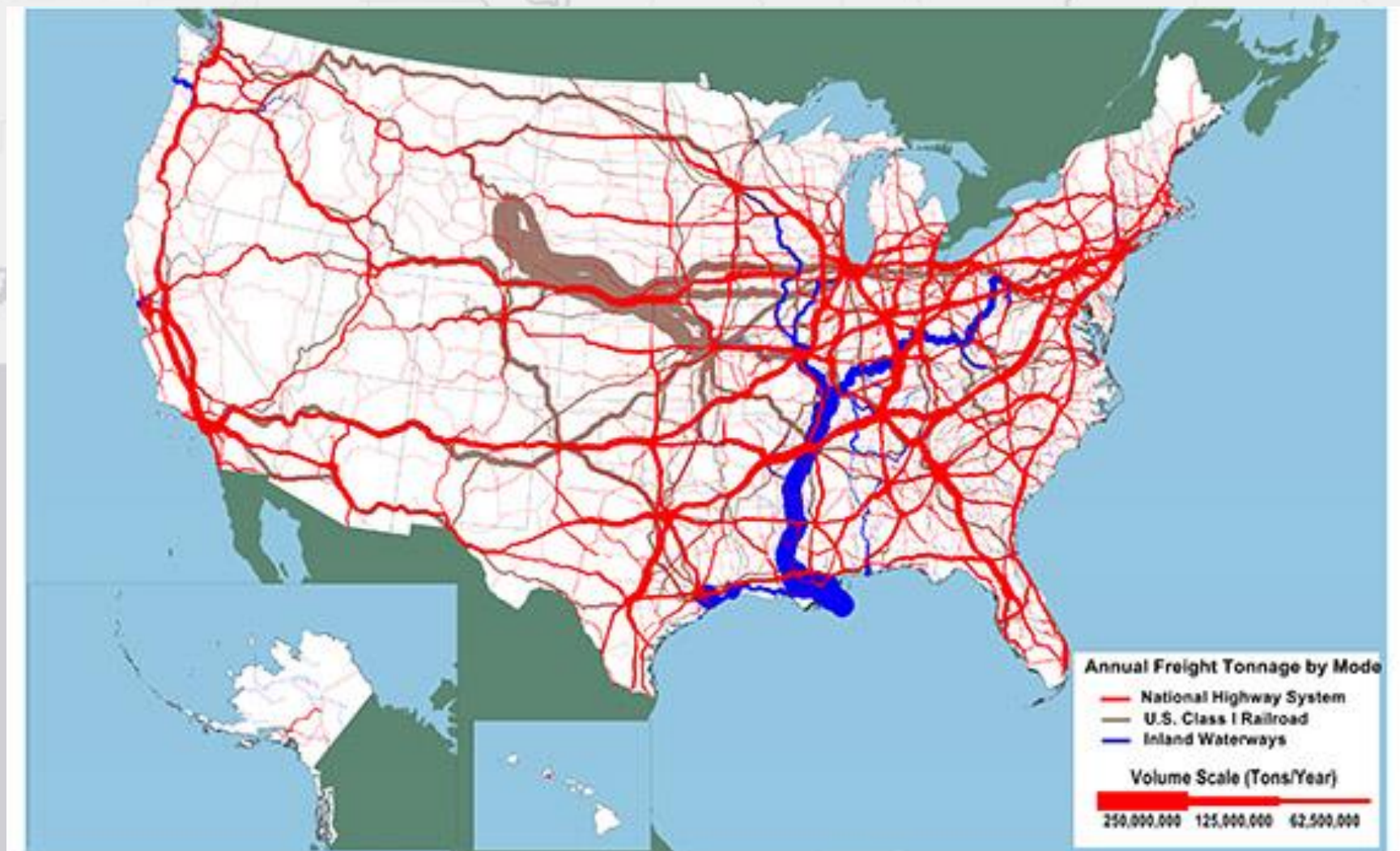
Storm Surge, 2064



- Much larger numbers and values for property at risk
- Business interruption/flows important
- One time losses



