

Appendix A. Guidance Development Methods

Note: This is an excerpt from “*Guidance for Pre- and Post-Construction Monitoring to Detect Changes in Marine Bird Distributions and Habitat Use Related to Offshore Wind Development*”. The full guidance document is available at www.nyetwg.com/avian-displacement-guidance



Developed by the [Avian Displacement Guidance Committee](#) of the [Environmental Technical Working Group](#), with support from the Biodiversity Research Institute

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Photo credit: Nicholas Doherty

Part VII. Appendices

Appendix A. Guidance Development Methods

The recommendations for pre- and post-construction monitoring to detect changes in marine bird distributions and habitat use related to offshore wind development presented in this document were developed via a collaborative effort involving a Specialist Committee of the New York State Energy Research and Development Authority's (NYSERDA) Environmental Technical Working Group (E-TWG), chaired by a representative from the U.S. Fish and Wildlife Service (USFWS), with scientific technical support provided by the Biodiversity Research Institute (BRI).

A.1 E-TWG Specialist Committees

The Environmental Technical Working Group (E-TWG; www.nyetwg.com) was convened by NYSERDA in 2018 to provide input to the state on environmental topics, and advance common understanding among offshore wind stakeholders. The E-TWG assists the State to improve understanding of, and ability to manage for, potential effects of offshore wind energy development on wildlife. This involves the development of transparent, collaborative processes for identifying and addressing priority issues relating to wildlife monitoring and mitigation, with the goals of both improving outcomes for wildlife and reducing permitting risk and uncertainty for developers.

E-TWG Specialist Committees, which are comprised of subject matter experts and a subset of E-TWG members, advance technical work supporting this mission. These Committees are made up of volunteers, with technical and facilitation support from E-TWG support staff (e.g., BRI, the Cadmus Group, and the Consensus Building Institute). The Committees develop collaborative, science-based products focused on priority issues, which are presented to the State of New York and the E-TWG, who provide review and comment.

A.2 Committee Formation

This document was developed in response to a need identified by the E-TWG in 2021 to provide guidance on the survey and monitoring of wildlife around offshore wind development. This is a topic that has been prioritized by other relevant stakeholders in relation to specific taxa, including the Atlantic Marine Bird Cooperative (AMBC) Marine Spatial Planning (MSP) Working Group, which submitted a letter¹⁰ to the Bureau of Ocean Energy Management (BOEM) in 2021 advocating for the development of pre- and post-construction monitoring guidelines to accompany BOEM's existing site characterization survey guidelines for birds (BOEM 2020). Partially in response to this AMBC MSP letter, USFWS staff committed to leading an expert Committee to discuss the development of guidance for conducting pre- and post-construction monitoring for changes in distributions and habitat use of marine birds. The Committee workplan was developed in consultation with the E-TWG, BOEM, and USFWS staff with the goals of developing guidance for the detection (e.g., identification of an effect occurring), characterization (e.g., what species and under what conditions), and degree (e.g., level and variability) of changes in distributions and habitat use patterns of marine birds in relation to OSW development. Committee members were selected for their scientific expertise on marine birds, study design, regional monitoring frameworks, and offshore wind development (Table A-1).

¹⁰ See Atlantic Marine Bird Cooperative Marine Spatial Planning Workgroup's 2021 [recommendations](#) to BOEM on the avian survey guidelines.

A.3 Process

The Specialist Committee used existing BOEM guidance for site assessment “Guidelines for Providing Avian Survey Information for Renewable Energy Development” (BOEM 2020) as a starting place, and attempted to clarify and improve on these guidelines, where relevant, to develop guidance specifically for conducting pre- and post-construction research to detect effects for marine birds. This effort was supported with a deep and thorough literature review of previous studies from Europe and elsewhere that have examined displacement, attraction, and macro- to meso-scale avoidance in marine birds (see [Appendix C](#)), as well as existing relevant power analysis studies to inform recommendations. BRI provided scientific technical support for the Committee and developed the report, relying on substantial guidance and input from the Specialist Committee at regular intervals. The Specialist Committee met approximately monthly from May 2022 to November 2023 to discuss different aspects of the development of this document and the recommendations within. Specialist Committee members also reviewed written draft products multiple times during their development.

In addition to extensive Specialist Committee member feedback on draft products, the E-TWG reviewed and provided input on Committee products prior to finalization. A stakeholder engagement effort included presentation of the recommendations via an open public webinar and creation of a public feedback survey, to obtain further input on the draft guidance/recommendations prior to finalization of the report. More information on this stakeholder feedback process can be found at www.nyetwg.com/avian-displacement-guidance.

Table A1. Subject matter experts and support staff involved in the Avian Displacement Guidance Specialist Committee, listed by role and in alphabetical order (last name). Alternate members substituted for working members from their specific organizations when primary working members were unable to participate in Committee meetings.

Role	Name	Organization
Chair	Caleb Spiegel	US Fish and Wildlife Service
Working member	Evan Adams	Biodiversity Research Institute
Working member	Aonghais Cook	British Trust for Ornithology
Working member	Shilo Felton	Renewable Energy Wildlife Institute
Working member	Carina Gjerdrum	Environment and Climate Change Canada
Working member	Chris Haney	Terra Mar Applied Sciences, LLC, under contract to National Audubon Society
Working member	Juliet Lamb	The Nature Conservancy
Working member	Kim Peters	Ørsted
Working member	Brad Pickens	US Fish and Wildlife Service
Working member	Martin Scott	HiDef Aerial Surveying
Working member	Emily Silverman	US Fish and Wildlife Service
Working member	Jennifer Stucker	Western EcoSystems Technology, Inc
Working member	Ally Sullivan	TotalEnergies
Working member	Julia Willmott	Normandeau
Working member	Arliss Winship	CSS, Inc. under contract to NOAA NCCOS
Alternate	Garry George	National Audubon Society
Alternate	Jeffery Leirness	CSS, Inc. under contract to NOAA NCCOS
Alternate	Brita Woeck	Orsted
Group moderator	Kate McClellan Press	NYSERDA
Support staff	Bennett Brooks	Consensus Building Institute
Support staff	Eleanor Eckel	Biodiversity Research Institute
Support staff	Holly Goyert*	Biodiversity Research Institute
Support staff	Julia Gulka	Biodiversity Research Institute
Support staff	Iain Stenhouse	Biodiversity Research Institute
Support staff	Kate Williams	Biodiversity Research Institute

*Note: Dr. Goyert was a working Committee member through much of the process while working at AECOM, before transitioning to a support role as a BRI employee.