

# Bureau of Ocean Energy Management Overview of Development Process in Context

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# Overview

- Re-cap of stages of development
- Areas in context of known fishing activity
- Technologies/infrastructure under consideration
- Overview of draft BMPs



# Stages of Development

## Identifying Wind Energy Areas

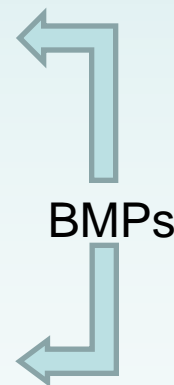
Task Force Consultation → Public Notice & Comment

## Leasing:

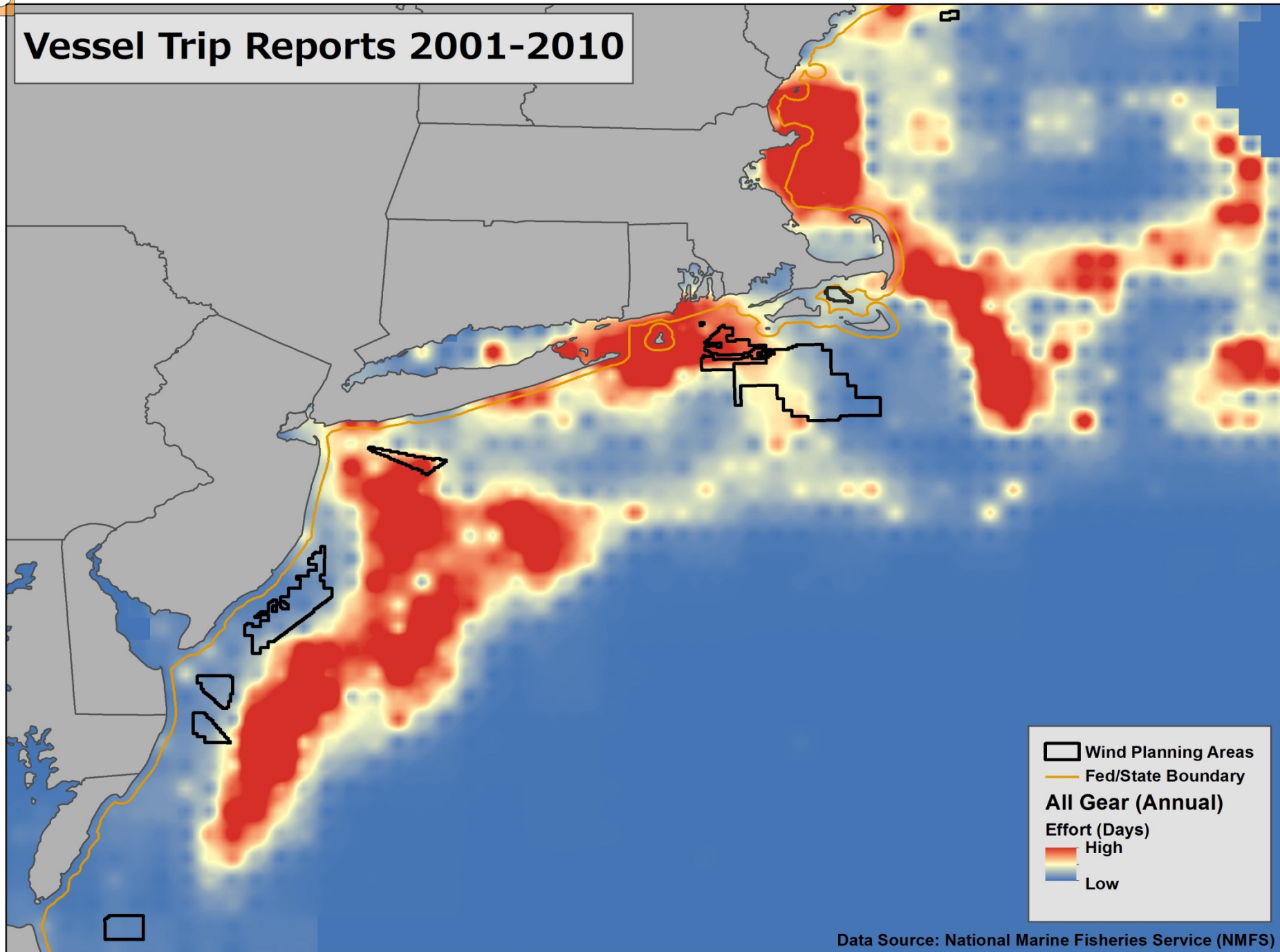
Notice → Environmental Assessment → Issuance

