Carolina Long Bay 2023 Offshore Wind Activities

Lease Area OCS-A 0545
TotalEnergies Renewables USA, LLC

Lease Area OCS-A 0546
Duke Energy Renewables Wind, LLC

South Atlantic Fishery Management Council

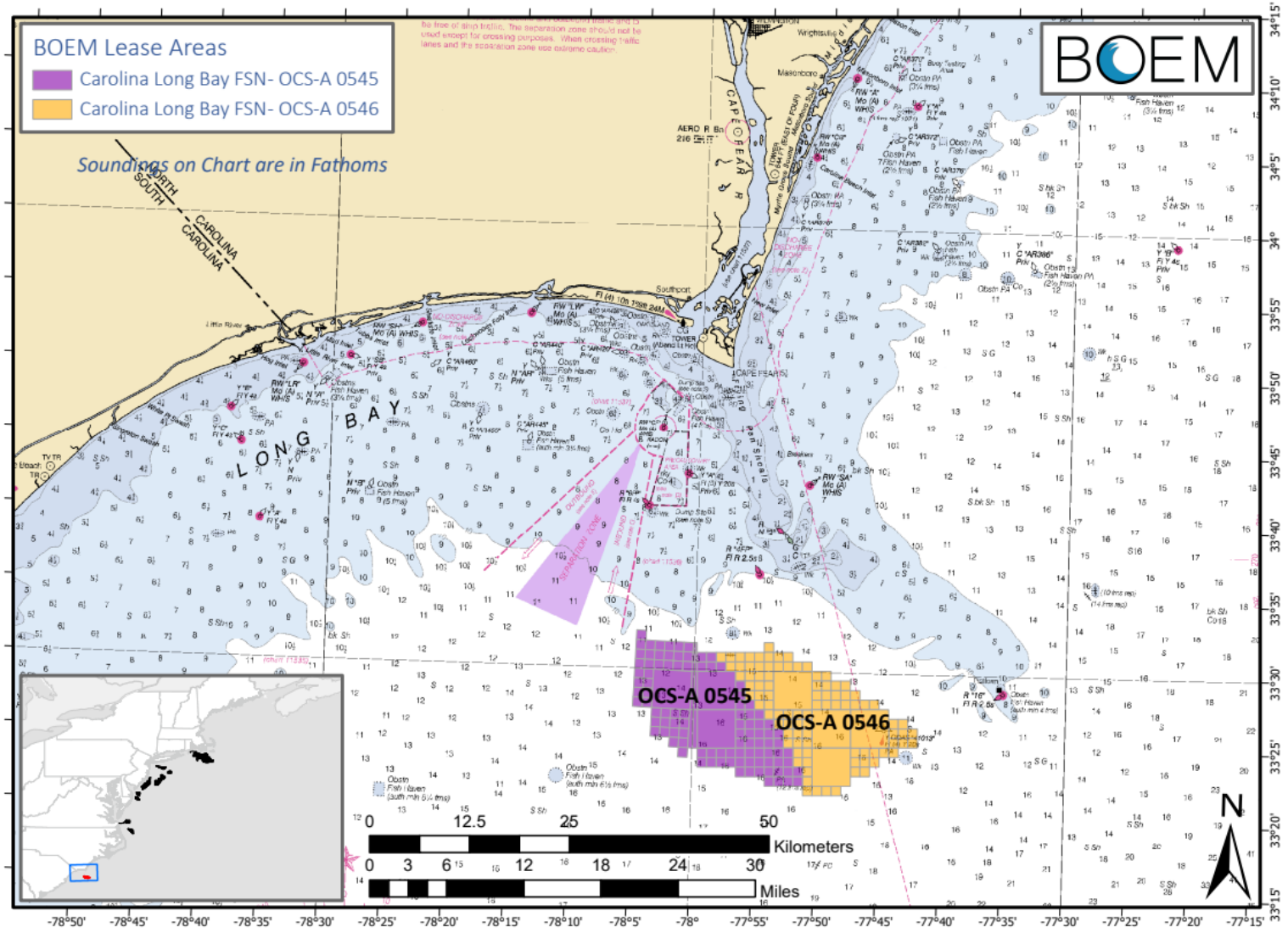
Habitat and Ecosystem Advisory Panel Meeting

May 17, 2023

Agenda

- Lease Descriptions
- Communication Activities
- 2023 Focus – Approval and Deployment of Buoys
- Survey Activities
- Geophysical Desktop Study
- Next Steps

