

2025 Request For Proposals – WIND

INTRODUCTION AND BACKGROUND

The Renewable Energy Wildlife Research Fund (REWRF, the Fund) is an initiative of the renewable energy industry (Industry) to support independent, third-party research informing wind and solar energy development, construction, and operations. The Fund comprises companies that build and/or operate utility-scale renewable energy projects and is administered by staff from the Renewable Energy Wildlife Institute (REWI). **Fund-sponsored projects** are intended to advance scientific research designed to accelerate renewable energy deployment to meet demand for clean energy while mitigating impacts on wildlife. Projects will:

- Improve understanding of wind energy and wildlife interactions; and
- Develop and advance science-based solutions that will result in or support approaches to avoid, minimize, mitigate, or measure wind and wildlife interactions.

All Fund-sponsored research must address one or more of the **Fund's Wind Energy Research Goals**:

- **Goal 1:** Minimize or avoid impacts to species of concern and their habitats during project siting and construction by developing pre-construction practices that support efficient, effective siting assessments, minimize wildlife risk, and improve ecosystem benefits.
- Goal 2: Minimize or avoid impacts to species of concern at operational facilities:
 - **Goal 2A**: Investigate strategies to avoid/minimize operational loss and risk to wildlife species or regional/local ecosystems.
 - **Goal 2B**: Explore, utilize, and/or improve technologies and their applications that lead to more effective detection and deterrent system deployment.
 - **Goal 2C**: Advance understanding of species responses to wind energy infrastructure and explore wildlife-friendly practices that increase wildlife compatibility with such infrastructure.
- **Goal 3**: Improve and increase compensatory mitigation options for wind projects:
- **Goal 4**: Identify and assess appropriate, efficient, and effective post-construction monitoring (PCM) protocols to increase value of PCM practices.
- **Goal 5**: Quantify and compare climate and biodiversity impacts of utility scale renewable energy against other energy sources.

Finally, the Fund operates under the imperative that any research it supports maintains a high level of credibility and produces objective results accepted by parties including the scientific, conservation, industry, and regulatory communities. All Fund projects result in a publicly available report that undergoes expert peer review.

RESEARCH OBJECTIVES:

REWRF research priorities address major topics leading to results that are actionable and relevant to the needs of industry, regulators, and NGOs. The outcomes support both the development of renewables and wildlife protection.

For this <u>Request for Proposals</u>, the Fund is interested in research 1.) to reduce the need for and improve the accuracy and efficiency of post construction mortality monitoring (PCMM) for bat species, and 2.) to simplify the process of operationalizing informed curtailment in the presence or expected presence of bats at **utility scale wind energy installations**. This may be informed directly by acoustic monitoring or through using an algorithm that predicts periods of high risk based on other factors such as time, season, weather, etc.

Both goals rely on the **relationship between bat activity measurements (acoustic, thermal imagery, other) and actual fatality rates of various bat species and across bat species.** On this basis, several key questions have emerged to fill identified knowledge gaps. Successful proposals will address:

- How to efficiently and rigorously characterize the relationship between activity (acoustic, thermal imagery, other) and actual fatality risk? Can thermal imagery or other sensor platforms support and potentially replace on-ground carcass searching to estimate fatality rates?
- How does this relationship differ among regions and species, which is likely to be confounded since species composition varies regionally?
- Is site level variation (e.g., topography, habitat, proximity to water) in fatality rate reflected in acoustic activity measures, and is the underlying relationship similar at high-risk and low-risk sites?
- Can information from sites and species with large fatality sample sizes collected during PCMM be leveraged to make informed decisions for sites and species with smaller fatality sample sizes?
- How the results of the research can be directly applicable to existing and/or future wind projects (e.g, pairing traditional bat take permit monitoring with novel monitoring techniques to make informed decisions).

The Fund is interested in learning more about these issues both for current and proposed federally listed bat species with focus within US Fish and Wildlife Service (USFWS) Region 3, as well as currently non-listed species with broader geographic ranges that may need conservation to avoid future listing. The relationship between acoustic activity measurements and actual fatality rates is likely to vary regionally, among species, and potentially among nearby sites with differing baseline fatality rates. Developing a fuller understanding of this variable relationship such that it can be applied readily to new sites and circumstances is complicated by the fact that some sites and

species provide low sample sizes, particularly for fatality rate estimation. Also, a standardized and rigorous methodology for analyzing this relationship is lacking.

