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#### **ACCEPTED MANUSCRIPT**

# Macrobenthic community structure in the deep Gulf of Mexico one year after the Deepwater Horizon blowout

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#### **Abstract**

The impacts of the 2010 Deepwater Horizon (DWH) disaster on deep-sea Gulf of Mexico benthic communities were analyzed one year after the blowout. Richness, diversity, and evenness were severely impaired within a radius of approximately 1 km around the DWH wellhead. However, lower diversity than background was observed in several stations up to 29 km to the southwest of the wellhead. Compared to samples from 2010, abundance near the DWH wellhead increased in 2011 with some of the highest values found at stations within the 1 km radius. The increase was mostly caused by the high abundance of opportunistic polychaetes of the family Dorvilleidae, genus *Ophryotrocha*. At contaminated stations near the DWH

<sup>&</sup>lt;sup>1</sup> Authors wish to let it be known that they both had equal contributions to the paper

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