

**Impact of the *Deepwater Horizon* oil spill on a deep-water coral community in the Gulf of Mexico**

Helen K. White<sup>a,1</sup>, Pen-Yuan Hsing<sup>b</sup>, Walter Cho<sup>c</sup>, Timothy M. Shank<sup>c</sup>, Erik E. Cordes<sup>d</sup>, Andrea M. Quattrini<sup>d</sup>, Robert K. Nelson<sup>e</sup>, Richard Camilli<sup>f</sup>, Amanda W. J. Demopoulos<sup>g</sup>, Christopher R. German<sup>h</sup>, James M. Brooks<sup>i</sup>, Harry H. Roberts<sup>j</sup>, William Shedd<sup>k</sup>, Christopher M. Reddy<sup>l</sup>, and Charles R. Fisher<sup>m</sup>

<sup>a</sup>Department of Chemistry, Haverford College, Haverford, PA 19041; <sup>b</sup>Department of Biology, Pennsylvania State University, University Park, PA 16802; <sup>c</sup>Biology Department, <sup>d</sup>Department of Marine Chemistry and Geochemistry, <sup>e</sup>Applied Ocean Physics and Engineering, and <sup>f</sup>Department of Geology and Geophysics, Woods Hole Oceanographic Institution, Woods Hole, MA 02543; <sup>g</sup>Biology Department, Temple University, Philadelphia, PA 19122; <sup>h</sup>Southeast Ecological Science Center, US Geological Survey, Gainesville, FL 32653; <sup>i</sup>TDI-Brooks International Inc., College Station, TX 77945; <sup>j</sup>Department of Oceanography and Coastal Sciences, Coastal Studies Institute, Louisiana State University, Baton Rouge, LA 70803; and <sup>k</sup>Bureau of Ocean Energy Management, U.S. Department of the Interior, New Orleans, LA 70115

To assess the potential impact of the *Deepwater Horizon* oil spill on offshore ecosystems, 11 sites hosting deep-water coral communities were examined 3 to 4 mo after the well was capped. Healthy coral communities were observed at all sites >20 km from the Macondo well, including seven sites previously visited in September 2009, where the corals and communities appeared unchanged. However,

PNAS | December 11, 2012 | vol. 109 | no. 50 | 20303–20308