BOEM BUREAU OF OCEAN ENERGY MANAGEMENT

Compensatory Mitigation for Offshore Wind

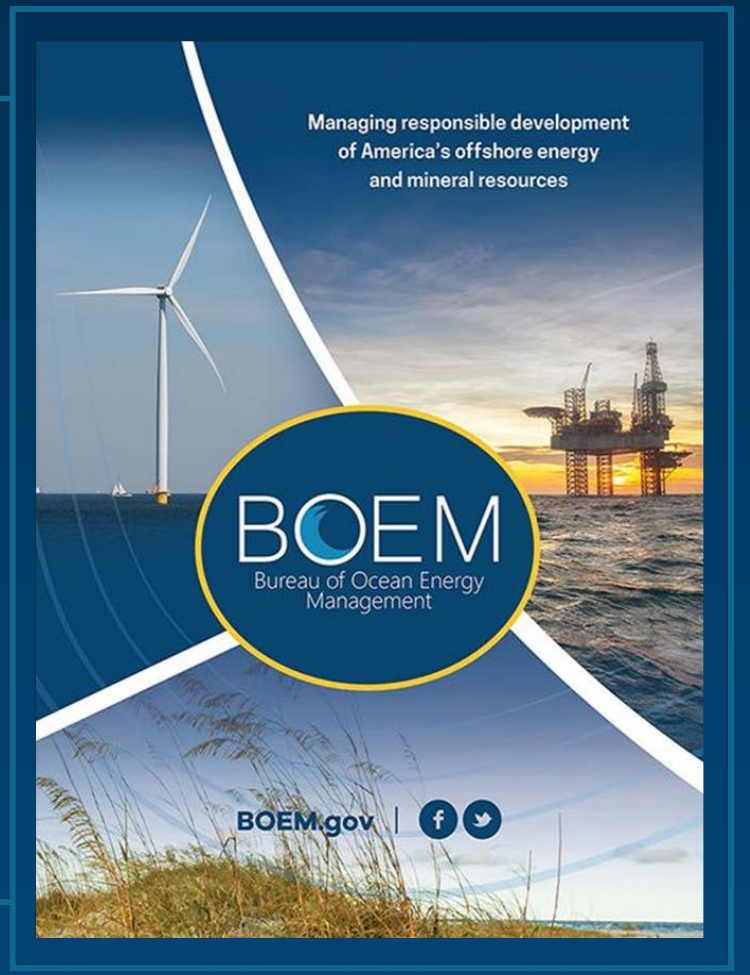
July 15, 2024

Kyle Baker | State of the Science Workshop

BOEM Mission

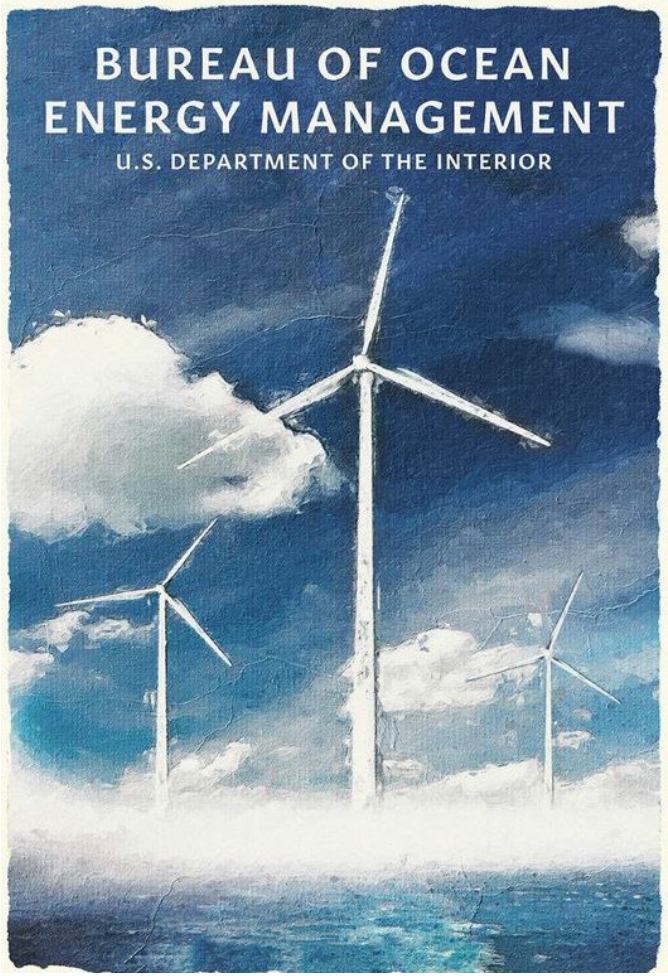
To manage the development of U.S. Outer Continental Shelf (OCS) energy, mineral, and geological resources in an environmentally and economically responsible way.

