

Field Station, P.O. Box 911, 1553 South Main Street, Tonopah, NV 89049.

SUPPLEMENTARY INFORMATION: The land has been identified as suitable for disposal by the Tonopah Resource Management Plan. The land is not needed for any resource program and is not suitable for management by the Bureau or another Federal department or agency. An environmental assessment which analyzes potential impacts from this action has been prepared and is available for review at the address shown above.

The mineral estate, excepting saleable minerals, has been determined to have no known value. Therefore, the mineral estate, excepting saleable minerals, will be conveyed simultaneously with the surface estate in accordance with Section 209(b)(1) of Federal Land Policy and Management Act of 1976. Acceptance of the sale offer will constitute application for conveyance of the mineral interests. The sale proponent will be required to submit a \$50.00 non-refundable filing fee for conveyance of the mineral interests with the purchase price for the land. Failure to submit the non-refundable fee for the mineral estate within the time frame specified by the authorized officer will result in cancellation of the sale.

Upon publication of this Notice of Realty Action in the **Federal Register**, the lands will be segregated from all forms of appropriation under the public land laws, including the mining laws, but not the mineral leasing laws or disposals pursuant to Sections 203 and 209 of FLPMA. The segregation shall terminate upon issuance of a patent or other document of conveyance, upon publication in the **Federal Register** of a termination of segregation, or 270 days from date of this publication, which ever occurs first.

Patent, if issued, will be subject to the following third party rights: Excepting and Reserving to the United States:

1. Saleable minerals,
2. A right-of-way thereon for ditches or canals constructed by the authority of the United States. Act of August 30, 1980 (43 U.S.C. 945).

Subject to: All valid existing rights.

For a period of 45 days from the date of publication in the **Federal Register**, interested parties may submit comments to the Assistant Field Manager, Tonopah Field Station, P.O. Box 911, Tonopah, NV 89049. Any adverse comments will be evaluated by the State Director, who may sustain, vacate or modify this realty action and issue a final determination. In the absence of timely filed objections, this realty action will become a final determination of the Department of the Interior.

Dated: December 12, 2000.

W. Craig MacKinnon,

Assistant Field Manager.

[FR Doc. 00-32738 Filed 12-21-00; 8:45 am]

BILLING CODE 4310-HC-P

DEPARTMENT OF THE INTERIOR

Bureau of Land Management

[NV-930-1430-ET; NVN-73931]

Notice of Proposed Withdrawal and Opportunity for Public Meeting; Nevada

AGENCY: Bureau of Land Management, Interior.

ACTION: Notice.

SUMMARY: The Bureau of Land Management proposes to withdraw 277.046 acres of public lands for a period of 20 years to protect the historic town of Rhyolite. This notice closes the lands for up to 2 years from surface entry and mining while various studies and analyses are made to make a final decision.

DATES: Comments and requests for meeting should be received on or before March 22, 2001.

ADDRESS: Comments and meeting requests should be sent to the Nevada State Director, BLM, 1340 Financial Blvd., P.O. Box 12000, Reno, Nevada 89520-0006.

FOR FURTHER INFORMATION CONTACT: Dennis J. Samuelson, BLM Nevada State Office, 775-861-6532.

SUPPLEMENTARY INFORMATION: On December 8, 2000, a petition was approved allowing the Bureau of Land Management to file an application to withdraw the following described public lands from settlement, sale, location, or entry under the general land laws, including the mining laws, subject to valid existing rights:

Mount Diablo Meridian

T. 12 S., R. 46 E.,
secs. 9 and 16 (within).

The areas described aggregate 277.046 acres in Nye County. For a more complete description, you may contact Dennis J. Samuelson at the phone number or address listed above.

The purpose of the proposed withdrawal is for the Bureau of Land Management to protect the historic town of Rhyolite, which contains numerous cultural resources. The most prominent resource is a train depot built in 1906. The lands will be managed for historic and recreation purposes. Rhyolite is located about 90 miles northwest of Las Vegas near the town of Beatty.

For a period of 90 days from the date of publication of this notice, all persons who wish to submit comments, suggestions, or objections in connection with the proposed withdrawal may present their views in writing to the Nevada State Director of the Bureau of Land Management.

Notice is hereby given that an opportunity for a public meeting is afforded in connection with the proposed withdrawal. All interested persons who desire a public meeting for the purpose of being heard on the proposed withdrawal must submit a written request to the Nevada State Director within 90 days from the date of publication of this notice. Upon determination by the authorized officer that a public meeting will be held, a notice of the time and place will be published in the **Federal Register** at least 30 days before the scheduled date of the meeting.

The application will be processed in accordance with the regulations set forth in 43 CFR Part 2300.

For a period of 2 years from the date of publication of this notice in the **Federal Register**, the lands will be segregated as specified above unless the application is denied or canceled or the withdrawal is approved prior to that date. Other uses which will be permitted during this segregative period are rights-of-way, leases, and permits.

Date: December 18, 2000.

Margaret L. Jensen,

Deputy State Director, Natural Resources, Lands, and Planning.

[FR Doc. 00-32760 Filed 12-21-00; 8:45 am]

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DEPARTMENT OF THE INTERIOR

National Park Service

Record of Decision; Winter Use Plans for the Yellowstone and Grand Teton National Parks and John D. Rockefeller Jr., Memorial Parkway

Responsible Official:

Dated: November 22, 2000.

Karen Wade,

Intermountain Regional Director, National Park Service.

Record of Decision

Winter Use Plans for Yellowstone and Grand Teton National Parks and the John D. Rockefeller Jr., Memorial Parkway

Table of Contents

The Decision

Decision

Actions and Assumptions Common to All Units
 Actions Specific to Yellowstone National Park
 Actions Specific to Grand Teton National Park and the Parkway
 Definitions
 Mitigation
 Monitoring
 Rationale for the Decision
 Basis for the Decision
 How Environmental Issues Were Considered and Addressed
 Factors Other Than Environmental Consequences Considered in Making the Decision
 Findings
 Measures Taken To Avoid Environmental Harm
 Public Involvement
 Scoping
 Summary of Public Scoping Comment
 Major Issues
 Issues or Concerns Not Addressed in the Plans/EIS
 Federal Register Notices
 Distribution of the Draft Environmental Impact Statement
 Public Meetings/Hearings
 Comments on the Draft Environmental Impact Statement
 Public Response to the FEIS
 Consultation
 Cooperating Agencies
 American Indian Tribes
 State Historic Preservation Offices
 U.S. Fish and Wildlife Service
 Alternatives Considered
 Alternative Development
 Scope of Analysis in the FEIS
 Alternatives
 Comparison of Alternatives
 Environmentally Preferred Alternative
 Information Contact
Attachment A—Monitoring and Adaptive Management
Attachment B—Summary of Public Comments on the FEIS
Record of Decision
Winter Use Plans for Yellowstone and Grand Teton National Parks and the John D. Rockefeller Jr., Memorial Parkway
The Decision
 This decision made as a result of the Winter Use Plans Final Environmental Impact Statement (FEIS) for Yellowstone (YNP) and Grand Teton National Parks (GTNP) and the John D. Rockefeller Jr., Memorial Parkway (the Parkway) will guide winter use management in the three park units. The decision is to select a modified form of alternative G, as described and evaluated in the FEIS, with the changes to that alternative explained here. Elements of the decision are given in detail below as actions and assumptions

common to all 3 units, actions specific to Yellowstone, actions specific to Grand Teton and the Parkway, mitigation, and monitoring. The maps for alternative G and the description of each management zone provided in the FEIS, while not duplicated in this Record of Decision, are features of this decision.

In order to implement portions of this decision, the National Park Service (NPS) will propose to amend its regulations at 36 CFR 7.13(l), 7.21(a), and 7.22(g). Although this decision is final for the purposes of this planning project, those elements that will go through the rule making process may be modified based on further public comments.

Decision

The selected alternative emphasizes cleaner, quieter access to the parks using the technologies available today. Effective the winter of 2003–2004 and thereafter, it will allow oversnow motorized recreation access via NPS-managed snowcoach only, with limited exceptions for continued snowmobile access to other public and private lands adjacent to or within GTNP. Until then, interim actions will progressively reduce the impacts from snowmobile use in the parks.

This decision addresses the full range of issues regarding safety, natural resource impacts, and visitor experience and access. It addresses the issues in a way that will make it necessary for local economies to adapt, and for snowmobile users to access the parks using a different mode of transport.

Actions and Assumptions Common to All Units

Implementation

• Unless otherwise noted, the parks will implement all actions the winter following the Record of Decision (ROD) for the winter use plans and EIS. Actions requiring a change in regulations will be implemented once the new regulations are effective.

• If it can be demonstrated sufficiently for NPS to determine that an implemented action has affected or would substantially affect a concession operation prior to the expiration of its contract, the action will be implemented only through negotiation or when a new contract is awarded.

• NPS will develop a detailed snowcoach implementation plan in coordination with gateway communities, concessioners and winter permittees.

• NPS will coordinate with gateway communities, concessioners and winter

permittees and state tourism program resources on a new marketing strategy designed to facilitate winter visitation by snowcoach.

• Allow a planning and implementation period of 3 (three) years.

• In the winter of 2000–2001, snowmobile and snowplane use will continue under current regulations. This is a departure from alternative G. This change is made because the implementation of changes in snowmobile and snowplane use that require new regulations could not be made until the 2000–2001 season is nearly over. Waiting until 2001–2002 to set new limits on snowmobile and snowplane use will afford ample public notice of the new limits.

• In the winter of 2000–2001, actions that do not require regulations (such as increasing ranger patrols to reduce the disturbance of wildlife) will be undertaken to reduce the impacts from snowmobile use.

• In the winters of 2001–2003, existing commercial snowcoach operators will be encouraged to increase their fleet size, and snowmobile and other new operators will be encouraged to purchase or lease coaches and reduce snowmobile numbers.

• In 2001–2002, daily limits will be set on snowmobile and snowplane use so that daily use levels cannot increase above the average peak day use levels of recent years, as shown in table 1, below.

• In 2002–2003, daily limits will be set to limit total recreational snowmobile use to approximately 50% of the current average annual use levels at the South and West Entrances of YNP. Current snowmobile use levels will be maintained from the East and North Entrances of YNP. See table 1, below.

• In 2002–2003 for GTNP and the Parkway eliminate snowmobile use on the Teton Park Road, all motorized use on Jackson Lake, and all other recreational snowmobile use except for that on the CDST, Grassy Lake Road, and access routes to adjacent public lands, with limits shown in table 1, below.

• In 2003–2004 and thereafter, all oversnow motorized visitor travel in the parks will be by snowcoach, except for limited routes in GTNP that will remain open for snowmobile access to adjacent public or private lands and to private inholdings.

Regulation/Enforcement/Administration

• Several actions include possible road closures depending on the results of scientific studies. None of the actions preclude other closures for safety,

resource protection, or other reasons as identified in 36 CFR 1.5 or 2.18.

- At present no Environmental Protection Agency (EPA) standards exist for off-road vehicles. If the EPA adopts standards or measurement methods for vehicle emissions and sound applicable to winter use in the parks, they will be implemented in accordance with EPA regulations.

- Require all new oversnow vehicles purchased by the parks to conform to the best environmental standards available, and that other vehicles are retrofitted whenever possible with new technologies designed to lower sound and emission levels.

- Increase the field presence of park rangers during the interim period before full implementation of snowcoach access to monitor, anticipate, detect and mitigate resource and wildlife impacts and to increase visitor safety.

Resource Protection

- Continue scientific studies and monitoring regarding winter visitor use and park resources. Close selected areas of the park, including sections of roads, to visitor use if scientific studies indicate that human presence or activities have a detrimental effect on wildlife or other park resources that could not otherwise be mitigated. The appropriate level of environmental assessment under NEPA will be completed for all actions as required by CEQ regulations (40 CFR parts 1500–1508).

- Give a 1-year notice before any closure is implemented unless immediate closure is deemed necessary to avoid impairment of park resources or to protect public safety.

- Sand, or an equally environmentally neutral substance, will be used for traction on all plowed winter roads. Before spring opening, sand removal operations will continue on all plowed park roads.

- Investigate and implement options to reduce the palatability and accessibility to wildlife of the hydraulic fluid used in snow groomers.

- When snow depth warrants and at periodic intervals, routine plowing or grooming operations will include laying back roadside snowbanks that could be a barrier to wildlife exiting the road corridor.

Visitor Use and Access

- NPS will determine visitor use capacities based on studies that set indicators and standards for desired visitor experiences and resource conditions. The NPS will monitor indicators to maintain the conditions for each management prescription. If

necessary, techniques such as reservations, permits, and differential fees will be implemented. See zone descriptions, monitoring table, and Appendix H (Recreation Carrying Capacity).

- Continue to implement transition and action plans for accessibility and support the philosophy of universal access in the parks. The NPS will make reasonable efforts to ensure accessibility to buildings, facilities, programs, and services. The NPS will develop strategies to ensure that new and renovated facilities, programs and services (including those provided by concessioners) are designed, constructed, or offered in conformance with applicable policies, rules, regulations, and standards (including but not limited to the Architectural Barriers Act of 1968; the Americans with Disabilities Act of 1990 (ADA); the Uniform Federal Accessibility Standards of 1984 (UFAS); and the Guidelines for Outdoor Developed Areas of 1999).

- Architectural and Site Access and Programmatic Access: The NPS will evaluate existing buildings and existing and new programs, activities, and services (including telecommunications and media) to determine current accessibility and usability by disabled winter visitors. Action plans to remove barriers will be developed.

- This decision includes an affirmative commitment to implement strategies designed to provide a reasonable level of affordable access to winter park visitors.

- Backcountry nonmotorized use will continue to be allowed throughout the parks except where designated otherwise for resource protection purposes (shown as Zone 11 or area of designated trail use on alternative map).

- Other means of oversnow travel not foreseen in this Record of Decision must be specifically approved by the park superintendent.

- In the third year of the interim period (2002–2003), snowmobiles in YNP must be accompanied by an NPS permitted guide and travel in groups of no more than 11 (including the guide). The superintendent will be authorized to also require groups and guides in GTNP and the Parkway.

- In 2003–2004 and thereafter, permit only NPS-managed mass transit snowcoaches on designated oversnow roads, other than for allowable administrative, emergency or other snowmobile access as specified in other actions in this document.¹

¹ Note: The term “NPS managed” refers to permit management. In this case the mass transportation

- Through the permitting process phase out all oversnow vehicles that do not meet the best available environmental standards for oversnow mass transit travel. Currently, the mass transit oversnow vehicle that produces the lowest emissions is the conversion van mat track.² Any oversnow mass transit system in the parks must be low emission, quiet, safe, affordable, accessible, and comply with the requirements of EO 11644.

- Allow mass transit snowcoaches only when their sound levels are at or below 75 decibels as measured on the A-weighted scale at 50 feet at full throttle. Continue to work with snowcoach manufacturers and operators to meet a long-term goal to lower snowcoach sound levels to 70 decibels or lower.

- Prohibit late night oversnow travel from about 11 p.m. to 6 a.m. in 2000–2001, and thereafter from about 9 p.m. to 8 a.m., unless specifically authorized.

- Implement an information program on snow and trail conditions, points of interest, and available recreational opportunities. Through partnerships, establish park visitor contact opportunities in gateway communities and utilize state tourism program resources.

Actions Specific to Yellowstone National Park

- In Yellowstone, the NPS will continue to allow the plowing of Highway 191 and will continue to plow the road from Mammoth to Tower and Tower to the Northeast Entrance (Cooke City) throughout the winter.

- Grand Canyon of the Yellowstone and the McMinn Bench bighorn sheep area will continue to be closed to winter use.