PROPOSAL EVALUATION

The criteria detailed below will be used by REWRF to identify which proposals are best aligned with Fund research goals and the RFP, and merit the solicitation of further discussion and presentation to the Fund. REWI staff will provide an initial review of each proposal to ensure compliance with Proposal Guidelines as a first cut. The Fund members will then assess each remaining proposal based on the categories below. A final decision on which proposals move forward to funding will be based on the likelihood and interest of REWRF supporting the research, the availability of funding, applicability of the results to other wind facilities and/or at a larger scale, and a clear path to the next phase of the research. Please see **Table 2** for an estimated timeline of the selection steps.

Evaluation Criteria:

- **1.** Extent that the proposal addresses a clear and compelling question germane to the Fund's Wind Energy Research Goals and the research objectives presented above.
 - **a.** Sufficient information is provided to assess the relevance of the research question(s) and the potential impacts of the study's results.
 - **b.** The research questions are focused, and the study's approach is likely to produce robust answers.
 - c. The data necessary to perform the analyses are attainable.
- **2.** The methodology proposed is practical (aligns with industry needs), reproducible (readily testable and replicable by other researchers) and robust (will withstand potential challenge from regulators, NGO, and/or other researchers).
- **3.** Qualifications of the investigators, including a previously demonstrated ability to complete and publish funded research in a timely manner and within the provided budget.
 - **a.** The investigators have relevant expertise in the proposed subject matter.
 - **b.** Resources (e.g., field sites and equipment, data, manpower, technology) needed to complete the proposed project are reasonably attainable.
- 4. Value to Industry: The investigators demonstrate a clear understanding of how results from the proposed research will inform how the wind industry may more responsibly develop and operate onshore wind energy facilities. The proposed research is likely to produce results that will inform future improvements in how the wind industry assesses risk and/or minimizes operational impacts.

PROPOSAL GUIDELINES

The Fund will consider projects between one and three years in length including fieldwork, data analysis, and reporting, with a target start date of March 1, 2026. Longer-term projects may be considered on a case-by-case basis. Please consider any pre-start date work that may be necessary when establishing your timeline (e.g., site selection, study design completion and peer review, and project kick-off, all of which will be supported by REWRF Staff as needed).

You may submit a proposal for an initial, background study that leads to projects for future consideration (either via future formal REWRF solicitations or unsolicited proposals), or you may present a phased, comprehensive proposal that addresses multiple steps within this framework. Should you choose the latter, please provide budgets and timelines for each phase. Also note that

proposals may build upon existing work as long as they address the questions presented in the Research Objectives of this RFP.

Proposals should be concise and informative **(10 pages max, excluding CVs and literature cited).** Restrict graphics and other presentation aids to those crucial to the narrative (e.g., context, design, interpretation). Information provided beyond stated page limits or in additional attachments will not be considered as part of this evaluation. Full proposals must include the following components (we also provide a Proposal Checklist at the end of this document):

1. Project Synopsis/Abstract (1-2 paragraphs)

Provide a high-level overview of the proposed research including research questions, methodologies, analytical approach, and research outcomes. It should be written in such a way that it can be removed from the rest of the document and provide enough information for the reader to understand the study's objectives and approach to achieving those objectives.

2. Introduction, Context, and Objective(s)/Hypothesis(es)

Address the questions asked in the research objectives of this Request for Proposals. Briefly discuss the state of knowledge concerning the problem and explain how your project will address the problem or question or advance that state of knowledge.

3. Study Approach

An overview of your research question and how your team proposes to address it. Please provide the following:

- A detailed background including literature review;
- A proposed methodology; and
- Anticipated outcomes/next steps (if relevant).

Clearly identify the specific research question(s) the proposed study will address and outline the plan of work by providing a thorough description of methods and procedures, including proposed statistical analyses. Where appropriate, justify the proposed methodology by citing directly relevant studies or preliminary results. For any new datasets generated during this project, identify which established data standards will be used to ensure compatibility with similar ecological datasets and provide potential provisions on the confidentiality and sharing of these data. Please also list additional, external sources of data that will be used for analysis and provide citations for published datasets.