BOEM manages almost 3.2 billion acres of the U.S. Outer Continental Shelf.



Presentation Overview

- Provide background on BOEM role in CM
  - Renewables update and regional scale of CM
  - Regulatory drivers
- Ongoing efforts in BOEM
- Current requirements
  - Mitigation
  - COP conditions for threatened and endangered birds



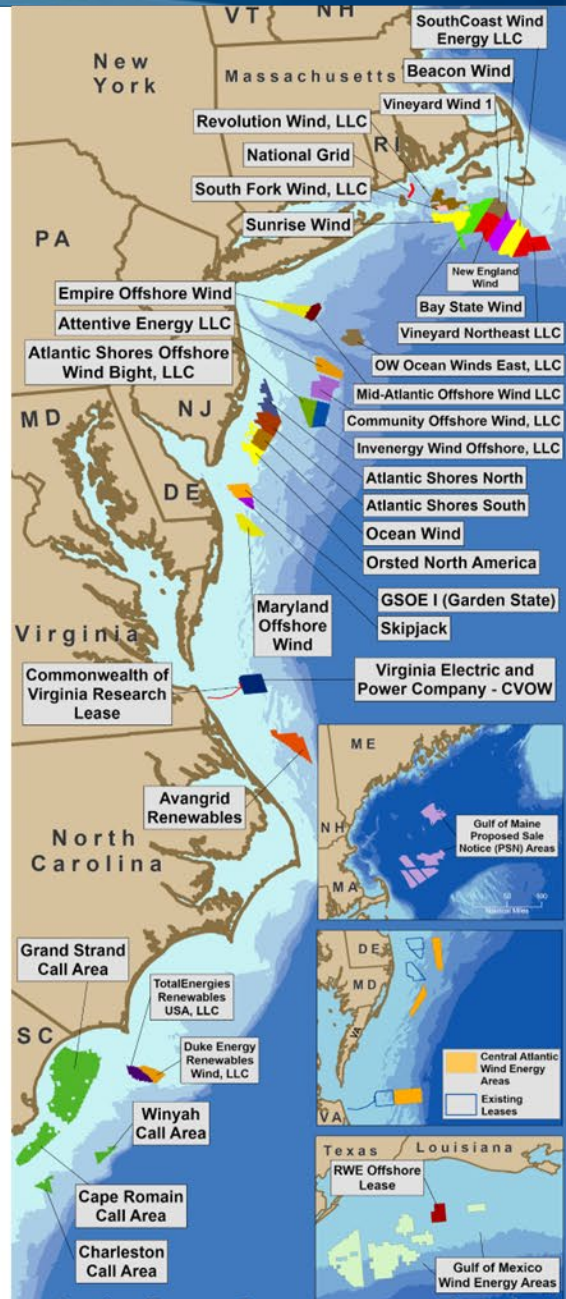
Administration Goals

- President Biden issued **Executive Order 14008** that called for the Interior Department to identify steps to increase responsible renewable energy development on public lands and waters