- Winter garbage storage facilities that are wildlife-proof will be constructed in the Old Faithful, Grant, Lake, and Canyon areas.

snowcoach system would be provided by private concessioners who operate under a permit from the NPS. Under the terms of the permit or concessions contract, the NPS may stipulate, among other items, the type of services to be offered, cost to the public, and number of visitors that may be served or transported. The NPS may require that the types of vehicles used meet certain environmental, accessibility and safety requirements. It is the responsibility of the NPS to monitor all services offered under permit to ensure that the public and the parks are being well served. These permits are generally offered for competitive bidding in limited numbers and are granted for a specific number of years.

² Estimates of emissions for conventional vans converted for oversnow travel indicate that the emissions increase once the conversion is made. For this reason adherence to EPA regulations for similar wheeled vans is neither appropriate nor required.

- Continue all existing groomed motorized routes (zone 3). Offer snowcoach service on the East Entrance Road if safety goals can be met. Management of avalanche danger on the East Entrance Road may mean unscheduled closures of the road to all travel.

- Provide nonmotorized opportunities (e.g., skiing and snowshoeing) (zones 8 and 9). Examples of existing roads or trails that will be groomed include Fountain Flats Road and portions of the East Entrance road.

- Where feasible, set parallel tracks on one or both sides of the snow roads to facilitate nonmotorized access.

- Increase interpretive opportunities related to the unique aspects of the winter environment by providing interpretive programs at destination areas and warming huts. Provide guided interpretive programs for organized groups on snowcoaches. Provide interpretive ski and snowshoe tours and programs such as near Tower, Canyon, Mammoth, Old Faithful, West Thumb, Madison, and West Entrance.

- Increase the size and number of warming huts and other day use facilities. Place warming huts and restrooms at popular ski trailheads (for example Tower), as support for motorized staging areas (for example Norris), and where the existing facility size is currently inadequate to handle to the dual function of warming hut and interpretive program staging area (for example, Canyon).

- Restrict nonmotorized uses in certain wildlife winter ranges and thermal areas to travel on designated routes or trails (zones 8 and 9).

- Implement the winter use season during the period from late November to mid-March.

- Reduce administrative snowmobile³ use from the 106 currently used and supplement with administrative snowcoaches, subject to available funding. When practicable, replace administrative snowmobiles with a type that meets the best available emission and sound limits.

- Continue allowing personal non-recreation use of snowmobiles by employees and their families living in the interior of Yellowstone; however, subject to available funding, provide administrative snowcoaches for their use and encourage them to replace their current snowmobiles with cleaner and quieter machines.

- Allow limited use of administrative snowmobiles by concessioners. Require cleaner and quieter technologies as they are developed (through permit and

contracts) and encourage the use of snowcoaches.

Actions Specific to Grand Teton National Park and the Parkway

- In Grand Teton and the Parkway, the following roadways will continue to be plowed:

- Highway 26/89/187 from the south boundary of the park to Moran

- Highway 89/287 from Moran to Colter Bay

- Highway 26/287 from Moran to the eastern park boundary

- Teton Park Road from Moose Junction to Taggart Lake Trailhead, and from Jackson Lake Junction to Signal Mountain Lodge; from Highway 89/287 along the Pacific Creek road to the park boundary; from Kelly to the eastern park boundary; from Gros Ventre Junction to Kelly to Shadow Mountain staging area; and the road to the eastern park boundary at Ditch Creek.

- Current winter closures will remain in effect on the Snake River floodplain, the Buffalo Fork River floodplain, the Uhl Hill area, Willow Flats, Kelly Hill, and Static Peak.

- Reasonable and direct access to adjacent public and private lands, or to privately owned lands within the park with permitted or historical motorized access, will continue via paved and plowed routes or via oversnow routes from GTNP (used by snowmobiles).⁴

- Provide opportunities for oversnow motorized trail use (zone 3) by snowcoaches only on the unplowed, groomed surface of the highway from Colter Bay to Flagg Ranch, in the future upon the meeting of certain conditions, and, effective 2003–2004 and thereafter, north into Yellowstone, and on the Grassy Lake Road.⁵

- Provide opportunities for nonmotorized ungroomed winter trail use (zone 9):

- On the Teton Park Road from Taggart Lake Trailhead to Signal Mountain.

- On Antelope Flats.

- Near Colter Bay and Two Ocean Lake.

- On the unplowed portion of the Moose-Wilson road.

- Continue destination and support facilities at Moose, Triangle X, Colter Bay, and Flagg Ranch, and add warming hut facilities along the Teton Park Road to provide visitor services and

interpretive opportunities that focus on nonmotorized uses (zone 1).

- Limit backcountry nonmotorized use to designated routes to address wildlife issues in certain wildlife winter ranges, or close certain areas to all use.

- Winterize facilities at Colter Bay to provide a suitable staging area for snowcoach access.⁶

- Effective 2002–2003, discontinue the motorized use of Jackson Lake's frozen surface (no snowplanes or snowmobiles).

- Increase interpretive opportunities related to the unique aspects of the winter environment by providing interpretive programs at destination areas and warming huts. Provide guided interpretive programs for organized groups on snowcoaches. Provide interpretive ski and snowshoe tours and programs at locations such as Moose, Colter Bay, and Flagg Ranch visitor services.

- Phase in administrative snowmobile types that meet the best available emission and sound limits. Administrative use of snowmobiles in Grand Teton is limited to law enforcement, utility and maintenance access, permitted scientific studies, search and rescue or other use as approved by the superintendent.⁷

Definitions

- Oversnow motor vehicles: self-propelled vehicles intended for travel on snow, driven by a track or tracks in contact with the snow that may be steered by skis or tracks in contact with the snow. This term includes both snowmobiles and snowcoaches.

- Snowmobiles: self-propelled vehicles intended for travel on snow, having a curb weight of not more than 1,000 pounds (450kg), driven by a track or tracks in contact with the snow, which may be steered by a ski or skis in contact with the snow.

- Snowplanes: self-propelled vehicles intended for oversnow travel, having a weight of not more than 1,000 pounds (450kg) mounted on skis in contact with the snow, and driven by a pusher-propeller.

- Snowcoaches: self-propelled, mass transit vehicles intended for travel on snow, having a curb weight of over 1,000 pounds (450kg), driven by a track or tracks and steered by skis or tracks, having a capacity of at least 8 passengers.

- The phrase gateway communities refers to the towns of Jackson and Cody,

⁴ 16 U.S.C. 406d–1, *et seq.*

⁵ Termination of plowing from Colter Bay to Flagg Ranch is contingent upon the winterization of facilities at Colter Bay and expiration and reissuance of a concession contract associated with Flagg Ranch. The present contract expires in 2009. See Actions and Assumptions Common to All Units, second bullet under Implementation.

⁶ This provision is contingent upon the termination of plowing from Colter Bay to Flagg Ranch.

⁷ EO 11644, sections (3) and (4).

³ EO 11644, sections (3) and (4).

Wyoming, and Gardiner and West Yellowstone, Montana.

- A designated route for nonmotorized recreation is defined as a marked or otherwise indicated oversnow travel way.

Mitigation

Mitigation beyond the actions described in the decision is necessary to reduce disclosed impacts to a level that meets legal requirements, or that is otherwise acceptable within the framework of regulations, executive orders or policies. The following measures are necessary to further mitigate impacts of this decision during the interim period before full implementation and thereafter.

Air Quality

- Park concessions will be required to mitigate the impacts of air pollution during the interim period by selling only bio-fuels and synthetic lubes inside the park.

Water Resources

- Best management practices will be used during the construction, reconstruction, or winter plowing of trails and roads to prevent unnecessary vegetation removal, erosion, and sedimentation.

- Separate new or reconstructed winter-motorized trails from drainages where practicable to mitigate the routing of snowpack contaminants into surface water.

- Any new or reconstructed winter use sanitary facilities will be constructed in locations and with advanced technologies that will protect water resources.

- A focused monitoring program will reduce the uncertainty of impacts from oversnow vehicles, and if necessary indicate best management practices that might be implemented.

Wildlife, Including Federally Protected Species and Species of Special Concern

- NPS personnel will patrol sensitive resource locations to ensure compliance with area closures.

- NPS personnel will increase patrols of locations where disturbance of wildlife by snowmobile use is most common, to reduce that disturbance.

- Monitoring of eagle populations to identify and protect nests will continue. The park will continue to support the objectives of the Greater Yellowstone Bald Eagle Management Plan.

- Monitoring of wolf populations will continue.

- Lynx surveys will be undertaken to document the distribution and abundance of lynx in the parks and their relationship to packed surfaces. The presence of other carnivores will be documented. The parks will abide by the recommendations of the Lynx Conservation Assessment Strategy.

- Continue to assess grizzly bear abundance, distribution, and habitat selection, including the location of dens. The information obtained will assist park managers in protecting important habitats and planning recreational activities that minimize disturbance to bears. Monitoring grizzly bear populations will continue in accordance with the Interagency Grizzly Bear Management Guidelines and the parks' bear management plans.

- Monitoring and protecting trumpeter swan habitats and nests will continue, including the closure of nest sites, when warranted, to public access from February 1 to September 15.

- Monitoring potential or known winter use conflicts will result in area closures if necessary to protect wildlife habitat.

- Conduct snow track surveys for carnivores (including lynx) on both groomed and ungroomed routes.

- Continue to monitor use of groomed, ungroomed, and plowed surfaces by bison and other ungulates.

Cultural Resources

- Should the discovery of human remains, funerary objects, sacred objects, or objects of cultural patrimony occur during construction, provisions outlined in the Native American Graves Protection and Repatriation Act of 1990 (25 USC 3001) will be followed.

- Trails and trailheads will be sited to avoid adversely impacting known cultural resources, including potential cultural landscapes. In addition, the use of natural materials and colors for all permanent signs erected will allow the signs to blend into their surroundings.

Interim Snowmobile Use Limits

During the winter of 2000–2001 snowmobile use will continue to be allowed under existing regulations. This deviates from the FEIS since regulations on use limits will not be finalized until near the end of that winter season or later. Making a change during that season would not provide enough notice to visitors, many of whom would have

already made plans to visit the parks before any limits could be finalized.

- During the winter of 2001–2002, snowmobile use will be capped as follows:

- Set daily snowmobile use numbers for all three park units at levels not to exceed the 7-year peak daily average. The visitor scenario developed for alternative A (see FEIS appendix G) shows snowmobile use distribution at YNP gateways, and by road segments in the three parks at both the current daily average and peak average snowmobile use levels over the past seven years. The scenario provides numbers that can be expressed as interim visitor use limits. Maximum daily limits at the entrances will be set at the average peak day snowmobile use (see Table 1 and footnote at the bottom of the following page).

- For snowplane use on Jackson Lake reissue permits to permit holders of record and do not issue any new permits. Limit snowmobile use on Jackson Lake to 30 per day.

- If monitoring indicates a trend of significant increase above average daily use as shown in Table 1, NPS will consider adjusting the cap downward at other than traditional peak use periods pursuant to, and as authorized under, 36 CFR 1.5 and 2.18.

- In 2002–2003 set daily snowmobile entrance limits to reduce total recreational snowmobile use to levels that will result in approximately 50% of the current average annual use level at the South and West Entrances of YNP. Current snowmobile use levels will be maintained from the East and North Entrances of YNP.

- In 2002–2003 for the Parkway, in addition to limiting use between Flagg Ranch and the South Entrance to YNP, limit snowmobile use on the Grassy Lake Road and the CDST in the Parkway to current use levels.

- In 2002–2003 for GTNP eliminate snowmobile use on the Teton Park Road, all motorized use on Jackson Lake, and all other recreational use by snowmobiles except for that on the CDST and access routes to adjacent public lands. Limit snowmobile use on the CDST in GTNP to current use levels.

- In 2003–2004 and thereafter, all oversnow motorized visitor travel in the parks will be by snowcoach except for limited routes in GTNP that will remain open for snowmobile access.

TABLE 1.—INTERIM CAPS ON SNOWMOBILES IN YELLOWSTONE (YNP), ROCKEFELLER PARKWAY (JDRMP) AND GRAND TETON (GTNP)

Road segments	Historic average daily use	2001–2002 Peak day limits	2002–2003 Daily limits
YNP North Entrance	41	60	60
YNP West Entrance	555	1030	278
YNP East Entrance	37	100	65
JDRMP Flagg Ranch to YNP South Entrance	176	330	90
JDRMP Grassy Lake Road	25	40	25
JDRMP Flagg Ranch to GTNP Moran Junction	25	70	25
GTNP Jackson Lake	30	30	0
GTNP Teton Park Road	11	20	0
GTNP Moose-Wilson Road	3	10	0

*Implementation of this limit is to ensure that use does not exceed the historic averages for use on the busiest peak days and the level of impact associated with it. Use fluctuates daily, increasing especially during certain holiday periods. Use caps should act to allow such fluctuations, since this is the nature of business and visitation. This is why the peak use day represents a cap, to allow the business pattern to continue. It *is not* the intent of this cap to allow peak use numbers to occur every day. If this were to occur then levels would be exceeded overall, and additional impacts would be incurred. It *is* the intent of this cap to replicate the pattern and amount of use that has been established over an average of seven years.

Monitoring

In order to assess the long-term effects of management actions on park resources and values resource inventory, monitoring and adaptive management are incorporated into this decision. The key resources and values potentially impacted by winter recreation use in the three park units are air quality, wildlife, sound,⁸ water resources, safety, and visitor experience. Attachment A outlines specific indicators for monitoring these resources and values. The indicators will be monitored to ensure protection of natural resources and park values and evaluate management success. The selected alternative also includes adaptive management provisions. It provides for systematic feedback to park management and allows for adjustment of activities to mitigate unplanned or undesirable outcomes. Procedures, indicators, standards and potential management actions for adaptive

management are also presented in Attachment A.

Monitoring programs will be coordinated among the parks. The programs will function and be coordinated through the planning staffs of the parks. The development of annual plans and reports will be coordinated through the planning units, and the planning units will be responsible for delivering those products. Actual monitoring responsibilities for park personnel will be assigned through annual plans.

Monitoring programs will be conducted on a sampling basis for the purpose of effective use of funds and personnel. It is expected that initial monitoring will be intensive, both in geographic and temporal extent, so that correlations can be made and results can be extrapolated. It is also expected that monitoring over time will become less intensive and arrive at a low intensity, maintenance level. Sampling schedules can vary from year to year, focusing on different areas within the park units.

U.S. EPA expressed concerns about the actions that would be taken if NPS does not have sufficient funds to monitor winter use in accordance with the adaptive management part of this decision. Actions affecting park values for which there are no defined standards, such as odor, sound or visitor satisfaction, are subject to an adaptive management approach. If continuing problems are indicated relative to such impacts, but there are not sufficient funds for focused monitoring and evaluation of those problems, emergency management actions will be implemented to eliminate the impact pending the attainment of funds.

Rationale for the Decision

This section provides the reasons for selecting FEIS alternative G as the decision and the basis for winter use plans in the three park units. In arriving at this decision, I have considered the detailed analysis of effects in the FEIS

for a range of alternative plans that would govern winter use. I have considered how each alternative responds to the purpose and need for action, to improve existing conditions in the parks and move them toward a desired condition that is implicit in NPS mandates. In doing so, I considered the impacts for each alternative program and weighed them against affirmative direction for protecting park resources and values, and their enjoyment by future generations, from adverse impacts or impairment. I also considered the degree to which each alternative would enhance the condition of resources or values and their enjoyment. Other considerations include socioeconomic impacts, effects on lands adjacent to the three parks, the plans or desires articulated by local communities and nonfederal governments, and the full body of public comments on the draft EIS. All these considerations are presented below as they contribute to the decision.