Carolina Long Bay Offshore Wind Lease Auction – May 2022



Auction Winners

OCS-A 0545: TotalEnergies Renewables USA, LLC

- 54,937 acres

OCS-A 0546: Duke Energy Renewables Wind, LLC

- 55,154 acres

Communication Activities

Agency Communication Plan (ACP)	Purpose is to ensure early and active information sharing, focused discussion of potential issues, and collaborative identification of solutions
	Describes strategies the Lessee intends to use for communicating with federal, state and local agencies with authority related to the lease areas
	Living Document
	Drafts submitted October 2022 – each Lessee submitted individual plans
	The draft ACPs have been revised to address comments submitted
	Final plans to be posted on Project websites within 30 days of issuance of BOEM's final guidance

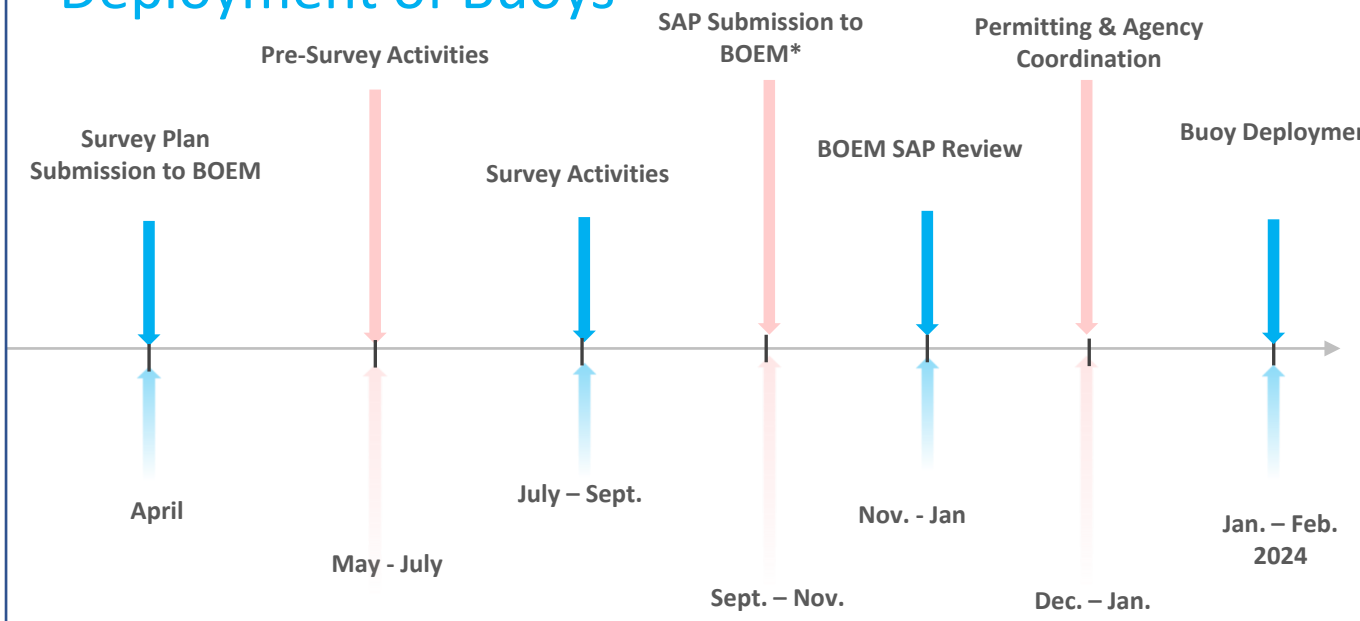
Communication Activities

Fisheries Communications Plan (FCP)	Drafts submitted October 2022 - each Lessee submitted individual plans
	Communications strategy for fisheries stakeholders prior to and during activities
	Final plans to be posted on Project websites within 30 days of issuance of BOEM's final guidance
Native American Tribal Communication Plan (NATCP)	Communications strategy with Tribes that have an interest in the project
	BOEM issued guidance on February 6, 2023
	Joint NATCP between Duke Energy Renewables Wind, LLC and TotalEnergies submitted to BOEM and Tribes on March 10, 2023
	Meeting with federally recognized tribes conducted on April 5, 2023
	Meeting with state recognized tribes scheduled for May 24, 2023
Semi-Annual Progress Report	Provides a brief narrative of the overall progress since the effective date of the Lease
	Drafts submitted December 2022 - each Lessee submitted individual plans
	Final drafts addressing comments by BOEM submitted March 1, 2023; posted on BOEM's website
	Next report due June 1st