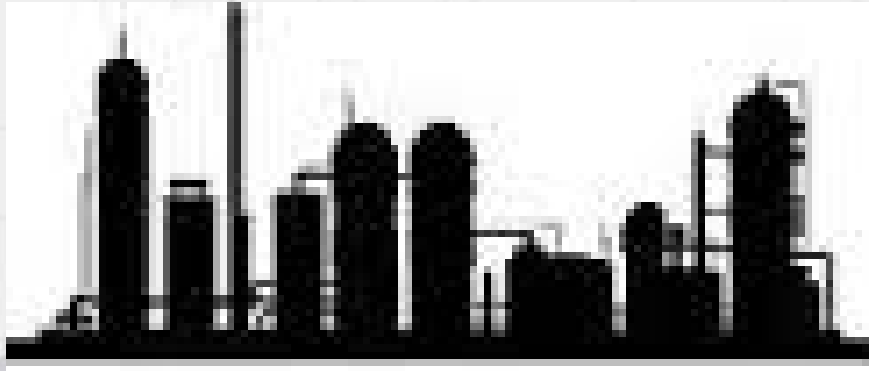
ECONOMIC IMPACT: ON OTHER STATES



Sources: Highways: U.S. Department of Transportation, Federal Highway Administration, Freight Analysis Framework, Version 3.4, 2012. Rail: Based on Surface Transportation Board, Annual Carload Waybill Sample and rail freight flow assignments done by Oak Ridge National Laboratory. Inland Waterways: U.S. Army Corps of Engineers (USACE), Annual Vessel Operating Activity and Lock Performance Monitoring System data, as processed for USACE by the Tennessee Valley Authority; and USACE, Institute for Water Resources, Waterborne Foreign Trade Data, Water flow assignments done by Oak Ridge National Laboratory.

