Project Completion Report Rocky Mountains Cooperative Ecosystem Studies Unit (RM-CESU)

Project Title: Livingston, MT and Cody, WY YELL-ITS Road Status Signs

Project Code: MSU-241; P12AC10155

Type of Project: Technical Assistance

Funding Agency: National Park Service

Partner University: Montana State University

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Start Date of Project: February 8, 2012

End Date of Project: December 31, 2012

Funding Amount: \$7726

<u>Project Summary</u>, 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.

There are few alternative routes/entrances into Yellowstone National Park. Further, visitors may drive significant distances before arriving at an entrance to the park. Given that the weather and other factors can influence whether or not an entrance is open, Yellowstone National Park officials wanted a way to inform motorist whether entrances were open or closed that could be updated on a frequent (instantaneous) basis. Yellowstone National Park worked with Montana State University's Western Transportation Institute (WTI) on a project to design and install signs that would allow motorists to know which entrances are open and which are closed.

A manually changeable sign just south of Livingston, MT and a changeable message sign on the outskirts of Cody, WY were selected to be replaced. WTI researched sign requirements (Manual for Uniform Traffic Control Devices) to determine the most cost effective signage. From there, WTI worked to develop a list of specifications, so that Yellowstone National Park could bid out the project. WTI provided assistance on the review of bids, and was available for

assistance during the installation and testing of the signs, if necessary.

<u>Number of students participating in this project</u>: undergraduates, graduate students, degrees conferred. None

<u>Lessons Learned from this project:</u> While the Manual for Uniform Traffic Control Devices (MUTCD) provides some "standards" for signage, different state and different people sometimes interpret the information differently.

While there is often a desire for agencies to use the most technology (highest degree of technology) possible, the most cost-effective solution is sometimes a very low-technology option.

There are relatively simple and low cost solutions to most problems.

Other RM-CESU agencies or research partners who participated in this project: None