



OFFSHORE WIND

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
NJ PACT STAKEHOLDER SESSION
SEPTEMBER 23, 2020



“As atmospheric levels of carbon dioxide and other greenhouse gases increase, New Jersey will experience significant direct and secondary changes in its environment.”

– New Jersey Climate Science Report, 2020

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- Sea-levels are increasing at a greater rate in New Jersey than other parts of the world.
 - By 2050, there is a 50% chance that sea-level rise will meet or exceed 1.4 feet and a 17% chance it will exceed 2.1 feet. Those levels increase to 3.3 and 5.1 feet by the end of the century (under a moderate emission scenario).
 - "Sunny day flooding" will occur more often across the entire coastal area of New Jersey due to sea-level rise.
 - It is extremely likely that Atlantic City will experience "sunny day flooding" 95 days a year, and a 50% chance it will experience 355 days a year, by 2100 (under a moderate emission scenario).

- Since the industrial age, ocean pH levels have declined and the ocean is now 30% more acidic.
- If carbon dioxide emissions continue at current rates, ocean pH levels are expected to fall, creating an ocean that is more acidic than has been seen for the past 20 million years.
- Southern New Jersey counties rank second in the United States in economic dependence on shelled mollusks, which will suffer from increasing ocean acidity.



NJ'S EMISSIONS GOAL
80%↓
from 2006 baseline by
2050

“Successfully implementing the strategies outlined in the Energy Master Plan will drastically reduce New Jersey’s demand for fossil fuels, reduce our carbon emissions, greatly improve local air quality, and related health impacts. The Energy Master Plan, together with PACT, the most sweeping set of climate regulations in the country, represents a seismic shift in our energy policy.”
– Governor Phil Murphy



Objective of this Meeting

To identify regulatory mechanisms to assist in balancing responsible siting of offshore wind facilities and solicit feedback from stakeholders on whether to adapt the regulatory framework.



Discussion

Definition of Energy Facility in CZM 7:7-15.4

Energy facilities include facilities, plants or operations for the production, conversion, exploration, development, distribution, extraction, processing, or storage of energy or fossil fuels. Energy facilities also include onshore support bases and marine terminals. Energy facilities do not include operations conducted by a retail dealer, such as a gas station, which is considered a commercial development.



Discussion

Rationale for the CZM 7:7-15.4 Energy Facility

New energy facility construction has the potential to cause significant impacts to coastal ecosystems, natural resources, public access, and scenic and visual qualities in coastal areas. The standards for energy facility siting and requirements for specific types of energy facilities are intended to steer non-water dependent development away from the coast and to preserve coastal values. Wind and solar energy are renewable resources that do not involve the refining or burning of fossil fuels. These types of energy facilities often result in fewer adverse impacts and, thus, have less stringent setback requirements.



Discussion

Rationale for the CZM 7:7-9.12 Submerged Infrastructure Routes

(c): Submerged infrastructure routes are a large capital investment and much depends on the safe functioning of the infrastructure. Both human and natural systems suffer from accidental breakage, especially of large oil or gas pipelines. Activities that increase hazard for submerged infrastructure must, therefore, be excluded



Resources Protected Under Coastal Zone Management Program

- Shellfish habitat, N.J.A.C. 7:7-9.2
- Surf clam areas, N.J.A.C. 7:7-9.3
- Prime fishing areas, N.J.A.C. 7:7-9.4
- Submerged vegetation habitat, N.J.A.C. 7:7-9.6
- Inlets, N.J.A.C. 7:7-9.9
- Dunes, N.J.A.C. 7:7-9.16
- Beaches, N.J.A.C. 7:7-9.22
- Historic and archaeological resources, N.J.A.C. 7:7-9.34
- Public open space, N.J.A.C. 7:7-9.38
- Marine fish and fisheries, N.J.A.C. 7:7-16.2



Known Issues and Challenges

N.J.A.C. 7:7-9.2 acknowledges that dredging activities have a negative effect on the recruitment of shellfish by changing the composition of the substrate.

Such activities can disturb and degrade shellfish habitat by adversely altering the water quality, salinity regime, substrate characteristics, natural water circulation pattern, and natural functioning of the shellfish habitat.

Therefore, N.J.A.C. 7:7-9.2(e) generally prohibits new dredging in shellfish habitat.

Further, N.J.A.C. 7:7-15.4(b)1 generally disallows siting of energy facilities in special areas like shellfish habitat, as well as other special areas and marine fish and fisheries areas.



Discussion

Rationale for the CZM 7:7-9.2 Shellfish Habitat

Dredging activities have a negative effect on the recruitment of shellfish by changing the composition of the substrate. Dredging disturbs and degrades shellfish habitat by adversely altering the water quality, salinity regime, substrate characteristics, natural water circulation pattern, and natural functioning of the shellfish habitat



Discussion

Question 1: Electric Transmission Cables

How should DEP analyze the impacts from dredging for cable crossings?

What conditions or practices should be considered for near-shore cabling, including construction methods and post-construction controls (such as the use of concrete mattresses)?



Discussion

Question 2: Dredging in Shellfish Habitat

New dredging is currently prohibited in shellfish habitat. DEP is considering whether changes that would permit certain activities related to the construction of energy transmission lines are appropriate.

What should the DEP consider when reviewing potential impacts to shellfish habitat and fishing activities?

What standards should DEP apply?

What would be appropriate mitigation?



Open Forum

Discussion of New Topics and Ideas

Please contact us to share additional comments or concerns at jill.aspinwall@dep.nj.gov.

