

Social Science for Coastal Georgia: A How to Guide



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JHT, Incorporated , NOAA Hollings Marine Laboratory, Charleston, SC

Georgia Environmental Conference, August 23, 2012



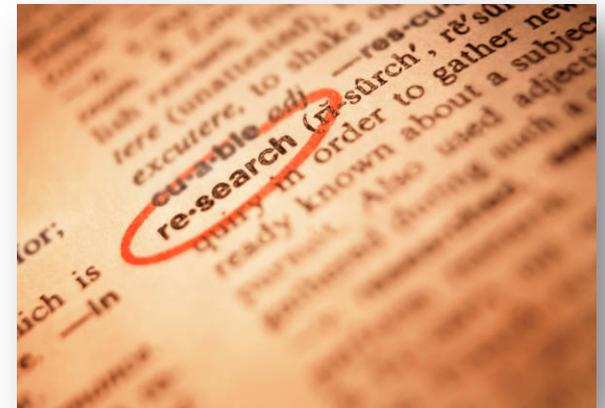
Background

- Social science research can help answer tough questions
- Types of information collected through social science include: population characteristics, attitudes and perceptions, networks between social organizations
- Understanding complex human-environment interactions requires social science



Social science research

- How do social scientists construct research?
 - Define society in a special way
 - Think in terms of variables and relationships among variables
 - Employ the scientific method



Goals of social science research

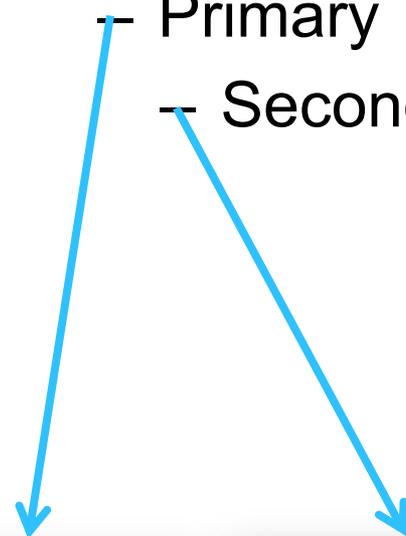
- Identify general patterns and relationships
- Test and refine theories
- Make predictions
- Interpret culturally and historically significant phenomena
- Explore diversity
- Give voice
- Advance new theories

(Ragin and Amoroso 2011)

Strategies of social science research

- Methodological approach
 - Qualitative
 - focused on underlying meanings and patterns of relationships
 - Quantitative
 - focused on the development and testing of models
 - Comparative
 - aims to make comparisons across cultures, countries

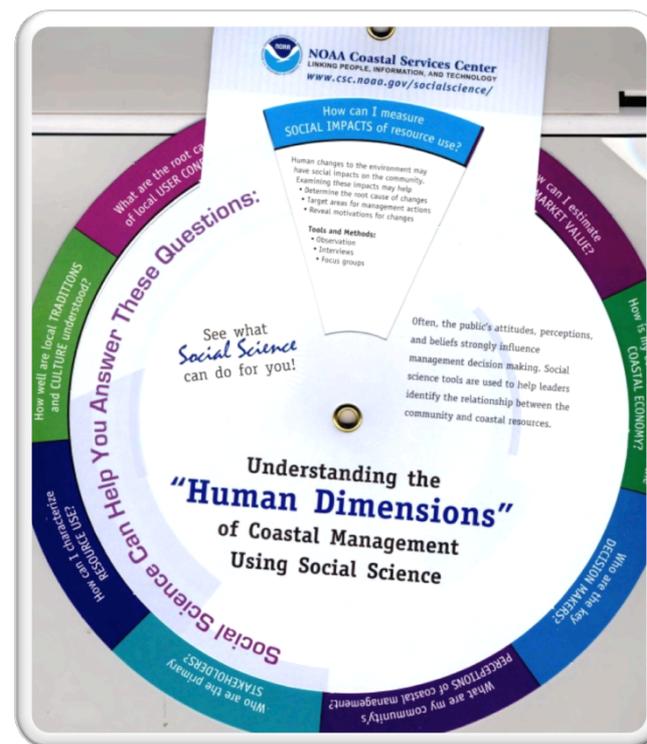
- Data collection
 - Primary
 - Secondary



Introduction to methods

- Many tools in the toolkit
- What are the options?
- How do you choose?

