

**COMMITTEE ON RESOURCES
U. S. HOUSE OF REPRESENTATIVES**

TESTIMONY OF

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Mr. Chairman and distinguished committee members, thank you for the invitation to appear today to discuss an issue important to my state, but equally important to the Gulf Coast region and the nation. I am Robert Barham, Secretary for the Louisiana Department of Wildlife and Fisheries.

My state is blessed with abundant and diverse natural resources. Louisianans cherish these resources but we have never been an “either/or” state. We have long been a major fisheries producer as well as major energy producer. Louisiana accounts for one quarter of the commercial fisheries production of the lower 48 and at the same time a third of the nation’s natural gas and oil supply is either produced in Louisiana, produced off our coast, or moves through our state. Louisiana is also known worldwide as the Sportsman’s Paradise. Our coastal marshes and wetlands are the most important waterfowl wintering area in North America providing habitat for about 2 million migratory waterfowl. They are also home to some of the largest alligator, river otter, and water bird populations in the country.

The fishing industry and oil and gas industry have had a mutually beneficial coexistence in my state for many decades and we recognize that Louisiana’s role as a major energy producer is vital to our national security but the recent Deepwater Horizon incident brings home the unfortunate ecological consequences which can result from energy production.

What's at Risk

Commercial and recreational fishing is a way of life in coastal Louisiana. All of our coastal communities had their beginnings as fishing villages and fishing is still a major economic engine in those communities. The cultural identity of these communities is also largely defined by fishing.

Commercial Fisheries

Louisiana is second only to Alaska in terms of commercial fisheries production and home to 3 of the top 7 commercial fishing ports in the country. About 1 billion pounds of fisheries products worth over \$272 million are produced annually. In recent years Louisiana landed significant portions of the total U.S. commercial harvest of many species, including, 35% of the shrimp, 36% of the oysters, 56% of the Gulf menhaden and 27% of the blue crab, 55% of the black drum, 23% of all snapper species, and 20% of the yellowfin tuna. Nearly 13 thousand commercial fishermen and over 1,500 seafood dealers/processors and brokers register each year to provide this nation with fresh seafood.

Recreational Fisheries

Louisiana's recreational harvest is second only to Florida among the states surveyed by the NOAA Fisheries recreational survey. Louisiana-based recreational anglers caught high proportions of the total U.S. recreational harvest of many species, including, 57% of the black drum, 56% of the red drum, 28% of the sheepshead, 29% of the southern flounder, and 51% of the spotted seatrout from the states surveyed by the Marine Recreational Fishery Statistical Survey. Over 13% of the total marine recreational harvest in the nation is landed in Louisiana. We have a large Charter Fishing industry and tourist make up a large portion of their clientele. Annually 660 charter fishing guides provide their services to recreational fishermen. On average 4.5 million saltwater recreational fishing trips start and end out of Louisiana fishing sights.

Species of Special Interest

There are 21 species of marine mammals and 5 species of sea turtles that occur in the area of the spill.

Jobs, Income and Tax Revenues

Louisiana's commercial and recreational fisheries resources provide the state and national economy with an important source of jobs, income, and tax revenues. A recent study of the economic benefits of fisheries, wildlife and boating in

Louisiana prepared by Southwick Associates indicates that marine commercial and recreational fishing supported \$2.2 billion in retail sales, 34,078 jobs, \$588 million in salaries and wages, generated \$198 million in federal income tax revenue and had a total economic impact \$3.1 billion. Louisiana's commercial fishery is a major driver of the restaurant industry and the recreational fishery is a major driver of the tourism industry in the entire Gulf region.

<i>Economic Benefits of Marine Fisheries in Louisiana</i> ¹						
	Retail Sales	Total Economic Effect	Earnings	Jobs Supported	State and Local Tax Revenues	Federal Tax Revenues
Saltwater Recreational Fishing	\$472,092,061	\$757,091,876	\$210,847,634	7,733	\$49,976,489	\$45,605,182
Shrimp	\$961,973,147	\$1,282,630,863	\$206,228,716	14,384	91,138,912	\$83,444,200
Oysters	\$238,407,501	\$317,876,668	\$51,110,027	3,565	22,587,117	\$20,680,123
Blue Crab	\$219,973,963	\$293,298,617	\$47,158,228	3,289	20,840,694	\$19,081,147
Menhaden	\$223,080,959	\$297,441,278	\$47,824,308	3,336	21,135,055	\$19,350,657
Other Marine Finfish	\$118,449,901	\$157,933,202	\$25,393,403	1,771	11,222,138	\$10,274,670
Total	\$2,233,977,532	\$3,106,272,504	\$588,562,316	34,078	\$216,900,405	\$198,435,979

¹ Southwick Associates. (2008). The Economic Benefits of fisheries, Wildlife, and boating Resources in the State of Louisiana - 2006. Prepared for the Louisiana Department of Wildlife and Fisheries. Baton Rouge, LA. pp 14-15. Website: http://www.wlf.louisiana.gov/pdfs/education/Southwick_2006_final_final_report_5-27-08.pdf.

