FEMC ECOSYSTEM MONITORING FUND 2024 RFP

Abstract

The Forest Ecosystem Monitoring Cooperative (FEMC) is requesting proposals to support greater access to forest ecosystem monitoring information across the seven-state FEMC monitoring region. Proposals can feature development of new monitoring programs or continuance and maintenance of established programs. Prioritization will be given to proposals that further the mission of the FEMC and current priorities of the regional network, but this is not a requirement to apply.

A total of $40,000 is available in funding to support projects of up to $20,000 for up to one year. A 1:1 match of non-federal funds is required. We anticipate funding 2-3 projects.

Please contact Elissa Schuett (eschuett@uvm.edu) with any questions.

About FEMC

The mission of the Forest Ecosystem Monitoring Cooperative is to serve the northeast temperate forest region through improved understanding of long-term trends, annual conditions, and interdisciplinary relationships of the physical, chemical, and biological components of forested ecosystems.

The FEMC also promotes the efficient coordination of multi-disciplinary environmental monitoring and research activities among federal, state, university, and private-sector agencies with common interests in the long-term health, management, and protection of forested ecosystems.

To learn more about FEMC priorities and resources, please visit: https://www.uvm.edu/femc/about

Objectives of the Ecosystem Monitoring Fund

The Ecosystem Monitoring Fund will support forest ecosystem monitoring projects in the seven-state FEMC program area. The goal is to provide support for the collection, aggregation, analysis, and utilization of forest ecosystem monitoring information to better understand the current threats, historical trends, and future directions of the forested landscape in the Northeast. Basic research projects will not be funded. Basic research is a systematic study directed toward greater knowledge or understanding of the fundamental aspects of phenomena and of observable facts without specific applications towards processes or products in mind. However, research projects that include applications to practitioners are allowable, which may include methods development, impact analysis, trend analysis, and forest health monitoring activities.

To learn more about the Ecosystem Monitoring Fund and outcomes of this opportunity, please visit:

https://www.uvm.edu/femc/emf/rfp

Project Types: A wide range of project types will be considered for funding. As examples of the breadth of activities the FEMC hopes to support, this may include:

- the implementation of new monitoring programs to fill a critical gap in our understanding of forest response to novel stressors,
- upgrading an existing monitoring program to increase comparability with others in the region,
- aggregation of disparate data sets to expand the relevance of existing data,
- continuation and maintenance of existing long-term monitoring sites,
- digitization of key historical data sets to examine historical trends,
- collection of additional monitoring field data to address emerging needs,
- support or improvement of continuously deployed monitoring instrumentation,
- development of geospatial products to explore landscape patterns.

Project Focus: Projects may include any monitoring efforts related to forest ecosystem function, structure, and health. This may include forest vegetation, ecosystem services, invasive species, wildlife, water, soil, weather and climate, or air quality. Proposals for monitoring programs outside of these topics and activity types are welcome as long as there is a clear connection made to forest ecosystems in the Northeast.

Project Duration: Projects can be funded for up to one year, with all activities and reports completed by August 2025.

Fund Priorities: FEMC's recent work generally focuses on the following themes:

- Forest Pests and Disturbance Regimes
- Forest Inventory and Relationship to Carbon and Management
- Climate Change Impacts on Forested Ecosystems
- Forest Regeneration
- Recreation and Forest Health
- Forest Ecosystem Data Rescue and Preservation
- Forest-Water and Forest-Wildlife Intersections

FEMC's guiding committees have identified several priority topics of interest within these themes that would benefit from increased or improved monitoring. These priorities are not exhaustive – but meant to guide selection of successful proposals to fund.

- Carbon storage: improve the understanding of the impacts of invasive pests, assessment by forest type, or how timber management may play a role in carbon sequestration.
- Urban and community forestry: Define issues of forests in urban settings and consider what monitoring urban woodlands looks like. This may also include questions about increased development, land use change, and forest fragmentation.
- Invasive pest monitoring: including monitoring hemlock wooly adelgid, emerald ash borer, balsam wooly adelgid, spotted lanternfly, and others that may be emerging threats to the region.
- Forest regeneration capacity: identify thresholds for adequate regeneration by forest type or understand factors that result in a lack of regeneration.
- Deer browse: identify trends in browse impact and how browse affects the diversity of forests and plant communities.
- Invasive plants: monitor and map distribution to help inform where they are located and where they will spread.
- Old growth forests: standardize characterization of old growth and quantify the amount that exists.
- Recreation and forest health: Test the implementation of one or multiple methods to monitor the impacts of recreation on forest health