The fundamental basis for the decision is the direction provided in laws, regulations, executive orders and policies (mandates) that relate to human uses of the parks and their effect on park resources and values. This basis is overlain by the analysis of effects on park resources and values disclosed in the FEIS. Then, conclusions or findings are made about the alternatives and their effects in relation to the key mandates regarding adverse impacts and impairment. Other considerations are incorporated into the discussion.

Basis for the Decision

Law

The fundamental purpose of the national park system established by the Organic Act and reaffirmed by the General Authorities Act, as amended, begins with a mandate to conserve park resources and values. This mandate is independent of the separate prohibition on impairment and applies all the time, with respect to all park resources and

⁸NPS Director's Order #47 provides guidance for inventory and monitoring procedures necessary to preserve the natural soundscape. NPS-77 provides guidance for monitoring and inventory of other natural resources elements.

values, even when there is no risk that any park resources or values may be impaired. NPS managers must always seek ways to avoid, or to minimize to the greatest degree practicable, adverse impacts on park resources and values. The laws give the NPS the discretion to allow some impacts to park resources and values when appropriate and necessary to fulfill the purposes of a park as long as that impact does not constitute impairment.

The Organic Act mandate includes providing for the enjoyment of park resources and values by the people of the United States. The mandate applies not just to the people who visit the parks—but to all the people—including those who derive inspiration and knowledge from afar. NPS policies acknowledge that providing opportunities for public enjoyment is a fundamental part of the NPS mission. While the policies permit recreation and other activities, including NPS management activities, they may be allowed only when they will not cause an impairment or derogation of a park's resources, values or purposes. Recognizing that the enjoyment of the national parks by future generations can be assured only if the quality of park resources and values is left unimpaired, Congress has provided that when there is a conflict between conserving resources and values and providing for enjoyment of them, conservation is to be the primary concern.⁹

Regulation

Snowmobiling (specifically) may be allowed only where it is consistent with the park's natural, cultural, scenic and aesthetic values, safety considerations, park management objectives, and will not disturb wildlife or damage park resources.¹⁰

Executive Orders

Areas and trails for off road vehicle use shall be located in areas of the national park system only if the agency head determines that off road vehicle use in such locations will not adversely effect their natural, aesthetic or scenic values. Use will be controlled or directed to protect the resources, promote safety, and minimize conflicts among various users of those lands. Also, the agency head shall monitor the effects of such use that may be authorized, and upon that information

⁹ The Redwood Act of March 27, 1978 serves as the basis for any judicial resolution of competing private and public values and interests in the national park system, and affirms the primary consideration of conserving, unimpaired, park resources and values.

¹⁰ 36 CFR 2.18 Snowmobiles.

they shall from time to time amend or rescind designations, or take other actions to eliminate adverse impacts.¹¹ If the agency determines that the use of off-road vehicles (including snowmobiles) will cause or is causing considerable adverse effects on the soil, vegetation, wildlife, wildlife habitat, such areas shall immediately be closed to that use.¹²

Interpretation of Policy

Impairment is an impact that, in the professional judgment of the responsible NPS manager, would harm the integrity of park resources or values, including the opportunities that otherwise would be present for the enjoyment of those resources or values. Impairment may occur from visitor use or park management activities.¹³

NPS Director's Order # 55 define the terms "resources and values" as the park's scenery, natural and historic objects, and wildlife, including, to the extent present in the park: The ecological, biological and physical processes that created the park and that continue to act upon it; scenic features; natural visibility (both in daytime and at night); natural landscapes; natural soundscapes¹⁴ and smells; water and air resources; soil; geological resources; paleontological resources; archeological resources; cultural landscapes; ethnographic resources; historic and prehistoric sites, structures, and objects; museum collections; and native plants and animals. The park's resources and values also include the opportunity for enjoyment of these resources, to the extent that can be done without impairing them. The term also includes the park's role in contributing to the national dignity, the high public value and integrity, and the superlative environmental quality of the national park system, and the benefit and inspiration provided to the American people by the national park and any additional specific purposes for which a park was established. An impact is more likely to constitute an impairment to the

¹¹ EO 11644, Use of Off-Road Vehicles on Public Lands, *Federal Register*, Vol 37, page 2877, No. 27—Wed. February 9, 1972.

¹² EO 11989, Off Road Vehicles on Public Lands, *Federal Register*, Vol 42, page 26959 No: 101—Wed. May 25, 1977.

¹³ Directors Order #55, September 8, 2000, as amended November 17, 2000.

¹⁴ NPS Director's Order #47 articulates operational policies requiring the protection, maintenance or restoration of the natural soundscape resource in a condition unimpaired by inappropriate noise sources. Inappropriate noise is that generated by activities at a level described as excessive, which impacts the park's natural soundscapes and jeopardizes the natural resources or the purposes for which the park was created.

extent that it affects a resource or value whose conservation is:

- Necessary to fulfill specific purposes identified in the establishing legislation;
- Key to the cultural or natural integrity of the park or opportunities to enjoy the park; or
- Identified as a goal in relevant NPS planning documents.

The 1988 NPS Management Policies state that the National Park Service will seek to perpetuate the best possible air quality in parks because clean air is critical to visitor enjoyment, human health, scenic vistas, and the preservation of natural systems and cultural resources. The policies also recognize that many natural resources, including water and wildlife, are sensitive to air pollution. Additionally, NPS must err on the side of protecting air quality and related values if there is doubt as to the impacts on park resources of existing or potential air pollution.¹⁵ NPS also has recognized that it must preserve the natural quiet and the natural sounds associated with the physical and biological resources of the parks. Managers must monitor sounds and take actions to prevent or minimize unnatural sounds that adversely affect park resources or values and visitors' enjoyment of them.

The 1988 NPS management policies¹⁶ also recognize that the NPS Organic Act directs the agency to provide for the public enjoyment of parks while leaving resources unimpaired for future generations. The policies mandate that the use of parks will be resource-based and nonconsumptive of resources. To the extent practicable, the NPS will encourage people to come to the parks and to pursue inspirational, educational, and recreational activities related to the resources found in the parks. NPS must manage visitor use and, as necessary, regulate the amount and kind, and the time and place, of visitor activities.

NPS must encourage recreational activities that are consistent with applicable legislation, that promote visitor enjoyment of park resources through a direct association or relation to those resources so long as those uses are consistent with the protection of the resources and are compatible with other visitor uses. NPS must manage recreational use to protect park resources, provide for public enjoyment, promote public safety, and minimize conflicts with other visitor activities and park uses. Finally, unless the activity is required by statute, NPS will not allow

¹⁵ 1988 NPS Management Policies, Chapter 4

¹⁶ 1988 NPS Management Policies, Chapter 8

a recreational activity in a park if it would involve or result in:

- Inconsistency with the park's enabling legislation or proclamation, or derogation of the values or purposes for which the park was established
- Unacceptable impacts on visitor enjoyment due to interference or conflict with other visitor use activities
- Consumptive use of park resources
- Unacceptable impacts on park resources or natural processes
- Unacceptable levels of danger to the welfare or safety of the public, including participants

Public use of a park is an important reason for the creating and sustaining the national park system. In developing the winter use plan and environmental impact statement, the goal of the parks was to provide for a winter use experience to a wide range of people, not just to the most physically fit. Given the mandate of the Organic Act, to preserve and provide for public enjoyment, some level of adverse impact from visitor use during the winter is acceptable, if the parks mitigate the impacts to the greatest extent practicable. Should future monitoring disclose that the impacts are too much for the resources to sustain, it will be appropriate to further restrict winter visitor use in the parks.

How Environmental Issues Were Considered and Addressed

Considering present winter use activities, the key management concerns and objectives relating to park resources and values are: Air quality, wildlife (especially ungulates), natural soundscapes, and opportunities for visitor experience (of these resources and values, including scenic quality and aesthetics). Related concerns that are key elements in the desired condition are the safety of employees and visitors, and access for purposes of park enjoyment. Finally, there is an issue regarding how local, private commercial industries have developed to serve visitors and facilitate their enjoyment of the parks.

Natural Resources

The analysis of natural resource/environmental consequences for a range of alternatives shows clearly that there are overall adverse impacts associated with snowmobile use in the parks, even when some areas are closed to that use. Snowmobile use at current levels adversely affects wildlife, air quality, and natural soundscapes and natural odors. Further, it adversely impacts the enjoyment of those values and resources by other visitors. The impact on people who may visit the three parks once or

twice in a lifetime, and who seek the resources and values for which the parks were created, may be adversely and irretrievably affected.

Elimination of these impacts is most easily and effectively accomplished by eliminating snowmobile use. Holding use at current levels under all alternatives but G would allow documented adverse impacts of snowmobiles to continue. The level of adverse impact varies by resource or value, and by alternative, but it is demonstrated to be more than negligible and often moderate when considered cumulatively over the three park units. Locally, the impact can be major. The effect on resources and values is demonstrated to impact the enjoyment of those resources by other visitors. Mitigation of the impacts of snowmobiles, as proposed in the different alternatives, is insufficient to reduce the impacts to a level deemed acceptable within the constraints of the law, regulations, executive orders and policies presented as the basis for this decision. Reduction of numbers of snowmobiles is problematic because carrying capacity studies are left to the future, and adverse impacts would continue until capacities are determined and effectively implemented.

Other winter uses and means of access also produce impacts. Cross country skiing and other nonmotorized forms of recreation are shown to impact wildlife. Since there are areas that can be identified as critical to bison and other ungulates, mitigation as proposed in some alternatives effectively reduces or eliminates the impairment. Snowplane use, though limited to Jackson Lake, has a dominant and unmitigated impact on the natural soundscape.

The use of snowcoaches on groomed roads is demonstrated to impact wildlife, air quality, and natural soundscapes. However, mass transit snowcoach use effectively mitigates the closure of parks to snowmobiles and results in much less traffic while allowing winter access for current levels of visitation. Snowcoaches would impact resources or values, or the enjoyment of them (at the current level of visitation) at least a magnitude lower than with snowmobile access. Adverse impacts of an NPS managed snowcoach system on wildlife, as in alternative G, would occur at low and mitigable levels.

Factors Other Than Environmental Consequences Considered in Making the Decision

Safety and Access

Safety issues are related to access issues. Modes of access and volumes of traffic are primary factors. Presently unsafe conditions can be improved, as proposed in several alternatives, by separating different uses and modes of transport, by eliminating wheeled vehicle use in places, and by eliminating large volumes of oversnow motorized use especially where ungulates use groomed surfaces. Safety would be most improved where a number of these measures are combined, as in alternatives F and G. All alternatives hypothesize impacts on the basis of motorized oversnow access at current use levels. However, there are different mixes of snowcoach, snowplane, and snowmobile use, distributed differently through the range of alternatives. In some areas, snowmobiles operate on groomed trails in the same locale as nonmotorized visitors, wheeled vehicles and large ungulates. Therefore, there is a risk that continued snowmobile use would result in accidents and is unsafe. In some places, the volume of wheeled vehicle traffic during the winter—much of which is associated with snowmobile staging—results in a higher rate of accidents. This represents a situation that must be remedied. The selected alternative eliminates the source of most safety concerns, snowmobile use, as well as wheeled vehicle use on a plowed road that currently has a high winter accident rate (Highway 89/287 from Colter Bay to Flagg Ranch). Discontinued plowing of the route from Colter Bay to Flagg Ranch would also convert Flagg Ranch to an oversnow destination. This would provide a new opportunity of that nature, similar to that available at Old Faithful in Yellowstone's interior. Opportunities for developing winter recreation around Flagg Ranch are abundant. There is a perception that not plowing the road would make a snowcoach trip from Colter Bay to Old Faithful too long. Flagg Ranch, as a destination, allows people the opportunity to break this trip up if they are unwilling or unable to make the trip to Old Faithful in one day.

Economic Impacts on Local Communities

The impacts of any alternative on economies beyond the gateway communities are generally negligible. Gateway communities are affected in different alternatives by entrance closure or area closure (D and F), or

closure to snowmobiles and change in allowable modes of motorized access (B, C and G). Economically, West Yellowstone is most affected through the range of alternatives because that community is most directly tied to access via snowmobile. Not coincidentally, the West Entrance to Old Faithful is the most adversely impacted oversnow route in the three-unit area.

Consistency With Land Use Plans, Policies or Controls for Adjacent Lands

Impacts on adjacent lands for all alternatives are described on pages 434–474 in the FEIS. There are concerns about how any reduction in snowmobile use within the three parks would translate into increased use on national forest lands in particular. The Forest Service, a cooperating agency, indicates that alternative G could result in conditions that would necessitate amendments to forest plans because snowmobile use on those lands is at the highest tolerance level permissible. My determination is that use on national forests is likely not to increase.¹⁷ Further, the forests have provided no convincing evidence or monitoring data to support their concerns, or to support that the need to revisit their forest plans does not already exist. I consider that the period of three years being allowed for a transition to snowcoaches only in the parks will facilitate the monitoring of recreational snowmobile use on public lands (national forests) in the Greater Yellowstone Area. I agree that such monitoring is necessary to develop a baseline for gauging the impacts of future winter management changes on public lands, and resources therein. Therefore, this is part of the rationale for allowing a three-year phase in period.

Potentially affected States and counties were involved as cooperating agencies in the preparation of this EIS (see pages 16–18 in the FEIS). Through the process, these entities identified no issues concerning conflicts with any land use plans, policies or controls that may exist. Any such impacts are inferred in the analysis (FEIS pages 434–435). Concerns expressed by the cooperators are twofold. On the one hand, they are concerned about increased use on adjacent lands resulting from the parks' decision, and how it would affect other public lands, wildlife habitat, and currently groomed snowmobile trail systems. On the other hand, they are concerned that the decision would devastate local

economies by drastically reducing snowmobile use and visitation to the area. These positions are in conflict. My assessment is: first, that snowmobile use is likely to decrease, or at least not increase, on adjacent lands; and second, that snowcoach access to the parks will invigorate local entrepreneurs in marketing a special (albeit different) park experience. As explained elsewhere, the effect of alternative G on local economies is expected to be of short-term duration—mitigated by provisions for implementation over time and allowing communities and businesses to adapt.

Public Comments on the Draft EIS

Comments on the draft EIS are discussed explicitly in the public participation section of this record of decision. The vast majority of the comments did not substantively address the merits of the EIS analysis. Many comments assisted NPS in clarifying or otherwise improving the disclosure of impacts in the FEIS (as documented in FEIS Volume III). Most comments (94%) expressed some preference for winter use management that resembled some alternative evaluated in the draft EIS. I wish to make clear that, although it is not the primary rationale for this decision, the public expression of preference is certainly a factor that I considered. The public's preference in the large body of comment was evenly divided between those who clearly wished for continued snowmobile use and those who felt that snowmobiles should not be allowed in the parks. Four percent of those who commented indicated there should be no motorized use or grooming of winter routes in the parks. The overwhelming negative reaction to the preferred alternative B in the draft EIS, which would have plowed the road from West Yellowstone to Old Faithful, was a factor in considering a new preferred alternative for the final EIS.

Findings

Park Values and Resources

The use of snowmobiles and snowplanes at present levels harms the integrity of the resources and values of these three parks, and so constitutes an impairment of the resources and values, which is not permissible under the NPS Organic Act. In YNP, the impairment is the result of the impacts from snowmobile use on air quality, wildlife, the natural soundscape, and opportunities for enjoyment of the park by visitors. In GTNP, the impairment is the result of the impacts from snowmobile and snowplane use on the

natural soundscape and opportunities for enjoyment of the park by visitors. In the Parkway, the impairment is the result of impacts from snowmobile use on air quality, the natural soundscape, and opportunities for enjoyment of the park.

