

## **APPENDIX J. FEDERAL, STATE, AND LOCAL GOVERNMENT AGENCY AND TRIBAL LETTERS RECEIVED ON THE DRAFT EIS**

This appendix includes letters received from Federal, State, and local government agencies and tribal letters on the Draft EIS.

State of Montana, Department of Fish, Wildlife and Parks

State of Wyoming, Office of the Governor

State of Wyoming, Division of State Parks, Historic Sites and Trails

State of Wyoming, Game and Fish Department

Teton County, Wyoming

Park County, Wyoming

U.S. Environmental Protection Agency

Fremont County, Idaho

Summaries and responses to the comments contained within these letters (and summaries and responses to other comments received during the DEIS comment period) are included in Appendix I.





# Montana Fish, Wildlife & Parks

1400 So. 19<sup>th</sup>  
Bozeman, MT 59718

June 5, 2007

National Park Service  
Attention: John Sacklin  
Winter Use Plan EIS  
P. O. Box 168  
Yellowstone National Park, WY 82190

Dear Mr. Sacklin:

This letter serves as the State of Montana's comments on the National Park Service's *Winter Use Plans Draft Environmental Impact Statement*. Thank you for involving designated cooperators such as the State of Montana in this process.

We generally agree with Alternative 1, the preferred alternative. This would continue the current level of allowable and managed use of over-snow vehicles. Best available technology (BAT) would be required of snowmobiles and snow coaches and would maintain air quality well below federal standards required by the Clean Air Act (Tables 30, 31, 72 – 78) and comply with the Organic Act. Studies documented in the Draft and Tables 15 suggest that there would be negligible to moderate impacts to wildlife species and other natural resources in the study area. Fish, Wildlife & Parks' staff concur with that assessment.

. Our comments on Alternative 1 are:

1. We think some very small amount of non-commercial guiding would be acceptable in Yellowstone National Park. It appears that the required guiding has worked very well over the last few years, particularly at the use levels you have experienced. However, allowing some visitors access to the park with non-commercial guides would make the experience more affordable for a small segment of the users. If you decided to implement some non-commercial guided trips, we support a Certified Leader requirement in lieu of what is called a non-commercial guide in some of the draft alternatives. A Certified Leader can provide the leadership and group oversight required to provide proper visitor safety and resource protection. We believe the on-line Safe Rider! Snowmobile Safety Education Awareness Program, developed by the International Association of Snowmobile Administrators (IASA) and the American Council of Snowmobile Associations (ACSA), offers a great template to build upon for a leader certification program for Yellowstone. We recommend that a derivative of this course be required for non-commercially guided group leaders prior to coming to the Parks (as on page 48, bullet 4, Guiding requirements, Actions Specific to Yellowstone, Section 2.6.5 Provide for Unguided Access, Chapter II, DEIS). We recommend that template be used for the discussed Yellowstone Park training timeframe that covers the concerns of the National Park Service. We recommend that you approach the non-commercial guiding on a trial basis to determine if you can

implement without substantial use violations. We also recommend that you enforce substantial penalties if violations occur.

2. We recommend the current commercially guided group size of up to eleven including one guide. We recommend group size for non-commercially guided groups to be somewhat smaller, six including the non-commercial guide. This should facilitate tighter control of group actions by the guide. The smaller groups would reduce the impact on the sound scape (noise) as less multiple machine noise would be produced by the smaller groups along the trails and collection points.
3. Montana recommends language that would allow the east entrance to stay open to snowmobiling but under defined conditions. We encourage NPS to pursue creative ways to partner with Park County and the State of Wyoming to keep this entrance open during the winter season. Visitor and employee safety are extremely important, but at the same time there has to be management options, other than full closure, that can creatively and effectively address avalanche concerns on Sylvan Pass.
4. Seasonal and daily entry limits may have some merit and should be studied in the future. We propose that the final rule include a provision whereby adaptive management could be used to adjust daily entrance limits. We would recommend use of a local (on-site) meteorologist to help identify times of better air dispersion and provide adequate notice to increase or decrease daily entries not to exceed 20 percent for a given day. If the improved air dispersion method works well, there should be potential to work toward numbers of over snow vehicles currently used in the Temporary Plan following an Adaptive Management process. Likewise, if these numbers create issues for any entrance area or region of the park, adaptive management should be available to adjust vehicle or vehicle emissions numbers as needed.
5. The appropriate number of snowmobiles per day is somewhere between recent use levels and the use levels recommended in the preferred alternative. We ask that you apply the best available science in identifying the use limit that also meets all of your legal obligations for managing a National Park.

Alternative 2 would not allow best available technology (BAT) snowmobiles, but would allow 120 BAT snowcoaches. Although snowcoaches allow more visitors per vehicle, most of the current fleet emit higher amounts of pollution per machine compared to BAT or Improved BAT snowmobiles. Several older Bombardier B12 snowcoaches have been modified by Montana concessions with newer Tier II (2002-2003) emissions controls and electro-mechanical transmissions. These vehicles have been tested (Bishop et al, February 2005, February 2006) and appear to be the lowest-emitting over snow vehicles currently operating during the winter Yellowstone season, with or without load. Other older (Tier I and earlier) snowcoaches have shown higher emissions. The current snowcoach BAT in the DEIS recommends only Tier I emissions controls be operable by the 2011-2012 season. Also, smaller groups using Improved BAT snowmobiles would lower the emissions from snowmobiles, possibly lower than some of the Tier II snowcoaches. Without the use of cleaner vehicle technology, and because this alternative would not allow BAT snowmobiles, Montana finds this alternative unacceptable.

Alternative 3A and 3B would not allow snowmobiles or snow coaches from Montana gates. Montana opposes this alternative for several reasons. The Alternative has no provisions for visitation by the disabled. Also, the Alternative would result in as yet undefined environmental impacts to neighboring federal Forest Service and state lands from the diversion of winter use. This Alternative would result in adverse impacts to the economy and outdoor recreation opportunities in the area that would further reduce the ability of neighboring states and communities to mitigate any adverse environmental impacts.

Alternative 4 would increase snowmobile numbers from the current 720/day to 1,025/day. Montana views this level of increased numbers as unrealistic at this time for a variety of reasons including 1) a lack of adequate on-site management and field staff, 2) potential adverse impacts to visitor health and safety and 3) moderate to major negative impacts to natural soundscapes.

Alternative 5 would reduce the current numbers of snowmobiles allowed per day in Yellowstone National Park from 720 to 540, would allow 20 percent to be unguided groups, and allows for seasonal as well as daily entry limits. We understand that recent use levels have been well below even the 540 snowmobiles per day. The appropriate number of snowmobiles per day is somewhere between recent use levels and those recommended in the preferred alternative. Seasonal and daily entry limits may have some merit and should be studied in the future. We propose that the final rule include a provision whereby adaptive management could be used to adjust daily entrance limits, with use of a local (on-site) meteorologist to help identify times of better air dispersion and helps provide due notice and process to adjust the number of visitors. The past years of ambient monitoring and management of over snow vehicle traffic supply the data to demonstrate that better air dispersion significantly lowers monitored pollution, while days with poor air dispersion (inversions) record higher amounts of pollution with fewer vehicles.

Montana opposes Alternative 6 because it would incorporate plowing the road from the west entrance at West Yellowstone to Madison Junction for bus access and thus would close access from that entrance to all over-snow vehicles.

We have a few additional suggestions for the Final *Winter Use Plans EIS*. In the Draft document, Big Sky is not seriously considered as a gateway community but should be included. The actions in Yellowstone Park impact Big Sky because so many Big Sky winter visitors spend part of their time visiting Yellowstone Park by snowmobile or snow coach.

We understand that a study of bison movement within Yellowstone Park is needed based on a Washington D.C. area district court action. We appreciate the fact that you have invited (Montana) Fish, Wildlife & Parks biologists to review the study methodology.

The State of Montana would like to affirm the use of cleaner fuels in all winter use vehicles as listed in Items Common to All Alternatives, Section 2.5.2 bullet 14 page 28, chapter 2 including "...biodiesel and ethanol blends for use in all over snow vehicles..."

Montana recommends use of the data from Dr. Bishop's 2006 "In Use Emissions" of over-snow vehicles for modeling in the Final EIS. We would also recommend requiring use of newer, cleaner Tier II emissions control equipment in non-historic snowcoaches beginning in the winter of 2011-2012. By that season, most of the Tier 1 equipment would be some 14 years old or older, and may not be in proper working order, or capable of being in proper working order. The use of

Tier II emissions control vehicles would also comply with the EPA assumptions in previous winter use plans, and have fewer emissions as monitored by Bishop, et al (2005, 2006). In other words, please change "Tier I" to "Tier II" in Chapter II, Section 2.5.4 Mitigation, Snowcoach Best Available Technology, page 30, bullet 1, and elsewhere "...Beginning 2011-2012 season, all snowcoaches must meet ...having EPA Tier II emissions control equipment..."

With respect to snowcoaches, some reference to an improved power-to-weight ratio, as stated in Bishops' November 2006 data draft report, might be included to improve emissions and fuel economy, and improved grooming. Bishop's work appears to show a 15-to-20 percent decrease in work (fuel consumption) with a well-groomed trail and also showed reduced emissions.

We ask that in the end you select a preferred alternative that has the best opportunity to remain stable over time, and that best meets all of your legal obligations for managing our premier National Park. Thank you again for allowing Montana to comment on the Draft EIS. If you have questions about content of these comments, please contact me at your earliest convenience at 406-994-4042.

Sincerely,

A handwritten signature in black ink, appearing to read 'P. J. Flowers', with a large, stylized flourish extending from the end of the signature.

Patrick J. Flowers, Region 3 Supervisor  
Fish, Wildlife & Parks and  
Montana Cooperator Team Leader

DAVE FREUDENTHAL  
GOVERNOR



STATE CAPITOL  
CHEYENNE, WY 82002

## Office of the Governor

June 4, 2007

Mr. John Sacklin  
Winter Use Planning Team  
P.O. Box 168  
Yellowstone National Park, WY 82190

RE: Comments on Winter Use Plans Draft Environmental Impact Statement (DEIS), Yellowstone and Grand Teton National Parks and John D. Rockefeller, Jr. Memorial Parkway

Dear Mr. Sacklin:

Thank you for the opportunity to comment on the National Park Service's (NPS) Winter Use Plans Draft Environmental Impact Statement (DEIS) regarding winter-use in Yellowstone National Park (YNP), Grand Teton National Park (GTNP) and the John D. Rockefeller, Jr. Memorial Parkway (Parkway) (collectively "the parks"). This comment document is submitted on behalf of Wyoming as a cooperating agency. We appreciate the opportunity for Wyoming to meet with NPS regarding our previously submitted comments on the preliminary DEIS (dated January 5, 2007) and to participate in the various cooperators' meetings. We will remain a fully engaged participant in this latest winter-use planning process.

The primary outcome the State of Wyoming expects for winter use in the parks is a plan that provides park visitors, local communities, and other stakeholders assurance that winter use management will remain stable and predictable over the long term, that our residents and visitors will have reasonable access to the Parks, and that park resources will be protected. In that regard, we are pleased the NPS Preferred Alternative (Alternative 1) will allow continued snowmobile access to the parks at near historic levels and that Best Available Technology (BAT) snowmobiles and snowcoaches will be required in YNP.

However, as NPS is well aware, the citizens of Wyoming are strongly opposed to the proposed closure of the East Entrance. This action will permanently limit the ability of our local residents and visitors to access YNP and will harm the winter tourism economy and associated infrastructure in Cody and the surrounding area. This is an unacceptable outcome and one we will continue to vigorously oppose. We further believe closing the East Entrance will severely restrict the ability of NPS to effectively manage predictable future growth in winter visitation to YNP. The East Entrance provides a unique opportunity for those wishing to experience the park under less crowded conditions compared to the more popular West and South Entrances.

In terms of meeting our expectations for winter use in Wyoming, on behalf of the citizens of Wyoming, I reiterate the following key highlights from our attached detailed comment document on the DEIS and the NPS Preferred Alternative:

- We strongly oppose closure of the East Entrance in the NPS Preferred Alternative (Alternative 1). NPS fails to make a compelling argument for closing the entrance based on safety and has failed to

act on recommended mitigations that could further improve their existing avalanche control program.

- The DEIS overstates the health and safety issues related to the avalanche conditions on Sylvan Pass and associated control operations, while at the same time, demonstrates a very safe program since control operations began in 1973.
- The DEIS goes to great length describing the inherent avalanche hazards encountered by visitors traveling over Sylvan Pass and to employees conducting avalanche mitigation in the avalanche zone area of Sylvan Pass yet fails to include a discussion of the avalanche hazards at the Talus Slope area along the South Entrance Road. This is a puzzling and serious omission and demonstrates an inconsistent park-wide analysis of avalanche safety issues. This omission must be corrected in the Final EIS.
- Ironically, Alternative 1 (the Preferred Alternative) and Alternatives 2, 3, and 6 propose to close Sylvan Pass to through over-snow vehicle (OSV) use while “inviting” skiers and snowshoers to use and travel on a constructed highway feature over Sylvan Pass “with its substantial avalanche hazards for visitors and employees” (p. 197) without managing or controlling the avalanche risk. We support keeping all visitors safe and oppose closure of Sylvan Pass and the East Entrance.
- We recommend NPS resume use of the howitzer as the primary method for avalanche control. The helicopter is a costly, less reliable substitute that has resulted in longer closures of Sylvan Pass. Artillery is industry standard and NPS has more than 30 years experience with this type of program.
- The DEIS acknowledges that socioeconomic impacts to businesses along the North Fork Shoshone River will be major, adverse, and long-term. Keeping the East Entrance open and implementing needed changes in other NPS management policies (allowing limited unguided access) will avoid and mitigate these negative impacts.
- Management of the CDST and the Grassy Lake Road under the Temporary Winter Use Plan of August 2004 has virtually eliminated use of these trails. The NPS Preferred Alternative will continue the current management direction which does nothing to address these declines. We suggest a more innovative approach that recognizes that these trails provide an important link between public lands on either side of GTNP and the parkway. We recommend that a limited number of non-BAT snowmobiles that meet 2007 EPA emission requirements be allowed to use these trails as a throughway. This will improve opportunities for those snowmobilers wishing to travel this unique route linking extensive snowmobile trail systems in Wyoming, Montana, and Idaho.
- We support allowing non-BAT snowmobile access for visitors to Jackson Lake to facilitate returning angler utilization to health levels consistent with Wyoming Game and Fish Department (WGFD) management objectives. We also request WGFD be granted administrative access to Jackson Lake via snowmobiles that are exempt from BAT requirements. Jackson Lake is an important world-class fishery in Wyoming and reasonable public and agency access to this important fishery is vital for meeting overall management objectives.
- We strongly support allowing non-commercially guided snowmobiles in YNP as proposed in Alternative 4. Non-commercially guided snowmobile use hasn't been tried since implementation



Mr. John Sacklin  
June 4, 2007  
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of managed winter use in 2004. Given existing restrictions (speed limits, nighttime use restrictions, ranger patrols) and adaptive management opportunities, we believe non-commercially guided use can provide a wider range of more affordable recreation opportunities for visitor's while still protecting park resources and values. Although we support the proposal in Alternative 5 for 20% non-commercially guided snowmobiles, the State of Wyoming believes that 25% is the most reasonable management decision as it maximizes the variety of recreational use opportunities.

- Wildlife populations in YNP have historically shown dramatic fluctuations. Possible adverse effects from OSV use will always be insignificant compared to other variables including wildfire, predation, winter severity, and lack of population control actions.
- The DEIS appears to be NEPA deficient, cumulative impacts do not fully characterize or capture economic impacts and foreseeable limitations to adjacent public land winter motorized use. For example, the public lands surrounding the East Entrance are almost entirely wilderness or roadless areas managed for non-motorized use. Loss of access to Yellowstone via the East Entrance will significantly impact winter motorized opportunities in that area.

Finally, Wyoming incorporates by reference our comments previously submitted on the Cooperating Agency Preliminary DEIS (PDEIS) to the extent such comments were not addressed by the NPS in the DEIS, and to the extent they are not inconsistent with this new comment document.

Thank you again for the opportunity to submit comments on the DEIS.

Best regards,



Dave Freudenthal  
Governor

DF:TJ:pjb

**COMMENT DOCUMENT FOR  
WINTER USE PLANS  
DRAFT ENVIRONMENTAL IMPACT STATEMENT  
YELLOWSTONE AND GRAND TETON NATIONAL PARK  
JOHN D. ROCKEFELLER, JR. MEMORIAL PARKWAY**

**Prepared for**

**Governor's Planning Office  
State of Wyoming**

**June 4, 2007**

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## EXECUTIVE SUMMARY

Ecosystem Research Group (ERG) contracted with the Wyoming Governor's Planning Office (GPO) to review the *Draft Environmental Impact Statement for the Winter Use Plans for Yellowstone and Grand Teton National Parks and the John D. Rockefeller, Jr., Memorial Parkway* (NPS 2007), hereto after referred to as the DEIS. Our review focused on the proposed closure of Sylvan Pass, the socioeconomic analysis, National Park Service (NPS) commercial guiding requirements in Yellowstone National Park (YNP), management of snowmobiles in Grand Teton National Park (GTNP) and the John D. Rockefeller, Jr., Memorial Parkway (Parkway), wildlife and over-snow-vehicle (OSV) use, and compliance with the National Environmental Policy Act of 1969 (NEPA). Our key findings are presented below.

### KEY FINDINGS

- We strongly oppose closure of the East Entrance in the NPS Preferred Alternative (Alternative 1). NPS fails to make a compelling argument for closing the entrance based on safety and has failed to act on recommended mitigations that could further improve their existing avalanche control program.
- We support a final alternative that keeps all four entrances open, allows both snowcoach and snowmobile access at near historic levels as proposed in Alternative 1, that accommodates limited non-commercially guided access, and that allows limited numbers of non-BAT (best available technology) but Environmental Protection Agency (EPA) compliant snowmobiles to use the Continental Divide Snowmobile Trail (CDST). We support BAT-only snowmobiles in YNP. We support non-BAT snowmobiles on Jackson Lake.
- The DEIS overstates the Health and Safety issues related to the avalanche conditions on Sylvan Pass and associated control operations, while at the same time, demonstrates a very safe program since control operations began in 1973.
- The DEIS goes to great length describing the inherent avalanche hazards encountered by visitors traveling over Sylvan Pass and to employees conducting avalanche mitigation in the avalanche zone area of Sylvan Pass yet fails to include a discussion of the avalanche hazards at the Talus Slope area along the South Entrance Road. This is a puzzling and serious omission and demonstrates an inconsistent park-wide analysis of avalanche safety issues. This omission must be corrected in the Final EIS.
- Ironically, Alternative 1 (the Preferred Alternative) and Alternatives 2, 3, and 6 propose to close Sylvan Pass to through over-snow vehicle (OSV) use while "inviting" skiers and snowshoers to use and travel on a constructed highway feature over Sylvan Pass "with its substantial avalanche hazards for visitors and employees" (p. 197) without managing or controlling the avalanche risk. We support keeping all visitors safe and oppose closure of Sylvan Pass and the East Entrance.
- We recommend NPS resume use of the howitzer as the primary method for avalanche control. The helicopter is a costly, less reliable substitute that has resulted in longer closures of Sylvan Pass. Artillery is industry standard and NPS has more than 30 years experience with this type of program.
- The DEIS acknowledges that socioeconomic impacts to businesses along the North Fork Shoshone River will be major, adverse, and long-term. Keeping the East Entrance open and implementing needed changes in other NPS management policies (allowing limited non-commercially guided access) will avoid these impacts.

The East Entrance provides public recreation opportunities, supporting local, independent businesses and governments through the collection of taxes and entrance fees.

- The DEIS fails to adequately look at cumulative impacts to visitor access and circulation if the East Entrance is closed. The public lands surrounding the East Entrance are almost entirely wilderness or roadless areas managed for non-motorized use. Loss of access to Yellowstone via the East Entrance will significantly impact motorized opportunities in this area.
- Management of the CDST and Grassy Lake Road under the temporary winter use plan of August 2004 has virtually eliminated use of these trails. The NPS Preferred Alternative will continue the current management direction which will do nothing to address these declines. We suggest a more innovative approach that recognizes that these trails provide an important link between public lands on either side of GTNP and the Parkway. We recommend that a limited number of non-BAT snowmobiles that meet 2007 EPA emission requirements be allowed to use these trails as a throughway. This will improve opportunities for those snowmobilers wishing to travel this unique route linking extensive snowmobile trail systems in Wyoming, Montana, and Idaho.
- We support allowing non-BAT snowmobile access for visitors to Jackson Lake to facilitate returning angler utilization to health levels consistent with Wyoming Game and Fish Department (WGFD) management objectives. We also request WGFD be granted administrative access to Jackson Lake via snowmobiles that are exempt from BAT requirements. Jackson Lake is an important world-class fishery in Wyoming and reasonable public and agency access to this important fishery is vital for meeting overall management objectives.
- We strongly support non-commercially guided snowmobiles in YNP as proposed in Alternatives 4 and 5. Non-commercially guided snowmobile use hasn't been tried since implementation of managed winter use in 2004. Given existing restrictions (speed limits, nighttime use restrictions, ranger patrols) and adaptive management opportunities, we believe non-commercially guided use can provide a wider range of recreational opportunities for visitor access while still protecting park resources and values.
- We support the use of seasonal entry limits, and associated flexible daily entry limits, as proposed for Alternative 5. This approach will allow YNP and local businesses the ability to respond to higher visitor demand during busy holidays and weekends.
- Wildlife populations in YNP have historically shown dramatic fluctuations. Possible adverse effects from OSV use will always be insignificant compared to other variables including wildfire, predation, winter severity, and lack of population control actions.
- The DEIS appears to be NEPA deficient, cumulative impacts do not fully characterize or capture economic impacts and foreseeable limitations to adjacent public land winter motorized use.

## 1. INTRODUCTION

The State of Wyoming appreciates the opportunity to work with the NPS on developing a Winter Use plan for YNP, GTNP, and the Parkway. Given the importance of developing a winter use plan that provides park visitors, local communities, and other stakeholders assurance that winter use management will remain stable and predictable over the long-term, the State of Wyoming, as a formally recognized "Cooperating Agency", is intent on being a fully engaged participant and stakeholder in this process.

This document provides comments to the *Draft Environmental Impact Statement for the Winter Use Plans for Yellowstone and Grand Teton National Parks and the John D. Rockefeller, Jr., Memorial Parkway* (DEIS). The DEIS (NPS 2007) is not significantly different than the Preliminary Draft Environmental Impact Statement (PDEIS); we therefore incorporate by reference the comments submitted on the PDEIS (ERG 2007) to the extent they are not inconsistent with this new body of comments. We respectfully reserve the right to refine our comments and provide additional detail as more information becomes available.

In preparing this document, we also reviewed the NPS responses to our comments on the 2006 PDEIS. These comments were provided by NPS to Cooperating Agencies on May 5, 2007. Many of our comments were not addressed or only cursory responses were provided. Therefore, we bring forth many of our comments (some updated) from the PDEIS review document for emphasis and clarification of important issues.

### 1.1 REVIEW COMMENTS ORGANIZATION

Wyoming's detailed comments are specific to those areas most likely to adversely impact businesses and communities in Wyoming and are organized as follows. Chapter 1 is an introduction to the document, Chapter 2 is review and comment on the alternatives presented in the DEIS. Chapter 3 includes detailed comments on specific issues areas including the proposed closure of the East Entrance (Section 3.1), proposed management of the snowmobiles in GTNP and the Parkway (Section 3.2), NPS guiding requirements (Section 3.3), wildlife and OSV use in YNP (Section 3.4), and NEPA considerations (Section 3.5). Chapter 4 includes specific comments for correction or clarification. Chapter 5 is a list of preparers and Chapter 6 is list of references used in the preparation of these comments.

## 2. COMMENTS ON DEIS ALTERNATIVES

Wyoming's general positions in regard to key elements of the alternatives presented in the DEIS are summarized below, followed by a Wyoming Preferred Alternative that combines elements from several alternatives and that we believe better meets the NPS dual mandate of providing for the public enjoyment of the parks while conserving park resources and values.

### 2.1 ALTERNATIVES

The NPS Preferred Alternative (Alternative 1) would essentially continue winter use management according to provisions in the Temporary Winter Use Plan and Environmental Assessment (EA) (NPS 2004). The State of Wyoming supports elements of the Preferred Alternative including continued snowmobile access to the YNP, GTNP, and the Parkway; the requirements for BAT snowmobiles in YNP; and daily entrance limits that are near historic levels. We are absolutely **opposed** to closure of the East Entrance and do not support the requirement that all snowmobiles use commercial guides.

Wyoming is opposed to snowcoach-only access and closure of the CDST and Jackson Lake to motorized access as proposed in Alternative 2. We recognize that snowcoaches provide an important choice for winter access to YNP but snowmobiles clearly remain the most popular means for the public to access the park. Snowmobile BAT requirements have proven very effective for improved air quality and noise levels. Both choices should be available to best meet visitor preferences and demand.

We are opposed to Alternatives 3A and 3B. These alternatives would essentially eliminate reasonable access to opportunities for the public to enjoy YNP, would devastate the regional winter tourism industry, and would not meet the desired conditions for visitor access and experience. The CDST and Jackson Lake would be closed, further eroding public access to public lands.

We are supportive of management options put forth in Alternatives 4 and 5, including allowing limited non-commercially guided snowmobile access in YNP, allowing limited non-BAT (but EPA compliant) snowmobiles on the CDST, allowing commercially guided snowmobiles on the CDST, and seasonal visitor limits that will allow more flexible daily entry limits during busy holidays and weekends. We request non-BAT snowmobile access to Jackson Lake.

We are opposed to Alternative 6 because it would close the East Entrance and the CDST. We also believe plowing the roads from the West Entrance to Old Faithful and from Mammoth to Madison Junction will greatly detract from the winter experience in YNP.



### 2.1.1 Wyoming Preferred Alternative

The State of Wyoming encourages NPS to continue to look at innovative ways to manage winter-use in YNP, GTNP, and the Parkway. We believe the range of alternatives provided in the DEIS contain several innovative elements that, when combined, will provide an alternative that is protective of the parks' resources and increases the range of appropriate recreational winter-use opportunities. Table 2-1 below provides a comparison of the key provisions in the NPS Preferred Alternative with those provisions we request be included in the Final EIS Preferred Alternative. The key differences include:

- Keeping the East Entrance open
- Allowing limited non-commercially guided snowmobile access in YNP
- Allowing limited non-BAT (but EPA compliant 2007 model year or newer) snowmobiles on the CDST and allowing non-BAT snowmobile use on Jackson Lake.

**Table 2-1 Comparison of Provisions in NPS Preferred Alternative with Wyoming Requested Provisions**

Topic	Alternative 1 Provisions			Wyoming Preferred Provisions		
<b>YNP</b>						
East Entrance	Closed			Open		
Seasonal Limits	No, Daily Limits Only			Yes, Flexible Daily Limits		
Snowmobile Guiding Requirements	All snowmobiles commercially guided			25% non-commercially guided		
<b>GTNP/Parkway</b>						
	CDST	Grassy Lake Road	Jackson Lake	CDST	Grassy Lake Road	Jackson Lake
Daily Entry Limits	50	50	40	50	50	100
BAT Requirements (number)	Yes (50)	Yes (50) <sup>1</sup>	Yes (40)	Yes (25), No (25) <sup>2</sup>	Yes (15), No (35) <sup>3</sup>	No
Guiding Requirements	No	No	No	No	No	No

<sup>1</sup> For snowmobiles traveling west and not originating in Targhee National Forest

<sup>2</sup> Non-BAT snowmobiles would be 2007 or newer model year

<sup>3</sup> 25 would be 2007 or new model year, 10 would be pre-2007 model year but only if they originate in Targhee NF.

### 3. DETAILED COMMENTS ON KEY ISSUES

The key issues of concern for the State of Wyoming for winter use management include the proposed closure of the East Entrance, proposed management direction for snowmobiles in GTNP and the Parkway, NPS commercial guide requirements, the purported effects of OSV use on park wildlife, and NEPA considerations. Our major concerns with these issues are addressed in the following sections.

#### 3.1 PROPOSED CLOSURE OF THE EAST ENTRANCE

NPS Alternative 1 (the Preferred Alternative), and Alternatives 2, 3, and 6, propose closing the East Entrance Road and Sylvan Pass to through motorized traffic, virtually eliminating motorized access or OSV use from the East Entrance to other destination points within the park, and conversely, from destination points within the park out over Sylvan Pass to the East Entrance. As NPS is well aware, this proposal is strongly opposed by residents and business entities in the gateway community of Cody, in Park County, and to the State of Wyoming. This area is popular with both snowmobilers and skiers and loss of these local opportunities is unacceptable.

The primary justification cited for closing this entrance is health and safety concerns related to avalanche hazards in the Sylvan Pass Area and low-visitor use compared to other entrances. We believe NPS has overstated the employee and visitor safety issues associated with avalanche control at Sylvan Pass as justification for closing the East Entrance while ignoring similar concerns at the Talus Slope area along the South Entrance Road. We also believe NPS has failed to implement past recommendations that could further reduce hazards to employees and further improve and enhance their very successful avalanche control program. While The NPS acknowledges the adverse economic impact closure of the East Entrance will have on local Park County businesses, we still believe the economic analysis is flawed and that economic impacts are not accurately disclosed. Finally, we believe that inconsistent NPS management actions contribute substantially to low-visitation at the East Entrance and the associated adverse economic impacts on local Park County businesses. These issues are detailed in the following subsections.

##### 3.1.1 Human Health and Safety Concerns at Sylvan Pass

We fully appreciate the parks' concern for employee and visitor health and safety. We recognized that avalanche control at Sylvan Pass and elsewhere in the park presents unique safety challenges requiring specialized training and equipment. We further recognize that NPS has successfully met this challenge for more than 30 years and has implemented mitigations to reduce the risk from avalanche hazards to visitors and employees. We do not accept the notion that safety issues have now changed to the degree they can no longer be successfully mitigated.

One of the key employee safety concerns discussed in the DEIS (p. 97) is the fact that NPS employees cross several uncontrolled avalanche paths on the way to the howitzer gun mount. We have reviewed numerous unpublished documents related to avalanche control in YNP (provided by NPS to Park County and the State of Wyoming on January 22, 2007) as well as the Avalanche Hazard Assessment and Mitigation Report (Avalanche Hazard Report) for Sylvan Pass (Comey 2007). This safety issue has clearly been recognized for a long time yet NPS has failed to implement recommended mitigations that could reduce this hazard.

For example, the Avalanche Hazard Report (Comey 2007) provides numerous mitigations for reducing avalanche hazards at Sylvan Pass. One recommendation was to evaluate using an avalauncher as an alternative artillery delivery method. This same recommendation was put forth in 1999 when NPS purchased an avalauncher and subsequently contracted for an independent assessment (NoHow Inc. 1999) to determine, among other things, if the avalauncher could be used to decrease exposure to crews traveling to the howitzer gun mount. The assessment indicated the avalauncher could decrease the amount of exposure and recommended test firing from various locations to confirm this possibility. We can find no information, and NPS has provided none to indicate this was ever done. We can only conclude that NPS ignored this potential mitigation. It is also our understanding that NPS has since given the avalauncher to the Gallatin National Forest.

Past reports have also recommended installing a weather station at Sylvan Pass to provide real time, site-specific data for improved avalanche forecasting. This recommendation was put forth in the 1999 NoHow report and again in the 2007 Avalanche Hazard Assessment report. NPS has yet to implement this obvious safety improvement (a basic industry standard). It appears to us that NPS has the funds to conduct studies of the avalanche hazards (but then fails to act on the results), to purchase equipment only to give it away, and then continues to describe the hazards as “extreme and unavoidable” when their enviable safety record for avalanche control at Sylvan Pass speaks otherwise. It is clear to us that NPS has the experience and tools to safely manage avalanche hazards at Sylvan Pass and we ask that they recommit to keeping the pass open and safe for winter use.

#### **3.1.1.1 *The Talus Slope***

The DEIS identifies avalanche hazards as one of “three primary health and safety issues regarding winter visitor use” (Table S-2: Major Issues, p. S-5). The DEIS goes to great length describing the inherent avalanche hazards encountered by visitors traveling over Sylvan Pass and to employees conducting avalanche mitigation in the avalanche zone area of Sylvan Pass (Chapter III, pp. 95–100). What NPS fails to include in the DEIS is a discussion of the Talus Slope area along the South Entrance road, despite the fact that these hazards are well documented in past winter use planning documents, NPS operational plans, and NPS contracted reports related to YNP’s avalanche program. This is a serious and puzzling

omission, especially in light of NPS's often repeated statement that "safety is of paramount concern." A summary of key reports documenting conditions at the Talus Slope follows:

- ***Avalauncher Evaluation and Site Review (NoHow Inc. 1999).*** This report discusses using the avalauncher (purchased by NPS and subsequently given away by NPS) to control avalanche hazards at the Talus Slope. NoHow Inc. visited YNP to evaluate firing locations for the avalauncher at the Talus Slope and to also evaluate its potential use at Sylvan Pass to, specifically to allow slope stability testing at the pass in the earlier avalanche target areas (i.e., the target areas that employees must pass under to reach the howitzer mount). The report also documents that have been near-miss incidents when a small avalanche was released by a grooming machine and the size of the avalanche "was able to bury the grooming machine in up to four feet of debris."
- ***Avalauncher Tower-Site Placement, South Entrance Road, Talus Slope, (Sumeriski 1999).*** This proposal, prepared immediately following NoHow's, Inc. site visit in October, 1999, described potential locations for the avalauncher tower in recognition of the need for avalanche control. The proposal includes descriptions of near-miss avalanche incidents at the Talus Slope, along with the statement that "many of the employees have witnessed avalanche incidents and have been caught in them, many with runouts significant enough to be potentially fatal."
- ***YNP Avalanche Control Program (NPS 2003).*** This document describes the NPS avalanche safety plan for identified avalanche zones within YNP road corridors. The document's emphasis is employee and visitor safety. Appendix D is a draft Avalauncher Operation Plan for the Talus Slope Area, clearly demonstrating that NPS recognizes avalanche hazards in this area as an employee and visitor safety issue.
- ***2000 FEIS, p. 134.*** The FEIS states,  

Avalanches are prevalent or a concern in three locations adjacent to roads...Winter avalanche control is currently practiced at Sylvan Pass and the Talus Slope (south of Lewis Lake. Sylvan Pass and the Talus Slope area include road segments that are groomed in the winter for snowmobile use.

Pp. 134-135 of the same document contains the following statements,

The NPS has conducted an avalanche control program to maintain the road in a reasonable safe condition for visitor traffic and for spring plowing. Risks associated with avalanche control can potentially affect both employees and visitors. At the Talus Slope, an avalauncher is used to lob charges onto the slope. Installed in 1999, the avalauncher allows for remote delivery of explosives, minimizing the need for hand-set charges.

P. 226 states, "Avalanche control activities would continue on YNP's East Entrance road, at the Talus Slope and Washburn Hot Springs (spring only) and in GTNP."

- ***2003 SEIS, p. 115.*** The SEIS states, "Avalanche control is a high-risk operation. NPS staff conducts avalanche control operations on both the South Entrance and East Entrance roads." The Talus Slope is along the South Entrance road.
- ***2004 Temporary Winter Use EA, p. 24.*** The EA states, "Avalanche control will continue at Sylvan Pass and other locations..." We presume one of the other locations would be the Talus Slope.

These documents raise many concerns regarding the DEIS and appropriate information disclosure, especially given NPS has stated in their response to Cooperating Agency comments on the PDEIS (NPS 2007, p. 2) that “increased attention to safety issues *“park-wide”* is one reason for proposing to close the East Entrance. Did the previously existing visitor and employee health and safety issues at the Talus Slope simply vaporize? According to comments reported in the press (Billings Gazette 2007), NPS is no longer conducting avalanche control at the Talus Slope because of the lack of heavy snow. Why then wouldn’t lack of heavy snow also reduce avalanche hazards at Sylvan Pass? This apparent lack of concern and disclosure of avalanche hazards at the Talus Slope demonstrates serious inconsistencies in how YNP manages avalanche safety issues *“park-wide.”*

While choosing to ignore the hazards at the Talus Slope, NPS provides new information in the DEIS describing the 1980s closure of Dunraven Pass to OSV travel “due to growing concerns about the pass’s avalanche danger and because it was lightly used by oversnow vehicles” (p. 100). Why is this new information now included in the DEIS, when it wasn’t mentioned in the PDEIS? Is this perhaps to further justify the alternatives that propose to close Sylvan Pass to OSV travel based on past NPS actions? How is this area similar to Sylvan Pass? Was avalanche control ever conducted at this pass? Was it a groomed route? It certainly is not a main gateway entrance so we fail to see why this new information is particularly relevant.

While we appreciate YNP’s commitment to protecting employee and visitor safety, we also can’t help but wonder why YNP didn’t include the Talus Slope area when they engaged the services of an independent avalanche specialist to prepare an avalanche hazard assessment and mitigation report for Sylvan Pass when the scope-of-work for the assessment had the following purpose statement, “The leadership of Yellowstone National Park is committed to protecting all employees and visitors entrusted to their care. This assessment will address snow avalanche safety issues.” It appears that there may be more areas with snow avalanche safety issues than just Sylvan Pass.

Finally, we question whether the DEIS meets its legal mandate to disclose cumulative impacts as described in CEQ regulations (1508.7) by not including discussions on either the Talus Slope avalanche hazard and possible avalanche mitigation operations or both as “past, present, or reasonably foreseeable future actions...”

### **3.1.2 Avalanche Hazards and DEIS Effects Analysis**

The DEIS (pp. 212 and 213) describes the effects on public and employee health and safety for alternatives 4 and 5 (Sylvan Pass Open) as “major, direct, long term, and adverse.” A major impact is defined in the DEIS (p. 207) as, “The impact to employee or public health and safety is substantial. Extensive mitigation measures would be needed, and their success would not be guaranteed...” For all other alternatives, where Sylvan Pass is closed, effects on public and employee health and safety are

described as “minor, short-term, and adverse.” Wyoming is concerned that the DEIS purposely overstates the safety effects for Alternative 4 and 5 to justify closing Sylvan Pass in the Preferred Alternative. Consider the following:

- Avalanche hazards at Sylvan Pass were evaluated in the 2000 FEIS, the 2003 SEIS, and the 2004 Temporary EA. In the 2000 FEIS, the effect on visitors utilizing the East Entrance and employees involved in avalanche control was described as “minor to moderate and adverse” (p. 266). In the SEIS, effects to *employees* involved in avalanche control were described as “adverse and major” (p.192). Effects to the public were incorporated by reference from the FEIS so were “minor to moderate and adverse.” In the Temporary EA, after implementation of a helicopter as part of avalanche control operations, the effects on employee safety are described as “moderate, adverse” (p. 98). Effects to visitor safety are not specifically addressed in the EA.
- In the 2007 DEIS, the effect on public and employee safety for Alternatives 4 and 5 is described as “major and adverse” (pp. 212 and 213). Since the major difference between alternatives 4 and 5 and other alternatives is that Sylvan Pass is open, we question what conditions at Sylvan Pass have changed since 2004 to warrant avalanche hazards to now be considered a “major, adverse” impact, especially to visitors. The helicopter is still in use so why in the last three years have the effects gone from “moderate adverse” to “major adverse.” It appears to us a contrived effort to justify closure based on overstated safety concerns.
- We also suggest that it would be more appropriate to describe the effects of Alternatives 4 and 5 as “moderate, adverse” since NPS’s enviable safety record for avalanche control at Sylvan Pass demonstrates the effects meet the definition of a moderate effect, defined as “Mitigation measures would probably be necessary and would likely be successful” on p. 207, Table 4-40).

In the January 5, 2005 Cooperating Agency Review PDIES Comments (ERG 2007, p. 8) we expressed concerns over the PDEIS’s Health and Safety inconsistency for those alternatives that would allow non-motorized travel over Sylvan Pass. We reiterate this concern and recommend you consider our January 5, 2007 comment when finalizing the cumulative effects analysis in the upcoming FEIS.

Finally, considering Sylvan Pass as backcountry in these alternatives is also inconsistent with NPS policy (NPS 2006a, Section 8.2.2.4) which states,

The Park Service uses the term backcountry to refer to primitive, undeveloped portions of parks. This is not a specific management zone, but rather refers to a general condition of land that may occur anywhere within the park.

Yet the DEIS states (p. 27): “for all alternatives, the parks are divided into *four management zones*...” Figure 2-1 in the DEIS depicts the East Entrance road over Sylvan Pass as a Road Corridor and the areas immediately adjacent to the road as Transition and Developed Areas. Also on p. 27, “Backcountry” is defined as,

Areas where natural sights, sounds, and smells dominate and human-caused activities are minimal or completely absent. Specifically, this zone includes all areas more than 1.5 miles from the nearest road or developed area.

Based on the information provided on p. 27, Sylvan Pass should be classified as **Transition**, as “this zone would include those roads not open to OSV travel in the winter, but which may be open to motorized travel in summer.”

### **3.1.3 Park Service Winter Operations and Avalanche Control**

According to the DEIS, alternatives that keep Sylvan Pass open to OSV use and continue avalanche control and grooming will have an adverse effect on Winter Operations, based primarily on the associated costs. The DEIS lists the unit cost for avalanche control at Sylvan Pass as approximately \$200,000 per annum (p. A-54). Given that this amount is around 5% of the park’s winter budget, this argument alone should not be the reason for closing the gate during the winter months. Sand storage appears to cost as much.

Furthermore, the decision to use the helicopter as the primary means of avalanche control has more than doubled the cost of the avalanche control program. According to information provided by the NPS, the estimated cost per winter season for the helicopter is approximately \$131,500. This compares to around \$37,000 for the howitzer. The NPS has raised the issue of costs associated with keeping Sylvan Pass open for relatively few visitors (YNP Newsletter 2007). What the NPS fails to mention is these costs have increased substantially because they chose to abandon their long successful howitzer program for a dual program that relies primarily on the very expensive helicopter.

We have real concerns about the limitations of using the helicopter as the primary means of avalanche control, apparently shared by others, as discussed below.

#### **3.1.3.1 *Limitations of Using the Helicopter for Avalanche Control***

The Avalanche Hazard Report (Comey 2007) acknowledges the viability of helicopter dispensed explosives to control Sylvan Pass avalanche hazards, but also acknowledges the limitations of the sole use of this alternative due to weather and associated flying conditions, and the associated delay in performing timely and effective control operations during or immediately after a storm event. On p. 24 of the Avalanche Hazard Report it states:

This change in management approach is likely to result in an increase in the amount of time the road is closed due to avalanche hazards. In addition, the inability of helicopter missions to be conducted during storm conditions could result in an increase in the number of large and natural released avalanches that impact the road.

The report goes on to suggest the helicopter delivery system supplement, not replace, the artillery delivery system, which is the industry standard for programs utilizing multiple delivery systems. It is unclear to us why NPS would choose to rely primarily on a helicopter for avalanche control when it is not industry

standard and may be less effective in reducing avalanche hazards to park visitors. This hazard report supports our past stated concerns regarding the sole use of helicopter avalanche control methods.

We also reviewed the Control Method Journals provided by NPS for both the 2004-2005 and 2005-2006 seasons for helicopter missions on Sylvan Pass. The reliability of the helicopter is less than impressive due to factors including weather conditions either at the pass or in-route to the pass, and contract helicopter availability. In some cases, lack of helicopter availability delayed operations for several days.

Compared to the howitzer, NPS data clearly shows that using the helicopter has increased the amount of time the pass is closed. Using information provided by NPS (John Sacklin pers. comm.), we looked at the number of days the East Entrance was closed for the period from 1992 through 2006. For the 2006-2007 winter season, when the helicopter was the only avalanche control method used, Sylvan Pass was closed a total of 15 days for 4 separate avalanche control missions. The season was 81 days long so the pass was closed approximately 19% of the season. In contrast, prior to adopting the helicopter as the primary means for avalanche control, the pass was rarely closed for more than one day per control mission, generally for less than three days for an entire season, and never more than a total of seven days (Figure 3-1). That is the standard NPS should strive for to ensure consistency within and between seasons, and to provide visitors and local businesses predictability in making travel plans or business decisions.