2023 Focus – Approval and Deployment of Buoys

- **Preliminary Plan for Buoys**
  - Two buoys (one within each lease area) equipped with floating light detection and ranging (LiDaR)
  - Third buoy for additional biological monitoring

Anticipated Timeline for Approval and Deployment of Buoys



- Survey Plan submitted to BOEM on April 21, 2023
- Comments expected by May 21st

Survey Activities Purpose & Objectives

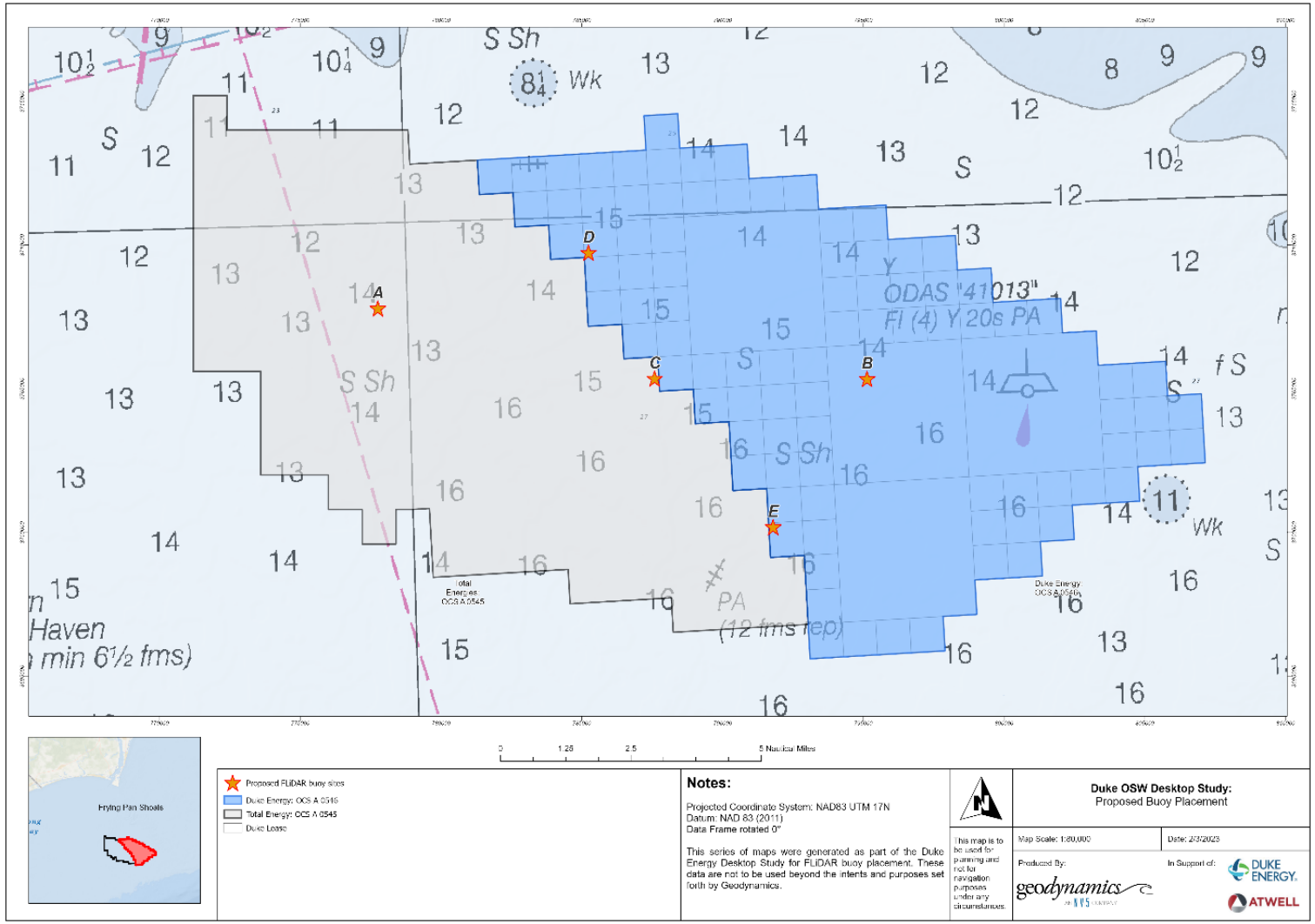
General Plan	Five or more 300 m × 300 m square plots with 30 m line spacing and one center crossline will be surveyed
Purpose	To support the Site Assessment Plan for the proposed deployment of meteorological buoys within the Carolina Long Bay Lease areas
Objectives	Identify the locations of seafloor and shallow subsurface hazards within the surveyed plots
	Obtain a general characterization of the geological conditions within the surveyed plots
	Identify the locations and extents of marine archaeological resources within the surveyed plots
	Identify the locations and extents of benthic resources within the surveyed plots

