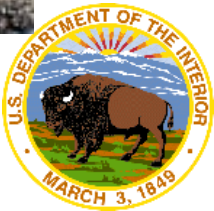# Deepwater Coral Atlas and Modeling Program: Gulf of Mexico

Image courtesy of NOAA Okeanos Explorer Program.

BOEM Information Need:

Characterize the known distribution of deepwater corals and predict their occurrence in the GOM. These data will support environmental descriptions in NEPA documents and support our ability to protect deepwater coral habitats from potential oil and gas impacts
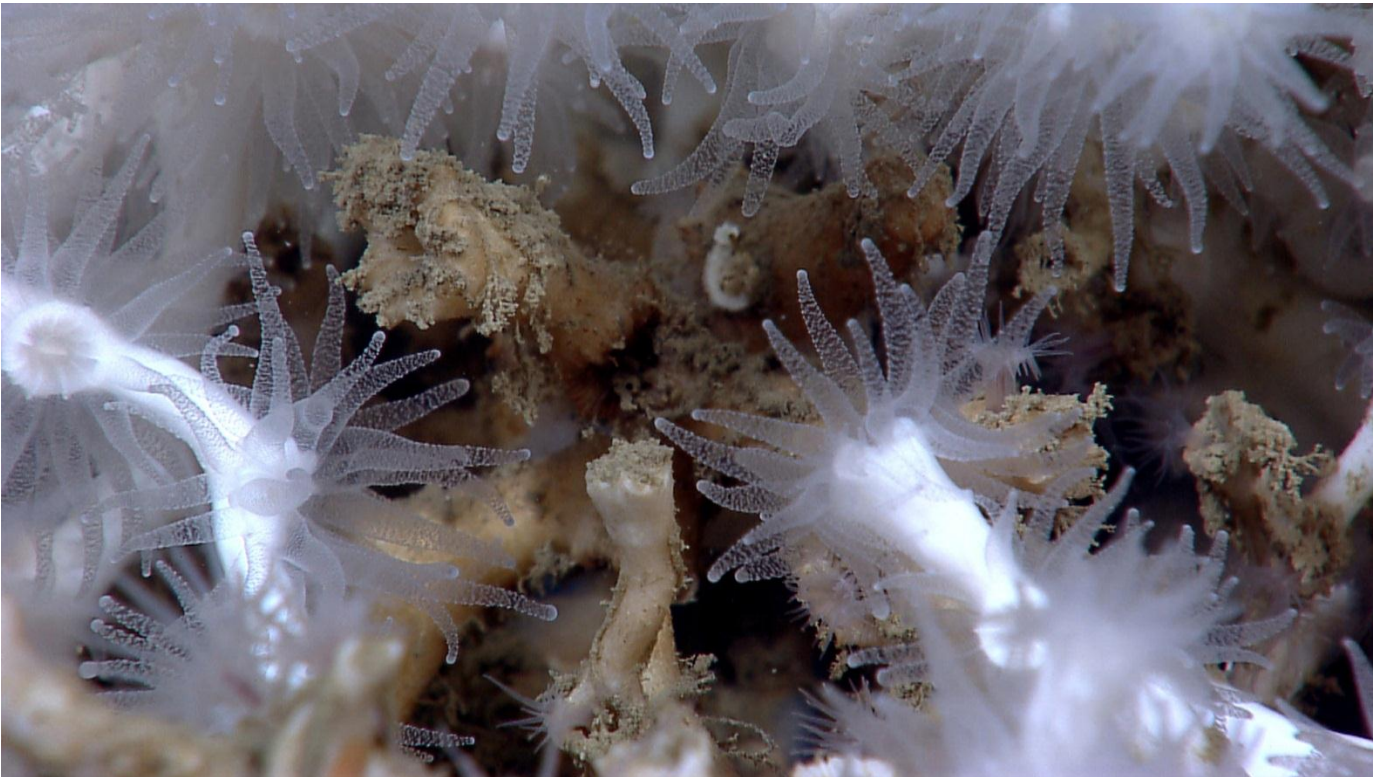
Date Information is Required:

Synthesis of current information as well as predictive models are needed to make current and future regulatory decisions

Tentative Ranking: 10

Background:

BOEM (MMS) has funded a number of deepwater coral studies – Lophelia, Lophelia II, and others

Study's Objectives:

1) collate, analyze, and synthesize all available information about deepwater chemosynthetic and coral communities in the northern GOM
2) Ultimately these data will populate a database already in use by the National Oceanic and Atmospheric Administration (NOAA)
3) Model ecological parameters to predict community occurrence

Study's Methods:

1) NOAA's National Centers for Coastal Ocean Science (NCCOS) will be the lead for this project. The NCCOS is building the database for NOAA's National Inventory of Deep Coral Distribution

2) Data will be extracted from a variety of formats (manned submersibles, remotely operated vehicles (ROV), sonar and imagery from automated underwater vehicles (AUV), 3D seismic data, cruise reports, maps, museum records, deep-sea trawl data)

3) Extracted data will specifically include deep coral habitats as well as chemosynthetic communities, sponge communities, and relevant deep artificial reef information (e.g. rigs, shipwrecks, etc.)