



Project Title: “Fisheries Content Provider – Gulf Fisheries Info (FINFO) - #127”

Grantee: Gulf & South Atlantic Fisheries Foundation, Inc.

Amount of Award: \$19,000

Award Period: October 3, 2013 - March 31, 2014

Description of Problem:

Utilizing funds made available through the Gulf States Marine Fisheries Commission (GSMFC) Oil Disaster Relief Program, a website was envisioned to mirror and complement the federal FishWatch.gov, which profiles the sustainability of fisheries in federal waters. A collaboration among the five Gulf states, GSMFC, and NOAA Fisheries, Gulf FINFO provides a platform for these authorities to communicate how they conserve and manage fisheries in Gulf state waters. GCR, Inc. and GSMFC requested the Gulf and South Atlantic Fisheries Foundation, Inc. (Foundation) assistance in completing the fishery profiles for Gulf of Mexico species.

Gulf FINFO, GulfFishInfo.org, profiles top Gulf fisheries, with information ranging from basics about species biology and habitat to how fisheries operate and how each state ensures these operations are sustainable. Through FINFO, users can quickly review the status of Gulf fisheries resources or dig deeper to understand the robust science and responsible management at work to ensure these resources are viable for generations to come.

Statement of Work:

Foundation content creation responsibilities included:

- Six Gulf region species profiles previously completed (included editing the state specific profiles for those species):
 - o Eastern oyster
 - o Brown shrimp
 - o White shrimp
 - o Blue crab
 - o King mackerel
 - o Red snapper
- FAQ page content

- Sustainable Fisheries Management content
- Enjoying Gulf Seafood content (input from Edelman)
- Gulf Fisheries Economics content
- Species profiles - Gulf content created and edited/created state specific content:
 - o Southern flounder
 - o Sheepshead
 - o Black drum
 - o Striped mullet
 - o Pink shrimp
 - o Spiny lobster
 - o Stone crab
 - o Red drum

Weekly content calls and bi-weekly Gulf FINFO State Liaison status calls.

Most state content required heavy edits to standardize language and make sure the content was robust enough for the site.

Content templates are included as appendices to this report.

Seafood Profiles Content Checklist

General Guidance:

States are responsible for providing state-specific information for each of the following categories for every seafood species they are profiling on the site.

Consider the following content requirements as you develop your seafood profiles. Also, if a 3rd party pre-assessment or fishery improvement project exists for a specific species you're working on, be sure to address concerns raised in those documents along with any other common "sustainability" concerns about that species or fishery.

COMMON NAMES:

- ✓ Are there any local nicknames for this species?

SOURCE:

- ✓ Is this species wild-caught, farmed, or both?
- ✓ Where is this species caught or farmed (specific to your state)? Ex: Louisiana state waters

OVERVIEW:

This overview should help "tell the story" of this species and fisheries history and current state in the Gulf/individual state. This information is less technical and should allow contributor to give the profile "flavor." This section introduces the species/fishery and could address the importance of the fishery to a region or state, a management success story, and/or similar content. See NOAA's FishWatch seafood profile overviews (www.fishwatch.gov) or examples to be provided at the kick-off. Questions that might guide your response are as follows:

- Where is it harvested?
- How old is the fishery?
- Important to both commercial harvesters and recreational fishermen?
- What is its current status?
- What kind of management is it under?
- Is there any particular history regarding its management that should be mentioned?
- What is the expected outcome of current management?
- Is there any historical significance to the fishery?
- To what extent are local communities dependent on the fishery?

Also, please provide any photos or illustrations unique to the fishery in your state.

STATUS:

Population:

- ✓ What is the current health of the population – measured against state’s reference points, e.g. spawning potential ratio (similar to the federal level overfished/not overfished status)?
- ✓ If the population is below ideal levels, describe what management is doing to respond. For example: “The Gulf stock is now overfished (below sustainable population levels). Managers [recently implemented](#) a rebuilding plan for the stock. The plan includes a number of measures for the commercial and recreational gag fisheries, including annual catch limits, that will manage harvest at a level that will allow the overfished stock to rebuild to target population levels by a specified deadline.”
- ✓ If this is not applicable, either explain why or turn off this field.