Coastal Habitat

Forty percent of the coastal wetlands within the lower 48 states are in Louisiana. Louisiana is also home to the delta of the largest river on the continent and unlike the coastal habitat of much of the country Louisiana's coast is composed of thousands of miles of shoreline dominated by highly fragmented vegetated wetlands. These coastal wetlands are laced with large and small bays, lakes, bayous, canals, shallow ponds and remnant barrier islands. These wetlands support our highly productive fisheries but also perform an important function in protecting our coastal communities and oil and gas infrastructure from storm surge.

State Response

The immediate reaction to the Deepwater Horizon explosion was concern for the loss of life and the recovery and safety of the survivors. Initially there was no confirmed oil leakage but once the rig sank, oil leakage was confirmed and became an issue of concern.

It became apparent early on that dealing with the consequences of this incident would not be a sprint but rather a marathon the length of which is yet to be determined.

I, along with Governor Jindal and other state officials met with the Coast Guard and BP officials early on to get an understanding of their response capabilities and response plans and we immediately began preparations for the potential damage resulting from movement of leaked oil to our coast. Department field staff began daily reconnaissance of our entire coast looking for presence of oil or oiled wildlife and that effort continues indefinitely. Key state officials, parish presidents, emergency operations professionals, levee district officials and others continuously met to discuss strategies to fill the voids we identified in the response efforts by BP and the Coast Guard.

Using all information available regarding the location and trajectory of the surface oil, the Department worked with both federal and state partners to identify the most highly sensitive shoreline areas that would most likely be impacted and developed boom deployment plans to protect these areas. The initial boom deployments to protect highly sensitive areas took place well before any oil made landfall but these deployments proved to be very unstable due to wave, wind and current action.

Using information on the likely movement of oil into an area I along with the Secretary of our State Department of Health and Hospitals coordinated the implementation of precautionary closures to fishing in designated areas and initiated sampling and testing of fish to modify and adjust area openings and closures.

Simultaneous with the implementation of the initial boom deployments and when it became apparent that neither BP nor the Coast Guard had a detailed “boom plan” we worked with our state partners and local government officials to develop a boom plan for the entire coast, identifying primary closure points focused on attempting to keep oil from the most interior reaches of our wetlands.

The state also fully utilized all available freshwater diversions to flow freshwater into our coastal areas in an attempt to minimize intrusion of oil into our wetlands.

As a result of the limited effectiveness of the initial boom deployments the state, again working with local government officials, the state developed a dredging plan to build “sand booms” along the alignment of the historic barrier islands and filed for an emergency permit from the Army Corps of Engineers.

Louisiana has from the start “leaned forward” with actions, proposed response plans and advice to both BP and the Coast Guard.

What We Know

The characteristics which make Louisiana’s coast highly productive from a fisheries standpoint also make them exceptionally vulnerable to oil impacts. The topography of coastal Louisiana presents unique challenges with respect to oil movement and infiltration into these areas as well as unique clean-up challenges. Simply put, our coast is not composed of beaches which can be reasonably cleaned.

In the short term we know that there has been and continues to be a tremendous loss of earnings for a large and diverse group of people dependent on our coast. Payrolls have already been cut. Commercial fishermen have been deprived of the opportunity to fish. The availability of seafood products to seafood docks and processors has been severely limited if not eliminated. Restaurants and seafood consumers in the region and throughout the nation have been deprived of highly prized food products. Charter Captains have been deprived of the opportunity to take clients on fishing trips and have had many future booked trips cancelled. Sports fishermen have not been able to fish. All of the industries and businesses that rely on commercial and recreational fishing have been negatively impacted by the lack of expenditures by fishermen, dealers and processors.

Most of our large commercial fisheries are based on estuarine dependent species many of which spawn offshore in the Gulf, the eggs and larvae are carried inshore on currents where they grow into juveniles and sub-adults and then move back to the Gulf as adults. Other species primarily occupy near shore and inshore areas throughout their life cycle while some spend their entire life out in the open Gulf.