Priority ranking will be given to projects that:

- Address one of the above topics and/or themes
- Align closely with the strategic mission and objectives of the FEMC and current issue priorities identified by the FEMC network (detailed in the FEMC workplan)
- Expand on existing forest ecosystem monitoring efforts (spatially, temporally, or informationally), including current or past FEMC projects
- Make use of data available in the FEMC data archive and use tools developed by FEMC to conduct analysis or synthesis such as the Forest Health Atlas, Forest Indicators tools, NEFIN, among others
- Have potential for impact across the larger FEMC stakeholder region
- Have the potential for ongoing support, and long-term viability

Funding Availability: A total of $40,000 is available in funding to support projects of up to $20,000 for up to one year, beginning in 2024, with a completion date of August 2025. This is a reimbursable grant award in which the University of Vermont is the direct sponsor of this award with funds federally sourced from the U.S. Forest Service. A 1:1 match of non-federal funds is required. We anticipate funding 2-3 projects.

Diversity

FEMC is committed to integrating principles of diversity, equity, inclusion, and justice (DEIJ) into our monitoring programs. FEMC will implement approaches in this RFP to reach diverse communities, both to conduct monitoring and who may benefit from monitoring. We encourage proposals from underrepresented organizations, or that will provide valuable information to these communities. Please include in the proposal narrative (see below) a description of how FEMC DEIJ goals will be met with this proposal. The details can be included throughout the proposal, but also specifically in the rationale, objectives, or outcomes sections.

Some examples of activities and approaches to include in the proposal may include, but are not limited to:

- Considering position descriptions, advertising, and hiring processes to encourage diverse candidates to be hired for any positions that may be a part of the project.
- Incorporating elements from the FEMC Inclusive Field SOP into your field planning to provide an inclusive and safe experience for employees from marginalized backgrounds.
- Identifying opportunities to share findings and results with diverse audiences through targeted outreach and communication.

Deadlines

Proposals due	March 22, 2024
Awards announced	April 19, 2024
Awards begin	May 1, 2024
Awards complete	August 1, 2025

Eligibility

Proposals will be accepted from personnel from universities, non-profit, state, tribal, or private organizations located in one of the FEMC member states: Connecticut, Maine, Massachusetts, New Hampshire, New York, Rhode Island, or Vermont. Investigators from other states can be included as co-author on the proposal but cannot lead the project.

Monitoring must be conducted primarily within one of the seven listed states. Monitoring conducted outside of these states with matching funds can be included.

Proposal Specifications

NARRATIVE

The proposal should include a narrative that describes the monitoring objective, project design and approach, and expected outcomes. The narrative should not exceed three pages. The proposal should clearly describe the need for the monitoring and how this project will address the need. The approach should use methods appropriate to meet the described objective. Explanation and support for the use of methods should be included.

The proposal narrative should include the following elements:

Abstract: A one- or two-paragraph description of the proposed project.

Rationale: Use this section to fully describe the justification/need and expected benefits and value of the project. This section should provide a convincing argument for why this project should be funded, who will benefit, how they will benefit, and how the project will contribute to the FEMC goal of improving access to sustainable monitoring data. Any background information about the location or type of monitoring should be included here to provide support for the justification. Please also describe how this project will be sustainable at the completion of the project to help establish or maintain a long-term monitoring program or data collection, and how the project relates to other FEMC projects or priorities.

Approach/Methodology: A detailed description of the planned methodology, including Instruments used, survey methods, data acquisition and storage methods, and data review and use. Please provide support for methods used. If these are standard methods, provide a review of their use. If these are new or novel methods, please describe why they were chosen and how they will meet the project objectives.

Anticipated Outcomes and Timeline: Expected outcomes of the monitoring project, including types of data, benefit to stakeholders, and products such as data sets, interpretation, or analysis of monitoring data. Any additional outcomes or products should also be described. Please provide a timeline of major activities and deliverables.

Project Roles: Describe the roles and responsibilities for each principal investigator/project lead, any key personnel, and project partners.

Resources: Provide information about personnel qualifications, access to equipment and facilities, or other resources that will lead to the success of the proposed project.