Fishing Rate:

- ✓ What is the current fishing rate/fishing mortality – measured against state’s reference points (similar to federal overfishing, no overfishing status)?
- ✓ If fishing rate is too high, describe what management is doing to respond. For example: “Too high (overfishing); managers recently implemented measures to end overfishing of gag in both the South Atlantic and Gulf of Mexico.”
- ✓ If this is not applicable, either explain why or turn off this field. For example: “Unknown - the biology of wahoo suggests the species can handle relatively high fishing rates.”

Ecosystem Impacts:

- ✓ Does the fishery have any adverse impacts on the ecosystem (other species and/or habitat)? This can include impacts due to lost or abandoned gear (such as derelict crab traps).
- ✓ If so describe impacts and management response as well as any monitoring information. For example, “Sea turtles can be caught in shrimp trawls. Harvesters follow federal regulations requiring turtle excluder devices to minimize this bycatch.” OR “Traps can damage bottom habitat if they are set on and retrieved from coral reefs, live hard-bottom habitat, or seagrass beds. Managers implemented measures to close lobster trapping in some

areas to protect corals.” Please provide maps or graphics which show areas closed to fishing to address impacts on the ecosystem or other fisheries.

- ✓ If no impact, describe this as well. For example, “Hook-and-line gear has minimal impact on habitat as it does not contact the ocean floor.”

Environmental Factors:

- ✓ Do any natural and manmade variables such as climate, salinity, pollution, coastal restoration, etc. affect the species and/or fishery?
- ✓ If so, describe any management response and/or monitoring information.
- ✓ For example: “The growth and survival of young shrimp is directly related to water conditions in their nursery areas (coastal estuaries) in the spring; higher temperatures and salinities promote better growth and survival. These conditions play a large role in dictating the next season’s potential harvest. Through a coastwide shrimp monitoring program, LDWF biologists monitor these and other influential water and environmental conditions and use the data to make appropriate management recommendations.”

Current Initiatives:

- ✓ Are there any sustainability/marketing related initiatives such as fishery improvement plans, certifications, and other similar programs in place? Note that this field is optional and can be turned off if there is no applicable information. For example: “Several members of the shrimp industry have come together and organized a [fishery improvement plan](#) for the Louisiana shrimp fishery. They have evaluated the fishery, agreed on a number of improvement objectives, and will be carrying out activities to meet these objectives and reporting on their progress.”

HARVESTING:

Methods:

- ✓ What gear do harvesters and recreational fishermen use to harvest this species?
- ✓ Do you have any photos or illustrations of the gear?
- ✓ How does this gear work? For example: “Harvesters catch shrimp with trawls. Shrimp trawlers tow cone-shaped nets through the water near the ocean floor. The nets are wide in the front and taper toward the back, where the catch is concentrated.”
- ✓ How much does each gear contribute to the total harvest? For example: “Gillnets are the principal gear used in the commercial sector and account for approximately 40 percent of commercial landings. Harvesters also use hook and line gear and trawls to catch bluefish.”

- ✓ Where do harvesters fish for this species with these gear types? General not specific areas, i.e. open water, near shore, over sandy bottoms, etc. For example: “Harvesters catch rock shrimp using trawls. Rock shrimp are caught in deeper water than penaeid shrimp (white, pink, and brown shrimp in the same region).” Do you have any graphics or maps of fishing areas?

