

National Park Service
U.S. Department of the Interior
Yellowstone National Park



UPDATE: Operations and Technology Working Group

Winter Use Draft Adaptive Management Plan
Public Meeting
West Yellowstone, Montana
August 10, 2015

O&T Meeting Topics and Dates

Call	Topic	Date
1	Scoping the Topic	March 10, 2014
2	Snowroad Deterioration & Rutting	April 3, 2014
3	OSV Speed Limits	April 28, 2014
4	OSV Exhaust Emissions	May 20, 2014
5	Sylvan Pass Noise Abatement	June 17, 2014
6	Low Pressure Tire (LPT) Snowcoaches	July 1, 2014
7	Grooming	July 28, 2014
8	Research Questions & Monitoring Plan	January 14, 2015

What We're Already Monitoring

- Compliance with BAT, New BAT, and E-BAT rule and contractual requirements
- Low Pressure Tire Program
- Snowroad deterioration (rutting) & Grooming



Snowroad Deterioration & Grooming

- Combination of grooming practices, environmental variables, and vehicular attributes
- The working group would like to better understand how all of these processes interact to and contribute to poor operating conditions
- Cooperative study with MSU
 - Data loggers on groomers
 - Temperature and snowfall data
 - Snow microstructure
 - Stress propagation
 - Effects of tracks vs. tires

Speed Limits

- Concern about increased travel times in the park for snowcoaches, given distances between destinations and reduced speed limits
 - Generally accepting of the 35 mph speed limit for snowmobiles
- Positive relationship between speed and noise
- Some interest in exploring possibility of accommodating higher speeds in remote, less congested corridors for certain types of snowcoaches
- NEPA & final Rule implications

Exhaust Emissions/Performance-Based Testing

- Performance-based specification is one in which a set of required parameters for tailpipe pollutants is set under given operating conditions
- Issues:
 - confounding environmental variables
 - variability across snowcoaches themselves
- The group expressed interested in pursuing a partnership with an outside entity to experiment with a small pilot study.

Sylvan Pass

- NPS currently uses a howitzer for avalanche mitigation
- ORMAAs conducted in 2007 and 2010
- Interest in exploring other technologies that could eliminate the issue of live rounds on the mountain
 - Interest in use of helicopters
 - Gazex or DaisyBells
- Interest in monitoring days/hours of avalanche closure and admin/resident travel over the Pass.

Noise Abatement

Exterior Noise

- Several operators have been experimenting with exterior noise dampening technologies
 - e.g. Quiet guards, baffles, and foam mats under the hood
- Interest in exploring noise testing outside on turf, sand, or sawdust – feasibility issues
- Interest in testing at West Yellowstone Airport

Interior Noise

- Interested in exploring interior noise dampening technologies and designs, not regulating interior noise



Low Pressure Tire Snowcoaches

- Evaluation LPT vehicles based on 4 criteria:
 - Safe for occupants and other users
 - No more impactful to resources or rutting
 - Preserve unique look and feel
 - Operate safely and efficiently in all conditions
- Group is particularly interested in data on fuel efficiency, effects of various tire sizes, psi, and impact of tread, rigidity, and uniformity of loading.