Literature Cited: List of citations, this does not count toward the three-page limit of the narrative.

Letters of support from key stakeholder groups are welcomed but not required.

BUDGET DETAIL AND JUSTIFICATION

Budget Detail: Provide a detailed budget in the categories shown below.

Item	FEMC Funds	Non-Federal Matching Funds	Total
Individual personnel			
Personnel fringe benefits			
Travel			
Supplies			
Utilities			
Indirect Costs			
Total	$20,000 (maximum)	$20,000	$40,000

Budget Justification: Provide a detailed justification for each line item, including requested funds and non-federal matching funds.

Eligible budget items

Expenses are allowed for personnel time, including graduate student support (excluding tuition and fees), monitoring supplies, travel to field sites, utilities for site maintenance. Indirect costs of up to 10% are allowed on modified total direct costs.

Expenses cannot be used for participant costs, conference fees, graduate student tuition or fees, or other costs not directly related to the monitoring project. Equipment is considered a single item that is $5,000 or more, and this type of purchase is not allowed on this award. However, project supplies that individually cost less than $5,000 but total more than $5,000 are allowed.

Matching funds must be from non-federal sources and can include cash contributions, third-party in-kind contributions, and unrecovered indirect costs above 10% (indirect rate must be a federally approved). Matching funds from equipment of $5,000 or more is not eligible. Tuition and fees cannot be used for matching funds. For proposals selected for funding with other organizations contributing match, a letter of commitment will be required before award.

DATA MANAGEMENT

Describe the plan for making data from the project publicly available through the FEMC data archive (https://www.uvm.edu/femc/data/) or another publicly accessible repository providing open access to data downloads that meets the standards of the FEMC (permanent, unique URL, secure, available to the public without restrictions). Investigators can embargo publishing of the data for up to one year after the end date of the project to allow time for publication by submitting a written request to FEMC, but the data must still be deposited in a suitable repository during the embargo period. To aid in understanding data management requirements, a template FEMC data management plan can be found at: https://go.uvm.edu/nhval

OUTREACH

A key goal of FEMC is to promote improved understanding of trends and relationships of forested ecosystems which we achieve by convening environmental professionals at an annual meeting, promoting the utility of FEMC products to stakeholders in the region, and distributing information to and soliciting input from our collaborators. As such, FEMC will promote the results of projects funded through this program via our newsletter, website, and other relevant outlets. As recipients of funds, you will also be required to submit annual reports and present your work at the FEMC annual conference.

Proposal Selection

Proposals will undergo review by an internal review panel composed of members of the FEMC Steering Committee and staff. The review panel will evaluate proposals and make recommendations for funding in alignment with the criteria below and FEMC priorities.

EVALUATION CRITERIA

Proposals will be reviewed by an FEMC committee consisting of members from the Steering Committee.

Proposals will be evaluated on the following criteria:

- 20 – Rationale and justification
- 20 – Methods, approach, adequate team experience, and budget feasibility
- 10 – Alignment with the strategic mission and objectives of the FEMC and the Ecosystem Monitoring Fund
- 10 – Addresses key issues identified by the FEMC stakeholder network
- 10 – Expands existing forest ecosystem monitoring efforts spatially or temporally, expands our understanding of existing monitoring, or fills critical gaps in our understanding with new monitoring
- 10 – Potential for impact across the larger FEMC stakeholder region
- 10 – Long-term viability or impact
- 10 – Addresses diversity, equity, inclusion, and justice goals

SELECTION CRITERIA

The review panel will rank the proposals based on overall scores and review the overall pool and budget totals. Projects with smaller budgets may be accepted despite a lower score based on the pool of applications and the funds available. Final selection will be made based on availability of funding, diversity in the applicant pool (geography, institution, career stage, etc.), and alignment with strategic priorities and organizational goals of FEMC.

How to Apply

Please submit a single pdf document via UVM File Transfer (filetransfer.uvm.edu) Elissa Schuett (eschuett@uvm.edu) by **4:00pm** on March 22, 2024:

- Proposal narrative (three pages, maximum)
- Literature cited
- Budget justification and detail
- Data management plan

You should expect to receive an auto confirmation from filetransfer that your submission has been downloaded by Elissa. If you do not receive this confirmation email by 6:00pm on March 22, please send again.