

# **FISHERIES IMPACTS OF UNDERWATER EXPLOSIVES USED TO SALVAGE OIL AND GAS PLATFORMS IN THE GULF OF MEXICO**

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## **ABSTRACT**

There are more than 4,000 oil and gas structures present in the U. S. Gulf of Mexico. Approximately 100 structure removals occur each year and 66% of these are removed with explosives. From 1993-1995 an intensive study was conducted on the fish kill resulting from the explosive removal of 6 platforms off the Louisiana coast in water depths from 14-28 m (45-92 ft). After explosives were detonated, all floating fish and a sample of the dead fish which sank to the sea floor were collected. Estimated fish mortality ranged from approximately 2,000-5,000 with a mean of 3,000 and standard deviation of 1,045. The four most abundant species impacted by underwater explosives included spadefish, blue runner, red snapper, and sheepshead. These 4 species accounted for an estimated 88% of the fish killed at the platforms studied. One of these species, red snapper, is important both commercially and recreationally. Estimated mortality of red snapper ranged from 0-1200 with an average per platform of 500. A large standard deviation of 414 indicated high variability in red snapper mortality between platforms. Further study is planned to increase sample size, reduce variance, and address deeper water platform removals where red snapper abundance is expected to increase.