

STUDY TITLE: Boating Uses, Economic Significance, and Information Inventory for North Carolina's Offshore Area, "The Point"

REPORT TITLE: Boating Uses, Economic Significance, and Information for North Carolina's Offshore Area "The Point." Volume II: Economic Analysis of "The Point" and Adjacent Counties: Baseline Information, Valuation, and Potential Impacts

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BACKGROUND: The drilling of one or more exploratory wells in the Atlantic Ocean northeast of Cape Hatteras near an area known as "The Point" had been planned, but due to a moratorium, the all leases were relinquished in 2000. The State of North Carolina and particularly many coastal North Carolina residents were concerned about negative environmental effects and the increased possibility of oil spills in the area due to both production and increased tanker traffic in the area. Tourism and commercial fishing are key industries in the local economy that could potentially be damaged by offshore oil and gas production. There might also be significant impacts on recreational fishing.

OBJECTIVES: The purpose of this study is to generate baseline economic information for the counties that might be affected, explore the potential economic impacts of an oil spill off the Outer Banks, provide information on the value of recreational fishing at "The Point," and estimate the potential losses to recreational fishing at "The Point" if there were an oil spill.

DESCRIPTION: This study also presents information on the effects of coastal oil releases elsewhere to guide the scenarios used here. First, the report describes the economies of affected coastal counties and the role of tourism and commercial fishing in these areas. Next, the report describes the impact of several significant oil spill cases in the U.S. that will be used to develop possible spill scenarios for North Carolina. Following that, the appropriateness of economic base and input-output analysis to this case is discussed, and the techniques are used to describe the baseline economies and to analyze the potential impacts on the coastal economy of an oil spill. With caveats, the results in this report have generated baseline information about the economies of the coastal counties and the value of recreational fishing. By examining the experiences elsewhere with offshore releases, we have generated a range of scenarios and estimated the effects on the coastal counties and recreational fishing should there be a release off "The Point."

The other major area studied in this research is recreational fishing. Using data on individual's fishing, we model how decisions are made about where to fish. Such decisions are affected by the expected catch of the various species and by the cost of getting to the fishing site. Using statistical models, we are able to estimate the role that these and other factors play in the decisions. Using the results, we are able to run scenarios about the losses to recreational fishermen if fishing at "The Point" is closed for various periods. These scenarios are again based on experiences elsewhere around the country.

SIGNIFICANT CONCLUSIONS: In the unlikely event of an oil spill from oil and gas activities near "The Point," both tourism and commercial fishing would be impacted. The time of year is critical, with July and August being the months when the greatest impact would occur. However, both tourists and fishermen would likely adjust their activities by moving to nearby areas.

STUDY RESULTS: The potential economic impacts of an oil spill resulting from proposed oil exploration about forty miles off shore from Cape Hatteras was examined. Tourism dominates the local economy and the impacts to this sector are potentially large. As a comparison, the tourism losses from a hurricane are much greater. Hurricane Fran in September 1996 was estimated to reduce direct tourism expenditures in coastal North Carolina by \$211 million, much more than the estimated tourism losses from a large, summer oil spill (Brothers, 1998). However, the effects of the oil spill would be more concentrated than the effects of a major hurricane.

Although it has a smaller role in the economy, the impacts to the commercial fishing sector may be just as important for two reasons. First, the northeast flowing gulfstream currents and the distance from shore make it very likely that an oil spill would not reach the shore before being contained. In this case, the tourism impacts would be minimal while the commercial fishing impacts could still be substantial. Second, the multiplier effects of a dollar loss in fishing sales are higher than those in the tourism sector. The larger multipliers are because most fishing sales are retained as personal income, and

relatively few inputs are imported from outside the region. While this study has concentrated on Dare County, the potential fishing impacts are particularly important to tiny Hyde County, where the local economy is equally based in fishing and tourism.

Tourists who avoid the Outer Banks because of an oil spill are likely to choose alternate locations rather than forgo their vacations altogether. An oil spill near Cape Hatteras would probably be good for the tourism business in Wrightsville Beach or Myrtle Beach. Thus, as one broadens the region of analysis, the economic impact of tourism losses diminishes although there may be substantial redistribution between areas. In addition to generating baseline data, this study has presented the results for various scenarios in the unlikely event of the release of oil from the drilling operation. The various scenarios used for the impacts on Dare County and the impacts on recreational fishermen are almost identical. However, the nature of the numbers generated from the input-output model is quite different from the values estimated for the recreational fishing model. It is important to interpret them carefully.

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