National Park Service
U.S. Department of the Interior

Yellowstone National Park

Air Quality and **Soundscapes**

Winter Use Draft Adaptive Management Plan Public Meeting

West Yellowstone, Montana

August 10, 2015

EXPERIENCE YOUR AMERICA

Soundscapes Workgroup Process

- Developed draft monitoring of OSV noise impacts
- Meetings
  - Met initially in person 22 Nov. 13
  - Met by conference call 26 Feb and 30 Apr 14
  - Several more recent group emails to review draft chapter

Soundscapes Workgroup Process

- Topics discussed
  - State of current knowledge
  - Current acoustic monitoring
  - Additional monitoring needs
- Outcome of meetings
  - Good discussions about monitoring needs
  - Draft chapter in plan

What We're Already Monitoring

Oversnow Vehicle Noise in

- Developed Areas and Travel Corridors
  - Sound levels
  - Percent time audible
  - Noise-free intervals

Suggested Metrics Goal 1:
Keeping Impacts Within the Range Predicted

- Continue monitoring long-term sites at Old Faithful and Madison Junction, and add a South Entrance site
  - Percent time audible
  - Noise-free interval
  - Average, maximum, median, and 10th percentile sound levels
- Cost estimate= $25,000/year with current staff

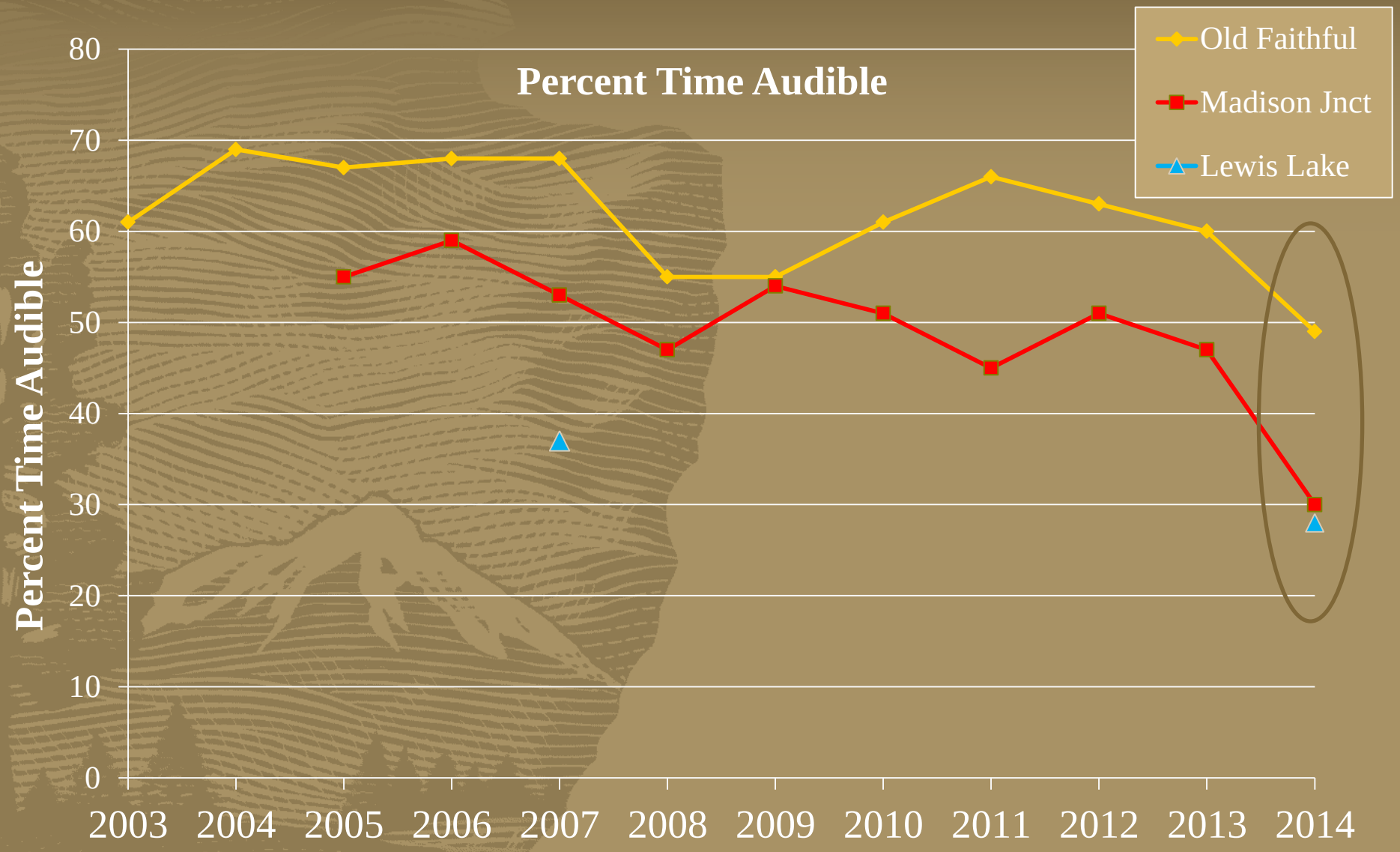
Suggested Metrics Goal 2:
Data Regarding Comparability

- Measure OSV comparability at near-road visitor destinations
  - Percent time audible, maximum level, time above 55 dBA, and time above 10 dBA over natural ambient
  - Estimated cost = $2,500/year with current staff
- Conduct visitor survey at near-road visitor destinations
  - Estimated cost = $10,000/year for one or two years

Suggested Metrics Goal 3:
Additional Social and Ecological Data

- No novel monitoring or research, but suggest the following operational considerations
  - Purchase and use quietest available OSV models and types
  - Document and implement, where possible, behaviors and operations that mitigate or eliminate noise impacts
    - Slowing down near visitor destinations
    - Reduce distance between vehicles in groups
    - Reduce idling
    - Avoid rapid acceleration and deceleration
- Estimated costs = $0

Triggers and Mitigation Measures

- Goal 1
  - Trigger- Increasing trend in monitored metrics
  - Mitigation- Reduce speed limit, reduce OSV numbers, reduce noise from loudest OSV
- Goal 2
  - Trigger- Significant differences between OSV type
  - Mitigation- Re-allocating or re-distributing transportation events between snowmobiles and snowcoaches, and reduce noise from loudest OSVs

Winter 2003-2015 Results