Under the NPS Organic Act, the NPS may not allow the impairment of park resources and values, and when there is an impairment, the NPS must eliminate it. The combination of actions provided for in this Record of Decision will eliminate the impairment in GTNP following the winter of 2001–2002, and in YNP and the Parkway following the winter of 2002.

We have also determined that the snowmobile use now occurring is inconsistent with the requirements of the Clean Air Act (in the case of YNP and the Parkway), Executive Orders 11644 and 11989, the NPS's general snowmobile regulations, and NPS management objectives for the parks. We have determined that the snowplane use occurring in GTNP is inconsistent with Executive Orders 11644 and 11989 and NPS management objectives for the parks.

We have determined that the snowcoach use that will occur in YNP and the Parkway under this decision, and the snowmobile use that will continue in GTNP in the winter of 2002–2003 and thereafter is consistent with the requirements of Executive Orders 11644 and 11989 and the NPS's general snowmobile regulations.

There is no current means of mitigation, aside from a reduction of numbers unsupported by a carrying capacity analysis, that assures recreation snowmobile use impacts could be reduced, predictably and soon, to a level that does not impair and adversely impact these resources and values.

Snowmobile use for official administrative or emergency purposes in the three park units is specifically allowed under the regulations and executive orders cited herein as the basis for the decision. Incidental amounts of snowmobile use in GTNP for purposes of winter access to inheld private lands or to adjacent public lands as provided under the establishment legislation for the park.¹⁸ These are not recreation uses, per se, that are the subject of analysis in the FEIS.

Clean, quiet and odorless snowmobiles are not available at present. Even with technical advances in snowmobiles, the impacts of snowmobile use on wildlife, especially ungulates using groomed routes,

¹⁷ I believe the analysis indicating that decreased use in the parks would result in decreased use generally in the Greater Yellowstone Area, thereby reducing use on forests not increasing it, is sound.

¹⁸ EO 11644, sections (3) and (4), and 16 USC 406d–1, *et seq.*

constitutes disturbance and harassment at a time when individual animals are particularly challenged for survival. The continued use of snowmobiles as provided in the alternatives studied other than alternative G is found to be inconsistent with the health and integrity of resources existing in the three park units. Continued use hinders the enjoyment of resources and values for which the parks were created, most notably natural soundscapes, clean and clear air, and undisturbed wildlife in a natural setting.

The social and economic impacts of the elimination of most snowmobile use in the parks can be mitigated to a high degree by providing oversnow access using mass transit snowcoaches. Considering the analysis of alternatives, there is a clear magnitude of difference between the impacts of snowmobiles and the impacts of snowcoaches on natural resource values and the opportunities to enjoy them. This rationale supports the selection of alternative G.

The use of groomed routes by snowcoaches adversely affects wildlife, air quality, natural soundscapes, and the opportunity to enjoy those values, as disclosed in the FEIS, although the adverse effects are negligible to minor. These impacts are found not to impair those values and opportunities. This is due to the overall decrease in impacts to a level described as negligible—with greatly decreased volumes of traffic and consequent decreases in odor, noise, and pollutants. The area within the three park units that would be available for use without audible motorized sound would be maximized using snowcoach access. An NPS managed mass transit snowcoach system would assertively implement available technologies for further reducing the amount of sound and pollution created. It would assertively implement schedules and strategies and controls for minimizing impacts on wildlife due to use of groomed surfaces. Additionally, because operators of snowcoaches will be familiar with park roadways and trained in appropriate techniques for mitigating the effects of vehicle-wildlife encounters the potential for wildlife harassment will be minimized.

Skiing and other nonmotorized uses adversely affect wildlife, particularly bison, elk, moose, and bighorn sheep. Backcountry use, in particular, stresses these ungulates at a time when their energy reserves are low. In areas adjacent to high use nonmotorized routes animals may adapt to regular passage by humans using a predictable route. Nonmotorized trail use therefore has fewer adverse impacts than does

unrestricted backcountry use. Therefore by limiting nonmotorized use in certain winter habitats to designated routes, adverse impacts of nonmotorized use are suitably reduced. Where the impacts of nonmotorized travel on wildlife cannot be suitably mitigated through route restrictions critical winter range will be closed. With this mitigation, limited nonmotorized use is found to be consistent with park resources and values, and it facilitates their enjoyment. FEIS alternative G closes certain important winter wildlife habitat to nonmotorized use, and limits use in other areas to designated trails and routes only.

Safety and Access

The analysis shows that impacts on safety of visitors and employees are associated with snowmobile use. It is found that current use by snowmobiles represents a risk to health and safety. This risk is mitigated to the highest degree in alternative G. Risks associated with NPS managed snowcoach systems are negligible, since there would be greater controls over speed, time of operation, driver training and experience, and the volume of traffic on the route. In addition, this system offers access to the public that is equivalent in numbers to current use. In doing so, the parks would be accessible to a larger population of young, elderly, and disabled visitors.

Economic Impacts on Local Communities

It has been found that snowmobile use as currently constituted, and as evaluated in the range of alternatives, adversely impacts and impairs park resources and values. Therefore, the use must be discontinued in order to meet the primary mandates, regulations and policies of the national park service. This has clear economic impacts on all the local, gateway communities, permittees and concessions that are highly dependent upon winter snowmobile use in the parks. However, the greatest impact on these communities would be closing the parks to winter motorized access entirely. Alternative G offers an opportunity for the same level of access that currently exists, while improving opportunities for people who cannot or choose not to ride snowmobiles. It is found that the cessation in the future of plowing a portion of the southern route into YNP, in addition to improving safety, would create additional opportunities for people to enjoy a destination winter area (Flagg Ranch) using oversnow transport.

Due to economic impacts (as disclosed in the FEIS), measures are incorporated into the implementation features of alternative G to allow communities, permittees and concessioners time to adapt. Considering the economic impacts, three years are to be allowed for conversion to an NPS managed snowcoach system, and existing concession contracts will be honored until they expire. During the first year, snowmobile use will be continue under existing regulations. During the second year of implementation, snowmobile use will be subject to daily limits based on historic peak day use, to avoid the occurrence of days with even higher use than in the past. Then, one more year of snowmobile use, at approximately 50% of current levels, will be allowed. This affords snowmobile operators three years to take advantage of existing technology for snowcoaches, to realize the investment they presently have in snowmobiles, and to market new opportunities. NPS will produce an implementation plan as soon as possible to develop the details of snowcoach transport in the parks. This plan will be developed in coordination with gateway communities, concessioners and permittees in order to insure successful implementation of the alternative. NPS will also work with these entities to develop and implement a new marketing strategy for winter recreation in the parks.

Additional measures will be used to reduce impacts to the degree possible during the interim period. This mitigation includes, but is not limited to, the following measures (see also the actions and mitigation sections of the decision, above).

During the interim period, snowmobile and snowplane use will be monitored and managed in a manner that prevents or mitigates local impacts to the greatest extent practicable;

Ranger patrols will be increased to facilitate monitoring as well as detection and on-the-spot handling of impacts particularly for wildlife disturbance.

Park concessions will be required to mitigate impacts on air quality by selling only bio-fuels and synthetic lubes inside the park;

Snowmobile tour guides shall receive additional training in appropriate methods of avoiding wildlife disturbance, and park personnel will assertively provide similar information to all other users. Prohibit late night oversnow travel.

In the third year of the phase-in period, all recreation snowmobile users in YNP must be accompanied by a permitted guide and travel in groups of

no more than 11 (including the guide). The superintendent will be authorized to also require groups and guides in GTNP and the Parkway.

A phase-in period of three years is necessary to allow the creation and implementation of a functional mass transit system using snowcoaches.

Measures Taken To Avoid Environmental Harm

The focus of the EIS analysis is to improve environmental conditions relative to those which exist due to current use and management. Alternative G best improves environmental conditions, as demonstrated in the FEIS and this decision rationale. Therefore, the features of selected alternative G and the mitigation that applies with this decision are construed as measures taken to avoid environmental harm. If future monitoring, as provided in this decision, indicates that impacts are too great to sustain additional use, or that impairment occurs, it will be appropriate to implement further management changes. Monitoring plans will describe standards or thresholds of impact, and management actions that will be taken if standards are not met. See the monitoring section of the decision, above.

Public Involvement

Scoping

The NPS accepted public scoping comments from April 14 to July 18, 1998. Scoping brochures were mailed to about 6,000 interested parties, and 12 public meetings were held throughout the GYA and in Idaho, Montana, and Wyoming. In addition to local area and regional meetings, the NPS held four national meetings in Salt Lake City, Denver, Minneapolis, and Washington D.C. About 2,000 comment letters were received (about 1,200 of these were form letters), from which about 15,000 discrete comments were obtained. Scoping respondents included businesses; private and nonprofit organizations; local, state and federal agencies; and the public at large. Comments were received from 46 states and several foreign countries.

Summary of Public Scoping Comment

Comments received during scoping cover a full range of topics including issues, concerns, analysis questions, procedural questions, general opinions, and requests. Comments were sorted into the categories shown in Table 2, pages 22-24 in the FEIS.

The NPS addressed all comments received in one of two ways: (1) Either they were analyzed in detail through the

development of an alternative or as a possible impact of winter use; or (2) they were not analyzed further based on the rationale presented in FEIS Volume II, Appendix A. The NPS classified comments as major issues or concerns to be analyzed in detail based on relevance to the decision to be made. The following section, Major Issues, describes in greater detail those comment categories considered relevant. Issues or Concerns Not Addressed in the Plans/EIS describes specific types of comments not carried forward for in-depth analysis, and the rationale for their dismissal.

Major Issues

This section summarizes the major issues that relate to the purpose and need for action for the future of winter use in the three NPS units. These issues parallel the existing conditions identified in the FEIS in the purpose and need for action. While common concerns exist among the issues, they are categorized for purposes of analysis and alternative formulation. Because the decision regarding the future of winter use in the GYA is largely programmatic, relevant issues are those that bear on: (1) Winter programs that might be necessary to address existing circumstances and achieve desired conditions; and (2) the effects of those programs. An issue is defined as a point of contention about the specific possible environmental effect of a specific management action or program. Generally, comments on the DEIS about the details of implementing a program are not considered major issues. Implementation details will be important during future site-specific analyses under the new plan.

Another opportunity for public involvement is the ability to comment on the DEIS. No new major issues were identified as a result of public comments on the DEIS. FEIS Volume III contains the analysis of public comments on the DEIS, and responses to the comments. Major issues are described below.

Visitor Use and Access

Various user groups contend that the national parks offer either too much or not enough of various types of use. Some people are concerned that the parks do not offer an adequate range of winter experiences and will not be able to respond to future winter recreation demand. Others suggested that winter experiences should include dogsledding, off-road motorized play areas, and increases in both groomed motorized and nonmotorized trails. Other people voiced concerns about too

much winter use, suggesting that YNP should be closed in part or altogether, for the winter season. Because of the amount of use relative to the available facilities, both ski and snowmobile use sometimes occurs on the same groomed surface. This adds to the perception of too much use, and leads to other issues relating to visitor experience and safety. Many people contend that motorized use has greatly affected opportunities for nonmotorized use in the surrounding GYA, displacing cross-country skiing and other nonmotorized recreation to the parks. Another aspect of the issue relates to the affordability of winter access, and access for disabled, and old and young visitors. Some argue for increased availability of motorized access (via snowmobile in particular) to serve these access needs. Another issue is the high cost of winter access to the parks.

Visitor Experience

Expectations for quality winter recreation experiences are different for different user groups. This raises contention between groups for which quiet, solitude, and clean air needs conflict with the impacts of snowmobiles, especially when facilities for these different groups are in close proximity to each other. Nonmotorized users are easily affected or displaced by the sight, sound, and odor of snowmobiles. While skiing generally does not affect the quality of the snowmobiling experience, there are safety issues associated with slower traffic on groomed surfaces used by higher speed vehicles. In addition the quality of the visitor experience can be affected by the number of available support facilities (such as parking lots or rest rooms), the extent to which facilities are crowded, and the availability of information.

Human Health and Safety

Four primary health and safety issues were identified regarding winter visitor use:

- The effect of motorized vehicular emissions and noise on employees who are required to travel or work in areas with high traffic levels. Visitors may be subjected to some of the same impacts.
- Speed limits and the frequency of motor vehicle accidents and fatalities, and the number of nighttime collisions involving wildlife that often result in severe injury or fatality to both animals and people.
- Avalanche hazards.
- Safety risks where different modes of winter transport are co-located or in close proximity, like the CDST where

wheeled-vehicles and snowmobiles share the highway right-of-way.

Social and Economic Issues

Many comments reflected the effect of changes in parks management actions on local communities. Local businesses provide services to visitors near both parks, and many local economies rely, in part, on revenues from parks visitors in the winter. Concern was voiced that eliminating oversnow travel and snowmobiles in particular or closing an entrance to a park during the winter could have a detrimental effect on local economies. Other commenters stated that concern for parks' resources should be elevated above economics.

Natural Resources

Impacts of winter use on natural resources revolve around three major issues.

- The impact of groomed surfaces and their use on wildlife: Over the last several years, bison have been removed from the population because they have migrated from YNP to state and private lands during the winter. Some people commented on the effect that backcountry skiing might have on wildlife, particularly the displacement of large ungulates from important winter range.

- Air quality: The effect of snowmobile emissions on air quality was identified as a concern with respect to health, natural resources, and aesthetic and wilderness values. For example, on high snowmobile use days in YNP, the visual evidence and odor of snowmobile exhaust is apparent in some areas. The effect of hydrocarbons, carbon monoxide, and particulate matter emitted by snowmobiles on water quality was also a concern.

- Oversnow vehicle sound: The sound levels of snowmobiles and snowcoaches were raised as issues with regard to aesthetics and wilderness values. For example, on some days it is difficult for most visitors to travel to an area in YNP where snowmachines cannot be heard. For this reason some people question whether the use of snowmobiles and snowcoaches is appropriate in the national parks. Other people state that the sound of snowmachines has no impact on their ability to enjoy the parks.

Issues or Concerns Not Addressed in the Plans/EIS

Scoping issues and concerns that were not addressed in the EIS are listed below. The rationale for their dismissal may be found in the FEIS on pages 26–28. Essentially the reason for dismissal is that the issue is being dealt with in

another analysis, is beyond the scope of the purpose and need for action, or is a matter that is governed by procedural laws (like the National Environmental Policy Act—NEPA).

- Privatization
- Summer/Winter Use Comparisons
- Wildlife Carrying Capacities
- Land Use
- Economic Effects: Costs
- EIS Process
- Cooperating Agencies
- NEPA and NPS Policy
- Scientific Methods and Data

Federal Register Notices

A notice of intent to prepare an EIS was published in the **Federal Register** on April 15, 1998, officially beginning the scoping process. A notice of availability for the Winter Use Plan and Draft Environmental Impact Statement (EIS) for Yellowstone and Grand Teton National Parks and the John D. Rockefeller Jr., Memorial Parkway appeared in the **Federal Register**, August 15, 1999. The notice indicated that the public comment due date was November 15. The comment period was extended twice, once to December 1, 1999, and again to December 15, 1999. Notices of these deadline extensions were published in the **Federal Register**. The notice of availability for the FEIS was published on October 20, 2000.

Distribution of the Draft Environmental Impact Statement

In August 1999, postcards were mailed to 6000 persons notifying them of the impending release of the DEIS. Approximately 4,000 draft documents and summaries were mailed to interested parties during September 1999. In addition, documents were mailed to agencies, businesses, organizations, and public officials who had either requested the document or were generally interested in the management of winter use in the parks.

