

Under funding from the Massachusetts Clean Energy Center (MassCEC), **INSPIRE Environmental** and the **Northeast Regional Ocean Council (NROC)** are working together to **develop standard approaches to synthesizing, visualizing, and disseminating high-resolution acoustic and imagery data to advance benthic habitat mapping in the wind energy areas of the Northeast.**

As offshore wind development gains momentum in the Northeast region, responsible data-informed management requires synthesis and visualization of diverse datasets across the multiple wind energy areas to accurately assess and ensure the mitigation of potential cumulative impacts. Specifically, there is a substantial need to characterize and visualize the distribution of the benthic habitats in wind farm and cable route areas. Understanding benthic habitat distribution is necessary not only for engineering logistics but also for the important ecological value these environments provide, for example to commercial fisheries.

This project will develop best practices for **1) integrating acoustic data and high-resolution imagery to map benthic**

habitats; and 2) making those habitat data available to federal and state regulators and stakeholders in a vetted and established forum, the Northeast Ocean Data Portal. INSPIRE will collaborate with NROC to ensure that these habitat data products are compatible with existing mapping standards. NROC will convene stakeholders to elicit input regarding specific benthic habitat mapping needs as well as coordinating review and vetting by stakeholders of the developed habitat data products.

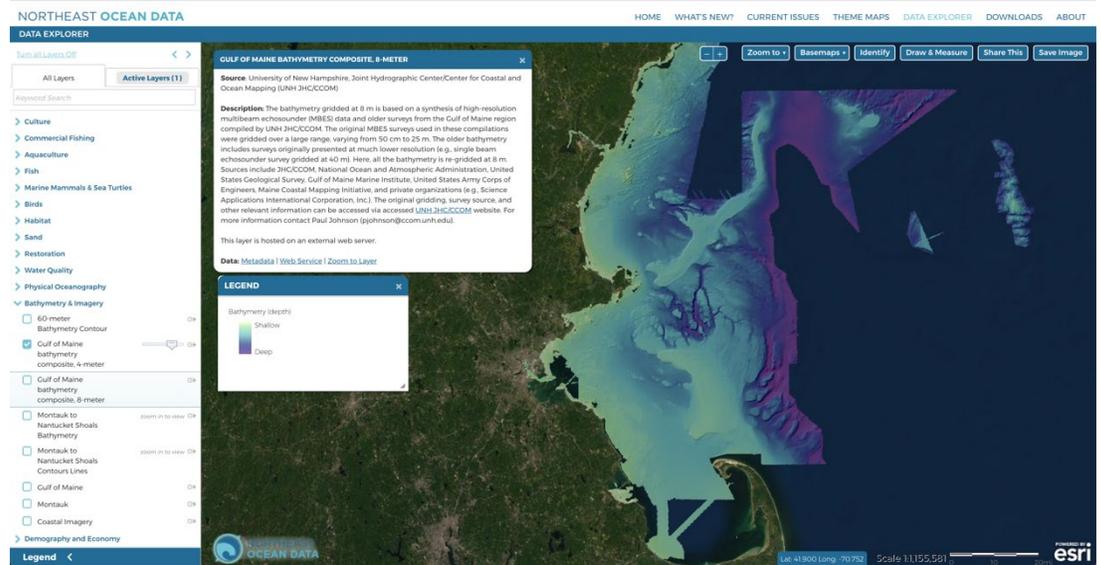


Figure 1. Example of high-resolution bathymetry data product along with user support and explanatory features such as links to additional technical information and metadata.

Accomplishing these goals will greatly advance the baseline data characterizing the benthic environment in and around offshore wind energy areas that may be affected by wind development AND enable high-resolution mapped data to be accessible to the numerous stakeholders involved through a web-based, vetted, and neutral forum, the Northeast Ocean Data Portal (i.e., Figure 1).

The Regional Seafloor Habitat Data Work Group, comprised of offshore energy developers and federal and state agency members with expertise in offshore wind regulatory processes, synthesis and classification of seafloor acoustic data and seafloor imagery, development of interactive data exploration or analysis tools, and development of infographics and documentation, including metadata, will help to inform standard approaches to synthesizing, visualizing, and disseminating high-resolution acoustic and imagery data to advance benthic habitat mapping in the wind energy areas of the Northeast.