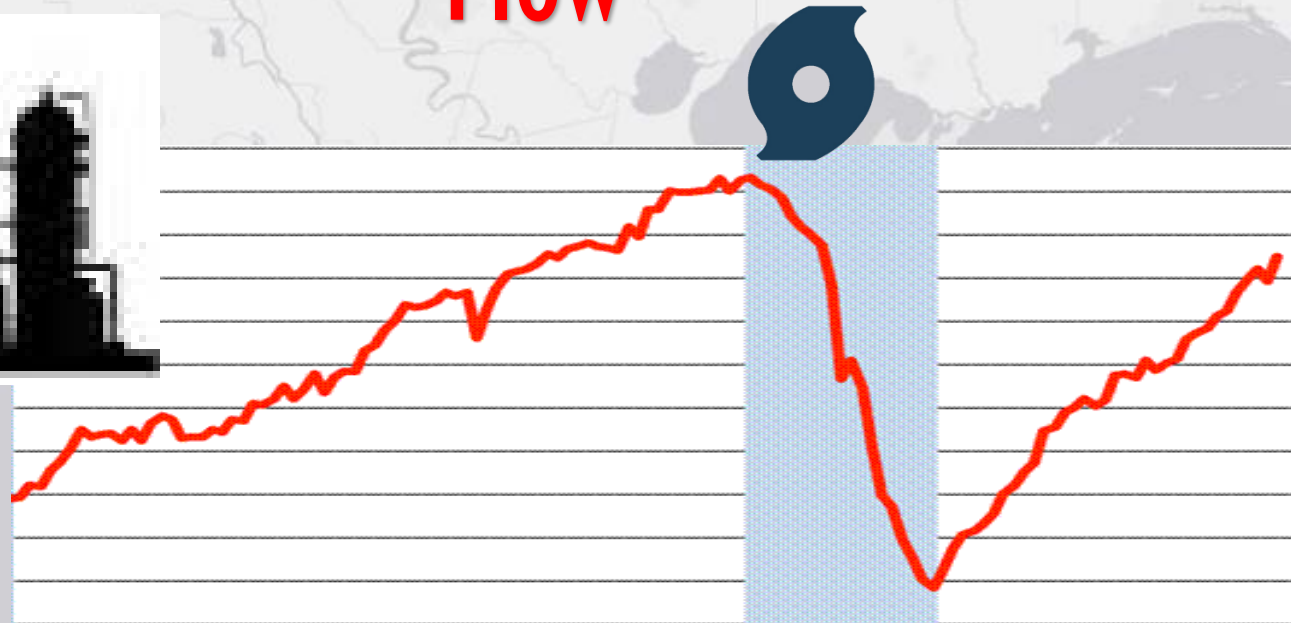


TWO BROAD TYPES OF IMPACT: STOCKS AND FLOWS



Stock

Flow



Disruption from Storm



DIRECT LAND LOSS

STORM DAMAGE