→ Please refer to your social science wheel for the following slides



Method 1 – Focus groups

- What? → guided group discussion, attempts to estimate the response of a larger group
- When is it used? → to identify opinions, attitudes, knowledge, and perceptions about a specific topic
- Why? → systematic collection of information in real time, lower cost than surveys, less time than individual interviews, facilitator can adapt to include new issues that arise



Method 2 - Observation

- What? → information gathering through direct observation of human behavior
- When is it used? → to identify user behavior and associated impacts, types of use, use patterns
- Why? → most direct measure, good for behaviors that people will not voluntarily



Method 3 – Demographic Analysis

- What? → study of the human population and characteristics like education, income, and race, as well as changes like size and composition
- When is it used? → to identify trends over time and space
- Why? → important to determining constituency and who will be impacted; provides information on how coastal communities are changing over time; cost-efficient if using secondary data



Method 4 - Surveys

- What? → data collection by mail, phone, web or face to face using a standardized list of questions
- When is it used? → to obtain information on specific issues from a representative sample of individuals or organizations
- Why? → direct measure, tailored to specific information needs, informs you about a larger population without collecting information from everyone



Method 5 – Cost benefit analysis

- What? → comparing costs and benefits to identify net benefits
- When is it used? → to understand social costs and benefits of project outcomes for stakeholders or to identify the most cost-effective alternatives
- Why? → contributes to informed, balanced decision-making; systematic approach helps minimize bias



Clicker Check

1. Which of these levels represents your fear of sharks?

HIGH

A

B

C

D

E

F

LOW

2. How many times have you eaten ice cream this summer?

A

13+

B

10-12

C

7-9

D

4-6

E

1-3

F

I am lactose intolerant!



Case study 1: Birds vs. Beach goers

- Wildview Park has a major conflict between nesting birds and beach goers. To collect information on park visitor values for endangered and threatened species, which method would you use?
 - A. Focus groups
 - B. Observation
 - C. Demographic analysis
 - D. Surveys
 - E. Cost benefit analysis



Surveys

- What? → data collection by mail, phone, web or face to face using a standardized list of questions
- When is it used? → to obtain information on specific issues from a representative sample of individuals or organizations
- Why? → direct measure, tailored to specific information needs, informs you about a larger population without collecting information from everyone



Focus groups

- What? → guided group discussion, attempts to estimate the response of a larger group
- When is it used? → to identify opinions, attitudes, knowledge, and perceptions about a specific topic
- Why? → systematic collection of information in real time, lower cost than surveys, less time than individual interviews, facilitator can adapt to include new issues that arise



Case study 2: Flip Flops Resorts Seeks Coastal Georgia Location

- Flip Flops Resort is choosing between 3 coastal Georgia sites (Wilmington Island, Tybee Island, Savannah). If you needed information to guide the site selection for this new development, which method would you use first?
 - A. Focus groups
 - B. Observation
 - C. Demographic analysis
 - D. Surveys
 - E. Cost benefit analysis



Cost benefit analysis

- What? → comparing costs and benefits to identify net benefits
- When is it used? → to understand social costs and benefits of project outcomes for stakeholders or to identify the most cost-effective alternatives
- Why? → contributes to informed, balanced decision-making; systematic approach helps minimize bias



Case study 3: Beach Weekend Nightmare

- If one of the specific issues you were asked to address was marine debris coming from boats, which method might you consider? Consider things like boater behavior, the source of the debris, differences among local and visiting boaters.
 - A. Focus groups
 - B. Observation
 - C. Demographic analysis
 - D. Surveys
 - E. Cost benefit analysis



Observation

- What? → information gathering through direct observation of human behavior
- When is it used? → to identify user behavior and associated impacts, types of use, use patterns
- Why? → most direct measure, good for behaviors that people will not voluntarily



