



HEALTHY LAND. CLEAN WATER. VIBRANT COMMUNITY.

REQUEST FOR PROPOSALS

White Paper Addressing:

Impacts of Climate Change in Vermont's Mad River Watershed & Opportunities for Action

Introduction:

There is no more room for debate about the reality of human impact on the climate; rising CO₂ and other greenhouse gas levels in the atmosphere will continue to increase global temperatures. Regionally, significant changes in the Northern New England climate are all but guaranteed; the Northeast is expected to warm faster than anywhere else in the contiguous United States.

That these changes will affect the Mad River Watershed (MRW) – her rivers, ponds and lakes, forests, pastures and mountaintops, her wildlife and human residents – is also a certainty. We know that climate change will affect the weather; the amount, frequency, duration, intensity, and nature of precipitation and the range of temperature variation. The changes don't stop with the forecast. We also know that climate change will affect the way we live day to day – the value and impact of our work; the growing seasons and productivity of our farms and food network; the affordability of our homes, roads, and infrastructure; the development and conservation patterns on our landscape; the composition and integrity of our forests; the stability of natural communities and ecological systems; the quality and availability of groundwater; the demographics of who lives and plays here; and our ability to connect to nature. In short, a changing climate impacts the entire landscape that defines and sustains our lives. This interconnected web is not new, but climate change requires us to think seriously about the fundamental systems we depend on.

The climatic effects of fossil fuel combustion have been recognized and anticipated for decades, yet the global societal response has been largely ineffective. As the preponderance of scientific evidence bears out, showing more disruptive and catastrophic impacts, private and public sectors alike will respond and adapt. But how this plays out and what that adaptation looks like will have real consequences for how we live our lives. Governmental policy could very well provide guidance and structure to enforce and ease the public adoption of more sustainable lifestyles. The private sector could similarly respond through divesting from harmful, increasingly risky and less-lucrative oil, gas, and coal industries. Optimistically, there are opportunities at many system scales and reaches for redressing a history of lukewarm commitments and generating action.

White Paper:

Friends of the Mad River (Friends) seeks a consultant who can summarize, synthesize, and organize the climate change impacts that **the Mad River Valley community and watershed** can

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expect in coming decades in a succinct, yet holistic “white paper.” Through this white paper, Friends wishes to better understand the:

1. Risks and realities of climate change and its probable impacts (painting the picture);
2. Potential mitigation and adaptation opportunities; and
3. General costs/benefits of opportunities to aid in prioritizing action.

The multiple layers of energy-use, economies, food systems, governance (local, state, and federal), ecologies, and existing/changing issues of equity and resilience set the stage for a complex, yet much needed blueprint for community action.

The white paper will inform an effort (and significant investment) by Friends to encourage and support our community in organizing and embracing the opportunities and meeting the challenges of climate change while cultivating an ethic of equity, inclusion, and resilience. We are looking for a consultant who can think across systems and scales; the white paper should focus within the boundaries of the watershed while articulating the push and pull of more regional and global systems on the local people and institutions. The white paper should consider “triage,” in a sense:

1. What will we not be able to preserve and how might we manage the losses?
2. What can we preserve with minimal change and investment?
3. What will be sorely challenged that we must preserve? How and at what cost?
4. What might be gained? Where do opportunities exist?
5. Where might there be opportunities for structural change in the MRW that address broader issues of accessibility and quality of life while solving for challenges presented by climate change?
6. What might our biases be in the triage and prioritization process?

The following list provides the systems and areas for analyzing the risks, realities, and impacts of climate change that Friends has identified as a starting point. We understand its overlap, redundancy, and interconnections; it is our hope that the consultant further refines, shapes, and develops the white paper’s breadth, depth, and organizing structure.

Weather:

1. Temperature – seasonal averages, highs and lows.
2. Precipitation – seasonal maximums, averages, and intensity of rain and snow fall; changing flooding and drought regimes.
3. Wind – seasonal averages, maximums, and changing intensity.
4. Seasonality – length of, and interruptions to, seasons (e.g. winter thaws, changing “shoulder” seasons)

Ecosystems:

1. Rivers, wetlands, lakes and ponds – seasonal average temperatures, water level fluctuations, impacts on overall quality as well as species distribution and health.

2. Forests – impacts on overall ecosystem quality as well as species distribution and health, threats and pests (e.g. EAB), ability to absorb CO2 and water, soil retention and health.
3. Fields, lawns, power corridors – impacts on overall ecosystem quality, species distribution, threats, and pests.
4. Wildlife - Range shifts/species distribution, predation and parasitic changes (e.g. ticks), interaction with, and impact on, human settlements (e.g. black bears in garbage), impacts on biodiversity.

Economies:

1. Agriculture – viability of traditional crops and land uses, impacts on import and export of locally grown crops, food security.
2. Recreation – viability of traditional recreational uses, consideration of current emphasis on development of new trails and connections, impacts.
3. Tourism and Hospitality – viability of traditional activities, impacts.
4. Retail – viability of traditional activities, impacts.
5. Forestry – viability of traditional land management, impacts on import and export of timber.

Quality of Life in the MRW:

1. Transportation
2. Real Estate & Development
3. Education
4. Affordable Housing & Housing Stock – availability/viability.
5. Municipal Government – budgets and capacity to meet needs.
6. Demographics and effects on housing, jobs, diversity, and resilience
7. Emigration & Immigration
8. Energy Use – housing weatherization, electric car use, public transportation, local production versus out of state/country of goods, etc...
9. Infrastructure & Utilities – roads (public & private), electric, telecommunications, stormwater, wastewater, water, etc...
10. Arts
11. Access to Information
12. Access to Health Care
13. Religion & Community Gathering

Equity and Culture:

1. Demographic Changes
2. Housing and Transportation Costs
3. Rural Gentrification
4. Culture Changes and Sensitivities
5. Mental and Physical Health – local and affordable care
6. Demographic distribution of climate ills (e.g. flooding in lower income areas)

Consultant Qualifications:

The selected consultant will have demonstrable expertise in climate change research and/or mitigation/adaptation, as well as demonstrable skills communicating technical information to less technical audiences.

Candidates shall provide proof of qualifications, examples of completed projects of relevant nature, and at least 2 references.

Proposal Requirements:

1. A brief cover letter expressing interest in working on this project and the strengths you (or your team) bring to the project, including identification of the principal individual(s) that will provide the requested services. Please include each person's area of responsibility and attach one page CVs or resumes.
2. A 2-4 page description of the proposed scope of work, a detailed description of the approach to be taken toward completion of the project (with general notes around anticipated research sources), and any insights into the project gained as a result of developing the proposal.
3. A proposed schedule that indicates project tasks, milestones, and overall dates for completion. (Please include check-in/review points with Friends board and staff leadership and at least one public presentation of the body of work.)
4. A cost proposal consisting of hours devoted to each task and estimated cost for each task.

Funding:

Not to exceed \$5,000.

Anticipated Timeline:

- September 4, 2020 – RFP Questions due via email, in writing, to Friends of the Mad River
- September 9, 2020 – Questions answered and posted on [Friends' website under 'Jobs'](#)
- **September 13, 2020 – Proposals due**
- September 24, 2020 – Consultant selection made by Friends, contracting
- October 1, 2020 – Work to begin. Work closely with members of the FCC
- January 31, 2021 – Final draft submitted to Friends

Send Proposal (in PDF format) to:

Corrie Miller, Executive Director
info@friendsofthemadriver.org

Please use "Climate Change White Paper Proposal" in Subject Line