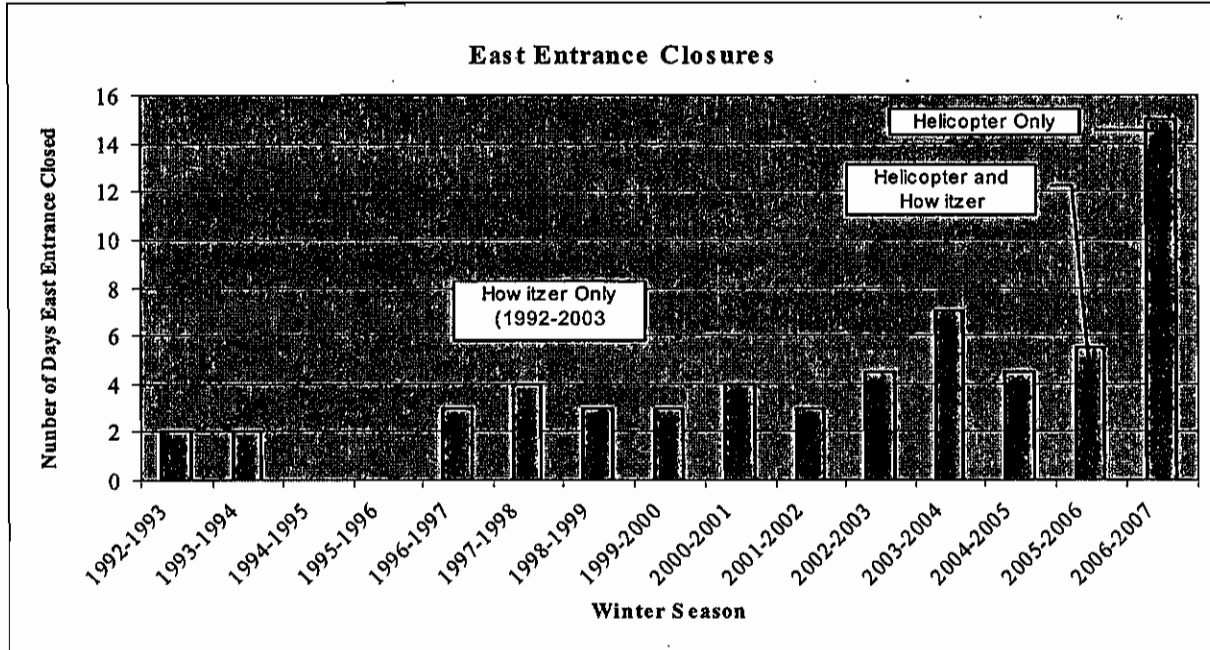


Figure 3-1 East entrance closures 1992–2007



### **3.1.3.2 Recommendations for Avalanche Control at Sylvan Pass**

If the pass is closed for longer periods and there is potential for an increase in the number of large and natural released avalanches, we question why the NPS chose to discontinue use of the howitzer rather than implementing additional mitigations to reduce risks to employees conducting avalanche control operations. We are encouraged by the discussion of potential additional mitigations in the *Avalanche Hazard* (Comey 2007) and *NoHow Inc. (1999)* reports that can be used to further augment and improve the current mitigation program as we are strong advocates of all actions that minimize the risk of avalanche hazard to both visitors and employees. In light of these reports, we suggest the following changes to the YNP avalanche program to further improve safety and provide a more responsive control program at Sylvan Pass.

The State of Wyoming strongly recommends that NPS resume use of howitzer as the primary method for avalanche control at Sylvan Pass since:

- The howitzer (artillery) is the industry standard for avalanche control in the US. An avalanche control program consistent with industry standards should be the goal of YNP.
- Yellowstone has an excellent safety record for avalanche control at Sylvan Pass using only the howitzer. There have been no visitor or employee injuries or deaths as a direct result of an avalanche control operations or avalanches since control operations were implemented over 30 years ago.
- The cost of using a helicopter for avalanche control is approximately 3.5 times more than using the howitzer (\$131,647 versus \$37,168 based on NPS data). Resuming use of the howitzer would significantly reduce costs associated with keeping Sylvan Pass open.
- The helicopter-only control program implemented last year will assure longer closures (documented above) which will continue to adversely impact local business and visitors. The direct result of the prolonged closures in 2006-2007 was the closure of Park County's historic Pahaska Tepee and a loss of twenty-four winter jobs. Local businesses need consistency and a level of predictability to sustain operations and build a customer base. Use of the howitzer for avalanche control can provide that consistency.

The State of Wyoming also requests that NPS act on mitigations recommended by *NoHow Inc. (1999)* and *Comey (2007)* to improve the avalanche control program, including installing a permanent weather station at Sylvan Pass to improve avalanche hazard forecasting and using an avalauncher to test snow stability and reduce hazards to employees crossing uncontrolled avalanche paths while conducting avalanche control at Sylvan Pass.

### **3.1.4 Socioeconomic Analysis Review**

The economic analysis presented in the March 2007 update of the DEIS is nearly identical to the previous version presented in the PDEIS. Although the National Park Service clearly states that they engaged in

public scoping, they did not sufficiently modify the economic analysis by Duffield and Neher (2006), or consider new economic analyses using unbiased data. The proposed closure of the East Entrance is a major action on the part of NPS and clearly warrants a more focused look at the communities that will be directly impacted.

One of the main issues derived from the needs assessment and public comments was potential adverse economic effects as stated on p. S-5,

The potential economic impacts of various winter use elements on local businesses and economies are at issue. Comments range from statements that protection of park resources is paramount, to the social and economic benefits of various access options. Affordable access, diversification of gateway community economies, protection of local business opportunities, and a need for additional socioeconomic surveys were all raised as issues, as was the potential closure or allocation changes at some entrances.

Notwithstanding, the Park Service selected Alternative 1 as its Preferred Alternative. This alternative sets daily entrance limits of 720 snowmobiles per day of which none come from the East entrance. The socio-economic analysis using IMPLAN™ reveals that Alternative 1, when compared to the 1997-1998 historical visitation baseline, results in a range of expected economic conditions from “negligible adverse to beneficial” for the three-state and five-county analyses, and for Cody and Jackson. However, “negligible adverse to minor beneficial” economic effects are expected for West Yellowstone. In addition, the NPS formally recognizes adverse economic effects to communities (see p. 168 regarding business on the North Fork of the Shoshone River) and the likelihood that Alternative 1 will exacerbate undesirable economic effects, yet offers no mitigation strategies, nor serious consideration of selecting an economically favorable alternative.

There are several problems with this analysis that leads to understated economic effects as acknowledged by the Park Service and Duffield and Neher (2006) who conducted the analysis. First is the choice of baseline data—it does not appropriately reflect historic use levels. Second, IMPLAN™ is not an appropriate tool to analyze changes in winter recreation given that data are annual, and that the most current data available are 2003—the year where the temporary plan came into effect. The relevance of these two issues is discussed below.

#### **3.1.4.1 *Baseline Data***

The choice of the 1997-1998 season as a benchmark does not represent visitation and leads to understated economic effects thereby downplaying the effects to communities of visitation reductions.

The range of benchmarks provides an array of economic effects, however, only *one* benchmark is appropriate and relevant—the historical baseline. In estimating changes to social welfare because of decreases in amenities, it is important to look at welfare associated with the original

endowments, or in this case, original use levels (Mitchell and Carson 1989). The temporary plan came into effect in 2003 reducing visitation significantly. Therefore, current use levels do not reflect the original social welfare associated with winter use. Similarly, estimating changes in community welfare as compared to the No-Action Alternative is not relevant. Therefore, the only relevant economic effects predicted for each scenario are those measured against the historical baseline.

The baseline (119,274) was chosen to reflect historical levels. Duffield and Neher (2006b) provide their rationale for using this figure based on the NPS opinion that increased visitation in 2000-2001 and 2001-2002 was a result of the expected reduction in visitation in 2003. While the latter two seasons may not reflect average levels, it is clear that visitation increased steadily since the 1996-1997 season. Analysis based on the 1996-1997 season visitation rates underestimates economic effects. The graph below (Figure 3-2) illustrates the upward trend in visitation without the 2000-2001 and 2001-2002 seasons. Visitation of 130,000 estimated using a polynomial trend would more accurately capture historical visitation thus resulting in greater economic effects given proposed reductions associated with NPS alternatives.

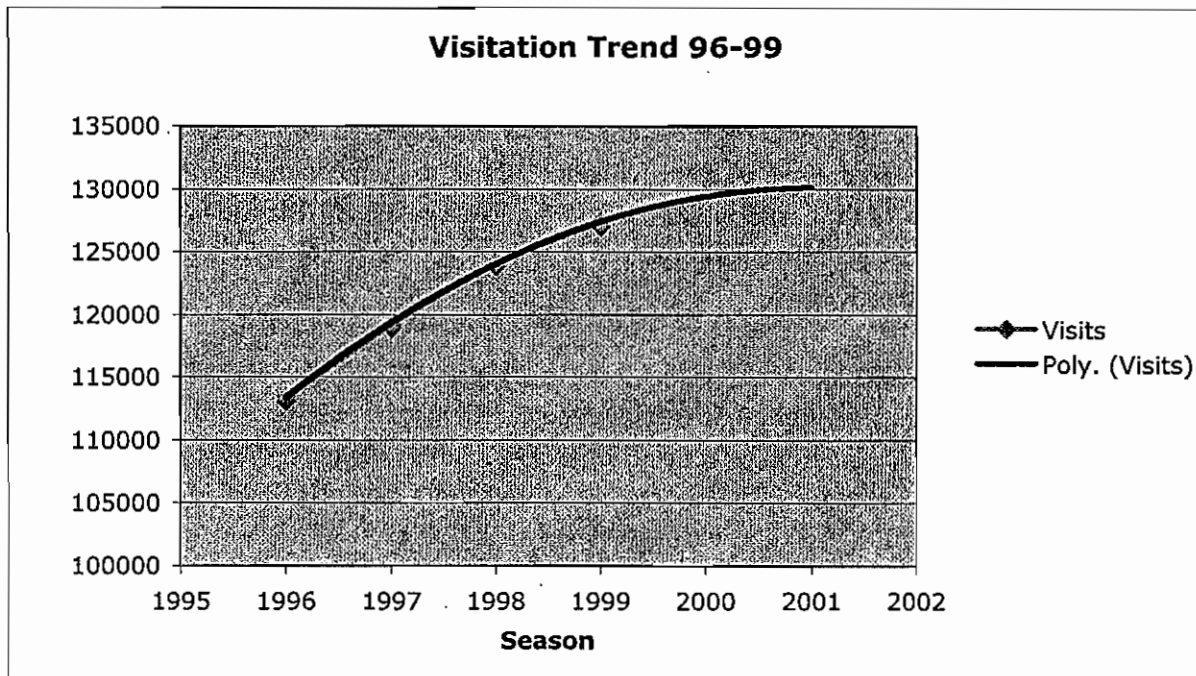


Figure 3-2 Visitation trends from 1996–1999

If increased visitation in 2000-2001 and 2001-2002 were a result of factors other than expected changes in policy, visitation would exceed 130,000 providing a higher historical baseline and greater adverse socio-economic effects. The following graph (Figure 3-3) indicates actual visits with actual visits in the two seasons preceding the 2003 restrictions.

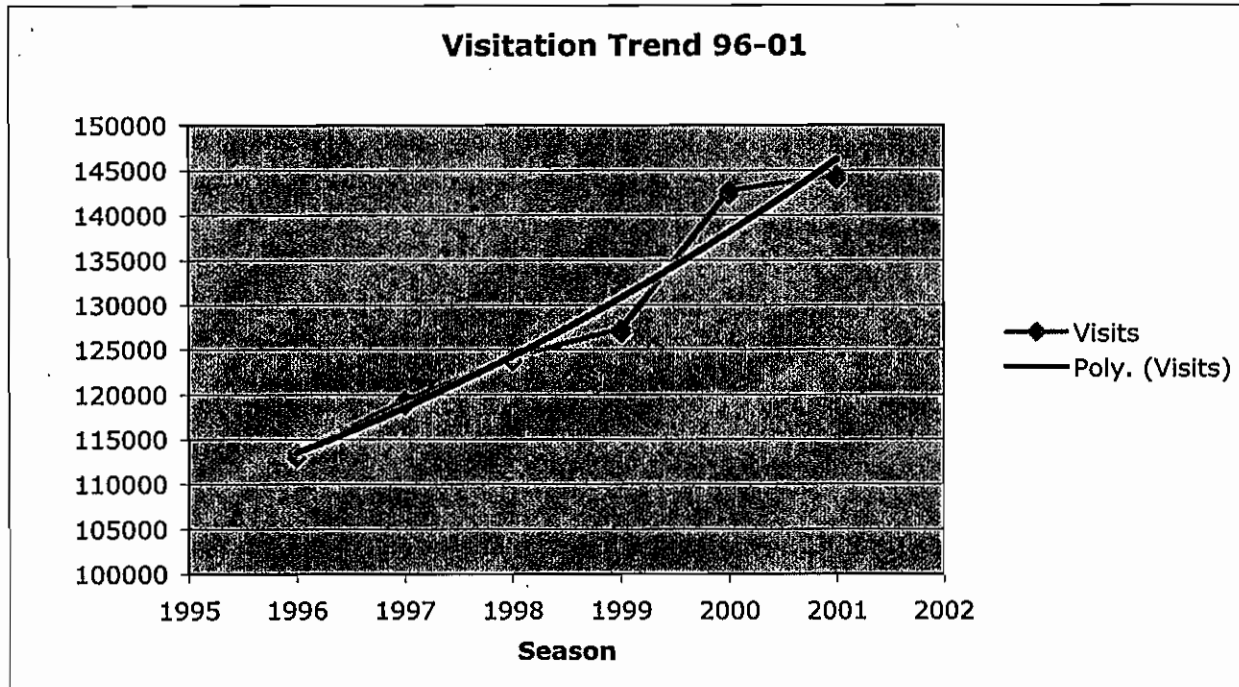


Figure 3-3 Visitation trends 1996–2001

### 3.1.4.2 IMPLAN

The use of IMPLAN is inappropriate for three reasons. First the model uses annual data to measure changes to the winter economy. The NPS does recognize that local effects to communities and families will be missed, or understated, yet does not attempt to engage in additional or alternative analysis to measure such effects.

Second, the model is static and cannot be used to derive cumulative effects (a significant requirement in planning). While the IMPLAN analysis is sound and assumptions are clearly stated, the models cannot accurately capture the economic effects to communities, especially at the scale and scope of analyses. Adverse economic effects will occur at the community level making the three-state and five-county analysis somewhat irrelevant given their sizes. As the authors point out, IMPLAN is a static model and cannot be used to test temporal changes in output and employment (Duffield and Neher 2006a, p. 16) and thereby, cannot measure or capture cumulative economic effects.

Third, while the NPS acknowledges that 2003 data are not current, and that they are the best available, they remain inappropriate. The base data used for the IMPLAN model reflect the economy in 2003 for each of the scenarios modeled. Decreases in winter visitation in 2003, as a result of the temporary plan, would be captured by the relationships and multipliers modeled by IMPLAN. Estimating negative

economic effects arising from NPS alternatives would then be compared with an economy that had already experienced decreases in economic activity, thus understating the full effects.

In summary, the economic effects presented for Alternative 1 are understated and would adversely and significantly affect small businesses in Cody. Adverse economic effects for Cody cannot be captured with IMPLAN given the scale and scope of analysis.

Given that all visitation levels are acceptable under the six alternatives, it is not clearly stated nor justified why Alternative 1 is preferred. Economically, Alternative 4 is superior. The Preferred Alternative results in negative economic effects and does not meet the needs of surrounding communities.

### **3.1.4.3 *Economic Issues Brought Forth From the PDEIS***

Our comment document on the PDEIS provided more detailed information on some of the specific socio-economic impacts to Park County businesses due to NPS management policy for the East Entrance and expected adverse impacts if the East Entrance is closed (ERG 2007). We incorporate those comments by reference for NPS to review and consider during preparation of the final EIS. We reiterate and refine key points from those comments below.

National Park Management Policies (NPS 2006a) encourage parks to support gateway communities and their economies:

**9.1.1.2 Integration of Facilities into the Park Environment:** Whenever feasible and authorized by Congress, major park facilities—especially those that can be shared with other entities—should be developed outside park boundaries. The Service will encourage the private sector to meet facility needs in gateway communities and thus contribute to local economic development, encourage competition, increase choices for visitors, and minimize the need for in-park construction.

**9.3 Visitor Facilities:** The Park Service will encourage the development of private sector visitor services in gateway communities to contribute to local economic development, encourage competition, increase choices for visitors, and minimize the need for in-park facilities.

The North Fork Corridor and the City of Cody have a remarkable existing infrastructure on which to build an economically-sustainable winter tourism industry. This industry is strongly dependent on winter access to Yellowstone (Taylor 1999, 2007). Closing the East Entrance along with loss of motorized access to destination areas within YNP will virtually assure stagnant growth. Keeping the entrance open, with sufficient daily entries to support existing and future viable businesses will benefit everyone, including YNP.

We strongly believe that NPS policies have a direct impact on our local businesses. Extended closures of the East Entrance, lack of more responsive, accurate, and timely communications with local businesses and visitors regarding closures, and continued confusion over winter use opportunities fail to provide a level of consistency and predictability from year to year for effective management by local businesses and make it difficult for visitors planning to visit YNP via Cody and the East Entrance.

Finally, p. 9 of the DEIS states:

The decision for a long-term winter plan is intended to provide park visitors, local communities, and other stakeholders with assurance that winter use management of the parks will remain fairly stable and predictable over the long-term. Such assurance will facilitate an environment in which visitors can make informed decisions about visiting the parks and allow tourism-based local communities and businesses to plan and invest with a certain degree of certainty.

Permanently closing the East Entrance will provide no such assurance for the citizens of Wyoming and will certainly lead to an erosion of public support for our national parks.

### **3.1.5 Visitor Access and Circulation**

As discussed in Section 2.5.5 of the DEIS (p. 34), the Madison to Norris road segment (Gibbon Canyon Road) could potentially be closed for research projects to determine whether bison use of this segment has resulted in impacts to their population and distribution. If this road segment is closed, there would clearly be adverse impacts on visitor access and circulation, including loss of opportunity to travel the Grand Loop and significantly greater travel distances for those traveling from Mammoth to Old Faithful.

We believe potential closure of the Gibbon Canyon Road has implications for any decision NPS makes regarding the East Entrance. If Gibbon Canyon Road is closed, travel from the East Entrance to the destinations like Old Faithful would be shorter than traveling from Mammoth (via Canyon). This could potentially increase visitation levels at the East Entrance where visitor use has declined significantly (approximately 80% in the last two years based on Table 3-23, DEIS p. 143). Closing both Gibbon Canyon Road and the East Entrance would decrease opportunities for oversnow travel in the park and would concentrate use into smaller areas. This is contrary to the desired condition for visitor access and experience.

Furthermore, we remind NPS that visitors are opposed to management options that would reduce access by closing roads, restricting groomed roads to snowcoaches, or plowing the road from West Yellowstone to Old Faithful (Freimund and Borrie 2001, p. 30). All of these management actions are proposed within the scope of alternatives considered in the DEIS.

### **3.2 PROPOSED MANAGEMENT OF THE SNOWMOBILES IN GTNP AND THE PARKWAY**

The State of Wyoming supports managed winter use in GTNP and the Parkway, yet for the CDST, the Grassy Lake Road, and Jackson Lake, we believe the Preferred Alternative fails to provide needed changes in management direction that are necessary to restore winter use to levels necessary for maintaining long-term access to these historically popular areas. Our comments on the proposed management direction in the Preferred Alternative for the CDST, Grassy Lake Road and Jackson Lake, including suggested changes for NPS consideration, follow. These comments are largely brought forward from our comments on the PDEIS, with some changes.

#### **3.2.1 Continental Divide Snowmobile Trail**

Future management of the CDST in GTNP and the Parkway is a key concern for the State of Wyoming. The CDST is a regional trail system developed by the State of Wyoming, Wyoming tourism and business interests, and snowmobiling enthusiasts. The trail facilitates multi-day touring opportunities between Lander, Wyoming and West Yellowstone, Montana where it connects with additional snowmobile trails in Montana and Idaho. The portion of the trail in GTNP and the Parkway was designated in the 1990 Winter Use Plan and EA and environmental concerns were mitigated by locating the trail parallel to plowed highways.

In the DEIS, management options range from trail closure (Alternatives 2, 3, and 6) to keeping the trail open but with various restrictions. Additionally, the NPS proposes that for alternatives that include the CDST, the NPS will monitor and evaluate its use, and consider adaptive management, including potential closure, if use levels do not warrant continued operation (p. 36). In the Preferred Alternative, winter snowmobile use would be managed the same as it is under the current Temporary Plan with daily entry limits and BAT requirements for all snowmobiles.

One of our primary concerns with the Preferred Alternative is that there will be no change in how the CDST is currently managed, which, under the Temporary Plan, has resulted in a dramatic decrease in snowmobile use. In the seven years prior to implementation of managed winter use in 2003, snowmobile use on the CDST in GTNP and the Parkway averaged 1,688 visitors each season. After 2003, average daily use dropped by a staggering 97%, with annual use ranging from 17 to 139 visitors per season (based on visitation numbers provide in Table 3.25, p. 145). We believe this dramatic reduction is a direct response to the requirement that all snowmobiles meet BAT requirements. Yet rather than proposing a Preferred Alternative that can reasonably be expected to reverse these declines, the NPS prefers to continue the status quo.

While the State of Wyoming is encouraged that the Preferred Alternative will continue to allow unguided snowmobile use on the CDST, we ask that NPS also allow limited non-BAT snowmobiles use, as is

proposed in Alternative 4, provided the snowmobiles are EPA compliant 2007 model year or newer. By allowing only 2007 model year or newer snowmobiles on the CDST, the NPS could be assured that air emissions would be significantly improved compared to historic conditions since 2007 model year snowmobiles are required to have approximately 75% lower emissions compared to a conventional two-stroke snowmobile.

Our recommendation is that 25 non-BAT EPA compliant and 25 BAT snowmobiles per day be allowed on the CDST. Group size would be limited to 10. We believe this will increase use of the trail, increase revenues to NPS, provide more flexibility for visitors wishing to travel to GTNP and the Parkway along the CDST from adjacent public lands, and allow local businesses to recapture some of the winter business that has been lost due to current management direction. Potential impacts to park resources (air, sound, wildlife, safety, and visitor experience) can be evaluated as part of the adaptive management program, and if necessary, daily limits on the non-BAT and BAT snowmobiles could be adjusted to mitigate unplanned or unwanted outcomes. Additionally, since the number of non-BAT, but EPA compliant snowmobiles will be restricted, and often using the trail as a through-way to adjacent public lands, snowmobile use shouldn't be highly concentrated and air and sound emissions concerns in the parks would be minimal.

Finally, we reiterate that in regard to adaptive management, we are concerned when NPS states they will monitor and evaluate use of the CDST, and consider adaptive management, including potential closure, if use levels do not warrant continued action. Given the obvious impact current management has already had on trail use, and the fact that management direction won't change under the Preferred Alternative, it appears to be a foregone conclusion that implementation of the Preferred Alternative will eventually lead to closure of the CDST trail. We find that an unacceptable outcome for a trail that was intended not only to provide access to YNP, but also to adjacent public lands in Idaho and Montana via its connection to the Grassy Lake Road.

### **3.2.2 Grassy Lake Road**

The Grassy Lake Road provides snowmobile access from the Targhee National Forest in Idaho to Flagg Ranch in the Parkway. Prior to managed winter use in 2003, the Grassy Lake Road provided a popular route for snowmobiles traveling from the CDST in Wyoming to destinations on the Targhee National Forest. It also provided an alternative snowmobile route from Wyoming to West Yellowstone, Montana that did not require travel through YNP.

In the Preferred Alternative and Alternative 5, snowmobiles starting in the Targhee National Forest and traveling on the Grassy Lake Road to Flagg Ranch would be exempt from BAT and guiding requirements but would not be able to continue east past Flagg Ranch. Travel to the west for snowmobiles originating anywhere but Targhee National Forest would have to meet BAT requirements. In Alternative 4,



snowmobiles traveling on the Grassy Lake Road either from or to Flagg Ranch would be exempt from BAT requirements.

We propose that management of the Grassy Lake Trail can be simplified by allowing a limited number of non-BAT EPA compliant snowmobiles to travel in either direction and managing the Grassy Lake Road-CDST corridor as one unit. We recommend setting a daily limit of 15 BAT and 25 non-BAT EPA compliant snowmobiles and allowing those snowmobiles to travel either east or west. Non-BAT snowmobiles traveling to the west and starting their trip from the CDST on the Bridger-Teton National Forest or from Flagg Ranch would be required to be 2007 or newer model year. For snowmobiles originating on the Targhee National Forest and traveling east to Flagg Ranch and then returning, we propose a daily limit of 10 non-BAT, pre-2006 model year snowmobiles. By allowing some non-BAT use and managing the Grassy Lake Road-CDST as one unit, this trail corridor can provide improved access to the public lands to the east and west of GTNP and the Parkway.

### **3.2.3 Jackson Lake**

Wyoming residents have traditionally used Jackson Lake for ice-fishing, using snowmobiles mostly to transport gear to the lake. In addition, the Wyoming Game and Fish Department (WGFD) has expended considerable portions of their annual budgets to improving this fishery and would like to maximize public access and enjoyment of this world class fishery. In the alternatives where snowmobile use is allowed on Jackson Lake (Alternatives 1, 4, 5, and 6), all snowmobiles would have to meet BAT requirements. Daily entry limits would be 40 for Alternatives 1 and 5, and 100 for Alternative 4. For Jackson Lake, we propose that 100 non-BAT snowmobiles per day be allowed onto the surface of the lake. We support higher daily entry limits to help return angler utilization to healthy levels consistent with WGFD overall management of this important fishery.

Furthermore, as Wyoming commented on the preliminary Alternatives presented in the Spring of 2005, the final Preferred Alternative should contain some administrative access to Jackson Lake that is also exempt from BAT requirements. The Jackson Lake fishery is an important management aspect of the WGFD's overall management of fish in Wyoming. It is vital that WGFD personnel have reasonable access to Jackson Lake.

### **3.2.4 Best Available Technology and EPA Compliant Snowmobiles**

Wyoming fully supports requiring only BAT snowmobiles in YNP. Monitoring data clearly show that winter air quality has improved, sound levels have decreased, and employee exposure levels to a variety of chemicals have dropped appreciably. We also support further research and investment toward even cleaner, quieter snowmobiles or "improved BAT." To that end, we are encouraged that 13 of the 27

snowmobiles on the YNP snowmobile BAT list already meet the stricter emission and noise requirements for improved BAT as described on p. 49 of the DEIS.

However, as discussed above, for GTNP and the Parkway, we also strongly support allowing a limited number of 2007 or newer model year (EPA compliant) snowmobiles on the CDST and the Grassy Lake Road, as is proposed in Alternative 4. The CDST and Grassy Lake Road provide a through connection to popular snowmobile trails on adjacent public lands in Idaho and Montana. Current management requirements have virtually eliminated snowmobile use on this route and we think a more innovative management strategy is warranted. We also ask that NPS allow non-BAT snowmobile access to Jackson Lake so our residents and visitors have more winter access opportunities to this world class fishery.

### 3.2.5 Summary of Recommendations for Snowmobile Use in GTNP and the Parkway

We provide the following comparison (Table 3-1) of how the State of Wyoming would like winter use managed in GTNP and the Parkway. The NPS Preferred Alternative is very similar to what we propose, with the exception that a limited number of non-BAT snowmobiles would be allowed under our proposal. There would be a total of 60 non-BAT snowmobiles allowed daily on the CDST and Grassy Lake Road, of those 75% would be required to be EPA compliant 2007 model year or newer. We believe the CDST and the Grassy Lake Road, along with their connection to adjacent public lands in Montana, Idaho, and Wyoming, provide a snowmobile experience unique in the west. More flexible management on the part of the NPS could assure this experience and opportunity is preserved. For Jackson Lake, we request higher daily entry limits along with and exemption from BAT requirements.

**Table 3-1 Comparison of NPS Preferred Alternative with Wyoming Modified Alternative**

Topic	NPS Preferred Alternative			Wyoming Modified		
	CDST	Grassy Lake Road	Jackson Lake	CDST	Grassy Lake Road	Jackson Lake
Daily Entry Limits	50	50	40	50	50	100
BAT Requirements (number)	Yes (50)	Yes (50) <sup>1</sup>	Yes (40)	Yes (25), No (25) <sup>2</sup>	Yes (15), No (35) <sup>3</sup>	No
Guiding Requirements	No	No	No	No	No	No

<sup>1</sup> For snowmobiles traveling west and not originating in Targhee National Forest

<sup>2</sup> Non-BAT snowmobiles would be 2007 or newer model year

<sup>3</sup> 25 would be 2007 or new model year, 10 would be pre-2007 model year (if originating in Targhee NF).

### 3.3 NON-COMMERCIALY GUIDED SNOWMOBILE ACCESS AND SEASONAL ENTRY LIMITS

As stated earlier, the State of Wyoming supports limited non-commercially guided snowmobile access to YNP, GTNP, and the Parkway as proposed in Alternatives 4 and 5. We also support the concept of

seasonal entry limits and flexible daily entry limits as proposed in Alternative 5. Comments related to those issues follow. These comments are largely brought forward from our previous comments on the PDEIS but include new information as well.

### **3.3.1 Non-Commercially Guided Access**

The State of Wyoming strongly supports allowing limited non-commercially guided snowmobiles in Yellowstone National Park. Alternatives 4 and 5 include unguided and/or non-commercially guided opportunities and we request NPS include a similar provision in the Preferred Alternative. We recognize the need and value of offering park visitors the choice of using a commercial guide service; however, it should not be the only choice. We expect that there are a significant number of visitors wishing to control the emphasis and timing of their experience and unguided access would accommodate their desires.

This is particularly true for Wyoming snowmobilers who historically visited YNP through the East and South Entrances, are familiar with the YNP winter experience, and will return to the park in greater numbers if unguided access is an option. We do not want the NPS to steer YNP use toward the equivalent of another social welfare experiment for recreation, where all activities are looked after and contained. Not everyone wants or requires having their hand held. We ask that the NPS not diminish the opportunity to travel in YNP without a commercial guide.

Allowing limited unguided and/or non-commercially access will better meet the NPS Policy (NPS 2006) for Visitor Use (Section 8.2) that states,

In addition to structured activities, the Service will, to the extent practicable, afford visitors ample opportunity for inspiration, appreciation, and enjoyment through their own personalized experiences—without the formality of program or structure.

As we see it, there is no opportunity for snowmobile visitors to enjoy YNP through their own personalized experience. If NPS is truly concerned with provided high quality opportunities to “every segment of American Society” (p. 132), then non-commercially guided access should be allowed.

The DEIS outlines a training program for non-commercially guided snowmobiles, administered by YNP, requiring education on park rules, safety considerations, and appropriate actions to minimize impacts to wildlife and other park resources. We strongly support training and education for all visitors as the best tool to ensure protection and responsible use of the park. By implementing training requirements, along with adherence to intensive monitoring and adaptive management programs, we believe unguided access can provide safe, appropriate access to YNP without damage to park resources. We encourage NPS to work with local snowmobiling associations and other interested groups to develop a training program that is regionally available and accessible.

One of the arguments used by NPS in favor of requiring commercial guides for all snowmobiles is safety. While requiring commercial snowmobile guides can contribute to a safe visitor experience, other safety requirements, including implementation of lower speed limits, increased ranger patrols, and imposed nighttime restrictions, contribute as well. Non-commercially guided access hasn't been allowed, or even tried on an experimental basis, since implementation of managed winter use in 2003, so there is no directly comparable basis to conclude that it will be unsafe. It also appears that OSV response cases have increased to similar rates per 1,000 visitors to those seen before 100% guiding was required (DEIS, p. 95 and see additional comment on this topic in Section 4 of this document). As locally elected officials, we strongly oppose the notion of legislating or mandating agencies to remove personal responsibility from local residents.

Another assumed benefit to visitor experience from commercial snowmobile guides is "continued good opportunities to view wildlife and scenery, generally safe touring conditions, availability of information, and opportunities for quiet and solitude, and cleaner air..." We maintain these same experiences are equally available, and improved in some cases, with non-commercially guided snowmobile access. We fully support availability of commercial guides, their services are invaluable and they play a strong role in the local community. However, visiting the park with a commercial guide should not be the only option.

Finally, one of the major issues that is to be addressed in the DEIS is social and economic issues, including affordable access (Section 1.7.1, p. 18). We can't find anywhere in the DEIS where this issue is addressed outside Alternative 6, but allowing some unguided access should be a consideration to address this need. Commercial guides typically charge \$40 per person so providing an option where there is no guide fee can make a visit to YNP more affordable, especially for a family. A snowmobile trip to YNP can easily cost a family of four around \$800. We recognize that visiting YNP in the winter can be expensive so we support any measures that can reduce costs and provide more opportunity for the public to enjoy this unique winter experience not duplicated on other public lands.

### **3.3.2 Seasonal Limits and Flexible Daily Entry Limits**

Alternative 5 provides for seasonal entry limits, in addition to flexible daily entry limits, recognizing that demand varies over the course of the season, especially during popular holiday periods. The State of Wyoming supports the general concept since it provides businesses greater flexibility to respond to visitor demand on busy days. Evaluating the success or unwanted outcomes of allowing flexible entry limits could be addressed through the adaptive management program.

### **3.4 WILDLIFE AND OSV USE IN YNP**

The Purpose and Need (DEIS p. S-4) states that the management of snowmobiles and coaches should ensure that "impacts to wildlife are mitigated and effective wildlife habitat for winter survival is

protected.” The wildlife literature (Toweill and Thomas 2002) generally concludes that human-caused disturbance on the winter range is detrimental to ungulates and therefore should be avoided. Such references are generally pertinent to hunted populations, and may have little application to non-hunted populations where animal tolerance to human presence is high.

The DEIS assumes that since the protection of wildlife is an emotional public issue, it automatically warrants inclusion as a selection criteria. We question that assumption for several reasons: (1) animals in the YNP exhibit extraordinary tolerance to human presence; (2) documented over-the-snow-vehicle (OSV) use has not resulted in a shift in animal use of traditional ranges; (3) responses of monitored animals to OSV use in the YNP is generally “subtle”, i.e. the monitored animal may exhibit “increased alertness” but seldom if ever “flees” from the OSV; and (4) massive changes in elk, bison, and coyote populations over the last 40 years can statistically be explained by changes in post-fire vegetation production, winter severity, bison control actions, or wolf predation. Conversely, however, it would be impossible to credibly attribute changes in animal populations to OSV use.

While we acknowledge the DEIS’s need to address social and economic factors related to OSV use, we feel that the DEIS’s focus upon wildlife is not consistent with the science. Furthermore, we suggest the fixation with wildlife panders to the public’s emotional need to protect wildlife, but fails to provide them with the objective scientific factors pertinent in a park setting. The following discusses the science and YNP philosophy measures that support this premise.

#### 3.4.1 Behavioral Responses of Wildlife to Snowmobiles and Coaches in Yellowstone

The paper *Behavioral Responses of Wildlife to Snowmobiles and Coaches in Yellowstone* by White et al. (2006) appears well-researched and well-written. The authors’ conclusions include:

1. OSVs illicit *responses* from wildlife that may include anything from increased alertness to moving away from the disturbance;
2. The degree of and type of response varies by species, but all species sampled (elk, bison, coyotes, bald eagles, etc) showed some level of response to OSV;
3. Animals have apparently habituated to OSVs to the extent that there is no evidence of those animals abandoning traditional preferred winter habitats; and
4. Based on a multitude of scientific papers, such responses to OSVs during the winter, even when no abandonment of traditional ranges is evident, is likely to cause some *measurable fitness effects*.

The authors don’t explicitly define *measurable fitness effects*, but from the literature cited (Cassirer et al. 1992), it is inferred that responses to OSVs could result in reduced winter survival, reduced reproductive vigor, and potentially declines in population. Because no wintering populations showed any indication of abandoning traditional winter ranges, we can assume that any such potential reduction in wintering

population would be very slight and probably insignificant when compared to other variables such as predation, winter severity, or forage production. Nonetheless, because of this potential loss of measurable fitness, the authors are recommending among other things that OSV levels be managed at or below levels observed during the study.

### 3.4.2 Wildlife Management in Non-Park versus Park Settings

In a non-park setting the findings of White et al. (2006) would be cause for alarm. In National Forests and Bureau of Land Management Lands adjacent to YNP, lands are generally open to hunting. Carrying capacities are generally identified (by trend, population, or vegetative condition). Ungulate population goals are generally identified (often by hunting district or herd unit). When carrying capacities decline due to lack of fires or other factors, there are usually measures identified at the State or National Forest level to correct those problems. Hunting harvest may be adjusted up or down accordingly.

Predators may be managed (via hunting or other control measures) to assure that ungulate levels remain at or near carrying capacity without major conflicts with hunters. Lastly, the relationship between ungulate numbers and hunters and hunting-generated economic revenue are commonly considered when making habitat management or animal harvest decisions. Consequently, in a National Forest or BLM setting, human-caused winter disturbance that resulted in even a slight potential loss in measurable fitness, to the extent that populations might drop below carrying capacity or adversely affect hunting or wildlife viewing opportunities, would be viewed in a negative light.

Unlike non-park public lands, YNP has taken a radically different approach to managing ungulates. Up until the early 1960's, ungulate management was not that different from National Forests and BLM lands, i.e., ungulate harvest was an integral part of management. For instance, in 1963, the Leopold Report (Leopold et al. 1963) concluded that:

1. "Good park management requires that ungulate populations be reduced to the level that the range will carry in good health and without impairment to the soil, the vegetation, or the habitats of other animals..."
2. "(Ungulate population) control... through natural predation should be encouraged..."
3. "Where other methods of control (sport hunting) are inapplicable or impractical, excess park ungulates must be removed by killing..."

The Leopold Report states that in 1961-1962, the YNP's carrying capacity was estimated at 5000 elk, current population was estimated at 10,000 elk, and 4,283 elk were killed by shooting.

Such population control measures were generally abandoned by the Park after 1967 (Greater Yellowstone Science N.d.). As a result, elk populations increased substantially and consistently, with a high reached in

the mid-1990s of 19,045 counted aerially (MFWP 2002), a level *4 times higher* than the 1962-estimated carrying capacity. Populations declined substantially after severe winters in 1989 (a decline exacerbated by the wildfires of 1988) and 1997 (MFWP 2002).

Interestingly, the issue of carrying capacity becomes less and less of an issue in YNP dialogue. One wonders how, if carrying capacity was estimated at 5,000 elk in 1962, YNP could allow the population to increase to over 19,000 by the 1990's without some cry of alarm. Nonetheless, during this period, YNP remained relatively silent regarding the issue of excessive elk.

#### **3.4.2.1 *Implications of Excessive Elk Populations***

As one example of how YNP has ignored the issue of carrying capacity and excessive elk populations, numerous researchers (Pengelly 1963; Kay 1990; Wagner et al. 1995) concluded that aspen had declined substantially as a result of overgrazing by elk. YNP's position on aspen declines, however, generally favored the theory that those declines were attributable to changes in climate (Despain 1987).

After wolves were re-introduced in 1994-1995, elk populations decreased at the rate of ~8% per year from pre-re-introduction levels of 15,000–20,000 elk to 9,000–10,000 elk by 2004-2005 (Greater Yellowstone Science N.d.). While the decline has generally been attributed primarily to wolf predation, other factors such as drought may have contributed to the decline (Vucetich et al. 2005). Interestingly, now that elk populations have declined due to wolf predation to a point a little more in line with carrying capacity, YNP is all too happy to celebrate the benefits of that decline in vegetative recovery (Schullery N.d.) as manifested by increases in cottonwood regeneration (Larsen and Ripple 2002), beaver colonies (Stiles N.d.) and aspen regeneration (Stiles N.d.).

#### **3.4.3 *Changes in Other YNP Wildlife Populations***

Bison in YNP have also suffered population shifts in recent decades similar to elk. Populations increased substantially in recent decades after culling was eliminated in 1967 (Greater Yellowstone Science N.d.). In 1966 the bison population was recorded at 226 but had grown to over 2,000 by 1984-85, and to nearly 4,000 by 1994-95 (Greater Yellowstone Science N.d.). In an effort to control the spread of brucellosis to Montana cattle herds, 1084 were lethally removed in 1997, with lesser harvests conducted in other years. In spite of those control actions, the bison herd reached a high level of ~4,900 in 1995-96.

Wolves view coyotes as competing predators and thus will aggressively kill them when the opportunity presents itself. Robbins (1996) reported that prior to wolf re-introduction; the YNP had "one of the densest and most stable coyote populations in the country because of the lack of human impacts." Since re-introduction, however, "50% of the pre-wolf population of coyotes has been killed" (Robbins 1996). These findings suggest that although coyote populations have been substantially reduced, carrion

available to a multitude of scavengers from wolf kills has indirectly benefited many species including ravens, foxes, bald eagles and golden eagles.

#### **3.4.4 White et al. (2006) Findings and YNP Management Philosophy**

As discussed above, elk, bison, and coyote populations (to name a few) have fluctuated wildly (Figure 3-4). YNP's position on these changes, whether in response to the elk winter die-off in 1989, or the century-long decline in aspen, or the elk decline from wolf predation, varies from *indifference* (such as the 4-fold increase in the northern elk herd from 1962-1995) to *enthusiasm* (such as attributing increases in aspen regeneration to declines in elk populations from wolf predation). We characterize this philosophy as "what happens, happens" and that's apparently an acceptable philosophy since it doesn't require any active management to either reduce wildlife populations via hunting or increase carrying capacity via prescribed burning or other vegetative manipulation.

White et al. (2006) conclude that OSV use should be "managed at or below current levels" to avoid the potential for a very slight (but probably undetectable) reduction in over-winter survival of park animals. YNP's 40-year management philosophy has demonstrated that massive population fluctuations are acceptable, and in some cases desirable. We see no relationship between YNP's demonstrated past management philosophy and the findings of White et al. (2006). In fact, White's findings, although scientifically credible, should be responded to with a collective "so what?" The potential adverse impacts inferred to in White et al. (2006) that might result in population impacts are, if anything, very, very subtle. There has been no shift in animal use of traditional ranges. Since the animals are not hunted, they exhibit extraordinary (compared to hunted populations) indifference to humans. If you were to try to identify, using the most rigorous of research, those variables most responsible for population changes over the last decade including winter weather, precipitation, forage availability from wildfires, wolf re-introduction, etc., it is highly doubtful that population shifts from OSV use would be statistically detectable.



