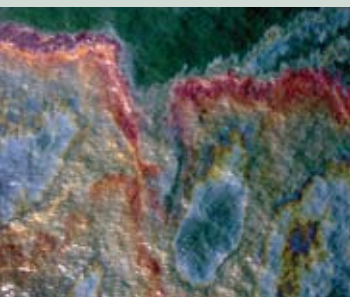


Stressed Out



THE GULF OIL SPILL IMPACTED HUNDREDS OF THOUSANDS OF FLORIDIANS



In the end, little of the estimated 220 million gallons of oil that gushed from the Deepwater Horizon well last year actually soiled Florida's beaches, but even the threat of that oil had a dramatic effect on the lives of thousands of people along the Gulf coast.

Using interviews with Gulf residents, surveys of Floridians and tourists, and analyses of laws and legal precedents, UF researchers have begun to develop a clearer understanding of how the spill impacted residents and industries.

Oil Anxiety

Watching the saturation news coverage of the spill from his office at UF's Emerging Pathogens Institute in Gainesville, Glenn Morris couldn't help but wonder what effect the threat to their livelihood was having on residents of the region.

"Our concern was to go in there and find out what was happening," Morris says. "It's one thing to talk about it or see it on the TV news, but you really need data. You've got to get in on the ground and talk to people. Thanks to the excellent network that the extension service has and the work by county extension folks, we were able to make contacts with key

components of the community to go in and do a very early assessment to try to get a feel for what was happening within these coastal communities."

So Morris, director of the institute and a nationally recognized public health expert, partnered with UF extension specialists on the ground in the Florida Panhandle to survey residents about their state of mind. William Mahan, Franklin County Extension director, mobilized the extension staff and community organizers to enlist subjects from Franklin County and Baldwin County, Ala. The researchers administered a one-hour standardized test to nearly 100 residents.

The researchers asked the study participants — mostly men involved in the Gulf fishing industries, or people who had suffered direct financial damages because of the spill — to answer a range of psychological questions, from how their financial circumstances were affected by the spill to how well they were able to cope in the months following the disaster. Participants were also assessed on cognitive tests to determine dexterity, speed and attention span.

What they found is that the psychological effects of the spill on residents extended far beyond areas of the Gulf that were directly impacted by the spill.

Writing in the online edition of the journal *Environmental Health Perspectives*, a publication of the National Institutes of Health, the researchers reported that people living in Franklin County — where oil had not reached the shore — showed similar levels of anxiety, depression, fatigue, anger and overall mood disturbance as people living in Alabama's directly affected communities. No



MENTALLY, ECONOMICALLY AND LEGALLY

evidence of neurotoxicologic impacts — in which the brain or nervous system is physically affected by oil, dispersants or other chemicals — was observed.

“The effects were fairly profound, particularly on the psychosocial side, in these communities, but what was interesting to us was the fact that it wasn’t so much the presence of oil,” Morris says. “It was more the financial loss and the overall impact on the community, which was generated because of the oil spill, that was having the impact on the individuals.”

The researchers also surveyed citizens’ perceived risk of calamity. The months of local and national media reports predicting oil would wash up along Franklin County’s shoreline led many citizens of the county to think that even natural events, such as red tide or protein scum, represented oil sightings. Other residents were convinced the government was covering up information and that the spill had already reached Franklin County.

“One of the things that caught us by surprise, from the mental health perspective, is that we wouldn’t expect to see such a strong peak of mental health issues until about three years after a disaster,” says Mahan. “Three years is the typical time period for major mood disturbances to manifest.”

The paper’s authors will continue to monitor domestic violence, substance abuse and long-term rates of stress and depression, all of which are on the rise in both counties. Studies conducted six years after the 1989 Exxon



Valdez oil spill, which examined only direct exposure to that spill, found that Alaskans exposed to that spill still suffered from mood disturbances significantly correlated with income and resource loss. The researchers are calling for greater longitudinal analysis of the psychological effects of the BP spill, as well as long-term community-academic partnerships in the two counties, where emergency mental health services, they say, are still lacking.

Tourist Trap



“First come the cancellations of beach trips, stays in hotels, motels and time-shares. Then we see reduced patronage of restaurants, grocery stores, bars, golf courses, water parks, shopping and convenience stores.”

— Stephen Holland

The Deepwater Horizon spill could not have come at a worse time for those who depend on tourism as their livelihood, as destinations in the Gulf were just entering the peak summer season.

Stephen Holland, associate director of UF’s Center for Tourism Research and Development, says economic impacts from the spill occurred in phases.

