Understanding the effects of offshore wind energy development in the U.S. on birds and bats:

Identifying key research needs, mitigation measures, and conservation guidance

Kate Williams[1] (kate.williams@briloon.org), Kate McClellan Press[2], Julia Gulka [1], Greg Lampman[2], Pamela Loring[3], and Edward Jenkins[1]

[1] Biodiversity Research Institute; [2] New York State Energy Research & Development Authority; [3] U.S. Fish & Wildlife Service Migratory Bird Program

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background image credit: Nicholas Doherty

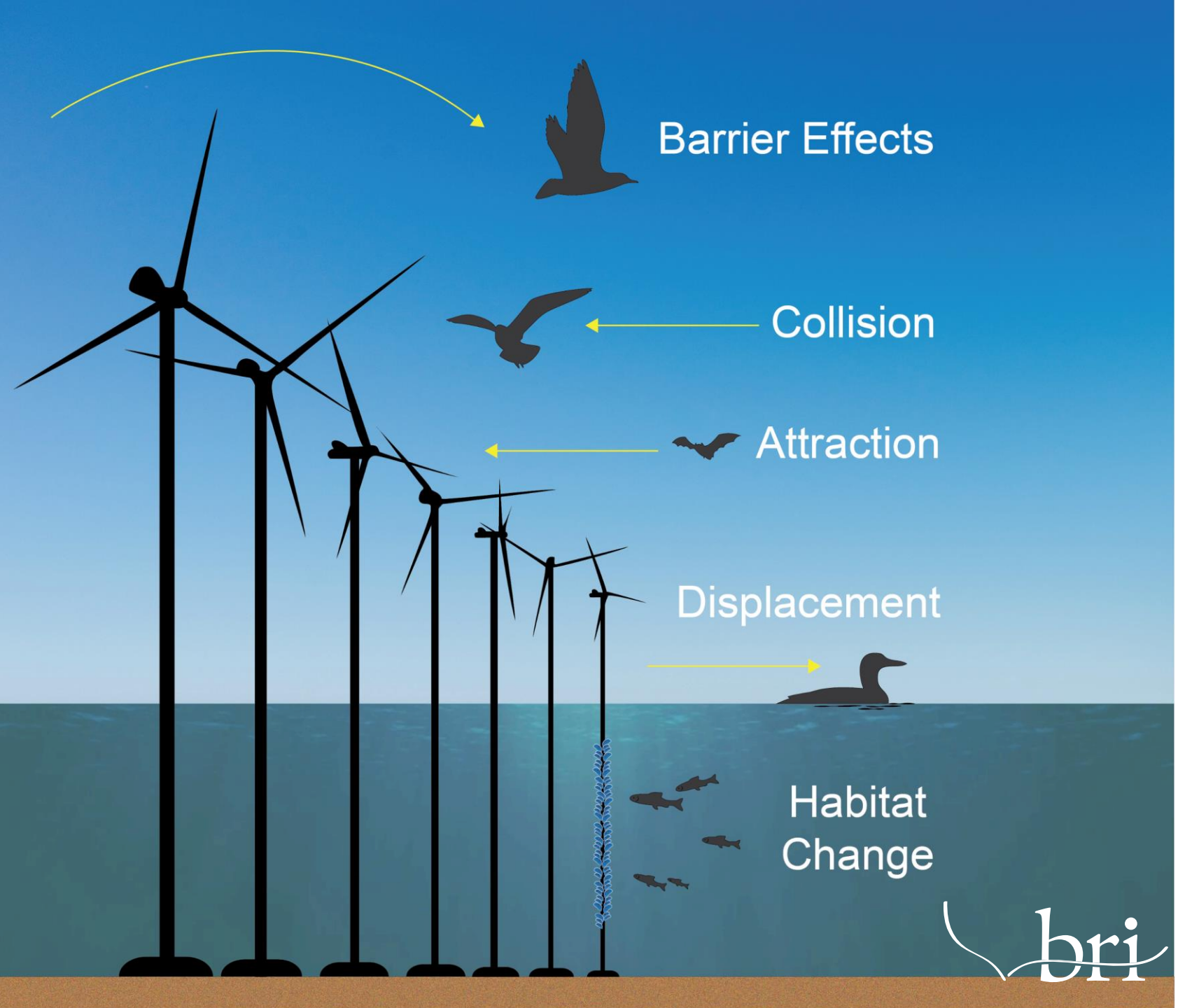
Outline

What is the E-TWG?