Case study 4: Coastal Flooding

- You need information on the population in Savannah and surrounding areas in order to develop emergency plans for evacuations due to flooding. Which method will help?
 - A. Focus groups
 - B. Observation
 - C. Demographic analysis
 - D. Surveys
 - E. Cost benefit analysis



Demographic Analysis

- What? → study of the human population and characteristics like education, income, and race, as well as changes like size and composition
- When is it used? → to identify trends over time and space
- Why? → important to determining constituency and who will be impacted; provides information on how coastal communities are changing over time; cost-efficient if using secondary data



Applications of social science methods

- Social valuation study using surveys and mapping
- Statistical analysis of secondary data
- Development of evaluation framework
- [Indicator development for human health and well-being, indicators to be used for monitoring](#)
- Participatory GIS mapping

Acknowledgements:
Funding provided by the National Oceanic and Atmospheric Administration. This project is a collaborative effort between Hollings Marine Laboratory and the Center for Coastal Monitoring and Assessment. The authors appreciate the assistance of well-being project investigators Maria Dillard, Susan Lovelace and Theresa Goedeke in producing this poster.

Changes in Human Health and Well-being Resulting From the Deepwater Horizon Oil Disaster

COLLEGE of CHARLESTON



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Introduction:

Most of the research on the Deepwater Horizon and other oil disasters has focused on the environmental damage and physical impacts of the disaster. In addition to these impacts, oil disasters also affect the surrounding communities in ways that have yet to be comprehensively evaluated. Because the oil has a significant impact on important ecosystem services that people from the Gulf regularly enjoy, we want to understand how a change in these ecosystem services can affect the well-being of entire communities.

Significance:

This project will improve our understanding of the impacts of such hazards on the basic needs, health, economies and social structure of coastal communities. Our findings will help support community planning before disasters and assist in recovery efforts afterwards. Resource managers and government officials will be able to use our results to create more comprehensive emergency plans. Our results will help officials take a critical look at governance, housing, jobs, public health, preparedness, social conflict and other factors to determine how to decrease the impacts of future disasters on human well-being.

Study Objective:

To document changes of well-being in counties affected by the Deepwater Horizon oil disaster.

Study Area:

This study is focused on twenty counties and parishes along Gulf of Mexico in Alabama, Florida, Louisiana and Mississippi that were directly affected by the oil. The study also includes twenty-one unaffected counties located along the Gulf of Mexico and the Southeast Coast for comparison.

Methods:

We are identifying, collecting, and consolidating the existing data for indicators of well-being into one dataset for modeling and analysis. Using statistical techniques including regression analysis and structural modeling, we will examine changes in well-being over time, focusing on changes associated with the Deepwater Horizon disaster and other large scale environmental events during the study period (2000-2010).

Indicators:

Through a review of the current literature, availability of relevant data, and recommendations from an expert workshop, we selected 13 specific indicators and over 120 measures for human well-being from which to characterize impacts of the Deepwater Horizon disaster on Gulf Coast communities. We are collecting county level data for the period, 2000-2010.