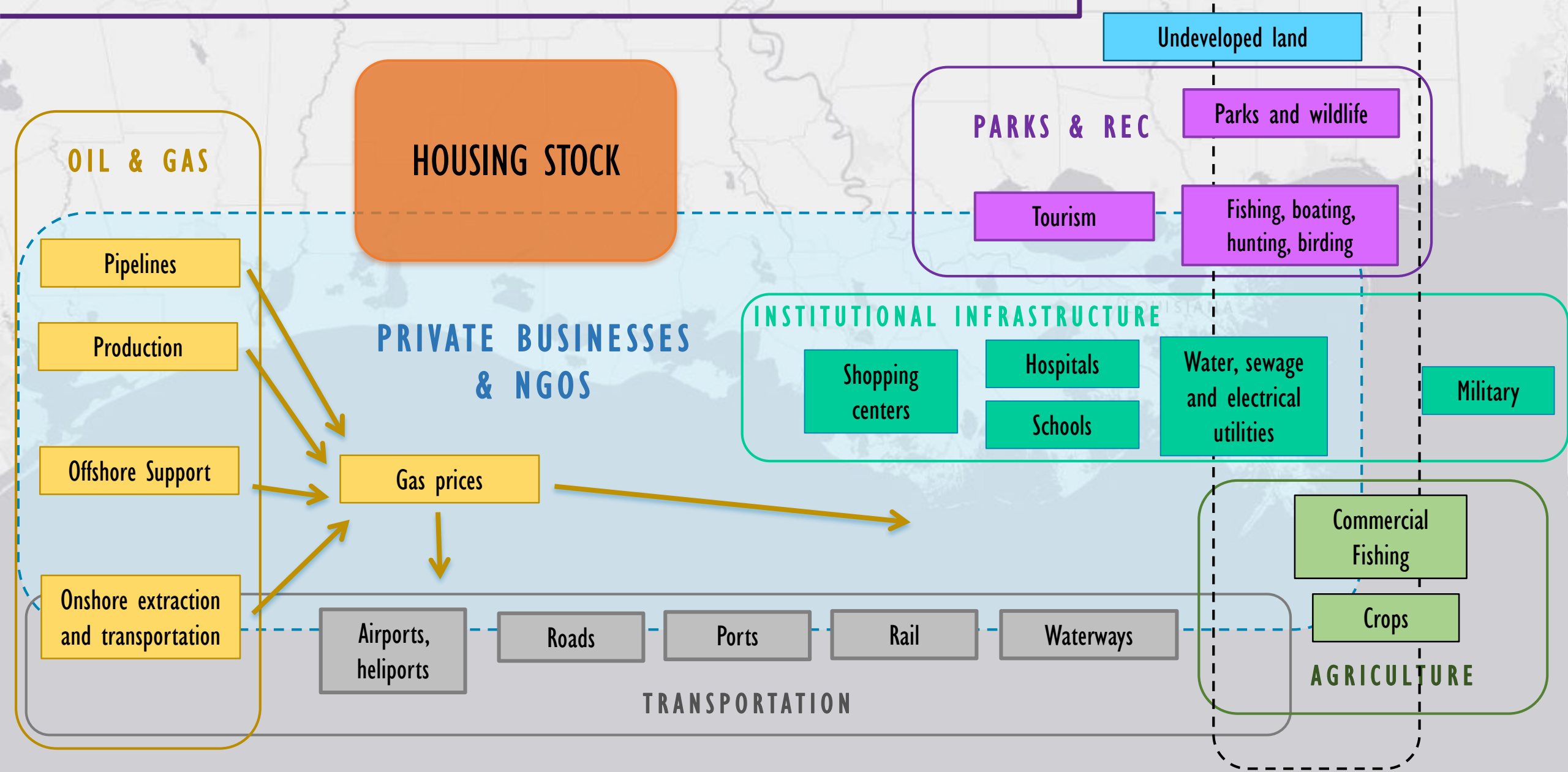
STOCK



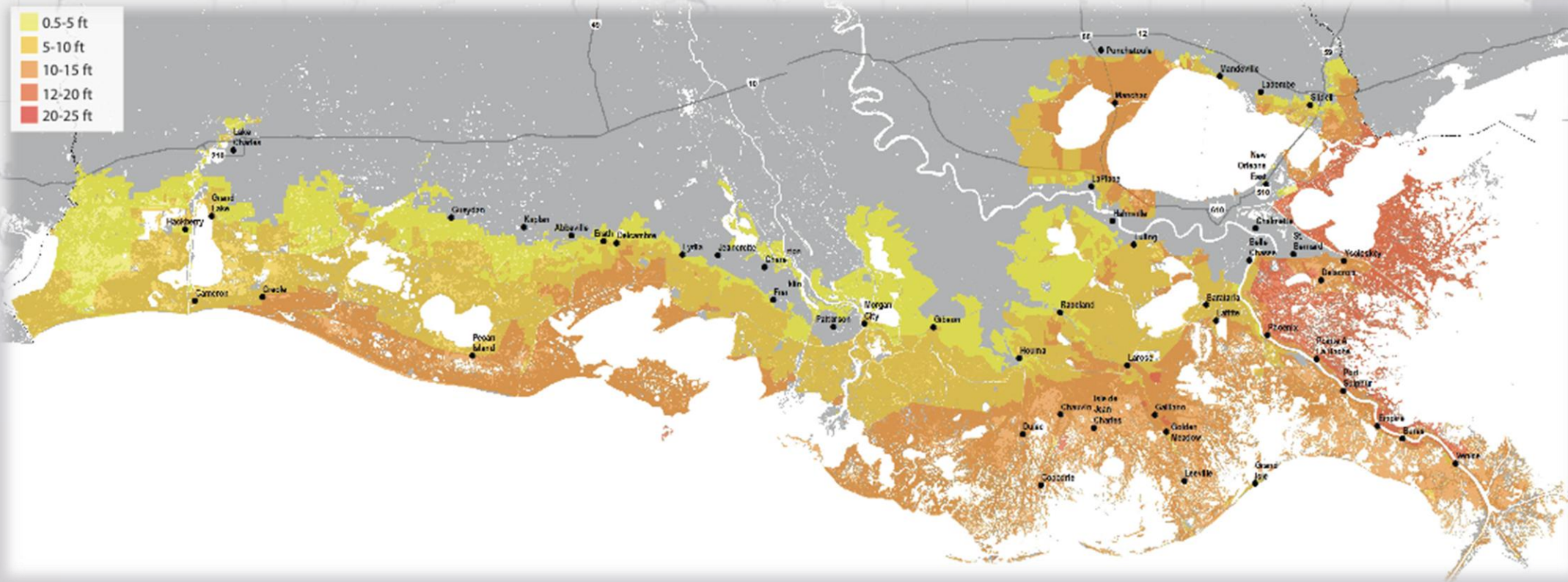
FLOW



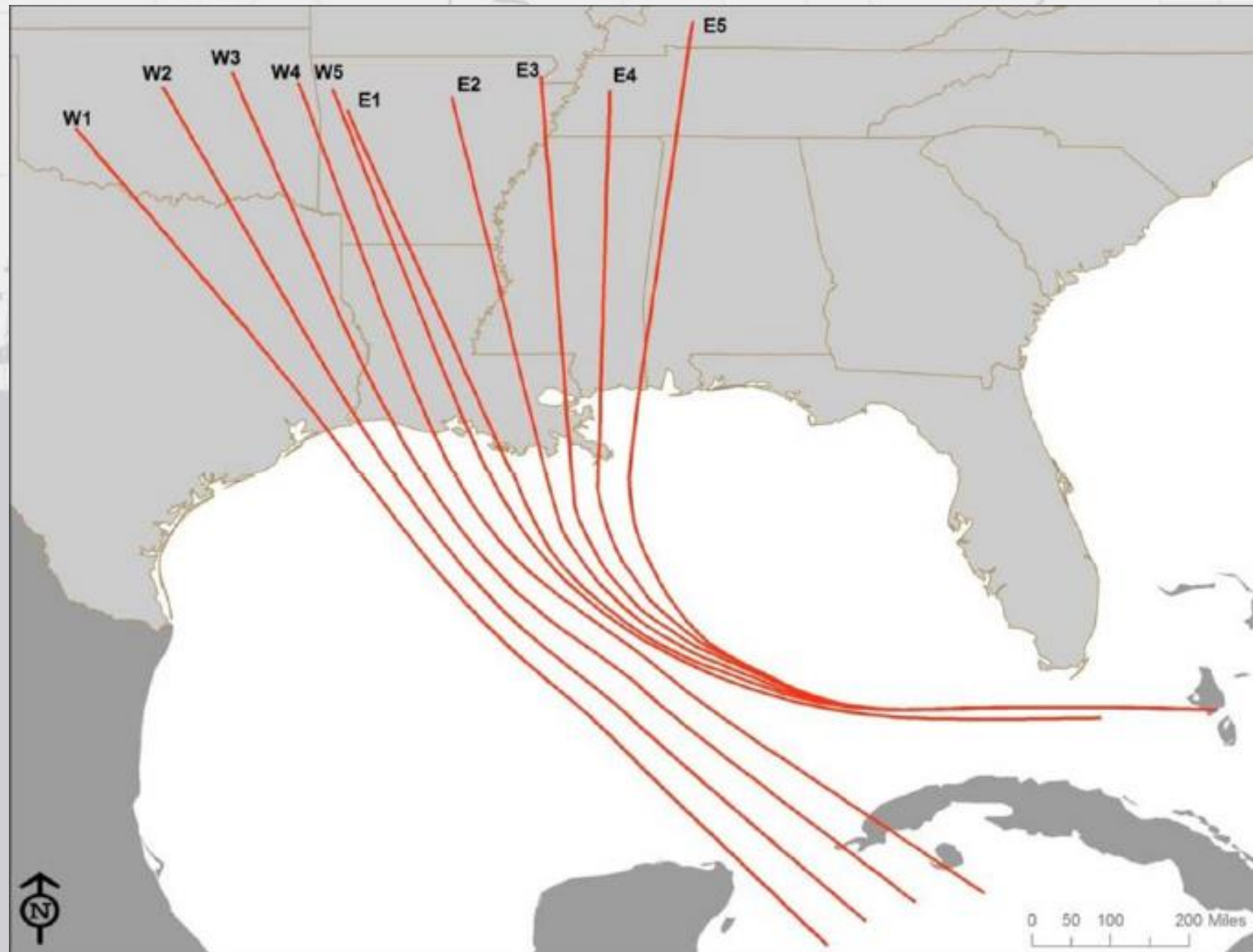
TASKS AND SPECIFIC AREAS OF INTEREST