Public Meetings/Hearings

Sixteen public meetings using an open house format were held early in the scoping period ranging from April through July of 1998. Meetings were held in each of the five gateway communities to the three park units. Other meetings were held within the region at Dubois and Casper, Wyoming; Billings and Bozeman, Montana, and Boise, Ashton and Pocatello, Idaho. Meetings outside the region were held at Denver, Colorado, Minneapolis, Minnesota, Salt Lake City, Utah, and Washington, D.C. Public hearings to solicit public comment on the DEIS were held during the month of October 1999 in the following cities: Idaho Falls,

Idaho; West Yellowstone and Livingston, Montana; Cody and Jackson, Wyoming; and Denver, Colorado. The proceedings of each hearing were transcribed and entered into the record. An average of 45 persons spoke at each hearing.

Comments on the Draft Environmental Impact Statement

Over 48,600 pieces of correspondence were received in response to the DEIS. Correspondence consisted of individual letters, form letters, e-mails, telephone calls, and hearing presentations. This body of comment is summarized, categorized, indexed and responded to in Volume III (parts one, two, and three) of the FEIS. Part one includes the summary, individual letters and specific responses to the contents of the letters. Part two includes the variety of form letters received (separate letters having the same content) and specific responses to their content. Part three contains the results of compiling all comments from all sources, categorizing and summarizing them, and then providing a response to each. This approach was considered necessary owing to the extreme volume of public comments on the DEIS. Following is a brief analysis of recurrent themes in the body of comment, and how NPS responds to them.

Many commenters expressed consternation about the lack of a “no snowmobiling” alternative in the DEIS, and suggested that impact descriptions and data to support the EIS and the preferred alternative were not detailed enough. NPS responds first, that a “no snowmobiling” alternative was provided in the DEIS—alternative G. Secondly, in some cases the NPS has added information to support the analysis of impacts in the FEIS. Additionally, NPS is engaged in programmatic planning, rather than project-specific planning; therefore analysis and data collection have been conducted on a reconnaissance level. Further, where data is lacking or unavailable even at that level, CEQ regulations provide for the decision process to continue based on best available data and professional application of credible methods.

Many people stated they could not support any of the DEIS alternative “mixes.” A large number of comments levied criticism on the preferred alternative—to the point that constructive comments on the other alternatives were greatly lacking. Three additional “alternatives” were proposed: Revised Alternative E (in various forms provided by cooperating agencies and the Blue Ribbon Coalition),

the Citizens' Solution (provided by a consortium of conservation groups), and the Natural Regulation Alternative (provided by The Fund for Animals).¹⁹ All such comments were read as the decisions that people would like to see the NPS make, based upon their opinions about impacts and their interpretations about laws.

The body of comment included little substantive information beyond that disclosed in the DEIS, and did not demonstrate that an alternative (feature) did not belong in the range of choices available for the decision-maker. Given the ability of a decision-maker to mix features from the FEIS range of alternatives, much of the criticism in the public comment does not apply to the analysis. Regarding the great amount of comment on the preferred alternative, and perceived lack of justification for it, the NPS responds by saying that such criticism is more appropriately applied to the decision. In fact, the NPS changed the preferred alternative between draft and final EIS whereupon most of these comments no longer apply.

Some commenters said that the desired conditions or objectives were too general, and that there is no demonstrated need for management change. In effect, such comments missed the real issues that are conveyed by statements of existing conditions. The NPS responds by explaining that the EIS is programmatic, leading to a plan, which is general in nature. In addition issues regarding resource impacts, health and safety, and visitor experience are documented sufficiently by the NPS to indicate the need for major management changes supported by a new plan.

Given the scope of analysis, the NPS developed alternatives (alternative plans) as possible ways to proceed from the current condition toward the desired condition. The NPS maintains that public access during the winter is an appropriate objective to be achieved. Accommodating a variety of recreational uses is also valid. In each case, activities must be evaluated in terms of impacts on parks' resources and values, health and safety, and visitor enjoyment. Alternatives that vary the location, amount and proximity of uses are needed to assess the relative impact or

change from the current condition. The EIS expresses impacts or changes in terms that allow people to understand how each alternative satisfies the purpose and need for action. It is unreasonable to expect that all alternatives would address all aspects of the purpose and need equally, or that all alternatives worthy of consideration would have no impacts. In the final analysis, the NPS concludes that the purpose and need for action articulated in the EIS is appropriate, and that the range of alternatives considered in detail is adequate. See Comparison of Alternatives at the end of this decision document.

Public Response to the FEIS

The FEIS was published and available to the public in hardcopy and on the internet on October 10, 2000. Summaries of the FEIS were mailed to about 46,500 interested parties, and about 400 copies of the FEIS were mailed at that time. The public was able to provide comments up until October 31. Due to the potential public controversy of the selection of alternative G as the preferred alternative in the FEIS, the former Assistant Secretary for Fish and Wildlife and Parks agreed to solicit public comment on that document. About 10,970 comment documents were received, including letters, e-mails, and postcards. Comments were read and evaluated regarding their content. A comment summary is attached to this decision (Attachment B). Generally, there were more respondents favoring elimination of snowmobiles from the parks than those who support continued snowmobiling. State and local governments and most business interests who responded favor continued snowmobiling.

Consultation

Cooperating Agencies

The details of cooperation with other agencies are provided on pages 16–17 and Appendix A of the FEIS. In summary, State and county governments surrounding the GYA requested and were granted cooperating agency status (40 CFR 1501.6) in December 1997 and January 1998. The NPS requested that the US Forest Service become a cooperating agency because of possible impacts on surrounding national forests from changes in the parks' winter use management; and the USFS acceded. Agreements were developed to assign formal roles in the EIS process and establish expectations. The NPS held its first meeting with the cooperating

agencies on February 13, 1998. Appendix A in the FEIS (Volume II) further discusses coordination with cooperating agencies.

Through the EIS process, NPS made it clear that veto or decision-making power does not accompany cooperating agency status. As the lead agency charged with carrying out the NEPA process under Sec. 102(2)(c) of NEPA, the NPS retains sole decision-making authority over the EIS and its process.

There were a number of comments on the DEIS relating to the designation of cooperating agencies. Many people objected to the inclusion of the counties in particular, feeling that their involvement biased the decision-making process and the EIS; others felt that the NPS did not involve or listen to the cooperating agencies. Most cooperators stated that there was insufficient time or information to provide adequate input to the NPS, and that the NPS had not met the terms of the signed memoranda of agreement. Conversely, many of the cooperating agencies commented that they had provided good information that the NPS did not consider or incorporate. A table that illustrates the extent to which the NPS interacted with cooperating agencies is contained in Appendix A of the FEIS.

The NPS believes that much of the criticism from cooperating agencies stems from the time frame for producing this EIS, which is noted in the cooperating agreements, a lack of experience, and a fundamentally different perspective on the issues. Few federal agencies have experience dealing with such a large number of cooperating agencies on a single NEPA project. With the exception of the USFS and the State of Montana, few of the cooperating agencies have experience producing environmental impact statements, and the analyses necessary in their areas of special expertise.^{20 21} NPS believes it met all of its responsibilities under the cooperating agreements to the best of its ability under the highly constraining time frame.

American Indian Tribes

The details of consultation with American Indian Tribes are provided in the FEIS on pages 18–20. To summarize: NPS is committed to recognizing the past and present existence of American Indians in the region, and the traces of their use as an important part of the

²⁰ The CEQ definition of special expertise is: "statutory responsibility, agency mission, or related program experience." (40 CFR 1508.26)

²¹ Montana has a state law governing environmental policy: Montana Environmental Policy Act.

¹⁹ Most features of Revised Alternative E and The Citizens' Solution were covered within the DEIS range of alternatives. Certain features were either considered to be implementation details or outside the scope of analysis. The Natural Regulation Alternative, by advocating no motorized access or groomed routes, was considered outside the scope of analysis—although some alternatives close sections of the parks to motorized use, and adaptive management could conceivably result in other sections being closed over time.

cultural environment to be preserved and interpreted. NPS initiated consultation along with scoping in May 1998 in accordance with the Presidential Memorandum of April 29, 1994, "Government-to-Government Relations with Native American Tribal Governments" and in compliance with a variety of laws, federal regulations, and agency management policies and directives. Eight tribes were identified as being traditionally affiliated with the GYA.

By April 1999, an additional 13 contemporary tribes had been recognized by YNP and GTNP as traditionally affiliated with the GYA. The NPS notified the 21 affiliated tribes of an affiliated tribal consultation meeting to be held at YNP on May 20, at which the Plans/EIS would be one of the planning projects and issues discussed. On April 23, NPS faxed invitation letters to the tribal consultation meeting, and four days later the NPS mailed copies of the draft alternatives to each tribe. During the week of May 3, the NPS made follow-up telephone calls to each of the tribes, to confirm receipt of the draft alternatives and encourage participation in the affiliated tribal consultation meeting on May 20.

At that meeting, tribal representatives voiced concerns that oversnow motorized vehicles, the grooming of road and trail surfaces, and the movement of people would negatively impact YNP's bison population. The affiliated tribes received copies of the DEIS for review and comment in mid-September 1999, and were notified of six public hearings on the draft plans in late-September 1999. On October 6, 1999, members of the Assiniboine and Sioux (Fort Peck), Cheyenne River Sioux, Confederated Salish and Kootenai, Crow, Lac Courte Oreilles, Nez Perce, Rosebud Sioux, the Winnebago Tribe of Nebraska, and organizations met with Yellowstone and Grand Teton staff to discuss the Winter Use Plans as part of fall 1999 government-to-government tribal consultation meetings.

The NPS will continue to consult with representatives of affiliated tribes as actions resulting from this plan are implemented. The goal of consultation is to insure that the affiliated tribes' interests and concerns are adequately addressed, as well as to develop and accomplish future programs in a way that respects the beliefs, traditions, and other cultural values of the American Indian tribes who have ancestral ties to the area.

State Historic Preservation Offices

In October 1995, a programmatic agreement was developed among the National Conference of State Historic Preservation Offices (SHPO), the Advisory Council on Historic Preservation (Council) and the NPS. In accordance with the agreement and pursuant to Section 106 of the National Historic Preservation Act (16 U.S.C. 470(f)), consultation with the Wyoming, Montana, and Idaho SHPOs and the Council was initiated in May 1998. The NPS sent copies of the scoping brochure (May 1998) and the draft preliminary winter use alternatives (December 1998) to the SHPOs and the Council. In accordance with their request, the NPS continued to consult with the Wyoming, Montana, and Idaho SHPOs and the Council regarding actions described in the Winter Use Plans/EIS that may affect cultural resources (FEIS Appendix E). The NPS mailed copies of the Draft EIS to each SHPO and the Council for review and comment. Before completion of the FEIS, the NPS contacted the SHPOs of all three states directly, and all offices stated that they had no comments on the DEIS and saw no need for further consultation.

U.S. Fish and Wildlife Service

The settlement agreement under which the winter use plan and EIS were produced also required the NPS to prepare a biological assessment (BA) and request formal consultation with the USFWS pursuant to section 7(a)(2) of the ESA, 16 U.S.C. 1536(a)(2) and its implementing regulations. To comply, on February 16, 2000 the NPS requested from the USFWS an updated list of all federally protected threatened, endangered, proposed, or candidate species that might occur in the affected area (FEIS Appendix D). Because winter use is highly controversial, and the NPS was aware of the potential for considerable post-draft changes, it elected not to initiate consultation at the time the DEIS was issued. Instead, a BA was prepared for the FEIS preferred alternative, and subsequently submitted to USFWS on July 5, 2000.²² On October 25, 2000, USFWS provided a letter concurring with NPS' determination in the biological assessment that implementation of the winter use plans as proposed is not likely to affect threatened or endangered species or migratory birds in the action area. The letter notes the coordination between

²² Actions taken in accordance with *Endangered Species Consultation Handbook: Procedures for Conducting Consultation and Conference Activities under Section 7 of the Endangered Species Act*, March 1998.

NPS and USFS through the Greater Yellowstone Coordinating Committee which resulted in a commitment to monitor possible but unanticipated impacts on grizzly bears as a result of the action.

Alternatives Considered

Alternative Development

Alternative development is described in detail on pages 31–32 and in Appendix A of the FEIS. The alternatives for the Winter Use Plans and Environmental Impact Statement for Yellowstone National Park (YNP), Grand Teton National Park (GTNP) and the John D. Rockefeller, Jr., Memorial Parkway (the Parkway) were formulated in response to the major issues and concerns raised through public and internal scoping. In addition to the scoping process, the National Park Service (NPS) and the cooperating agencies met in Idaho Falls, Idaho, for 3 days during October 1998 to formulate initial concepts for alternatives. Later, similar workshops were conducted with the staffs in both parks. For a complete discussion of the concepts generated during the workshops see FEIS Appendix A.

The NPS planning team evaluated the concepts in terms of their responsiveness to the major issues and concerns, the decision to be made, and the purpose and need for the Winter Use Plans. The concepts were also evaluated against their adherence to current law, park management guidelines, and NPS mandates and policies. Lastly, each concept was evaluated for its economic and technical feasibility. The concepts that best met the above criteria were packaged into the range of alternatives discussed below. Each alternative proposed considers a different means of achieving the desired condition of the parks in the winter while minimizing impacts to park resources.

Scope of Analysis in the FEIS

The scope of analysis determines the range of alternatives to be considered. The analysis in the EIS is limited to recreation during the wintertime (about December 15 through March 15, annually). Geographically, the analysis is limited to recreation management within the boundaries of the three national park units.²³ Recreational use considerations and supporting facilities

²³ As a matter of process under CEQ regulations, the impacts of park management that are known or suspected to occur at other times and places must be disclosed in the EIS. In this EIS, economic impacts outside park boundaries are disclosed in the socioeconomic impacts section. Physical and resource effects are disclosed in the sections on adjacent lands and cumulative impacts.

are limited to those that are technically possible at the present time or are feasible for development and implementation. The range of alternatives presents options for motorized and nonmotorized winter recreational use in the three park units considering reasonably expected technological improvements in emissions and sound of snowmachines. One alternative evaluates the impacts of current winter use (per the settlement agreement and CEQ regulations). In this instance, "no action" is interpreted as current management, which is appropriate for programmatic planning.²⁴

Alternatives

Alternative A (No Action)

This alternative reflects current use and management practices in the parks and meets the requirement for including a no action alternative in an EIS.²⁵ Alternative A is a baseline for analysis and reflects existing conditions. Other alternatives are intended to improve the existing condition in one or more major issue areas. Issues associated with alternative A include visitor access difficulties, visitor experience conflicts, unsafe conditions, and resource impacts.

Alternative B

This alternative provides for a moderate range of affordable and appropriate winter visitor experiences. Key changes in recreational opportunities include: Plowing the road from West Yellowstone to Old Faithful to allow mass transit access by wheeled vehicles, moving the CDST to a year-round path from Moran to Flagg Ranch, and phasing out snowmobile use on Jackson Lake. Over the next 10 years, an advisory committee would make recommendations on phasing and

implementing sound and emission standards for air quality and motor vehicle sound issues. By winter 2008(2009, strict emission and sound requirements would be required by all vehicles entering the parks. In addition this alternative emphasizes an adaptive approach to park resource management, which would allow the results of new and ongoing research and monitoring to be incorporated as it becomes available. Adaptive management increases the Park Service's ability to solve visitor access and experience issues and resource issues over time. Using the criteria stated within Executive Order (EO) 11644 (as amended) and its implementing regulation (36 CFR 2.18), monitoring results demonstrating disturbance to wildlife or damage to park resources would be cause to implement actions for mitigating these conditions (for example, closure to winter visitor use or trail restrictions).