Proposed Survey Activities

Survey / Sampling Activity	Purpose	Representative Equipment*
Depth sounding (multibeam echo sounder (MBES))	To determine water depths, topographic features on the seabed, and initial review of surficial sediments	Konsberg 2040 or equivalent
Acoustic seafloor imaging (sidescan sonar (SSS))	Sediment classification purposes, to map surficial sediment distributions and bedforms, and to identify natural and anthropogenic acoustic targets (hazards) resting on the seafloor (such as boulders, debris, and shipwrecks) as well as any anomalous features	Edgetech 4205 or equivalent
Magnetic intensity measurements (magnetometer)	For detecting local fluctuations in the regional magnetic field from geological strata and potential ferrous objects on and below the seafloor (including debris and shipwrecks)	G-882 Cesium Marine Magnetometer or equivalent
Shallow parametric sub-bottom profiler	To map the near-surface stratigraphy	Innomar parametric medium-100 or equivalent
Subsea positioning (or cable counter)	To determine underwater position	Sonardyne Ranger 2 ultra-short baseline (USBL) or equivalent
Benthic grab samples (up to two benthic grab samples per site)	For macrofaunal and grain-size analysis	Young-Modified Van Veen benthic grab (0.04 m^2) or equivalent
Video Transect (one video transect through each proposed area)	To support interpretation of geophysical data to characterize surficial sediment conditions and benthic habitat classification	QYSEA FIFISH WS with USBL positioning or equivalent

*Actual equipment will be specified and identified once a geophysical contractor is selected.
Only sensors that do not require an incidental harassment authorization (IHA) under the Marine Mammal Protection Act (MMPA) will be used.

Potential Proposed Location of Buoys



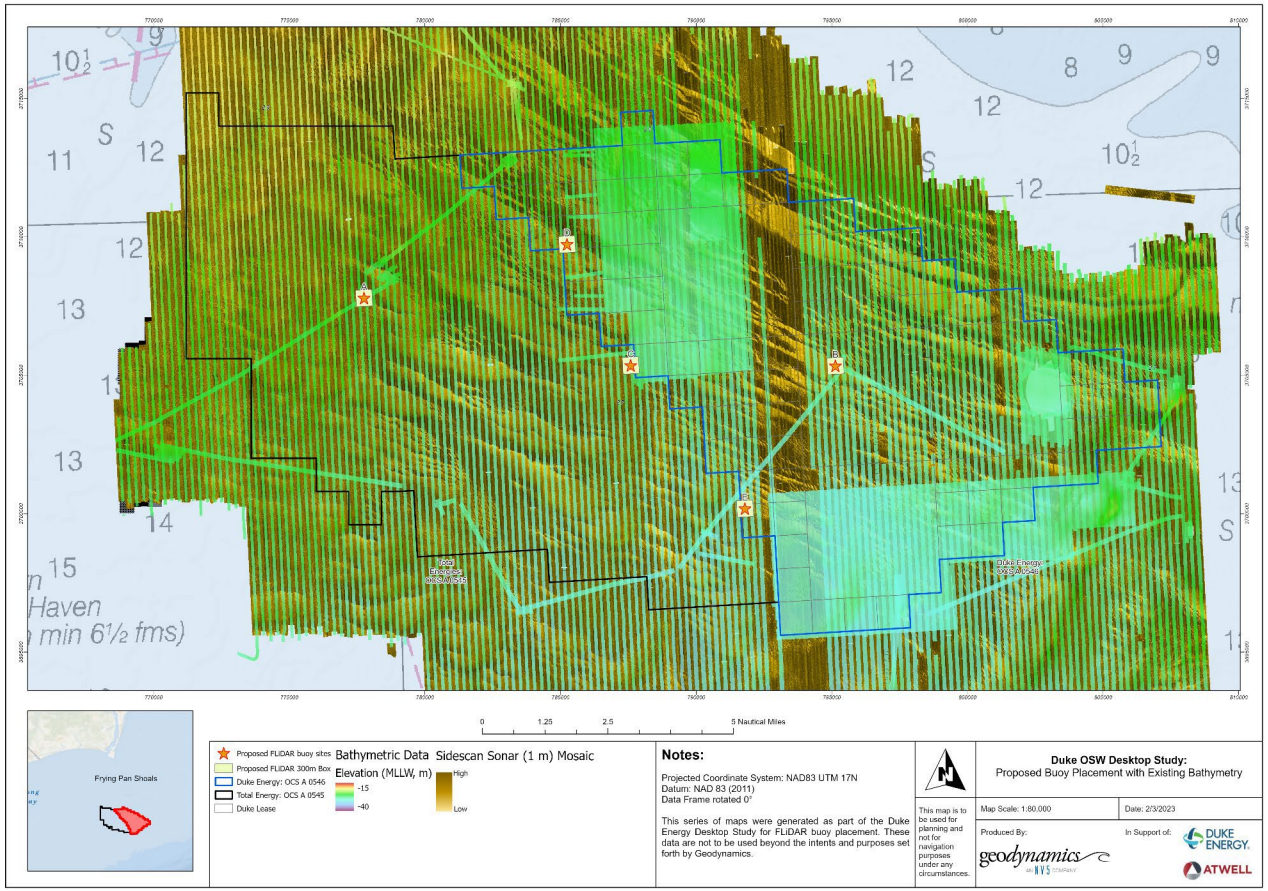
*No more than 3 buoys are anticipated to be deployed; exact locations to be determined based on results of future survey activities

