**Persistent Impacts to the Deep Soft-Bottom Benthos four years after the Deepwater Horizon Event**

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In September-October 2010, three to four months after the Deepwater Horizon blowout was capped, a zone of moderate and severe impacts to deep-sea soft-bottom benthos was identified that extended over an area of 172 km2. The impact was a loss of -53.7% of macrofauna family diversity and -38.3% of meiofauna major taxa diversity in the most severely impacted zone. The area was resampled in May-June 2011 and May-June 2014 to determine if the identified effects were persisting. The sampling design compared 19 stations in the impact zone to 13 stations in the reference zone that were sampled in all years. While there are some signs of recovery in 2011 and 2014 in terms of abundance, there is evidence of persistent, statistically significant impacts to both macrobenthic and meiobenthic diversity because the relative losses of biodiversity are largely the same as in 2010. A loss in diversity has been shown to correlate with a loss of deep-sea ecosystem services because these fauna serve vital functional roles in the deep-sea (including: biomass production, sediment bioturbation and stabilization, organic matter decomposition and nutrient regeneration, and secondary production and energy flow to higher trophic levels). The persistence of significant biodiversity losses four years after the wellhead was capped indicates that full recovery of ecosystem services has yet to occur.