Site Assessment Plan  
(Surveys)

Construction &  
Operations Plan  
EIS



# Vessel Trip Reports 2001-2010

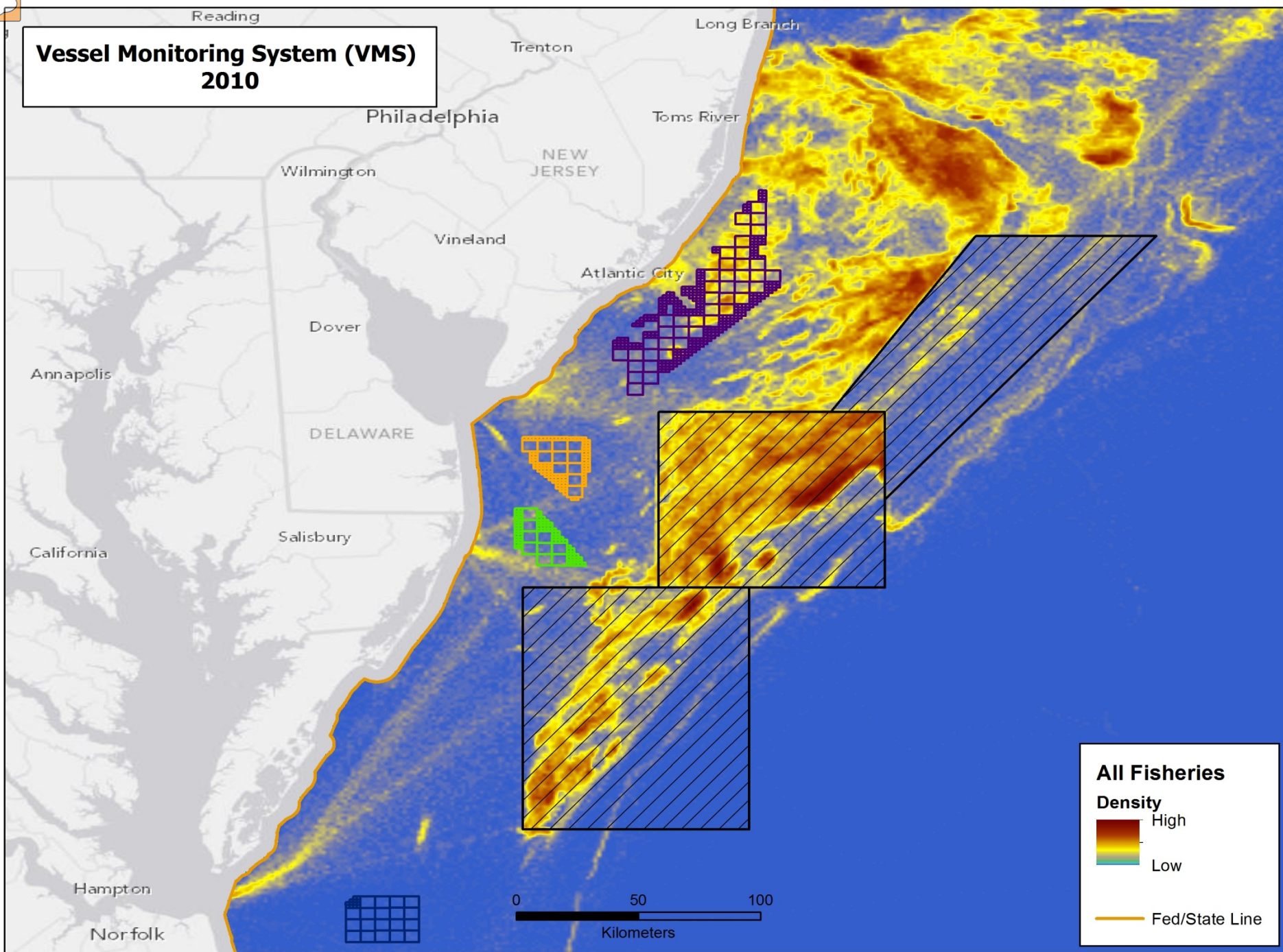


Data Source: National Marine Fisheries Service (NMFS)