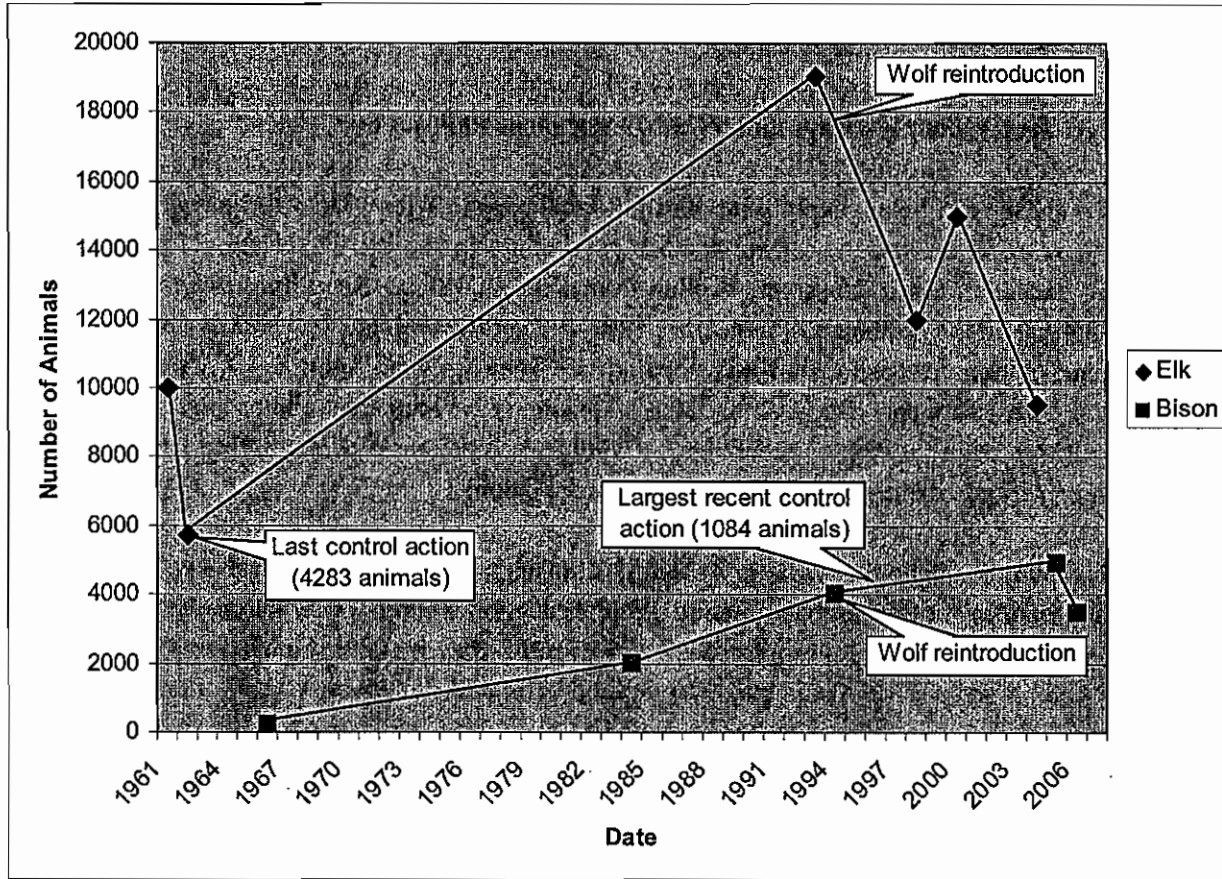


Figure 3-4 Elk and bison population trends 1961–2006

### 3.4.5 Summary

While we appreciate the social and economic variables NPS must consider in determining its OSV policy, we find no logical connection to wildlife effects and OSV use. We suggest NPS not consider wildlife effects in its determination of appropriate OSV effects. The four points most pertinent in making this recommendation are:

1. Park animals are not hunted and exhibit extraordinary tolerance to human activities;
2. Wintering animals have not been displaced from traditional winter ranges;
3. Populations of elk and bison still exceed historically-determined carrying capacities; and
4. Possible adverse effects from OSV use will always be insignificant compared to other variables including wildfire, predation, winter severity, and lack of population control actions.

### **3.5 NEPA CONSIDERATIONS**

The State of Wyoming believes that there are serious NEPA deficiencies and flaws which do not support the selection of the Preferred Alternative. In this section of our comments, we provide new NEPA related concerns with the March 2007 Winter Use Plans DEIS beyond what we previously commented on in the PDEIS. The new issues are; the Preferred Alternative appears to be predetermined, a lack of decision criteria, and a cumulative effects analysis that provides inadequate treatment of climate change, thereby violating the “reasonably foreseeable actions” clause identified in Section 1508.7 of the Council on Environmental Quality (CEQ) guidelines for implementing NEPA.

#### **3.5.1 Predetermined Alternative Selection**

We are concerned that the initial and subsequent selection of the Preferred Alternative, described in the Preliminary Draft EIS and that proposed closing the east entrance due to avalanche risk and safety concerns, was predetermined. While the Preliminary Draft was being circulated for comment from Cooperating Agencies, there was a simultaneous Avalanche Hazard Assessment and Mitigation report (Comey 2007) being prepared by avalanche specialist Robert Comey, with later additional comments on the Draft Assessment from other avalanche specialists.

Given the fact that the Preferred Alternative was selected prior to the new assessment, this action gives the direct appearance of having selected an alternative before the data was in. Once the Draft Assessment was completed with the mitigations and reviews from other professionals, it is clear that NPS improperly selected an alternative based on a mitigable safety risk and an enviably long NPS safety record for Sylvan Pass concerning motorized use and avalanche safety program.

Furthermore, the DEIS (p. 36) states that for the Preferred Alternative “As of the winter of 2008-2009, Yellowstone’s East Entrance Road would be open to snowcoach and non-motorized travel from the entrance to a point about 6-miles west only (near the Sylvan Avalanche Zone).” Since NPS is required to provide public notice of decisions that will restrict or control a public use or activity, by including this date (which was not included in the PDEIS) it appears to us that a decision to close the East Entrance has already been made.

#### **3.5.2 Decision Criteria**

The difference between the Desired Conditions (p. 5) and the existing conditions can be considered the need for change. It is important to understand the need for change as it allows one to better articulate and understand the required and all-important Purpose and Need section of any NEPA document. All succeeding portions of a NEPA document have to fundamentally support the Purpose and Need. The need for change must be explicitly expressed in the Purpose and Need section of the document. How the

desired conditions are met within the developed range of alternatives are another one of the keys to this complicated process. In this particular case the NPS has stated that the, “existing conditions, for the purposes of this planning effort, are the historic conditions that existed prior to the last three winters of managed use.” The decisions to be made are clearly set forth in Chapter 1, and are relatively simple, evaluating the type and extent of public recreation access appropriate to the Parks in winter. “It will be judged upon the alternative and the associated impacts which best meet all the desired conditions defined in the purpose and need for action and addresses associated impacts.” The decision language goes on to state, and this is important as this gives a great deal of subjective leeway to the agency, “Since some desired conditions work at cross purposes, this means that the decision requires optimizing between recreation activities and protection of resources and values, in accordance with NPS policies.” This great latitude coupled with the fact that there is no objective decision criteria in the DEIS, and the fact that the current Preferred Alternative was selected prior to the Avalanche Hazard Assessment & Mitigation (Corney 2007) report gives the appearance that the decision to close Sylvan pass was already made. Due to the predetermined nature of the alternative selection, and the lack of objective decision criteria, we question whether this can be considered an arbitrary and capricious decision.

### 3.5.3 Climate change and cumulative effects

The DEIS notes that the decisions to be made “will not hinge” on the topics dismissed from detailed analysis, and that there is no new information to indicate the issues dismissed require detailed analysis in this EIS process. The lack of analysis concerning climate change is a serious flaw in this NEPA document. The discussion of global climate change was dismissed because “it would be speculative to predict changes in snow water equivalency or average winter temperatures, in part because there are many variables that are not fully understood and there may be variables not currently defined.” However this rationale for dismissing an analysis of climate change dramatically conflicts with the NPS publications and articles with the service’s own *Sustainability News* noting “The weight of scientific evidence in support of global climate change is overwhelming—we need to take action now. (NPS 2006c). In fact, a brief review of NPS publications would show an agency on the one hand firmly convinced of climate change, looking forward to understanding it and the implications to park management, and on the other hand, dismissing it outright as not worthy of discussion for winter use planning in YNP.

Earth’s climate is changing and our national parks, with the unique resources they protect, are beginning to experience the effects of this change. This new reality poses very important questions for the National Park Service. Specifically, how will climate change affect the natural and cultural resources entrusted to us and how do we recognize and monitor these changes? What management decisions are appropriate in response to ecosystem changes? —Shawn Norton, Coordinator National Park Service Environmental Leadership Program

In dismissing climate change as unworthy of detailed analysis, the NPS directly contradicts thinking and consideration within the leadership of its own agency. *Consumer Reports* quotes a Dec. 14, 2006 memo

from NPS Director Mary Bomar as the services response to climate change “as mostly underdeveloped requiring considerable future planning and implementation”. Excerpts from the NPS developed and published *Sustainability News* shed some light on the DEIS notion that climate change is not important enough to consider treatment in the Winter Use EIS.

While many questions remain, we know a lot, and research conducted in national parks has added greatly to our knowledge about how natural systems are responding to climate change. We know that glacial ice is melting, high latitudes are warming faster than the tropics, oceans are warming, and sea level is rising. Most scientists also agree that the water cycle is changing and intensifying, and that this will lead to changes in water supply, flooding, and drought patterns. We can expect warmer winters, longer growing seasons, fewer freezes, more extensive insect and pathogen outbreaks, and more intense fire seasons. The weight of scientific evidence in support of global climate change is overwhelming—we need to take action now. How do we develop an appropriate societal response to a problem that has been exposed by scientific investigation and what is the role of parks in that process? Science helps us understand the need for change, but people must act on that information to find solutions. The people who have contributed to this issue of *Sustainability News* are taking action. Their examples range from providing information to managers about how climate change is impacting park resources, to raising public awareness through outreach and education, to integrating climate change issues with environmental management. Park employees and their partners are forming green teams and developing alliances with a long-term commitment to sustainable, climate-friendly operations and practices for their parks and surrounding communities. (NPS 2006c)

Global climate change will affect snow pack and snow based recreation in all forms in YNP. Loss of snow pack and reduced snow water equivalent likely means that the opportunity for OSV use will be concentrated in fewer places, increasing the relative importance of suitable winter use landscapes. Without an assessment of global climate change and its related reduced snowfall and accumulation, the Winter Use DEIS falls short of taking a hard look at one of the foundation environmental impacts. The issue of how NEPA applies to climate change is currently being reviewed by the courts. The “hard look test” is not a prescribed scientific test but more of a test of reasonableness for a lay person’s perspective. Our belief is that most reasonable people would consider a plan for winter use activities to be sorely deficient without an analysis of changing winter weather patterns as evidenced by many in-house NPS articles and publications.

#### **3.5.4 NEPA issues brought forth from PDEIS**

Our previous review of the PDEIS revealed several areas of analysis and processes that appear to be inadequate and inconsistent with the CEQ guidance for implementing the Act. We are troubled about the following areas: cooperating agency essentials, scoping, alternative development, and cumulative effects. These sections or treatments do not fully capture the socio-economic impacts, nor does the analysis properly characterize avalanche risks, which is used as primary evidence to support the closing Sylvan Pass and the East Entrance. The initial four areas are related and there is overlap in the review below.

### 3.5.4.1 *Cooperating Agency Essentials*

As we pointed out in our comments for the PDEIS, we very much appreciate the NPS NEPA process that recognizes the important contribution made by state agencies and local county governments. We know that the CEQ regulations directs that the NPS give special emphasis and treatment to “Cooperating Agency” comments based on requirements (CEQ 1501.6) which states:

- (a) The lead agency shall:  
Request the participation of each cooperating agency in the NEPA process at the earliest possible time. Use the environmental analysis and proposals of cooperating agencies with jurisdiction by law or special expertise, to the maximum extent possible consistent with its responsibility as lead agency (emphasis ours). Meet with a cooperating agency at the latter’s request.
- (b) Each cooperating agency shall:  
...Participate in the NEPA process at the earliest possible time. *Participate in the scoping process* (emphasis ours) (described below in Sec. 1501.7). Assume on request of the lead agency responsibility for developing information and preparing environmental analyses including portions of the environmental impact statement concerning which the cooperating agency has special expertise.

As a cooperating agency, we understand and appreciate our responsibilities under NEPA. Where applicable, the comments contained in this, and previously submitted document should be considered as special expertise as portrayed in the CEQ regulations (1501.6) “Use the environmental analysis and proposals of cooperating agencies with jurisdiction by law or special expertise, to the maximum extent possible...”

We have constructed this document to describe the technical and qualitative nature of our expertise with the help of our consultant Ecosystem Research Group (ERG). We know from experience, that many times, comment documents such as this are split into different components and assigned to specialists for review and incorporation into the next iteration of the NEPA process. We respectfully request that a NPS project manager read this document in its entirety as the whole is greater than the sum of its parts. Should this analysis be split up one would only get a piece-of-the-puzzle understanding of the impacts to us as a stakeholder and cooperating agency.

We recognize there is the potential to disagree with appropriateness of analysis and the conclusions from this process. Our economics review suggests that the DEIS does not fully capture economic impacts to Wyoming and Park County. As a Cooperating Agency, we are interested in fully understanding the implications of disagreements. To that end, we have reviewed the CEQs 40 Frequently Asked Questions documents as it relates to potential disagreements. Question 14b address disputes.

*How are disputes resolved between lead and cooperating agencies concerning the scope and level of detail of analysis and the quality of data in impact statements?*

A. Such disputes are resolved by the agencies themselves. A lead agency, of course, has the ultimate responsibility for the content of an EIS. But it is supposed to use the environmental analysis and recommendations of cooperating agencies with jurisdiction by law or special expertise to the maximum extent possible, consistent with its own responsibilities as lead agency. Section 1501.6(a)(2).

If the lead agency leaves out a significant issue or ignores the advice and expertise of the cooperating agency, the EIS may be found later to be inadequate. Similarly, where cooperating agencies have their own decisions to make and they intend to adopt the environmental impact statement and base their decisions on it, one document should include all of the information necessary for the decisions by the cooperating agencies. Otherwise they may be forced to duplicate the EIS process by issuing a new, more complete EIS or Supplemental EIS, even though the original EIS could have sufficed if it had been properly done at the outset. Thus, both lead and cooperating agencies have a stake in producing a document of good quality. Cooperating agencies also have a duty to participate fully in the scoping process to ensure that the appropriate range of issues is determined early in the EIS process.

Because the EIS is not the Record of Decision, but instead constitutes the information and analysis on which to base a decision, disagreements about conclusions to be drawn from the EIS need not inhibit agencies from issuing a joint document, or adopting another agency's EIS, if the analysis is adequate.

#### **3.5.4.2 Scoping**

Section 4.1.6 of the PDEIS describes the impairment analytical procedures and what are the unacceptable impacts. The list of unacceptable impacts (p. 144) states that it is unacceptable to "diminish opportunities for current or future generations to enjoy, learn about, or be inspired by park resources or values." We believe that the proposed closing of the East Entrance and limitations posed by guiding requirements may diminish future opportunities.

The CEQ has called scoping the key to analyzing cumulative effects. While the Scoping Document (North Wind 2005) categorizes the 33,365 scoping documents and makes the effort to satisfy scoping requirements, the sheer volume and the classification effort minimize or at least masks the issues that might be significantly important. The CEQ handbook for analyzing cumulative effects states,

Analysts must tease from the complex networks of possible interactions those that substantially affect the resources. Then, they must describe the response of the resource to this environmental change using modeling, trend analysis and scenario building when uncertainties are great.

The PDEIS (Section 4.5) then states and describes the inability of use of trend information,

Further confounding the discussion is that visitation to Yellowstone has fluctuated up and down over the past two decades, making predictions of use based on past (especially short-term) trends virtually impossible. Recently, visitation to Yellowstone began dropping even before any restrictions were put in place, probably reflecting confusion about continued snowmobile access to

the parks. Visitation to Yellowstone in the past three winters has been below the daily limits, which suggests that displacement of visitors onto surrounding national forest lands by restrictions on Yellowstone access does not occur.

The baseline visitation was chosen by the NPS to be around 119,000 visits as an average. The reason the years 2000-2001 and 2001-2002 were not considered was because the NPS felt that visitation was unnaturally high in response to the expectation that the park would eliminate snowmobiling. If you look at trends in visitation without the two high-visitation years, estimated visitation is 130,000. If you consider actual visitation, the baseline should be around 140,000. The baseline is important to the IMPLAN analysis because it measures the change in economic activity for different alternatives. Any decrease in visitation will be measured against this baseline. For this reason, a lower baseline (119,000) will show dampened effects. And for this same reason, when a no-action baseline is used, the economic effects are considered beneficial given low or zero access. Neither the no-action baseline, nor the current baselines however, are appropriate. Valuation literature clearly states that changes in welfare should be measured from the status quo, which would be a historical level that reflects actual visitation.

We are concerned that scoping did not properly cover concerns about the Cody gateway community and that the admissions from Section 4.5 noting the futility of visitation trend data, coupled with the economic criticisms in this document, make the cumulative analysis sections insufficient.

#### **3.5.4.3 *Alternative Development***

The NPS, while required to explore a full range of alternatives (Sec. 1505.1 (e)), the alternative must be considered reasonable. Both the State and Park County feel the closure of the East Entrance was minimized during discussion in 2006 and not until the Cooperating Agency PDEIS was released did the proposed closure become clear. Page 55 notes that Alternative 3B is the environmentally Preferred Alternative in this PDEIS because it “best preserves the unique historic, cultural and natural resources associated with the parks.” We think the historic and cultural resources of the Park County area contribute to the unique historical and cultural environment of the park

Part of our frustration is that throughout this entire process, the formal scoping meetings, the Cooperating Agency meetings etc. we had not been made aware of the probability of closing the East Entrance.

#### **3.5.4.4 *Cumulative Impacts***

Cumulative impacts are among the most difficult and complex assessment(s) required in a NEPA document, and have become a focus for court challenges (Smith 2005). Social and Economic issues were listed as a major issue. When analyzing cumulative impacts that require a look at future actions, there has been no analysis of future scenarios for Cody and Park County. The boom and bust cycle of energy

development that has occurred periodically did not appear in the PDEIS. Should the continued and projected economic growth of Park County not occur, the impacts of closing the East Entrance will surely be incrementally greater.

This cumulative effects section broadly discusses the greater Wyoming economy ranging from recreation and tourism to the oil and gas industry. In general, the DEIS portrays Wyoming as having a robust economy with opportunities for growth and development. While this may be true, the document neglects to discuss specifically, the cumulative effects resulting from ongoing changes in Park Service policy including the temporary ruling in 2003.

Cumulative effects from closing the east entrance, restricted visitation, and imposed mandatory snowmobile guides will all be negative. While this will not likely affect the greater Wyoming economy, it will adversely affect local businesses and communities in the short and long run. Similarly, because adverse economic effects have occurred since 2003, they must also be considered as part of the cumulative socio-economic effects. These effects are not specifically stated in this section.

In order to correct what we regard as NEPA deficiencies we believe that modifying the Preferred Alternative to keep the East Entrance open will mitigate some of the cumulative socio-economic effects described in this document. Indeed, we agree with the CEQ when they state "Only by reevaluating and modifying alternatives in light of the projected cumulative effects can adverse consequences be effectively avoided or minimized".<sup>[1]</sup>

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<sup>[1]</sup> Considering Cumulative Effects Under the National Environmental Policy Act.



#### 4. SPECIFIC COMMENTS FOR CORRECTION AND CLARIFICATION

Specific comments regarding the DEIS are provided below. These comments are arranged by page number and by specific sections in the DEIS.

##### DESIRED CONDITIONS

**P. S-4, Table S-1:** One of the Desired Health and Safety Conditions in the DEIS states, “The safety and health of persons, and protection of property, are ensured by identifying and preventing potential injuries from recognizable threats” (Table S-1, p. S-4 and Table 1-1, p. 5). We do not feel that that YNP can “ensure” employee and visitor health and safety, as safety is not a perfect science. YNP is setting a goal or desired condition which cannot be achieved and appears to contradict NPS Policy 8.2.5.1 which states:

While recognizing that there are limitations on its capability to totally eliminate all hazards, the Service and its concessionaires, contractors, and cooperators will seek to provide a safe and healthful environment for visitors and employees.... The Service recognizes that the park resources it protects are not only visitor attractions, but that they may also be potentially hazardous. In addition, the recreational activities of some visitors may be of especially high-risk, high adventure types, which pose a significant personal risk to participants and which the Service cannot totally control.” Park visitors must assume a substantial degree of risk and responsibility for their own safety when visiting areas that are managed and maintained as natural, cultural, or recreational environments.

We recommend this desired condition be rewritten to state something like “The safety and health of persons will be provided to the extent possible by...”

We also question the desired Health and Safety condition that states “Visitors will know how to participate safely in winter use activities, and they equip themselves for doing so.” Again, YNP is setting a goal that we feel is not achievable.

##### ACTION ALTERNATIVES

**P. 51, Non-Motorized Access:** We question the lack of safety analysis for and cumulative effects of alternatives where “Ski and snowshoe use of the South Entrance and East Entrance Road would be allowed to continue after the balance of the park’s roads close to winter operations (during spring plowing). The draft *Avalanche Hazard Assessment and Mitigation Report* (Comey 2007a) states (p. 11, *Spring, Summer, & Fall Operations* section): “During spring plowing operations plow drivers are likely to spend more time beneath each avalanche path than a typical traveler who quickly passes through an avalanche path on the road.” We assume that a skier or snowshoer will also spend more time beneath each avalanche path, thus exposing them longer as they travel through the Sylvan Pass avalanche zone. The report further states on the same page “Until the snow is sufficiently melted, the avalanche paths

above the road can produce dry and wet snow avalanches that could equal the destructive force of avalanches experienced during the winter season.”

The final Avalanche Report (Comey 2007b) states in the Spring & Fall Avalanche Hazards section “The threat of snow avalanches to the East Entrance Road is not limited to the winter season. Spring snow removal operations occur in April when snow depths are typically near their maximum depths.” The author documents his observations that at this time the paths had sufficient snow cover for dangerous avalanches to occur. He goes on to state, “An avalanche hazard assessment and mitigation program is necessary to protect the public, administrative travelers and NPS workers during the entire season.” How has the DEIS addressed this evident employee and visitor health and safety issue and utilized Mr. Comey’s report in analyzing the Safety and Health cumulative effects on visitors and employees?

#### AIR QUALITY AND AIR QUALITY-RELATED VALUES

**P. 83, section 3.4.2, New Research and Monitoring:** The first paragraph discusses the results of winter in-use OSV emissions monitoring by Bishop et al. (2007) and the finding that measured emissions/person were lower for snowcoaches than for 2-stroke snowmobile engines. One of the significant findings that NPS fails to report in the DEIS is that on average, 4-stroke snowmobiles had lower gram/mile emissions for all species (CO, HC, and NO<sub>x</sub>) and lower gram/mile/person emissions for CO and HC than the average snowcoach. This seems to contradict conventional NPS wisdom that snowcoaches are cleaner than 4-stroke snowmobiles.

**P. 85, first paragraph:** Regarding the change from two-stroke snowmobiles to BAT snowmobiles, it is stated that, “This change, combined with an overall reduction in snowmobiles from previous years, use of ethanol-enhanced fuels, and less idling by guided groups led to a marked reduction in ambient pollution levels.” We fail to find any data in the DEIS, previous planning documents, or other technical reports to substantiate the statement that there is “*less idling by guided groups.*” Rather, it appears to be a rationalization to justify requiring all snowmobiles be accompanied by commercial guides. If NPS has quantifiable scientific data to justify this statement, it must be included in the final EIS. If this statement is unsupported by actual data, it should be deleted.

**P. 85, Figure 3-5:** The caption for this figure states the graph shows trends in maximum 1-hour CO level and West Entrance annual snowmobile visitation. The graph actually shows CO and PM2.5 trends at the West Entrance and Old Faithful, but does not show snowmobile visits. The CO emissions plotted are 1-hour 1<sup>st</sup> Max and not 2<sup>nd</sup> Max as indicated on the graph.

The corrected graph below (Figure 4-1) shows trends in CO and PM2.5 levels and includes the number of snowmobile and snowcoach entries for the West Entrance. We point out that for the 2005-2006 winter season, the number of snowmobiles increased by 32% at the West Entrance and the number of

snowcoaches increased by 6% while CO levels continued to decline. PM2.5 levels increased slightly (5%) over 2004-2005 levels but were still well below 2002-2003 levels and below all applicable ambient air quality standards (DEIS Table 3-8, p. 83). This graph needs to be corrected in the final EIS because it provides important information regarding air quality trends in relation to number of OSVs.

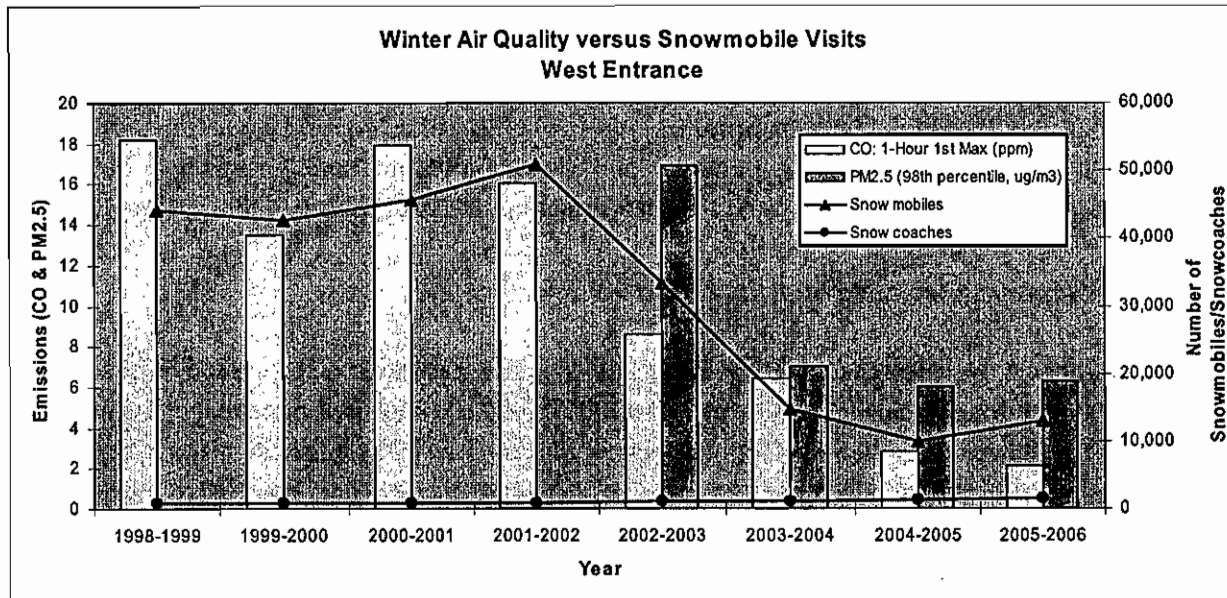


Figure 4-1 Winter air quality versus snowmobile visits, West Entrance

**PUBLIC AND EMPLOYEE HEALTH AND SAFETY**

**P. 95, Law Enforcement Statistics:** The first paragraph on this page discusses decreases in the number of citations issued to snowmobilers. According to information provided to ERG by YNP (John Sacklin pers. comm.), in response to our specific request asking how many of the OSV incidents were snowmobile versus snowcoach, NPS responded that the OSV incidents data is not in a format that distinguishes snowmobile incidents from snowcoach incidents. How then is YNP able to make the claim that “park rangers had 46% fewer incidents involving snowmobile citations ... as compared to the 2002-2003 season, when guiding was not required?. Furthermore, since a portion of the snowmobiles were guided in 2002-2003, unless YNP can provide data that shows guided snowmobiles at that time were never cited for moving violations or arrested, how can you frame these law enforcement statistics as supportive of a guided versus unguided issue?

Regarding the statistics themselves, if you look at these numbers in the context of the number of OSV cases per OSV visitor, for 2002-2003 the incident rate was 0.5%, or around 5 incidents per 1,000 OSV visitors. In 2003-2004, this rate was 3 per 1,000 visitors, not significantly different. Since 2003-2004, the number of total OSV cases has increased, and in 2005-2006 the rate was again at 5 cases per 1,000

OSV visitors. No different than in 2002-2003 when guiding was not required so actually no sustained decrease in the number of OSV cases responded to by park rangers.

The number of OSV moving violations and arrests has progressively decreased since 2002-2003. There were 3 moving violations or arrests per 1,000 OSVs in 2002-2003 compared to 0.002 arrests and 0.5 moving violations per 1,000 OSVs in 2005-2006. However, even in 2002-2003, the number of arrests (3 per 1,000 OSVs) was extremely low.

**P. 97, Avalanche Hazard Mitigation in YNP:** The first paragraph on this page states that approximately 10 avalanche control missions are required per year to control avalanche paths at Sylvan Pass. According to data provided to ERG regarding East Entrance closures (Sacklin pers. comm.), it appears that in the last 15 years, the average number of control “episodes” at the pass has been about three, and the highest number of “episodes” was in 2005-2006 when there were seven “episodes. Please clarify if an episode is an avalanche control mission, and if so, why the discrepancy? Does the average of 10 reported in the DEIS include spring avalanche control missions at Sylvan Pass?

#### THE NATURAL SOUNDSCAPE

**P. 122, Natural Soundscape, Regulatory and Policy Overview:** Section 3.7.1 should include NPS management policy 8.2.2 (NPS 2006) that recognizes that park visitors have certain expectations regarding the sounds they will hear as part of their experience. In addition to expectations of muted to loud sounds associated with nature, park visitors also expect sounds reflecting our cultural heritage and “*sounds associated with people visiting their parks (such as children laughing, park interpretive talks, motors in cars and motorboats).*” We fully believe that most visitors traveling along park roads or visiting developed areas expect to hear OSV noise and that noise will not be a significant deterrent to their visit.

**P. 128, Soundscape Monitoring Data:** The last sentence states: “The reduced sound and audibility levels were largely explained by fewer snowmobiles, the change from two- to four-stroke engine technology, and the guided group requirement. Our review of the Natural Soundscape Monitoring reports (Burson 2004, 2005, 2006) indicate there is no compelling data to support the contention that 100% commercial guiding decreases percent time audible. Furthermore, these reports state that guiding has increased the noise free interval (NFI) while acknowledging (p.17 of the 2006 Soundscape Monitoring report) that the data supporting this statement is the author’s “personal observation” along with two sound plots (see p. 92, Appendix D of the 2006 monitoring report).

In our opinion, undocumented personal observations do not constitute objective data, especially since there is no way to independently review or evaluate their merit. As far as the sound plots go, these two plots compare *one* day in 2003 with *one* day in 2006. This is one “raw” data point and the differences

shown in the plots could be explained by any number of variables (two-stroke snowmobiles in 2003 versus quieter BAT snowmobiles in 2006, decreased numbers of OSVs, environmental variables, etc). Without more information, these plots are of questionable scientific value, there is no way to know if they are representative of the entire winter season, and by themselves provide no clear evidence to show guiding has helped reduce sound and audibility levels or NFI.

Burson (2006) also states (p. 17) that: “The percent time snowmobiles are audible is more closely associated with the number and distribution of groups rather than number of individual snowmobiles”. There is no data provided to understand what the association is between number and distribution of groups, number of individual snowmobiles, and percent time audible. Does this statement mean that individual snowmobiles are generally not audible?

Our analysis of the relationship between number of snowmobile groups and audibility at the Old Faithful monitoring station, using guide and outfitter snowmobile use data provided to ERG by NPS (John Sacklin pers. comm.), suggests the “association” is as the number of snowmobile groups increases, the percent time audible decreases (Figure 4-2). The same pattern is apparent if you plot total OSVs against percent time audible. This is an interesting result, certainly not what you would intuitively expect, and perhaps indicates that grouping or number of OSVs alone are poor predictors of percent time audible. It is also relevant to the adaptive management evaluation program regarding natural soundscapes.

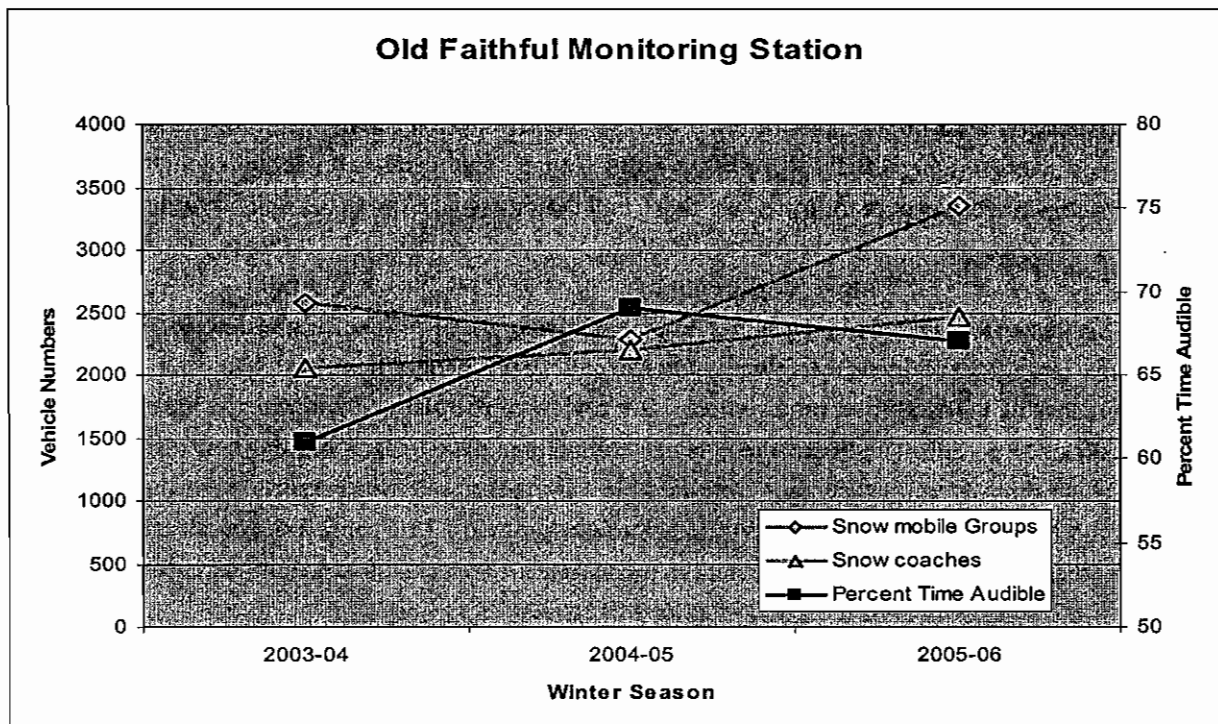


Figure 4-2 Relationship of vehicle numbers and audibility

On p. A-44 (Monitoring and Adaptive Management Table), one of the possible management options if natural soundscape thresholds are exceeded is to adjust the number of daily vehicle entries (presumably decreasing visitor entries). Given that there is no apparent correlation between numbers of OSVs and average percent time audible, along with the reality that unpredictable environmental conditions (temperature, wind, inversions, etc.) affect audibility, we see this as a questionable management option with no guarantee that the action will improve perceived adverse impacts to the soundscape.

To further illustrate our concern, consider that on January 6, 2006, 145 snowmobiles and 16 snowcoaches entered YNP through the West Entrance, with an average percent time audible of around 79% at the Madison Junction 2.3 monitoring site. On March 11, 2006, 143 snowmobiles and 15 snowcoaches entered YNP through the West Entrance with an average audibility of around 36%. The adaptive management threshold for a road corridor is not to exceed 50%. With essentially the same number of OSVs, one day greatly exceeded the threshold while the other day was well below the threshold. Since there is no data provided to evaluate why the percent time audible was so different (were there more administrative vehicles on one day, more OSVs from other entrances, different environmental conditions?, etc.), we question whether simply reducing numbers will accomplish anything, other than adversely effecting visitor access and local businesses.

We suggest including additional management options for natural soundscape, for example, increasing the adaptive management sound thresholds along busy road corridors if they are consistently exceeded. Perhaps it is just not realistic to expect the most popular OSV routes in the park to be noise free 50% of the time. On balance, the vast majority of the park will be meeting natural soundscape thresholds and for visitors seeking quiet and solitude, NPS could provide information directing them to those areas that will best fulfill their desires. The East Entrance comes to mind.

Finally, if numbers are reduced, how would they be reduced (by selected entrances?)? Could numbers be increased if thresholds are not exceeded? Please provide clarification on how numbers could be adjusted. We also suggest that if NPS does have to adjust daily entry numbers in the future, keeping the East Entrance open will provide greater flexibility if daily entries need to be redistributed among the entrances.

#### VISITOR ACCESS AND CIRCULATION

**P. 138, Winter Visitation Data:** The first sentence in the third paragraph states, "More recently, snowmobile visitation has begun to increase, and snowcoach visitation has been increasing even more, suggesting that some who would otherwise snowmobile may be taking snowcoach tours instead." While it is true that both snowmobile and snowcoach numbers have been increasing for the last two seasons, it is *snowmobile* use that has shown the greatest increase. In 2005-2006, snowmobile use increase 20.1% compared to the previous season while snowcoach use increased 15.3%. For 2006-2007, snowmobile use increased 10.1% from the previous year, while snowcoach use only increased 2.5%. The data clearly

show (Figure 4-3) snowmobiles remains the most popular means among the visiting public to access YNP and NPS should not try to marginalize this fact.

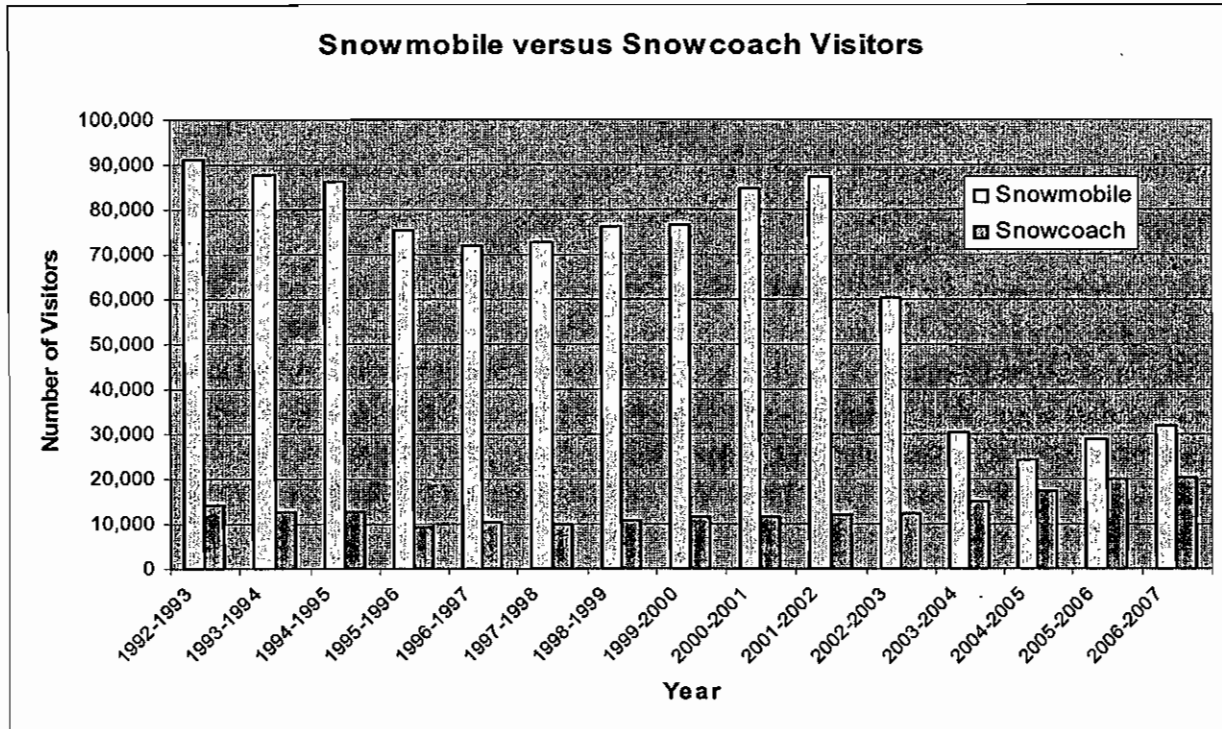


Figure 4-3 Number of snowmobile versus snowcoach visitors

**P. 143, Winter Visitation Data:** In the last paragraph, the description of OSV visitation trends for the South Entrance is incorrect. In the last three winters (2003-2004 to 2005-2006), snowmobile use has *increased* from 70% to 74%, not declined from 87% to 72.3% as stated in the DEIS. NPS needs to ensure their interpretation and reporting of visitation data and trends is accurate if they are to understand visitor demand and desires, and if they are to provide an accurate document on which to base winter use management decisions. These numbers indicate to us that snowmobiles are by far the most popular means to enter YNP, at the South Entrance and all entrances except the North Entrance. This fact needs to be acknowledged.

Furthermore, the real trend this data show is the dramatic decline in snowmobile visitation since the 2002-2003 season. This should be a major concern for NPS as they work to plan understanding of visitor needs.

## EFFECTS ON PUBLIC AND EMPLOYEE HEALTH AND SAFETY

**P. 207, four bulleted items at top of page:** Various types of information, including air monitoring results, personal exposure and sound monitoring results, air quality and sound monitoring modeling, and employee and commercial guide reports were used to assess the level of impact to employee and public health for each alternative. Shouldn't the cumulative impact of each of these parameters of safety and health issues be assessed separately for employees versus the public (as was done in the 2000 FEIS)? For example, wouldn't personal exposure to OSV sound be considerably different for an employee exposed to the sounds on an almost daily basis compared to a visitor who may only be exposed for a day or two?

Furthermore, in our January 5, 2005 PDIES Comments, we expressed concerns over the PDEIS's Health and Safety inconsistencies for those alternatives that would allow non-motorized travel over Sylvan Pass (see Section 2.1.1, Item 1, p. 8). We reiterate this concern and recommend you consider our January 5, 2007 comment when finalizing the cumulative effects analysis in the upcoming FEIS. For example, wouldn't the effects of avalanche hazards be different in the alternatives where Sylvan Pass is closed to OSV travel, no avalanche control operations are conducted, and the Pass is open to skiers and snowshoers than to employees? In this scenario it would appear the effect of the avalanche hazard would be major on skiers and snowshoers.

**P. 207, Table 4-40:** This table lists the definitions of impacts to employee and public health and safety. The definitions quantify some of the known identified safety and health issues for each impact category, but little is said about avalanche hazard other than very generic statements that impacts are not noticeable, measurable, sufficient, or substantial. What do these terms mean in relation to avalanche hazards?

## DIRECT, INDIRECT AND CUMULATIVE EFFECTS ON ADJACENT LANDS

**P. 322, Alternative Displacement Scenarios:** For Alternative 1, the DEIS states: "Yellowstone would partner with the Park County Nordic Ski Association, Wyoming Department of Transportation (WYDOT), and other interested parties regarding non-motorized recreational opportunities near the east entrance of the Park." This same statement is repeated for all alternatives that close Sylvan Pass. What will Yellowstone do to compensate for the adverse impact to those members of the public seeking motorized (snowmobile) recreational opportunities in this area? They will be most affected by the closure, especially considering the public lands on the Shoshone National Forest (SNF) outside YNP along the North Fork corridor are either federally-designated wilderness area or inventoried roadless areas managed for non-motorized uses (USDA 1986, 2007). The East Entrance into YNP is the only realistic option for motorized winter recreational use in this area. We strongly support both motorized and non-motorized use in NPS, and if opportunities for either are diminished, we expect NPS to address both.