Buoy	Purpose
A and B	Floating LiDaR to collect metrological and biological data
D or E	Biological Monitoring only
C	Alternative floating LiDaR if only 1 buoy is proposed

Preliminary Buoy Locations

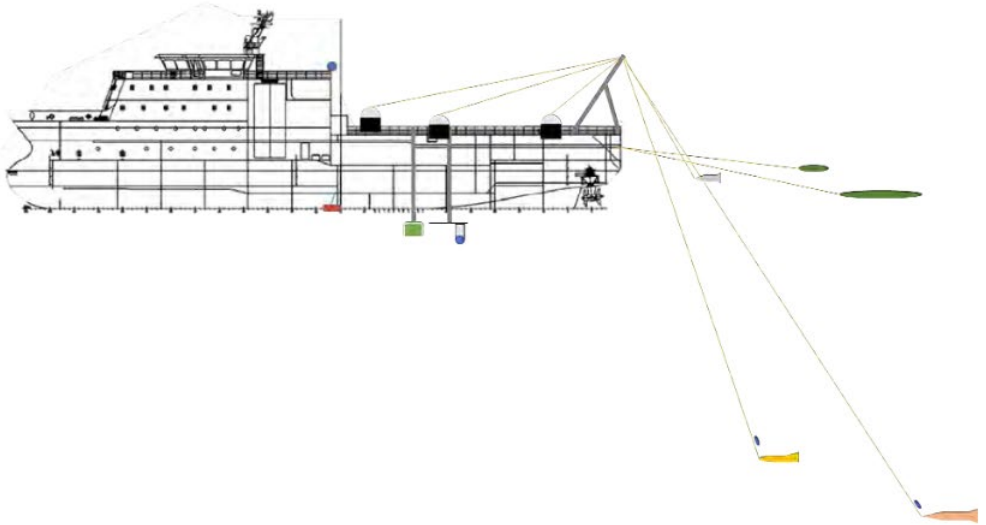
Buoy	Latitude	Longitude
Location A	33.477819N	78.0119996W
Location B	33.447271N	77.830528W
Location C	33.442476N	77.913567W
Location D	33.486247N	77.874085W
Location E	33.402796N	77.874085W

Geophysical Desktop Study



Proposed sites (within OCS-A 0545 and OCS-A 0546) on NOAA ENC Chart 11250 with the 2015 BOEM remote sensing effort overlaid.

- NV5-Geodynamics conducted a desktop analysis on all 5 proposed locations
- Original sites have shifted slightly
- Additional locations are being identified in the event that unfavorable sites are identified during survey activities



Buoy Location Survey Activities – Impact Minimization Measures

- All survey activities will comply with applicable Project Design Criteria and Best Management Practices (Latest Revision: 11/22/2021)
- Anytime a survey vessel is underway (transiting or surveying), the vessel will maintain a 500 meter minimum separation distance from ESA-listed species
- A PSO / trained lookout will monitor a Vessel Strike Avoidance Zone (500 meter or greater from any sighted ESA-listed species or other unidentified large marine mammal visible at the surface)
- No equipment with potentially harassing frequencies to marine mammals (Level A or Level B Harassment) will be used

*Survey Plan will provide compliance statement for all Project Design Criteria and Best Management Practices and other lease requirements.