Alternative C

This alternative provides for maximum winter visitor opportunities for a range of park experiences, with emphasis on motorized recreation, while mitigating some natural resource impacts and safety concerns. Key changes in recreational opportunities include: plowing the road from West Yellowstone to Old Faithful to allow access by wheeled vehicles, providing a widened highway corridor to accommodate the CDST, and providing additional groomed trails for both motorized and nonmotorized uses. This alternative directly addresses issues that arose during scoping about potential impacts of management change on local economies. It shows how the range of winter opportunities could be preserved, applying mitigation primarily in the areas of air quality and sound impacts.

Alternative D

This alternative emphasizes opportunities for visitor access to the unique winter aspects of the parks (for example, geysers, geothermal areas, wildlife, and scenic vistas), and protection of those qualities and natural resources by phasing in cleaner and quieter modes of travel. It focuses winter visitor activities near destination areas and gateway communities. Key changes in recreational opportunities include: eliminating motorized oversnow access to Yellowstone through its East Entrance, limiting snowmobile use in Grand Teton and the Parkway to the CDST and the Grassy Lake Road, eliminating wheeled-vehicle access from Colter Bay to Flagg Ranch to accommodate oversnow vehicles on the

groomed highway surface, and eliminating snowmobile use on Jackson Lake. Emphasizing uses in different areas of the park minimizes conflicts between nonmotorized and motorized users, and addresses issues about visitor access and experience. Support facilities would have minimal amenities. In this alternative, visitor access routes and timing would be modified to provide safer conditions. Over time, issues regarding impacts on natural resources would be addressed, particularly in Grand Teton and on the east side of Yellowstone.

Alternative E

This alternative emphasizes the protection of wildlife and other natural resources while allowing park visitors access to a range of winter recreation experiences. It uses an adaptive planning approach that allows the results of new and ongoing research and monitoring to be incorporated. Key changes to current recreational opportunities are: eliminating motorized oversnow access in Grand Teton and the Parkway except for use on the Grassy Lake Road and north of Flagg Ranch into Yellowstone, and eliminating all winter motorized use on Jackson Lake.

This alternative addresses the full range of winter use issues in Yellowstone over time, but the current condition would prevail in the short term. Using the criteria stated in EO 11644 (as amended) and its implementing regulation (36 CFR 2.18), monitoring results demonstrating disturbance to wildlife or damage to park resources would be cause to implement actions for mitigating these conditions (for example, closure to snowmobile use). Alternative E calls for instituting an advisory committee to make recommendations about emission and sound standards. Local, county, state, and federal agencies as well as representatives from the snowmobile industry and environmental groups would participate on this committee. In Grand Teton and the Parkway, the full range of issues are addressed more immediately by limiting oversnow motorized use to the north end of the park, thus separating uses and eliminating most resource and visitor experience conflicts relating to snowmobile use.

Alternative F

Alternative F emphasizes wildlife protection. Key changes in recreational opportunities include: eliminating all winter access to Yellowstone's interior through its North and West Entrances, eliminating motorized oversnow access in Grand Teton and the Parkway except

²⁴ Many commenters on the DEIS stated that the "no action" alternative must be "no snowmobiling", and that the court settlement showed that to be the appropriate course of action. The park service's interpretation of "no action" means no change in general management direction from the present. The settlement agreement did not include any concessions to claims by The Fund for Animals, nor did it remove any options within the park service's discretion for park management from the range of alternatives to be considered. In approving the settlement agreement, the court asserted that a comprehensive winter use EIS (in accordance with CEQ regulations) would be written.

²⁵ CEQ 40 Most Asked Questions, question number 3. Where an existing program is being evaluated, "no action" is "no change in management." "No action" may be thought of as continuing with the present course of action until the action is changed. CEQ states that in such instances, "to construct an alternative based on no management at all would be a useless academic exercise."

for use on the Grassy Lake Road and north of Flagg Ranch into Yellowstone, and eliminating all winter motorized use on Jackson Lake. For YNP this alternative addresses issues regarding protection of wildlife resources by focusing winter visitor activities near scenic areas in the eastern and southern portions of YNP. These areas are generally outside important winter range for large ungulate wildlife species. In Grand Teton and the Parkway, the full range of issues is addressed by limiting oversnow motorized use to the north end of the park, thus separating uses and eliminating most resource and visitor experience conflicts relating to snowmobile use.

Alternative G (The FEIS Preferred Alternative)

This alternative emphasizes cleaner, quieter access to the parks using the technologies available today. It would allow oversnow access on all routes currently available via NPS-managed snowcoach only. Other key changes in recreational opportunities include: eliminating winter plowing on the Colter Bay to Flagg Ranch route, making

Flagg Ranch a destination via oversnow transport, and eliminating all winter motorized use on Jackson Lake. This alternative addresses the full range of issues regarding safety, natural resource impacts, and visitor experience and access. It addresses the issues in a way that would make it necessary for local economies to adapt, and for visitors wanting motorized oversnow access to the parks to use snowcoaches rather than snowmobiles.

Comparison of Alternatives

A comparison of alternative actions and the effects of the alternatives may be found in the FEIS beginning on page 66 (Tables 11 and 12). The following rating process, using the FEIS data, is designed to illustrate—in a relative fashion—how each alternative meets the purpose and need for action. The purpose and need elements are equivalent to the impact topics assessed in the EIS. The rating scale is defined below.

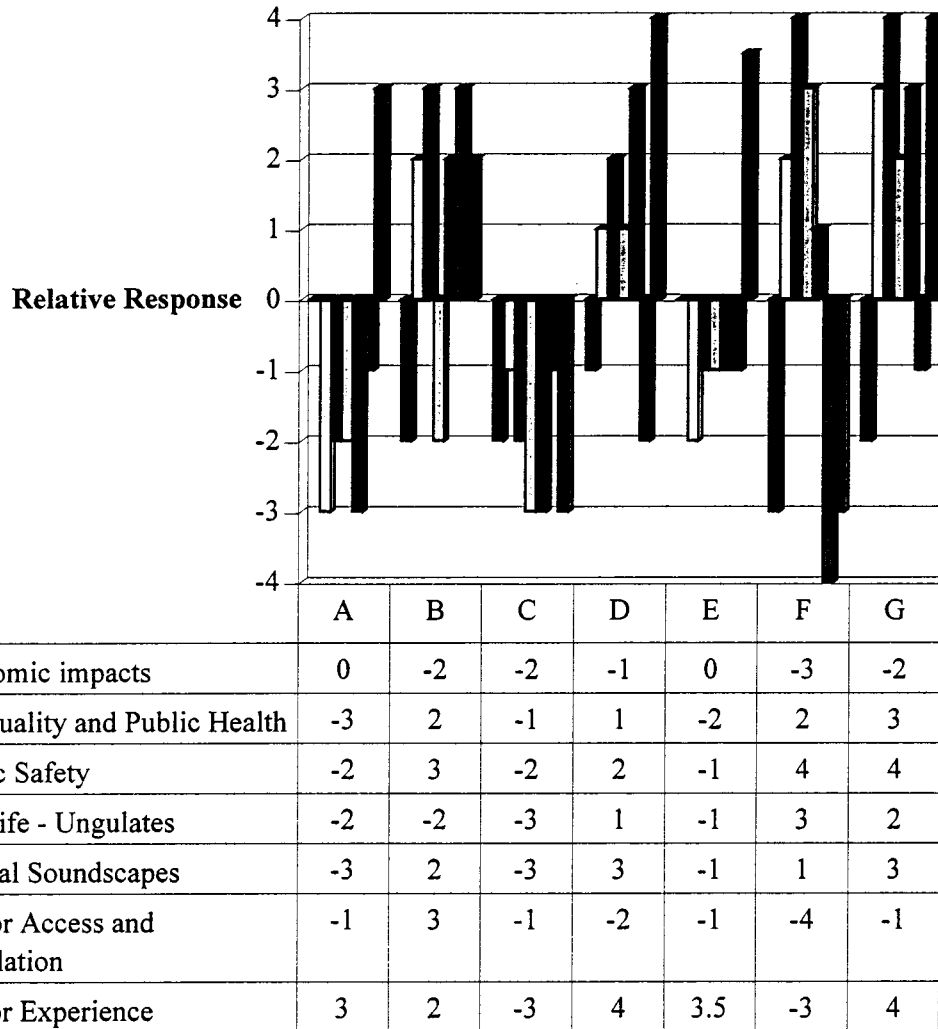
Rating	Definition
+4	Major beneficial impact
+3	Moderate beneficial impact

Rating	Definition
+2	Minor beneficial impact
+1	Identifiable but negligible beneficial impact
0	Neutral level—no adverse impact, no beneficial impact
-1	Identifiable but negligible adverse impact
-2	Minor adverse impact
-3	Moderate adverse impact
-4	Major adverse impact

With reference to the summarized impacts by alternative in the FEIS Chapter II (Table 12), a rating was assigned to each cell; *e.g.*, where a major beneficial impact was disclosed, a +4 was assigned to that block. This represents a composite rating, and it should be noted that the detailed effects analysis represented by the rating is found in Chapter IV of the FEIS. The impact topics were weighted equally in this rating. All impact topics for all alternatives were rated in this fashion and then tabulated accordingly. A chart tabulating the ratings for major impact topics, or purpose and need elements, is shown below.

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Alternatives' Responses to Major Issues



This chart illustrates effects relative to a neutral environmental baseline reflecting an assessment of no identifiable adverse or beneficial effect.²⁶ In the EIS, the defined environmental baseline is the existing condition, or alternative A (no action).

²⁶ For such illustrations, the selection of a rating scale has many possible permutations. In this case, a scale showing positive and negative values was selected in order to better visualize the adverse impacts as opposed to the beneficial impacts of each alternative. An added feature of this scale is that it illustrates the existing condition, represented by Alternative A, as a condition to be improved in terms of "purpose and need" elements.

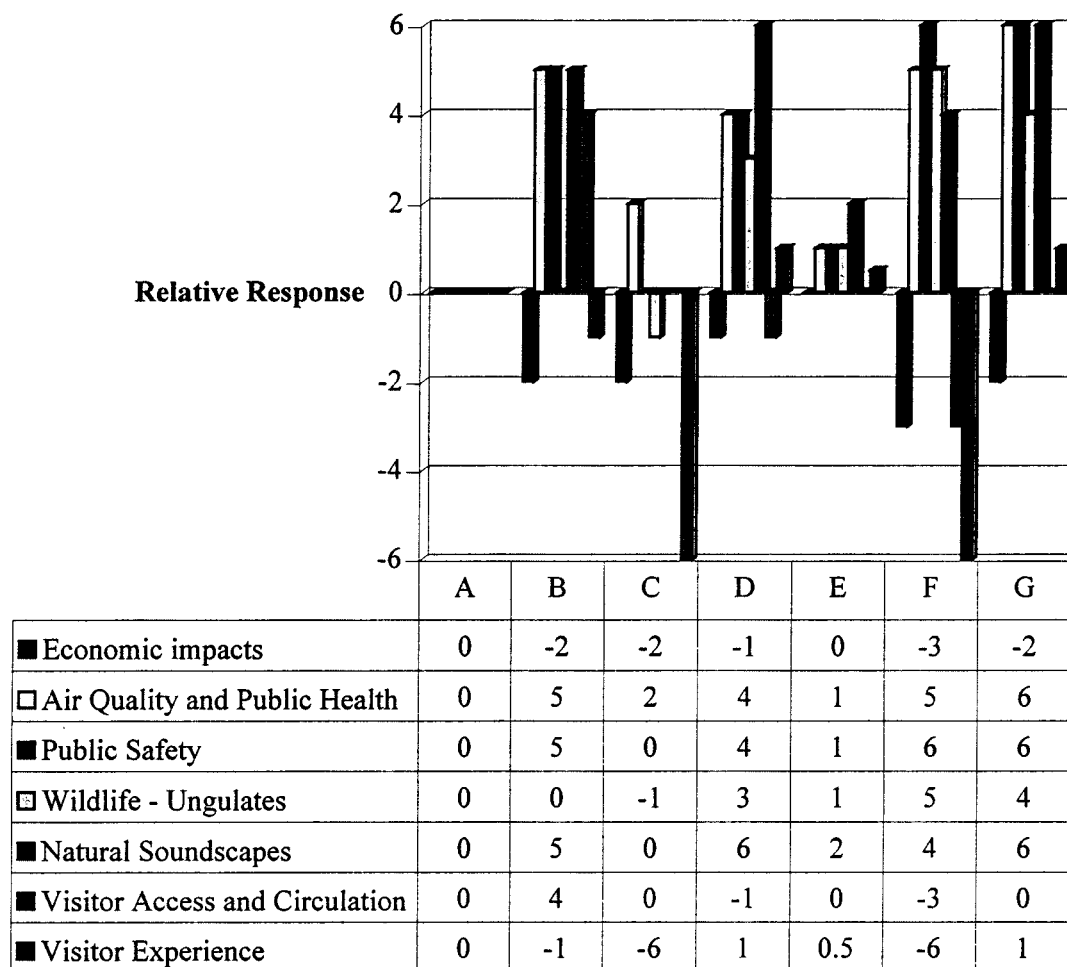
Therefore, another data set and chart were generated to normalize the ratings relative to alternative A. That is, for each impact topic, the difference between the ratings for alternative A and the analogous ratings for each other alternative was gauged. For example, alternative A has a rating of +3 for visitor experience and F has a rating of -3 for the same element; the relative difference (or the scale difference) between the two is -6.²⁷ The resulting

²⁷ This explains why the chart shows values up to +/-6, when the rating scale for effects is +/-4.

chart, below, shows alternative A as having no effects relative to the existing condition, and the other alternatives as having positive or negative effects compared to that base. The chart is an illustration of the extent to which each alternative meets the purpose and need for action, moving management from the existing to the desired condition.

The "effects" scale does not apply to the second chart; it is the relative change from alternative A that is now illustrated.

Alternatives' Responses to Major Issues Compared to Alternative A



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The purpose and need for action, as expressed in Chapter I of the FEIS, is illustrated fundamentally by describing the desired condition for the park units and comparing it to the existing condition. The descriptions are made in terms that relate to park resources and values, so that there is a direct relationship with mandates, regulations, executive orders and policies that direct NPS in managing resources and values. The relationship of existing condition to desired condition is developed through the most important resources and values within the context of winter use, as determined in the FEIS.

The intent of actions proposed in the alternatives is to change management so that parks move from their existing condition toward the desired condition. Since various important resource elements make up the existing/desired condition relationship, it is expected

that different alternatives designed to emphasize different concerns will respond differently to the overall purpose and need for action. As illustrated in the above chart, this is the case for winter use alternatives in the three park units.

The above comparison chart illustrates the following generalizations. The existing condition is represented effectively by alternative A. Comparing other alternatives to alternative A, it is clear that all but alternative C respond positively, overall, to the purpose and need for action. Alternative E would improve the condition of all resources and values (and the opportunity to enjoy them), compared to alternative A, but the improvement overall would be of a fairly low magnitude while retaining the economic status quo. In alternative G impacts on all resources/values would be greatly decreased over

existing conditions, and decreased overall to a greater extent than in any other alternative. This improvement would come primarily at the cost of economic impacts to local communities, also shown in the above chart. Balancing the positive and negative changes from the existing condition, alternatives D, B and F rank in that order below alternative G. All would adversely impact one or two of the four gateway communities while improving resource conditions. Alternative F would greatly improve resource conditions, while incurring long-term adverse impacts on opportunities to enjoy park resources and values, and on the winter economies of West Yellowstone and Gardiner, Montana.