Map ID: ERB-2012-1082

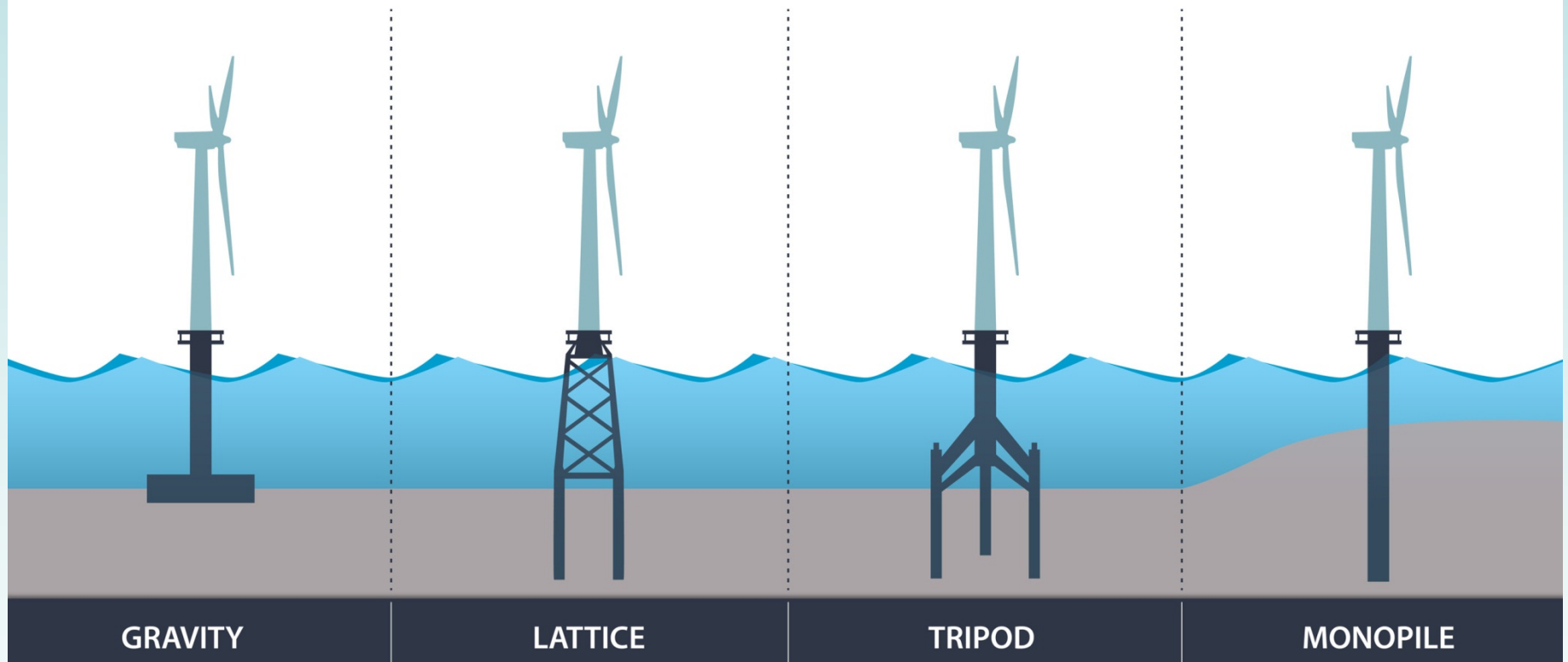