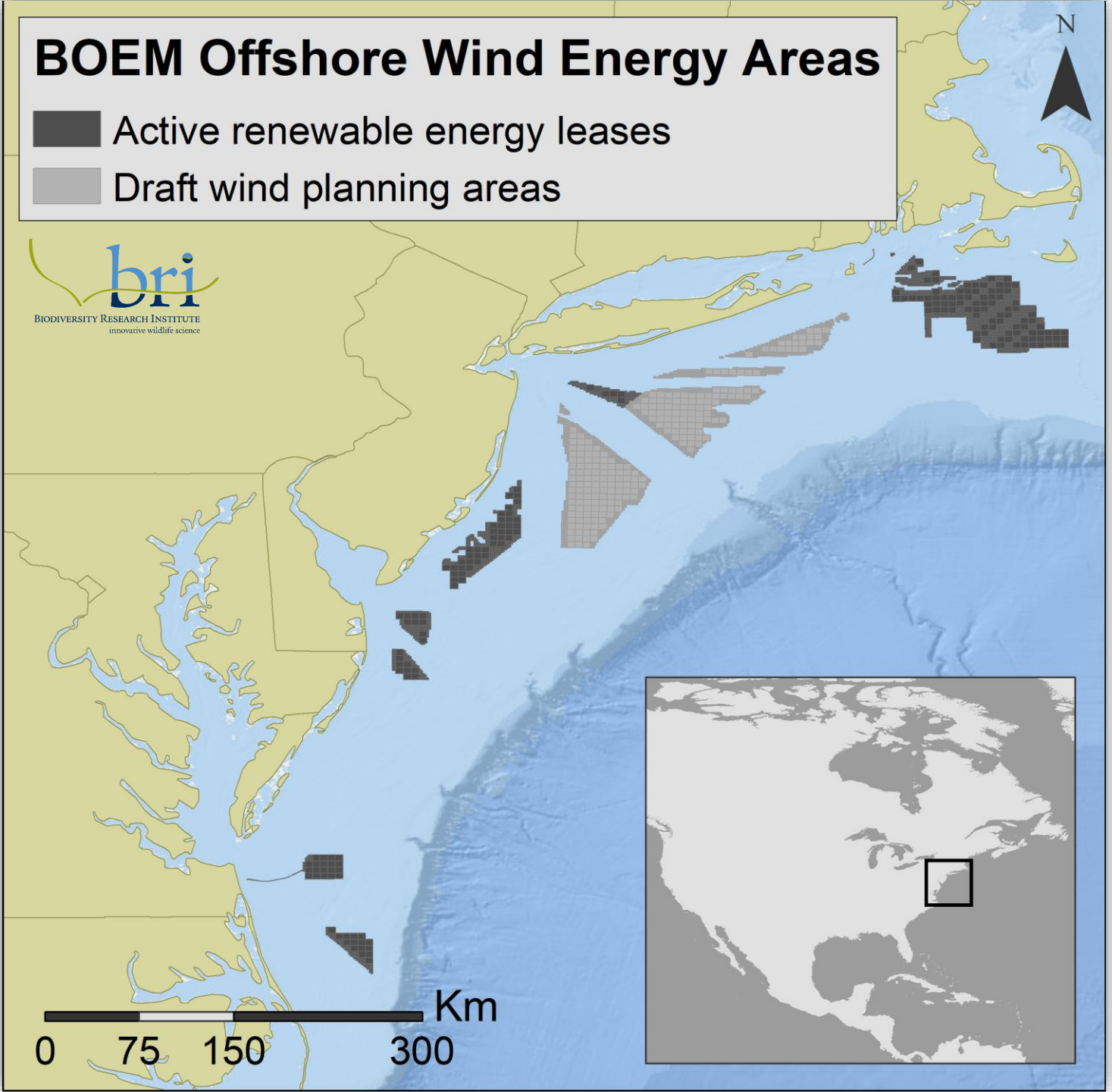
Key Efforts

- Develop a **scientific research framework** to understand the impacts of offshore wind energy development on birds
- **Identify research priorities** to help improve our understanding of **cumulative impacts** to wildlife
- Develop **recommendations for ways to mitigate