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