5. TABLE OF PREPARERS

Table 5-1 List of Preparers

Name/Role	Agency/Firm	Education
Travis Benton Environmental Scientist	Ecosystem Research Group	B.S. Forestry
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Mike Hillis Wildlife Biologist	Ecosystem Research Group Associate	B.S. Wildlife Biology
Hayley Hessel Resource Economist	Ecosystem Research Group Associate	PhD. Economics
Gregory Kennett Senior Environmental Scientist	Ecosystem Research Group	B.S. Forestry, Watershed Management
Katie McDonald Geohydrologist/ Environmental Scientist	Ecosystem Research Group	M.S. and B.S. Geology
Remy Pochelon Recreation Specialist	Ecosystem Research Group Associate	B.S. Forest Resource Management
Melanie Smith GIS Coordinator	Ecosystem Research Group	B.A. Environmental Studies M.A. Geography (anticipated 5/07)
Temple Stevenson Policy Analyst	State of Wyoming Office of the Governor	Environmental and Natural Resources, Communications
Jon Schulman Environmental Engineer	Ecosystem Research Group	M.S. Environmental Engineering M.A. Journalism

## 6. REFERENCES

- Billings Gazette. 2007. Gazette Opinion: Winter plan fails to balance conservation, recreation. May 13.
- Bishop, G. A., Stadtmuller, R., and D.H. Stedman. 2007. Portable emission measurements of snowcoaches and snowmobiles in Yellowstone National Park. <http://www.nps.gov/yell/parkmgmt/winterusetechndocuments.htm>. (accessed April 23, 2007).
- Burson, Shan. 2004. Natural soundscape monitoring in Yellowstone National Park, December 2003-March 2004. <http://www.nps.gov/yell/parkmgmt/winterusetechndocuments.htm>. (accessed April 26, 2007).
- . 2005. Natural soundscape monitoring in Yellowstone National Park, December 2004-March 2005. <http://www.nps.gov/yell/parkmgmt/winterusetechndocuments.htm>. (accessed April 26, 2007).
- . 2006. Natural soundscape monitoring in Yellowstone National Park, December 2005-March 2006. <http://www.nps.gov/yell/parkmgmt/winterusetechndocuments.htm>. (accessed April 26, 2007).
- Cassier, E. F., D. J. Freddy, and E. D. Ables. 1992. Elk responses to disturbance by cross-country skiers in Yellowstone National Park. *Wildlife Society Bulletin* 20:375–381. In *Yellowstone's northern range: Complexity & change in a wildland ecosystem*. <http://mms.nps.gov/yell/northernrange> (accessed May 18, 2007).
- Comey, Bob. 2007a. Draft avalanche hazard assessment and mitigation report, Sylvan Pass, Yellowstone National Park. Unpublished report prepared for National Park Service, Yellowstone National Park, Wyoming.
- . 2007b. Avalanche hazard assessment and mitigation report, Sylvan Pass, Yellowstone National Park. Unpublished final report prepared for National Park Service, Yellowstone National Park, Wyoming.
- Council on Environmental Quality. 1981. NEPA Guidance; 40 Questions: Guidance issued by CEQ to address frequently asked questions (FAQs) concerning NEPA implementation. 46 Fed. Reg. 18026.
- . 1997. Considering cumulative effects under the National Environmental Policy Act.

- Despain, D. 1987. The two climates of Yellowstone National Park. *Proceedings of the Montana Academy of Science* 47:11–20. In *Yellowstone's northern range: Complexity & change in a wildland ecosystem*. <http://mms.nps.gov/yell/northernrange> (accessed May 18, 2007).
- Duffield, John, and Chris Neher. 2006. *Draft technical report: Regional economic impact analysis for Yellowstone and Grand Teton National Parks and John D. Rockefeller, Jr. Memorial Parkway; winter use draft environmental impact statement*. Located at University of Montana, Missoula, MT. August 1.
- . 2006a. *Final technical report: Regional economic impact analysis for Yellowstone and Grand Teton National Parks and John D. Rockefeller, Jr. Memorial Parkway; winter use draft environmental impact statement*. Located at The University of Montana, Department of Mathematical Sciences, Missoula, MT.
- . 2006b. *Response to comments on "Draft Technical Report, Regional Economic Impact Analysis for Yellowstone and Grand Teton National Parks and John D. Rockefeller, Jr. Memorial Parkway Winter Use Draft Environmental Impact Statement."*
- ERG (Ecosystem Research Group). 2006. Review of the regional economic impact analysis for the Greater Yellowstone Area winter use DEIS. Prepared for State of Wyoming Office of Planning.
- . 2007. *Comment document for Cooperating Agency Review Draft, Winter Use Plans Draft Environmental Impact Statement, Yellowstone and Grand Teton National Park and John D. Rockefeller, Jr. Memorial Parkway*. Prepared for State of Wyoming Office of Planning.
- Freimund, Wayne A. and William T. Borrie. 2001. *Winter visitation in Yellowstone National Park: A review of six years of research*. Unpublished report to National Park Service, Yellowstone National Park, Wyoming
- Greater Yellowstone Science. N.d. Yellowstone elk overview. <http://www.greateryellowstonescience.org> (accessed May 18, 2007).
- Kay, C. 1990. Yellowstone's northern elk herd: A Critical evaluation of the "natural-regulation" paradigm. Ph.D. dissertation, Utah State University. In *Yellowstone's northern range: Complexity & change in a wildland ecosystem*. <http://mms.nps.gov/yell/northernrange> (accessed May 18, 2007).

- Leopold, A. S., S. A. Cain, C. M. Cottam, I. N. Gabrielson, and T. L. Kimball. 1963. Wildlife management in the National Parks: The Leopold report. <http://www.cr.nps.gov/history/leopold.htm> (accessed May 21, 2007).
- Larsen, Eric J., and William J. Ripple. 2002. Aspen age structure in the northern Yellowstone ecosystem: USA. *Forest Ecology and Management* 179 (2003): 469–482. [www.elsevier.com/locate/foreco](http://www.elsevier.com/locate/foreco) (accessed May 21, 2007).
- MFWP (Montana Fish, Wildlife and Parks). 2002. Annual northern Yellowstone elk count completed. January 25. [http://fwp.mt.gov/news/article\\_1180.aspx](http://fwp.mt.gov/news/article_1180.aspx) (accessed May 18, 2007).
- Mitchell, Robert Cameron, and Richard T. Carson. 1989. Using surveys to value public goods: The contingent valuation method. Washington D.C.: Resources for the Future.
- NPS (National Park Service, U.S. Department of the Interior). 1990. Winter use plan environmental assessment, Yellowstone and Grand Teton National Parks and John D. Rockefeller, Jr., Memorial Parkway. Denver Service Center, Denver, Colorado.
- . 2001. Director's order #12: Conservation planning, environmental impact analysis, and decision-making.
- . 2003. Winter use plans final environmental impact statement and record of decision: Yellowstone and Grand Teton National Parks and John D. Rockefeller, Jr., Memorial Parkway.
- . 2006. National Park Service Visitation Statistics. [www.nature.nps.gov/mpur/reports/reportlist.cfm](http://www.nature.nps.gov/mpur/reports/reportlist.cfm) (accessed May 1, 2007).
- . 2006a. Management Policies 2006.
- . 2006b. Cooperating agency review draft: Winter Use Plans Draft Environmental Impact Statement, Yellowstone and Grand Teton National Parks and the John D. Rockefeller, Jr. Memorial Parkway
- . 2006c. Sustainable News. Climate: People and parks respond to change. no. 1, 5 (Fall). [http://www.nature.nps.gov/sustainabilityNews/search\\_docs/News\\_Issues/Fall06SusNews.pdf](http://www.nature.nps.gov/sustainabilityNews/search_docs/News_Issues/Fall06SusNews.pdf)
- . 2007. Winter Use Plans Draft Environmental Impact Statement, Yellowstone and Grand Teton National Parks and the John D. Rockefeller, Jr. Memorial Parkway,

- NoHow Inc. 1999. Avalauncher Evaluation and Site Review. Unpublished report prepared for Yellowstone National Park. October 1999.
- North Wind Inc., 2005. Yellowstone and Grand Teton National Parks and the John D. Rockefeller, Jr., Memorial Parkway. Final Scoping Report.
- Pengelly, W. L. 1963. Thunder on Yellowstone. *Naturalist* 14:18–25. In *Yellowstone's northern range: Complexity & change in a wildland ecosystem*. <http://mms.nps.gov/yell/northernrange> (accessed May 18, 2007).
- Robbins, Jim. 1996. Weaving a new web: Wolves change an ecosystem. *ZooGoer* 27 (3). <http://nationalzoo.si.edu/Publications/ZooGoer/1998/3/weavingwolfweb.cfm> (accessed May 21, 2007).
- Sacklin, John. 2007. [Personal communication]. Management Assistant, Yellowstone National Park, Wyoming. April and May.
- Schullery, Paul. N.d. The Greater Yellowstone ecosystem. <http://biology.usgs.gov/s+t/nofram/r114.htm> (accessed May 21, 2007).
- Smith, M. D., 2005. Recent trends in cumulative impact case law. Presented at the National Association of Environmental Professionals Annual Conference, Alexandria, VA, April 16–19.
- Stiles, David Paul II. N.d. *Effects of Canis lupus reintroduction within the Greater Yellowstone ecosystem*. <http://academic.evergreen.edu/s/stidav22/reports/WolfReintroduction.pdf> (accessed May 21, 2007).
- Sumeriski, Alan. 1999. Avalauncher Tower – Site Placement, South Entrance Road, Talus Slope. Unpublished project proposal prepared by Yellowstone National Park staff. November 27, 1999.
- Taylor, David T. 1999. Economic importance of the winter season to Park County, Wyoming. University of Wyoming, Cooperative Extension Service, Laramie, WY.
- . 2007. Economic trends in the winter season for Park County, Wyoming. University of Wyoming, Cooperative Extension Service, Laramie, WY.
- Toweill, D. E. and J. W. Thomas. 2002. *North American Elk: Ecology and Management*. Smithsonian Institution Press. Washington, D.C.

- USDA. (USDA U.S. Forest Service). 1986. Shoshone National Forest, Land and Resource Management Plan, Cody, Wyoming
- . 2007. Shoshone National Forest, Draft Proposed Land and Resource Management Plan, Cody, Wyoming
- Vucetich, John A., Douglas W. Smith, and Daniel R. Stahler. 2005. Influence of harvest, climate, and wolf predation on Yellowstone elk, 1961–2004. April 21.
- Wagner, F. H., R. B. Keigley, and C. L. Wamboldt. 1995. Comment: Ungulate herbivory of willows on Yellowstone's northern winter range: Singer et al. (1994). *Journal of Range Management* 48:475–477. In *Yellowstone's northern range: Complexity & change in a wildland ecosystem*. <http://mms.nps.gov/yell/northernrange> (accessed May 18, 2007).
- White, P. J., T. Davis, J. Vorkowski, R. Garrott, D. Reinhart, and D. McClure. 2006. Behavioral responses of wildlife to snowmobiles and coaches in Yellowstone. Unpublished review draft available at <http://www.nps.gov/yell/parkmgmt/winterusetechicaldocuments.htm>. (accessed May 15, 2007).

**YELLOWSTONE WINTER USE  
DRAFT EIS COMMENT FORM**

June 2007

Reviewer Kelly Bott Agency: WDEQ - AQD Date: 5/30/2007  
 Contact (phone/email): 307-777-6088 kbott@state.wy.us Comments Due: June 5, 2007

Page	Section	Paragraph	Line	Comment	Follow up to Comment
83	3.4.1	Table 3-8		All pollutants should be represented as they may impact AQRV's, including visibility.	
83	3.4.1	Table 3-8		On September 21, 2006, EPA announced final revisions to the National Ambient Air Quality Standards for particulate matter, which were published in the Federal Register on October 17, 2006 and took effect on December 18, 2006. The revision strengthens the 24-hour PM2.5 standard from 65 to 35 ug/m3 and revokes the annual PM10 standard of 50 ug/m3. EPA retained the existing annual PM2.5 standard of 15 ug/m3 and the 24-hour PM10 standard of 150 ug/m3. The State of Wyoming will enter into rulemaking to revise the Wyoming Ambient Air Quality Standards.	
189	4.2.3	1st Paragraph	2nd Sentence	On September 21, 2006, EPA announced final revisions to the National Ambient Air Quality Standards for particulate matter, which were published in the Federal Register on October 17, 2006 and took effect on December 18, 2006. The revision strengthens the 24-hour PM2.5 standard from 65 to 35 ug/m3 and revokes the annual PM10 standard of 50 ug/m3. EPA retained the existing annual PM2.5 standard of 15 ug/m3 and the 24-hour PM10 standard of 150 ug/m3. The State of Wyoming will enter into rulemaking to revise the Wyoming Ambient Air Quality Standards. However, currently the Wyoming Ambient Air Quality Standard is not the same as the federal standard.	
193	4.2.3	1st Paragraph under "Modeled versus Measured Data"		WDEQ does not endorse short-term (24-hour) modeling exercises as a viable tool in predicting short-term ambient impacts from fugitive dust particulate emissions, as the recommended EPA dispersion models have not shown to work well when evaluating short-term fugitive particulate emissions.	
194; 197; 198; 199	4.2.3	Table 4-24; Table 4-30; Table 4-31; Table 4-32; Table 4-33		WDEQ does not endorse short-term (24-hour) modeling exercises as a viable tool in predicting short-term ambient impacts from fugitive dust particulate emissions, as the recommended EPA dispersion models have not shown to work well when evaluating short-term fugitive particulate emissions.	

# ARTS. PARKS. HISTORY.

Wyoming State Parks & Cultural Resources

Division of State Parks, Historic Sites & Trails  
2301 Central Avenue Barrett Building 4<sup>th</sup> Floor  
Cheyenne, WY 82002 (307) 777-7550

June 3, 2007

Dear Winter Use Planning Team:

I'm writing on behalf of the State of Wyoming, Division of State Parks, Historic Sites and Trails in regard to the Winter Use Plans Draft Environmental Impact Statement (DEIS) for Yellowstone (YNP) and Grand Teton (GTNP) National Parks and the John D. Rockefeller, Jr. Memorial Parkway (parks). Continued winter access to these parks by snowmobiles is extremely important for constituents of Wyoming and the American public, so we appreciate the opportunity for continuing dialogue with the National Park Service (NPS) as this planning process moves forward.

## Focus of our comments

1. **A viable winter visitation level for these parks** – “the overall winter visitation level to Yellowstone, Grand Teton, and the Parkway has been decimated over the past five years and has been particularly hard hit under the framework of the existing Temporary Plan. Even though snow coach visitation has increased by 72% since 2001/2002, this equates to only another 8,500 coach visitors. Over this same time period, snowmobile visitation declined dramatically and is still down nearly 64% (over 55,000 visitors) despite a slight rebound this past winter. The bottom line is that total winter visitation to Yellowstone remains down nearly 47,000 visitors (over 47%) which equates to nearly \$600,000 in lost entrance revenue annually. At the same time under the Temporary Plan’s framework, snowmobile visitation within Grand Teton, the Parkway, and on Jackson Lake has nearly become extinct. Changes are needed in the framework of Alternative 1 to help restore viable winter visitation in these parks”.
2. **Certified Leader Groups** – it is critical that at least 25% non-commercially guided (Certified Leader Groups) be allowed within Yellowstone to help restore a viable level of winter visitation to Yellowstone. It is important that our constituents have affordable access.
3. **EPA-Compliant Snowmobiles on the Continental Divide Snowmobile Trail (CDST) and Jackson Lake** – it is important that EPA-Compliant Snowmobiles be allowed on the CDST and on Jackson Lake (rather than requiring all BAT Snowmobiles) to help restore a viable level of winter visitation to Grand Teton, the Parkway, and Jackson Lake.
4. **Keep Sylvan Pass Open** – we believe it is important that winter access to Yellowstone’s interior continue to be available from the park’s East Entrance. This entrance is extremely important to visitors and especially those from Park County Wyoming.



Dave Freudenthal, Governor  
Milward Simpson, Director



## **Preface**

The planning processes over the past ten years have generated huge numbers of ‘public comments’ heralding mass transit-only winter access to Yellowstone, along with severe restrictions on access to Grand Teton and the Parkway. Our observation, though, that many who have submitted and continue to submit these largely ‘form comments’ really have no idea as to what ‘winter use’ of these parks really is or really should be – they have never seen these parks in the winter and likely never will. As an example during a recent NPS public meeting, many commented that two-stroke snowmobiles were still used in the park and in fact one person commented that snowmobile’s were powered by diesel engines, hardly the case and certainly an illustration that many of those who provide comments- are out of touch with reality. By contrast, our constituents who live in Wyoming- live near these parks understand what the winter season is all about and most of all, desire to see these parks properly managed to protect them for our children and future generations to come.

Unfortunately over the last ten years there has been a considerable amount of misleading rhetoric and inaccurate information tossed around by groups and individuals opposed to either snowmobiling or any motorized access to these parks. However, for the first time, we have a DEIS based largely upon new information gleaned from the monitoring of actual winter park conditions and use versus the hypothetical modeling and supposition and information extrapolated from historic unmanaged winter use that “drove the train” during the first three processes. There is now important new information available and it is essential that NPS use it wisely to make good decisions that protect the resources while also allowing a full range of access and recreational use for park visitors.

The NPS Winter Use Planning Team is to be commended for their efforts in producing this document that is, overall, better written and based to a greater degree upon facts versus the numerous myths which drove previous winter use planning efforts. You now have the best information ever available on this subject, so we hope you to stay focused on the facts. The barrage of misleading information will carry on – but it continues to focus on old news – “driven by a train” of conditions from five and ten years ago that no longer exist in the parks today. Most important of all – this planning process is not about an orchestrated public comment “vote” – it is instead about making good decisions based upon the best available information.

## **Viable Winter Access**

While snow coaches can help support winter access to Yellowstone, they are not capable of providing dependable access to the entire park since they are slow and often uncomfortable and undependable for extended trips, particularly to the eastern reaches of the park’s interior. It would be improper to adopt Alternative 2, or any alternative that depends solely upon snow coaches for park access, because it would be a de-facto closure of the park’s interior and particularly the eastern and northern portions of the Grand Loop.

Similarly, it would be improper to allow no level, or only a severely limited level, of motorized vehicle access to the park as proposed in the two variations of Alternative 3. Yellowstone is far too large and remote of an area to believe that any level of “only human-powered” recreational access would be reasonable or particularly safe given the vastness of the park. Furthermore, road grooming is critical for winter travel in Yellowstone – not only for visitor access, but also for park administrative, maintenance, and security functions within the park boundaries – so it would be counterproductive and in actual fact detrimental to believe the park would be appropriately managed and adequately protected if the primary interior roads are ungroomed.

The proposal in Alternative 6 to plow a large portion of Yellowstone's interior roadways would also be counterproductive and detrimental to effective management of the vast park interior. This would eliminate touring the Grand Loop in one vehicle type in one day's time (since rubber tracked-equipped vans are too slow), which would substantively detract from the winter visitor's desired experience. Furthermore, it would make both visitor and administrative travel within the park a virtual nightmare – requiring a minimum of two vehicle switches/transfers to complete a single trip around the Grand Loop or even to visit single locations on the north, east, and south sides of the Loop if the trip originates in either the Mammoth or West Yellowstone areas. This would require visitors to rent both a van and a snowmobile or snow coach to complete a single interior loop trip – certainly not a visitor friendly way to experience a national park. It would also require park staff, as well as employees' families who live within the interior, to have two vehicle types available for their transportation needs within the park – certainly a pointless and unwarranted additional expense for both families and the government. Additionally, NPS would have to invest in a “hub and spoke” infrastructure, which airlines have tried to improve for many years, given the weather conditions during the winter- do you really want to wait to the next flight or shuttle?.

We appreciate and support the fact that the NPS Preferred Alternative, Alternative 1, includes continued access to the parks by snowmobile. But we are very concerned that Alternative 1 essentially only extends the Temporary Winter Use Plan without making important changes we believe are needed to make winter use management successful and sustainable.

We do not view the Temporary Plan as a success because overall winter visitation to Yellowstone has declined over the past five years by nearly fifty percent (minus nearly 47,000 visitors). This translates to a nearly \$600,000 decrease in park entrance revenues (the most recent 06/07 season revenue as compared to five years ago).

Park visitation under this Rule bottomed out at a minus 71 percent/minus 64,000 visitors and a minus \$708,000 in entrance revenue during the 2004/05 winter season. Likewise, unless something changes from the severe restrictions imposed by the Temporary Rule, GTNP/Parkway snowmobile visitation will most likely continue at the current daily average of zero. We don't believe that should be the case, especially since more revenue is always needed to help manage the parks.

As mentioned above, overall winter visitation to Yellowstone has declined dramatically during the three seasons this rule has been in effect when compared to overall visitation numbers previous to the Temporary Rule. These changes are summarized in Table 1 on the following page with data from the NPS Public Use Statistics Office. Highlights include:

- Compared to the ‘historic high’ 1992/1993 season when there were a total of 105,536 snowmobile and snow coach visitors (91,196 snowmobile and 14,340 snow coach), there has been an overall decrease of 64,269 visitors/-60.9%, 56,797 visitors/-53.8%, and 53,381 visitors/-50.6% respectively during the 2004/05, 2005/06, and 2006/07 seasons.
- Overall Yellowstone visitation is also down dramatically under the Temporary Plan when compared to the ‘most recent high season prior to implementation of the Temporary Rule’ (2001/2002) when there were 99,038 total visitors (87,206 snowmobile visitors and 11,832 snow coach visitors). This equates to a decrease of 57,771 visitors (-58.3%) in 2004/05, a decrease of 50,299 visitors (-50.8%) in 2005/06, and a decrease of 46,883 visitors (-47.3%) in 2006/07.

- The bottom line is that, even with a 72% (+8,518 visitors) increase in snow coach visitors over the past five years, total park visitation remains down 47.3% (-46,883 visitors) after three years of the Temporary Plan framework because snowmobile visitors remain down by 63.5% (-55,401 visitors).
- Under the Temporary Rule, snowmobiles are averaging about 1.3 passengers per sled while snow coaches are averaging about 8 passengers per vehicle – neither is substantively different than what they were 15 years ago.
- Yellowstone’s visitor entrance revenue has been down approximately **\$708,000**, \$629,000, and \$585,000 per year during the three years of the Temporary Plan.

**Table: 1 Comparison of Yellowstone Snowmobile and Snow coach Visitation and Revenue** (Source of Data used to compile Table 1: NPS Public Use Statistics Office, WSSA)

Category	1992/1993 Historic Peak # of Sled Visits Year	1994/1995 Historic Peak # of Sleds Year	2001/2002 Most Recent Peak # of Sled Visits Year	2002/2003	2003/2004	2004/2005 Temp. Rule Year 1 Lowest Sled Visits Year	2005/2006 Temp. Rule Year 2	2006/2007 Temp. Rule Year 3 Peak Coach Visits Year
<b>Total Snowmobiles</b>	56,450	<b>74,859</b>	69,196	47,799	22,423	18,364	21,916	24,516
<b>Snowmobile Visitors</b>	<b>91,196</b>	87,616	<b>87,206</b>	60,406	30,210	<b>24,049</b>	28,883	31,805
<i>Change from 01/02</i>				- 26,800 - 30.7%	- 56,996 - 65.4%	- 63,157 - 72.4%	- 58,323 - 66.9%	-55,401 - 63.5%
<i>Change from previous year</i>				- 26,800 - 30.7%	- 30,196 - 50.0%	- 6,161 - 20.4%	+ 4,834 + 20.1%	+ 2,922 + 10.1%
<b>Ave. Visitors Per Sled</b>	1.616*	1.170	1.260	1.264	1.347	1.310	1.318	1.297
<b>Total Snow coaches</b>	1,147	<b>1,579</b>	1,605	1,653	2,058	2,201	2,463	2,448
<b>Snow coach Visitors</b>	14,340	12,960	11,832	12,154	14,823	17,218	19,856	<b>20,350</b>
<i>Change from 01/02</i>				+ 322 + 2.7%	+ 2,991 + 25.3%	+ 5,386 + 45.5%	+ 8,024 + 67.8%	+ 8,518 + 72.0%
<i>Change from previous year</i>				+ 322 + 2.7%	+ 2,669 + 22.0%	+ 2,395 + 16.2%	+ 2,638 + 15.3%	+ 494 + 2.5%
<b>Ave. Visitors Per Coach</b>	12.502	8.208	7.372	7.353	7.203	7.823	8.062	8.313
<b>Total Visitors</b>	105,536	100,576	99,038	72,560	45,033	41,267	48,739	52,155
<i>Change from 01/02</i>				- 26,478 - 26.7%	- 54,005 - 54.5%	- 57,771 - 58.3%	- 50,299 - 50.8%	- 46,883 - 47.3%
<i>Change from previous year</i>				- 26,478 - 26.7%	- 27,527 - 37.9%	- 3,766 - 8.4%	+ 7,472 + 18.1%	+ 3,416 + 7.0%
<b>Snowmobile Revenue **</b>			\$1,037,940	\$716,985	\$336,345	\$275,460	\$328,740	\$367,740
<b>Snow coach Revenue ***</b>			\$118,320	\$121,540	\$148,230	\$172,180	\$198,560	\$203,500
<b>Total Revenue</b>			\$1,156,260	\$838,525	\$484,575	\$447,640	\$527,300	\$571,240
<i>Change from 01/02</i>				- \$317,735 - 27.5%	- \$671,685 - 58.1%	- \$708,620 - 61.3%	- \$628,960 - 54.4%	- \$585,020 - 50.6%
<i>Change from previous year</i>				- \$317,735 - 27.5%	- \$353,950 - 42.2%	- \$36,935 - 7.6%	+ \$79,660 + 17.8%	+ \$43,940 + 8.3%

**Snow coach Visitation:** There has been a lot of emphasis's that snow coaches are being touted the transportation of the future in Yellowstone. There have been massive attempts to market snow coach visitation during the three years of the Temporary Plan, as well as in the years leading up to it. And many proponents have trumpeted the "large increase in coach riders" and that "winter visitors have voted with their feet" during the term of this Rule. Well yes, as Table 1 shows, people have voted with their feet – and well over 60% of snowmobile visitors voted to walk away. And today over 55,000 of them continue to stay away – because the winter experience being offered is not what they desire.

When you look closely at the snow coach visitation in Table 1 it shows that, really, the snow coach visitor level is not that much different from what it was sixteen years ago. The NPS Public Use Statistics Office reports that there were a total of 14,340 snow coach visitors in Yellowstone during the 1992/1993 winter season. Interestingly, snow coach visitors then declined to as low as 9,071 in the 1995/1996 winter season and never reached the 14,000 mark again for eleven years when, in the 2003/2004 winter season (the year prior to implementation of the Temporary Rule), it hit 14,833. (Is this another case of visitors voting with their feet?) So since the Temporary Rule has gone into effect (along with all the intense coach marketing efforts by businesses, NPS, and special interest groups promoting snow coaches), snow coach visitation has really only increased by 5,527 riders (37.3%) since the start of the Temporary Rule or by 6,010 riders (41.9%) as compared to 1992/1993 – so that's really only an average growth rate of 2.6% per year when compared to sixteen years ago despite massive marketing efforts over the past years. So the question is a 2.6% increase- a large increase in snow coach riders?

Another important observation regarding snow coach visitation is that the number of snow coaches entering Yellowstone have increased quite dramatically over the past sixteen years – from 1,147 in the 1992/1993 winter season to 2,448 in the most recent 2006/2007 winter season. This equates to 113.4% growth and an additional 1,301 snow coaches per year – for only an additional 6,010 riders over this same period. A lot of seats were added- but do you have "cheeks in the seats"? This is important because heavy snow coaches' subject groomed trails to significant wear and tear – so their increased use has certainly had a negative impact on the quality and durability of groomed roads in the park. And snow coaches are yet unregulated in Yellowstone in respect to their tailpipe emissions – so more than doubling the number of tailpipes for just a few more riders has also unnecessarily increased the emissions and sound levels within the park. It seems hard to characterize this growth as a success.

Over the past fifteen years the average number of riders per snow coach has also remained relatively flat, fluctuating between 7.2 and 8.3 riders per vehicle. Since most snow coaches are modified 15-passenger vans, this means that, today and for the past fifteen years, snow coaches have operated at about 50% of their seating capacity – or less given that several larger "modern coaches" have been placed into service in recent years. If the premise is that coaches are better since they are mass transit, shouldn't they be managed closer to their 'transit carrying capacity' to help minimize the number of tailpipes entering the park? Our observation is that NPS has been handing out snow coach concession permits to anyone and everybody who wants to help move the coach's political bandwagon down the road, which has done nothing other than to dilute the intended benefits of winter mass transit in Yellowstone. We hope future permit allocation reconsiders this practice and limits the number of vehicles to only what are really needed to meet visitor's demand and interest.

It is interesting to note that the number of snow coach vehicle entries into Yellowstone actually declined slightly (15 vehicles = 0.6%) in 2006/2007 as compared to the 2005/2006 season. This is good in that it helped move the average number of riders per coach up slightly, from 8.062 to 8.313. But when you couple this with the fact that Overall snow coach visitors only increased by 494 riders (2.5%) over this same time period, you have to wonder if the public's interest in snow coach visitation has possibly

peaked and once again reached its saturation point? Have the commercial folks realized that they are over seat capacity? Perhaps another lesson learned from the airline industry. The NPS needs to be extremely cautious about proceeding with only the existing framework of the Temporary Plan – because visitation likely may not be sustainable and could instead revert to decreases like what happened with snow coach visitation between 1992 and 2004.

In general it doesn't appear that NPS has given the effects of this significantly decreased visitation proper weight or analysis in this process – otherwise it is difficult to understand how the agency could believe that simply continuing down the path laid by the Temporary Plan could be good for the long-term health of the parks. You must have visitors if you expect to have support for your overall mission.

Three years into the Temporary Plan the park is still down nearly 47,000 visitors, so it seems that something needs to be changed-if there is hope of getting any substantive number of those past visitors back. Some individuals and interest groups will continue to say these visitors will/should come from snow coach riders. But when one looks at the facts that seems extremely unlikely and quite frankly, would come with extreme consequences to the park's infrastructure and particularly the groomed roadways.

Based upon the past fifteen year's trend as well as current figures, 2,448 snow coaches were required to handle 20,350 riders at an average of 8.3 riders per coach. If one were to replace the 47,000 overall lost visitors with just snow coach riders at the current rate, this would require another 5,662 snow coach entries (annual total of over 8,100 snow coaches) into the park per year – which would absolutely decimate the park's groomed snow roads. And even if snow coach riders increased to an average of 12 per vehicle (80% occupancy- "cheeks in seats"), it would still require over 5,600 snow coach entries per season – which would still decimate the quality of the groomed roads.

Cumulatively, these statistics show there is absolutely no way snow coaches alone can deliver a sufficient level of park visitation that is at the level that: A) the park needs to sustain its public support and operating costs, B) the public needs to meet its desired level of visitation to the parks and desired range of experiences, and C) can sustain the park's infrastructure and resource management requirements.

### **Support Blending Several Pieces of Alternatives 1, 4, and 5**

We support the Wyoming State Snowmobile Associations (WSSA) beliefs" that there are three severely detrimental flaws within Alternative 1's proposed management prescriptions that would be harmful for successful and sustainable long-term management of these parks. These damaging flaws include: 1) requiring 100% of the snowmobile groups within Yellowstone to be commercially guided since it is excessive and unreasonable regulation that has decimated visitation levels, 2) requiring that all snowmobiles operated on the Continental Divide Snowmobile Trail (CDST) and Jackson Lake within Grand Teton and the Parkway be a Best Available Technology (BAT) snowmobile since it is unreasonable given the low historic use numbers and the fact that the CDST is immediately adjacent to a plowed highway with concurrent automobile, truck, and bus traffic, and 3) closure of Sylvan Pass to all motorized vehicle traffic since this would unduly eliminate important access to the park from the Cody region of Wyoming. We therefore ask that you consider a final management plan that blends several pieces of Alternatives 1, 4 and 5 to reflect the following:

## **Allow at least 25% of Daily YNP Snowmobile Entries to be led by Certified Group Leaders**

Requiring that 100% of snowmobile visitors in Yellowstone be led by a commercial guide is undesirable since it has proven to be detrimental to providing an adequate level of winter visitor use in the park. At least 25% of daily snowmobile entries should be available to be led by non-commercial Certified Group Leaders who have taken a short certification course and would control and be responsible for managing the actions of their groups. Certified Groups would still be heavily regulated and would be very different than historic unguided snowmobile access when winter use was generally unmanaged. Furthermore, this limited access would always be subject to monitoring and review and ultimately be subject to change under the park's underpinning adaptive management principles.

The importance and high degree of public support for NPS allowing a level of non-commercial snowmobile use in Yellowstone is demonstrated by the recent (and unusual) joint comment letter on this Draft EIS by the Wyoming Congressional Delegation. This letter strongly urges NPS to improve the preferred alternative and specifically states, "...residents of Wyoming, Montana and Idaho have a unique relationship with Yellowstone and Grand Teton National Parks. As residents of the states who house these national treasures within their borders, these individuals have a unique opportunity to access the Parks and a vested interest in keeping the Parks pristine. We strongly urge the NPS to consider a separate, limited designation that would allow access to the Park without a commercial guide. Such a designation would be similar to the unguided or non-commercial tours proposed in Alternative 4, which requires a certified group leader. We encourage the NPS to include such a proposal in the Final EIS and the ROD." Senator Thomas, Senator Enzi, and Representative Cubin speak loud and clear on behalf of Wyoming's residents and winter visitors – non-commercial access to Yellowstone National Park is important to us.

### **Comments Related to Certified Group Leaders and Members of Their Groups**

Clearly, the "commercial guides-only" requirement has been the death knell of sustainable winter visitation in Yellowstone. And this requirement has also changed the demographics of "snowmobile visitors" to Yellowstone. In our visits with numerous commercial snowmobile tour operators in both the Jackson and West Yellowstone areas, they have estimated that 80 to 90 percent of their clients during the term of the Temporary Rule have never been on a snowmobile before their guided trip into Yellowstone.

While this is good in respect to introducing many new people to snowmobiling, it is not so good in respect that snowmobile visitation to Yellowstone is now primarily just 'tourists who have never seen a snowmobile before riding one into the park.' Real snowmobiler's (those who own one or at least have experience riding one – like our constituents) have for the most part been displaced – because of the commercial guiding requirement.

So again, we believe it is critical that some degree of non-commercial guiding be allowed in YNP if there is to be any hope of bringing a reasonable level of winter visitation back to the park. We believe the Certified Group Leader is the best vehicle to accomplish this since it would allow NPS to continue to retain tight control (a leash, if you will) over the number and types of machines entering the park, as well as the behavior of the drivers of those vehicles. Certified Leaders would be very similar to commercial guides – the major difference being they would not be paid for assuming this major responsibility for oversight of their group in providing visitor safety and resource protection. At the same time, the situation would be very dissimilar to the unguided-unmanaged snowmobile access as it existed prior to the Temporary Rule. It would be, as the planning team has been quoted as saying in respect to other aspects of this plan, "A difference of night and day."

### **Certified Leader Requirements:**

This would tier to the general description outlined for 'Non-Commercial Tours' in Alternative 4 – Guiding Requirements at the bottom of page 46 of the DEIS. One member of the group (while not charging a fee to other members of their group) would be required to make prior arrangements for educating and certifying themselves in advance of their trip into Yellowstone. This certification as a Group Leader would then enable them to assume leadership responsibilities required to lead a group into the park. The Leader would be responsible for ensuring the group obtained their required reservations, entrance permits, and BAT snowmobiles in advance of their trip, as well as for providing the required supervision and oversight of group members while they are in the park. Specific requirements should include:

1. The individual must have actual snowmobiling experience and knowledge. An individual who has not snowmobiled at anytime in the past would not be eligible.
2. The individual must possess a valid certificate of completion of a snowmobile safety course administered by a state, province, the American Council of Snowmobile Associations, the Canadian Council of Snowmobile Organizations, Tread Lightly!, or any other generally recognized certifying organization. This will help eliminate those who have no previous snowmobiling experience.
3. The individual must pass an annual certification course administered by the parks or their designee. The on-line Safe Rider! Snowmobile Safety Education Awareness Program available at [www.snowiasa.org](http://www.snowiasa.org) or [www.snowmobilers.org](http://www.snowmobilers.org), and augmented with park-specific information about wildlife encounters and park rules, would provide a good framework from which to build a Leader certification course.
4. The individual must obtain any reservations, permits, and BAT equipment required for the group's trip into Yellowstone.
5. The individual would be required to check-in with the park or their designee to obtain the most current information and advisories prior to entering the park on the day of their permitted trip.
6. Non-compliance with any terms and conditions imposed upon Group Leaders by NPS shall result in immediate revocation of the individual's Leader certification (along with any other penalties applicable for park rule violations), as well as a ban on any future Leader certification for the individual (or for a set number of years).

The on-line Safe Rider! Awareness Program typically takes someone with snowmobiling experience and knowledge (a prerequisite for leader certification) 1½ to 3 hours to work through all parts of this education program, which is consistent with what we believe would be a reasonable requirement for a Leader certification program. This program is available for NPS use if the parks so desire. The Wyoming State Snowmobile Association and the American Council of Snowmobile Associations (ACSA) offer their assistance, both in the short and long-term, to help NPS develop a training program for the certification of group leaders. We firmly believe this approach can be just as effective as the use of commercial guides has been thus far and we are committed to make such a system work for the parks. The actual certification and reservation system that would be required for this program could be operated through a NPS contract with one organization or by partnerships with multiple agencies and organizations in the area.

### **Certified Leader Group – Member Requirements:**

We believe the purpose of Certified Leader led groups should be to provide an opportunity for experienced snowmobilers to visit the parks at their own pace versus at the pace driven by a commercial guide. Therefore, we believe that all group members who are operating a snowmobile should also have prior snowmobiling experience. Specific requirements for group members should include:

1. All snowmobile operators who are members of a group escorted by a Certified Leader must possess a valid Motor Vehicle Operator's License.
2. All snowmobile operators who are members of a group escorted by a Certified Leader must possess a valid certificate of completion of a snowmobile safety course administered by a state, province, the American Council of Snowmobile Associations, the Canadian Council of Snowmobile Organizations, Tread Lightly!, or any other generally recognized certifying organization. (This would be comparable to WY Game & Fish requirements that all big game hunters must possess a Hunter Education Program certificate, to ensure a basic knowledge about safe practices.)

This will help ensure that all snowmobile operators in the group have some level of prior snowmobiling safety knowledge and operating experience. It would still allow inexperienced individuals to travel with the group as a passenger on a snowmobile.

Persons with no prior snowmobiling experience would be required to work with a commercial snowmobile tour operator if they desire to drive a snowmobile themselves within Yellowstone.

#### **Certified Leader Group Size:**

We propose that the maximum size of groups led by a Certified Leader should be somewhat smaller, six (five plus the Leader), to facilitate tighter control of group actions by the leader. We also believe there should be a minimum group size of four (three plus the leader) to help maximize use of this category.

#### **Management by Total Group Limits:**

We propose that Certified Leader Groups be managed by both daily snowmobile limits as well as by a maximum number of Certified Leader Groups allowed in the park each day.

The daily group limit would prevail over the maximum total daily snowmobile limit and be determined by dividing the maximum group size into the daily snowmobile limit for each entrance. We propose that daily snowmobile limits should be allocated to approximately 75% commercially guided entries and a minimum of 25% to certified leader groups for the West and South entrances. The other access points could be the same (75/25) or a mixed percentage based more upon potential demand as determined by NPS. Once the daily limit for an entrance is established, then the maximum Certified Leader Group size (6, 10, or whatever the number is) is divided into the 20% non-commercial allocation for that gate which then derives the daily group limit for Certified Leader Groups at that gate.

Additionally, most snowmobiles used by Certified Leader Groups will most likely end up being commercial BAT rental snowmobiles. Therefore, gateway businesses will be a primary beneficiary – and they won't have to supply guides with their rental sleds, which should help those who say they have a labor shortage in respect to qualified commercial snowmobile guides.

#### **Do Not Support Unguided Snowmobiles in Yellowstone:**

We do not support unguided snowmobiles in Yellowstone since we do not believe it would be in the best interest of long-term sustainable snowmobile access to the park. There are simply too many restrictions for the average person to know and understand, as well as many issues that will remain volatile with groups opposed to snowmobiling. Therefore, a combination of Certified Leaders and Commercial Guides is the best way to manage snowmobile visitors”.



## **Continental Divide Snowmobile Trail:**

We are very concerned about the continued viability of the Continental Divide Snowmobile Trail (CDST). Snowmobile use has become nearly extinct on this important inter-state connection during the term of the Temporary Plan. Snowmobile visits now average zero per day and not substantively above zero for the entire season. This has been driven by the overbearing and unjustified NPS rule that allows only BAT snowmobiles to travel this route through Grand Teton and the Parkway – even though it is located within the right-of-way of a plowed highway with concurrent automobile, truck, and bus traffic. This simply makes no sense.

We believe it is critical to remember the context in which this trail route was initially established: an opportunity for long-distance snowmobile trail touring between Lander, Wyoming and West Yellowstone, Montana. It was an important economic development initiative that involved three states: Wyoming, Idaho, and Montana. This long-distance trail was never approved as a trail through Yellowstone National Park to reach West Yellowstone. Rather, the official CDST touring route has always been from Lander across the Shoshone and Bridger-Teton National Forests in Wyoming, through Grand Teton and the Parkway alongside the plowed roadway to Flagg Ranch, on the Grassy Lake Road in the Parkway, and then across the Targhee and Gallatin National Forests in Idaho and Montana to West Yellowstone. The requirement for BAT snowmobiles on the CDST has essentially destroyed any opportunity for inter-state trail touring since BAT snowmobiles are not typical of snowmobiles used in the adjacent national forest settings.

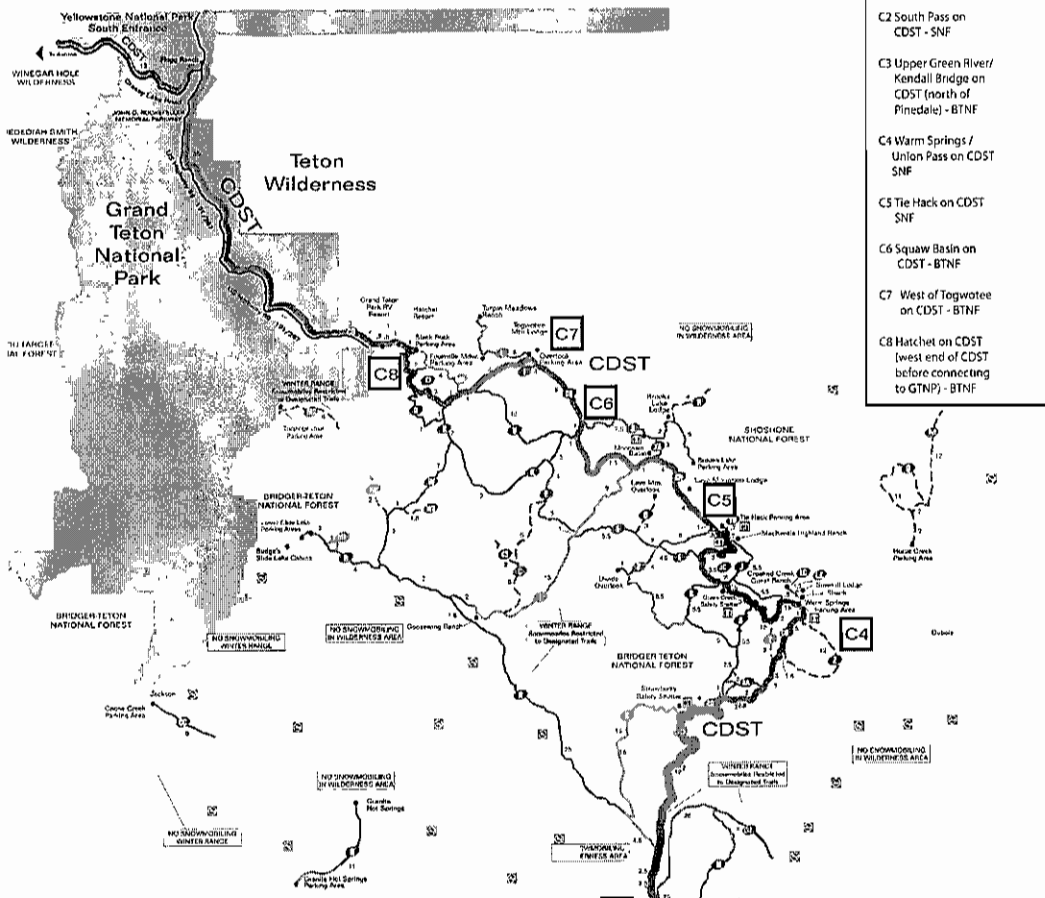
Table 2 on the page 11 and accompanying maps on pages 12-14 illustrate snowmobile counter data and locations for the Continental Divide Snowmobile Trail for the 1999-2000 through 2003-2004 winter seasons (the most recent statistics readily available). This data was collected by our Wyoming State Trails Program staff, in partnership with local forest district personnel, through the use of infrared trail counters at selected sites for CDST monitoring and information collection.

