



Long-Term, Big Picture? Scale in US Offshore Wind EIAs

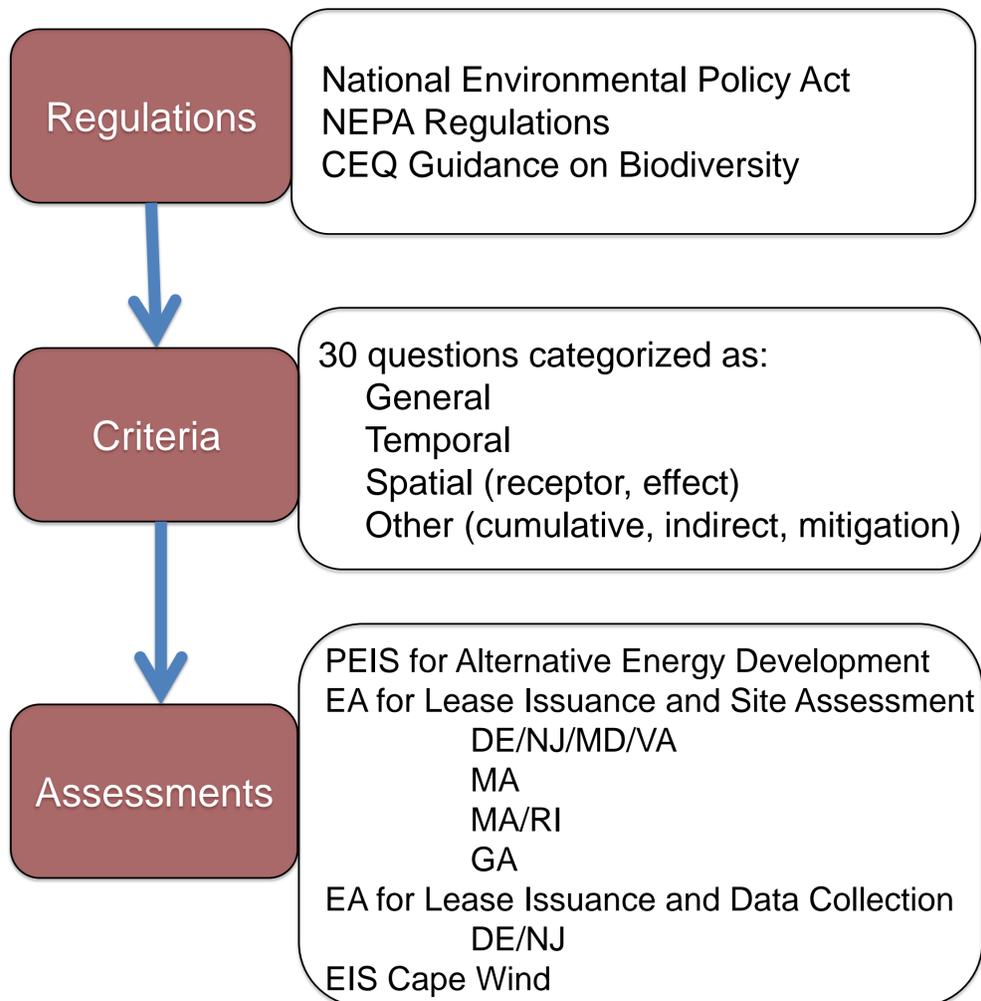
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Background

Offshore wind projects in the United States require compliance with environmental regulations, principally the National Environmental Policy Act (NEPA), which may necessitate the preparation of an Environmental Assessment (EA) or Environmental Impact Statement (EIS). These provide a framework to evaluate the potential adverse effects of a proposed action (project, program, or policy) on the physical and social environment. Further instructions for the preparation of these documents are given by the Council on Environmental Quality (CEQ) NEPA Regulations and a series of CEQ guidance, including that regarding Biodiversity. Within the impact assessments, the affected environment and potential impacts are described. Differences in spatial and temporal scales exist among the proposed action, the affected environment, and the potential impacts, necessitating the clear definition and inclusion of scale within assessments. Failure to do so may result in incomplete and erroneous assessments, contrary to the letter and spirit of NEPA.

Methods

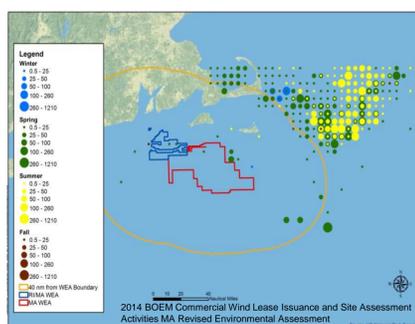


Findings



Analyses were based on project areas instead of effect areas or ecosystem boundaries.

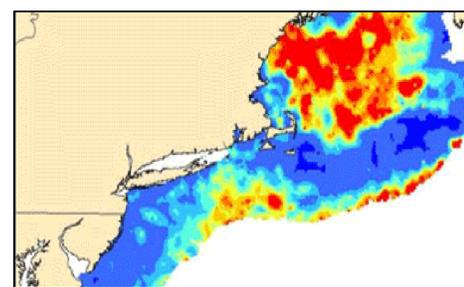
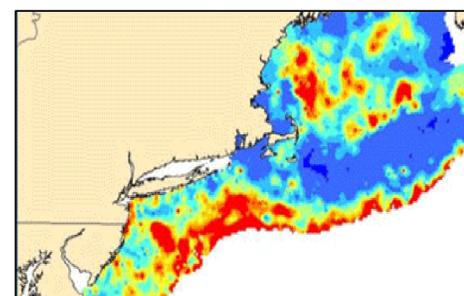
Cetacean data lacked consistency, usually only detailed Endangered Species Act-listed animals, and were represented by few visual overlays.



Extent and detail of Standard Operating Conditions for mitigation and monitoring increased with the completion of more assessments.

Scale Matters!

Changing ocean temperatures, salinity, and dynamics as a result of climate change result in shifts of prey availability and thus of historic habitats and ranges of cetaceans. These shifts should be accounted for in the evaluation of affected environment and potential impacts in assessments and marine spatial plans.



Northward shift in silver hake as a result of climate change: 1968 – 2007. 2014 (2013 NMFS)

Inclusion of habitat models, in addition to the current practice of describing range, habitat, and abundance, could incorporate these changing spatial and temporal scale considerations.

Overall average compliance to criteria = 36%



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