Next Steps

Exploring a Joint Site Assessment Plan (SAP)

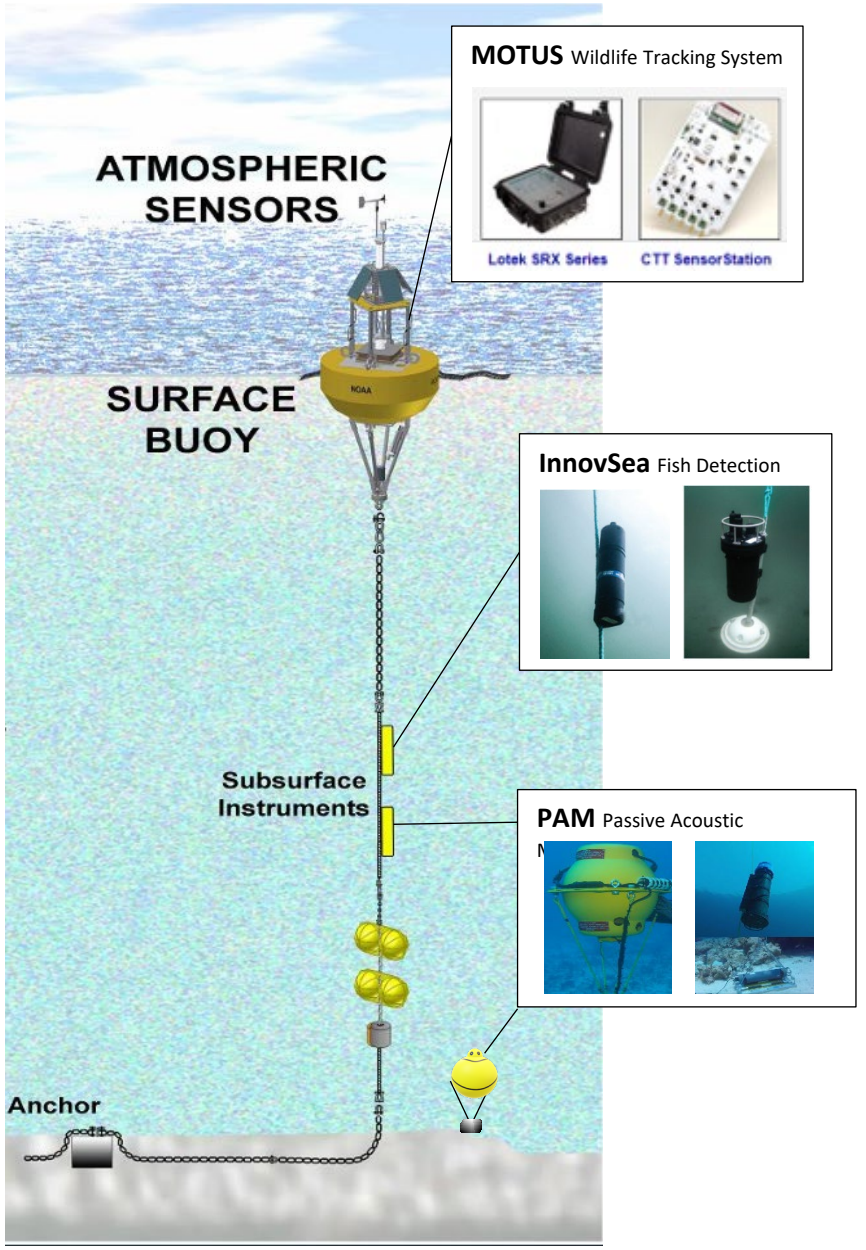
- Anticipating 2 buoys equipped with floating LiDaR (1 within each lease area) & 1 additional buoy for biological monitoring

Metocean Buoy Evaluation & Sensor Selection

- MOTUS Wildlife Tracking System
- Passive Acoustic Monitors
- Fish detection (InnovaSea recommended by SC DNR)
- Other recommendations

Permitting for Buoy Deployment

- Combined authorizations for Private Aids to Navigation and Nationwide Permit 5
- Others as identified



Questions & Discussion