BACKGROUND
The Consortium for Research on Environmental Water Systems (CREWS), funded by NSF EPSCoR’s RII Track-1 award to the state of Montana, focuses on environmental water systems and water quality issues stemming from the impact of land-resource use. The CREWS project targets three study-sites, each representative of a different land-resource use: 1) hard rock mining in the Upper Clark Fork River; 2) agriculture and grazing in the Judith River Watershed; and 3) energy extraction in the Powder River Basin. The research approach integrates the site-based activities with four thematic teams: 1) systems ecology and earth sciences; 2) molecular engineering and environmental science; 3) environmental synoptic signals and sensors; and 4) natural resource social sciences.

For more information, please see https://www.mtnsfepscor.org/projects/crews.

OBJECTIVES
The CREWS Research Seed Award Program is designed to fund innovative research related to water quality and build research capacity across Montana’s higher education institutions. The awards can be used to support personnel costs for faculty, postdoc and student researchers, research supplies, field data collection and analysis costs, and travel. The intent of the CREWS Research Seed Award Program is to pursue novel research activities that support solutions and advance knowledge related to water quality issues and environmental water systems that align with or enhance CREWS research goals and objectives (https://www.mtnsfepscor.org/projects/crews/strategic-plan).

Faculty from Montana’s higher education campuses are encouraged to submit applications to pursue research within the broader scope of the CREWS project. Priority will be given to projects that will likely result in publications, research grants, and/or workforce development outcomes.

AWARD INFORMATION
Anticipated Funding Range Per Award: $15,000 to $50,000 (maximum), including any allowable indirect costs (F&A)
Estimated Number of Awards: the number of awards will be based on evaluation of proposals and available funding
Anticipated Award Period: January 1 to September 30, 2020

ELIGIBILITY
Any faculty member at a MUS institution, Tribal College, or private college in Montana may submit a proposal. Current participation in a Montana EPScoR–funded project is not required. Funded participants on the CREWS project are not eligible to apply; however, developing a partnership proposal with one of the existing CREWS research teams and activities is encouraged. All supported investigators and students must be from Montana institutions.

FORMAT OF PROPOSAL
Proposals must be submitted in digital format in MS Word or as a PDF file, using a standard font in 11 point or larger, with one-inch margins. A maximum of 5 pages, not including budget and appendices, is allowed and must include the information below. Proposals that exceed the page limit will not be reviewed. Budget and NSF biosketch template documents referenced below can be found here:

https://www.mtnsfepscor.org/opportunity/crews-research-seed-award-program-2019
Proposal Cover Page (1 page)
- Proposal Title
- Lead Investigator, Co-Investigator(s), primary affiliation, and all contact information
- Half-page summary statement appropriate for general audiences (maximum 250 words)

Project Description (maximum 4 pages)
- Research plan: Describe the research framework, hypothesis, research questions, and methods and procedures for the work.
- Objectives: Summarize the activities and how they relate to CREWS' priorities and goals, include a timetable for their completion. If relevant, explain the purpose of any specialized supplies or materials requested to carry out the work.
- Outcomes and benefits: State anticipated outcomes and benefits (e.g., knowledge created, anticipated publications or proposals, number and type of undergraduate research opportunities created, number of students impacted.)

Additional Required Information (not included in the 5 page limit)
- Budget and 1-page Justification. Budgets are to be submitted in the format provided (see above). Budgets may include: Research salaries and wages, supplies, contracted services, travel, and tuition (no fees). Budgets must include appropriate fringe benefits on all personnel salary and institutional F&A (Facility & Administration/Indirect Costs). Proposers should use the approved F&A rate for their institution; F&A cannot be waived.
- Curriculum vitae (NSF biosketch format) of all investigators (maximum 2 pages per person).
- References cited (if applicable).

REPORTING REQUIREMENTS
Grantees are required to provide information to the Montana EPSCoR State Office when requested, including annual project updates and supported participant information. Grantees are also required to submit a final report (1–3 pages) within 2 months after the award end date. The final report should detail the activities, supplies purchased, publications, new courses developed, extramural grant application(s), and/or extramural grant awards arising from support. Include names, degrees, and demographic information for any students supported by the award.

PROPOSAL REVIEW
A CREWS multi-institutional panel will review proposals. Proposals will be reviewed considering the following criteria:
- relevance to NSF merit review criteria (intellectual merit);
- relevance to CREWS Project scientific goals and objectives (see above and website for CREWS Strategic Plan);
- degree of potential scientific novelty or applied advances;
- potential of the research design to accomplish the proposed research;
- justification of budget; and,
- potential for increasing students’ access to research experiences.

Proposals will also be assessed in part for their impact on broadening institutional participation in relevant research areas.

PROPOSAL SUBMISSION
Proposals should be submitted as a single complete document with any graphics embedded in the document. Submit the proposal document(s) by email to: info@mtnsfepscor.org.

Proposals must be submitted electronically by 5:00 pm (MST) November 15, 2019.
Proposers are encouraged to send questions to info@mtnsfepscor.org or contact CREWS team members directly.