

Project Summary
Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Snowroad Deterioration and Oversnow Vehicle Impact Study, Yellowstone NP

Discipline: Interdisciplinary
Type of Project: Research/Technical Assistance
Funding Agency: National Park Service
Other Partners/Cooperators: Montana State University
Student Involvement: Yes, graduate students
Effective Dates: 08/01/2015 - 12/31/2017
Funding Amount: \$166,890

Investigators and Agency Representative:

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Project Abstract: A collaborative project between Yellowstone National Park and Montana State University (MSU) Department of Civil Engineering is proposed to study the issue of snowroad deterioration and oversnow vehicle (OSV) impacts. Each winter, Yellowstone National Park maintains approximately 200 miles of snowroads to support administrative and commercial snowmobile and snowcoach (collectively oversnow vehicles or OSVs) use in the park. Over the past several years, Yellowstone has seen an increase in ruts in the snowroads. These ruts can create dangerous driving conditions which compromise visitor experience and safety. A two year program is proposed with intensive observation and analysis in year one, focusing largely on observations, gathering snowroad quality and environmental data, and investigating the impact of low pressure tires and tracked vehicles on snowroads. Year two may involve further or continued investigation of specific vehicle configuration and variations on grooming methods and techniques. Results will inform management policies to ensure a safer experience for visitors, NPS employees, and concessioners, increase the longevity of snowroads, and inform future designs and styles of OSVs.

Keywords:

Yellowstone National Park, Montana State University, OSV impacts, snowroad deterioration