“When the oil is waterborne, we see disruptions in local seafood consumption and cancellations of recreational and commercial boating and fishing trips,” Holland says. “That affects other parts of the coastal economy, such as ice and bait sales, boat motor repairs, marina dock payments and diesel sales. We also see diversions of cruise ships and off-shore scuba diving and snorkeling excursions.”

As the oil enters the near-shore waters, disruptions spread to activities like personal watercraft use, para-sailing, surfing, fishing from piers, near-shore scuba/snorkeling, near shore eco-tours and dinner and sunset cruises.

But when the oil washes up on beaches, the magnitude of impacts explodes.

“First come the cancellations of beach trips, stays in hotels, motels and time-shares. Then we see reduced patronage of restaurants, grocery stores, bars, golf courses, water parks, shopping and convenience stores,” Holland adds. “Tanning, beach walking, spending quality time with family, kite flying, surf-fishing, bird watching, escaping the heat and just plain relaxing — it’s all suddenly off-limits.”

And even though a very limited number of Florida beaches experienced any actual oil pollution, it was hard to tell by the media coverage.

“Undeniably, in addition to the environmental, economic and social impacts, the Oil Spill was also a crisis of perception,” says Lori Pennington-Gray, Director of UF’s Tourism Crisis Management Institute.

Media coverage flowed almost as fast as the oil and the impact on tourism was immediate.

“The intensity of this coverage obviously had a tremendous impact on travelers’ awareness and interest in the spill,” says Pennington-Gray. “It has also clearly had negative impacts, particularly on potential tourists to the region.”

Between early May and late June 2010 the UF institute collaborated with Tampa-based Research Data Services, Inc. on three surveys of potential and/or past visitors to Gulf Coast beach destinations.

The study found that the percentage of respondents who said the oil spill caused them to change their vacation destination rose as the crisis continued. Almost 20 percent of respondents indicated an affect in the first survey, 34.4 percent in the second survey and 35.3 in the third survey.

When broken down by region, the research found that residents in the Southeast and Midwest, as well as international tourists, all increased over time. In the Northeast, however, concerns rose between the first and second survey, then went down in the third survey.

“This may have been related to the fact that VISIT FLORIDA, the state tourism agency, received \$25 million from BP for advertising and a portion of these advertising dollars were spent in major metro markets such as New York and Philadelphia,” Pennington-Gray says.

The institute continues to conduct follow-up research to determine the long-term impact on visitors’ perceptions of Florida beaches.

“The oil spill in the Gulf of Mexico provided a unique setting to monitor how risk perceptions of potential tourists change over a prolonged period of time. Tracking the dynamics over a prolonged crisis may provide significant insight into response and recovery efforts,” says Pennington-Gray.

Legal Legacy



“The mission of the law working group is to intensively evaluate and scrutinize the existing law that relates to oil spills.”
— Jon Mills

UF legal scholars are also contributing their expertise to the oil spill conversation, helping to assess local, state and federal laws, review previous disasters, evaluate the claims process and mitigate the effects of — and perhaps prevent — future catastrophes.

At UF’s Levin College of Law, experts have formed the UF Law Oil Spill Working Group to assist in working through the numerous legal issues that have arisen since the spill.

“The mission of the law working group is to intensively evaluate and scrutinize the existing law that relates to oil spills,” says Jon Mills, dean emeritus of the college and head of the Oil Spill Working Group.

“The laws are complex and overlapping. It’s not going to be easy to sort out,” says Mills, who also is director of the college’s Center for Governmental Responsibility (CGR).

The 1989 Exxon Valdez oil spill in Alaska, the resulting federal Oil Spill Pollution Act of 1990 (OPA) and Florida statute 376 — Pollutant Discharge Prevention and Removal — are a few of the areas the group is focusing on to better grasp the current situation in Florida. But history and law offer limited guidance because of the unique circumstances of the Gulf spill.

“In Alaska there is one state involved and here there are four states. Here the damages are larger, considerably different and involve much more tourism,” Mills says.

And while many federal statutes focus on resource damage to wildlife and marine life, a big question that remains

unanswered by previous legislation is remuneration for economic loss in a place like Florida.

Mills offers this hypothetical scenario to illustrate the situation: If a hotel owner in Panama City Beach, which never had oil on the beach, still loses business over a period of years because of the perception of the Gulf Coast beaches, are those losses recoverable?

It’s still too early to know, Mills says, adding that there are a lot of questions remaining about how the claims process will play out.

With the help of a \$25,000 grant from the McIntosh Foundation, Mills says the Oil Spill Working Group has continued researching the previous policy areas and also started compiling data to contribute to the Environmental Protection Agency’s Gulf Ecosystem Restoration Task Force.

