## Project Progress/Completion Report, FY11 RM-CESU small projects Rocky Mountains Cooperative Ecosystem Studies Unit (RM-CESU)

**Project Title:** Living Building Challenge Charrette for the Lovell Visitor's Center

Project Code MSU-231, J1320119034

Type of Project (Research, Technical Assistance or Education): Tech Assist.

Funding Agency: National Park Service

Partner Agency/University: Montana State University

NPS Agreement Technical Representative (with complete contact information):

Cassity Bromley, 307-548-5416.

## Principal Investigator (with complete contact information):

Steve P. Juroszek, Interim Director of School of Architecture Montana State University, P.O. Box #173760, Bozeman, MT 59717; <a href="mailto:stevej@montana.edu">stevej@montana.edu</a> (406) 994-3921

Dr. Fatih A. Rifki, School of Architecture, Montana State University P.O. Box #173760, Bozeman, MT 59717; <a href="mailto:rifki@montana.edu">rifki@montana.edu</a> (406) 994-4290

Thomas McNabb, "McNab, Thomas" < tmcnab@montana.edu>,

Start Date of Project: 01/10/11

End Date of Project: 12/31/11

**Funding Amount:** \$9,859

Project Summary, including descriptions of products, work accomplished and/or major results. If the information is restricted (e.g. location of endangered species or cultural resources), indicate the title and location of the final report. Also add web sites where project-related information may be found.

This project examined ways in which the Lovell Visitor's Center at Bighorn Canyon can become more sustainable by using a whole-systems approach defined through the Living Building Challenge. Through collaboration between Montana State University's Community Design Center, the Living Building Institute, and the National Park Service the goal was to pilot the use of the Living Building Challenge to determine whether the challenge is applicable and beneficial for federal land based agencies. Throughout the process, various design ideas were developed and presented to both the Living Building Institute and NPS all aimed at explaining how the imperatives listed in the Living Building Challenge could be fulfilled.

The Living Building Challenge offers a planning and certification model with the goal to "reconcile the built environment with the natural environment, into a civilization that creates greater biodiversity, resilience, and opportunities for life with each adaptation and development". This agreement covered tasks to be performed by MSU's School of Architecture faculty and students; a

separate Cooperative Agreement will cover work performed by the Living Building Institute. Final products are located at Bighorn Canyon NRA, 20 Highway 14-A East, Lovell, WY 82431.

Number of students participating in this project: undergraduates, graduate students, degrees conferred. Approximately 5-graduate student, 5-undergrad students

**Lessons Learned from this project.** The philosophy found within the Living Building Challenge is complementary to the NPS mission. The project included 3- draft schematic design submissions plus some engineering documentation that could be used to support a professional Living Building Challenge schematic design process.

When final products will be received. Products were received by May 1, 2011.