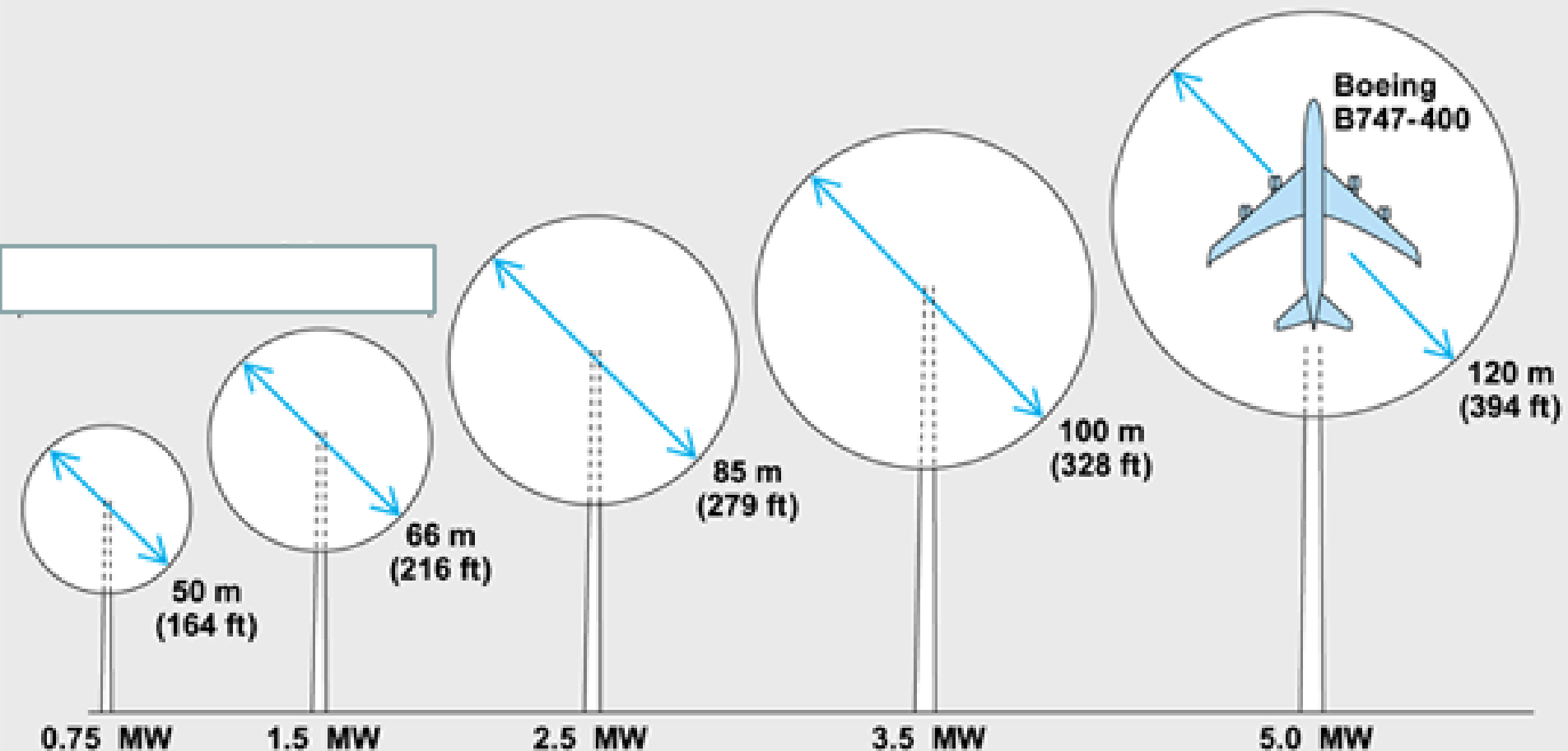
**Vessel Monitoring System (VMS)  
2010**



