Off-Shore Wind Energy in the Gulf of Mexico

BOEM GULF OF MEXICO INTERGOVERNMENTAL RENEWABLE ENERGY TASK FORCE MEETING – JULY 27, 2022

U.S. Fish and Wildlife Service (FWS) Efforts to Support Off-Shore Wind Energy Efforts in the GOM

1. Bi-Regional Team Assembled to Provide Technical Support and Expertise
2. Spatial Mapping Efforts to Date
3. Gulf of Mexico Aerial Seabird Surveys – July 2022
4. Migratory Bird Pilot R2/R4 - Radar Proof of Concept Project
5. Migratory Bird Regulations
6. SLOPES Agreements between Ecological Services Field Offices and BOEM

Bi-Regional Team

FWS R2 REGIONAL DIRECTOR – AMY LUEDERS
FWS R4 REGIONAL DIRECTOR – LEO MIRANDA

REGIONAL OFFICE STAFF FROM THE FOLLOWING PROGRAMS:

- ECOLOGICAL SERVICES
- MIGRATORY BIRDS
- NATIONAL WILDLIFE REFUGES
- SCIENCE APPLICATIONS
- GULF RESTORATION PROGRAM

ECOLOGICAL SERVICES FIELD OFFICE STAFF

- LOUISIANA FIELD OFFICE
- COASTAL TEXAS FIELD OFFICE

FWS HEADQUARTERS STAFF – POLICY, REGULATION, AND NEPA

Spatial Mapping Efforts

1.

USFWS Avian Space Use Conflict Data README

This file contains a brief description of each geospatial data layer being shared with BOEM

2.

Wind Energy Literature Review

This file represents a comprehensive review of the literature with respect to wind energy

3.

Bird Migration Pathways

This file is compilation of maps (gleaned from the literature) depicting bird migration pathways for a variety of bird species

4.

GOM Bird Overview

This file provides an overview of bird migration and use of the Gulf of Mexico region

Geospatial data layers were made available via ArcGIS Online Services

[data access was granted to Mike Gravois at BOEM]

Spatial Mapping Efforts Part 2

In October of 2021 we provided BOEM with 18 maps of Avian Data.

- Aerial Photographic Colony Surveys (NRDA)
- Aerial Photographic Colony Surveys (NRDA): w/20 mile buffer
- Nesting Colonies (GCJV): polygon layer
- Nesting Colonies (GCJV): w/20 mile buffer
- Nesting Colonies (GCJV): symbolized by count
- Nexrad Doppler Radar: Landbird Migration Hotspots
- Brown Pelican Telemetry
- Nonbreeding Shorebird Surveys
- Black-capped Petrel Observations

Spatial Mapping Efforts Part 3

- 24 Pelagic Species (Habitat Suitability Index)
- Black-capped Petrel (Habitat Suitability Index)
- Nearshore Species (cumulative model): Winter Predictions
- Nearshore Species (cumulative model): Summer Predictions
- USFWS Threatened and Endangered Species Critical Habitat
- USFWS National Wildlife Refuges
- National Park Service Lands
- Distance from Shoreline
- Bathymetry