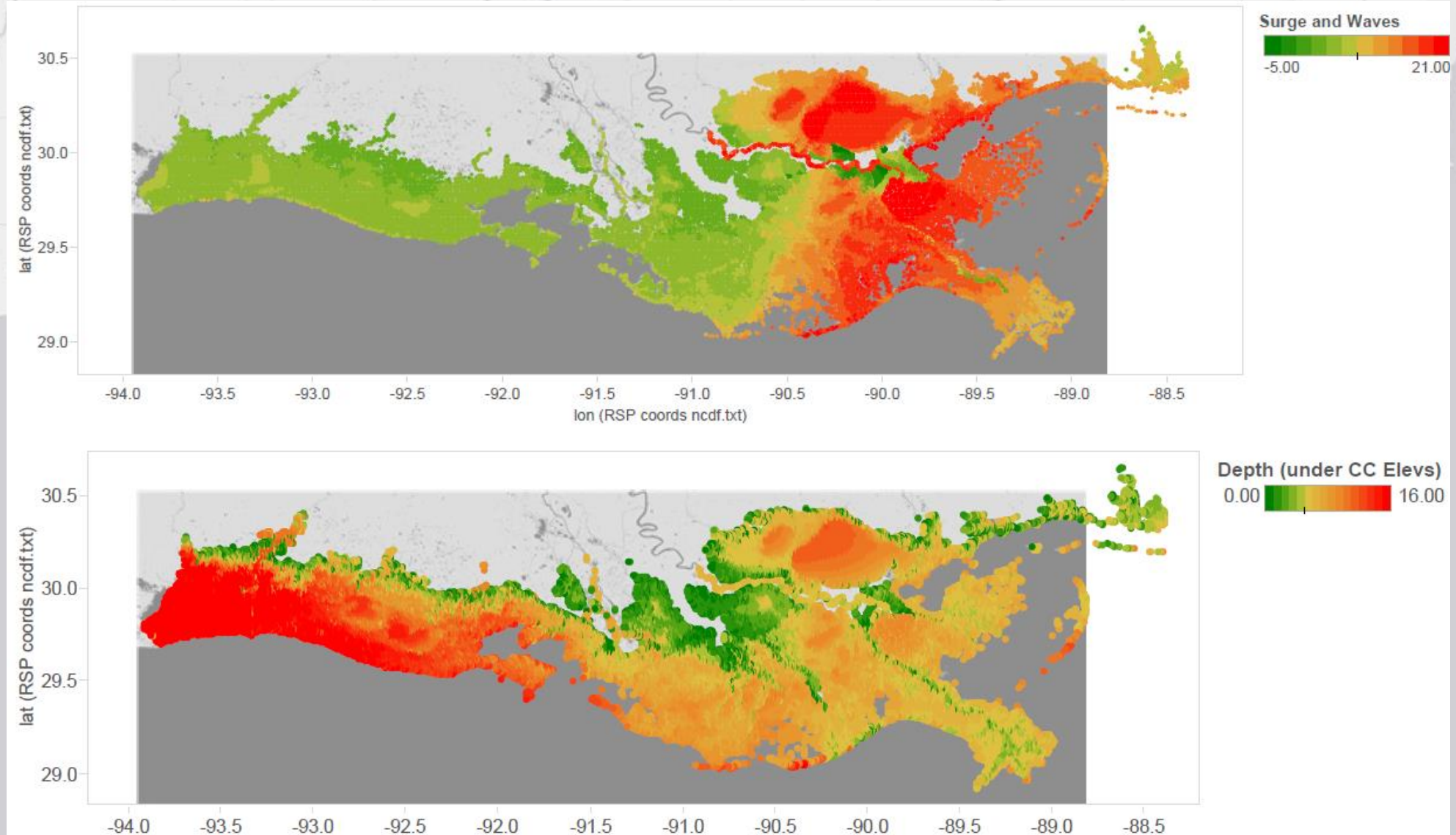
HURRICANE DAMAGE: 100 YEAR FLOOD



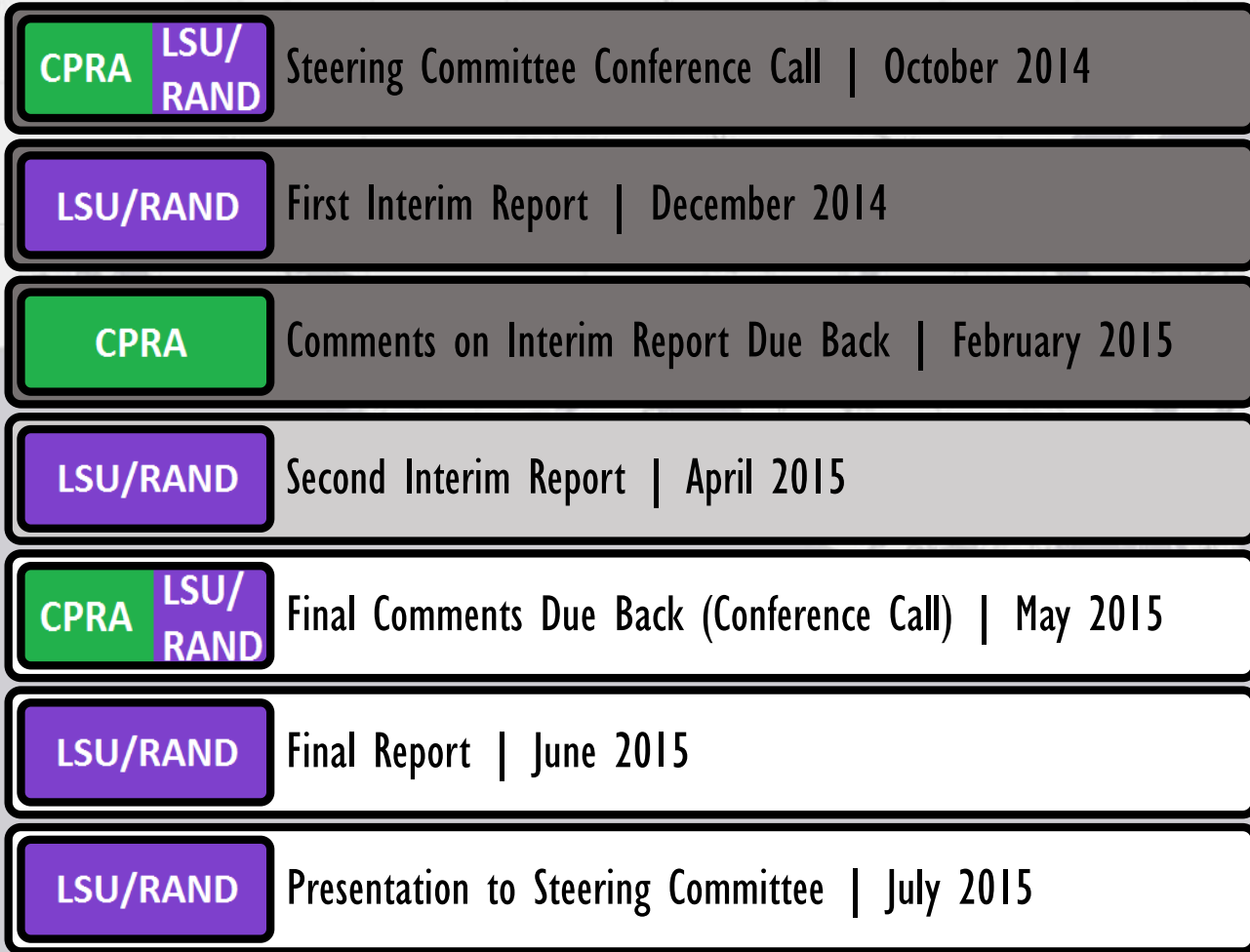
HURRICANE TRACKS FOR CASE STUDY: E2 AND W2



STORM SURGE FOR TWO CASE STUDIES



PROJECT TIMELINE



CPRA **LSU/RAND**
Working Groups



PROJECT DELIVERABLES

- Data repository of assets and business activities in coastal area
- Maps showing locations of assets and business activities
- Narrative report outlining methodology and results
- Executive summary presentation
- Public and conference presentations

