Atlantic Marine Bird Cooperative

Marine Spatial Planning Work Group

December 1, 2022

S. Felton Notes

Recent WG focus on Avian Compensatory Mitigation Planning for Offshore Wind Energy Development

**Presentations**

* **BOEM Offshore wind regional and project-level updates (David Bigger, BOEM, Environmental Review Branch)**
  + Gains its authority from Outer Continental Shelf Lands Act (OCSLA) and Energy Policy Act (Amendment to OCSLA in 2005)
  + White House 3/29/21 Announcement
    - Committed to deploy 30 GW of offshore wind by 2030
    - BOEM required to review COPs from 16 projects by 2025
  + Status of projects by number
    - 10 COPs under review
    - 2 approved since 2021
    - 6 more awaiting review
    - 5 under consideration for leasing
  + Summary of review process from Call/RFI to Installation
  + Approved Projects:
    - South Fork (early construction)
    - Vineyard Wind I (early construction)
    - Coastal Virginia Pilot Project (operational)
  + List of projects with published EISs and under review
  + Status of leasing in NY Bight, Central Atlantic, offshore North Carolina, and Gulf of Maine
* **RWSC Bird and Bat Subcommittee Update (Zara Dowling, RWSC)**
  + Summary of RWSC and how to get involved and sign up for updates: rwsc.org
  + Background of the Science Plans
    - To compile a taxa-specific science plan
    - Recommendations/research needs developed with input from experts, research community, subcommittee
    - Working on a database of ongoing and completed research
    - Attempting to standardize data collection
    - Determine how to get priority research/projects funded
  + Role of subcommittee in coordinating current research efforts and determining the gaps that need to be filled
  + Science Plan draft expected in early 2023
* Informing Avian Research and Monitoring at Offshore Wind Farms (Kate Williams, BRI)
  + Several collaborative efforts to coordinate avian needs for offshore wind
  + Regional Synthesis Workgroup (E-TWG)
    - Develop regional scale guidance for research and monitoring
    - Products intended to feed into RWSC efforts
    - To inform immediate efforts by developers and states on which current research efforts to support, prior to publication of RWSC science plan
    - Beta version of project database currently available on workgroup webpage
    - Guidance document draft to stakeholders in spring 2023
  + Avian Displacement Guidance Committee (E-TWG)
    - Co-chaired by BOEM and USFWS
    - Came out of letter to BOEM from AMBC-MSP
    - To produced guidance to inform pre- and post- construction monitoring to detect changes in distributions in response to offsore wind (instead of just characterizing species composition at an offshore wind site)
  + Guidance for Using Motus to Track Birds Offshore
    - Lead by USFWS
    - End products
      * simulation study
      * data framework
      * guidance document (methods for deploying motus stations)
      * study design tool (IDIOMS), https://briloon.shinyapps.io/IDIOMS
      * monitoring framework (approaches for using Motus in relation to offshore wind energy development)
  + Informing R&D Needs for Avian Monitoring
    - Identify limitations/gaps of available avian monitoring technologies
    - Develop database of technologies
    - Final products expected early 2023
  + Project WOW
    - Lead by Duke University
    - <https://offshorewind.env.duke.edu>
    - Largely focused on marine mammals, but avian component
* **Update—Block Island Wind Operational Monitoring Program (Kim Peters, Orsted)**
  + Summary of Orsted projects and status
  + BI WF stats:
    - 5 turbines, 30 MW
    - Within 3 miles of shore (much closer to shore than upcoming projects)
    - Much smaller turbines than expected in federal leases
  + Integrated monitoring strategy for birds—Post-construction monitoring (PCM)
    - Beached bird survey
    - Boat-based observational surveys
    - Acoustic detectors on turbines
    - Turbine-mounted radar/camera
    - Digital VHS telemetry (Motus)
  + Beached bird surveys (SEANET Protocol)
    - 2 years pre-construction/construction
    - 2 years during operations
    - No difference between treatments
  + Boat-based surveys
    - Not designed to detect displacement effects