You will note that this trail across the Shoshone and Bridger-Teton National Forests in Wyoming is a popular and heavily used venue. While it receives steady use from east (the Lander area) to west (the Togwotee/Black Rock area), use generally increases as you move westward. The Squaw Basin, Togwotee, and Hatchet counters are all located west of the Continental Divide and consistently record some of the highest traffic counts. Daily counts for the whole trail system range from 121 to 163 snowmobiles per day, while daily averages toward the west end of the trail can be over 300 snowmobiles per day. While not all of these snowmobilers regularly traverse the entire length of the CDST across both forests, a good number of groups do. And many of these groups tout their CDST trip as one of their 'lifetime snowmobiling experiences.' The CDST is an extremely unique and special snowmobiling experience that we're trying to keep intact so that future groups don't have to dead-end their trips at Black Rock – but can instead continue across GTNP, JDR, and then national forest trails into Idaho and eventually end up at West Yellowstone, Montana. These through-trips are important – and don't require a large number of daily snowmobile entries to accommodate.

**Table 2: CDST Snowmobile Use Figures on the Shoshone (SNF) and Bridger-Teton (BTNF) National Forests (Source: Wyoming State Trails Program – CDST Monitoring Reports)**

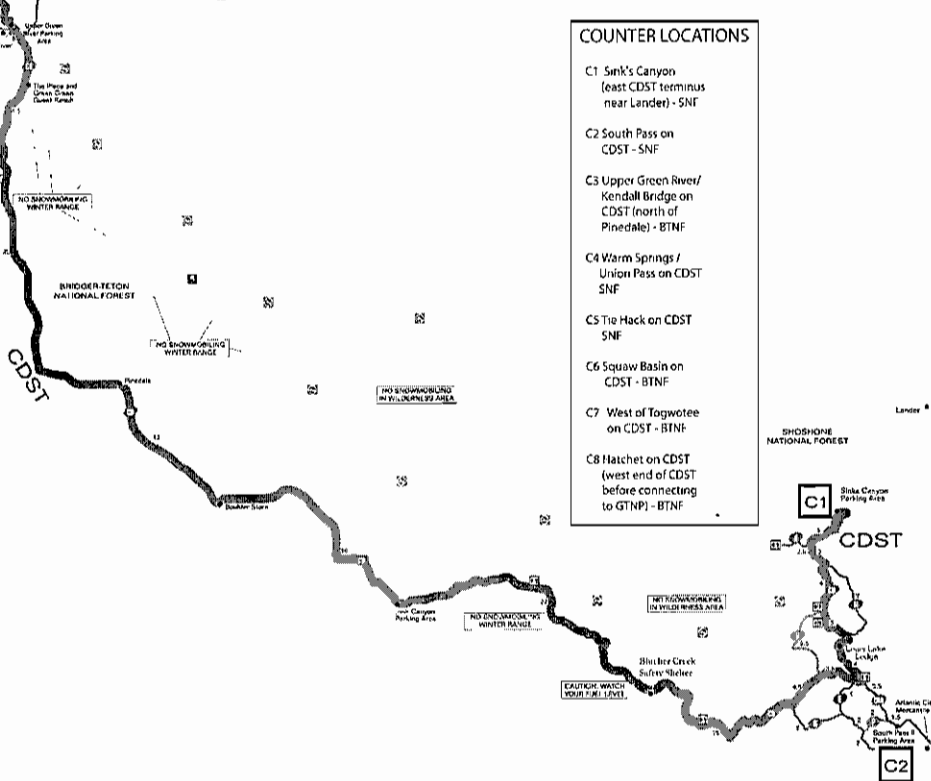
Infrared Trail Counter Location  See Map	1999/2000		2000/2001		2001/2002		2002/2003		2003/2004	
	Total Annual # Sleds	Daily Ave. Sleds	Total Annual # Sleds	Daily Ave. Sleds	Total Annual # Sleds	Daily Ave. Sleds	Total Annual # Sleds	Daily Ave. Sleds	Total Annual # Sleds	Daily Ave. Sleds
Sink's Canyon (east CDST terminus near Lander) – SNF  C1	1,852	21.5	7,478	68.6	8,740	114	13,119	230	missing	missing
South Pass on CDST – SNF  C2	2,257	32.7	2,168	24.9	732	31	3,398	33	2,029	51.5
Upper Green River/ Kendall Bridge on CDST (north of Pinedale) – BTNF  C3	4,065	84.7	missing	missing	10,009	103	7,064	91	8,503	160
Warm Springs / Union Pass on CDST – SNF  C4	11,608	85.1	9,132	62.5	10,487	109	7,495	88	14,360	123
Tie Hack on CDST – SNF  C5	6,786	77.1	10,075	89.1	2,796	39	25,734	204.2	16,019	135
Squaw Basin on CDST – BTNF  C6	57,997	597.9	30,585	325.3	16,546	312	29,437	282	30,045	273
West of Togwotee On CDST – BTNF  C7	21,516	231.4	18,272	167.6	16,216	165	16,184	153	11,727	118
Hatchet on CDST (west end of CDST before connecting To GTNP) – BTNF  C8	15,263	173.4	13,100	111	12,415	133	10,279	113	11,269	110
Total CDST Trail – Average of Representative Sites	15,168	163.0	12,973	121.3	9,743	125.8	14,089	149.3	13,422	138.6

# Continental Divide Snowmobile Trail (CDST)



- COUNTER LOCATIONS**
- C1 Sink's Canyon (east CDST terminus near Lander) - SNF
  - C2 South Pass on CDST - SNF
  - C3 Upper Green River/ Kendall Bridge on CDST (north of Pinedale) - BTNF
  - C4 Warm Springs / Union Pass on CDST - SNF
  - C5 Tie Hack on CDST - SNF
  - C6 Squaw Basin on CDST - BTNF
  - C7 West of Togwotee on CDST - BTNF
  - C8 Hatchet on CDST (west end of CDST before connecting to GTNP) - BTNF

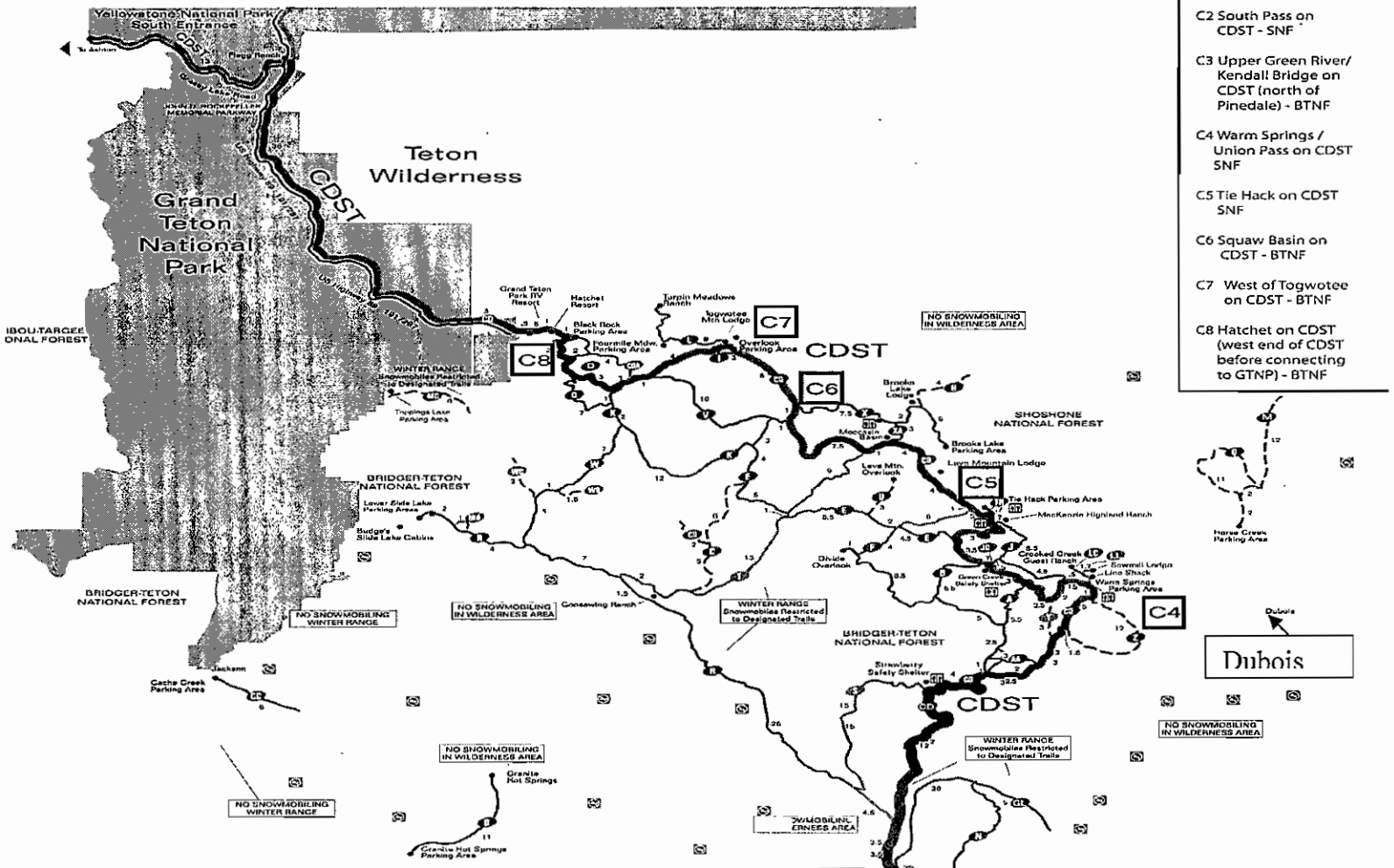
# Continental Divide Snowmobile Trail (CDST)



- COUNTER LOCATIONS**
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  - C7 West of Togwotee on CDST - BTNF
  - C8 Hatchet on CDST (west end of CDST before connecting to GTNP) - BTNF

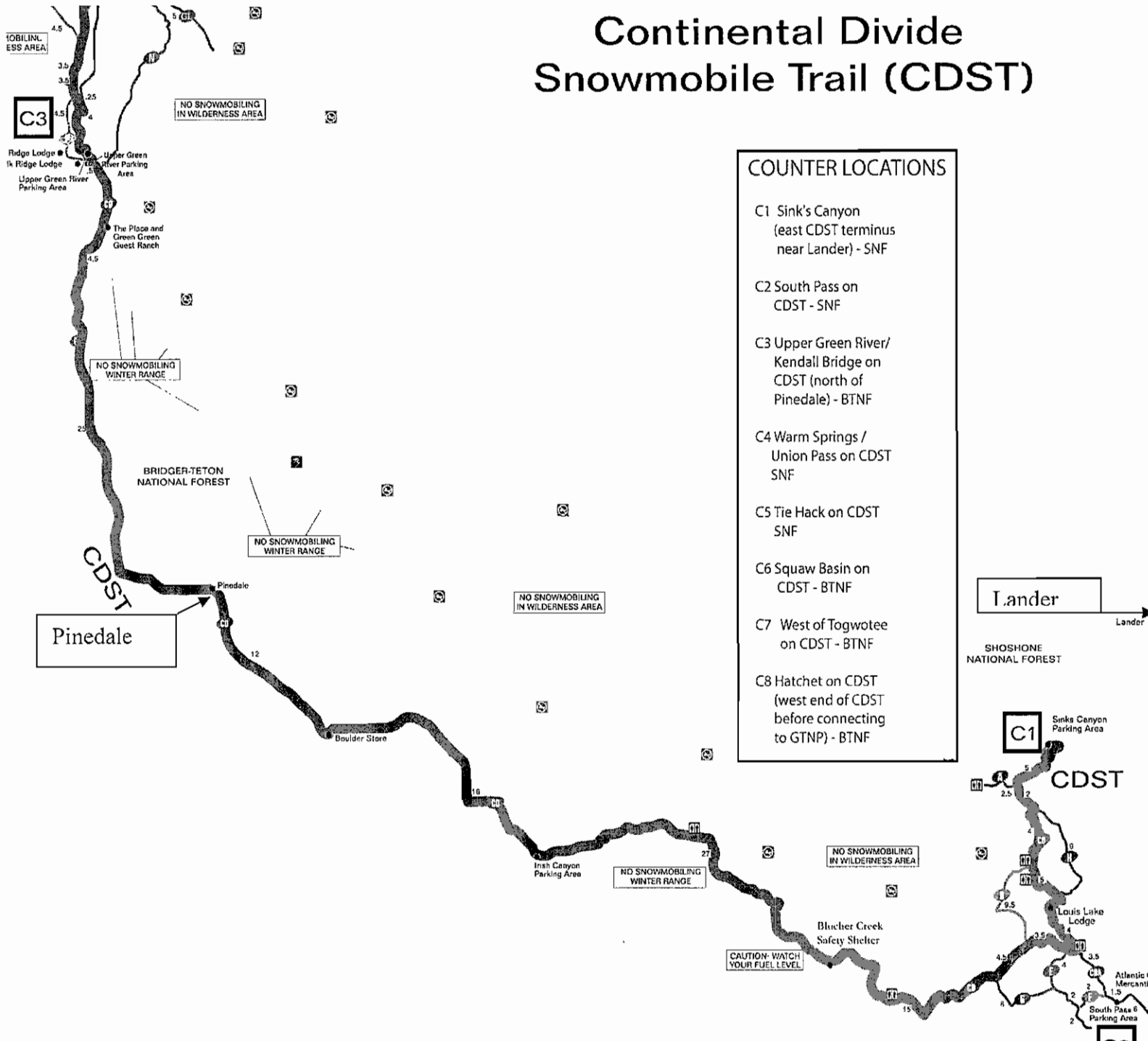
per Portion of CDST- From Elk Ridge Lodge (Upper Green River Area) - Ashton, ID via Grassy Lakes Road

## Continental Divide Snowmobile Trail (CDST)



Lower Portion of CDST from Lander, WY- Elk Ridge Lodge (Upper Green River Area)

# Continental Divide Snowmobile Trail (CDST)



## **Keep Sylvan Pass and the East Entrance of Yellowstone Open:**

The East Entrance provides important access to Yellowstone National Park for northeast Wyoming residents and visitors to the Cody area. Closure of Sylvan Pass would in essence close this entrance other than to localized non-motorized travel. This would be extremely detrimental to winter tourism in Park County, Wyoming. We therefore encourage NPS to pursue ways to partner with entities in Park County to keep Sylvan Pass open during the winter season.

The importance and high degree of public support for NPS keeping this route open is demonstrated by the recent (and rare) joint comment letter on this Draft EIS sent to NPS by the Wyoming Congressional Delegation. This letter expresses strong concerns and states, “Simply stated, the preferred alternative closes the East Entrance of Yellowstone National Park to motorized snowmobile and snow coach access. This decision is unacceptable to us and our constituents, and we strongly urge the NPS to reconsider closure of the East Entrance as the Draft EIS moves toward a Record of Decision (ROD).”

NPS needs to weigh this strongly stated concern from the Congressional Delegation quite heavily. And as you are well aware, it is also accompanied by equally strong concerns from the Wyoming Governor, Wyoming state legislators, Park County, the community of Cody, and numerous other entities. It states in Appendix F on page A-55 of the DEIS that the cost of Sylvan Pass avalanche management is “\$200,000 per year.” If NPS does, in fact, decide to close Sylvan Pass, it will undoubtedly result in an extreme degree of ill-will toward Yellowstone from all fronts – something that will most certainly be intense and long-lasting. It makes one wonder just how high of a price NPS is willing to pay – and for how long – when compared to saving \$200,000 out of a \$3.7 million annual winter operation?

One of the reasons cited by NPS for proposing to eliminate avalanche control on Sylvan Pass is the ‘low number of visitors’ who have traveled through this area during recent winter seasons. Once again, restrictions imposed by NPS through the Temporary Plan have been a large contributor to this factor. Specifically the 100% BAT snowmobile and 100% commercially guided snowmobile requirements have decimated the viability of this entrance. Additionally, helicopter-based avalanche control has led to more and longer delays in opening the pass to travel after winter storms – which only worsened the dependability of access through this area. NPS policies have driven numbers down to set the stage for ‘discontinuing avalanche control because it costs too much for the number of visitors.’ One certainly has to wonder if the former has orchestrated the latter. But again in the end, is the \$200,000 saved really worth the price paid in regard to community and state relations over the longer term?

Visitor and employee safety are extremely important, but at the same time there are numerous potential management options outlined in Appendix H, other than full closure, that can more creatively and effectively address avalanche concerns on Sylvan Pass. NPS has done avalanche control work in this area for nearly three and one-half decades – so why the sudden change of heart?

The DEIS and your most recent *Winter Use Newsletter* state that, “Yellowstone has stepped up its commitment to employee and visitor safety in recent years...” That’s all good and well – but the fact is that no one has been hurt or killed by an avalanche in the Sylvan Pass area in the over 40 years that Yellowstone has been open to winter visitors. There is therefore no sound basis that warrants closure. Rather than close this access, we would suggest amending management policies so visitors who can help support the cost of avalanche control are attracted back to the park and this entrance.

If NPS does proceed with closure, we would encourage language in the final rule that doesn't make such a decision "forever," but instead somehow leaves the door open for reconsideration in the future in the event circumstances and/or technology changes regarding avalanche management.

It is stated on page 39 (in the Alternative 1 discussion about the 'East Entrance Road' at the top of the page) as well as elsewhere in the DEIS that, "The balance of the road (Sylvan Pass to Lake Butte Overlook) would be open to ski and snowshoe access only; the road would be considered backcountry, with no motorized winter access. Skiers and snowshoers using the Sylvan Pass area would travel at their own risk." If this pass is truly an extreme safety issue for park employees and visitors, then it would seem any closure should be to all uses – and it should *not* remain open to nonmotorized access.

It is also stated on page 207 and elsewhere that, "Sylvan Pass would be closed to OSV travel but remain open to non-motorized travel." The first bullet following this statement then says, "No avalanche control operations would occur at the pass, other than those necessary for search and rescue operations..." It seems that leaving the pass open to non-motorized travel invites the potential for preventable search and rescue operations that could unnecessarily expose park employees to avoidable risks. Our perspective is that a closed roadway does not qualify as 'backcountry' where one assumes complete risk for their individual actions; rather, the cleared road corridor invites an easier travelway than what occurs in true park backcountry. Federal agencies routinely close areas to "all human presence" to protect wintering wildlife – so why wouldn't YNP close this area to all uses (if the road is subsequently closed to grooming and avalanche management activities are suspended) to protect human lives? If the pass is closed, then it must be closed to all uses.

Thank you for the opportunity to comment, if you should have any questions please feel free to call me at 307 777 7550.

Sincerely,

Brad Hill  
Trails Program Manager  
State of Wyoming- Division of State Parks, Historic Sites and Trails

CC    Governors Planning Office  
      Milward Simpson – Director  
      Patrick Green- Administrator  
      WSSA BOD



## WYOMING GAME AND FISH DEPARTMENT

5400 Bishop Blvd. Cheyenne, WY 82006

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Web site: <http://gf.state.wy.us>

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May 16, 2007

WER 6136.01  
National Park Service  
Environmental Impact Statement  
Winter Use Activities in the Parks  
Yellowstone and Grand Teton NP  
And John D. Rockefeller Memorial Parkway

Debbie VanDePolder  
Winter Use Plan  
P.O. Box 168  
Yellowstone National Park, WY 82190

Dear Ms. VanDePolder:

The staff of the Wyoming Game and Fish Department has reviewed the Environmental Impact Statement for Winter Use Activities in the Parks. We offer the following comments for your consideration.

A common concern among winter anglers is that purchasing snowmobiles that meet BAT is expensive. Anglers are apprehensive to make this investment when there is no guarantee that the snowmobile will meet BAT the following year. We would suggest that once a snowmobile is on the approved BAT list, the snowmobile be guaranteed use for 5 to 10 years.

Historic snowmobile use figures for Jackson Lake do not take into account the past use of snowplanes. A better representation of historic use would be combining snowmobiles with snowplanes into a general motorized use category.

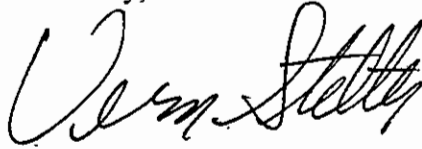
Alternative 4 that allows for 100 snowmobiles per day on Jackson Lake is most consistent with past motorized use levels.



Ms. Debbie VanDePolder  
May 16, 2007  
Page 2 - WER 6136.01

Thank you for the opportunity to comment.

Sincerely,

A handwritten signature in black ink, appearing to read "John Emmerich". The signature is fluid and cursive, with the first name "John" being more prominent.

*JE* JOHN EMMERICH  
DEPUTY DIRECTOR

JE:VS:gfb

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Hank Phibbs

## County Administrator

Jan Livingston

May 15, 2007

Winter Use Team  
P.O. Box 168  
Yellowstone National Park, WY 82190

RE: Cooperating Agency Review Draft: Winter Use Plans DEIS

Dear Sir / Madam:

These comments are submitted on behalf of Teton County, Wyoming which was formally designated by the National Park Service as a Cooperating Agency under the National Environmental Policy Act for the Grand Teton and Yellowstone Winter Use Plans.

Teton County appreciates the role it has as a Cooperating Agency and we are particularly pleased to be invited to participate in a technical review of the proposed plans and in having the opportunity to submit preliminary comments prior to the release of the Draft Environmental Impact Statement.

Teton County commends the National Park Service for recognizing and addressing the extremely important issues of air quality and air quality related values, employee health and safety, natural soundscapes, public health and safety, socioeconomics, wildlife, and visitor experience.

In addition, Teton County supports the requirement of best available technology in commercially available snow mobile engines, but notes that the same criterion is not required in the Preferred Alternative for snow coaches to be utilized under the Plans; although we also note the belief of NPS that improved technology for snow coaches will be pursued by the concessionaires and providers. Nevertheless, Teton County views the exclusion of snow coaches best available technology at this time is not in the best interest of the users of the park nor the attainment of the high standards visitors expect and all of us demand under applicable federal laws. We would like to see optimum visitation while preserving/protecting resources by monitoring the number of visitors rather than the number of snow coaches allowed.

Generally stated, Teton County supports Alternative One, the Preferred Alternative under the DEIS; however, in addition to the comments made above with respect to BAT for snow coaches, Teton County wishes to express its considerable concern for the well-being of Park County Wyoming under the proposal to close the east entrance, as stated. Teton

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Jackson, Wyoming 83001

Tel: (307) 733-8094  
Fax: (307) 733-4451

Email:  
[commissioners@tetonwyo.org](mailto:commissioners@tetonwyo.org)

County urges NPS to work cooperatively with the state of Wyoming and Park County, Wyoming to find a satisfactory means to avoid the proposed closures and yet provide the level of safety necessitated by the natural conditions existing on Sylvan Pass.

Despite Teton County's general support of the preferred alternative, we wish to state that the discontinuation of use of snow planes on Jackson Lake is not supported by us and although it has been made very clear by NPS that the issue will not be revisited at this time and that the issue remains in litigation, we wish to urge favorable reconsideration on the decision made on the issue.

At the recently held Cooperators' Meeting in Cody, there was considerable discussion regarding the concern of Teton County that users of the Continental Divide snow mobile trail ("CDST") as well as users of the Grassy Lake trail not be inhibited by rules that would make it difficult or undesirable for those users with machines not meeting current BAT requirements to not utilize the trail connecting the east and west portions of the trail as it passes through Grand Teton National Park. We believe that a reasonable option between historic (unregulated) two-stroke snowmobiles and requiring 100% BAT compliant snowmobiles on the CDST, would be to require "EPA Compliant Snowmobiles". We would specifically define EPA Compliant Snowmobiles as a "2007 model or newer" snowmobiles that meet engine family (FEL) regulations. Teton County recognizes the low numbers of usage at this point in time, but feels it important that the potential for increased visitation utilizing these routes be preserved and further recommends that 2006 and newer snow mobiles be permitted as some percentage of the daily entrances of sleds for through-snow mobilers from Grand Junction to Flagg Ranch and on to the Grassy Lake Road in the National Forest.

A certification program similar to the commercial guide program including safety and environmental aspects and park regulations, could be designed for non-commercial snow machine guides or trail leaders to allow more private enjoyment of the Parks.

Teton County would support expanding groomed trails for non motorized activity at the Canyon, Lake and Old Faithful areas in YNP and the road from Cottonwood to Signal Mountain in GTNP and feel further consideration should be given to the potential grooming of future Park pathways. We recommend that the two planning documents, GTNP Transportation Plan and Parks Winter Use EIS, be considered together.

We have read with interest the provisions that apply to the ongoing bison studies and urge continued vigilance in the monitoring and studying of those important issues surrounding the well being of the Yellowstone bison herd.

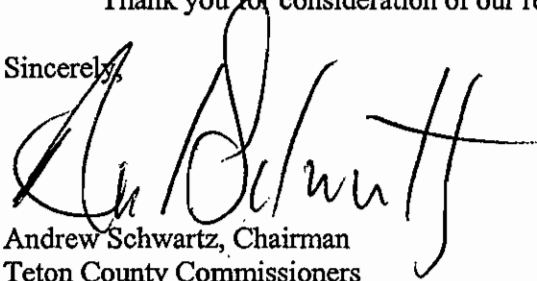
As our representative discussed at the Cooperators' Meeting, the necessity and predictability and sufficient lead-time for change resulting from adaptive management actions taken by NPS are an absolute economic necessity. Teton County urges NPS to maximize the time given for necessitated change on the part of users, but at the same time would not urge actions to be taken in jeopardy of environmental protections.

As set forth in the Memorandum of Understanding, the State of Wyoming is the primary agency for the submission of socioeconomic data. Although not technical in nature, we certainly want to express in a general way the economic importance of the Parks to our county and the justified expectation of our people for appropriate access to the Parks being available.

We understand that these comments are not to be considered exclusive on our part, and that Teton County will have a further opportunity to comment on all matters appropriate under the DEIS. We look forward to continuing in a cooperative manner to the ultimate adoption of Plans that fully implement the established mission and goals of The Grand Teton and Yellowstone National Parks, while permitting our citizens an opportunity to enjoy the splendors of each Park.

Thank you for consideration of our remarks.

Sincerely,

A handwritten signature in black ink, appearing to read "Andrew Schwartz". The signature is fluid and cursive, with a large initial "A" and "S".

Andrew Schwartz, Chairman  
Teton County Commissioners

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CODY, WYOMING  
COMPLETED 1912

*Commissioners' Office  
June 5, 2007*

Mr. John Sacklin  
Winter Use Planning Team  
P.O. Box 168  
Yellowstone National Park, Wyoming 82190

**RE: Comments on Winter Use Plans Draft Environmental Impact Statement (DEIS)  
Yellowstone and Grand Teton National Parks and  
John D. Rockefeller, Jr. Memorial Parkway**

Dear Mr. Sacklin:

Attached to this email with a hard copy to follow, please find Park County, Wyoming's Cooperating Agency comments on the Winter Use Plan DEIS. We have taken our role as a cooperating agency very seriously in light of the proposed closure of the East Entrance in the Preferred Alternative (Alternative 1), which will directly and adversely impact our residents, visitors, and our local winter tourism businesses that rely on access to Yellowstone for sustainability and survival. Because there is overwhelming local opposition to closing the East Entrance, we have spent considerable time and resources educating ourselves on this and other key issues so that we can provide substantive comment. We request that the National Park Service (NPS) consider our comment document in detail and commit to keeping the East Entrance open.

As you are well aware, our greatest concern is closure of the East Entrance in the Preferred Alternative. We strongly oppose this proposed action which will so fundamentally and permanently affect our residents and our visitor's ability to use and access our public lands. The primary reason given for closing the East Entrance is safety concerns associated with avalanche control at Sylvan Pass, although low visitor use and costs have also been mentioned as considerations. Based on our thorough review of the DEIS and other related documents, the following points highlight our key concerns regarding the NPS Preferred Alternative:

- The DEIS overstates the Health and Safety issues related to the avalanche conditions on Sylvan Pass and associated control operations, while at the same time, demonstrates a very safe program since control operations began in 1973.
- The Avalanche Hazard and Mitigation Assessment Report (Coney 2007) provides recommendations that NPS should implement to improve their already successful avalanche control program and that would further reduce risks to employees involved in avalanche control. We do not understand why NPS prefers to head in a direction that limits the public's ability to enjoy Yellowstone rather than exploring all options to improve safety for both employees and visitors while maintaining current access opportunities.
- We recommend NPS resume use of the howitzer as the primary method for avalanche control. The helicopter is a costly, less reliable substitute that has resulted in longer closures of Sylvan Pass and added approximately \$115,000 per year to control costs. Artillery is industry standard and NPS has operated a very successful artillery program for more than 30 years.
- The DEIS goes to great length describing the inherent avalanche hazards encountered by visitors traveling over Sylvan Pass and to employees conducting avalanche mitigation in the avalanche zone area of Sylvan Pass yet fails to include a discussion of the avalanche hazards at the Talus Slope area along the South Entrance Road. This is a puzzling and serious omission and demonstrates an inconsistent park-wide analysis of avalanche safety issues. This omission must be corrected in the Final EIS.
- Visitation at the East Entrance has declined dramatically since implementation of managed winter use in 2003. We believe much of this decline can be attributed to the requirement that all snowmobiles be accompanied by a commercial guide. While we recognize the importance of providing guide services, we strongly recommend that NPS implement a program allowing up to 80% unguided/non-commercially guided access at the East Entrance. We oppose NPS using low visitation as a justification for closing the East Entrance without giving any consideration to how their own restrictions may be affecting visitation numbers.
- The DEIS acknowledges that socioeconomic impacts to businesses along the North Fork of the Shoshone River will be major, adverse, and long-term. Keeping the East Entrance open and implementing needed changes in other NPS management policies (allowing limited unguided/non-commercially guided access) will avoid these impacts. The East Entrance provides public recreation opportunities, supporting local, independent businesses and governments through the collection of taxes and entrance fees.
- The DEIS fails to adequately look at cumulative impacts to visitor access and circulation if the East Entrance is closed. The public lands surrounding the East Entrance are almost entirely wilderness or roadless areas managed for non-motorized use. Loss of access to Yellowstone via the East Entrance will significantly impact motorized opportunities in this area. The NPS failed to consider the compound effects of all Federal decisions being made concurrently by other federal land use plans and the Winter Use Plan

- We support a final alternative that keeps all four entrances open, allows both snowcoach and snowmobile access with daily entry limit of 60 snowmobiles through the East Entrance and flexible daily limits for special occasions, and that accommodates unguided/non-commercially guided access. We support BAT-only snowmobiles in YNP
- We recommend contracting locally for avalanche control to detonate the howitzer.

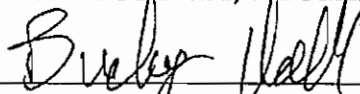
The accompanying "Comment Document" prepared for Park County by Ecosystem Research Group (ERG) details our objections to and concerns about specific portions of the DEIS and our recommended changes. We respectfully request that a NPS project manager read this document in its entirety as the whole is greater than the sum of its parts. We will vigorously oppose any attempt on the part of NPS to close the East Entrance, and hope to continue to work with NPS in finding creative solutions to keeping this historical and unique entrance open for the long-term.

Finally, we also incorporate by reference our comments previously submitted on the Cooperating Agency Preliminary DEIS (PDEIS) to the extent such comments were not addressed by the NPS in the DEIS, and to the extent they are not inconsistent with this new comment document.

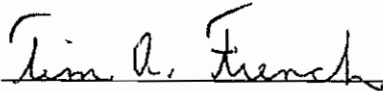
Thank you again for the opportunity to submit comment on the DEIS.

Sincerely,

**BOARD OF COUNTY COMMISSIONERS  
PARK COUNTY, WYOMING**



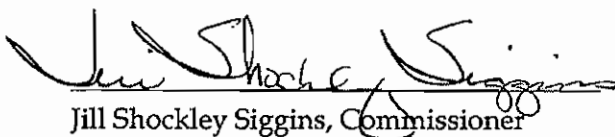
Bucky Hall, Chairman



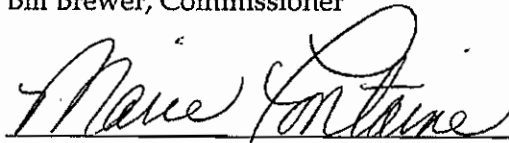
Tim A. French, Vice Chairman



Bill Brewer, Commissioner



Jill Shockley Siggins, Commissioner



Marie Fontaine, Commissioner

Enc: Comment Document For Winter Use Plans

**COMMENT DOCUMENT FOR  
WINTER USE PLANS  
DRAFT ENVIRONMENTAL IMPACT STATEMENT  
YELLOWSTONE AND GRAND TETON NATIONAL PARK  
JOHN D. ROCKEFELLER, JR. MEMORIAL PARKWAY**

**Prepared for**

**Park County, Wyoming**

**June 5, 2007**

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## EXECUTIVE SUMMARY

Ecosystem Research Group (ERG) contracted with Park County, Wyoming to review the *Draft Environmental Impact Statement for the Winter Use Plans for Yellowstone and Grand Teton National Parks and the John D. Rockefeller, Jr., Memorial Parkway* (NPS 2007), hereto after referred to as the DEIS. Our review focused on the proposed closure of Sylvan Pass, the socioeconomic analysis, National Park Service (NPS) commercial guiding requirements in Yellowstone National Park (YNP), management of snowmobiles in Grand Teton National Park (GTNP) and the John D. Rockefeller, Jr., Memorial Parkway (Parkway), wildlife and over-snow-vehicles (OSV), and compliance with the National Environmental Policy Act of 1969 (NEPA). Our key findings are presented below.

### KEY FINDINGS

- We strongly oppose closure of the East Entrance in the NPS Preferred Alternative (Alternative 1). NPS fails to make a compelling argument for closing the entrance based on safety and has failed to act on recommended mitigations that could further improve their existing avalanche control program.
- We support a final alternative that keeps all four entrances open, allows both snowcoach and snowmobile access at levels proposed in Alternative 1, that accommodates unguided/non-commercially guided access, and that allows limited numbers of non-BAT (best available technology) but Environmental Protection Agency (EPA) compliant snowmobiles to use the Continental Divide Snowmobile Trail (CDST). We support BAT-only snowmobiles in YNP.
- The DEIS overstates the Health and Safety issues related to the avalanche conditions on Sylvan Pass and associated control operations, while at the same time, demonstrates a very safe program since control operations began in 1973.
- The DEIS goes to great length describing the inherent avalanche hazards encountered by visitors traveling over Sylvan Pass and to employees conducting avalanche mitigation in the avalanche zone area of Sylvan Pass yet fails to include a discussion of the avalanche hazards at the Talus Slope area along the South Entrance Road. This is a puzzling and serious omission and demonstrates an inconsistent park-wide analysis of avalanche safety issues. This omission must be corrected in the Final EIS. The superintendent made comments regarding the dismal safety record of the National Park Service nationally and the high ratio of OSHA related incidents suggesting the closure of the East Entrance would mitigate avalanche risks to Park employees and thus lower the % of accidents. There is no connection to any known YNP avalanche incident yet the superintendent continues to suggest risks are too high to apply mitigation measures.
- Ironically, Alternative 1 (the Preferred Alternative) and Alternatives 2, 3, and 6 propose to close Sylvan Pass to through over-snow vehicle (OSV) use while “inviting” skiers and snowshoers to use and travel on a constructed highway feature over Sylvan Pass “with its substantial avalanche hazards for visitors and employees” (p. 197) without managing or controlling the avalanche risk. We support keeping all visitors safe and oppose closure of Sylvan Pass and the East Entrance.
- Visitation at the East Entrance has declined dramatically since implementation of managed winter use in 2003. We believe much of this decline can be attributed to the requirement that all snowmobiles be accompanied by a commercial guide. While we recognize the importance of providing guide services, we

strongly recommend that NPS implement a program allowing up to 80% unguided/non-commercially guided access at the East Entrance. We oppose NPS using low visitation as a justification for closing the East Entrance without giving any consideration to how their own restrictions may be affecting visitation numbers.

- We recommend NPS resume use of the howitzer as the primary method for avalanche control. The helicopter is a costly, less reliable substitute that has resulted in longer closures of Sylvan Pass. Artillery is industry standard and NPS has more than 30 years experience with this type of program.
- The DEIS acknowledges that socioeconomic impacts to businesses along the North Fork Shoshone River will be major, adverse, and long-term. Keeping the East Entrance open and implementing needed changes in other NPS management policies (allowing limited unguided access) will avoid these impacts. The East Entrance provides public recreation opportunities, supporting local, independent businesses and governments through the collection of taxes and entrance fees.
- The DEIS fails to adequately look at cumulative impacts to visitor access and circulation if the East Entrance is closed. The public lands surrounding the East Entrance are almost entirely wilderness or roadless areas managed for non-motorized use. Loss of access to Yellowstone via the East Entrance will significantly impact motorized opportunities in this area. The NPS failed to consider the compound effects of all Federal decisions being made concurrently by other federal land use plans and the Winter Use Plan. The Shoshone National Forest Plan revision, the Big Horn National Forest plan, and the Bridger Teton National Forest plans are implementing decisions and plans negatively impacting winter use on National Forests in the GYC region. These cumulative decisions will have a significant economic impact to all counties surrounding YNP. (i.e. the closure of Sleeping Giant ski area on the SNF, the auction of properties in the Big Horn Mountains on federal lands including Deer Haven, Meadowlark, and Big Horn Ski Resorts and the Wilderness Ranch.) Many resorts and ski areas on surrounding national forests are financially suffering from federal decisions. None of these impacts are considered in the Winter Use plan yet they are all inflicted by federal government agencies and none of these agencies are considering the cumulative negative economic impacts to the surrounding communities, counties and state.
- Management of the CDST and Grassy Lake Road under the temporary winter use plan of August 2004 has virtually eliminated use of these trails. The NPS Preferred Alternative will continue the current management direction which will do nothing to address the declines. We suggest a more innovative approach that recognizes that these trails provide an important link between public lands on either side of GTNP and the Parkway. We recommend that a limited number of non-BAT snowmobiles that meet 2007 EPA emission requirements be allowed to use these trails as a throughway. This will improve opportunities for those snowmobilers wishing to travel this unique route linking extensive snowmobile trail systems in Wyoming, Montana, and Idaho.
- We strongly support allowing unguided and non-commercially guided snowmobiles in YNP as proposed in Alternatives 4 and 5. Given existing restrictions (speed limits, nighttime use restrictions, ranger patrols) and adaptive management opportunities, we believe unguided and non-commercially guided use can provide a wider range of recreational opportunities for visitor access while still protecting park resources and values. We believe requiring 100% commercial guides for snowmobiles has directly caused the dramatic declines in visitation at the East Entrance. A change in management direction should be implemented to reverse these recent declines. Suggested mitigation measures in the PDEIS were ignored by the National Park Service and not incorporated into the DEIS. Some, but not all of these mitigations were the implementation of a national park winter snowmobile license. This license could be obtained through a NPS website with online testing and receipt. This test and license would provide all of the rules and regulations to the license holder thereby eliminating any misunderstanding of current winter use snow mobile regulatory measures. An annual license could be issued to ensure up to date regulations and procedures. No licensed driver would mean no access to the park for winter use.

- We support the use of seasonal entry limits, and associated flexible daily entry limits, as proposed for Alternative 5. This approach will allow YNP and local businesses the ability to respond to higher visitor demand during busy holidays and weekends.
- Wildlife populations in YNP have shown dramatic fluctuations. Possible adverse effects from OSV use will always be insignificant compared to other variables including wildfire, predation, winter severity, and lack of population control actions.
- The DEIS appears to be NEPA deficient, cumulative impacts do not fully characterize or capture economic impacts and foreseeable limitations to adjacent public land winter motorized use.

## 1. INTRODUCTION

Park County appreciates the opportunity to work with the NPS on developing a Winter Use plan for YNP, GTNP, and the Parkway. Given the importance of developing a winter use plan that provides park visitors, local communities, and other stakeholders assurance that winter use management will remain stable and predictable over the long-term, Park County, as a formally recognized “Cooperating Agency”, is intent on being a fully engaged participant and stakeholder in this process.

This document provides comments to the *Draft Environmental Impact Statement for the Winter Use Plans for Yellowstone and Grand Teton National Parks and the John D. Rockefeller, Jr., Memorial Parkway* (DEIS). The DEIS (NPS 2007) is not significantly different than the Preliminary Draft Environmental Impact Statement (PDEIS); we therefore incorporate by reference the comments submitted on the PDEIS (ERG 2007) to the extent they are not inconsistent with this new body of comments. We respectfully reserve the right to refine our comments and provide additional detail as more information becomes available.

In preparing this document, we also reviewed the NPS responses to our comments on the 2006 PDEIS. These comments were provided by NPS to Cooperating Agencies on May 5, 2007. Many of our comments were not addressed or only cursory responses were provided. As a Cooperating Agency, this underscores the frustration felt between our agency and lack of voice we believe we have had through out the process. When dialogue takes place it creates an environment of high trust and openness. Ideally this process could have been an opportunity of continuous learning, diversity, conflict exploration, decision making and problem solving, between all parties concerned. This takes consideration on the part of NPS and requires them to collaborate and come up with solutions rather than dictates. Park County officials believe they have participated in providing solutions and creating a fuller picture of the realities of winter use opportunities in YNP. The appropriate smiles, nods and platitudes have been afforded Park County by the park service personal. Therefore, we bring forth many of our comments (some updated) from the PDEIS review document for emphasis and clarification of key issues.

### 1.1 REVIEW COMMENTS ORGANIZATION

Park County’s detailed comments are specific to those areas most likely to adversely impact businesses and communities in Park County and Wyoming and are organized as follows. Chapter 1 is an introduction to the document, Chapter 2 is review and comment on the alternatives presented in the DEIS. Chapter 3 includes detailed comments on specific issues areas including the proposed closure of the East Entrance (Section 3.1), proposed management of the snowmobiles in GTNP and the Parkway (Section 3.2), NPS guiding requirements (Section 3.3), wildlife and OSV use in YNP (Section 3.4), and NEPA considerations (Section 3.5). Chapter 4 includes specific comments for correction or clarification. Chapter 5 is a list of preparers and Chapter 6 is the references used in the preparation of these comments.

## 2. COMMENTS ON DEIS ALTERNATIVES

Park County's general positions in regard to key elements of the alternatives presented in the DEIS are summarized below, followed by a Park County Preferred Alternative that combines elements from several alternatives and that we believe better meets the NPS dual mandate of providing for the public enjoyment of the parks while conserving park resources and values. We respectfully request a careful review of our positions to be thoughtfully considered and incorporated into the final Winter Use Plan and record of decision.

### 2.1 ALTERNATIVES

The NPS Preferred Alternative (Alternative 1) would essentially continue winter use management according to provisions in the Temporary Winter Use Plan and Environmental Assessment (EA) (NPS 2004). Park County supports elements of the Preferred Alternative including continued snowmobile access to the YNP, GTNP, and the Parkway; the requirements for BAT snowmobiles in YNP; and daily entrance limits that are near historic levels. We are absolutely **opposed** to closure of the East Entrance and do not support the requirement that all snowmobiles use commercial guides.

Park County is opposed to snowcoach-only access and closure of the CDST and Jackson Lake to motorized access as proposed in Alternative 2. We recognize that snowcoaches provide an important choice for winter access to YNP but snowmobiles clearly remain the most popular means for the public to access the park. Snowmobile BAT requirements have proven very effective for improved air quality and noise levels. Both choices should be available to best meet visitor preferences and demand.

We are opposed to Alternatives 3A and 3B. These alternatives would essentially eliminate reasonable access to opportunities for the public to enjoy YNP, would devastate the regional winter tourism industry, and would not meet the desired conditions for visitor access and experience. The CDST and Jackson Lake would be closed, further eroding public access to public lands.

