U.S. Department of the Interior
PRIVACY IMPACT ASSESSMENT

Introduction

The Department of the Interior requires PIAs to be conducted and maintained on all IT systems whether already in existence, in development or undergoing modification in order to adequately evaluate privacy risks, ensure the protection of privacy information, and consider privacy implications throughout the information system development life cycle. This PIA form may not be modified and must be completed electronically; hand-written submissions will not be accepted. See the DOI PIA Guide for additional guidance on conducting a PIA or meeting the requirements of the E-Government Act of 2002. See Section 6.0 of the DOI PIA Guide for specific guidance on answering the questions in this form.

NOTE: See Section 7.0 of the DOI PIA Guide for guidance on using the DOI Adapted PIA template to assess third-party websites or applications.

Name of Project: Marine Minerals Information System (MMIS)
Bureau/Office: Bureau of Ocean Energy Management (BOEM)
Date: August 8, 2018
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Section 1. General System Information

A. Is a full PIA required?

☐ Yes, information is collected from or maintained on
- ☐ Members of the general public
- ☐ Federal personnel and/or Federal contractors
- ☐ Volunteers
- ☐ All

☒ No

B. What is the purpose of the system?

Erosion of the nation's beaches, dunes, barrier islands, and coastal wetlands is a serious problem that affects natural resources, energy, defense, and public infrastructure, as well as economically important tourism. Beach nourishment and other coastal restoration

projects aim to address this problem, often using Outer Continental Shelf (OCS) sand to strengthen or rebuild the coastline. The Bureau of Ocean Energy Management (BOEM) serves as the lead federal agency and liaison in support of the nation's current and long-term interests in OCS non-energy marine minerals and is the only federal agency with the authority (granted under Public Law 103-246) to lease access to OCS resources. The BOEM Marine Minerals Program (MMP) is tasked with negotiating agreements for OCS sand, gravel, and shell resources for use in beach nourishment and coastal restoration projects in an environmentally responsible way.

BOEM's need to access offshore mineral resource information has been rapidly expanding in recent years. In order to fulfill its mission and share information with the public and coastal planners and managers, the BOEM MMP needs to know 1) where offshore marine mineral resources are (spatial extent of resource), 2) what the mineral resource is (marine mineral characterization, type, size and color), and 3) how much resource (volume of sand) is there on national, regional and operational scales. The Marine Minerals Information System (MMIS) is a BOEM enterprise Geographic Information System (GIS) environment that helps advance the BOEM MMP science strategy by serving as a local, state, and federal collaboration for OCS sand resource geospatial information exchange and investments across all levels of government.

The MMIS is a moderate-impact system under the Federal Information Security Modernization Act of 2014 and National Institute of Standards and Technology (NIST) standards. BOEM employees performing administrative tasks gain access to the Department of the Interior (DOI) network and the MMIS through a two-factor authentication process to logon and are authenticated through the DOI Enterprise Active Directory, which has been assessed separately. Information about the Enterprise Active Directory is documented in the Enterprise Hosted Infrastructure PIA available on the DOI Privacy Program PIA Web page.

The MMIS uses Open Geospatial Standards and a GIS platform. As a centralized resource hosted by DOI, the MMIS integrates resource evaluation data with environmental studies information to recognize the importance of identifying suitable OCS sand deposits and describes past, ongoing, and future environmental studies investments needed to make informed decisions regarding the use of federal mineral resources for future beach nourishment or wetlands restoration activities. The MMIS provides reliable public access to a variety of MMP, partner agency, and state geospatial data and related non-geospatial information (dependent on area coverage and resolution) such as sediment samples; bathymetry; electromagnetic, seismic, and side scan sonar surveys; National Environmental Policy Act and agency consultation data; operational dredged data; and sand resource data.

MMIS Data, Sources, and Format

1. Marine mineral project data from sand and gravel leasing (MMIS Planning and Administration and Construction Feature Class datasets), as obtained from the United States Army Corps of Engineers (USACE) and its dredging contractor:

- Offshore lease areas
- Potential sand resource areas
- Beach placement
- Dredge areas
- Indirect and direct species (e.g., sea turtle takes)
- Dredge pipelines
- Dredge pumpouts

Format: ArcGIS geodatabase files (.gdb, .shp, .txt, .xls, .csv, and .pdf)

2. Geophysical surveys and elevation data sourced from BOEM contacts with industry, the United States Geological Survey (USGS), the National Oceanic and Atmospheric Administration (NOAA), USACE, state agencies, and academia:

- Sonar data: Sonar (sound navigation and ranging) uses sound waves to explore and map the ocean and seafloor.
  - Single and multibeam (bathymetry) data: Single and multibeam sonar use echo sounding to measure the sea floor depth below the sea surface.
  - Interferometric sonar data (bathymetry and backscatter): Interferometric sonar uses the measurement of phase at each of several receive elements to determine the angle from which the acoustic return originates.
  - Side scan data: Side scan sonar is a specialized system for detecting objects on the seafloor.
- Seismic data: Seismic data is obtained from a geophysical method used to image the subsurface in marine environments.
  - Sub-bottom profile data (high-resolution seismic reflection profile data): Sub-bottom profiles, coupled with other geophysical data (bathymetry, backscatter, and other forms of seismic reflection profiling) and physical samples (sediment cores/grabs, rock samples) allow for a fully integrated and detailed view of the marine geological environment.

