

ENVIRONMENTAL STUDIES PROGRAM: Studies Proposed for FY 2008

Region: Headquarters

Planning Area(s): All Planning Areas

Title: Compendium of Avian Information and Comprehensive GIS Geodatabase

MMS Information Need to be Addressed: Development of offshore alternative energy facilities, particularly wind turbines, have the potential to impact bird species. Knowledge about the numbers and distribution of birds that are at risk would greatly assist MMS in identifying locations that are preferred for wind energy development and those that should be avoided entirely.

Cost Range: (in thousands): \$400 – \$600 **Period of Performance:** FY 2008-2010

Description:

Background: With the passage of the Energy Policy Act of 2005, MMS was delegated responsibilities for alternative energy activities on the Outer Continental Shelf (OCS). This new responsibility includes offshore wind energy projects. Experience from onshore wind development suggests that the siting of facilities is critical to minimize impacts to bird species, particularly migratory birds. While MMS and other Federal and State agencies have collected and/or compiled data on many coastal birds, this data is widely dispersed and of varying quality. For some species, information is readily available while for others it is non-existent. Most of this information is contained in Atlases, Census compilations and in databases that are held by the U.S. Fish and Wildlife Service, U.S. Geological Survey, State environmental agencies, academic institutions or avian advocate groups such as the Audubon Society or the Sea Duck Joint Venture. This information needs to be compiled, synthesized and incorporated into a comprehensive GIS Geodatabase to assist MMS scientists and decision makers regarding potential impacts from wind energy development on the OCS. The need for this information was identified during the MMS Alternative Energy workshop and in the Worldwide Synthesis and Analysis of the Existing Information Regarding Environmental Affects of Alternative Energy Uses on the OCS.

This initial compilation will serve as a basis for future studies by identifying key species of concern and data gaps. Since MMS' jurisdiction begins about three nautical miles (nmi) offshore, the focus of the information collection will be on those avian species likely to be at risk from activities occurring greater than three nmi. Initially, this study will focus on a geographic area bounded by Cape Hatteras and Cape Cod, but may be expanded to other areas of the Atlantic Coast and other coasts.

Objectives: The objective of the study is to create a single, comprehensive Geodatabase populated with data on avian species that are potentially at risk from offshore wind facility development.

Methods: The data search and synthesis will collect existing data from a variety of sources

including other Federal agencies (FWS, USGS), State resource agencies, conservation groups, academia and other bird related NGOs. Information to be collected will include avian presence, abundance, distribution, flight patterns and behaviors (foraging, roosting, staging, etc.) focusing on birds that use coastal and offshore areas and therefore are potentially at risk from collision with wind turbines. The information will be integrated, when appropriate, into a comprehensive GIS Geodatabase.

Revised Date: October 31, 2007