We are supportive of management options put forth in Alternatives 4 and 5, including allowing unguided/non-commercially guided snowmobile access in YNP, allowing limited non-BAT (but EPA compliant) snowmobiles on the CDST and non-BAT snowmobiles on Jackson Lake, allowing commercially guided snowmobiles on the CDST, and seasonal visitor limits that will allow more flexible daily entry limits during busy holidays and weekends. We absolutely think allowing managed, unguided/non-commercially guided snowmobile access will reverse visitation declines at the East Entrance and improve the economic viability of Lodges and business along the Northfork corridor.

We are opposed to Alternative 6 because it would close the East Entrance and the CDST. We also believe plowing the roads from the West Entrance to Old Faithful and from Mammoth to Madison

Junction will greatly detract from the winter experience in YNP and add to the challenges the park service faces with increased operational maintenance costs.

### 2.1.1 Park County Preferred Alternative

Park County encourages NPS to continue to look at innovative ways to manage winter-use in YNP, GTNP, and the Parkway. We believe the range of alternatives provided in the DEIS contain several innovative elements that, when combined, will provide an alternative that is protective of the parks' resources, increases the range of appropriate recreational winter-use opportunities, and ensure a viable winter tourism industry for Park County and the surrounding area. Table 2-1 below provides a comparison of the key provisions in the NPS Preferred Alternative with those provisions we request be included in the Final EIS Preferred Alternative. The key differences include:

- Keeping the East Entrance open
- Allowing 60 snowmobiles entries per day through the East Entrance (near historical highs)
- Allowing unguided/non-commercially guided snowmobile access to YNP
- Allowing limited non-BAT (but EPA compliant 2007 model year or newer) snowmobiles on the CDST and non-BAT snowmobiles on Jackson Lake.

**Table 2-1 Comparison of Provisions in NPS Preferred Alternative with Park County Requested Provisions**

Topic	Alternative 1 Provisions			Park County Preferred Provisions		
<b>YNP</b>						
East Entrance	Closed			Open		
Daily Entry Limit	0			60		
Seasonal Limits	No, Daily Limits Only			Yes, Flexible Daily Limits		
Snowmobile Guiding Requirements	All snowmobiles commercially guided			20% commercially guided, 40% unguided, 40% non-commercially guided		
<b>GTNP/Parkway</b>						
	CDST	Grassy Lake Road	Jackson Lake	CDST	Grassy Lake Road	Jackson Lake
Daily Entry Limits	50	50	40	50	50	100
BAT Requirements (number)	Yes (50)	Yes (50) <sup>1</sup>	Yes (40)	Yes (25), No (25) <sup>2</sup>	Yes (15), No (35) <sup>3</sup>	No
Guiding Requirements	No	No	No	No	No	No

<sup>1</sup> For snowmobiles traveling west and not originating in Targhee National Forest

<sup>2</sup> Non-BAT snowmobiles would be 2007 or newer model year

<sup>3</sup> 25 would be 2007 or new model year, 10 would be pre-2007 model year but only if they originate in Targhee NF.



### 3. DETAILED COMMENTS ON KEY ISSUES

The key issues of concern for Park County for winter use management include the proposed closure of the East Entrance, proposed management direction for snowmobiles in GTNP and the Parkway, NPS commercial guide requirements, the purported effects of OSV use on park wildlife, and NEPA considerations. Our major concerns with these issues are addressed in the following sections.

#### 3.1 PROPOSED CLOSURE OF THE EAST ENTRANCE

NPS Alternative 1 (the Preferred Alternative), and Alternatives 2, 3, and 6, propose closing the East Entrance Road and Sylvan Pass to through motorized traffic, virtually eliminating motorized access or OSV use from the East Entrance to other destination points within the park, and conversely, from destination points within the park out over Sylvan Pass to the East Entrance. As NPS is well aware, this proposal is strongly opposed by residents and business entities in the gateway community of Cody, in Park County, and to the State of Wyoming. This area is popular with both snowmobilers and skiers and loss of these local opportunities is unacceptable.

The primary justification cited for closing this entrance is health and safety concerns related to avalanche hazards in the Sylvan Pass Area and low-visitor use compared to other entrances. We believe NPS has overstated the employee and visitor safety issues associated with avalanche control at Sylvan Pass as justification for closing the East Entrance while ignoring similar concerns at the Talus Slope area along the South Entrance Road. We also believe NPS has failed to implement past recommendations that could further reduce hazards to employees and further improve and enhance their very successful avalanche control program. While The NPS acknowledges the adverse economic impact closure of the East Entrance will have on local Park County businesses, we still believe the economic analysis is flawed and that economic impacts are not accurately disclosed. Finally, we believe that inconsistent NPS management actions contribute substantially to low-visitation at the East Entrance and the associated adverse economic impacts on local Park County businesses. These issues are detailed in the following subsections.

##### 3.1.1 Human Health and Safety Concerns at Sylvan Pass

We fully appreciate the parks' concern for employee and visitor health and safety. We recognized that avalanche control at Sylvan Pass and elsewhere in the park presents unique safety challenges requiring specialized training and equipment. We further recognize that NPS has successfully met this challenge for more than 30 years and has implemented mitigations to reduce the risk from avalanche hazards to visitors and employees. We do not accept the notion that safety issues have now changed to the degree they can no longer be successfully mitigated.

One of the key employee safety concerns discussed in the DEIS (p. 97) is the fact that NPS employees cross several uncontrolled avalanche paths on the way to the howitzer gun mount. We have reviewed numerous unpublished documents related to avalanche control in YNP (provided by NPS to Park County and the State of Wyoming on January 22, 2007) as well as the Avalanche Hazard Assessment and Mitigation Report (Avalanche Hazard Report) for Sylvan Pass (Comey 2007). This safety issue has clearly been recognized for a long time yet NPS has failed to implement recommended mitigations that could reduce this hazard.

For example, the Avalanche Hazard Report (Comey 2007) provides numerous mitigations for reducing avalanche hazards at Sylvan Pass. One recommendation was to evaluate using an avalauncher as an alternative artillery delivery method. This same recommendation was put forth in 1999 when NPS purchased an avalauncher and subsequently contracted for an independent assessment (NoHow Inc. 1999) to determine, among other things, if the avalauncher could be used to decrease exposure to crews traveling to the howitzer gun mount. The assessment indicated the avalauncher could decrease the amount of exposure and recommended test firing from various locations to confirm this possibility. We can find no information, and NPS has provided none to indicate this was ever done. We can only conclude that NPS ignored this potential mitigation. It is also our understanding that NPS has since given the avalauncher to the Gallatin National Forest. This action taken ahead of the final record of decision and final winter use plan indicates the NPS has ignored and not fully considered mitigation measures suggested throughout this process. This underscores our position that dialogue has not been appreciated by all parties involved in the NEPA process. This generous gift to the Gallatin National Forest could have been allocated after a record of decision was made and at least given the appearance of consideration.

Past reports have also recommended installing a weather station at Sylvan Pass to provide real time, site-specific data for improved avalanche forecasting. This recommendation was put forth in the 1999 NoHow report and again in the 2007 Avalanche Hazard Assessment report. NPS has yet to implement this obvious safety improvement (a basic industry standard). It appears to us that NPS has the funds to conduct studies of the avalanche hazards (but then fails to act on the results), to purchase equipment only to give it away, and then continues to describe the hazards as “extreme and unavoidable” when their enviable safety record for avalanche control at Sylvan Pass speaks otherwise. It is clear to us that NPS has the experience and tools to safely manage avalanche hazards at Sylvan Pass and we ask that they recommit to keeping the pass open and safe for winter use.

#### **3.1.1.1 *The Talus Slope***

The DEIS identifies avalanche hazards as one of “three primary health and safety issues regarding winter visitor use” (Table S-2: Major Issues, p. S-5). The DEIS goes to great length describing the inherent avalanche hazards encountered by visitors traveling over Sylvan Pass and to employees conducting

avalanche mitigation in the avalanche zone area of Sylvan Pass (Chapter III, pp. 95–100). What NPS fails to include in the DEIS is a discussion of the Talus Slope area along the South Entrance road, despite the fact that these hazards are well documented in past winter use planning documents, NPS operational plans, and NPS contracted reports related to YNP’s avalanche program. This is a serious and puzzling omission, especially in light of NPS’s often repeated statement that “safety is of paramount concern.” A summary of key reports documenting conditions at the Talus Slope follows:

- ***Avalauncher Evaluation and Site Review (NoHow Inc. 1999).*** This report discusses using the avalauncher (purchased by NPS and subsequently given away by NPS) to control avalanche hazards at the Talus Slope. NoHow Inc. visited YNP to evaluate firing locations for the avalauncher at the Talus Slope and to also evaluate its potential use at Sylvan Pass to, specifically to allow slope stability testing at the pass in the earlier avalanche target areas (i.e., the target areas that employees must pass under to reach the howitzer mount).
- ***Avalauncher Tower–Site Placement, South Entrance Road, Talus Slope, (Sumeriski 1999).*** This proposal, prepared immediately following NoHow’s, Inc. site visit in October, 1999, described potential locations for the avalauncher tower in recognition of the need for avalanche control. The proposal includes descriptions of near-miss avalanche incidents at the Talus Slope, along with the statement that “many of the employees have witnessed avalanche incidents and have been caught in them, many with runouts significant enough to be potentially fatal.”
- ***YNP Avalanche Control Program (NPS 2003).*** This document describes the NPS avalanche safety plan for identified avalanche zones within YNP road corridors. The document’s emphasis is employee and visitor safety. Appendix D is a draft Avalauncher Operation Plan for the Talus Slope Area, clearly demonstrating that NPS recognizes avalanche hazards in this area as an employee and visitor safety issue.
- ***2000 FEIS, p. 134.*** The FEIS states,

Avalanches are prevalent or a concern in three locations adjacent to roads...Winter avalanche control is currently practiced at Sylvan Pass and the Talus Slope (south of Lewis Lake. Sylvan Pass and the Talus Slope area include road segments that are groomed in the winter for snowmobile use.

Pp. 134–135 of the same document contains the following statements,

The NPS has conducted an avalanche control program to maintain the road in a reasonable safe condition for visitor traffic and for spring plowing. Risks associated with avalanche control can potentially affect both employees and visitors. At the Talus Slope, an avalauncher is used to lob charges onto the slope. Installed in 1999, the avalauncher allows for remote delivery of explosives, minimizing the need for hand-set charges.

P. 226 states, “Avalanche control activities would continue on YNP’s East Entrance road, at the Talus Slope and Washburn Hot Springs (spring only) and in GTNP.”

- ***2003 SEIS, p. 115.*** The SEIS states, “Avalanche control is a high-risk operation. NPS staff conducts avalanche control operations on both the South Entrance and East Entrance roads.” The Talus Slope is along the South Entrance road.

- **2004 Temporary Winter Use EA, p. 24.** The EA states, “Avalanche control will continue at Sylvan Pass and other locations...” We presume one of the other locations would be the Talus Slope.

These documents raise many concerns regarding the DEIS and appropriate information disclosure, especially given NPS has stated in their response to Cooperating Agency comments on the PDEIS (NPS 2007, p. 2) that “increased attention to safety issues *“park-wide”* is one reason for proposing to close the East Entrance. Did the previously existing visitor and employee health and safety issues at the Talus Slope simply vaporize? According to comments reported in the press (Billings Gazette 2007), NPS is no longer conducting avalanche control at the Talus Slope because of the lack of heavy snow. Why then wouldn’t lack of heavy snow also reduce avalanche hazards at Sylvan Pass? This apparent lack of concern and disclosure of avalanche hazards at the Talus Slope demonstrates serious inconsistencies in how YNP manages avalanche safety issues *“park-wide.”*

While choosing to ignore the hazards at the Talus Slope, NPS provides new information in the DEIS describing the 1980s closure of Dunraven Pass to OSV travel “due to growing concerns about the pass’s avalanche danger and because it was lightly used by oversnow vehicles” (p. 100). Why is this new information now included in the DEIS, when it wasn’t mentioned in the PDEIS? Is this perhaps to further justify the alternatives that propose to close Sylvan Pass to OSV travel based on past NPS actions? How is this area similar to Sylvan Pass? Was avalanche control ever conducted at this pass? Was it a groomed route? It certainly is not a main gateway entrance so we fail to see why this new information is particularly relevant.

While we appreciate YNP’s commitment to protecting employee and visitor safety, we also can’t help but wonder why YNP didn’t include the Talus Slope area when they engaged the services of an independent avalanche specialist to prepare an avalanche hazard assessment and mitigation report for Sylvan Pass when the scope-of-work for the assessment had the following purpose statement, “The leadership of Yellowstone National Park is committed to protecting all employees and visitors entrusted to their care. This assessment will address snow avalanche safety issues.” It appears that there may be more areas with snow avalanche safety issues than just Sylvan Pass.

Finally, we question whether the DEIS meet its legal mandate to disclose cumulative impacts as described in CEQ regulations (1508.7) by not including discussions on either the Talus Slope avalanche hazard and possible avalanche mitigation operations or both as “past, present, or reasonably foreseeable future actions...”

### **3.1.2 Avalanche Hazards and DEIS Effects Analysis**

The DEIS (pp. 212 and 213) describes the effects on public and employee health and safety for alternatives 4 and 5 (Sylvan Pass Open) as “major, direct, long term, and adverse.” A major impact is

defined in the DEIS (p. 207) as, “The impact to employee or public health and safety is substantial. Extensive mitigation measures would be needed, and their success would not be guaranteed...” For all other alternatives, where Sylvan Pass is closed, effects on public and employee health and safety are described as “minor, short-term, and adverse.” Park County is concerned that the DEIS purposely overstates the safety effects for Alternative 4 and 5 to justify closing Sylvan Pass in the Preferred Alternative. Consider the following:

- Avalanche hazards at Sylvan Pass were evaluated in the 2000 FEIS, the 2003 SEIS, and the 2004 Temporary EA. In the 2000 FEIS, the effect on visitors utilizing the East Entrance and employees involved in avalanche control was described as “minor to moderate and adverse” (p. 266). In the SEIS, effects to *employees* involved in avalanche control were described as “adverse and major” (p.192). Effects to the public were incorporated by reference from the FEIS so were “minor to moderate and adverse.” In the Temporary EA, after implementation of a helicopter as part of avalanche control operations, the effects on employee safety are described as “moderate, adverse” (p. 98). Effects to visitor safety are not specifically addressed in the EA.
- In the 2007 DEIS, the effect on public and employee safety for Alternatives 4 and 5 is described as “major and adverse” (pp. 212 and 213). Since the major difference between alternatives 4 and 5 and other alternatives is that Sylvan Pass is open, we question what conditions at Sylvan Pass have changed since 2004 to warrant avalanche hazards to now be considered a “major, adverse” impact, especially to visitors. The helicopter is still in use so why in the last three years have the effects gone from “moderate adverse” to “major adverse.” It appears to us a contrived effort to justify closure based on overstated safety concerns.
- We also suggest that it would be more appropriate to describe the effects of Alternatives 4 and 5 as “moderate, adverse” since NPS’s enviable safety record for avalanche control at Sylvan Pass demonstrates the effects meet the definition of a moderate effect, defined as “Mitigation measures would probably be necessary and would likely be successful” on p. 207, Table 4-40).

In the January 5, 2005 Cooperating Agency Review PDIES Comments (ERG 2007, p. 8) we expressed concerns over the PDEIS’s Health and Safety inconsistency for those alternatives that would allow non-motorized travel over Sylvan Pass. We reiterate this concern and recommend you consider our January 5, 2007 comment when finalizing the cumulative effects analysis in the upcoming FEIS.

Finally, considering Sylvan Pass as backcountry in these alternatives is also inconsistent with NPS policy (NPS 2006a, Section 8.2.2.4) which states,

The Park Service uses the term backcountry to refer to primitive, undeveloped portions of parks. This is not a specific management zone, but rather refers to a general condition of land that may occur anywhere within the park.

Yet the DEIS states (p. 27): “for all alternatives, the parks are divided into *four management zones...*” Figure 2-1 in the DEIS depicts the East Entrance road over Sylvan Pass as a Road Corridor and the areas immediately adjacent to the road as Transition and Developed Areas. Also on p. 27, “Backcountry” is defined as,

Areas where natural sights, sounds, and smells dominate and human-caused activities are minimal or completely absent. Specifically, this zone includes all areas more than 1.5 miles from the nearest road or developed area.

Based on the information provided on p. 27, Sylvan Pass should be classified as **Transition**, as “this zone would include those roads not open to OSV travel in the winter, but which may be open to motorized travel in summer.”

### **3.1.3 Park Service Winter Operations and Avalanche Control**

According to the DEIS, alternatives that keep Sylvan Pass open to OSV use and continue avalanche control and grooming will have an adverse effect on Winter Operations, based primarily on the associated costs. The DEIS lists the unit cost for avalanche control at Sylvan Pass as approximately \$200,000 per annum (p. A-54). Given that this amount is around 5% of the park’s winter budget, this argument alone should not be the reason for closing the gate during the winter months. Sand storage appears to cost as much.

Furthermore, the decision to use the helicopter as the primary means of avalanche control has more than doubled the cost of the avalanche control program. According to information provided by the NPS, the estimated cost per winter season for the helicopter is approximately \$131,500. This compares to around \$37,000 for the howitzer. The NPS has raised the issue of costs associated with keeping Sylvan Pass open for relatively few visitors (YNP Newsletter 2007). What the NPS fails to mention is these costs have increased substantially because they chose to abandon their long successful howitzer program for a dual program that relies primarily on the very expensive helicopter.

We have real concerns about the limitations of using the helicopter as the primary means of avalanche control, apparently shared by others, as discussed below.

#### ***3.1.3.1 Limitations of Using the Helicopter for Avalanche Control***

The Avalanche Hazard Report (Comey 2007) acknowledges the viability of helicopter dispensed explosives to control Sylvan Pass avalanche hazards, but also acknowledges the limitations of the sole use of this alternative due to weather and associated flying conditions, and the associated delay in performing timely and effective control operations during or immediately after a storm event. On p. 24 of the Avalanche Hazard Report it states:

This change in management approach is likely to result in an increase in the amount of time the road is closed due to avalanche hazards. In addition, the inability of helicopter missions to be conducted during storm conditions could result in an increase in the number of large and natural released avalanches that impact the road.

The report goes on to suggest the helicopter delivery system supplement, not replace, the artillery delivery system, which is the industry standard for programs utilizing multiple delivery systems. It is unclear to us why NPS would choose to rely primarily on a helicopter for avalanche control when it is not industry standard and may be less effective in reducing avalanche hazards to park visitors. This hazard report supports our past stated concerns regarding the sole use of helicopter avalanche control methods.

We also reviewed the Control Method Journals provided by NPS for both the 2004-2005 and 2005-2006 seasons for helicopter missions on Sylvan Pass. The reliability of the helicopter is less than impressive due to factors including weather conditions either at the pass or in-route to the pass, and contract helicopter availability. In some cases, lack of helicopter availability delayed operations for several days.

Compared to the howitzer, NPS data clearly shows that using the helicopter has increased the amount of time the pass is closed. Using information provided by NPS (John Sacklin pers. comm.), we looked at the number of days the East Entrance was closed for the period from 1992 through 2006. For the 2006-2007 winter season, when the helicopter was the only avalanche control method used, Sylvan Pass was closed a total of 15 days for 4 separate avalanche control missions. The season was 81 days long so the pass was closed approximately 19% of the season. In contrast, prior to adopting the helicopter as the primary means for avalanche control, the pass was rarely closed for more than one day per control mission, generally for less than three days for an entire season, and never more than a total of seven days (Figure 3-1). That is the standard NPS should strive for to ensure consistency within and between seasons, and to provide visitors and local businesses predictability in making travel plans or business decisions.

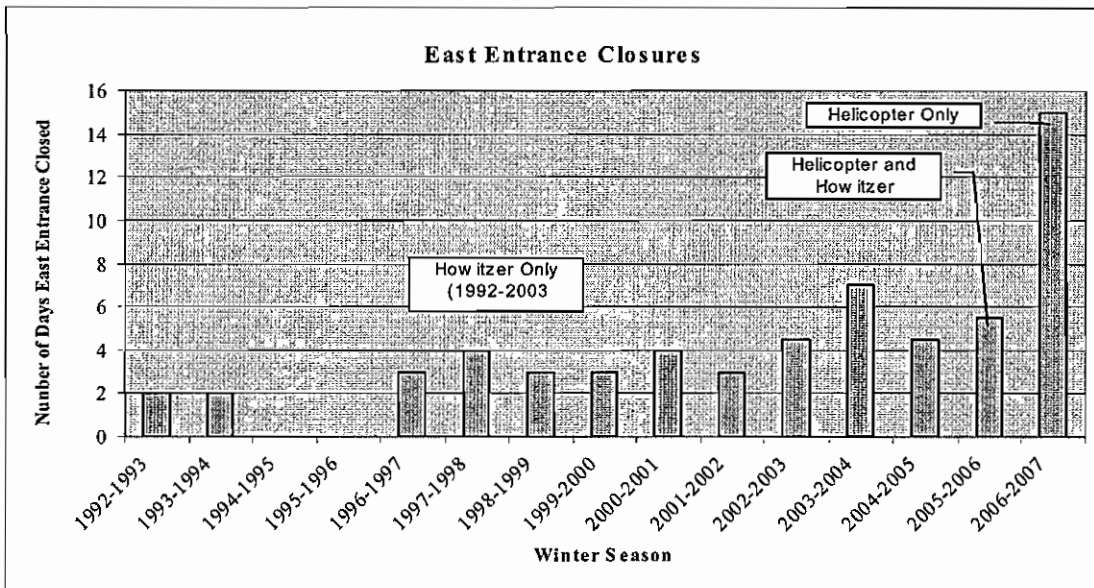


Figure 3-1 East entrance closures 1992-2007

Park County would support utilizing multiple delivery methods of avalanche control identified in the DEIS and future best technologies available. We would encourage the NPS make every effort to communicate delays and closures. It is understood winter weather is unpredictable and safety issues facing the public and park service personnel must be addressed. It has been noted through out this process miscommunication between the YNP websites and public service announcements have added to the confusion surrounding closures and openings and it is our belief these announcements by the NPS have led to the decline of East Gate entrance receipts.

### **3.1.3.2 Recommendations for Avalanche Control at Sylvan Pass**

If the pass is closed for longer periods and there is potential for an increase in the number of large and natural released avalanches, we question why the NPS chose to discontinue use of the howitzer rather than implementing additional mitigations to reduce risks to employees conducting avalanche control operations. We are encouraged by the discussion of potential additional mitigations in the *Avalanche Hazard* (Comey 2007) and *NoHow Inc. (1999)* reports that can be used to further augment and improve the current mitigation program as we are strong advocates of all actions that minimize the risk of avalanche hazard to both visitors and employees. In light of these reports, we suggest the following changes to the YNP avalanche program to further improve safety and provide a more responsive control program at Sylvan Pass.

Park County strongly recommends that NPS resume use of howitzer as the primary method for avalanche control at Sylvan Pass since:

- The howitzer (artillery) is the industry standard for avalanche control in the US. An avalanche control program consistent with industry standards should be the goal of YNP.
- Yellowstone has an excellent safety record for avalanche control at Sylvan Pass using only the howitzer. There have been no visitor or employee injuries or deaths as a direct result of an avalanche control operations or avalanches since control operations were implemented over 30 years ago.
- The cost of using a helicopter for avalanche control is approximately 3.5 times more than using the howitzer (\$131,647 versus \$37,168 based on NPS data). Resuming use of the howitzer would significantly reduce costs associated with keeping Sylvan Pass open.
- The helicopter-only control program implemented last year will assure longer closures (documented above) which will continue to adversely impact local business and visitors. The direct result of the prolonged closures in 2006-2007 was the closure of Park County's historic Pahaska Tepee and a loss of twenty-four winter jobs. Local businesses need consistency and a level of predictability to sustain operations and build a customer base. Use of the howitzer for avalanche control can provide that consistency.
- We recommend contracting locally for avalanche control to detonate the howitzer.

Park County also requests that NPS act on mitigations recommended by *NoHow Inc. (1999)* and *Comey (2007)* to improve the avalanche control program, including installing a permanent weather station at



Sylvan Pass to improve avalanche hazard forecasting and using an avalauncher to test snow stability and reduce hazards to employees crossing uncontrolled avalanche paths while conducting avalanche control at Sylvan Pass.

### 3.1.4 Socioeconomic Analysis Review

The economic analysis presented in the March 2007 update of the DEIS is nearly identical to the previous version presented in the PDEIS. Although the National Park Service clearly states that they engaged in public scoping, they did not sufficiently modify the economic analysis by Duffield and Neher (2006), or consider new economic analyses using unbiased data. The proposed closure of the East Entrance is a major action on the part of NPS and clearly warrants a more focused look at the communities/counties that will be directly impacted.

One of the main issues derived from the needs assessment and public comments was potential adverse economic effects as stated on p. S-5,

The potential economic impacts of various winter use elements on local businesses and economies are at issue. Comments range from statements that protection of park resources is paramount, to the social and economic benefits of various access options. Affordable access, diversification of gateway community economies, protection of local business opportunities, and a need for additional socioeconomic surveys were all raised as issues, as was the potential closure or allocation changes at some entrances.

Notwithstanding, the Park Service selected Alternative 1 as its Preferred Alternative. This alternative sets daily entrance limits of 720 snowmobiles per day of which none come from the East Entrance. The socio-economic analysis using IMPLAN™ reveals that Alternative 1, when compared to the 1997-1998 historical visitation baseline, results in a range of expected economic conditions from “negligible adverse to beneficial” for the three-state and five-county analyses, and for Cody and Jackson. However, “negligible adverse to minor beneficial” economic effects are expected for West Yellowstone. In addition, the NPS formally recognizes adverse economic effects to communities (see p. 168 regarding business on the North Fork of the Shoshone River) and the likelihood that Alternative 1 will exacerbate undesirable economic effects, yet offers no mitigation strategies, nor serious consideration of selecting an economically favorable alternative.

There are several problems with this analysis that leads to understated economic effects as acknowledged by the Park Service and Duffield and Neher (2006) who conducted the analysis. First is the choice of baseline data—it does not appropriately reflect historic use levels. Second, IMPLAN™ is not an appropriate tool to analyze changes in winter recreation given that data are annual, and that the most current data available are 2003—the year where the temporary plan came into effect. The relevance of these two issues is discussed below.

**3.1.4.1 Baseline Data**

The choice of the 1997-1998 season as a benchmark does not represent visitation and leads to understated economic effects thereby downplaying the effects to communities of visitation reductions.

The range of benchmarks provides an array of economic effects, however, only *one* benchmark is appropriate and relevant– the historical baseline. In estimating changes to social welfare because of decreases in amenities, it is important to look at welfare associated with the original endowments, or in this case, original use levels (Mitchell and Carson 1989). The temporary plan came into effect in 2003 reducing visitation significantly. Therefore, current use levels do not reflect the original social welfare associated with winter use. Similarly, estimating changes in community welfare as compared to the No-Action Alternative is not relevant. Therefore, the only relevant economic effects predicted for each scenario are those measured against the historical baseline.

The baseline (119,274) was chosen to reflect historical levels. Duffield and Neher (2006b) provide their rationale for using this figure based on the NPS opinion that increased visitation in 2000-2001 and 2001-2002 was a result of the expected reduction in visitation in 2003. While the latter two seasons may not reflect average levels, it is clear that visitation increased steadily since the 1996-1997 season. Analysis based on the 1996-1997 season visitation underestimates economic effects. The graph below (Figure 3-2) illustrates the upward trend in visitation without the 2000-2001 and 2001-2002 seasons. Visitation of 130,000 estimated using a polynomial trend would more accurately capture historical visitation thus resulting in greater economic effects given proposed reductions associated with NPS alternatives.

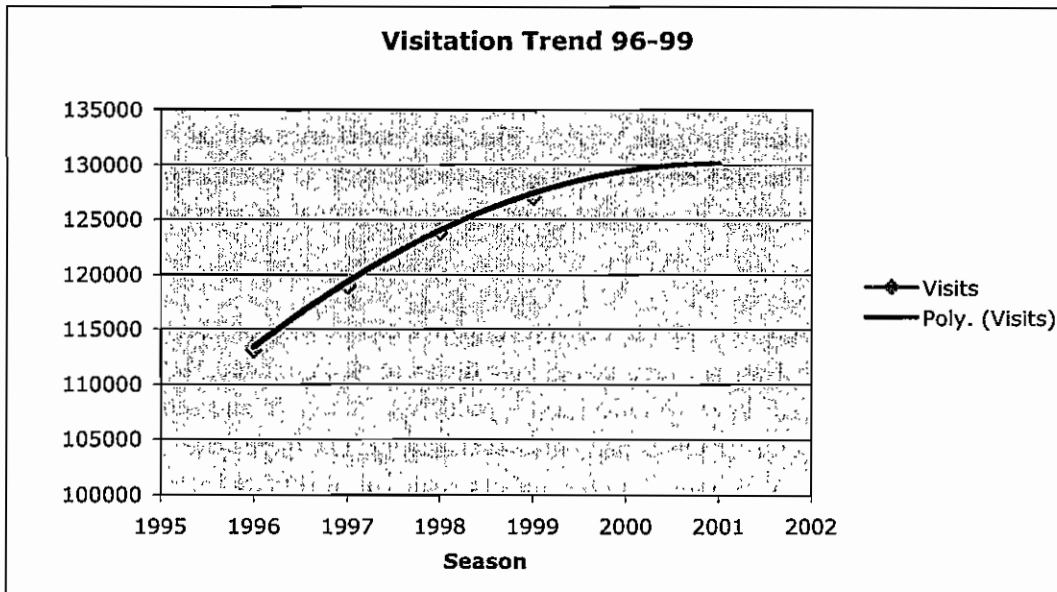


Figure 3-2 Visitation trends from 1996–1999

If increased visitation in 2000-2001 and 2001-2002 were a result of factors other than expected changes in policy, visitation would exceed 130,000 providing a higher historical baseline and greater adverse socio-economic effects. The following graph (Figure 3-3) indicates actual visits with actual visits in the two seasons preceding the 2003 restrictions.

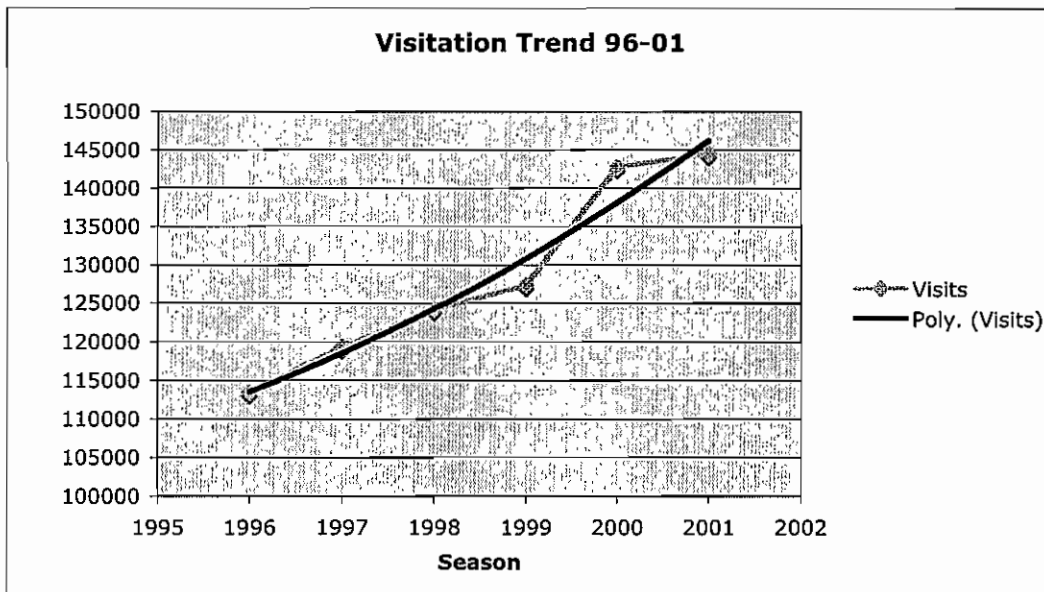


Figure 3-3 Visitation trends 1996–2001

### 3.1.4.2 IMPLAN

The use of IMPLAN is inappropriate for three reasons. First the model uses annual data to measure changes to the winter economy. The NPS does recognize that local effects to communities and families will be missed, or understated, yet does not attempt to engage in additional or alternative analysis to measure such effects.

Second, the model is static and cannot be used to derive cumulative effects (a significant requirement in planning). While the IMPLAN analysis is sound and assumptions are clearly stated, the models cannot accurately capture the economic effects to communities, especially at the scale and scope of analyses. Adverse economic effects will occur at the community level making the three-state and five-county analysis somewhat irrelevant given their sizes. As the authors point out, IMPLAN is a static model and cannot be used to test temporal changes in output and employment (Duffield and Neher 2006a, p. 16) and thereby, cannot measure or capture cumulative economic effects.

Third, while the NPS acknowledges that 2003 data are not current, and that they are the best available, they remain inappropriate. The base data used for the IMPLAN model reflect the economy in 2003 for each of the scenarios modeled. Decreases in winter visitation in 2003, as a result of the temporary plan, would be captured by the relationships and multipliers modeled by IMPLAN. Estimating negative economic effects arising from NPS alternatives would then be compared with an economy that had already experienced decreases in economic activity, thus understating the full effects.

In summary, the economic effects presented for Alternative 1 are understated and would adversely and significantly affect small businesses in Cody and the North Fork corridor. Adverse economic effects for Cody and the North Fork cannot be captured with IMPLAN given the scale and scope of analysis.

Given that all visitation levels are acceptable under the six alternatives, it is not clearly stated nor justified why Alternative 1 is preferred. Economically, Alternative 4 is superior. The Preferred Alternative results in negative economic effects and does not meet the needs of surrounding communities.

#### **3.1.4.3 *Economic Issues Brought Forth From the PDEIS***

Our comment document on the PDEIS provided more detailed information on some of the specific socio-economic impacts to Park County businesses due to NPS management policy for the East Entrance and expected adverse impacts if the East Entrance is closed (ERG 2007). We incorporate those comments by reference for NPS to review and consider during preparation of the final EIS. We reiterate and refine key points from those comments below.

National Park Management Policies (NPS 2006a) encourage parks to support gateway communities and their economies:

**9.1.1.2 Integration of Facilities into the Park Environment:** Whenever feasible and authorized by Congress, major park facilities—especially those that can be shared with other entities—should be developed outside park boundaries. The Service will encourage the private sector to meet facility needs in gateway communities and thus contribute to local economic development, encourage competition, increase choices for visitors, and minimize the need for in-park construction.

**9.3 Visitor Facilities:** The Park Service will encourage the development of private sector visitor services in gateway communities to contribute to local economic development, encourage competition, increase choices for visitors, and minimize the need for in-park facilities.

The North Fork Corridor and the City of Cody have a remarkable existing infrastructure on which to build an economically-sustainable winter tourism industry. This industry is strongly dependent on winter access to Yellowstone (Taylor 1999, 2007). Closing the East Entrance along with loss of motorized access to destination areas within YNP will virtually assure stagnant growth. Keeping the entrance open,

with sufficient daily entries to support existing and future viable businesses will benefit everyone, including YNP.

We strongly believe that NPS policies have a direct impact on our local businesses. Extended closures of the East Entrance, lack of more responsive, accurate, and timely communications with local businesses and visitors regarding closures, and continued confusion over winter use opportunities fail to provide a level of consistency and predictability from year to year for effective management by local businesses and make it difficult for visitors planning to visit YNP via Cody and the East Entrance.

Finally, p. 9 of the DEIS states:

The decision for a long-term winter plan is intended to provide park visitors, local communities, and other stakeholders with assurance that winter use management of the parks will remain fairly stable and predictable over the long-term. Such assurance will facilitate an environment in which visitors can make informed decisions about visiting the parks and allow tourism-based local communities and businesses to plan and invest with a certain degree of certainty.

Permanently closing the East Entrance will provide no such assurance for the citizens of Wyoming and will certainly lead to an erosion of public support for our national parks. Recently the YNP superintendent praised the increased numbers of internet downloads to I-Pods of Yellowstone's magnificent splendor. Is she encouraging visitors to see the park in a digitized format and is this attitude prevalent among the winter use planning decision makers as well? Park County is concerned our youth will never have the opportunity to explore one of our world's magical parks from its East Entrance through the phenomenal Sylvan Pass. I-Pods and internet experiences must not be touted as recreation opportunities or utilized to replace winter adventures to save the NPS operation and maintenance costs.

### **3.1.5 Visitor Access and Circulation**

As discussed in Section 2.5.5 of the DEIS (p. 34), the Madison to Norris road segment (Gibbon Canyon Road) could potentially be closed for research projects to determine whether bison use of this segment has resulted in impacts to their population and distribution. If this road segment is closed, there would clearly be adverse impacts on visitor access and circulation, including loss of opportunity to travel the Grand Loop and significantly greater travel distances for those traveling from Mammoth to Old Faithful.

We believe potential closure of the Gibbon Canyon Road has implications for any decision NPS makes regarding the East Entrance. If Gibbon Canyon Road is closed, travel from the East Entrance to the destinations like Old Faithful would be shorter than traveling from Mammoth (via Canyon). This could potentially increase visitation levels at the East Entrance where visitor use has declined significantly (approximately 80% in the last two years based on Table 3-23, DEIS p. 143). Closing both Gibbon Canyon Road and the East Entrance would decrease opportunities for oversnow travel in the park and

would concentrate use into smaller areas. This is contrary to the desired condition for visitor access and experience.

Furthermore, we remind NPS that visitors are opposed to management options that would reduce access by closing roads, restricting groomed roads to snowcoaches, or plowing the road from West Yellowstone to Old Faithful (Freimund and Borrie 2001, p. 30). All of these management actions are proposed within the scope of alternatives considered in the DEIS.

### **3.2 PROPOSED MANAGEMENT OF THE SNOWMOBILES IN GTNP AND THE PARKWAY**

Park County supports managed winter use in GTNP and the Parkway, yet for the CDST, the Grassy Lake Road, and Jackson Lake, we believe the Preferred Alternative fails to provide needed changes in management direction that are necessary to restore winter use to levels necessary for maintaining long-term access to these historically popular trails. Our comments on the proposed management direction in the Preferred Alternative for the CDST, Grassy Lake Road and Jackson Lake, including suggested changes for NPS consideration, follow. These comments are largely brought forward from our comments on the PDEIS, with some changes.

#### **3.2.1 Continental Divide Snowmobile Trail**

Future management of the CDST in GTNP and the Parkway is a key concern for the Park County and citizens of Wyoming. The CDST is a regional trail system developed by the State of Wyoming, Wyoming tourism and business interests, and snowmobiling enthusiasts. The trail facilitates multi-day touring opportunities between Lander, Wyoming and West Yellowstone, Montana where it connects with additional snowmobile trails in Montana and Idaho. The portion of the trail in GTNP and the Parkway was designated in the 1990 Winter Use Plan and EA and environmental concerns were mitigated by locating the trail parallel to plowed highways.

In the DEIS, management options range from trail closure (Alternatives 2, 3, and 6) to keeping the trail open but with various restrictions. Additionally, the NPS proposes that for alternatives that include the CDST, the NPS will monitor and evaluate its use, and consider adaptive management, including potential closure, if use levels do not warrant continued operation (p. 36). In the Preferred Alternative, winter snowmobile use would be managed the same as it is under the current Temporary Plan with daily entry limits and BAT requirements for all snowmobiles.

One of our primary concerns with the Preferred Alternative is that there will be no change in how the CDST is currently managed, which, under the Temporary Plan, has resulted in a dramatic decrease in snowmobile use. In the seven years prior to implementation of managed winter use in 2003, snowmobile use on the CDST in GTNP and the Parkway averaged 1,688 visitors each season. After 2003, average

daily use dropped by a staggering 97%, with annual use ranging from 17 to 139 visitors per season (based on visitation numbers provide in Table 3.25, p. 145). We believe this dramatic reduction is a direct response to the requirement that all snowmobiles meet BAT requirements. Yet rather than proposing a Preferred Alternative that can reasonably be expected to reverse these declines, the NPS prefers to continue the status quo.

While Park County is encouraged that the Preferred Alternative will continue to allow unguided snowmobile use on the CDST, we ask that NPS also allow limited non-BAT snowmobiles use, as is proposed in Alternative 4, provided the snowmobiles are EPA compliant 2007 model year or newer. By allowing only 2007 model year or newer snowmobiles on the CDST, the NPS could be assured that air emissions would be significantly improved compared to historic conditions since 2007 model year snowmobiles are required to have approximately 75% lower emissions compared to a conventional two-stroke snowmobile.

Our recommendation is that 25 non-BAT EPA compliant and 25 BAT snowmobiles per day be allowed on the CDST. Group size would be limited to 10. We believe this will increase use of the trail, increase revenues to NPS, provide more flexibility for visitors wishing to travel to GTNP and the Parkway along the CDST from adjacent public lands, and allow local businesses to recapture some of the winter business that has been lost due to current management direction. Potential impacts to park resources (air, sound, wildlife, safety, and visitor experience) can be evaluated as part of the adaptive management program, and if necessary, daily limits on the non-BAT and BAT snowmobiles could be adjusted to mitigate unplanned or unwanted outcomes. Additionally, since the number of non-BAT, but EPA compliant snowmobiles will be restricted, and often using the trail as a through-way to adjacent public lands, snowmobile use shouldn't be highly concentrated and air and sound emissions concerns in the parks would be minimal.

Finally, we reiterate that in regard to adaptive management, we are concerned when NPS states they will monitor and evaluate use of the CDST, and consider adaptive management, including potential closure, if use levels do not warrant continued action. Given the obvious impact current management has already had on trail use, and the fact that management direction won't change under the Preferred Alternative, it appears to be a foregone conclusion that implementation of the Preferred Alternative will eventually lead to closure of the CDST trail. We find that an unacceptable outcome for a trail that was intended not only to provide access to YNP, but also to adjacent public lands in Idaho and Montana via its connection to the Grassy Lake Road.

### **3.2.2 Grassy Lake Road**

The Grassy Lake Road provides snowmobile access from the Targhee National Forest in Idaho to Flagg Ranch in the Parkway. Prior to managed winter use in 2003, the Grassy Lake Road provided a popular

route for snowmobiles traveling from the CDST in Wyoming to destinations on the Targhee National Forest. It also provided an alternative snowmobile route from Wyoming to West Yellowstone, Montana that did not require travel through YNP.

In the Preferred Alternative and Alternative 5, snowmobiles starting in the Targhee National Forest and traveling on the Grassy Lake Road to Flagg Ranch would be exempt from BAT and guiding requirements but would not be able to continue east past Flagg Ranch. Travel to the west for snowmobiles originating anywhere but Targhee National Forest would have to meet BAT requirements. In Alternative 4, snowmobiles traveling on the Grassy Lake Road either from or to Flagg Ranch would be exempt from BAT requirements.

We propose that management of the Grassy Lake Trail can be simplified by allowing a limited number of non-BAT EPA compliant snowmobiles to travel in either direction and managing the Grassy Lake Road-CDST corridor as one unit. We recommend setting a daily limit of 15 BAT and 25 non-BAT EPA compliant snowmobiles and allowing those snowmobiles to travel either east or west. Non-BAT snowmobiles traveling to the west and starting their trip from the CDST on the Bridger-Teton National Forest or from Flagg Ranch would be required to be 2007 or newer model year. For snowmobiles originating on the Targhee National Forest and traveling east to Flagg Ranch and then returning, we propose a daily limit of 10 non-BAT, pre-2006 model year snowmobiles. By allowing some non-BAT use and managing the Grassy Lake Road-CDST as one unit, this trail corridor can provide improved access to the public lands to the east and west of GTNP and the Parkway.