impacts** to birds during construction and operations of offshore wind facilities
- Begin to **fill data gaps** and research/coordination needs, including through development of guidance for automated radio telemetry at OSW facilities

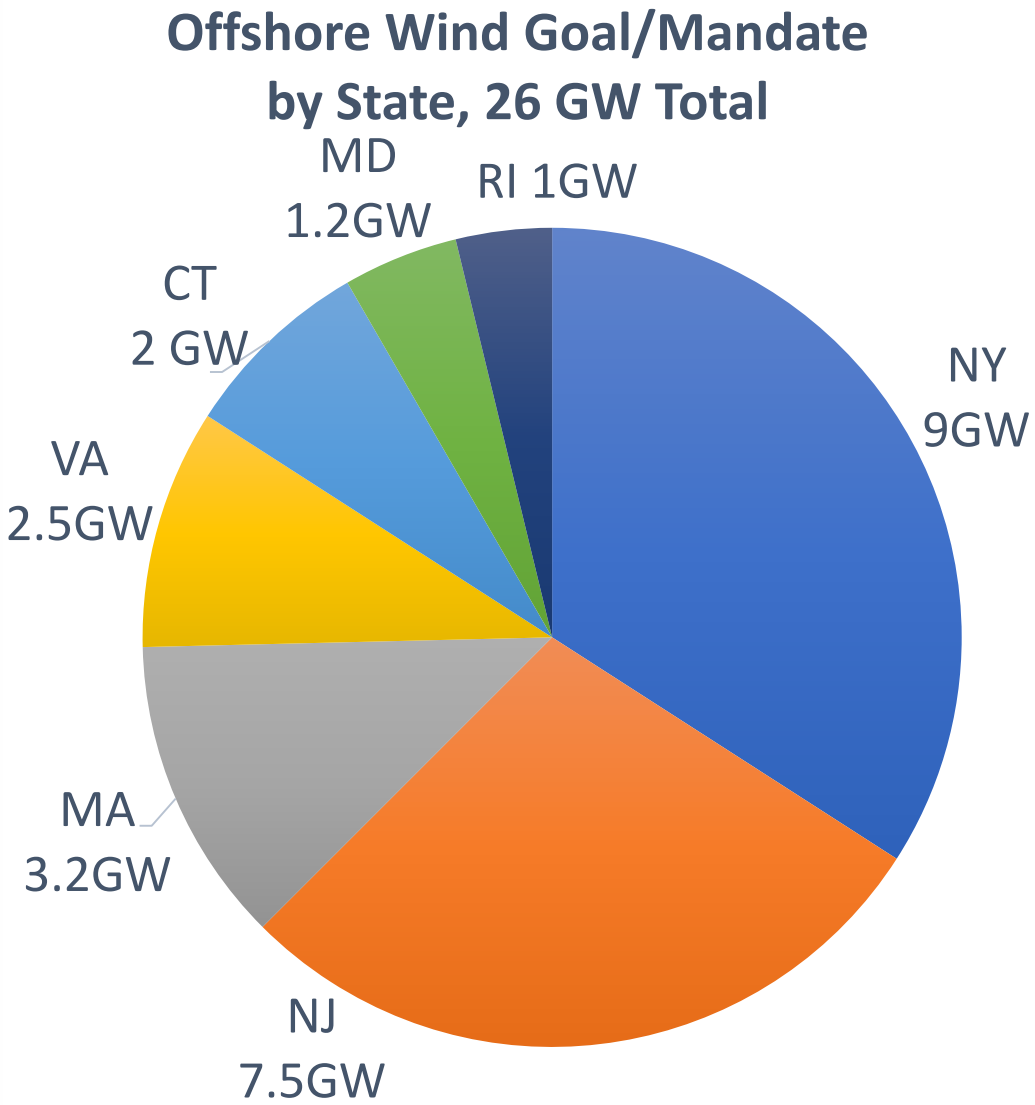
Why These Regionally Focused Efforts are Effective