Format: ArcGIS raster datasets and GeoTIFF files

3. Datasets derived from marine geology, geotechnical surveys, and magnetometer surveys (magnetic anomalies) sourced from BOEM contacts with industry, USGS, NOAA, state agencies, and academia:

- Physical samples: Marine geophysical surveys gather data about the shape and subsurface geology of the sea floor. Data from survey methods combine to provide the information needed to understand the seabed environment and subsurface processes.

    - Sediment cores (cylindrical samples of material from the seabed)
    - Sediment grab samples (samples of sediment from the seabed)
- Seabed data (sediment and rock)
- Sediment grain size data
- Magnetometer data (marine magnetometers are used to detect variations in the total magnetic field of the underlying seafloor)

Format: ArcGIS geodatabase files (.gdb, .shp, and .csv)

The MMIS is designed to serve as a centralized public resource for offshore mineral resource information that will be consistent with open access goals while upholding high data quality standards. MMIS users are able to view and download publicly available offshore marine minerals data. Data through the viewer is retrieved by selecting an area on a map to retrieve information. The MMIS does not offer text-based search capabilities.

The MMIS is not intended for the collection or maintenance of sensitive personally identifiable information in any format. No information stored in the MMIS is searchable or retrievable using personal identifiers. The MMIS may contain scientific reports that include attribution-related information of scientists/publication authors of federally-funded studies and reports that are publicly available. This non-sensitive information provides a means of apportioning scientific credit in alignment with BOEM's Science Quality and Integrity Policy. No report-associated image data available in the MMIS pertains to any individuals. All sourced data has been collected solely for the purpose of resource evaluation; no conclusions about individuals can be made from any of the datasets or images. The MMIS does not provide BOEM with the capability to identify or monitor individuals.

For access to the MMIS and additional information about the BOEM MMP, please visit the program's website.

C. What is the legal authority?

The Outer Continental Shelf Lands Act (OCSLA) (43 U.S.C. 1331 et. seq.) established federal jurisdiction over the submerged lands of the continental shelf seaward of state boundaries and charges the Secretary of the Interior with the responsibility for administering minerals exploration and development in the OCSLA, as well as formulating regulations to meet the provisions of the OCSLA. DOI's jurisdiction for leasing and regulating the recovery of minerals extends to the subsoil and seabed of all submerged lands seaward of state-owned waters to the limits of the OCS (except where this may be modified by international law or convention or affected by the Presidential Proclamation of March 10, 1983, regarding the Exclusive Economic Zone [EEZ]). The OCSLA does not authorize BOEM to issue prospecting permits or leases to private interests in the EEZ of a commonwealth or territory of the United States.

Public Law 103-426 (43 U.S.C. 1337(k)(2)) allows BOEM to negotiate, on a noncompetitive basis, the right to use OCS sand, gravel, or shell resources for shore protection, beach or wetlands restoration projects by federal, state or local agencies, or for use in construction projects funded in whole or in part by or authorized by the Federal Government.

Office of Management and Budget (OMB) Memorandum, Open Data Policy-Managing Information as an Asset (M-13-13), supports Executive Order 13642 of May 9, 2013, Making Open and Machine Readable the New Default for Government Information, and requires agencies to collect or create information in a way that supports downstream information processing and dissemination activities. Additionally, it involves agencies building or modernizing information systems in a way that maximizes interoperability and information accessibility, maintains internal and external data asset inventories, enhances information safeguards, and clarifies information management responsibilities.

D. Why is this PIA being completed or modified?

☒ New Information System
☐ New Electronic Collection
☐ Existing Information System under Periodic Review
☐ Merging of Systems
☐ Significantly Modified Information System
☐ Conversion from Paper to Electronic Records
☐ Retiring or Decommissioning a System
☐ Other: *Describe*

E. Is this information system registered in CSAM?

The completed PIA, associated system of records notice(s), and any other supporting artifacts must be entered into the CSAM system for each registered system or application.

☒ Yes: 010-000001871 Marine Minerals Information System
☐ No

F. List all minor applications or subsystems that are hosted on this system and covered under this privacy impact assessment.

Subsystem Name	**Purpose**	**Contains PII** *(Yes/No)*	**Describe** *If Yes, provide a description.*
None	None	No	N/A

G. Does this information system or electronic collection require a published Privacy Act System of Records Notice (SORN)?

☐ Yes
☒ No

H. Does this information system or electronic collection require an OMB Control Number?

☐ Yes
☒ No