### **3.2.3 Jackson Lake**

Wyoming residents have traditionally used Jackson Lake for ice-fishing, using snowmobiles mostly to transport gear to the lake. In addition, the Wyoming Game and Fish Department (WGFD) has expended considerable portions of their annual budgets to improving this fishery and would like to maximize public access and enjoyment of this world class fishery. In the alternatives where snowmobile use is allowed on Jackson Lake (Alternatives 1, 4, 5, and 6), all snowmobiles would have to meet BAT requirements. Daily entry limits would be 40 for Alternatives 1 and 5, and 100 for Alternative 4. For Jackson Lake, we propose that 100 non-BAT snowmobiles per day be allowed onto the surface of the lake. We support higher daily entry limits to help return angler utilization to healthy levels consistent with WGFD overall management of this important fishery.

Furthermore, as Wyoming commented on the preliminary Alternatives presented in the Spring of 2005, the final Preferred Alternative should contain some administrative access to Jackson Lake that is also exempt from BAT requirements. The Jackson Lake fishery is an important management aspect of the WGFD's overall management of fish in Wyoming. It is vital that WGFD personnel have reasonable access to Jackson Lake.



### 3.2.4 Best Available Technology and EPA Compliant Snowmobiles

Park County fully supports requiring only BAT snowmobiles in YNP. Monitoring data clearly show that winter air quality has improved, sound levels have decreased, and employee exposure levels to a variety of chemicals have dropped appreciably. We also support further research and investment toward even cleaner, quieter snowmobiles or “improved BAT.” To that end, we are encouraged that 13 of the 27 snowmobiles on the YNP snowmobile BAT list already meet the stricter emission and noise requirements for improved BAT as described on p. 49 of the DEIS.

However, as discussed above, for GTNP and the Parkway, we also strongly support allowing a limited number of 2007 or newer model year (EPA compliant) snowmobiles on the CDST and the Grassy Lake Road, as is proposed in Alternative 4. The CDST and Grassy Lake Road provide a through connection to popular snowmobile trails on adjacent public lands in Idaho and Montana. Current management requirements have virtually eliminated snowmobile use on this route and we think a more innovative management strategy is warranted. We also support non-BAT snowmobile access to Jackson Lake.

### 3.2.5 Summary of Recommendations for Snowmobile Use in GTNP and the Parkway

We provide the following comparison (Table 3-1) of how Park County would like winter use managed in GTNP and the Parkway. The NPS Preferred Alternative is very similar to what we propose, with the exception that a limited number of non-BAT snowmobiles would be allowed under our proposal. There would be a total of 60 non-BAT snowmobiles allowed daily on the CDST and Grassy Lake Road, of those 75% would be required to be EPA compliant 2007 model year or newer. We believe the CDST and the Grassy Lake Road, along with their connection to adjacent public lands in Montana, Idaho, and Wyoming, provide a snowmobile experience unique in the west. More flexible management on the part of the NPS could assure this experience and opportunity is preserved. For Jackson Lake, we request higher daily entry limits along with and an exemption from BAT requirements.

**Table 3-1 Comparison of NPS Preferred Alternative with Park County Modified Alternative**

Topic	NPS Preferred Alternative			Park County Modified		
	CDST	Grassy Lake Road	Jackson Lake	CDST	Grassy Lake Road	Jackson Lake
Daily Entry Limits	50	50	40	50	50	100
BAT Requirements (number)	Yes (50)	Yes (50) <sup>1</sup>	Yes (40)	Yes (25), No (25) <sup>2</sup>	Yes (15), No (35) <sup>3</sup>	No
Guiding Requirements	No	No	No	No	No	No

<sup>1</sup> For snowmobiles traveling west and not originating in Targhee National Forest

<sup>2</sup> Non-BAT snowmobiles would be 2007 or newer model year

<sup>3</sup> 25 would be 2007 or new model year, 10 would be pre-2007 model year (if originating in Targhee NF).

### 3.3 UNGUIDED SNOWMOBILE ACCESS AND SEASONAL ENTRY LIMITS

As stated earlier, Park County supports limited unguided snowmobile access to YNP as proposed in Alternatives 4 and 5. We also support the concept of seasonal entry limits and flexible daily entry limits as proposed in Alternative 5. Comments related to those issues follow. These comments are largely brought forward from our previous comments on the PDEIS but include new information as well.

#### 3.3.1 Unguided / Non-Commercially Guided Access

Park County strongly supports allowing limited unguided and/or non-commercially guided snowmobiles in Yellowstone National Park. Alternatives 4 and 5 include unguided and/or non-commercially guided opportunities and we request NPS include a similar provision in the Preferred Alternative. We recognize the need and value of offering park visitors the choice of using a commercial guide service; however, it should not be the only choice. Furthermore, we believe the sharp decline in visitor's using the East Entrance is a direct result of current guiding requirements. We expect that there are a significant number of visitors wishing to control the emphasis and timing of their experience and unguided access would accommodate their desires.

This is particularly true for Wyoming snowmobilers who historically visited YNP through the East and South Entrances, are familiar with the YNP winter experience, and will return to the park in greater numbers if unguided access is an option. We do not want the NPS to steer YNP use toward the equivalent of another social welfare experiment for recreation, where all activities are looked after and contained. Not everyone wants or requires having their hand held. We ask that the NPS not diminish the opportunity to travel in YNP without a commercial guide.

Allowing limited unguided and/or non-commercially access will better meet the NPS Policy (NPS 2006) for Visitor Use (Section 8.2) that states,

In addition to structured activities, the Service will, to the extent practicable, afford visitors ample opportunity for inspiration, appreciation, and enjoyment through their own personalized experiences—without the formality of program or structure.

As we see it, there is no opportunity for snowmobile visitors to enjoy YNP through their own personalized experience. If NPS is truly concerned with provided high quality opportunities to “every segment of American Society” (p. 132), then unguided/non-commercially guided access should be allowed.

The DEIS outlines a training program for unguided snowmobiles, administered by YNP, requiring education on park rules, safety considerations, and appropriate actions to minimize impacts to wildlife

and other park resources. We strongly support training and education for all visitors as the best tool to ensure protection and responsible use of the park. By implementing training requirements, along with adherence to intensive monitoring and adaptive management programs, we believe unguided access can provide safe, appropriate access to YNP without damage to park resources. We encourage NPS to work with local snowmobiling associations and other interested groups to develop a training program that is regionally available and accessible.

One of the arguments used by NPS in favor of requiring commercial guides for all snowmobiles is safety. While requiring commercial snowmobile guides can contribute to a safe visitor experience, other safety requirements, including implementation of lower speed limits, increased ranger patrols, and imposed nighttime restrictions, contribute as well. Unguided access hasn't been allowed, or even tried on an experimental basis, since implementation of managed winter use in 2003, so there is no directly comparable basis to conclude that it will be unsafe. It also appears that OSV cases have increased to similar rates per 1,000 visitors to those seen before 100% guiding was required (DEIS, p. 95 and see additional comment on this topic in Section 4 of this document). As locally elected officials, we strongly oppose the notion of legislating or mandating agencies to remove personal responsibility from local residents.

Another assumed benefit to visitor experience from commercial snowmobile guides is "continued good opportunities to view wildlife and scenery, generally safe touring conditions, availability of information, and opportunities for quiet and solitude, and cleaner air..." We maintain these same experiences are equally available, and improved in some cases, with unguided snowmobile access. We fully support availability of commercial guides, their services are invaluable and they play a strong role in the local community. However, visiting the park with a commercial guide should not be the only option.

Finally, one of the major issues that is to be addressed in the DEIS is social and economic issues, including affordable access (Section 1.7.1, p. 18). We can't find anywhere in the DEIS where this issue is addressed outside Alternative 6, but allowing some unguided access should be a consideration to address this need. Commercial guides typically charge \$40 per person so providing an option where there is no guide fee can make a visit to YNP more affordable, especially for a family. A snowmobile trip to YNP can easily cost a family of four around \$800. We recognize that visiting YNP in the winter can be expensive so we support any measures that can reduce costs and provide more opportunity for the public to enjoy this unique winter experience not duplicated on other public lands.

### **3.3.2 Seasonal Limits and Flexible Daily Entry Limits**

Alternative 5 provides for seasonal entry limits, in addition to flexible daily entry limits, recognizing that demand varies over the course of the season, especially during popular holiday periods. Park County supports the general concept since it provides businesses greater flexibility to respond to visitor demand

on busy days. Evaluating the success or unwanted outcomes of allowing flexible entry limits could be addressed through the adaptive management program.

### 3.4 WILDLIFE AND OSV USE IN YNP

The Purpose and Need (DEIS p. S-4) states that the management of snowmobiles and coaches should ensure that “impacts to wildlife are mitigated and effective wildlife habitat for winter survival is protected.” The wildlife literature (Toweill and Thomas 2002) generally concludes that human-caused disturbance on the winter range is detrimental to ungulates and therefore should be avoided. Such references are generally pertinent to hunted populations, and may have little application to non-hunted populations where animal tolerance to human presence is high.

The DEIS assumes that since the protection of wildlife is an emotional public issue, it automatically warrants inclusion as a selection criteria. We question that assumption for several reasons: (1) animals in the YNP exhibit extraordinary tolerance to human presence; (2) documented over-the-snow-vehicle (OSV) use has not resulted in a shift in animal use of traditional ranges; (3) responses of monitored animals to OSV use in the YNP is generally “subtle”, i.e. the monitored animal may exhibit “increased alertness” but seldom if ever “flees” from the OSV; and (4) massive changes in elk, bison, and coyote populations over the last 40 years can statistically be explained by changes in post-fire vegetation production, winter severity, bison control actions, or wolf predation. Conversely, however, it would be impossible to credibly attribute changes in animal populations to OSV use.

While we acknowledge the DEIS’s need to address social and economic factors related to OSV use, we feel that the DEIS’s focus upon wildlife is not consistent with the science. Furthermore, we suggest the fixation with wildlife panders to the public’s emotional need to protect wildlife, but fails to provide them with the objective scientific factors pertinent in a park setting. The following discusses the science and YNP philosophy measures that support this premise.

#### 3.4.1 Behavioral Responses of Wildlife to Snowmobiles and Coaches in Yellowstone

The paper *Behavioral Responses of Wildlife to Snowmobiles and Coaches in Yellowstone* by White et al. (2006) appears well-researched and well-written. The authors’ conclusions include:

1. OSVs illicit *responses* from wildlife that may include anything from increased alertness to moving away from the disturbance;
2. The degree of and type of response varies by species, but all species sampled (elk, bison, coyotes, bald eagles, etc) showed some level of response to OSV;

3. Animals have apparently habituated to OSVs to the extent that there is no evidence of those animals abandoning traditional preferred winter habitats; and
4. Based on a multitude of scientific papers, such responses to OSVs during the winter, even when no abandonment of traditional ranges is evident, is likely to cause some *measurable fitness effects*.

The authors don't explicitly define *measurable fitness effects*, but from the literature cited (Cassirer et al. 1992), it is inferred that responses to OSVs could result in reduced winter survival, reduced reproductive vigor, and potential declines in population. Because no wintering populations showed any indication of abandoning traditional winter ranges, we can assume that any such potential reduction in wintering population would be very slight and probably insignificant when compared to other variables such as predation, winter severity, or forage production. Nonetheless, because of this potential loss of measurable fitness, the authors are recommending among other things that OSV levels be managed at or below levels observed during the study.

#### 3.4.2 Wildlife Management in Non-Park versus Park Settings

In a non-park setting the findings of White et al. (2006) would be cause for alarm. In National Forests and Bureau of Land Management Lands adjacent to YNP, lands are generally open to hunting. Carrying capacities are generally identified (by trend, population, or vegetative condition). Ungulate population goals are generally identified (often by hunting district or herd unit). When carrying capacities decline due to lack of fires or other factors, there are usually measures identified at the State or National Forest level to correct those problems. Hunting harvest may be adjusted up or down accordingly.

Predators may be managed (via hunting or other control measures) to assure that ungulate levels remain at or near carrying capacity without major conflicts with hunters. Lastly, the relationship between ungulate numbers and hunters and hunting-generated economic revenue are commonly considered when making habitat management or animal harvest decisions. Consequently, in a National Forest or BLM setting, human-caused winter disturbance that resulted in even a slight potential loss in measurable fitness, to the extent that populations might drop below carrying capacity or adversely affect hunting or wildlife viewing opportunities, would be viewed in a negative light.

Unlike non-park public lands, YNP has taken a radically different approach to managing ungulates. Up until the early 1960's, ungulate management was not that different from National Forests and BLM lands, i.e., ungulate harvest was an integral part of management. For instance, in 1963, the Leopold Report (Leopold et al. 1963) concluded that:

1. "Good park management requires that ungulate populations be reduced to the level that the range will carry in good health and without impairment to the soil, the vegetation, or the habitats of other animals..."
2. "(Ungulate population) control... through natural predation should be encouraged..."

3. "Where other methods of control (sport hunting) are inapplicable or impractical, excess park ungulates must be removed by killing..."

The Leopold Report states that in 1961-1962, the YNP's carrying capacity was estimated at 5000 elk, current population was estimated at 10,000 elk, and 4,283 elk were killed by shooting.

Such population control measures were generally abandoned by the Park after 1967 (Greater Yellowstone Science N.d.). As a result, elk populations increased substantially and consistently, with a high reached in the mid-1990s of 19,045 counted aurally (MFWP 2002), a level *4 times higher* than the 1962-estimated carrying capacity. Populations declined substantially after severe winters in 1989 (a decline exacerbated by the wildfires of 1988) and 1997 (MFWP 2002).

Interestingly, the issue of carrying capacity becomes less and less of an issue in YNP dialogue. One wonders how, if carrying capacity was estimated at 5,000 elk in 1962, YNP could allow the population to increase to over 19,000 by the 1990's without some cry of alarm. Nonetheless, during this period, YNP remained relatively silent regarding the issue of excessive elk populations.

#### **3.4.2.1 Implications of Excessive Elk Populations**

As one example of how YNP has ignored the issue of carrying capacity and excessive elk populations, numerous researchers (Pengelly 1963; Kay 1990; Wagner et al. 1995) concluded that aspen had declined substantially as a result of overgrazing by elk. YNP's position on aspen declines, however, generally favored the theory that those declines were attributable to changes in climate (Despain 1987).

After wolves were re-introduced in 1994-1995, elk populations decreased at the rate of ~8% per year from pre-re-introduction levels of 15,000-20,000 elk to 9,000-10,000 elk by 2004-2005 (Greater Yellowstone Science N.d.). While the decline has generally been attributed primarily to wolf predation, other factors such as drought may have contributed to the decline (Vucetich et al. 2005). Interestingly, now that elk populations have declined due to wolf predation to a point a little more in line with carrying capacity, YNP is all too happy to celebrate the benefits of that decline in vegetative recovery (Schullery N.d.) as manifested by increases in cottonwood regeneration (Larsen and Ripple 2002), beaver colonies (Stiles N.d.) and aspen regeneration (Stiles N.d.).

#### **3.4.3 Changes in Other YNP Wildlife Populations**

Bison in YNP have also suffered population shifts in recent decades similar to elk. Populations increased substantially in recent decades after culling was eliminated in 1967 (Greater Yellowstone Science N.d.). In 1966 the bison population was recorded at 226 but had grown to over 2,000 by 1984-85, and to nearly 4,000 by 1994-95 (Greater Yellowstone Science N.d.). In an effort to control the spread of brucellosis to

Montana cattle herds, 1084 were lethally removed in 1997, with lesser harvests conducted in other years. In spite of those control actions, the bison herd reached a high level of ~4,900 in 1995-96.

Wolves view coyotes as competing predators and thus will aggressively kill them when the opportunity presents itself. Robbins (1996) reported that prior to wolf re-introduction; the YNP had “one of the densest and most stable coyote populations in the country because of the lack of human impacts.” Since re-introduction, however, “50% of the pre-wolf population of coyotes has been killed” (Robbins 1996). These findings suggest that although coyote populations have been substantially reduced, carrion available to a multitude of scavengers from wolf kills has indirectly benefited many species including ravens, foxes, bald eagles and golden eagles.

#### 3.4.4 White et al. (2006) Findings and YNP Management Philosophy

As discussed above, elk, bison, and coyote populations (to name a few) have fluctuated wildly (Figure 3-4). YNP’s position on these changes, whether in response to the elk winter die-off in 1989, or the century-long decline in aspen, or the elk decline from wolf predation, varies from *indifference* (such as the 4-fold increase in the northern elk herd from 1962-1995) to *enthusiasm* (such as attributing increases in aspen regeneration to declines in elk populations from wolf predation). We characterize this philosophy as “what happens, happens” and that’s apparently an acceptable philosophy since it doesn’t require any active management to either reduce wildlife populations via hunting or increase carrying capacity via prescribed burning or other vegetative manipulation.

White et al. (2006) conclude that OSV use should be “managed at or below current levels” to avoid the potential for a very slight (but probably undetectable) reduction in over-winter survival of park animals. YNP’s 40-year management philosophy has demonstrated that massive population fluctuations are acceptable, and in some cases desirable. We see no relationship between YNP’s demonstrated past management philosophy and the findings of White et al. (2006). In fact, White’s findings, although scientifically credible, should be responded to with a collective “so what?” The potential adverse impacts inferred to in White et al. (2006) that might result in population impacts are, if anything, very, very subtle. There has been no shift in animal use of traditional ranges. Since the animals are not hunted, they exhibit extraordinary (compared to hunted populations) indifference to humans. If you were to try to identify, using the most rigorous of research, those variables most responsible for population changes over the last decade including winter weather, precipitation, forage availability from wildfires, wolf re-introduction, etc., it is highly doubtful that population shifts from OSV use would be statistically detectable.

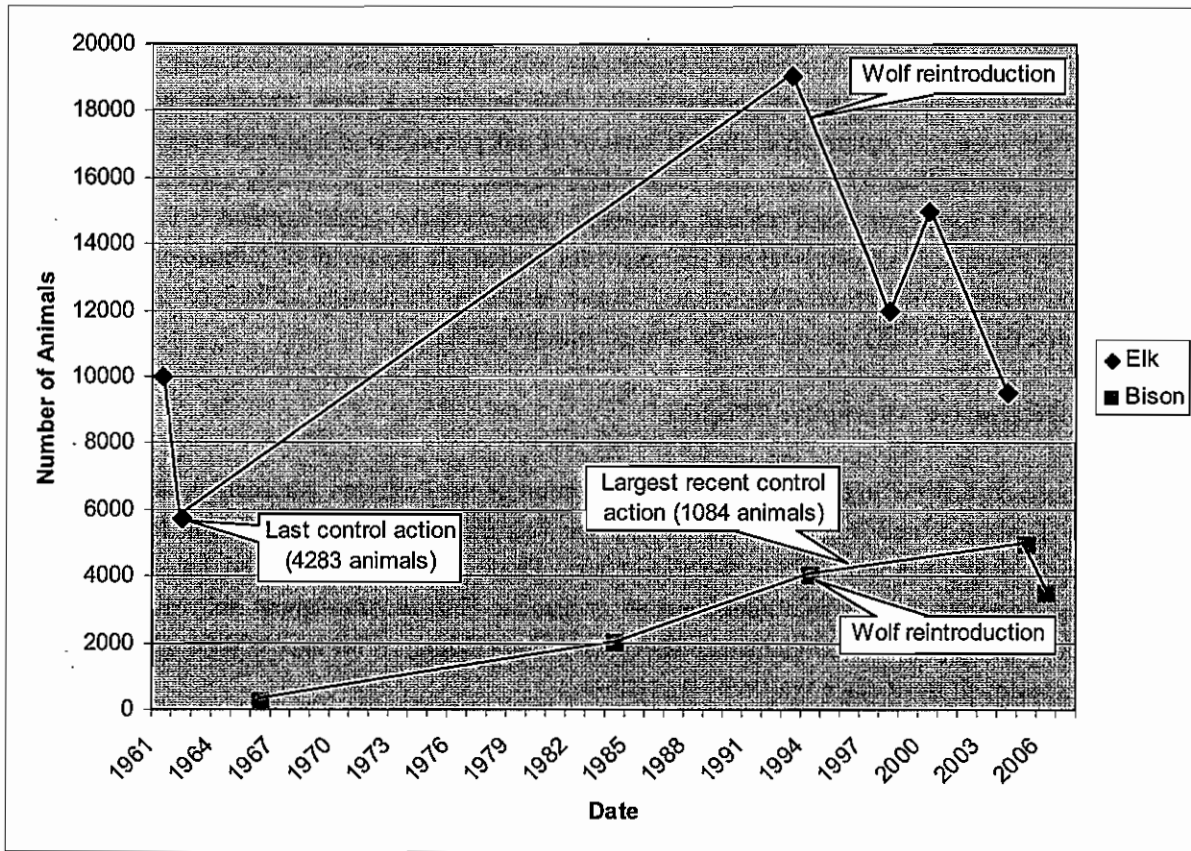


Figure 3-4 Elk and bison population trends 1961–2006

### 3.4.5 Summary

While we appreciate the social and economic variables NPS must consider in determining its OSV policy, we find no logical connection to wildlife effects and OSV use. We suggest NPS not consider wildlife effects in its determination of appropriate OSV effects. The four points most pertinent in making this recommendation are:

1. Park animals are not hunted and exhibit extraordinary tolerance to human activities;
2. Wintering animals have not been displaced from traditional winter ranges;
3. Populations of elk and bison still exceed historically-determined carrying capacities; and
4. Possible adverse effects from OSV use will always be insignificant compared to other variables including wildfire, predation, winter severity, and lack of population control actions.



### **3.5 NEPA CONSIDERATIONS**

Park County believes that there are serious NEPA deficiencies and flaws which do not support the selection of the Preferred Alternative. In this section of our comments, we provide new NEPA related concerns with the March 2007 Winter Use Plans DEIS beyond what we previously commented on in the PDEIS. The new issues are; the Preferred Alternative appears to be predetermined, a lack of decision criteria, and a cumulative effects analysis that provides inadequate treatment of climate change, thereby violating the “reasonably foreseeable actions” clause identified in Section 1508.7 of the Council on Environmental Quality (CEQ) guidelines for implementing NEPA.

#### **3.5.1 Predetermined Alternative Selection**

We are concerned that the initial and subsequent selection of the Preferred Alternative, described in the Preliminary Draft EIS and that proposed closing the east entrance due to avalanche risk and safety concerns, was predetermined. While the Preliminary Draft was being circulated for comment from Cooperating Agencies, there was a simultaneous Avalanche Hazard Assessment and Mitigation report (Comey 2007) being prepared by avalanche specialist Robert Comey, with later additional comments on the Draft Assessment from other avalanche specialists.

Given the fact that the Preferred Alternative was selected prior to the new assessment, this action gives the direct appearance of having selected an alternative before the data was in. By selecting this alternative before all of the information was gathered the NPS created the public perception the park service shaped opportunities to support closure of the East Entrance. Once the Draft Assessment was completed with the mitigations and reviews from other professionals, it is clear that NPS improperly selected an alternative based on a mitigable safety risk and an enviably long NPS safety record for Sylvan Pass concerning motorized use and avalanche safety program.

Furthermore, the DEIS (p. 36) states that for the Preferred Alternative “As of the winter of 2008-2009, Yellowstone’s East Entrance Road would be open to snowcoach and non-motorized travel from the entrance to a point about 6-miles west only (near the Sylvan Avalanche Zone).” Since NPS is required to provide public notice of decisions that will restrict or control a public use or activity, by including this date (which was not included in the PDEIS) it appears to us that a decision to close the East Entrance has already been made.

#### **3.5.2 Decision Criteria**

The difference between the Desired Conditions (p. 5) and the existing conditions can be considered the need for change. It is important to understand the need for change as it allows one to better articulate and understand the required and all-important Purpose and Need section of any NEPA document. All

succeeding portions of a NEPA document have to fundamentally support the Purpose and Need. The need for change must be explicitly expressed in the Purpose and Need section of the document. How the desired conditions are met within the developed range of alternatives are another one of the keys to this complicated process. In this particular case the NPS has stated that the, “existing conditions, for the purposes of this planning effort, are the historic conditions that existed prior to the last three winters of managed use.” The decisions to be made are clearly set forth in Chapter 1, and are relatively simple, evaluating the type and extent of public recreation access appropriate to the Parks in winter. “It will be judged upon the alternative and the associated impacts which best meet all the desired conditions defined in the purpose and need for action and addresses associated impacts.” The decision language goes on to state, and this is important as this gives a great deal of subjective leeway to the agency, “Since some desired conditions work at cross purposes, this means that the decision requires optimizing between recreation activities and protection of resources and values, in accordance with NPS policies.” This great latitude coupled with the fact that there is no objective decision criteria in the DEIS, and the fact that the current Preferred Alternative was selected prior to the Avalanche Hazard Assessment & Mitigation (Comey 2007) report gives the appearance that the decision to close Sylvan pass was already made. Due to the predetermined nature of the alternative selection, and the lack of objective decision criteria, we question whether this can be considered an arbitrary and capricious decision.

### 3.5.3 Climate change and cumulative effects

The DEIS notes that the decisions to be made “will not hinge” on the topics dismissed from detailed analysis, and that there is no new information to indicate the issues dismissed require detailed analysis in this EIS process. The lack of analysis concerning climate change is a serious flaw in this NEPA document. The discussion of global climate change was dismissed because “it would be speculative to predict changes in snow water equivalency or average winter temperatures, in part because there are many variables that are not fully understood and there may be variables not currently defined.” However this rationale for dismissing an analysis of climate change dramatically conflicts with the NPS publications and articles with the service’s own *Sustainability News* noting “The weight of scientific evidence in support of global climate change is overwhelming—we need to take action now. (NPS 2006c). In fact, a brief review of NPS publications would show an agency on the one hand firmly convinced of climate change, looking forward to understanding it and the implications to park management, and on the other hand, dismissing it outright as not worthy of discussion for winter use planning in YNP.

Earth’s climate is changing and our national parks, with the unique resources they protect, are beginning to experience the effects of this change. This new reality poses very important questions for the National Park Service. Specifically, how will climate change affect the natural and cultural resources entrusted to us and how do we recognize and monitor these changes? What management decisions are appropriate in response to ecosystem changes? —Shawn Norton, Coordinator National Park Service Environmental Leadership Program

In dismissing climate change as unworthy of detailed analysis, the NPS directly contradicts thinking and consideration within the leadership of its own agency. Through out our comments we have highlighted how the NPS seems to pick, choose and ignore scientific data in order to support the decision to select their preferred alternative. *Consumer Reports* quotes a Dec. 14, 2006 memo from NPS Director Mary Bomar as the services response to climate change “as mostly underdeveloped requiring considerable future planning and implementation”. Excerpts from the NPS developed and published *Sustainability News* shed some light on the DEIS notion that climate change is not important enough to consider treatment in the Winter Use EIS.

While many questions remain, we know a lot, and research conducted in national parks has added greatly to our knowledge about how natural systems are responding to climate change. We know that glacial ice is melting, high latitudes are warming faster than the tropics, oceans are warming, and sea level is rising. Most scientists also agree that the water cycle is changing and intensifying, and that this will lead to changes in water supply, flooding, and drought patterns. We can expect warmer winters, longer growing seasons, fewer freezes, more extensive insect and pathogen outbreaks, and more intense fire seasons. The weight of scientific evidence in support of global climate change is overwhelming—we need to take action now. How do we develop an appropriate societal response to a problem that has been exposed by scientific investigation and what is the role of parks in that process? Science helps us understand the need for change, but people must act on that information to find solutions. The people who have contributed to this issue of *Sustainability News* are taking action. Their examples range from providing information to managers about how climate change is impacting park resources, to raising public awareness through outreach and education, to integrating climate change issues with environmental management. Park employees and their partners are forming green teams and developing alliances with a long-term commitment to sustainable, climate-friendly operations and practices for their parks and surrounding communities. (NPS 2006c)

Global climate change will affect snow pack and snow based recreation in all forms in YNP. Loss of snow pack and reduced snow water equivalent likely means that the opportunity for OSV use will be concentrated in fewer places, increasing the relative importance of suitable winter use landscapes. Without an assessment of global climate change and its related reduced snowfall and accumulation, the Winter Use DEIS falls short of taking a hard look at one of the foundation environmental impacts. The issue of how NEPA applies to climate change is currently being reviewed by the courts. The “hard look test” is not a prescribed scientific test but more of a test of reasonableness for a lay person’s perspective. Our belief is that most reasonable people would consider a plan for winter use activities to be sorely deficient without an analysis of changing winter weather patterns as evidenced by many in-house NPS articles and publications.

#### **3.5.4 NEPA issues brought forth from PDEIS**

Our previous review of the PDEIS revealed several areas of analysis and processes that appear to be inadequate and inconsistent with the CEQ guidance for implementing the Act. We are troubled about the following areas: cooperating agency essentials, scoping, alternative development, and cumulative effects.

These sections or treatments do not fully capture the socio-economic impacts, nor does the analysis properly characterize avalanche risks, which is used as primary evidence to support the closing of Sylvan Pass and the East Entrance. The initial four areas are related and there is overlap in the review below.

#### 3.5.4.1 *Cooperating Agency Essentials*

As we pointed out in our comments for the PDEIS, we very much appreciate the NPS NEPA process that recognizes the important contribution made by state agencies and local county governments. We know that the CEQ regulations directs that the NPS give special emphasis and treatment to “Cooperating Agency” comments based on requirements (CEQ 1501.6) which states:

(a) The lead agency shall:  
Request the participation of each cooperating agency in the NEPA process at the earliest possible time. Use the environmental analysis and proposals of cooperating agencies with jurisdiction by law or special expertise, to the maximum extent possible consistent with its responsibility as lead agency (emphasis ours). Meet with a cooperating agency at the latter’s request.

(b) Each cooperating agency shall:  
...Participate in the NEPA process at the earliest possible time. *Participate in the scoping process* (emphasis ours) (described below in Sec. 1501.7). Assume on request of the lead agency responsibility for developing information and preparing environmental analyses including portions of the environmental impact statement concerning which the cooperating agency has special expertise.

As a cooperating agency, we understand and appreciate our responsibilities under NEPA. Where applicable, the comments contained in this, and previously submitted document should be considered as special expertise as portrayed in the CEQ regulations (1501.6) “Use the environmental analysis and proposals of cooperating agencies with jurisdiction by law or special expertise, to the maximum extent possible...”

We have constructed this document to describe the technical and qualitative nature of our expertise with the help of our consultant Ecosystem Research Group (ERG). We know from experience, that many times, comment documents such as this are split into different components and assigned to specialists for review and incorporation into the next iteration of the NEPA process. We respectfully request that a NPS project manager read this document in its entirety as the whole is greater than the sum of its parts. Should this analysis be split up one would only get a piece-of-the-puzzle understanding of the impacts to us as a stakeholder and cooperating agency.

We recognize there is the potential to disagree with appropriateness of analysis and the conclusions from this process. Our economics review suggests that the DEIS does not fully capture economic impacts to Wyoming and Park County. As a Cooperating Agency, we are interested in fully understanding the implications of disagreements. To that end, we have reviewed the CEQs 40 Frequently Asked Questions documents as it relates to potential disagreements. Question 14b address disputes.

*How are disputes resolved between lead and cooperating agencies concerning the scope and level of detail of analysis and the quality of data in impact statements?*

A. Such disputes are resolved by the agencies themselves. A lead agency, of course, has the ultimate responsibility for the content of an EIS. But it is supposed to use the environmental analysis and recommendations of cooperating agencies with jurisdiction by law or special expertise to the maximum extent possible, consistent with its own responsibilities as lead agency. Section 1501.6(a)(2).

If the lead agency leaves out a significant issue or ignores the advice and expertise of the cooperating agency, the EIS may be found later to be inadequate. Similarly, where cooperating agencies have their own decisions to make and they intend to adopt the environmental impact statement and base their decisions on it, one document should include all of the information necessary for the decisions by the cooperating agencies. Otherwise they may be forced to duplicate the EIS process by issuing a new, more complete EIS or Supplemental EIS, even though the original EIS could have sufficed if it had been properly done at the outset. Thus, both lead and cooperating agencies have a stake in producing a document of good quality. Cooperating agencies also have a duty to participate fully in the scoping process to ensure that the appropriate range of issues is determined early in the EIS process.

Because the EIS is not the Record of Decision, but instead constitutes the information and analysis on which to base a decision, disagreements about conclusions to be drawn from the EIS need not inhibit agencies from issuing a joint document, or adopting another agency's EIS, if the analysis is adequate.

### **3.5.4.2 Scoping**

Section 4.1.6 of the PDEIS describes the impairment analytical procedures and what are the unacceptable impacts. The list of unacceptable impacts (p. 144) states that it is unacceptable to "diminish opportunities for current or future generations to enjoy, learn about, or be inspired by park resources or values." We believe that the proposed closing of the East Entrance and limitations posed by guiding requirements may diminish future opportunities.

The CEQ has called scoping the key to analyzing cumulative effects. While the Scoping Document (North Wind 2005) categorizes the 33,365 scoping documents and makes the effort to satisfy scoping requirements, the sheer volume and the classification effort minimize or at least masks the issues that might be significantly important. The CEQ handbook for analyzing cumulative effects states,

Analysts must tease from the complex networks of possible interactions those that substantially affect the resources. Then, they must describe the response of the resource to this environmental change using modeling, trend analysis and scenario building when uncertainties are great.

The PDEIS (Section 4.5) then states and describes the inability of use of trend information,

Further confounding the discussion is that visitation to Yellowstone has fluctuated up and down over the past two decades, making predictions of use based on past (especially short-term) trends

virtually impossible. Recently, visitation to Yellowstone began dropping even before any restrictions were put in place, probably reflecting confusion about continued snowmobile access to the parks. Visitation to Yellowstone in the past three winters has been below the daily limits, which suggests that displacement of visitors onto surrounding national forest lands by restrictions on Yellowstone access does not occur.

The baseline visitation was chosen by the NPS to be around 119,000 visits as an average. The reason the years 2000-2001 and 2001-2002 were not considered was because the NPS felt that visitation was unnaturally high in response to the expectation that the park would eliminate snowmobiling. If you look at trends in visitation without the two high-visitation years, estimated visitation is 130,000. If you consider actual visitation, the baseline should be around 140,000. The baseline is important to the IMPLAN analysis because it measures the change in economic activity for different alternatives. Any decrease in visitation will be measured against this baseline. For this reason, a lower baseline (119,000) will show dampened effects. And for this same reason, when a no-action baseline is used, the economic effects are considered beneficial given low or zero access. Neither the no-action baseline, nor the current baselines however, are appropriate. Valuation literature clearly states that changes in welfare should be measured from the status quo, which would be a historical level that reflects actual visitation.

We are concerned that scoping did not properly cover concerns about the Cody gateway community and that the admissions from Section 4.5 noting the futility of visitation trend data, coupled with the economic criticisms in this document, make the cumulative analysis sections insufficient.

#### **3.5.4.3 *Alternative Development***

While NPS is required to explore a full range of alternatives (Sec. 1505.1 (e)), the alternative must be considered reasonable. Both the State and Park County feel the closure of the East Entrance was minimized during discussion in 2006 and not until the Cooperating Agency PDEIS was released did the proposed closure become clear. Page 55 notes that Alternative 3B is the environmentally Preferred Alternative in this PDEIS because it “best preserves the unique historic, cultural and natural resources associated with the parks.” We think the historic and cultural resources of the Park County area contribute to the unique historical and cultural environment of the park

Part of our frustration is that throughout this entire process, the formal scoping meetings, the Cooperating Agency meetings etc. we had not been made aware of the probability of closing the East Entrance. The reality of this becoming a part of the permanent record of decision and winter use plan is still untenable and unbelievable to Park County citizens.

#### 3.5.4.4 *Cumulative Impacts*

Cumulative impacts are among the most difficult and complex assessment(s) required in a NEPA document, and have become a focus for court challenges (Smith 2005). Social and Economic issues were listed as a major issue. When analyzing cumulative impacts that require a look at future actions, there has been no analysis of future scenarios for Cody and Park County. The boom and bust cycle of energy development that has occurred periodically did not appear in the PDEIS. Should the continued and projected economic growth of Park County not occur, the impacts of closing the East Entrance will surely be incrementally greater.

This cumulative effects section broadly discusses the greater Wyoming economy ranging from recreation and tourism to the oil and gas industry. In general, the DEIS portrays Wyoming as having a robust economy with opportunities for growth and development. While this may be true, the document neglects to discuss specifically, the cumulative effects resulting from ongoing changes in Park Service policy including the temporary ruling in 2003.

Cumulative effects from closing the east entrance, restricted visitation, and imposed mandatory snowmobile guides will all be negative. While this will not likely affect the greater Wyoming economy, it will adversely affect local businesses and communities in the short and long run. Similarly, because adverse economic effects have occurred since 2003, they must also be considered as part of the cumulative socio-economic effects. These effects are not specifically stated in this section.

In order to correct what we regard as NEPA deficiencies we believe that modifying the Preferred Alternative to keep the East Entrance open will mitigate some of the cumulative socio-economic effects described in this document. Indeed, we agree with the CEQ when they state “Only by reevaluating and modifying alternatives in light of the projected cumulative effects can adverse consequences be effectively avoided or minimized”.<sup>[1]</sup>

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<sup>[1]</sup> Considering Cumulative Effects Under the National Environmental Policy Act.

#### 4. SPECIFIC COMMENTS FOR CORRECTION AND CLARIFICATION

Specific comments regarding the DEIS are provided below. These comments are arranged by page number and by specific sections in the DEIS.

##### DESIRED CONDITIONS

**P. S-4, Table S-1:** One of the Desired Health and Safety Conditions in the DEIS states, “The safety and health of persons, and protection of property, are ensured by identifying and preventing potential injuries from recognizable threats” (Table S-1, p. S-4 and Table 1-1, p. 5). We do not feel that that YNP can “ensure” employee and visitor health and safety, as safety is not a perfect science. YNP is setting a goal or desired condition which cannot be achieved and appears to contradict NPS Policy 8.2.5.1 which states:

While recognizing that there are limitations on its capability to totally eliminate all hazards, the Service and its concessionaires, contractors, and cooperators will seek to provide a safe and healthful environment for visitors and employees.... The Service recognizes that the park resources it protects are not only visitor attractions, but that they may also be potentially hazardous. In addition, the recreational activities of some visitors may be of especially high-risk, high adventure types, which pose a significant personal risk to participants and which the Service cannot totally control.” Park visitors must assume a substantial degree of risk and responsibility for their own safety when visiting areas that are managed and maintained as natural, cultural, or recreational environments.

We recommend this desired condition be rewritten to state something like “The safety and health of persons will be provided to the extent possible by...”

We also question the desired Health and Safety condition that states “Visitors will know how to participate safely in winter use activities, and they equip themselves for doing so.” Again, YNP is setting a goal that we feel is not achievable.

##### ACTION ALTERNATIVES

**P. 51, Non-Motorized Access:** We question the lack of safety analysis for and cumulative effects of alternatives where “Ski and snowshoe use of the South Entrance and East Entrance Road would be allowed to continue after the balance of the park’s roads close to winter operations (during spring plowing). The draft *Avalanche Hazard Assessment and Mitigation Report* (Comey 2007a) states (p. 11, *Spring, Summer, & Fall Operations* section): “During spring plowing operations plow drivers are likely to spend more time beneath each avalanche path than a typical traveler who quickly passes through an avalanche path on the road.” We assume that a skier or snowshoer will also spend more time beneath each avalanche path, thus exposing them longer as they travel through the Sylvan Pass avalanche zone. The report further states on the same page “Until the snow is sufficiently melted, the avalanche paths



above the road can produce dry and wet snow avalanches that could equal the destructive force of avalanches experienced during the winter season.”

The final Avalanche Report (Comey 2007b) states in the Spring & Fall Avalanche Hazards section “The threat of snow avalanches to the East Entrance Road is not limited to the winter season. Spring snow removal operations occur in April when snow depths are typically near their maximum depths.” The author documents his observations that at this time the paths had sufficient snow cover for dangerous avalanches to occur. He goes on to state, “An avalanche hazard assessment and mitigation program is necessary to protect the public, administrative travelers and NPS workers during the entire season.” How has the DEIS addressed this evident employee and visitor health and safety issue and utilized Mr. Comey’s report in analyzing the Safety and Health cumulative effects on visitors and employees?

#### AIR QUALITY AND AIR QUALITY-RELATED VALUES

**P. 83, section 3.4.2, New Research and Monitoring:** The first paragraph discusses the results of winter in-use OSV emissions monitoring by Bishop et al. (2007) and the finding that measured emissions/person were lower for snowcoaches than for 2-stroke snowmobile engines. One of the significant findings that NPS fails to report in the DEIS is that on average, 4-stroke snowmobiles had lower gram/mile emissions for all species (CO, HC, and NO<sub>x</sub>) and lower gram/mile/person emissions for CO and HC than the average snowcoach. This seems to contradict conventional NPS wisdom that snowcoaches are cleaner than 4-stroke snowmobiles.

**P. 85, first paragraph:** Regarding the change from two-stroke snowmobiles to BAT snowmobiles, it is stated that, “This change, combined with an overall reduction in snowmobiles from previous years, use of ethanol-enhanced fuels, and less idling by guided groups led to a marked reduction in ambient pollution levels.” We fail to find any data in the DEIS, previous planning documents, or other technical reports to substantiate the statement that there is “*less idling by guided groups.*” Rather, it appears to be a rationalization to justify requiring all snowmobiles be accompanied by commercial guides. If NPS has quantifiable scientific data to justify this statement, it must be included in the final EIS. If this statement is unsupported by actual data, it should be deleted.

**P. 85, Figure 3-5:** The caption for this figure states the graph shows trends in maximum 1-hour CO level and West Entrance annual snowmobile visitation. The graph actually shows CO and PM2.5 trends at the West Entrance and Old Faithful, but does not show snowmobile visits. The CO emissions plotted are 1-hour 1<sup>st</sup> Max and not 2<sup>nd</sup> Max as indicated on the graph.

The corrected graph below (Figure 4-1) shows trends in CO and PM2.5 levels and includes the number of snowmobile and snowcoach entries for the West Entrance. We point out that for the 2005-2006 winter season, the number of snowmobiles increased by 32% at the West Entrance and the number of

snowcoaches increased by 6% while CO levels continued to decline. PM2.5 levels increased slightly (5%) over 2004-2005 levels but were still well below 2002-2003 levels and below all applicable ambient air quality standards (DEIS Table 3-8, p. 83). This graph needs to be corrected in the final EIS because it provides important information regarding air quality trends in relation to number of OSVs.

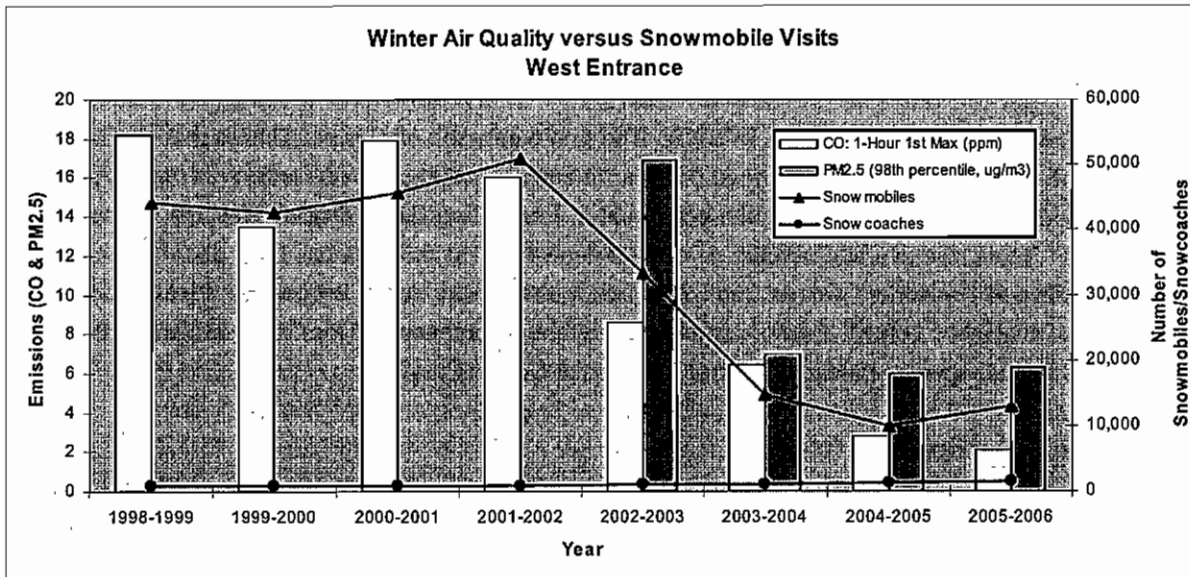


Figure 4-1 Winter air quality versus snowmobile visits, West Entrance

**PUBLIC AND EMPLOYEE HEALTH AND SAFETY**

**P. 95, Law Enforcement Statistics:** The first paragraph on this page discusses decreases in the number of citations issued to snowmobilers. According to information provided to ERG by YNP (Sacklin pers. comm.), in response to our specific request asking how many of the OSV incidents were snowmobile versus snowcoach, NPS responded that the OSV incidents data is not in a format that distinguishes snowmobile incidents from snowcoach incidents. How then is YNP able to make the claim that “park rangers had 46% fewer incidents involving snowmobile citations ... as compared to the 2002-2003 season, when guiding was not required?”. Furthermore, since a portion of the snowmobiles were guided in 2002-2003, unless YNP can provide data that shows guided snowmobiles at that time were never cited for moving violations or arrested, how can you frame these law enforcement statistics as supportive of a guided versus unguided issue?