Investigators proposing to undertake methods that require the capture, handling, and/or tagging of animal specimens should acknowledge any ethical and regulatory concerns of working with these animals and describe steps that the project team will take to ensure the ethical treatment of all study subjects including, as appropriate, approval of the study design from an Institutional Animal Care and Use Committee (IACUC) or similar body. Investigators should also provide a brief description of how they will comply with any applicable state and federal laws for handling study subjects (e.g. handling or take permits) and the expected timeline for compliance. If the investigator does not fall under the jurisdiction of an IACUC, justification for capture, handling, and tagging techniques must be provided with reference to published best practices. Any proposed deviation from best practices must be accompanied by evidence that the proposed methods will not pose undue risk to the health of the study subjects. A clear description of any power analysis or considerations of statistical power should be included.

4. <u>Research Outcomes</u>

Specifically describe how the results of the project are expected to be used by the onshore wind energy industry to develop and operate facilities in North America more responsibly. Applicants should explain how results from their proposed work would provide value and/or cost reductions to the wind energy industry. Please also articulate how your approach fits into a Theory of Change model (e.g., <u>https://www.theoryofchange.org/what-is-theory-of-change/</u>) wherein the results from your research initiate and/or complement other studies that will lead to long-term outcomes that meet REWRF's goals.

5. Project Timeline and Deliverables

Please provide a target timeline for the entirety of the project, preferably presented as a table or bulleted list. Include key project milestones, kick-off meeting(s) with key partners, any proposed go/no-go decisions, and expected deliverable completion dates. Note if there are seasonal components of the project that could affect the timeline.

<u>Deliverables</u> will comprise monthly status reports and at least one manuscript for publication in a peer-reviewed journal (including at least one round of review by REWI and funders). Projects proposed to last more than one year must also include annual performance reports (annual reports will account for the monthly status report in the month they are submitted).

Deliverables will also include a dataset for archiving in a REWI repository (e.g., the American Wind Wildlife Information Center [AWWIC]), and a copy of computer code capable of replicating the analysis added to REWI's GitHub repository (if applicable).

Note: If a host site has been identified, provide a description and name of associated company; if not, indicate so and provide a description of the desired characteristics. If you have not identified field site(s) and are hoping to utilize REWRF member sites, please make sure to incorporate this into your project timeline. Site selection/contracting through REWRF can take up to 6 months and requires close coordination with REWRF Staff.

6. Technical Qualifications (does not count toward full proposal page limit)

Provide an overview of your team's technical qualifications and experience developing and conducting similar studies. If this proposed research builds from other publicly available research and/or research previously funded by REWRF, please provide references and summarize. Please list key personnel available to conduct this study (names/affiliations) and provide CVs for each. Please limit this to **two (2) pages per participant**; note that these do not count towards the full proposal page limit. CVs should include up to five (5) relevant peer-reviewed or technical publications and a description of experience working on similar research to that proposal. Finally, describe your team's current and projected workloads outside of this proposal as well as their overall work capacity.

7. Literature Cited (does not count toward full proposal page limit).

8. Cost Estimate & Labor Rates:

Provide a total project cost estimate (broken into phases, if applicable) as well as a table of labor categories and fully loaded rates. When developing your labor rates, please consider any anticipated changes to those rates over the duration of the project. Please identify any match-funding or in-kind match that you have secured.

- Key budget considerations:
 - Budget should account for **monthly project status reports** (one page using a template to be provided). Multi-year projects must also include annual performance reports (annual reports will account for the monthly status report in the month they are submitted).
 - Publication of a final report in a peer-reviewed journal corresponding to the purpose of the study as awarded (unless otherwise agreed upon). Should publication not be feasible, the study will be released as a technical report. Investigators should account for at least one round of review by REWI staff and project funders, peer or expert review by a journal (or facilitated by REWI if appropriate) and fees for making publication open access.
 - Allocate time to conduct a pre-publication webinar to REWRF members.
 - Account for time required to consult with REWI regarding data transfer to and from AWWIC (if applicable). Labor costs incurred by REWI for this coordination do not need to be accounted for in the investigator's budget.
 - Projects should have an estimated start date no earlier than March 1, 2026.
 - Budget should be developed using loaded rates that include fringe, overhead, profit/fee, etc. Overhead is not allowed on other direct costs. Note that REWRF limits indirect costs to a maximum of 15% of the total project award amount.