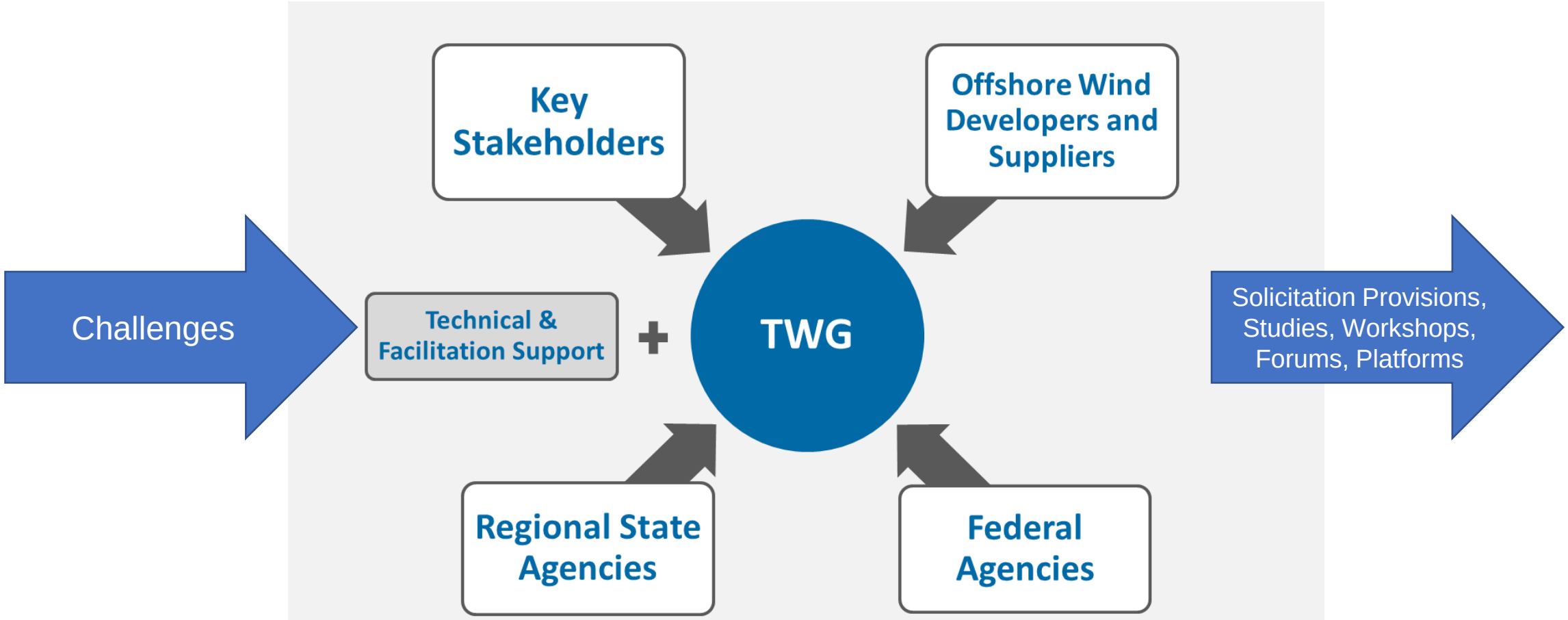
Potential Impacts to Birds and Bats

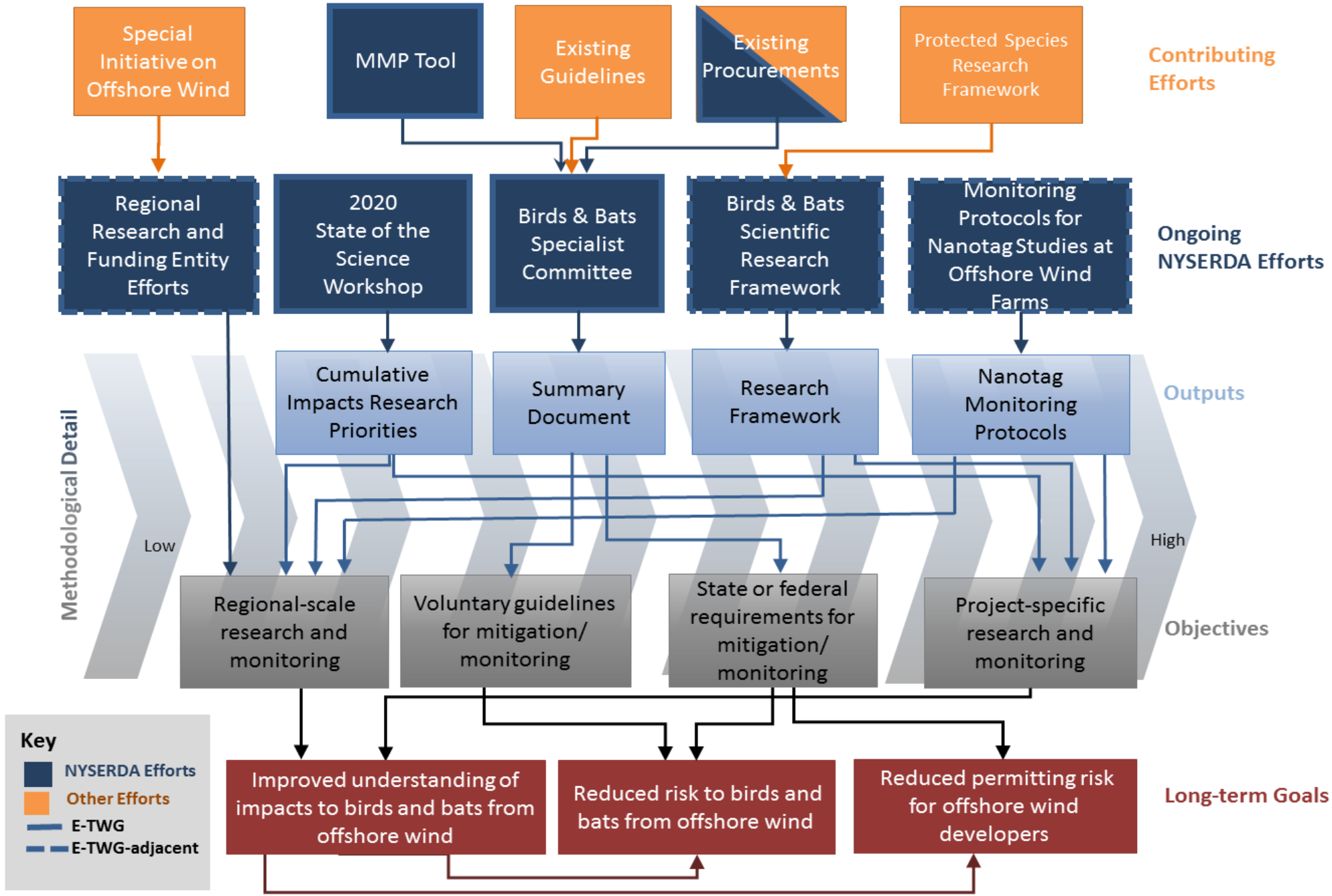


U.S. Offshore Wind

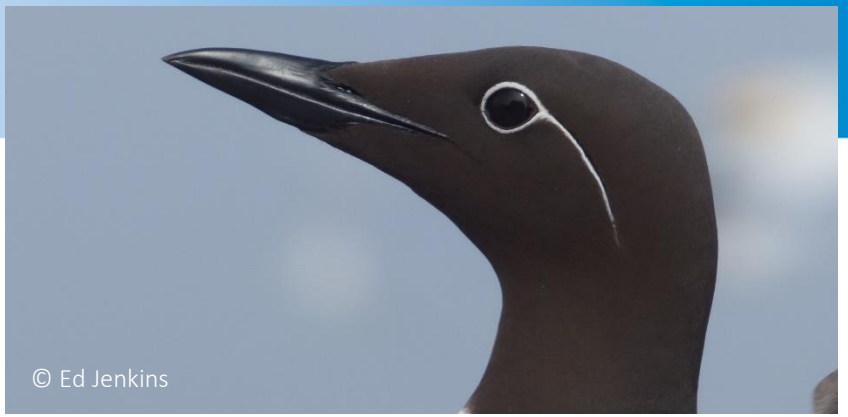


Technical Working Group (TWG)




Special Initiative on Offshore Wind
MMP Tool
Existing Guidelines
Existing Procurements
Protected Species Research Framework
Contributing Efforts
Regional Research and Funding Entity Efforts
2020 State of the Science Workshop
Birds & Bats Specialist Committee
Birds & Bats Scientific Research Framework
Monitoring Protocols for Nanotag Studies at Offshore Wind Farms
Ongoing NYSERDA Efforts
Cumulative Impacts Research Priorities
Summary Document
Research Framework
Nanotag Monitoring Protocols
Outputs
Methodological Detail
Low
High
Regional-scale research and monitoring
Voluntary guidelines for mitigation/ monitoring
State or federal requirements for mitigation/ monitoring
Project-specific research and monitoring
Objectives
Key