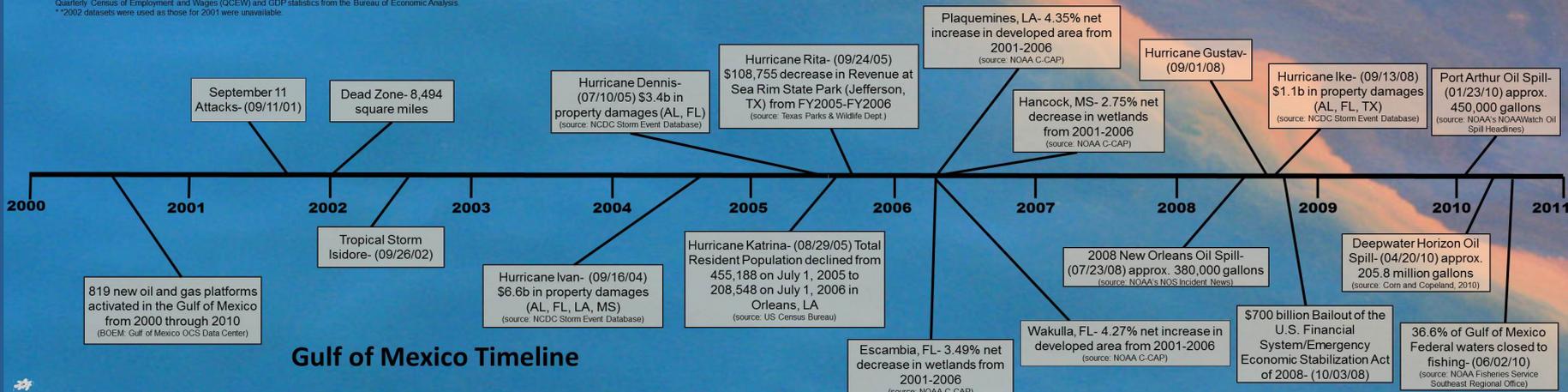
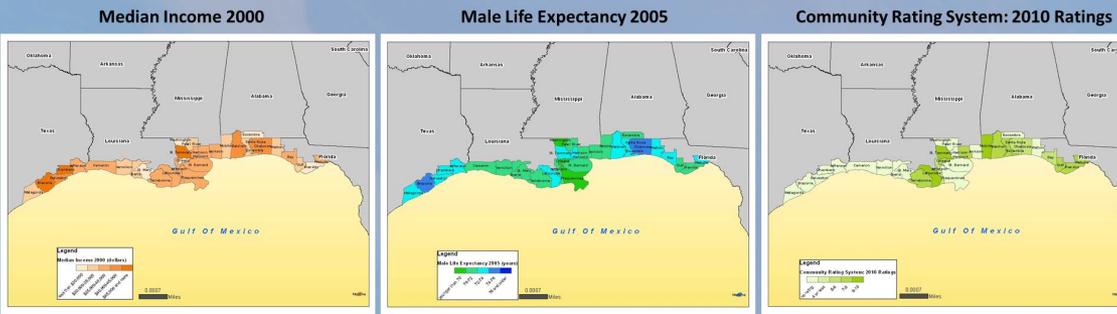


Snapshot of Gulf Coast Ocean Jobs* 2001-2008

County/Parish, State	% Change	Ocean Jobs as a % of Total Jobs	County/Parish, State	% Change	Ocean Jobs as a % of Total Jobs
Baldwin, AL	2%	12.4%	Orleans, LA	-32%	15.6%
Mobile, AL	-4%	8.3%	Plaquemines, LA	-5%	9.7%
Bay, FL	23%	15.5%	St. Bernard, LA	-51%	6.9%
Escambia, FL	-7%	8.6%	St. Mary, LA	-13%	10.9%
Franklin, FL	-1%	17.8%	St. Tammany, LA	53%	12.4%
Gulf, FL	-1%	3.6%	Terrebonne, LA	94%	19.3%
Okaloosa, FL	24%	12.9%	Vermilion, LA	-9.1%	10.3%
Santa Rosa, FL	69%	10.8%	Hancock, MS	44%	6.7%
Wakulla, FL	-34%	5.3%	Harrison, MS	-27%	7.7%
Walton, FL	87%	12.1%	Jackson, MS	-75%	7.4%
Cameron, LA	46%	4.3%	Brazoria, TX	21%	10.7%
Iberia, LA	-46%	6.6%	Chambers, TX	16%**	5.7%
Jefferson, LA	13%	13.2%	Galveston, TX	11%	13.1%
Lafourche, LA	50%	16.7%	Jefferson, TX	46%	12.8%
			Matagorda, TX	-5%	10.1%

*Ocean Jobs derived from Economics: National Ocean Watch (ENOW) datasets, which are based on Bureau of Labor Statistics' Quarterly Census of Employment and Wages (QCEW) and GDP statistics from the Bureau of Economic Analysis.
**2002 datasets were used as those for 2001 were unavailable.

Sample Measures for Economic Security, Health, and Governance Indicators



Gulf of Mexico Timeline

Visit our Project Website: <http://coastalhealth.noaa.gov/dwh>