There are limited funds available for projects selected under this RFP. The Fund has previously supported research projects ranging up to \$170,000 per year. Cost-effective proposals are often more competitive, but more expensive research may be prioritized depending on the interests of Fund members as well as the impacts of the anticipated outcomes of the research.

9. Proposals should follow these formatting requirements:

- Text:
 - Times New Roman (12-pt.) or Calibri (11-pt).
 - Figures/tables/captions may be in 10-pt font.
 - Lines single-spaced.
- Page:
 - 1-inch margins.
 - Header (all pages): proposal title (left) and date of submission (right).
 - Footer (all pages): name of submitting organization (left) and page number (right).
- File type (Submission email must include the following attachments):
 - Full Proposal Word document.
 - Proposal Task and Budget Excel document.
 - **Note:** Documents will not be modified.

Proposals that do not follow the required formatting may be disqualified.

10. Submission process and deadlines:

All materials associated with the Full Proposal must be submitted via email to <u>REWRF</u> (<u>fund@rewi.org</u>) by 11:59pm PT, <u>July 11, 2025</u>. Proposals submitted after the deadline will not be considered.

11. Notes on Contracting and Intellectual Property:

Investigators for research projects selected under this RFP will be party to a work-for-hire contract with REWI (secretariat of the Fund). All data created or collected from wind research supported by the Fund will be archived within a REWI repository (e.g., AWWIC) and made discoverable and available to future researchers following publication under the appropriate data sharing license; successful applicants will be required to submit a Data Management Plan based on a template to be provided by REWRF as part of final contracting.

It is not the Fund's intent to create intellectual property that could limit the broad and swift application of research findings for the advancement of the Fund's goals. Specifics of any intellectual property and ownership will be addressed in the contracts developed with successful applicants.

Please submit your proposal to REWRF Staff in the requested time frame. If you have any questions, please reach out to Trey McDonald, <u>tmcdonald@rewi.org</u> and Audrey Neubauer, <u>aneubauer@rewi.org</u>.

PROPOSAL SUMMARY / CHECKLIST:

Requirement	Check When Complete
Project Title.	
Lead organization.	
Primary contact.	
Key partners and contact information.	
Research question(s).	
How does the research address the goals of REWRF?	
How will the results of this study improve siting and operation practices to promote timely and responsible renewable energy development that minimizes wildlife impacts?	
Have you engaged with state and/or federal agencies regarding this research (generally or specifically)? What about environmental NGOs?	
Note if this proposed research builds from other publicly available research and/or research previously funded by REWRF. If so, please provide references and summarize.	
Estimated budget, including both total budget and total request from REWRF.	
Estimated time frame and proposed timeline for the study.	
Confirm if this study needs access to operational wind facilities. If yes, detail whether sites have been identified and confirmed for use.	
Note whether the study will require the use of the AWWIC database or include other data- related requests from Fund members.	
Technical qualifications, including CVs.	
Literature Cited.	
Additional notes on budget and other requests for involvement/resources from the Fund.	
Does the proposal adhere to the formatting requirements?	

REWRF Wind RFP

TABLE 2: ESTIMATED* TIMELINE

Milestone	Target Deadline
Proposals Due	On or before July 11, 2025
First Cut (REWRF staff)	July 11-18, 2025
	*Inform applicants of status by July 22
REWRF Working Group Reviews	July 21-August 1, 2025
	*Inform applicants of status by August 5
External Peer Review and Recommendations	August 4-22, 2025
REWRF Selects Top 4-6 Proposals	August 25 – September 5, 2025
	*Inform applicants of status by September 9
Presentations of Top Proposals by Research Teams	Week of September 15
Final Project Selection	September 22 – October 3, 2025
	*Inform applicants of status by October 7
Fundraising	COMPLETE BY OCTOBER 24, 2025

*Note that REWRF will do our best to adhere to this schedule, but adjustments may occur due to unforeseen circumstances.