    - 2 saw-tooth survey transects surveyed monthly for each year
    - 2 years pre and 2 years post
    - Avian density was noticeably lower in the 2 years post construction compared to pre-construction, when looking at the segments proximate to turbines, but not statistically significant
  + Turbine mounted radar/camera
    - Proof of concept/feasibility
    - Multi Sensor wildlife detection system (MUSE)
    - Overheated at one point, but worked fine following retrofit
    - DHI developed system—pan tilt camera system
  + Acoustic Receivers
    - Too much noise to collect data on birds, ok for bats
  + VHF Telemetry
    - Proof of concept/feasibility for Motus offshore
    - Upgrade in progress
  + Guidance needed soon!
    - For some projects, getting past the point in planning to be able to integrate certain monitoring technologies
* **Compensatory Mitigation for Offshore Wind—A Potential Mechanism (Caleb Spiegel, USFWS on behalf of Christine Willis)**
  + Charles Peterson (UNC)—Bird Use of Marine Environment—BOEM NC task force
    - Nearshore environment has a lot of non-pelagic species (and more birds in general) than far out at sea
    - Nearshore environments has a greater number of conflicts—higher bird density and diversity closer to shore
  + Proposed concept: create mitigation banks in areas near shore
    - If there are already facilities in the water, and they’re having impacts, look to areas that don’t have OSW but have higher use/importance to birds
    - State waters could be a great place for these
    - Similar to what is done for land-based wind
    - Is this still useful if nearshore waters aren’t under consideration for OSW??? Yes.
  + Benefits
    - Protecting similar habitat (marine open waters)
    - Protection provided in close proximity of leasing areas
    - Lots of precident for these land easements onshore
  + Need to consider the following criteria
    - Adopts offsets that protect the same or similar resources
    - Easily administered
    - Numerous benefits to resources beyond just conservation
    - Is located near where impacts are occurring
  + Questions/Discussion from audience
    - How would this help if impacts are to pelagic species?
    - Has this happened in Europe? It seems compensatory mitigation is rare in Europe—Orsted has one for Black-legged Kittiwake for one of their larger UK projects <https://hornseaproject3.co.uk/kittiwake-compensation>
    - Could international mitigation still be credited to U.S. projects (aka ROST overwintering in Brazil?)
    - Some compensatory mitigation that could be most effective isn’t necessarily happening near where the injury occurred—lots of examples (Northern Gannets, Sooty Shearwater, and Loons in response to oil spills
    - Could be a good option for species like PIPL and REKN using NC barrier islands and sound that are also affected by offshore wind in Atlantic and Great Lakes
    - Would the easement be temporary or permanent? Answer: could be renewed if lease is renewed
    - Do we know enough about what size of easement would be comparable to take from an OSW project?

**Resources relevant to compensatory mitigation (Holly Goyert, AECOM)**

**Discussion—Compensatory Mitigation Guidance (Holly Goyert, AECOM)**

* Is there a need for support and interest in a training workshop?
  + Would be great to get a group together for several days of training and workshopping at NCTC
  + Would require funding
  + Will be difficult to get the product we need piecemeal
  + A crash course in compensation with an eye toward offshore could be helpful and more useful than a week long training around onshore compensatory mitigation
  + The crash course could then lead into a week long discussion and workshop among stakeholders to develop recommendations
  + Who would authorize this?—BOEM or USFWS? Examples from oil and gas exploration? BOEM interested in working together with USFWS
  + Should include regulatory folks at the state level
  + Not all states are able to accept compensatory mitigation
* Components of a plan
  + Example from fisheries mitigation—used claims process instead of pooled fund
    - Seems we might want a pooled fund that conservation fu
  + Doesn’t necessarily need to be about growing more birds, can also alleviate pressure from another source of mortalities