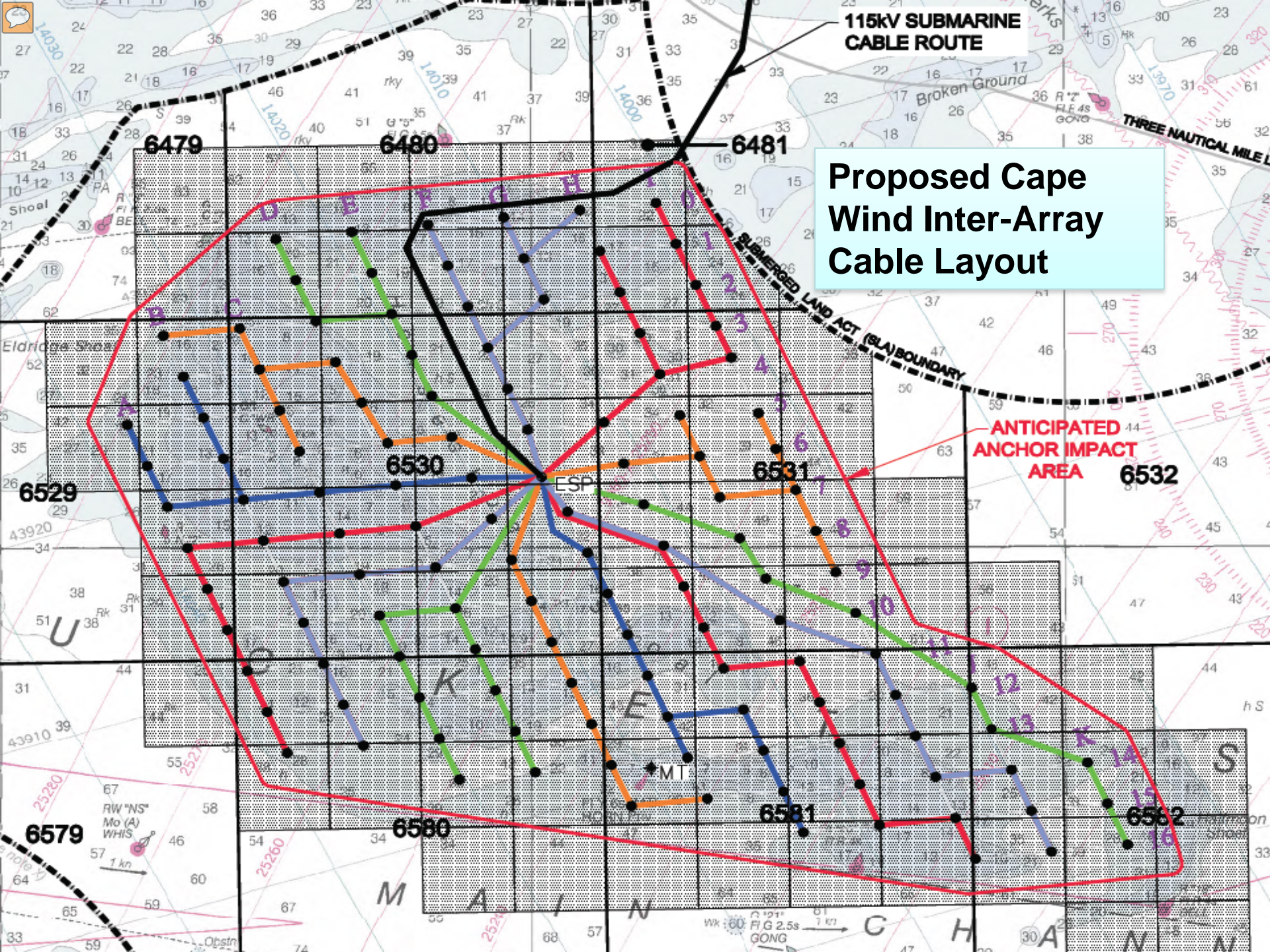


## Foundation Types









115KV SUBMARINE  
CABLE ROUTE

Proposed Cape  
Wind Inter-Array  
Cable Layout

ANTICIPATED  
ANCHOR IMPACT  
AREA

6479

6480

6481

6529

6530

6531

6532

6579

6580

6581

6582

ESP

MT

M A I N

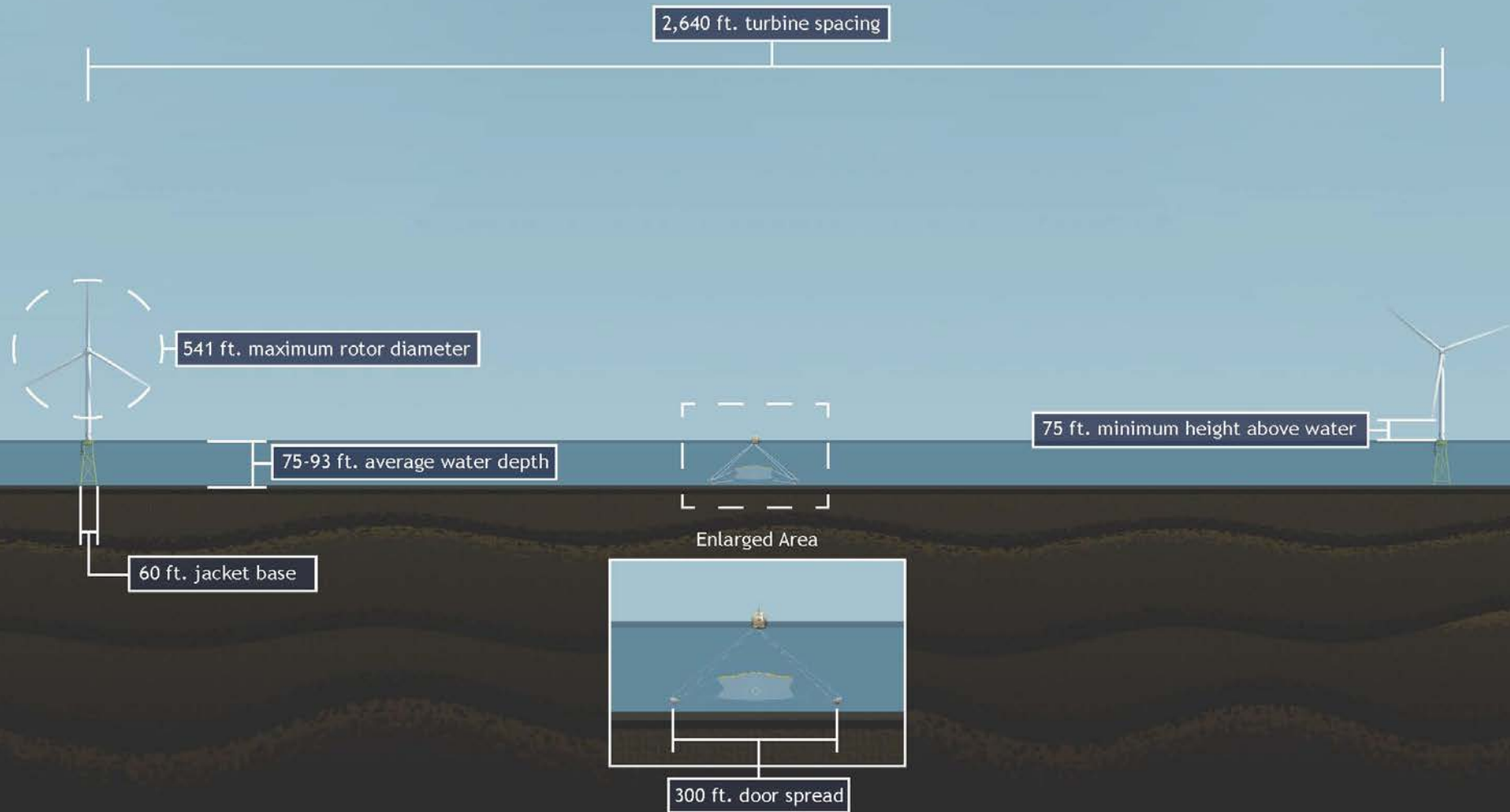
G H A N N

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## Block Island Wind Farm

October 9, 2012



Prepared by



Prepared for





## Block Island Wind Farm

October 9, 2012

Prepared by



Prepared for





# BMP Workshops

- Eight workshops were held between Oct. 2012 and Feb. 2013.
- Opportunity to provide comments on the construction and operational phases.
- Near term product- updated list of fishing-related best management practices (BMPs).
- Long term product – application of new fishing-related BMPs to the review of site assessment plans (SAPs), construction and operation plans (COPs), and general activity plans (GAPs).



# Draft Fishing BMPs

- Fisheries Community Outreach and Communication Program
- Project, Siting, Design, Navigation, and Access
- Alternating/Rotating Construction Schedule
- Safety

# Draft Fishing BMPs continued

- Wind Facility Fishing Access
- Environmental Monitoring Plan
- Financial Support for Gear Modification
- Port or Shore-side Improvements
- Measures to Offset Adverse Impacts

Questions?  
Comments?





# Studies: Biological

- EMF impact studies are continuing:
  - EMF model-based assessment and literature review is completed.
  - EMF *in situ* study ongoing in the Pacific.
  - Dept. of Energy funded EMF laboratory-based study is continuing.
- Fish acoustic impacts:
  - Workshop held in March 2012.
  - Effects of Pile Driving Sounds on Auditory and Non-Auditory Tissues of Fish has now been posted.



# Studies:

## Socioeconomic

- “Development of Mitigation Measures to Address Potential Use Conflicts Between the Wind and Commercial Fishing Industries.”
- Inter-Agency Agreement with NMFS to evaluate the socio-economic impact to fishing from offshore wind energy development was signed in September.
- Identification of Outer Continental Shelf Renewable Energy Space-Use Conflicts and Analysis of Potential Mitigation Measures.
- Present and historical fishing usage data continuing to be processed.