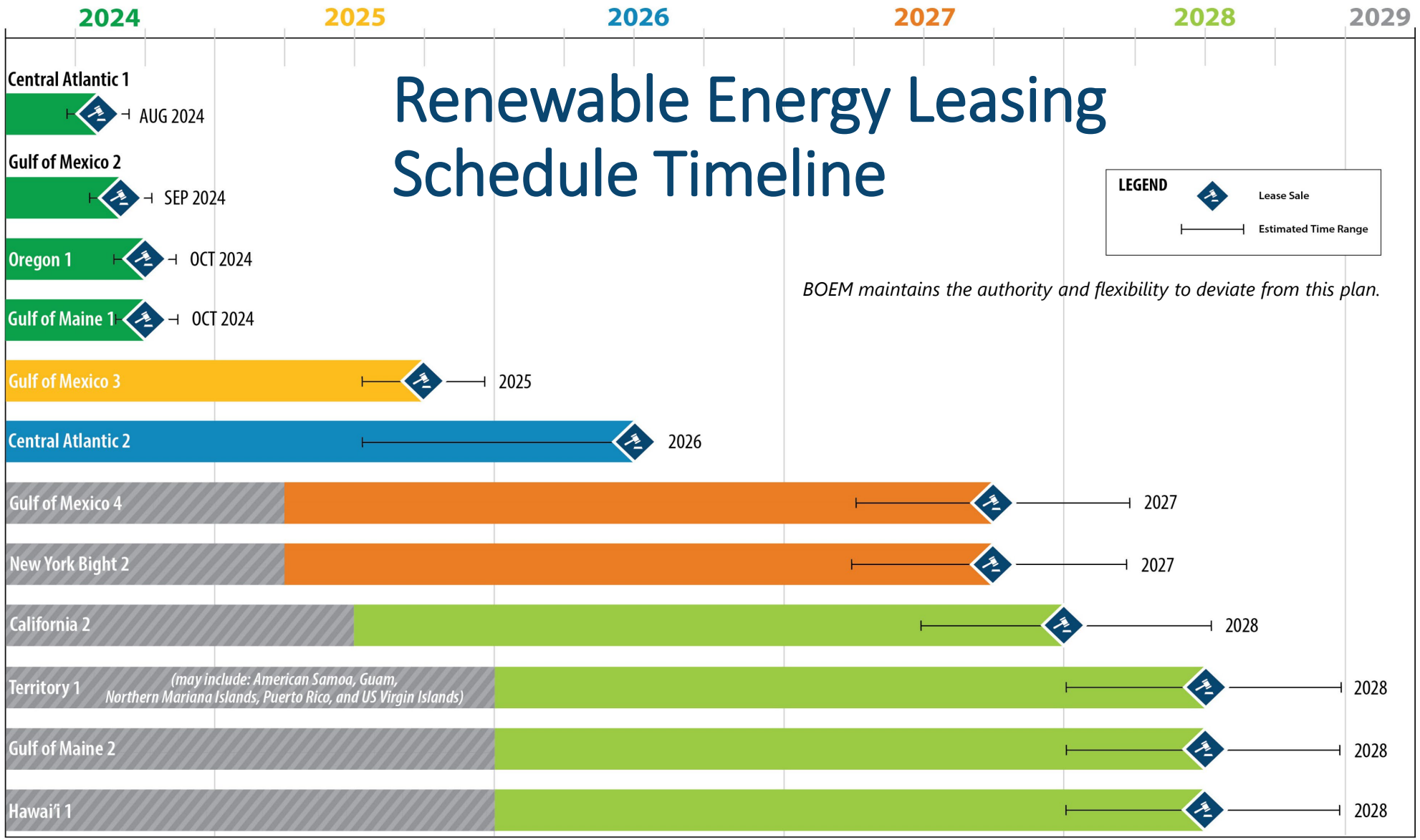
- First-ever **national offshore wind goal** to deploy **30 gigawatts of offshore wind by 2030** and **15 gigawatts of floating offshore wind by 2035**

Update: Renewable Energy Program by the Numbers

Competitive Lease Sales Completed:	12
Commercial Offshore Leases Issued:	35
Research Offshore Leases Issued:	2
Site Assessment Plans (SAPs) Approved:	17
General Activities Plans Approved:	1
Construction and Operations Plans (COPs):	
• Submitted to BOEM	19
• Records of Decision Issued	9
• Under Review	6
• Other COPs Submitted	4
Leasing Under Consideration:	4



Renewable Energy Leasing Schedule Timeline



BOEM maintains the authority and flexibility to deviate from this plan.