NYSERDA Efforts
Other Efforts
E-TWG
E-TWG-adjacent
Improved understanding of impacts to birds and bats from offshore wind
Reduced risk to birds and bats from offshore wind
Reduced permitting risk for offshore wind developers
Long-term Goals

Developing Best Management Practices for Birds and Bats



> Who's Involved: Specialist Committee (environmental non-profits, scientists, OSW developers, state/federal agencies)

> Objectives:

- Develop recommendations to mitigate (avoid, minimize, reduce, or offset) impacts to birds and bats from OSW
- Inform requirements included in New York offshore wind procurement released in July 2020

> Initial Recommendations:

- Minimizing lighting
- Perching deterrents
- Nearshore/onshore siting
- Regional coordination of funding and research
- Monitoring effects

Learn More

V1.0 of recommendations document can be found at: www.nyetwg.com/specialist-committees

Bird and Bat Scientific Research Framework

> Who's involved: OSW stakeholders and experts (academics, nonprofits, resource managers, developers)

> Goal: Guide the long-term study of potential impacts to birds and bats from offshore wind energy construction and operations in the eastern United States

- Help ensure that research/monitoring efforts focus on key priorities and are appropriately designed to improve the state of knowledge
- Identify key questions on impacts to birds/bats associated with offshore wind construction and operation; develop testable hypotheses; identify data/technology gaps and needs

> Components:

- Stakeholder workshop (March 2020) - 44 experts from a range of sectors
- Workshop summary document
- Scientific Research Framework document

Workshop Report will be available at www.nyetwg.com/bird-bat-research-framework

State of the Science Workshop 2020: Cumulative Impacts to Wildlife

> Dates: November 16-20, 2020

> Who's involved: OSW stakeholders

> Virtual Components:

- Plenary sessions Nov 16-20 - review the state of the knowledge on offshore wind development's cumulative effects on populations and ecosystems
- Work group meetings in late 2020-early 2021 - identify key research and coordination needs for the next 5 years to improve our understanding of cumulative biological impacts as the offshore wind industry develops in the U.S.
- Final webinar in spring 2021

www.nyetwg.com/2020-workshop

Guidance for Automated Radio Telemetry


Peter Paton, URI

- Who's involved: USFWS, URI, Birds Canada, BRI, range of OSW stakeholders and experts
- Goal: Develop guidance and decision support tools for studies using miniature digitally-coded radio transmitters at offshore wind facilities
- Components: Monitoring framework; receiver deployment guidance; study design tool; simulation study; Motus coordination

www.briloon.org/renewable/automatedvhfguidance

Email to get involved:
Kate.Williams@briloon.org

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Improving Environmental Data Transparency

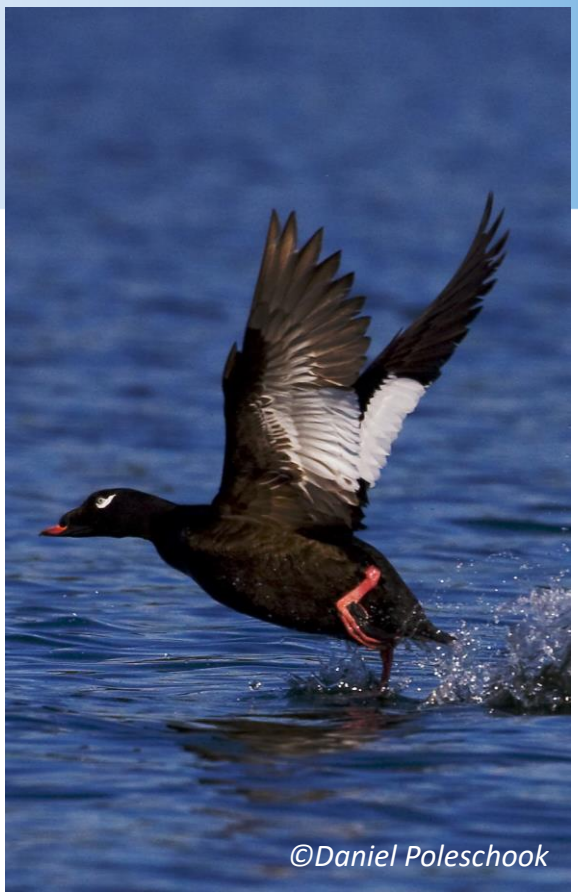
> Who's involved: NY State, OSW developers

> Components

- New York State requirement: non-proprietary environmental data collected by OSW developers must be made publicly available
- Review of existing environmental databases as repositories for OSW wildlife data
  - Focus on wildlife data
  - Host types of data expected to be collected by OSW developers
  - Geographic relevance for east coast
  - Accept and share raw data from third parties
  - Other criteria

Why the E-TWG Works

- Appropriate geographic scale
- Collaborative dialogue
- Stakeholder selections & diversity
- Clear goals and structure
- Documentation & transparency
- Emphasis on science to inform decisions
- Financial and logistical support
- “Participation as a process”
- Flexibility



Innes & Booher 2004; Pomeroy & Douvere 2008; Glicken. 2000; Gopnik et al. 2012; Berghofer et al. 2008; Safford et al. 2009; Portman 2009; Reed 2008

Summary

- Stakeholder engagement will be essential as the industry progresses
- Offshore wind is a regional resource, and regional stakeholder engagement is key
- We need to continue to identify guidance, research, and other needs and fulfill those needs
- Stakeholder advisory groups such as the E-TWG can help to:
  - Maintain regional collaboration and communication
  - Inform state (and regional) decision making and improve outcomes

Thanks!
Questions?

E-TWG website:
www.nyetwg.com

Kate Williams
Biodiversity Research Institute
Kate.Williams@briloon.org

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