A tremendous volume of oil has spread throughout a large area of the Gulf. Oil has also reached Louisiana's shores in many areas and has infiltrated into some of our interior coastal waters. It is likely that virtually all species of aquatic life at some stage of their life cycle have been or will be exposed to some form or concentration of oil leaked from the Deepwater Horizon.

Coastal shorelines, sea turtles, marine mammals and numerous wildlife species have already been oiled.

In addition to the massive amount of oil, there is also a large volume of oil dispersants that have been applied to our coastal waters, and it is likely that virtually all species of aquatic life at some stage of their life cycle have been or will be exposed to some concentration of dispersants.

We know that the oil leaked has "weathered" into various water/oil emulsions and other forms, and in general that the more "weathered" forms of oil are more stable and persistent in the environment.

Unfortunately, national media reports have led to negative consumer ideas about the quality and safety of harvested seafood products despite the fact that we have implemented a continuing testing program and have issued precautionary fishing closures so that those Louisiana seafood products that are making it to the wholesale and retail market remain safe and wholesome.

Consumer confidence questions combined with reductions in product availabilities have influenced the market share of our seafood products and recent experiences with disruption of our seafood supply by Hurricanes Katrina, Rita, Ike and Gustav have demonstrated the extreme difficulty recapturing that market share. Negative consumer confidence also threatens our Charter, restaurant and tourism industries.

In addition to the economic impacts, fishing is a way of life and an integral part of the culture of coastal Louisiana. Many of the fishing businesses that are threatened have been in families for generations. Coastal residents are experiencing extreme anxiety because of the "unknowns" both of their short term future and long term future. In a nutshell, coastal Louisiana has been turned on its head.

What we don't know

Unfortunately there are many things we don't know.

At this point we do not know the total volume of oil which has leaked from the Deepwater Horizon into the Gulf nor do we have consensus as to what volume continues to leak daily.

We have some knowledge of the extent and distribution of oil at the surface but the distribution changes with time as the volume grows and natural forces relocate and spread oil from the source site. The movement of oil is not in a straight line but rather omnidirectional.

Large volumes of dispersants have been and are continuing to be used both on the surface and injected into the plume below surface. This has been a serious concern of mine and on May 18th I wrote to BP officials expressing my concern and requesting additional data and information on the dispersants being used. In addition to concerns regarding the direct effects of dispersants on aquatic life it has become increasingly evident that there is a significant volume of oil below the surface of the water and it is difficult if not impossible to track movement of oil into new areas.

As the oil “weathers” it is transformed into various types of water/oil emulsions or other forms, is “scattered” in response to dispersants, and the movement dynamics of each of these react uniquely to the naturally occurring transport mechanisms in the Gulf and inshore waters. We do not have a complete understanding of the transport mechanisms but these same transport mechanisms transport fish eggs and larvae to areas critical to their survival into juveniles and adults.

The marine/estuarine ecosystem is highly complex and natural fluctuations in species composition, abundance and distribution are a basic feature of its normal function. We have limited understanding of these natural fluctuations.

Impacts from large volume surface spills have been documented (i.e. Exxon Valdez) however there is little documented information on large volume deepwater leaks. Surface spills likely have differing impacts than deepwater leaks.

We have limited knowledge of the concentrations of oil and dispersants at various levels of the water column. Eggs and larvae of various species are transported at the surface or at various levels of the water column.

We do not have a complete understanding of the toxicity of various concentrations of oil and dispersants to all of the life stages of all species of aquatic life.

Eggs and larvae are passively transported by currents and would not be expected to exhibit any oil avoidance behavior however we have limited if any knowledge of avoidance behavior by those life stages in which they are active swimmers.

We have little knowledge of deepwater transport mechanisms.

We have little knowledge of deepwater ecology.

Although we have some experience with relatively small scale releases of oil in our inshore areas, the immediate and residual effects of large quantities of oil over large shallow areas or large areas of vegetative wetlands are largely unknown.

The list can go on. There are many questions which will require answers if we are to truly understand the ecological impacts.

Closing

As I mentioned earlier this is not a sprint and it is difficult to envision where we will be when and if this marathon comes to an end.

The economy and culture of coastal Louisiana is a unique blend of many things similar to the unique blends prepared by our great chef's in New Orleans when they prepare that succulent dish of gumbo. In the case of coastal Louisiana our coastal ecology and fishing is and always has been the main ingredient. At this point the main ingredient is threatened and the future is anything but certain.