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- NEPA requires analyzing the potential environmental consequences of the proposed action and alternatives
- During the process of preparing an EIS, a proposed action is analyzed that includes a scenario(s) of activities
- Analyses of the environmental impacts on the human, marine, and coastal environments

## **Real-time Opportunity for Development Environmental Observations (RODEO)**

Collect real-time measurements of the construction and operation activities from the first facilities to be built to allow for more accurate assessments of the actual environmental effects and inform development of appropriate mitigation measures.

## *Air Quality*

- How many ships are used for construction of offshore wind energy facilities?
- What types of ships (e.g. jack-up rig) and what are their emissions (pollutant type)?
- How long do these construction activities occur – duration?

## *Sound*

- What is the intensity and duration of sound generated during pile driving?
- What level of sound is created by the vessels?
- What levels of sound are made during operations?

## *Seafloor Disturbance*

- What are the anchor patterns of the vessels used?
- What types of scarring occurs from the anchor chains?
- What is the extent of disturbance during cable laying for different installation methods?
- What is the duration of the cable laying for different installation methods?





# Demonstration



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[Statoil HyWind Project](#)

- Test different acoustic monitoring devices
- Compare monitoring techniques
- Cameras or other photographic collections





# Path Forward

- Partnering with DOE, NOAA, FWS
- Select project – several possibilities
- Coordinate with industry

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