



RENEWABLE ENERGY
WILDLIFE
RESEARCH FUND

2025 Request For Proposals – SOLAR

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

All Fund-sponsored research must address one or more of the **Fund's Solar 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 solar energy infrastructure and explore wildlife-friendly practices that increase wildlife compatibility with such infrastructure.
- **Goal 3:** Improve and increase compensatory mitigation options for solar 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 publicly available journals or technical reports that undergo 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 environmentally focused NGOs. The outcomes support both the development of renewables and wildlife protection.

For this Request for Proposals, the Fund is interested in research to document and improve the ecological value and ecosystem services provided by **utility scale solar energy installations**. Such research has the potential to address concerns raised by local, state and federal government agencies, NGOs, and communities regarding solar facilities, and to expand our understanding of the overall value of large-scale PV solar.

Because soils provide the basis for ecosystems on these sites, **we seek proposals for research that will illuminate mechanisms underlying the interactions among vegetation establishment, site management practices and soil conditions at utility scale solar installations**. Successful proposals will:

1. Address key background questions:

- a. How do these interactions change over time?
- b. How are these interactions affected by different vegetation and soil management practices?
- c. How might these relationships be influenced by the typical operations of a solar energy facility?

2. Synthesize this background information create predictions regarding these interactions.

Develop and assess testable predictions that can be the subject of focused research - i.e. looking at facilities of different ages using similar vegetation management protocols.

3. Articulate how the results of the research can be directly applicable to existing and/or future solar projects.

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 proposal advanced by staff 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 solar 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 Solar 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, available staff, 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 solar industry may more responsibly develop and operate solar energy facilities. The proposed research is likely to produce results that will inform future improvements in how the solar industry assesses risk and/or avoids 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 could lead into 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 also be included.

4. Research Outcomes:

Specifically describe how the results of the project are expected to be used by the solar 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 solar industry. Please also articulate how your approach fits into a Theory of Change model (e.g., <https://www.theoryofchange.org/what-is-theory-of-change/>) 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

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.

Deliverables 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 SolSource database) 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 upon 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 proposed. 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 SolSource (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 [REWRF \(fund@rewi.org\)](mailto:fund@rewi.org) by 11:59pm PT, **July 11, 2025.** 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 solar research supported by the Fund will be archived within a REWI repository (e.g., SolSource database) 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, tmcdonald@rewi.org and Audrey Neubauer, aneubauer@rewi.org.

TABLE 1: PROPOSAL SUMMARY / CHECKLIST:

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

TABLE 2: ESTIMATED* TIMELINE

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