Seasons:

- ✓ When do harvesters catch this species and in what areas (if applicable)?
- ✓ Are there any peak seasons?
- ✓ Are seasons set by management? If so, explain why. For example: “Fishing season closed April 1 through August 5 off Florida and the Gulf states to protect spiny lobsters during the peak of their spawning season.”
- ✓ If applicable, why is the fishery seasonal? For example: “In Louisiana’s inshore state waters, shrimp seasons are flexible, set by the Louisiana Wildlife and Fisheries Commission based on biological and technical data about shrimp populations. Shrimp are available for harvest in inshore waters as they migrate from coastal estuaries out to offshore waters to spawn. The Commission opens the inshore season when they’ve determined enough market-sized shrimp are available in these waters for harvest.”
- ✓ Is there a link to a state website where openings and closings are posted?

Landings: This data will come from NOAA databases. Please note if this information differs from information from state databases and provide the most accurate data. These will most be graphic representations of the data but can and should include some interpretation to qualify the data.

- ✓ Commercial by volume (in pounds) and by value (in dollars). Example text: “Annual commercial harvests have remained steady due to quota restrictions and have averaged 6.9 million pounds over the past several years. The 2010 commercial harvest was valued at over \$17 million.”
- ✓ Recreational by volume (in pounds). Example text: “There is equal interest in both recreational and commercial fishing for king mackerel. Recreational landings in both the South Atlantic and Gulf have been comparable or larger than the commercial harvest since the 1980s. In the past decade, annual recreational landings have averaged about 4.2 million pounds in the Atlantic and about 3.7 million pounds in the Gulf.”

MONITORING:

Overview:

- ✓ Who is responsible for monitoring the stock and the fishery?
- ✓ How do they accomplish this?

- ✓ Please describe relevant partnerships with academic or research institutions, e.g. Florida Fish and Wildlife Conservation Commission and Florida Fish and Wildlife Research Institute; or LDWF and applicable LSU programs; or Dauphin Island, etc.
- ✓ How often do they survey the stock and/or fishery?
- ✓ How is this information used, especially by managers?
- ✓ Is this information shared with regional organizations, other states, federal agencies, etc.?
- ✓ For example: “Every month, LDWF biologists conduct surveys to monitor the abundance of brown shrimp. They tow an otter trawl through the water for 10 minutes at a time, count all of the shrimp they catch, measure a random selection of the catch, record the information, and then start the process again at another location. They sample hundreds of locations then compile all of their collected data and plug it into mathematical models that generate an abundance index. They also monitor water conditions at their sample sites. Managers use this information to determine when shrimp seasons should be opened and closed. Scientists from NOAA Fisheries Southeast Fisheries Science Center also use LDWF’s monthly survey data, along with abundance data from joint federal and state Southeast Area Monitoring and Assessment Program (SEAMAP) groundfish surveys and commercial catch data, to assess the status of the brown shrimp stock throughout the Gulf of Mexico.”
- ✓ Please provide any relevant document such as a field survey manual or report that describes your overall independent survey program, as well as a description of your fishery dependent programs for commercial and recreational.

Current abundance:

- ✓ What is the current status of the stock? For example: “The Gulf of Mexico vermilion snapper stock assessment was last completed in 2011 and the stock is at 92 percent of its target population.”
- ✓ If a description of population status doesn’t apply, explain why. For example:” Shrimp are essentially an “annual crop” – most shrimp do not survive longer than 2 years. Although scientists monitor shrimp abundance to ensure the stock is healthy, abundance is not an important consideration for fishery managers. Instead, managers consider historic harvest amounts and fishing rates in developing a management strategy for the fishery. They also look at the amount of surviving parents and environmental conditions, such as weather and water temperatures. As long as environmental conditions are favorable, shrimp are very productive and can rebound from low abundance one year to high abundance the next.”

- ✓ If there is an applicable stock assessment, profile or report, please provide a link or copy for posting. If available, please provide graphics on status.

Additional research:

- ✓ Is there any other ongoing or future research on the species or fishery? If so, briefly describe and link to. For example: “NOAA Fisheries scientists [continue to study](#) the possible effects of the 2010 Deepwater Horizon/BP oil spill on Atlantic bluefin tuna, as the Gulf of Mexico is one of the only known spawning grounds for the western stock of Atlantic bluefin tuna.”
- ✓ Please include a description of research partnerships with academic organizations, research institutions, Sea Grant or other state or regional partnerships applicable to your state fisheries.