In November, Ocean Therapy Solutions, Inc., a company affiliated with the actor Kevin Costner, contracted with CGR for research on the legal foundations of response to the oil spill. Costner has been active in efforts to improve the response process from oil spills.

Tim McLendon, CGR’s staff attorney, says one “victim” of the spill is local governments.

“How do local governments recover?” McLendon says. “Some of them had been getting funds from BP, but that is winding down. They have fallen through the cracks and they’re going to have to fight their way and lobby the states or Congress for support.”

“Overall, when you step back from the disaster, what emerges is a series of decisions: policy decisions, decisions by industry, decisions by agencies implementing policy — all of which balanced away the protection of health, human life and the environment against costs measured very narrowly.” — Alyson Flournoy



Mills says a new concern that has developed in recent months is the possibility that Cuba will begin drilling for oil in the Gulf in the near future.

“There’s some trepidation about the fact that this oil will be drilled less than 90 miles from the Florida coast and any spill there is far, far worse because it goes right into those Florida Straights and into the Gulf Stream,” Mills says.

Echoing the findings of Morris and Mahan, Joan Flocks, director of CGR’s Social Policy Division, says “We know there are populations there that are probably experiencing a lot of disproportional stress related to the decline of the fishing and related industries.”

One of Flocks’ goals is to find ways the legal process can work better to make communities whole again by thinking outside the box and avoiding missteps that occurred in previous disasters.

While it has been established that much of the blame for the oil spill lies with BP, a confluence of laws, industries and organizations all had some role in allowing the oil spill to occur, says Alyson Flournoy, director of UF’s Environmental and Land Use Law Program.

“Overall, when you step back from the disaster, what emerges is a series of decisions: policy decisions, decisions by industry, decisions by agencies implementing policy — all

of which balanced away the protection of health, human life and the environment against costs measured very narrowly,” says Flournoy.

A comparison of two papers Flournoy has helped write about the spill reflects her own attitude about the pace of regulatory reform.

Flournoy coordinated, edited and contributed to a study released in October by the Center for Progressive Reform titled *Regulatory Blowout: How Regulatory Failures Made the BP Disaster Possible, and How the System Can Be Fixed to Prevent a Recurrence*. Along with 12 other scholars, Flournoy examined the disaster on a federal level, looking at the combination of legislation and regulations — or lack thereof — that contributed to the spill.

At the time, Flournoy professed cautious optimism about the legal community’s ability to solve the problems laid bare by the Gulf catastrophe.

“There are positive signs, but the real question is, what kind of follow-through there will be now that the well has been sealed,” she says. “Given the fact that much of the oil is settled on the bottom of the ocean, literally out of sight and out of mind, the pressure to move resources and attention elsewhere is inevitable.”

By spring, Flournoy’s optimism had dimmed.



Former Florida Senator Bob Graham (right) co-chaired the federal oil spill commission with former Environmental Protection Agency Director William Reilly.

“Unfortunately there hasn’t been the kind of learning that we had the opportunity for in the immediate wake of the blowout and oil release,” Flournoy says. “Congress seems to have lacked the political will to act in the short term, and now with budget crises and other topics at the forefront it seems unlikely that they will circle back to address some of the legislative gaps and inadequacies that were identified as a result of the BP disaster.”

Market pressures to focus on short-term profit, hefty government subsidies, and the industry’s lobbying power all weigh in favor of the status quo, she adds.

Flournoy, whose follow-up paper is titled *Three Lessons We Should Learn From the BP Deepwater Horizon Disaster and Why We Won’t*, says there was a lot of talk about the need for a safety culture in the wake of the disaster, including agreement that the culture within industry and government needed reshaping, but not enough has been done about it.

“A safety culture would represent a profound change. It doesn’t mean that people simply think about safety more often, it means a culture in which people are constantly asking questions and learning from mistakes,” Flournoy says. ✕

Joseph Kays, Claudia Adrien, Matthew Walker and Lori Pennington-Gray contributed to this report.

Joan Flocks

Director, Social Policy Division, Center for Governmental Responsibility
(352) 273-0837
flocks@law.ufl.edu

Alyson Flournoy

Professor, College of Law
(352) 273-0945
flournoy@law.ufl.edu

Jon Mills

Director, Center for Governmental Responsibility
(352) 273-0835
mills@law.ufl.edu

J. Glenn Morris

Director, Emerging Pathogens Institute
(352) 273-7526
jgmmorris@epi.ufl.edu

Lori Pennington-Gray

Director, Tourism Crisis Management Institute
(352) 392-4042
penngray@hhp.ufl.edu

Related website:

www.law.ufl.edu/oilspill
www.bobgrahamcenter.ufl.edu/category/article-category/oil-spill