

Environmental Studies Program: Studies Development Plan | FY 2025–2026

Field	Study Information
Title	Updating Climate Science Integration into BOEM Pacific Decision-making (PC-25-06)
Administered by	Pacific OCS Region
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Procurement Type(s)	Interagency Agreement, Cooperative Agreement, or Contract
Performance Period	FY 2025-2026
Final Report Due	TBD
Date Revised	May 2, 2024
Problem	Though climate change is widely cited as a Federal-, DOI-, and BOEM-level priority, it is difficult to translate high-level guidance into regionally applicable best practices and actionable outcomes that can be productively integrated into BOEM Pacific decision-making.
Intervention	This study will identify and synthesize critical climate change-related information (e.g., baseline climate conditions, climate projections, Traditional Ecological Knowledge (TEK), scenarios, resource vulnerability, and socioeconomic factors) that are relevant to the Pacific region. It will then develop a systematic and intentional strategy for integrating this information into BOEM’s decision-making processes in a way that aligns with BOEM-, Department-, and Federal-level efforts to better understand and address climate change.
Comparison	The outcomes of this study will be compared against similar strategic plans and climate change-related guidance (e.g., National Park Service 2023, Forest Service 2009, Brandt and Schultz 2016).
Outcome	Compilation of basic Pacific-focused climate change information, potential resource impacts, recommended future climate scenarios, and a strategic plan for integrating this information into BOEM Pacific decision-making, particularly in support of the National Environmental Policy Act (NEPA). Best practices and talking points for BOEM Pacific staff to handle climate change-related questions from stakeholders.
Context	This is a baseline effort for the Pacific Region that will complement NT-24-05 and DOI Climate Science Applications Coordination Team efforts and will ensure that BOEM’s public documents include up-to-date information and climate scenarios for informing BOEM Pacific actions.

BOEM Information Need(s): BOEM’s 2024–2028 Strategic Framework highlights the need to “...increase BOEM’s ability to understand and address the risks and effects of climate change as they relate to BOEM authorized activities” (Operational Priority #4). With NEPA requiring BOEM to consider the environmental impact of its proposed actions, incorporating climate change-related information into the NEPA process would address this priority. Such an effort would also be in alignment with the DOI Climate Action Plan and Secretarial Order 3399, which states that

“...identifying important interactions between a changing climate and the environmental impacts of a proposed action in NEPA documents can help decision makers identify opportunities to reduce GHG emissions, improve environmental outcomes, and contribute to protecting communities from the climate crisis.” (Sec. Order No. 3399). Further, guidance from the Council of Environmental Quality states that agencies should consider using “...the best available information and science when assessing the potential future state of the affected environment in NEPA analyses...including scenarios and climate modeling information that are most relevant to a proposed action” (CEQ 2023).

Despite extensive guidance and directives, BOEM’s Pacific region lacks the tangible direction necessary to incorporate climate change science and information into its decision-making processes (like NEPA) and stakeholder engagement activities in a productive way. Baseline climate data, TEK, and specific future climate scenarios relevant to the Pacific OCS environment are not currently being used to inform NEPA review and other environmental law compliance, and there is a general lack of confidence in addressing climate change-related questions raised by stakeholders.

Background: At the department level, the DOI Coordination Program for Resilience and Environment’s (CPRE) Climate Science Applications Working Group (CSACT) is compiling climate change-related resources and developing a technical guidance document: “Best Practices for Incorporating Climate Change Science into DOI Analyses, Consultations, and Decision-making” (expected to be published September 2024). At BOEM’s national level, study NT-24-05 (“Synthesis of Climate Change Sensitivity and Information Gaps in Priority Management Areas of the Outer Continental Shelf”) is taking a national approach to compiling and evaluating existing information on climate change impacts on OCS environments, particularly for deeper waters and areas with vulnerable species and habitats, identifying knowledge gaps, and creating a “one-stop shop” that can be referenced by BOEM subject matter experts (SMEs). The scope of NT-24-05 does not include developing a strategy for incorporating this information into BOEM decision-making. BOEM’s Pacific region needs a clear framework that not only identifies the various climate stressors that impact the region and their projected future changes, but also how they interact with BOEM Pacific activities. This framework should also provide a systematic and intentional strategy for integrating this information into its processes and procedures. Ongoing efforts at the department and bureau levels do not specifically address this need. By developing this framework, this study will facilitate BOEM Pacific’s compliance with existing NEPA requirements and align with BOEM-wide (2024-2028 Strategic Framework, Operational Priority #4), Department-wide (DOI Climate Action Plan, S.O. 3399, 523 DM 1, 526 DM 1), and Federal-level (CEQ 2023; E.O. 14008) efforts to better understand and address climate change, and will serve as a model that can be adapted to other BOEM regions and inform HQ planning.

Objective(s): The main objectives of this study are as follows:

- Identify, compile, and synthesize key existing climate change-related information (e.g., baseline climate conditions, TEK, and future scenarios of biotic, abiotic, and socioeconomic factors) relevant to the Pacific OCS region and BOEM Pacific’s proposed activities.
- Develop a systematic strategy with NEPA coordinator and SME buy-in for incorporating this information into the NEPA review process and other BOEM Pacific decision-making; this includes generating a process model that demonstrates how to adjust this strategy as needs evolve and additional sources of data become available.
- Develop talking points that can be used by BOEM Pacific staff when answering climate change-related questions at public-facing meetings.

- Complement and integrate with the ongoing National Study NT-24-05 through close communication with the POC, sharing resources, and two-way feedback.

Methods: First, resources relevant to climate change in the Pacific region will be compiled, including pre-existing baseline climate data, TEK, future climate scenarios, and climate assessment and/or vulnerability reports. This phase of the study may take the form of a workshop, where Federal and State agencies, academics, Tribes, and other stakeholders come together to contribute what they consider valuable climate change-related information that they believe should be incorporated into BOEM's decision-making processes. As part of this effort, other existing Federal climate-focused studies and committees, such as NT-24-05 and CPRE CSACT, will be consulted, and climate change-related mitigation measures that are already in place may also be summarized. Available future climate scenarios will be evaluated based on their likelihood and relevance to the Pacific region (e.g., projections of sea-level rise, sea-surface temperature, upwelling indices, storm intensity, etc.). Then, through coordination and review with Pacific region NEPA coordinators and SMEs, either through an internal workshop or a series of meetings, relevant climate change-related text and figures will be developed for incorporation into BOEM's NEPA documents. Text may include a description of climate projections relevant for the affected environment and additional climate-related mitigation measures. A process model will also be created that clearly expresses the factors to consider at each step of the NEPA process (similar to Brandt and Schultz 2016). This model will also consider how to adjust this approach as needs evolve and new data emerge. Finally, a series of talking points for Pacific climate change-related questions will be developed together with communications personnel, both at the detailed level approved by SMEs for the purpose of Pacific stakeholder meetings, and at high level for upper management to reference at national-scale meetings.

Specific Research Question(s):

1. What climate change-related information pertaining to the Pacific region already exists?
2. What is the best way for this information to be applied to the NEPA review process and other aspects of BOEM Pacific's decision-making?
3. Which future climate scenarios should be used for the Pacific region and why? What are their caveats?
4. How can we continue to integrate climate change information into BOEM processes, even as our needs evolve and new data and/or information emerge?
5. What are the best practices for talking about climate change to stakeholders? How can BOEM Pacific staff be best prepared to handle questions from stakeholders regarding climate change, like "How is offshore wind energy development combating climate change"?

Current Status: N/A

Publications Completed: N/A

Affiliated WWW Sites: N/A

References:

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