Introduction

The Gulf of Mexico Fishery Management Council is one of eight regional Fishery Management Councils established by the Fishery Conservation and Management Act in 1976. It is the Gulf Council’s responsibility to submit fishery management plans designed to manage fishery resources from where state waters end (3-9 nautical miles from shore), out to the 200-mile limit of the Gulf of Mexico (i.e., the Exclusive Economic Zone or EEZ).

The Gulf Council has 17 voting members from each state bordering the Gulf of Mexico and includes state fishery agency representatives and individuals, nearly equally distributed, from the commercial, recreational, and scientific sectors of the region. Since the reauthorization of the Act in 1996, the Gulf Council has successfully removed fish species from being categorized as “overfished” and has improved stock status on other important species such as red snapper. Current fishery management plans are in place to rebuild several fish stocks so that they are no longer overfished. We are well on our way to achieving this goal.

Fisheries impacts

The recent, and continuing, uncontrolled release of unrefined oil into the northern Gulf of Mexico off Louisiana causes the Gulf Council members and me great concern. There are a number of short-term (i.e., days, weeks, and months) effects that are likely to cause harm to several fisheries and the ecosystem in which they occur. During the spring and early summer months, many commercially and recreationally important reef-associated fish species, such as the groupers and red snapper, spawn in the area currently subjected to the oil release. Depending upon the species, eggs are released into the water column where they are fertilized and float at or near the surface for 20-40 hours before they hatch. These newly-hatched fish live as larvae at or near the surface for 20-50 days. Subsequent to their larval life stage, they settle out of the water column and become bottom dwelling inhabitants of sea grass beds, coral reefs and other hard bottoms.

Released oil floats to the surface and thus affects the life and condition of the early life stages of these and other species, including the forage food upon which they depend. Of additional concern, is that many of the dispersants being used to disperse the oil can also affect the health and condition of these fish species. Dispersants can make the oil easier to ingest as the oil is
often formed into small, “bite-sized” particles. Additionally, some dispersants can make oil more biologically available in that oil is more easily taken up by fish when emulsified.

The short-term impacts of this oil release will likely have an immediate effect on the number of eggs and larvae of numerous fish species – not only those that are important for our fisheries.

The long-term effects of red tide events demonstrate that something such as a large and persistent toxic bloom that occurred in the eastern Gulf of Mexico in 2005 is just now being observed by fishery scientists. The result of this bloom has led to noticeable reductions in the 2005 year-class. This indicates that major and significant events can have long-lasting and far-reaching effects, even after several years.

Economic impacts

The fisheries in the Gulf of Mexico are supported by a diverse range of fishery species for both the commercial and recreational sectors. As an industry, commercial fishing currently produces about 1.27 billion pounds of fish and shellfish in the Gulf of Mexico with a dockside value of over $659 million. Over 3.2 million individuals annually participate in the recreational fisheries of the Gulf of Mexico. Around the Gulf coast, the economic well-being of many communities is related to providing services to these fishing-related sectors.

The uncontrolled release of oil into the waters of the northern Gulf of Mexico has already had an impact on the fishery-based economy of the region. The emergency fishery closure area implemented by the Fisheries Service was purposefully done to protect the lives and increase the safety of marine product consumers. Lost revenues from the immediate closure are obvious. More significant are the long-term effects on fishing and fishing-related activities when a continued closure of a significant part of the Gulf of Mexico occurs. For example, charter boat operators suffer from immediate cancellations of reservations by participants in recreational fishing, not only in the impacted area, but throughout the Gulf of Mexico. Just as significant is the long-term negative impression by the fishing public, many of them from areas beyond the Gulf coast. The charter boat fishery will likely suffer a bad year. It may also suffer a bad decade as that is the length of time it may take for public confidence to return.

Commercial fishers will have to move to other fishing areas to ply their trade. But the impact of the oil release on their livelihoods will be potentially devastating in the long-term. If, as projected earlier, a result of oil release is a reduction in eggs and larvae of commercially important fish species, it is reasonable to assume that more restrictive management measures will have to be implemented to replenish those resources. Rebuilding fish stocks is painstakingly slow. This oil release event is likely to curtail the pace established for fish stocks currently undergoing rebuilding.

Conclusions
It can be anticipated that the release of oil will have an effect on eggs and larvae currently being produced in the Gulf of Mexico. It is likely that there will also be long-term negative effects on the abundance and health of the fishery resources that results in additional restrictions on commercial and recreational fisheries. This event will have long-lasting impacts on the economic station of a host of sectors and communities that directly participate in, and indirectly assist, the fishing-based industries of the Gulf of Mexico.

Regardless of the resulting impacts of the oil release, the Gulf of Mexico Fishery Management Council is ready to meet its obligation to assure the long-term sustainability of the fishery resources. It is hoped that the Gulf’s fishery resources can persist at a level of abundance and general condition that, after the oil release ceases, will allow their replenishment at a pace that will not impede the economic recovery of the lifestyle of individuals living around the Gulf of Mexico.