

## Environmental Studies Program: Studies Development Plan | FY 2023–2024

Title	Understanding Potential Health Impacts of Outer Continental Shelf (OCS) Energy Activities on Environmental Justice (EJ) Populations (NT-23-08)
Administered by	Office of Environmental Programs
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Procurement Type(s)	Contract
Conducting Organization(s)	TBD
Total BOEM Cost	TBD
Performance Period	FY 2023–2025
Final Report Due	TBD
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PICOC Summary	-
<i><u>Problem</u></i>	Many of BOEM’s National Environmental Policy Act (NEPA) documents, including the National Programmatic environmental impact statement (EIS) and the Office of Renewable Energy Program’s EISs do not describe potential health impacts of OCS energy related activities. Consideration of potential health impacts on EJ communities is required by Executive Orders (E.O.) 12898.
<i><u>Intervention</u></i>	This study proposes to conduct a literature review and synthesis to provide BOEM with information to use in EJ sections of NEPA documents. The synthesis will highlight potential health impacts relevant to EJ communities located in coastal areas near OCS energy activities.
<i><u>Comparison</u></i>	Without this study, potential human health impacts related to OCS energy activities will continue to be inadequately considered in environmental assessments.
<i><u>Outcome</u></i>	This study will help BOEM better identify, assess, and communicate potential human health impacts related to OCS energy activities. The synthesis of existing information will improve BOEM’s understanding and communication of how offshore energy activities could potentially affect the health of residents in potentially affected EJ communities. Furthermore, this study will allow for identification of specific data gaps and facilitate better prioritization of human health information needs.
<i><u>Context</u></i>	This study will be carried out at national level and will include data and other information collected from all regions. Deliverables are applicable at both a national and regional level.

**BOEM Information Need(s):** National-level assessments can be improved with more information about how OCS energy activities could potentially affect the health of residents in EJ communities. Understanding linkages between these activities and potential health impacts would enable BOEM to make more equitable and environmentally-just decisions. It would also help BOEM to meet E.O. 14008,

E.O. 12898, E.O. 13985, and E.O. 13990. Synthesized information would offer NEPA document authors a common knowledge base to advance consistency across the bureau.

**Background:** Current information on potential linkages between OCS activities and human health and well-being is spread across a variety of sources. Much of the available information typically evaluates impacts from environmental disasters, such as oil spills, rather than with respect to routine activities. While some activities or factors have been explored in relatively good detail, it is necessary to synthesize information specifically for BOEM's context to better understand the impact of OCS activities on human health. There is limited research specifically on the health of residents of EJ communities.

**Objectives:** Improve BOEM's ability to understand the affected environment of EJ communities, including the health and potential vulnerabilities of residents, and assess potential health impacts related to BOEM-authorized activities.

- Determine what information is available on EJ community health useful for the BOEM context.
- Identify types of potential environmental impacts created by BOEM-authorized activities that could possibly create health impacts on residents of EJ communities.
- Identify potential pathways that could expose residents of EJ communities to health impacts.
- Identify the types of potential health impacts on residents of EJ communities from OCS energy activities.
- Identify data gaps and future research needs related to human health impacts from OCS energy activities.

**Methods:** This study will compile relevant existing literature and data available on potential health impacts on EJ communities. The scope will cover OCS energy activities, including both offshore components and onshore support infrastructure. Sources will include existing peer-reviewed literature, models, databases, Subject Matter Expert (SME) input (where applicable and available), and other data sources. The literature review will focus on public health information. The review will highlight information that could help BOEM assess types and levels of human health impacts for activities. There will be coordination with BOEM SMEs throughout the process to ensure the deliverables maximize usefulness to the agency's needs and identify future information needs.

A comprehensive list of potentially impacting activities and factors will be compiled from the literature review and those already considered by BOEM in its EISs and national program analyses (e.g., noise, lighting, traffic, routine discharges, air quality, water quality, bottom/land disturbance, fisheries, visible infrastructure, space/use conflicts). Possible pathways through which humans may be exposed to potential health impacts from those activities and factors will be determined. Information on all potential human health effects of those activities or factors will be compiled. Conceptual models will also be created to visualize potential human health impacts and will include the following: "source" (i.e., potentially impacting activity or factor), pathways (i.e., how the impacts are transferred to the receptor, or potentially affected communities), and "sink" (i.e., specific potential human health impacts). Additionally, data gaps and future research needs related to OCS energy activities potential impacts on human health will be identified. All information collected will be synthesized to create a set of resources for SMEs consisting of an information database (i.e., collection of relevant literature and/or data), conceptual model(s), and synthesis summary report. The information database will build upon resources in the EJ Methodologies database related to health and will be provided in a format that can be integrated into that database.

**Specific Research Question(s):**

1. Can potential human health impacts be identified and, if so, what are the ways they are being identified and measured?
2. What are the OCS energy activities and factors that can have potential human health impacts on residents in EJ communities and what are those health effects?
3. Can available literature provide insights into what may contribute to potential health impacts being different in one area versus another?

**Current Status:** N/A

**Publications Completed:** N/A

**Affiliated WWW Sites:** N/A

**References:** N/A