Regarding the statistics themselves, if you look at these numbers in the context of the number of OSV cases per OSV visitor, for 2002-2003 the incident rate was 0.5%, or around 5 incidents per 1,000 OSV visitors. In 2003-2004, this rate was 3 per 1,000 visitors, not significantly different. Since 2003-2004, the number of total OSV cases has increased, and in 2005-2006 the rate was again at 5 cases per 1,000

OSV visitors. No different than in 2002-2003 when guiding was not required so actually no sustained decrease in the number of OSV cases responded to by park rangers.

The number of OSV moving violations and arrests has progressively decreased since 2002-2003. There were 3 moving violations or arrests per 1,000 OSVs in 2002-2003 compared to 0.002 arrests and 0.5 moving violations per 1,000 OSVs in 2005-2006. However, even in 2002-2003, the number of arrests (3 per 1,000 OSVs) was extremely low.

**P. 97, Avalanche Hazard Mitigation in YNP:** The first paragraph on this page states that approximately 10 avalanche control missions are required per year to control avalanche paths at Sylvan Pass. According to data provided to ERG by NPS (Sacklin pers. comm..) regarding East Entrance closures, it appears that in the last 15 years, the average number of control “episodes” at the pass has been about three, and the highest number of “episodes” was in 2005-2006 when there were seven “episodes. Please clarify if an episode is an avalanche control mission, and if so, why the discrepancy? Does the average of 10 reported in the DEIS include spring avalanche control missions at Sylvan Pass?

#### THE NATURAL SOUNDSCAPE

**P. 122, Natural Soundscape, Regulatory and Policy Overview:** Section 3.7.1 should include NPS management policy 8.2.2 (NPS 2006) that recognizes that park visitors have certain expectations regarding the sounds they will hear as part of their experience. In addition to expectations of muted to loud sounds associated with nature, park visitors also expect sounds reflecting our cultural heritage and “*sounds associated with people visiting their parks (such as children laughing, park interpretive talks, motors in cars and motorboats).*” We fully believe that most visitors traveling along park roads or visiting developed areas expect to hear OSV noise and that noise will not be a significant deterrent to their visit.

**P. 128, Soundscape Monitoring Data:** The last sentence states: “The reduced sound and audibility levels were largely explained by fewer snowmobiles, the change from two- to four-stroke engine technology, and the guided group requirement. Our review of the Natural Soundscape Monitoring reports (Burson 2004, 2005, 2006) indicate there is no compelling data to support the contention that 100% commercial guiding decreases percent time audible. Furthermore, these reports state that guiding has increased the noise free interval (NFI) while acknowledging (p.17 of the 2006 Soundscape Monitoring report) that the data supporting this statement is the author’s “personal observation” along with two sound plots (see p. 92, Appendix D of the 2006 monitoring report).

In our opinion, undocumented personal observations do not constitute objective data, especially since there is no way to independently review or evaluate their merit. As far as the sound plots go, these two plots compare *one* day in 2003 with *one* day in 2006. This is one “raw” data point and the differences

shown in the plots could be explained by any number of variables (two-stroke snowmobiles in 2003 versus quieter BAT snowmobiles in 2006, decreased numbers of OSVs, environmental variables, etc). Without more information, these plots are of questionable scientific value, there is no way to know if they are representative of the entire winter season, and by themselves provide no clear evidence to show guiding has helped reduce sound and audibility levels or NFI.

Burson (2006) also states (p. 17) that: “The percent time snowmobiles are audible is more closely associated with the number and distribution of groups rather than number of individual snowmobiles”. There is no data provided to understand what the association is between number and distribution of groups, number of individual snowmobiles, and percent time audible. Does this statement mean that individual snowmobiles are generally not audible?

Our analysis of the relationship between number of snowmobile groups and audibility at the Old Faithful monitoring station, using guide and outfitter snowmobile use data provided to ERG by NPS (Sacklin pers. comm.), suggests the “association” is as the number of snowmobile groups increases, the percent time audible decreases (Figure 4-2). The same pattern is apparent if you plot total OSVs against percent time audible. This is an interesting result, certainly not what you would intuitively expect, and perhaps indicates that grouping or number of OSVs alone are poor predictors of percent time audible. It is also relevant to the adaptive management evaluation program regarding natural soundscapes.

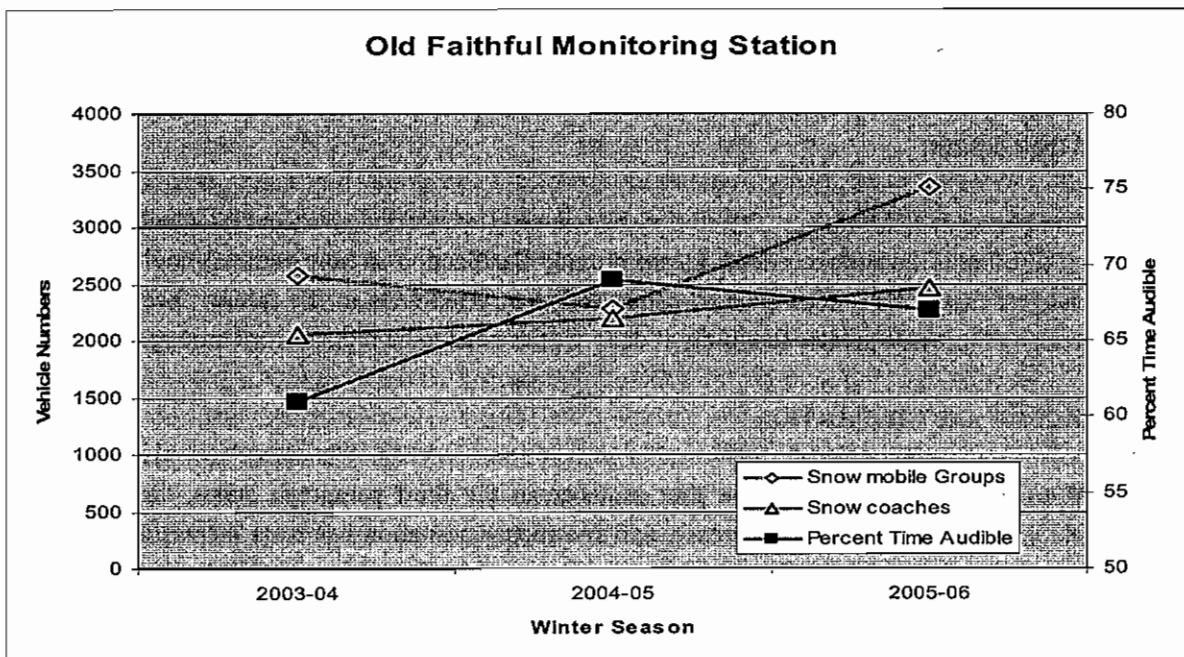


Figure 4-2 Relationship of vehicle numbers and audibility

On p. A-44 (Monitoring and Adaptive Management Table), one of the possible management options if natural soundscape thresholds are exceeded is to adjust the number of daily vehicle entries (presumably decreasing visitor entries). Given that there is no apparent correlation between numbers of OSVs and average percent time audible, along with the reality that unpredictable environmental conditions (temperature, wind, inversions, etc.) affect audibility, we see this as a questionable management option with no guarantee that the action will improve perceived adverse impacts to the soundscape.

To further illustrate our concern, consider that on January 6, 2006, 145 snowmobiles and 16 snowcoaches entered YNP through the West Entrance, with an average percent time audible of around 79% at the Madison Junction 2.3 monitoring site. On March 11, 2006, 143 snowmobiles and 15 snowcoaches entered YNP through the West Entrance with an average audibility of around 36%. The adaptive management threshold for a road corridor is not to exceed 50%. With essentially the same number of OSVs, one day greatly exceeded the threshold while the other day was well below the threshold. Since there is no data provided to evaluate why the percent time audible was so different (were there more administrative vehicles on one day, more OSVs from other entrances, different environmental conditions?, etc.), we question whether adjusting numbers will accomplish anything, other than adversely effecting visitor access and local businesses.

We suggest including additional management options for natural soundscape, for example, increasing the adaptive management sound thresholds along busy road corridors if they are consistently exceeded. Perhaps it is just not realistic to expect the most popular OSV routes in the park to be noise free 50% of the time. On balance, the vast majority of the park will be meeting natural soundscape thresholds and for visitors seeking quiet and solitude, NPS could provide information directing them to those areas that will best fulfill their desires.

Finally, if numbers are reduced, how would they be reduced (by selected entrances?)? Could numbers be increased if thresholds are not exceeded? Please provide clarification on how numbers could be adjusted. We also suggest that if NPS does have to adjust daily entry numbers in the future, keeping the East Entrance open will provide greater flexibility if daily entries need to be redistributed among the entrances.

#### VISITOR ACCESS AND CIRCULATION

**P. 138, Winter Visitation Data:** The first sentence in the third paragraph states, “More recently, snowmobile visitation has begun to increase, and snowcoach visitation has been increasing even more, suggesting that some who would otherwise snowmobile may be taking snowcoach tours instead.” While it is true that both snowmobile and snowcoach numbers have been increasing for the last two seasons, it is *snowmobile* use that has shown the greatest increase. In 2005-2006, snowmobile use increase 20.1% compared to the previous season while snowcoach use increased 15.3%. For 2006-2007, snowmobile use increased 10.1% from the previous year, while snowcoach use only increased 2.5%. The data clearly

show (Figure 4-3) snowmobiles remains the most popular means among the visiting public to access YNP and NPS should not try to marginalize this fact.

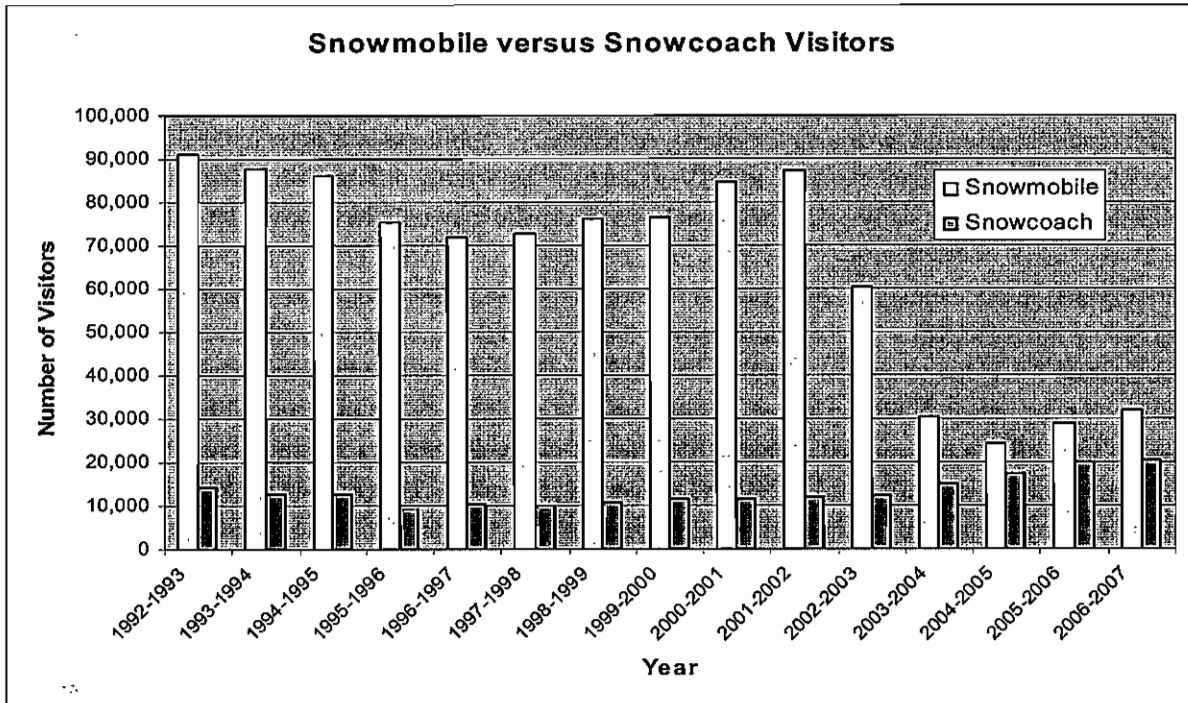


Figure 4-3 Number of snowmobile versus snowcoach visitors

**P. 143, Winter Visitation Data:** In the last paragraph, the description of OSV visitation trends for the South Entrance is incorrect. In the last three winters (2003-2004 to 2005-2006), snowmobile use has *increased* from 70% to 74%, not declined from 87% to 72.3% as stated in the DEIS. NPS needs to ensure their interpretation and reporting of visitation data and trends is accurate if they are to understand visitor demand and desires, and if they are to provide an accurate document on which to base winter use management decisions. These numbers indicate to us that snowmobiles are by far the most popular means to enter YNP, at the South Entrance and all entrances except the North Entrance. This fact needs to be acknowledged.

Furthermore, the real trend this data show is the dramatic decline in snowmobile visitation since the 2002-2003 season. This should be a major concern for NPS as they work to plan understanding of visitor needs.

## EFFECTS ON PUBLIC AND EMPLOYEE HEALTH AND SAFETY

**P. 207, four bulleted items at top of page:** Various types of information, including air monitoring results, personal exposure and sound monitoring results, air quality and sound monitoring modeling, and employee and commercial guide reports were used to assess the level of impact to employee and public health for each alternative. Shouldn't the cumulative impact of each of these parameters of safety and health issues be assessed separately for employees versus the public (as was done in the 2000 FEIS)? For example, wouldn't personal exposure to OSV sound be considerably different for an employee exposed to the sounds on an almost daily basis compared to a visitor who may only be exposed for a day or two?

Furthermore, in our January 5, 2005 PDIES Comments, we expressed concerns over the PDEIS's Health and Safety inconsistencies for those alternatives that would allow non-motorized travel over Sylvan Pass (see Section 2.1.1, Item 1, p. 8). We reiterate this concern and recommend you consider our January 5, 2007 comment when finalizing the cumulative effects analysis in the upcoming FEIS. For example, wouldn't the effects of avalanche hazards be different in the alternatives where Sylvan Pass is closed to OSV travel, no avalanche control operations are conducted, and the Pass is open to skiers and snowshoers than to employees? In this scenario it would appear the effect of the avalanche hazard would be major on skiers and snowshoers.

**P. 207, Table 4-40:** This table lists the definitions of impacts to employee and public health and safety. The definitions quantify some of the known identified safety and health issues for each impact category, but little is said about avalanche hazard other than very generic statements that impacts are not noticeable, measurable, sufficient, or substantial. What do these terms mean in relation to avalanche hazards?

## DIRECT, INDIRECT AND CUMULATIVE EFFECTS ON ADJACENT LANDS

**P. 322, Alternative Displacement Scenarios:** For Alternative 1, the DEIS states: "Yellowstone would partner with the Park County Nordic Ski Association, Wyoming Department of Transportation (WYDOT), and other interested parties regarding non-motorized recreational opportunities near the east entrance of the Park." This same statement is repeated for all alternatives that close Sylvan Pass. What will Yellowstone do to compensate for the adverse impact to those members of the public seeking motorized (snowmobile) recreational opportunities in this area? They will be most affected by the closure, especially considering the public lands on the Shoshone National Forest (SNF) outside YNP along the North Fork corridor are either federally-designated wilderness area or inventoried roadless areas managed for non-motorized uses (USDA 1986, 2007). The East Entrance into YNP is the only realistic option for motorized winter recreational use in this area. We strongly support both motorized and non-motorized use in NPS, and if opportunities for either are diminished, we expect NPS to address both.

5. TABLE OF PREPARERS

Table 5-1 List of Preparers

Name/Role	Agency/Firm	Education/Experience
Travis Benton Environmental Scientist	Ecosystem Research Group	B.S. Forestry
Bill Brewer Park County Commissioner	Park County, Wyoming	County Sheriff – 26 years
Marie Fontaine Park County Commissioner	Park County, Wyoming	County Clerk – 20 years County commissioner – 4 years
Tim French Park County Commissioner	Park County, Wyoming	AA Arts and Science County Commissioner – 6 years
Bucky Hall Park County Commissioner	Park County, Wyoming	County Commissioner – 2 years
Gibson Hartwell Environmental Scientist	Ecosystem Research Group	B.S. Forestry
Hayley Hesseln Resource Economist	Ecosystem Research Group Associate	PhD. Economics
Mike Hillis Wildlife Biologist	Ecosystem Research Group Associate	B.S. Wildlife Biology
Gregory Kennett Senior Environmental Scientist	Ecosystem Research Group	B.S. Forestry, Watershed Management
Katie McDonald Geologist/ Environmental Scientist	Ecosystem Research Group	M.S. and B.S. Geology
Remy Pochelon Recreation Specialist	Ecosystem Research Group	B.S. Forest Resource Management
Jon Schulman Environmental Engineer	Ecosystem Research Group	M.S. Environmental Engineering M.A. Journalism
Melanie Smith GIS Coordinator	Ecosystem Research Group	B.A. Environmental Studies M.A. Geography (anticipated 5/07)
Temple Stevenson Policy Analyst	State of Wyoming Office of the Governor	Environmental and Natural Resources, Communications
Jill Shockley Siggins Park County Commissioner	Park County, Wyoming	B.A. Speech and Hearing Pathology County Commissioner – 4 years



## 6. REFERENCES

- Billings Gazette. 2007. Gazette Opinion: Winter plan fails to balance conservation, recreation. May 13.
- Bishop, G. A., Stadtmuller, R., and D.H. Stedman. 2007. Portable emission measurements of snowcoaches and snowmobiles in Yellowstone National Park. <http://www.nps.gov/yell/parkmgmt/winterusetechndocuments.htm>. (accessed April 23, 2007).
- Burson, Shan. 2004. Natural soundscape monitoring in Yellowstone National Park, December 2003-March 2004. <http://www.nps.gov/yell/parkmgmt/winterusetechndocuments.htm>. (accessed April 26, 2007).
- . 2005. Natural soundscape monitoring in Yellowstone National Park, December 2004-March 2005. <http://www.nps.gov/yell/parkmgmt/winterusetechndocuments.htm>. (accessed April 26, 2007).
- . 2006. Natural soundscape monitoring in Yellowstone National Park, December 2005-March 2006. <http://www.nps.gov/yell/parkmgmt/winterusetechndocuments.htm>. (accessed April 26, 2007).
- Cassier, E. F., D. J. Freddy, and E. D. Ables. 1992. Elk responses to disturbance by cross-country skiers in Yellowstone National Park. *Wildlife Society Bulletin* 20:375–381. In *Yellowstone's northern range: Complexity & change in a wildland ecosystem*. <http://mms.nps.gov/yell/northernrange> (accessed May 18, 2007).
- Comey, Bob. 2007a. Draft avalanche hazard assessment and mitigation report, Sylvan Pass, Yellowstone National Park. Unpublished report prepared for National Park Service, Yellowstone National Park, Wyoming.
- . 2007b. Avalanche hazard assessment and mitigation report, Sylvan Pass, Yellowstone National Park. Unpublished final report prepared for National Park Service, Yellowstone National Park, Wyoming.
- Council on Environmental Quality. 1981. NEPA Guidance; 40 Questions: Guidance issued by CEQ to address frequently asked questions (FAQs) concerning NEPA implementation. 46 Fed. Reg. 18026.
- . 1997. Considering cumulative effects under the National Environmental Policy Act.

- Despain, D. 1987. The two climates of Yellowstone National Park. *Proceedings of the Montana Academy of Science* 47:11–20. In *Yellowstone's northern range: Complexity & change in a wildland ecosystem*. <http://mms.nps.gov/yell/northernrange> (accessed May 18, 2007).
- Duffield, John, and Chris Neher. 2006. *Draft technical report: Regional economic impact analysis for Yellowstone and Grand Teton National Parks and John D. Rockefeller, Jr. Memorial Parkway; winter use draft environmental impact statement*. Located at University of Montana, Missoula, MT. August 1.
- . 2006a. *Final technical report: Regional economic impact analysis for Yellowstone and Grand Teton National Parks and John D. Rockefeller, Jr. Memorial Parkway; winter use draft environmental impact statement*. Located at The University of Montana, Department of Mathematical Sciences, Missoula, MT.
- . 2006b. *Response to comments on "Draft Technical Report, Regional Economic Impact Analysis for Yellowstone and Grand Teton National Parks and John D. Rockefeller, Jr. Memorial Parkway Winter Use Draft Environmental Impact Statement."*
- ERG (Ecosystem Research Group). 2006. Review of the regional economic impact analysis for the Greater Yellowstone Area winter use DEIS. Prepared for State of Wyoming Office of Planning.
- . 2007. *Comment document for Cooperating Agency Review Draft, Winter Use Plans Draft Environmental Impact Statement, Yellowstone and Grand Teton National Park and John D. Rockefeller, Jr. Memorial Parkway*. Prepared for State of Wyoming Office of Planning.
- Freimund, Wayne A. and William T. Borrie. 2001. *Winter visitation in Yellowstone National Park: A review of six years of research*. Unpublished report to National Park Service, Yellowstone National Park, Wyoming
- Greater Yellowstone Science. N.d. Yellowstone elk overview. <http://www.greateryellowstonescience.org> (accessed May 18, 2007).
- Kay, C. 1990. Yellowstone's northern elk herd: A Critical evaluation of the "natural-regulation" paradigm. Ph.D. dissertation, Utah State University. In *Yellowstone's northern range: Complexity & change in a wildland ecosystem*. <http://mms.nps.gov/yell/northernrange> (accessed May 18, 2007).

- Leopold, A. S., S. A. Cain, C. M. Cottam, I. N. Gabrielson, and T. L. Kimball. 1963. Wildlife management in the National Parks: The Leopold report. <http://www.cr.nps.gov/history/leopold.htm> (accessed May 21, 2007).
- Larsen, Eric J., and William J. Ripple. 2002. Aspen age structure in the northern Yellowstone ecosystem: USA. *Forest Ecology and Management* 179 (2003): 469–482. [www.elsevier.com/locate/foreco](http://www.elsevier.com/locate/foreco) (accessed May 21, 2007).
- MFWP (Montana Fish, Wildlife and Parks). 2002. Annual northern Yellowstone elk count completed. January 25. [http://fwp.mt.gov/news/article\\_1180.aspx](http://fwp.mt.gov/news/article_1180.aspx) (accessed May 18, 2007).
- Mitchell, Robert Cameron, and Richard T. Carson. 1989. Using surveys to value public goods: The contingent valuation method. Washington D.C.: Resources for the Future.
- NPS (National Park Service, U.S. Department of the Interior). 1990. Winter use plan environmental assessment, Yellowstone and Grand Teton National Parks and John D. Rockefeller, Jr., Memorial Parkway. Denver Service Center, Denver, Colorado.
- . 2001. Director's order #12: Conservation planning, environmental impact analysis, and decision-making.
- . 2003. Winter use plans final environmental impact statement and record of decision: Yellowstone and Grand Teton National Parks and John D. Rockefeller, Jr., Memorial Parkway.
- . 2006. National Park Service Visitation Statistics. [www.nature.nps.gov/mpur/reports/reportlist.cfm](http://www.nature.nps.gov/mpur/reports/reportlist.cfm) (accessed May 1, 2007).
- . 2006a. Management Policies 2006.
- . 2006b. Cooperating agency review draft: Winter Use Plans Draft Environmental Impact Statement, Yellowstone and Grand Teton National Parks and the John D. Rockefeller, Jr. Memorial Parkway
- . 2006c. Sustainable News. Climate: People and parks respond to change. no. 1, 5 (Fall). [http://www.nature.nps.gov/sustainabilityNews/search\\_docs/News\\_Issues/Fall06SusNews.pdf](http://www.nature.nps.gov/sustainabilityNews/search_docs/News_Issues/Fall06SusNews.pdf)
- . 2007. Winter Use Plans Draft Environmental Impact Statement, Yellowstone and Grand Teton National Parks and the John D. Rockefeller, Jr. Memorial Parkway,

- NoHow Inc. 1999. Avalauncher Evaluation and Site Review. Unpublished report prepared for Yellowstone National Park. October 1999.
- North Wind Inc., 2005. Yellowstone and Grand Teton National Parks and the John D. Rockefeller, Jr., Memorial Parkway. Final Scoping Report.
- Pengelly, W. L. 1963. Thunder on Yellowstone. *Naturalist* 14:18–25. In *Yellowstone's northern range: Complexity & change in a wildland ecosystem*. <http://mms.nps.gov/yell/northernrange> (accessed May 18, 2007).
- Robbins, Jim. 1996. Weaving a new web: Wolves change an ecosystem. *ZooGoer* 27 (3). <http://nationalzoo.si.edu/Publications/ZooGoer/1998/3/weavingwolfweb.cfm> (accessed May 21, 2007).
- Sacklin, John. 2007. [Personal communication]. Management Assistant, Yellowstone National Park, Wyoming. April and May.
- Schullery, Paul. N.d. The Greater Yellowstone ecosystem. <http://biology.usgs.gov/s+t/nofram/r114.htm> (accessed May 21, 2007).
- Smith, M. D., 2005. Recent trends in cumulative impact case law. Presented at the National Association of Environmental Professionals Annual Conference, Alexandria, VA, April 16–19.
- Stiles, David Paul II. N.d. *Effects of Canis lupus reintroduction within the Greater Yellowstone ecosystem*. <http://academic.evergreen.edu/s/stidav22/reports/WolfReintroduction.pdf> (accessed May 21, 2007).
- Sumeriski, Alan. 1999. Avalauncher Tower – Site Placement, South Entrance Road, Talus Slope. Unpublished project proposal prepared by Yellowstone National Park staff. November 27, 1999.
- Taylor, David T. 1999. Economic importance of the winter season to Park County, Wyoming. University of Wyoming, Cooperative Extension Service, Laramie, WY.
- . 2007. Economic trends in the winter season for Park County, Wyoming. University of Wyoming, Cooperative Extension Service, Laramie, WY.
- Toweill, D. E. and J. W. Thomas. 2002. North American Elk: Ecology and Management. Smithsonian Institution Press. Washington, D.C.

- USDA. (USDA U.S. Forest Service). 1986. Shoshone National Forest, Land and Resource Management Plan, Cody, Wyoming
- . 2007. Shoshone National Forest, Draft Proposed Land and Resource Management Plan, Cody, Wyoming
- Vucetich, John A., Douglas W. Smith, and Daniel R. Stahler. 2005. Influence of harvest, climate, and wolf predation on Yellowstone elk, 1961–2004. April 21.
- Wagner, F. H., R. B. Keigley, and C. L. Wamboldt. 1995. Comment: Ungulate herbivory of willows on Yellowstone's northern winter range: Singer et al. (1994). *Journal of Range Management* 48:475–477. In *Yellowstone's northern range: Complexity & change in a wildland ecosystem*. <http://mms.nps.gov/yell/northernrange> (accessed May 18, 2007).
- White, P. J., T. Davis, J. Vorkowski, R. Garrott, D. Reinhart, and D. McClure. 2006. Behavioral responses of wildlife to snowmobiles and coaches in Yellowstone. Unpublished review draft available at <http://www.nps.gov/yell/parkmgmt/winterusetechicaldocuments.htm>. (accessed May 15, 2007).



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
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JUN 13 2007

Ref: 8EPR-N

Suzanne Lewis, Superintendent  
Yellowstone National Park, and  
Mary Gibson Scott, Superintendent  
Grand Teton National Park  
c/o Temporary Winter Use Plan  
P.O. Box 168  
Yellowstone National Park, Wyoming 82190

Re: 2006 Winter Use Draft EIS

Dear Superintendents Lewis and Scott:

The U.S. Environmental Protection Agency (EPA) has reviewed the 2006 Draft Environmental Impact Statement (DEIS) for Winter Use Plans in Yellowstone and Grand Teton National Parks and for the J.D. Rockefeller National Parkway. Our review was conducted in accordance with EPA's responsibilities under Section 102(2)(C) of the National Environmental Policy Act (NEPA), Section 309 of the Clean Air Act, and consistent with the Memorandum of Understanding between the National Park Service (NPS) and EPA that guides our participation as a Cooperating Agency.

Before conveying our comments on this DEIS, we want to acknowledge the improvements gained in the Parks' winter environment compared to historic conditions. Historic winter use management had no limits on the emissions, noise, or the number of snowmobiles and snowcoaches. In its 2000 EIS, NPS found that impacts to air quality, visibility, soundscapes, wildlife and visitor experience had triggered NPS's "impairment" threshold. In 2003, NPS implemented a commendable "best available technology" (BAT) program to reduce vehicle emissions and noise, and a commercial guiding program that is critical to improving wildlife protection and visitor experience. Today, vehicle numbers are reduced by two-thirds compared to historic use, resulting in improved air quality and soundscapes as well as reduced wildlife disturbance. The combination of significantly reduced vehicle numbers and the use of BAT has decreased the predicted maximum carbon monoxide and particulate matter levels by about eighty-five percent. We commend the NPS for its commitment to providing a cleaner, safer experience for one of America's most treasured National Parks.

EPA's collaboration with the NPS regarding Yellowstone Winter use reflects our longstanding efforts to ensure environmental protection at Yellowstone and Grand Teton

National Parks. Over the past few years, EPA has participated in 4 major NEPA processes regarding winter use at these Parks, and has provided extensive comments on the extent to which the modifications to the Winter Use management framework and the various proposed alternatives would meet environmental requirements.

We continue to support NPS firmly establishing the management framework for winter use at Yellowstone and Grand Teton National Parks to sustain or improve upon the progress the NPS has achieved over the past few years. This management framework is critical to ensuring that future winter use proceeds in an environmentally protective manner.

The DEIS provides two primary means for ensuring that NPS's winter use decision will be protective. First, the Desired Conditions in the DEIS are designed specifically for this Winter Use analysis to inform the decision making process. Second, the Winter Use Adaptive Management Program (AMP) is incorporated in this process to ensure that project implementation will provide adequate protections. EPA has supported this twofold approach as an exemplary way of ensuring that this complex winter use decision will meet the criteria for resource protection.

EPA is concerned that the proposed Desired Conditions and AMP, as drafted, may not ensure adequate resource protection. Thus, EPA recommends that the Final EIS revise the proposed Desired Conditions to ensure best available protection appropriate to the Yellowstone National Park Class I airshed, and that the selected alternative fully meets the revised Desired Conditions. This would ensure that the resulting winter use decision would sustain the best available resource protections over the long term.

### **Desired Conditions**

EPA's concerns with the proposed Desired Conditions are manifested in NPS's preferred alternative (Alt. 1). Alternative 1 calls for 720 guided snowmobiles and 78 snowcoaches per day in Yellowstone. The NPS's preferred alternative, when compared to another practicable alternative in the DEIS (Alt. 2, snowcoach only), would result in five times more carbon monoxide emissions and 17 times more hydrocarbon emissions. This alternative also would double the acres in Yellowstone impacted by oversnow vehicle noise for more than 50 percent of the day (DEIS, Tables 4-34 and 4-43 and Figure 4-2).

### **Other Concerns**

This DEIS indicates that NPS's preferred alternative would significantly exceed the previously established threshold for soundscape protection and exceed the threshold for air quality. For example, this alternative may produce significant levels of formaldehyde causing potential human health effects. If the NPS selects an alternative predicted to exceed resource protection thresholds, it would limit NPS's ability to address adverse effects that fall below the level of "impairment." We recommend that NPS clarify and assure its preferred alternative meets the previously adopted thresholds.

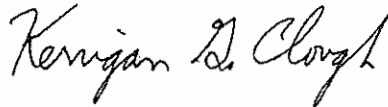
### **Rating**

The preferred alternative appears to lack adequate controls through the AMP to ensure the protection of air quality, human health, natural soundscapes, and wildlife and, therefore, EPA

rates the preferred alternative **Environmental Concerns – Insufficient Information (EC-2)**. Based on this rating, EPA believes that either the preferred alternative should be modified or a different alternative should be selected that meets the resource protections identified by the NPS.

If you have any questions about the concerns we have raised, please do not hesitate to call me at 303-312-6308 or Larry Svoboda, Director of EPA Region 8's NEPA program at 303-312-6004.

Sincerely yours,



Kerrigan G. Clough  
Deputy Regional Administrator

Enclosure: *EPA's Detailed Comments on the 2006 Winter Use DEIS*



## **EPA's Detailed Comments on the 2006 Winter Use DEIS**

### **Adaptive Management Program**

The DEIS states (p. A-40), "Many of these thresholds were derived partly from the results of computational models, and they are preliminary in nature. Therefore, they could be adjusted depending on data resulting from monitoring programs." We are concerned with this statement. The adaptive management thresholds for air quality and soundscapes were set to be roughly equivalent to the environmental conditions predicted for the "environmentally preferred alternative" (snowcoach only). If monitoring shows that these thresholds are being exceeded, we generally believe that such results should lead to changes in management rather than modifications to the thresholds. The one exception we envision is if the *environmentally preferred* alternative is implemented and monitored --or re-modeled based on new information— there may be a case for altering the air quality and soundscape thresholds. This should be clarified in the Final EIS.

The adaptive management thresholds were derived from the 2003 Supplemental EIS modeling and impact predictions for the practicable alternative that provides best available protection to park resources and values (the snowcoach only alternative). The snowcoach only alternative in the DEIS is significantly cleaner and quieter than when it was originally modeled because the modeling now includes a best available technology for snowcoach emissions and noise. It seems appropriate to revise the thresholds for soundscapes and air quality based on this new understanding of achievable resource protection.

### **Environmentally Preferred Alternative**

EPA agrees with the DEIS (p. 57) conclusion that "the snowcoach only alternative impacted park resources and values the least, overall, while accommodating human recreational access at [historic] levels." Alternative 2 utilizes the least impacting equipment, vehicles, and transportation systems, consistent with the NPS Policy for Use of Motorized Equipment (p. A-11). Both NPS and EPA have repeatedly expressed support for maintaining motorized, oversnow access to the major features currently accessible in Yellowstone National Park, and by an oversnow transportation system that could accommodate historic average visitation.

### **EPA Compliant Snowmobiles**

The DEIS (p. 30) proposes to restrict use on the Continental Divide Snowmobile Trail and Grassy Lake Road to "EPA Compliant Snowmobiles." We recommend that the Final EIS include more specifics on how this restriction would limit emissions and noise and where limitations would not be assured. EPA's emission standard requires that "on average" each manufacturer's fleet must meet the standard. A manufacturer can therefore produce snowmobiles that exceed the EPA standard as long as they are balanced by machines operating cleaner than the standard. It is also important to point out that "EPA Compliant Snowmobiles" have no noise restrictions. In summary, restricting use to modern (2007 model year) snowmobiles would be expected to improve both emissions and noise performance compared to earlier model years. It does not, however, assure that individual snowmobiles will operate cleaner or quieter than historic snowmobiles. The terms "EPA compliant" could be replaced with "snowmobiles meeting EPA's most recent emission standard," while including the above qualifiers.

## **Air Quality**

The DEIS (p. 88) indicates that concerns with air quality impacts to health and safety were felt “particularly on those days with peak snowmobile traffic.” The monitoring data from that time and the subsequent modeling lead to a conclusion that cold, stable air with a low-level temperature inversion caused human health effects and visibility impairment even on relatively light use days. The sentence at p. 88 of the DEIS should be revised in the Final EIS to reflect the effects of temperature inversion.

In the analysis of Environmental Consequences, the DEIS (p. 304) states, “Compared to current conditions, this alternative [Alt.1] would slightly improve the visitor experience because all snowcoaches would be required to use BAT.” We note that the analysis of air quality and soundscapes in the DEIS conflicts with the above statement. Alternative 1 produces increased soundscape impacts (p. 265, percent of park with 50% time audible is more than 3 times higher) and significantly increased air quality impacts (pp. 196-7, 41-170% more 8-hr CO and up to 61% more 24-hr PM<sub>2.5</sub>) compared to current conditions. Additionally, it is likely that the increased vehicle numbers associated with Alternative 1 could degrade road conditions and increase the likelihood of accidents thereby decreasing public safety compared to current conditions. We recommend this information be corrected in the Final EIS.

The DEIS’s framework for assessing visitor access and circulation (p. 132) cites several environmental, human health and safety issues to be assessed when evaluating effects of the proposed actions. The DEIS conclusions in this sections do not consistently refer to these environmental, human health and safety factors. The Final EIS would be more consistent if these impacts were summarized in the conclusions for each alternative.

## **Human Health**

The DEIS (p. 88) lists the OSHA permissible exposure limit (PEL) for carbon monoxide (50 ppm), but should also include the more restrictive 8-hour National Ambient Air Quality Standard of 9 ppm. The PEL is designed to be protective of a healthy worker population, while the National Ambient Air Quality Standards known as NAAQS are designed to include protection for sensitive populations including children, asthmatics, and the elderly.

The summary of the Spear, Hart, and Stephenson study in the DEIS (p. 89) should specify that there were only 180-220 “best available technology” (BAT) snowmobiles present on the days when 2 of 13 benzene employee exposure samples exceeded the chronic Minimum Risk Levels (MRL) of 0.003 ppm. We would add that there is also an “intermediate MRL” which is intended for short-term exposures starting at just 14 days per year. The intermediate MRL for benzene is 0.006 ppm. The intermediate MRLs correspond to a 10<sup>-5</sup> cancer risk using EPA risk assessment methodology for a worker scenario. The DEIS forecasts roughly a doubling of benzene emissions in Alternative 1 compared to current conditions raising the possibility that the intermediate MRL for benzene could be exceeded. We recommend including this information in the Final EIS.

We have previously indicated to NPS that increases in formaldehyde emissions could have human health implications. In 2005, Spear and Stephenson measured formaldehyde in

West Entrance Kiosk A of 0.01 ppm with just 180 snowmobiles per day. The National Institutes for Occupational Safety and Health (NIOSH) recommended exposure limit (REL) for formaldehyde is 0.016 ppm. Given that Alternative 1 is predicted to more than double vehicle formaldehyde emissions compared to current conditions, it is possible that levels of formaldehyde may exceed commonly recognized occupational health standards. Current (2005) formaldehyde levels are associated with a  $10^{-5}$  cancer risk in occupational workers and could exceed a  $10^{-4}$  cancer risk with increased vehicles and emissions. Formaldehyde is associated with lung and nasopharyngeal cancer in epidemiological studies of occupational workers exposed to formaldehyde and respiratory cancers in numerous animal studies. NPS may want to consider medically monitoring the workers at Yellowstone National Park for formaldehyde and benzene exposure if the number of vehicles were to significantly increase.

It appears that the 1997 personal noise exposure measurements were taken inside the enclosed kiosks. It is therefore not clear whether the cited conclusion, “noise does not appear to be a major hazard for employees at the West Entrance,” is accurate. If some employees work outside the kiosk – as they did in the past – it is possible that noise could still represent a significant hazard for them. Please clarify this issue in the Final EIS. Additionally, while the statement that “no noise sampling in the parks indicated a maximum exposure above 115 db” is accurate, it should be noted that several measurements of 114 db have been recorded with an average of just 214 snowmobiles per day.

#### **Natural Soundscapes**

This DEIS (p. 262) includes a new measure of impact levels for Natural Soundscapes, “Percent of Total Park in which OSB Sound is Audible.” The threshold for defining “moderate adverse effects” is audibility in 10 percent or more of the total park. Alternative 2 (snowcoach only) would be audible in slightly more than 10 percent of Yellowstone National Park. EPA recommends that the model assumptions be re-checked for Alternative 2 and that mitigation measures that could reduce the impact of Alternative 2 to a “minor impact” be considered. We recommend including mitigation in this alternative (entry timing, group size restrictions, technology improvement) and then re-modeling the alternative prior to the Final EIS.

Because Alternative 2 slightly exceeds 10 percent audibility, it falls in the same impact category as historic, unregulated use (“moderate adverse effects”). NPS determined that historic use “impaired” natural soundscapes while impacting 17 percent of the total park. This DEIS places both the practicable environmentally preferred alternative (Alt. 2) and historic use in the “moderate impact” category despite the fact that Alternative 2 spares about 240 square miles of Yellowstone from oversnow vehicle noise by comparison. It appears that Alternative 2, with slight modification, could be the only practicable alternative with minor or negligible effects to Yellowstone’s soundscapes, and therefore the only practicable alternative that would avoid the need to assess whether soundscapes are impaired.

We note that in the Soundscape Modeling Report (Oct. 2006, pp. 33 and 188, scenario F) that “Current Conditions” were apparently modeled using BAT snowcoaches. Because BAT snowcoaches are not currently required in Yellowstone, it is likely that the sound impact modeling results for “current conditions” are underestimated in both the Modeling Report and

the DEIS. We recommend re-running the analysis for current conditions prior to the Final EIS and using current snowcoach fleet sound performance data rather than BAT data.

### **Snowcoach Impacts**

The summary of impacts and Environmental Consequences (pp. 65 and 306) state that under Alternative 2, "opportunities to view wildlife and scenery may decrease." The DEIS does not list any visitor survey or other research that indicates that snowcoaches reduce opportunities to view wildlife or scenery in any measurable sense. We recommend the Final EIS either include such references or delete this statement.

The DEIS (pp. 65 and 306) also states that visitors would experience adverse impacts from "snowcoach slowness." Again, no studies or visitor surveys are cited in the DEIS to indicate that existing snowcoach visitors are adversely affected by snowcoach speed. When road conditions deteriorate, both snowmobiles and snowcoaches are forced to reduce their speed. If snowcoach speed becomes an issue, it may be possible to address this through improved technology over time.

## Correspondence (56433)

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### Correspondence Information

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**Number of Signatures:** 1      **Form Letter:** No  
**Contains Request(s):** No      **Type:** Web Form  
**Notes:**

### Correspondence Text

Knowing comments on the DEIS Winter Use Plan will be "plentiful" I will keep these comments brief.

-- Scope of analysis should include options/methods for keeping the East Entrance open to winter use. As snow depths and conditions vary, a complete winter closure would exclude travel opportunities in years when there is no risk of avalanche. The current plan does not appear to provide an option to manage the entrance during low snow years, etc. Management should be adaptive.

-- Non-BAT snowmobiles must be allowed continued access to Flagg Ranch for numerous safety reasons. Fremont County maintains the Grassy Lake Road trail at no expense to NPS and wishes to keep the "door open" for riders recreating in the area in need of services.

-- Fremont County supports non-BAT machines both ways on the Grassy Lake Road. The area provides excellent riding opportunities, with minimal impact, frequently overlooked by NPS.

-- Fremont County supports including 20 percent non-commercial use in alternatives allowing snowmobile access.

-- Fremont County supports the continued access to Cave Falls trail in all alternatives allowing snowmobile use.

-- Fremont County supports non-BAT machines on the Cave Falls trail.

-- Allowing the Continental Divide Snowmobile Trail to become a through route would have minimal impact and increase riding opportunities.