

Linking Commercial Fishing Activity to Coastal Communities

### DEVELOPING THE SCOPE

Initial interest: In depth study of recreational and commercial fishing analyzing the relationship between communities and coastal waters

Inventory of Existing Data

# **EXISTING DATA-LDWF** Area fished Home address Price/Unit Quantity caught Boat length Commercial Fisherman License No. Commercial Fisherman License Boat Registration Trip Ticket Data

### EXISTING DATA- SUPPLEMENTAL

- NAVTEQ Routing
- Marinas: Water-based fuel pumps from Louisiana Department of Agriculture
- Boat Launches: LOSCO map
- Boat Launches: NOAA

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Inventory of Existing Data

Project Focus: Commercial Fishing

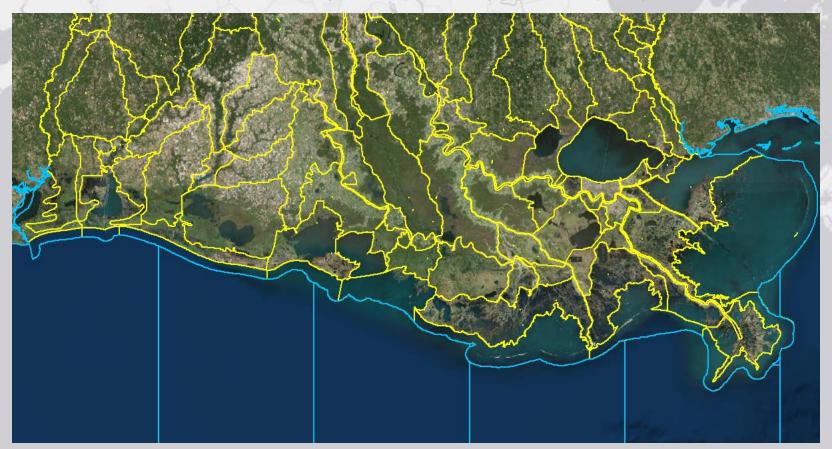
### **PROJECT GOALS**

### Summarize:

- I. The amount (in quantity and value) of fishing activity in different parts of the coast
- 2. Geographic patterns of activity among dealers
- 3. Geographic patterns of activity among fishers
- 4. Distance between commercial fishermen, land and water operations

### **DEFINING AREA FISHED**

- A watershed or basin is defined as an area of land drained by a particular set of streams and rivers
- Louisiana has 12 major basins; several basins are shared with neighboring states
- 133 total sub basins at the three-digit level (used by LDWF) for analyzing trip ticket data



## **DEFINING SPECIES GROUPS**

- Crab
- Oysters
- Saltwater finfish
- Shrimp

LOUISTANA

## METHODOLOGY GOALS 1-3

- Calculate total landings (weight) for each area by year and species group
- Calculate total value for each area by year and species group
- Present totals at lowest levels of geographic aggregation:
  - WATER: area fished
  - LAND
    - Zip codes or towns in high density fishing communities
    - Parish in southern Louisiana
    - Regions in northern Louisiana

### METHODOLOGY: GOAL 4

#### Geocode

- Commercial fisher address
- Marinas and launches

#### Route

- Identify five water access points with shortest straight-line distance to sub basin
- Route to each of the five points from the fisher address
- Select route with lowest drive time

# Compute weighted averages

- Distance weighted by value
- Distance weighted by landings
- Time weighted by value
- Time weighted by landings

## SAMPLE ROUTE CALCULATION

Fisher travels from

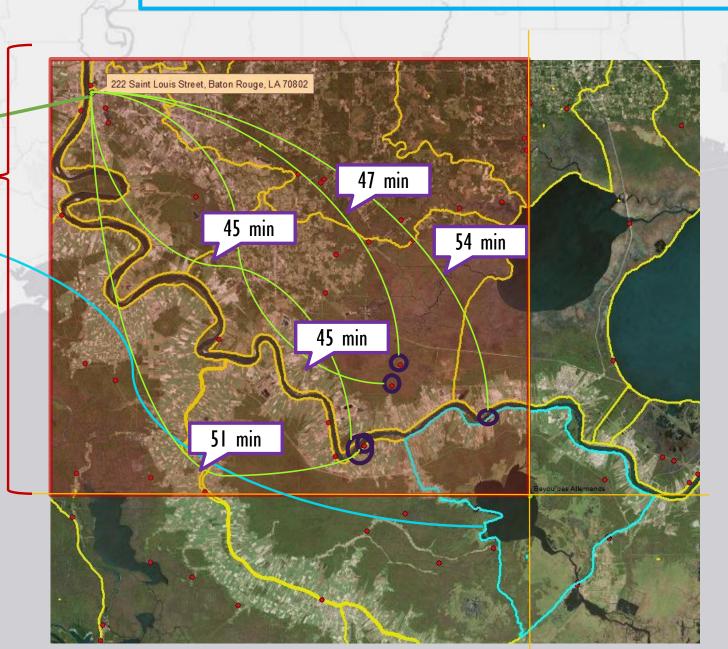
222 St. Louis St., Baton Rouge LA

To Sub basin 0202

Develop quadrant of potential routes

Route to five marinas or launches closest to sub basin NAVTEQ network database.

Select route with lowest drive time.



### STAKEHOLDERS

- Seeking feedback from the following groups:
  - Louisiana Department of Wildlife and Fisheries (LDWF)
  - National Oceanic and Atmospheric Administration (NOAA)
  - Louisiana Sea Grant

## TIMELINE

#### December 2014

• Obtain project data

#### March 2015

- Draft report
- Stakeholder feedback

# January-February 2015

- Develop summary statistics
- Stakeholder engagement

### April 2015

• Final report

### **DELIVERABLES**

- Tables for goals 1-4
- Maps for goals 1-4
- Narrative report summarizing methodology and key findings

### PROJECT GOALS 1-4

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