CPRA Basinwide Socio-Economic Analysis

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CPRA

Coastal Protection and
Restoration Authority of Louisiana

committed to **our coast**

Collaborators

Basin-Wide Analysis

EARTH ECONOMICS

ROYAL
engineering possibilities.

Economic Study

RAND CORPORATION

LSU

Coastal Atlas

THE WATER INSTITUTE OF THE GULF

Commercial Fisheries Study

LSU

Diversion Modeling

USGS
science for a changing world

Dynamic Solutions LLC

MOFFATT & NICHOL

URS

GEORGE MASON UNIVERSITY

ARCADIS

FENSTERMAKER
Experience | Innovation | Results

UNIVERSITY OF LOUISIANA Lafayette

THE UNIVERSITY of NEW ORLEANS

Deltares
Enabling Delta Life

Basinwide Socio-Economic Analysis Scope of Work

- Earth Economics & Royal will assist CPRA in assessing the impacts of proposed diversion projects and translating the social and economic outcomes of a future without action and a future with the 4 diversion projects

- Scope of work is from November 2014 – November 2015

  - Task 1 – Review literature and determine any data gaps
  - Task 2 – Develop a framework/methodology on which to conduct the analysis
  - Task 3 – Validate the socio-economic analysis methods with 1-2 past diversions
    - Perform socio-economic analysis of all four of the diversions

Basinwide Socio-Economic Analysis Literature Review

Biophysical Impacts

- Carbon sequestration/ storage
- Fisheries
- Flood risk reduction
- Habitat
- Navigation
- Nutrients
- Salinity
- Sediment
- Storm buffering
- Water supply

Social Impacts

- Agriculture
- Built infrastructure
- Cultural Impacts
- Fisheries
- Navigation
- Recreation and tourism
- Community Displacement

Economic Impacts

- Agriculture
- Built infrastructure
- Carbon sequestration and storage
- Cultural Impacts
- Fisheries
- Flood risk reduction
- Habitat
- Navigation
- Recreation and tourism
- Storm buffering
- Water supply
- Workforce Development

Basinwide Socio-Economic Analysis Scope of Work

Earth Economics & Royal Engineers will analyze the following model output data from multiple hydrodynamic/sediment-transport models and ecological/fisheries models:

- o Water Level
- o Water Velocity
- o Water Temperature
- o Salinity
- o Nutrient/Pollutant Concentration
- o Sediment Concentration
- o Elevation Change
- o Vegetation Type/Density
- o Organic Matter
- o Relative distribution and abundance of fish biomass

Basinwide Socio-Economic Analysis Scope of Work

- Draft and Final Paper which describes the historic and current socio-economic conditions of the 3 basins. This will include community population, employment, and demographic trends; past diversions and restoration projects; land loss and hurricane impacts; socio-economic drivers and fisheries distribution.

- Illustrations and descriptions of the 4 diversions cause & effect dynamics on the health and economic vitality of communities, using 21 categories of socio-economic indicators including fisheries, flood risk reduction, storm surge risk reduction, aesthetic value, and recreational value.

- Include maps, graphs, charts and animations to describe the analysis outcomes and illustrate change over time.

Socio-Economic Analysis Next Steps

- **Where we've been:** Literature review, synopsis of existing data gaps, and initial data collection has been completed.

- **Where we are:** Draft model output data is being analyzed by the project team to determine the appropriate bio-physical linkages to the socio-economic analysis. The team is currently coordinating with Modeling Teams and reviewing output data templates and formats for incorporation into the analysis.

- **What's next:** A draft framework for the analysis will be recommended which will outline the methodology for assessing socio-economic impacts of diversion activities.

THANK YOU