

## **Project Summary**

### **Rocky Mountains Cooperative Ecosystem Studies Unit**

**Project Title:** Operational and technical support for Vital Signs Monitoring in the Greater Yellowstone Network Inventory and Monitoring Program, Climate Workshop

**Discipline:** Natural  
**Type of Project:** Technical assistance  
**Funding Agency:** National Park Service  
**Other Partners/Cooperators:** Montana State University  
**Effective Dates:** March 25, 2009 - March 25, 2010  
**Funding Amount:** \$19,684

#### **Investigators and Agency Representative:**

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**Project Abstract:** The Big Sky Institute at Montana State University will work with the Greater Yellowstone I&M network to accomplish the following network support for protocols, communications and workshops:

#### **Pre-workshop Activities**

Dr. Kittel will collaborate with the Greater Yellowstone Network (GRYN) to plan the workshop agenda and coordinate the schedule, timing and invited participants. The network will provide Dr. Kittel with draft monitoring objectives prior to the workshop to facilitate his preparation for the workshop, as well as to receive feedback on the objectives before the workshop.

#### **Workshop**

A 2-3 day workshop will take place in early April in Bozeman, Montana to work on climate data analyses (including data preparation/cleaning methods) needed to address GRYN climate monitoring goals and objectives with a major focus on the data analysis Standard Operating Procedures (SOPs) for the GRYN/ROMN/SOPN/SODN climate monitoring protocol. The GRYN will provide the meeting space, printed material, note takers and the LCD projector. Dr. Kittel will facilitate the workshop and prepare the workshop report. While workshop participants will include representatives of other networks, the scope of the workshop will be limited to GRYN monitoring objectives.

The workshop report will include a short introduction explaining the purpose and need of the workshop, a discussion of the pros and cons of various ways to report on climate parameters and fairly detailed instructions on data requirements, data correction/cleaning methods, analysis methods, and ideal reporting timeframes for each of the GRYN climate monitoring objectives. The instructional content will be incorporated into a Standard Operating Procedure document prepared by GRYN staff in consultation with Dr. Kittel.

#### **Post-workshop**

Dr. Kittel will review the draft data analysis and reporting SOPs developed at the workshop and provide feedback and comment to GRYN on or before September 15. Dr. Kittel will also be available for follow-up questions via phone or email to clarify issues covered in the workshop.

#### **Outcomes with Completion Dates:**

1. Workshop agenda - April 1, 2009
2. Workshop Report - May 8, 2009
3. Standard Operating Procedures review comments - September 15, 2009

**Keywords:** Montana State University, Greater Yellowstone I&M network, protocols, workshops, climate workshop