In showing the generalized and relative comparisons, the chart does not reflect analysis details. For example, although alternative F greatly improves

resource conditions overall, there would still be disturbance to wildlife associated with snowmobile use at certain times and certain places. Analysis details such as this apply to all alternatives. The reader is referred to Table 12 and Chapter IV in the FEIS, where the detailed analyses are summarized and presented respectively.

Environmentally Preferred Alternative

Based on reduced impacts to human health and safety, air quality, visitor access, the natural soundscape and wildlife the NPS has identified alternative G as the environmentally preferred alternative. The U.S. Environmental Protection Agency, in its comments on both the Draft and Final EISs, similarly identifies this alternative as its environmentally preferred action.

Information Contact

For more information on this decision or on the FEIS, please contact the offices of:

Karen Wade, National Park Service—
Intermountain Region, 12795 West
Alameda Parkway, Lakewood, CO
80225.

Steve Iobst, Grand Teton National Park,
PO Drawer 170, Moose, WY 80312

Michael Finley, Yellowstone National
Park, PO BOX 168, Yellowstone,
WY 82190.

Attachment A—Monitoring and Adaptive Management Plans

Standards, Methods, and Intensity by Management Zone

Monitoring and Adaptive Management

Introduction

General resource inventory (and monitoring) and adaptive management are two approaches to assure the implementation and success of management actions. General resource inventory and monitoring in accordance with the National Park Service (NPS) 77 Resource Management Guidelines (NPS 1991) is a necessary part of the decision that proceeds from the Winter Use Final EIS (See Appendix I). Adaptive management is also a component of this decision.

The two approaches are distinguished by the degree of uncertainty regarding the impacts to park values. Adaptive management is an appropriate approach when important information pertaining to natural resource and visitor use management is lacking, and there is a need to take immediate management action rather than to wait for additional information to be collected. It is a process of implementing management decisions as scientifically driven

experiments that test predictions and assumptions in management plans, and using the resulting information to improve the plans. General resource monitoring is appropriate where standards exist either in laws, regulations or general management plans. Techniques must be available to measure conditions for effective comparison with the standard.

Additionally, the National Parks Omnibus Act of 1998 requires a program of inventory and monitoring of National Park System resources to establish baseline information and to provide information on long-term trends of the condition of national park system resources (16 U.S.C. 5934). The service also must use the results of scientific research, including monitoring and inventory, in making decisions about the management of parks (16 U.S.C. 5936).

The Winter Use EIS identifies information needs related to winter use as it may impact critical park values: air quality, natural quiet, wildlife, aquatic resources, and visitor experience. Both adaptive management and monitoring require standards, or thresholds, to establish baselines upon which to assess degradation to monitored park values. The initial identification of indicators, standards, methods and management responses that relate to critical values is located in FEIS appendix I. This is the basis for developing monitoring plans under authority of this decision.

Coordination and Responsibility Requirements

Monitoring programs will be coordinated between Yellowstone and Grand Teton National Parks. The programs will function and be coordinated through the planning staffs of both parks. The development of annual plans and reports will be coordinated through the planning units, and the planning units will be responsible for delivering those products to management. Other park divisions will coordinate with planning, and provide resources for performing monitoring tasks.

Adaptive Management Program

The essential first step when formulating an adaptive management strategy for the affected environment is to articulate the critical uncertainties, particularly where some information is known about a specific resource but conclusive evidence is currently unavailable. Based on current knowledge, a management scenario is then designed to test specific hypotheses relating to the critical uncertainties. Monitoring and

evaluation strategies are then employed to evaluate outcomes relative to acceptable thresholds, and assist in the development of management alternatives. Monitoring within the framework of adaptive management is critical because of the uncertainty of predictions based on limited information. It provides systematic feedback for management, and allows adjustment of activities to mitigate unplanned or undesirable outcomes.

A critical step in adaptive management involves the National Environmental Policy Act (NEPA). Each time a new management proposal is evaluated the analysis must be documented by performing the appropriate level of NEPA compliance. Some actions, such as permanent road closures to protect wildlife or the construction of new facilities may require an additional site-specific NEPA analysis, which includes public scoping. Some actions might be administrative in nature, or be implementable through application of a NEPA categorical exclusion (Ref: NPS 12).

The adaptive management process is shown schematically in Figure 1. Tables follow that prescribe monitoring standards, methods and proposed management actions for critical resources in each winter management zone. These are tables 12 through 22.

Monitoring Program

General resource monitoring applies when adequate information exists to make informed management decisions. It is the process of collecting information to evaluate if the objectives of a management plan are being realized. General monitoring techniques (as opposed to monitoring conducted within the adaptive management framework) will be employed to assess impacts to public health and safety; geothermal features; water quality; threatened and endangered species; trumpeter swans and some aspects of visitor experience, including access and circulation. NPS-77, Natural Resources Management Guideline, will be used initially as a guide to monitoring specific resource areas. As new techniques are developed, or as commonly accepted procedures become available, monitoring protocols will change.

Tables follow that prescribe monitoring standards, methods and possible management actions for critical resources in each winter management zone. These are tables 1 through 11.

Annual Monitoring and Adaptive Management Plans

The overall objective for monitoring and adaptive management is to assess the long-term effects of management actions on park resources and values. Specific objectives accrue to each winter management zone (FEIS Table xx and Figures xx and xx). With reference to the following tables, for each management zone and for each resource of concern, monitoring indicators are presented. For each indicator, a standard either exists or is hypothesized (for adaptive management). Also, for each indicator a monitoring method and intensity is prescribed. Finally, management actions are indicated if the standards should be exceeded.

Monitoring and adaptive management plans will be developed annually during workplanning and budget processes for the coming year. Plans will be developed through the planning staffs of both park units. Monitoring will be conducted on a sampling basis for the purpose of effective use of funds and personnel. The guiding principle for monitoring is to collect purposeful data—even if the amount is limited—rather than collecting a great deal of data that cannot be used statistically to arrive at valid conclusions. Therefore, monitoring plans will be brief and will cover the following items:

- The zones to be sampled, along with the indicators, standards, and methods to be used.
- Specific locations for monitoring, and the planned intensity—frequency of monitoring.
- A schedule (times) for data collection and submittal.
- The division or individual that is responsible for monitoring and reporting.

It is expected that initial monitoring will be intensive, both in geographic and temporal extent, so that correlations can be made and results can be extrapolated. It is also expected that monitoring over time will become less intensive and arrive at a low intensity, maintenance level. Sampling schedules can vary from year to year, focusing on different areas within the park units. Monitoring plans will continue to be coordinated between Yellowstone and Grand Teton so that common methods are used, efficiency is achieved, and results are comparable. Annual monitoring reports will be written and publicized through the planning units of the two parks.

Annual Monitoring and Adaptive Management Reports

Feedback for management is implicit in monitoring and adaptive management programs. In order for feedback to occur,

data must be collected effectively in accordance with a plan. Data must be captured in an accessible information system, capable of evaluation and statistical manipulation. Then, evaluations must be put in meaningful terms for management. The requirement of a formal report is essential to meet this need. The report should be published to a standard that is appropriate for public consumption.

Annual monitoring reports will be brief, and will meet the following requirements:

- Sum up the information collected during the year.
- Express conclusions relating to each management zone and indicator that was monitored.
- Extrapolate the conclusions to other areas, when possible and appropriate.
- State the need for applying management actions based on monitoring.
- Make recommendations for changes in monitoring locations, protocols, techniques or thresholds that should be considered in the monitoring plan for the following year.

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Figure 1. The Adaptive Management Process.

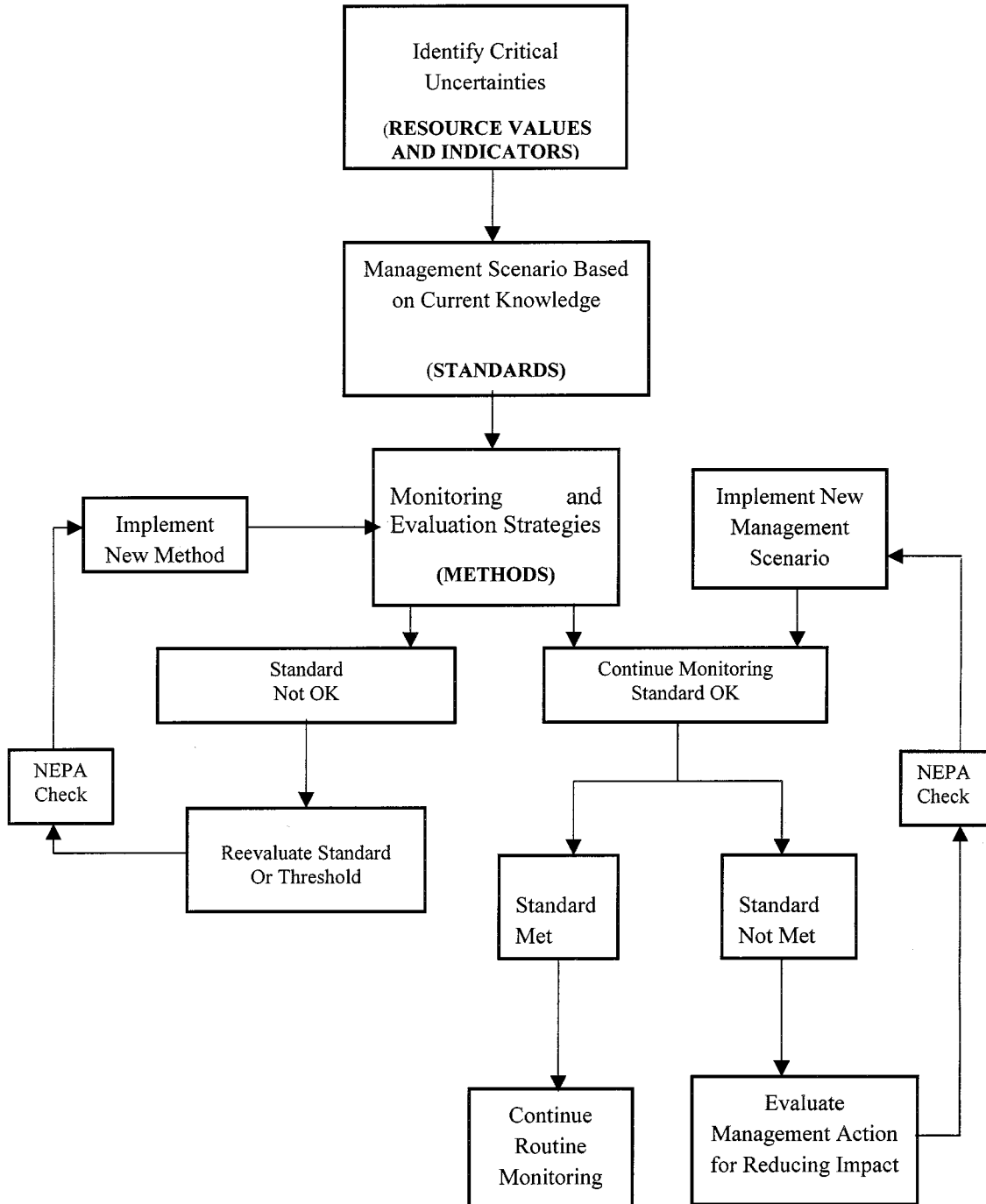


Table 1. Monitoring Standards, Methods, Intensity by Management Zone, Yellowstone and Grand Teton National Parks and the John D. Rockefeller, Jr., Memorial Parkway Winter Use Plan.

Management Zone → Resource Value	Destination or Support Area				Management Actions
	Indicator	Preliminary Standard	Method	Monitoring Intensity*	
Air Quality and Public Health	Visibility	State and federal air quality standards	Time lapse video Fixed site sampling of particulate matter (PM _{2.5} and PM ₁₀)	High	Establish vehicle carrying capacity reduce vehicle numbers Review annually
	Park workers and visitors exposure to CO, particulate matter, aldehydes, and VOCs	State and federal air quality standards	Fixed site sampling of PM and carbon monoxide, and VOCs	High	Establish vehicle carrying capacity reduce vehicle numbers Review annually
Wildlife	Bird and mammal habitation re; effectiveness of garbage facilities	Garbage unavailable to wildlife	Personal samples for exposure to aldehydes, VOCs, carbon monoxide, and particulate matter Photo surveys, and observation	High	Reduce exposure to emissions Reduce emissions Review annually
Water/Snowpack	Water quality: pH, hydrogen, ammonium, calcium, sulfate, nitrate, and VOCs	State and federal water quality standards	Surface water sampling Snowpack sampling	Moderate	Increase or improve garbage security Review annually Determination and application of best management practices Reduce emissions and vehicle numbers Review annually
Safety	Vehicle accidents and incidents	Continual improvement three-year sliding average	Incident descriptions and GIS mapping	High	Sign and reduce speed limits in areas of recurring incidents Increase law enforcement and information programs in areas of concern Review monthly
Geothermal Features	Human-caused damage to geothermal areas	No degradation of geothermal resources	Remote sensing and visual observation	High	Increase enforcement and monitoring Implement additional information programs Restrict travel Review monthly
Visitor Experience	Waiting lines	Visitors wait no more than 5 minutes to access restrooms and park information	Observation	Moderate	Increase facilities where possible Increase information programs Review annually
	Perceptions of crowding at attraction sites	Visitors are able to see, smell, and hear the natural environment at popular attraction sites such as Old Faithful or Jackson lake Visitors are highly satisfied with their park experience	Visitor survey	High	Establish carrying capacities Review Every other year
	Visitor satisfaction with opportunities to experience park values (wildlife viewing, scenery, and clean air), affordable services, and access to information		Visitor survey	High	Establish carrying capacities Review Every other year

* High = Daily to weekly or in accordance with standard protocol for parameter; Moderate = Monthly to seasonally and during peak days or use periods; Low = Annually during peak use periods or at the end of the season.

Record of Decision for Winter Use

Monitoring and Adaptive Management

Table 2. Monitoring Standards, Methods, Intensity by Management Zone, Yellowstone and Grand Teton National Parks and the John D. Rockefeller, Jr., Memorial Parkway Winter Use Plan.

Management Zone →		Plowed Road				Management Actions	
Resource Value	Indicator	Preliminary Standard	Method	Monitoring Intensity*			
Air Quality (Public Health)	Visibility	No degradation. State and Federal air Quality standards	Photo survey Fixed site sampling of PM	Moderate		Establish vehicle carrying capacity Review annually	
	Park workers and visitors exposure to CO, particulate matter, aldehydes, and VOCs	State air quality standards	Fixed site sampling of PM, Carbon Monoxide Personal samples for exposure to aldehydes, VOCs, and particulate matter	Moderate		Establish vehicle carrying capacity Review annually	
Wildlife	Vehicle caused wildlife mortality	No effect to population	Incident reports, roadside surveys, and visual observations	High		Sign and reduce speed limits in areas of recurring incidents Review monthly	
	Wildlife trapped by snow berms in road corridor	No effect on population				Increase number of exit berms - reevaluate location of existing exits Review weekly	
Sound	Distance and time human-caused sound is audible	CFR for vehicle sound	Audibility logging	High		Increase enforcement Review annually	
	Water quality: pH, Hydrogen, Ammonium, Calcium, Sulfate, Nitrate and VOC's	State and Federal water quality standards	surface water sampling Snowpack sampling	Moderate		Establish vehicle carrying capacity Determination and application of best management practices Review annually	
Safety	Motor vehicle accidents Motorized vs. nonmotorized visitor conflict	Continuous improvement three-year sliding average	Incident reports and GIS	High		Sign and reduce speed limits in areas of recurring incidents Increase law enforcement in areas of concern Review monthly	
	Encounter rates	Not to exceed 250 vehicles per hour for more than 1 hour per day. Visitors are able to see, smell, and hear the natural environment at roadside pullouts and interpretive trails Visitors are highly satisfied (+90%) with their park experience	Visitor survey	High		Establish carrying capacities/reduce visitor numbers Review every other year	
Visitor Experience	Visitor satisfaction levels with opportunities to experience park values and opportunities to view wildlife, scenery, and experience clean air and solitude		Visitor survey	High		Establish carrying capacities/ reduce visitor numbers Review every other year	

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Record of Decision for Winter Use

Monitoring and Adaptive Management

Table 3. Monitoring Standards, Methods, Intensity by Management Zone, Yellowstone and Grand Teton National Parks and the John D. Rockefeller, Jr., Memorial Parkway Winter Use Plan.