MANAGING:

Who’s responsible?

- ✓ Who is the management authority and what is their jurisdiction? For example: “As of October 2011, the stone crab fishery is now solely managed by the State of Florida. Florida and the Gulf of Mexico Fishery Management Council previously managed the fishery collaboratively, with Florida in charge of state waters and the Council in charge of federal waters. But because the fishery mostly operates in Florida state waters, the management authorities realized this management process was inefficient and duplicated efforts. To streamline management of the fishery and reduce costs, the Council transferred full management authority of the stone crab resource to the State of Florida, which has actively managed the fishery in state waters since 1929. Future management of this valuable fishery should now be more effective and efficient.”
- ✓ Is the stock/fishery shared with other jurisdictions? If so, is management compatible with other jurisdiction’s management? (For example, state vs. federal management of shrimp fisheries)
- ✓ Does the management authority collaborate and cooperate with any relevant regional or international authorities that have a shared interest in the stock/fishery?
- ✓ How are stakeholders involved in the management process? (For example, industry task forces in Louisiana)

Management program:

- ✓ List and link to fishery management plan, if applicable.
- ✓ What is the overall management strategy (goals and objectives)? For example: “The goal of Louisiana’s shrimp management program is to

maximize the economic and cultural benefits of the shrimp resource to the state's citizens.”

Commercial:

- ✓ List and describe the purpose of current management measures for the commercial fishery. Don't just say what the management measure is; also describe what that measure is designed to do/why it's in place. For example:
 - Individual fishing quota program, which allocates the commercial catch among individual harvesters and corporations. Harvesters may catch their quotas whenever they choose to do so and must report how much they harvest.
 - Minimum size limit to protect the spawning stock and juveniles.
 - Restrictions on the type of gear harvesters may use and where they can fish to reduce bycatch. Be sure to include any species-specific post-harvest/handling requirements.
- ✓ Note that this section doesn't just have to describe regulations; it can also include other management programs such as extension, outreach, technical/business assistance, etc.
- ✓ Include any compliance, monitoring, and enforcement information.
 - For example: “Areas closed to fishing to protect sensitive fish populations and habitats. Vessels with commercial reef fish permits must have a working satellite-based vessel monitoring system, (VMS) to enforce these closures. Laws are enforced by state enforcement agency (name) in cooperation with federal enforcement agencies through at-sea boardings and dock-side inspections.”

Recreational:

- ✓ List and describe current management measures for the recreational fishery. Don't just say what the management measure is; also describe what that measure is designed to do/why it's in place.
- ✓ Note that this section doesn't just have to describe regulations; it can also include other management programs such as extension, outreach, etc.
- ✓ Include any compliance, monitoring, and enforcement information.

DATA SOURCES:

Please provide links to data sources unique to your state where applicable to the above referenced topics.

Sustainable Fisheries Management

Content Checklist

General guidelines:

States are responsible for providing state-specific information for the “Who’s responsible?” and “What do they do?” categories. GSMFC or designee will develop the content for the “What is it” section as well as the Gulf information for “Who’s responsible” and “What do they do.”

WHO’S RESPONSIBLE?

- ✓ Who are the authorities responsible for managing fisheries in your state? This can include agencies, commissions, legislature, stakeholder groups (such as industry task forces).
- ✓ What areas do they have jurisdiction over?
- ✓ What are their roles and responsibilities?
- ✓ How do they work together and with other relevant bodies?

WHAT DO THEY DO?

This section will highlight how the regional or state organizations manage fisheries, i.e. what their process is. This section is broken down into three categories – science, management, and compliance and enforcement.