Additional Information Provided

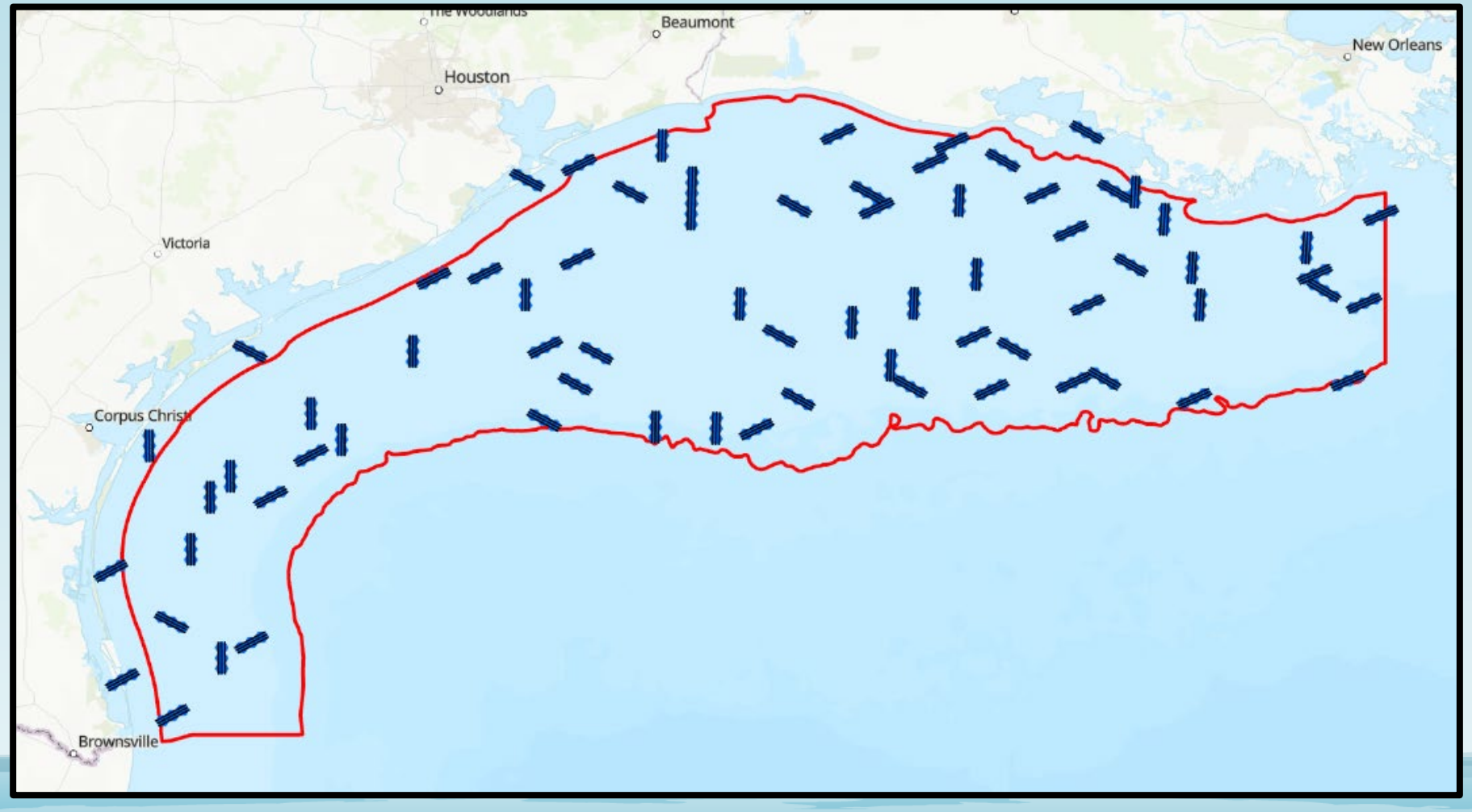
- In April of 2022, the FWS uploaded geo-spatial data to the AGOL platform for BOEM's consideration as they analyze off-shore wind energy in the GOM.

- That data included shorebird and waterbird species (all of conservation concern), one federally-threatened shorebird and one waterfowl species that provide more insight into migratory bird use of trans-Gulf and circum-Gulf migratory pathways and use of nearshore habitats in the Call Area.

Gulf of Mexico Aerial Seabird Surveys July 2022

- Aerial Surveys were conducted from July 6 to July 17, 2022, by FWS staff (pilot/biologist and Migratory Bird Biologist)
- Surveys took place within the Bureau of Ocean Energy Management (BOEM) Wind Energy Planning Area off the coast of Louisiana and Texas.
- 70 survey plots were completed.
- A total, >2,500 nm of transect were surveyed over 9 survey days.
- Surveys were conducted from a USFWS Kodiak amphibious aircraft flown at 105kts and 200’ MSL
- They counted and identified (to the lowest taxonomic-level possible) all birds, sea turtles, and marine mammals observed within 200 m of the aircraft.

Gulf of Mexico Aerial Seabird Surveys
July 2022 Continued



R2/R4 - Radar Proof of Concept Project

Purpose:

Test hardware and software associated with deployment of mobile x-band radar in offshore environment as a means to understand altitude and distribution of migrating birds at a fine spatial resolution.

- Study conducted in collaboration with USGS and NOAA
- Mobile x-band radar unit deployed on a NOAA vessel of opportunity (spring 2023)

Migratory Bird Proposed Rule Making

On October 4, 2021, the FWS announced an advanced notice of proposed rulemaking in the Federal Register authorizing incidental take under the Migratory Bird Treaty Act.

These regulations may apply to off-shore wind. Although we don't know what they will look like at this point, implementing our conservation recommendations, as available, will make it more likely the developers will be well placed to become consistent with those regulations should they become effective.

In our previous discussions with BOEM, we stressed the global importance of The Gulf of MX as a critically important and unique region for Migratory Birds.

- It is the confluence of three of the four North American Flyways,
- coastal area provides habitat for more than 400 species of birds during all or part of their annual life cycle,
- an estimated 2.1 billion individual birds some representing entire global populations make trans-gulf and circum-gulf migration twice a year.

The FWS appreciates BOEM's recognition of this globally important area and your consideration of our recommendations by your decision to exclude certain areas from lease options.

We look forward to continuing our collaboration with BOEM and the broader Task Force to find solutions to resource conflicts with future renewable energy projects.