



Canopy
Offshore Wind Farm

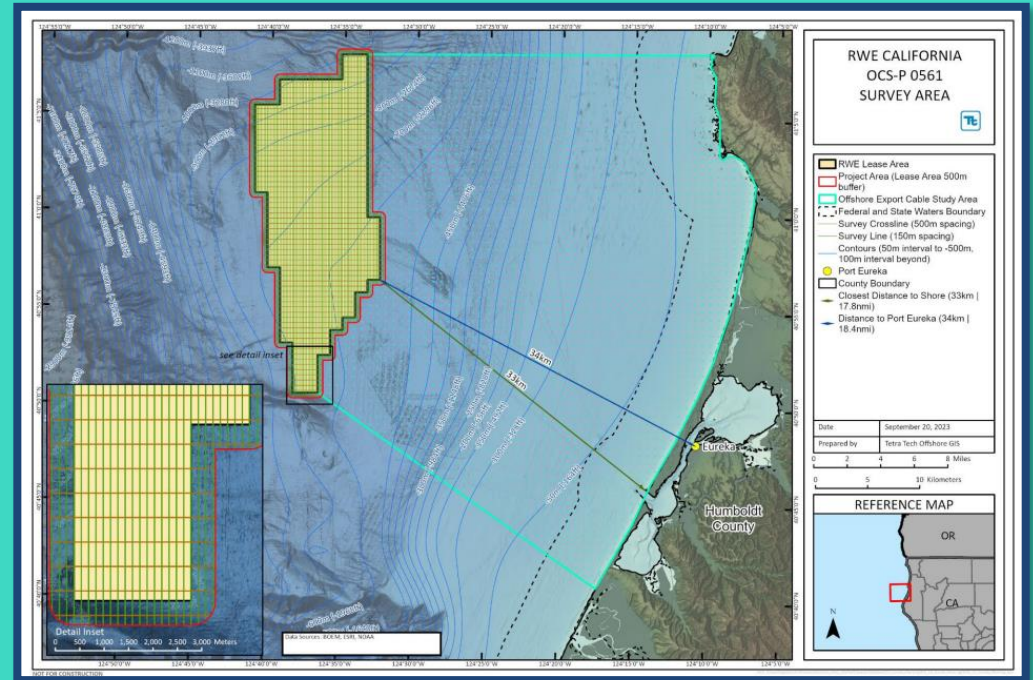
RWE

Updates to Survey Plan and Communications

Pacific Fishery Management Council
Marine Planning Committee
April 18, 2024

Proposed Geophysical and Geotechnical Survey Location

- Geophysical and geotechnical surveys will be conducted within lease area OCS-P 0561 (including 500-meter buffer) and the offshore export cable study area.
- The lease area is sited 17.8 to 28.6 nm offshore, in water depths ranging from ~550 to 1,100 meters (m).
- Geophysical survey line acquisition planning is Draft. BOEM requires 150 m x 500 m spacing (east/west orientation) in water depths > 130 m. For water depths <130 m, 30 m x 500 m spacing is required.
- One or two Notional Investigative Routes (NIRs) will be surveyed within the potential export cable study area inshore of the lease up to a water depth of ~50 m to study geohazards in the area.



Proposed Geophysical Survey Technology—AUV ‡

- Deepwater (~50 m and deeper) Geophysical Survey will be conducted from an Autonomous Underwater Vehicle (AUV) deployed from a deployment vessel with a launch and recovery cradle
- AUV is monitored remotely by crewed surface deployment vessel and is NOT towed
- Offshore AUV operates ~ 40 m above the seabed at 3-4 knots in water depths >130 m and ~6 m above the seabed to acquire camera images
- Surface vessel and AUV have operational flexibility to avoid hazards
- Estimated ~June 8 start, estimated 40 days of AUV work plus weather
- 2024 survey work will be conducted in federal waters



Example Offshore AUV

CA Low-Energy Compliant HRG Package

- Multibeam Echosounder
- Side Scan Sonar
- Gradiometer
- Camera
- Ultra-short Baseline Acoustic Positioning
- Sub-bottom Profiler

‡AUV use and selection subject to permitting and availability

Proposed Geotechnical Investigation and Benthic Sampling

- The Geotechnical Investigation (GI) will follow the Geophysical Survey and will be conducted on the same vessel
- Geotechnical sampling locations must avoid hard substrate, rock outcroppings, seamounts, deep-sea coral/sponge habitat and must be reviewed and cleared by a QMA and benthic SME **before** sampling that location
- Geotechnical Investigation and Benthic Sampling will be conducted at BOEM-recommended spacing intervals within the lease and along the Notional Investigative Route(s)
- Geotechnical vessel is stationary during sampling operation
- Q3 projected start, estimated ~20 days of Geotechnical and Benthic Sampling, plus weather
- 2024 survey work will be conducted in federal waters



Geotechnical Sampling

- Box Cores or Grab Samples
- Piston Core or Vibrocore
- Cone Penetration Test
- Jumbo Piston Core

Proposed Geophysical & Geotechnical Survey Platform Indicative Vessel

Dimensions	260 x 60ft	80 x 18m
Max Draft	21ft	6.3m
Freeboard	4ft	1.2m
USA Flagged Vessel		
Stern A-Frame		



Onboard Fisheries Liaison (OFL) Planning

Onboard Fisheries Liaison

- Serves an important role managing communications and coordination with fleet
- Sends daily report to fisheries team to support additional coordination as needed
- Must be GWO trained and certified, trained and hired by OFL service provider
- Preferably local with experience and relationships
- RWE is actively working with the local fisheries associations to identify candidates for training
- GWO training planned in May
- OFLs deployed in ~4-week cruises estimated June/July/Aug



Waterfront App –Ithaca Clean Energy, LTD



- Application designed to facilitate communication between fishermen and other boaters and the survey vessel
- In procurement phase: **Not live in California yet**
- Fixed gear locations can be marked by fishermen and transmitted confidentially to our team
- Two-way communication via chat with RWE's Fisheries Liaison and/or the survey vessel
- RWE will host an informational session to demonstrate the app's functionality when ready

RWE

Thank you.

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