Renewable Energy Leasing Process

2 Years	1-2 Years	5 Years5 years	2 Years (+25)
▪ Intergovernmental Task Force ▪ Request for Information (RFI) / Call for Information & Nominations (Call) ▪ Area Identification ▪ Environmental Reviews	▪ Publish Leasing Notices ▪ Conduct Auction ▪ Issue Lease(s)	▪ Site Characterization ▪ Site Assessment Plan (SAP)	▪ Construction and Operations Plan (COP) ▪ NEPA ▪ Consultations ▪ Compensatory Mitigation conditions

What is mitigation under National Environmental Policy Act (NEPA):

Mitigation includes specific means, measures, or practices that would reduce or eliminate adverse environmental effects of the proposed action or alternatives. Mitigation measures can be applied to reduce or eliminate adverse effects to biological, physical, or socioeconomic resources. Council on Environmental Quality (CEQ), 40 CFR 1508.20, defines five types of mitigation (mitigation hierarchy):

- **Avoiding** impacts (altogether by not taking a certain action or parts of an action)
- **Minimizing** impacts (by limiting the degree of magnitude of the action and its implementation)
- **Rectifying or reducing the impact overtime**
- **Compensating for unavoidable losses** of resources by replacing or providing substitute resources or environments

Compensatory Mitigation working efforts

OREP Compensatory Mitigation Workshops

BOEM Compensatory Mitigation Roundtable

FWS/BOEM National Compensatory Mitigation Working Group

Reviewing compensatory mitigation strategies to address residual impacts from marine renewables

Considering agency guidance on compensatory mitigation

BOEM Objectives: Start a Dialogue and Build a Framework for CM

Objectives and Themes

- Perspectives on aspects of CM from participants
- Identify Information needs for EISs and Bas
  - Analysis of impacts and debit calculations
  - Plan requirements (COP Approvals and CM programs)
- Identify Information needs for CM Plans
  - Credits
  - Conservation, restoration, enhancement, and preservation
  - Performance metrics

BOEM Objectives

- Explore Regional Cooperation
  - Discuss potential CM programs
  - Explore the relationship between CM, No Net Loss, NPI, and Net Biodiversity.
  - Explore regional partnerships
- Build a National Framework
  - Assessment approach for NEPA and the ESA
  - Requirements and expectations
  - Provide greater clarity for CM from-to-end

Regulatory Drivers for Environmental Protection

- Outer Continental Shelf Lands Act (43 USC 1331)

8(p)(4) of OCSLA, BOEM must ensure that any activity under this subsection is carried out in a manner that provides for, among other goals, safety, protection of the environment, conservation of the natural resources of the OCS, ….

- Energy Policy Act of 2005: "… energy from sources other than oil and gas …"
- Endangered Species Act (16 USC 1531)
  - 7(a)(1) and 7(a)(2)
- National Environmental Policy Act (42 USC 4321)
- Migratory Bird Treaty Act (16 U.S.C. 703-712)
- Marine Mammal Protection Act (16 U.S.C. 31)
- Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. 1801)
- Others

Conditions of Approval for Birds and Bats

Examples

- Bird-Deterrent Devices and Plan
- Navigation Lighting Upward Illumination Minimization
- Avian and Bat Post-Construction Monitoring Program
  - Monitoring, Reporting, Revisions, Incidental Mortality Reporting, Data storage
- Compensatory Mitigation

Conditions of COP Approval (boem.gov)

Current Requirements for Listed Species

Compensatory Mitigation for Piping Plover and rufa Red Knot.

At least 180 days prior to the start of commissioning of the first WTG, the Lessee must distribute a Compensatory Mitigation Plan to BOEM, BSEE, and the USFWS for review and comment. BOEM, BSEE, and USFWS will review the Compensatory Mitigation Plan and provide any comments on the plan to the Lessee within 60 days of its submittal. The Lessee must resolve all comments on the Compensatory Mitigation Plan to BOEM's and BSEE's satisfaction before implementing the plan and before commissioning of the first WTG. The Compensatory Mitigation Plan must provide compensatory mitigation actions to offset take of Piping Plover and rufa Red Knot by the fifth year of WTG operation.

The Compensatory Mitigation Plan must include

a) detailed description of the mitigation measures;

b) the specific location for each mitigation action;

c) a timeline for completion of the mitigation actions;

d) itemized costs for implementing the mitigation actions; e) details of the mitigation mechanisms (e.g., mitigation agreement, applicant-proposed mitigation); and

f) monitoring to ensure the effectiveness of the mitigation actions in offsetting take.