Science:

- ✓ In general, how does the authority collect fishery dependent and independent data?
 - How does the authority monitor the stocks? (Regular research vessel surveys of the resource and its environment, stock assessments, etc.)
 - How does the authority monitor the ecosystem? (Water and environmental conditions (both manmade and natural), associated species, habitat, etc.)
 - How does the authority monitor the fisheries? (Regular collection of data on catch and fishing effort, economics, gear research, etc.)
- ✓ How is this data/information used? How does it feed into management?
- ✓ Why is scientific information important in making management decisions?

Management:

- ✓ What is the overarching legal/administrative framework for the state’s fisheries management? (Laws, statutes, etc.)
- ✓ How does the authority manage fisheries (regulations, voluntary programs, etc.)?

- ✓ What are the authority's long-term fishery management and conservation goals and objectives?
- ✓ What is the general fisheries management process?
- ✓ How are stakeholders and the public involved?
- ✓ How do they balance concerns the environment, economy, and the community?

Compliance and Enforcement:

- ✓ How does the authority ensure fishermen are aware of applicable management measures?
- ✓ How do they help harvesters comply with these measures?
- ✓ How do they monitor compliance?
- ✓ How are these measures enforced, if necessary?
- ✓ Why is compliance and enforcement important?
- ✓ How is compliance and enforcement coordinated with other law enforcement agencies (federal and state)?

Enjoying Gulf Seafood Content Checklist

General Guidelines:

States are responsible for providing state-specific information for the “Quality”, “Safety”, and “Marketing Programs” categories. GSMFC will be responsible for general and Gulf information for each of the following categories.

OVERVIEW:

This section will serve as a brief introduction to the quality and safety of Gulf seafood as well as the resources available for marketing seafood.

QUALITY:

This description will discuss any special handling practices required at the Gulf/state level to ensure quality seafood products. Voluntary programs can also be included. This information should refer to producer handling practices, not consumer.

SAFETY:

This section will cover safety requirements at the Gulf/state level. Voluntary programs can also be included. Like the quality section, this information should refer to producer practices, not consumer.

MARKETING PROGRAMS:

Describe all Gulf/state programs aimed at educating the supply chain/consumer, marketing seafood, etc. Can include Gulf/state marketing boards, direct marketing programs, Gulf/state market maker sites, sustainability partnerships, etc. GSMFC will be responsible for Gulf content; contacts or designee from individual states will be responsible for individual states' content.

DATA SOURCES:

Please provide links to data sources unique to your state where applicable to the above referenced topics.

Value of Gulf Fisheries Content Checklist

General Guidance:

States are responsible for providing state-specific information for the overview section as well as an interpretation of the data under “Commercial Fisheries” and “Recreational Fisheries” categories. GSMFC or designee will be responsible for general Gulf information for each of the following categories.

OVERVIEW:

This description should include a characterization of fisheries and fishing communities by Gulf and by state. This section will provide an overview of the importance of Gulf/state fisheries to the Gulf/state community through their economic contribution.

COMMERCIAL FISHERIES:

This information will come from NOAA and/or state databases. These will most be graphic representations of the data but should include some interpretation. States should review NOAA data and ensure it lines up with state data.

Landed Value

Ports – Interpretation could include a brief description of significant fisheries for these ports and any graphic illustrations or maps of ports commercial or recreational.

Impacts – This information will be presented by state and will show years 2006-2011.

- Employment
- Sales
- Income
- Value Added

RECREATIONAL FISHERIES:

This information will come from NOAA and/or state databases. These will most be graphic representations of the data but should include some interpretation.

Trips

Total Expenditures

Impacts – This information will be presented by state and will show years 2006-2011.

- Employment
- Sales
- Income

- Value Added

DATA SOURCES:

This data will mostly come from NOAA's Fisheries Economics of the US report and interactive economic impact tool. Some information might also come from NOAA's report on fishing communities.

Please provide links or references to data sources unique to your state where applicable to the above referenced topics, including documents that provide background on the value of the fishery to the coastal communities (i.e. books on history of local fishery, interviews with fishermen from Sea Grant or other sources, etc.)