Management Zone →	Groomed Motorized Route Clean and Quiet				Monitoring Intensity*	Management Actions
Resource Value	Indicator	Preliminary Standard	Method			
Air Quality (Public health)	Visibility	No degradation. Area free of any visible sign of human-caused pollutants at least 95% of each 24-hour period	Photo survey Fixed site sampling of PM ₁₀		Moderate	Establish vehicle carrying capacity/ reduce vehicle numbers Review annually
	Park workers and visitors exposure to CO, particulate matter, aldehydes, and VOCs	State and federal air quality standards	Fixed site sampling of PM and carbon monoxide Personal samples for exposure to aldehydes, VOCs, and particulate matter Establish exposure measurements for snowcoaches		Moderate	Establish vehicle carrying capacities reduce vehicle numbers Review annually
Wildlife	Wildlife mortalities caused by oversnow vehicles	No effect on population	Incident reports and roadside surveys, photo surveys, and visual observations		Low	Sign and reduce speed limits in areas of recurring incidents Review annually
	Wildlife harassment or displacement due to vehicle sound or movements	No effect on population	Incident reports and photo surveys		High	Increase law enforcement Review monthly
	Bison use of groomed surfaces	No effect on population	Photo surveys, air surveys, and telemetry		High	Close roads Review annually
	Lynx habitat effectiveness	No effect on population	Carnivore and snowshoe hare track surveys			
Sound	Distance and time human-caused sound is audible	CFR for vehicle sound	Audibility logging		Moderate	Increase enforcement Review annually
	Water quality: pH, Hydrogen, Ammonium, Calcium, Sulfate, Nitrate, and VOCs	State and Federal water quality standards Snowpack sampling	Spring runoff surface water sampling Snowpack sampling		High	Establish vehicle carrying capacity Determination and application of best management practices Review annually
Safety	Oversnow vehicle accidents	Continuous improvement three-year sliding average	Incident reports and GIS		High	Sign and reduce speed limits in areas of recurring incidents. Increase law enforcement in areas of concern Review monthly
	Encounter rates	Not to exceed 250 vehicles per hour for more than 1 hour per day. Visitors are able to see, smell, and hear the natural environment at roadside pullouts and interpretive trails	Visitor survey		High	Establish carrying capacities reduce visitor numbers Review every other year
Visitor Experience	Smoothness of groomed surface	No worse than fair 20% of a 24-hour period	Visual observation			
	Visitor satisfaction levels with opportunities to experience park values and opportunities to view wildlife, scenery, and experience clean air and solitude.	Visitors are highly satisfied (+90%) with their park experience	Visitor survey		High	Establish carrying capacities/reduce visitor numbers Review every other year

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Record of Decision for Winter Use
Monitoring and Adaptive Management

Table 4. Monitoring Standards, Methods, Intensity by Management Zone, Yellowstone and Grand Teton National Parks and the John D. Rockefeller, Jr., Memorial Parkway Winter Use Plan.

Management Zone →	Resource Value	Indicator	Preliminary Standard	Method	Monitoring Intensity*	Management Actions
Air Quality (Public Health)	Visibility	Park workers and visitors exposure to CO, particulate matter, aldehydes, and VOCs	No degradation. Area free of any visible sign of human-caused pollutants at least 95% of each 24-hour period	Photo survey and time lapse video Fixed site sampling of particulate matter (PM _{2.5} and PM ₁₀)	High	Establish vehicle carrying capacities/reduce vehicle numbers Implement new technologies Review annually
			State air quality standards	Fixed site sampling of PM, Carbon Monoxide Personal samples for exposure to aldehydes, VOCs, and particulate matter Establish exposure measurements for snowcoaches	High	Establish vehicle carrying capacities/reduce vehicle numbers Implement new technologies Review annually
Wildlife	Wildlife mortalities caused by oversnow vehicles	Wildlife harassment	No effect on population	Incident reports and roadside surveys, photo surveys, and visual observations	Low	Sign and reduce speed limits in areas of recurring incidents Review monthly
			No effect on population	Incident reports and photo surveys	High	Increase law enforcement Review annually
			No effect on population	Photo and air surveys	High	Mitigate effects or close roads to grooming Review annually
Sound	Distance and time human-caused sound is audible	Wildlife harassment	CFR for vehicle sound	Carnivore and snowshoe hare track surveys Audibility logging	High	Increase enforcement Review annually
			State and Federal water quality standards	Spring runoff surface water sampling Snowpack sampling	High	Determination and application of best management practices Reduce emissions Implement or require new technologies Review annually
Water/Snowpack	Water quality: pH, Hydrogen, Ammonium, Calcium, Sulfate, Nitrate, and VOCs	Oversnow vehicle accidents	Continuous improvement three-year sliding scale	Incident reports and GIS	High	Sign and reduce speed limits in areas of recurring incidents. Increase law enforcement in areas of concern.
			Visitors are able to see, smell, and hear the natural environment at roadside pullouts and interpretive trails	Visitor survey	High	Establish carrying capacities/reduce visitor numbers Review every other year Improve or increase grooming Reduce visitor numbers
Safety	Encounter rates	Smoothness of groomed surface	No worse than fair 20% of a 24-hour period	Visual observation	High	Establish carrying capacities/reduce visitor numbers Review every other year
			Visitors are highly satisfied (+90%) with their park experience	Visitor survey	High	Establish carrying capacities/reduce visitor numbers Review every other year

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Record of Decision for Winter Use

Monitoring and Adaptive Management

Table 5. Monitoring Standards, Methods, Intensity by Management Zone, Yellowstone and Grand Teton National Parks and the John D. Rockefeller, Jr., Memorial Parkway Winter Use Plan.

Management Zone →	Resource Value	Indicator	Preliminary Standard	Method	Monitoring Intensity*	Management Actions
Air Quality (Public Health)	Visibility		No degradation. Area free of any visible sign of human-caused pollutants	Photo survey	Low	Establish vehicle carrying capacity/reduce vehicle numbers Review annually
	Park workers and visitors exposure to CO, particulate matter, aldehydes, and VOCs		State air quality standards	Fixed site sampling of particulate matter (PM _{2.5} and PM ₁₀) Personal samples for exposure to aldehydes, VOCs, and particulate matter	Low	Establish vehicle carrying capacity/reduce vehicle numbers Review annually
			No effect on population	Incident reports and roadside surveys, photo surveys, and visual observations		Sign and reduce speed limits in areas of recurring incidents Review monthly
Wildlife	Wildlife mortalities caused by oversnow vehicles		No effect on population	Incident reports and photo surveys	Low	Increase law enforcement Review annually
			No effect on population	Photo and air surveys	Low	Close trail Review annually
	Wildlife harassment		No effect on population	Carnivore and snowshoe hare track surveys Audibility logging	High	Increase law enforcement Review annually
	Bison use of groomed surfaces		No effect on population	Spring runoff surface water sampling	High	Determination and application of best management practices Reduce vehicle numbers Implement or require new technologies Review annually
Sound	Distance and time human-caused sound is audible		CFR for vehicle sound	Incident reports and GIS	High	Sign and reduce speed limits in areas of recurring incidents. Increase law enforcement in areas of concern. Review monthly
			State and Federal water quality standards	Visitor survey	High	Establish carrying capacity/reduce visitor numbers Review every other year
Water/Snowpack	Surface water sampling of pH, Hydrogen, Ammonium, Calcium, Sulfate, Nitrate, and VOCs		Continuous improvement three-year sliding scale	Visual observation	Low	Improve or increase grooming Reduce vehicle numbers Review annually
			Not to exceed 16 to 20 parties per day 80% of the time. Visitors are able to see, smell, and hear the natural environment at roadside pullouts and interpretive trails	Visitor survey	High	Reduce visitor numbers Review every other year
Safety	Oversnow vehicle accidents Conflicts between motorized and nonmotorized use		CFR for vehicle sound	Visitor survey	High	Establish carrying capacity/reduce visitor numbers Review every other year
			Continuous improvement three-year sliding scale	Visual observation	Low	Improve or increase grooming Reduce vehicle numbers Review annually
Visitor Experience	Encounter rates		Not to exceed 16 to 20 parties per day 80% of the time. Visitors are able to see, smell, and hear the natural environment at roadside pullouts and interpretive trails	Visitor survey	High	Reduce visitor numbers Review every other year
			No worse than fair 30% of the winter season	Visual observation	Low	Improve or increase grooming Reduce vehicle numbers Review annually
	Smoothness of groomed surface		Visitors are highly satisfied (190%) with their park experience	Visitor survey	High	Reduce visitor numbers Review every other year
	Visitor satisfaction levels with opportunities to experience park values and opportunities to view wildlife, scenery, and experience clean air and solitude.		Visitors are highly satisfied (190%) with their park experience	Visitor survey	High	Reduce visitor numbers Review every other year

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Record of Decision for Winter Use

Monitoring and Adaptive Management

Table 6. Monitoring Standards, Methods, Intensity by Management Zone, Yellowstone and Grand Teton National Parks and the John D. Rockefeller, Jr., Memorial Parkway Winter Use Plan.

Management Zone →		Groomed Motorized Trail				Monitoring Intensity*	Management Actions
Resource Value	Indicator	Preliminary Standard	Method				
Air Quality (Public Health)	Visibility	No degradation. Area free of any visible sign of human-caused pollutants	Photo survey		Low	Establish vehicle carrying capacity/reduce vehicle numbers Review annually	
	Park workers and visitors exposure to CO, particulate matter, aldehydes, and VOCs	State air quality standards	Fixed site sampling of particulate matter (PM _{2.5} and PM ₁₀) Carbon Monoxide Personal samples for exposure to aldehydes, VOCs, and particulate matter		Low	Establish vehicle carrying capacity/reduce vehicle numbers Review annually	
Wildlife	Wildlife mortalities caused by oversnow vehicles	No effect on population	Incident reports and roadside surveys, photo surveys, and visual observations		Low	Sign and reduce speed limits in areas of recurring incidents Review monthly	
	Wildlife harassment	No effect on population	Incident reports and photo surveys		Low	Increase law enforcement Review annually	
	Bison use of groomed surfaces	No effect on population	Photo and air surveys		Low	Close trail Review annually	
	Lynx habitat effectiveness	No effect on population	Cannivore and snowshoe hare track surveys Audibility logging		High	Increase law enforcement Review annually	
Sound	Distance and time human-caused sound is audible	CFR for vehicle sound			High		
	Surface water sampling of pH, Hydrogen, Ammonium, Calcium, Sulfate, Nitrate, and VOCs	State and Federal water quality standards	Spring runoff surface water sampling		Low	Determination and application of best management practices Reduce vehicle numbers Implement or require new technologies Review annually	
Safety	Oversnow vehicle accidents	Continuous improvement three-year sliding scale	Incident reports and GIS		High	Sign and reduce speed limits in areas of recurring incidents. Increase law enforcement in areas of concern. Review monthly	
	Conflicts between motorized and nonmotorized use	Not to exceed 16 to 20 parties per day 80% of the time. Visitors are able to see, smell, and hear the natural environment at roadside pullouts and interpretive trails	Visitor survey		High	Establish carrying capacity/reduce visitor numbers Review every other year	
Visitor Experience	Encounter rates	No worse than fair 30% of the winter season	Visual observation		Low	Improve or increase grooming Reduce vehicle numbers Review annually	
	Smoothness of groomed surface	Visitors are highly satisfied (≥90%) with their park experience	Visitor survey		High	Reduce visitor numbers Review every other year	
	Visitor satisfaction levels with opportunities to experience park values and opportunities to view wildlife, scenery, and experience clean air and solitude.						

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Record of Decision for Winter Use

Monitoring and Adaptive Management

Table 7. Monitoring Standards, Methods, Intensity by Management Zone, Yellowstone and Grand Teton National Parks and the John D. Rockefeller, Jr., Memorial Parkway Winter Use Plan.

7 Ungroomed Motorized Trail						
Management Zone →	Resource Value	Indicator	Preliminary Standard	Method	Monitoring Intensity*	Management Actions
Air Quality (Public Health)	Visibility	No degradation. Area free of any visible sign of human-caused pollutants	State air quality standards	Photo survey and time lapse video	Low	Establish vehicle carrying capacity /reduce vehicle numbers Review annually
				Fixed site sampling of particulate matter (PM _{2.5} and PM ₁₀)		
Wildlife	Park workers and visitors exposure to CO, particulate matter, aldehydes, and VOCs	Wildlife mortalities caused by oversnow vehicles	State air quality standards	Fixed site sampling of particulate matter (PM _{2.5} and PM ₁₀)	Low	Establish vehicle carrying capacity /reduce vehicle numbers Review annually
				Carbon Monoxide		
				Personal samples for exposure to aldehydes, VOCs, and particulate matter		
Wildlife	Wildlife harassment caused by oversnow vehicles	No effect on population	State air quality standards	Incident reports and roadside surveys, photo surveys, and visual observations	Low	Sign and reduce speed limits in areas of recurring incidents Review monthly
				Incident reports and photo surveys		
				Incident reports and photo surveys		
Sound	Lynx habitat effectiveness	No effect on population	No effect on population	Carnivore and snowshoe hare track surveys	High	Increase law enforcement Review annually
				Audibility logging		
				CFR for vehicle sound		
Water/Snowpack	Distance and time human-caused sound is audible	Surface water sampling of pH, Hydrogen, Ammonium, Calcium, Sulfate, Nitrate, and VOCs	State and Federal water quality standards	Spring runoff surface water sampling	Low	Determination and application of best management practices Reduce vehicle numbers Implement or require new technologies Review annually
				Incident reports and GIS		
Safety	Oversnow vehicle accidents	Conflicts between motorized and nonmotorized use	Continuous improvement three-year sliding scale	Incident reports and GIS	Low	Sign and reduce speed limits in areas of recurring incidents. Increase law enforcement in areas of concern Review monthly
				Visitor survey		
Visitor Experience	Encounter rates	Not to exceed 16 to 20 parties per day 80% of the time. Visitors are able to see, smell, and hear the natural environment at roadside pullouts and interpretive trails	Visitors are highly satisfied (100%) with their park experience	Visitor survey	Low	Establish carrying capacity/reduce visitor numbers Review every other year
				Visitor survey		

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Record of Decision for Winter Use

Monitoring and Adaptive Management

Table 8. Monitoring Standards, Methods, Intensity by Management Zone, Yellowstone and Grand Teton National Parks and the John D. Rockefeller, Jr., Memorial Parkway Winter Use Plan.

Management Zone →		8 Groomed Nonmotorized Trail				
Resource Value	Indicator	Preliminary Standard	Method	Monitoring Intensity*	Management Actions	
Air Quality (Public Health)	Visibility	No degradation. Area free of any visible sign of human-caused pollutants	Photo survey	Low	Establish vehicle carrying capacity/ reduce vehicle numbers Review annually	
	Park workers and visitors exposure to CO, particulate matter, aldehydes, and VOCs	State air quality standards	Fixed site sampling of particulate matter (PM _{2.5} and PM ₁₀) Carbon Monoxide Personal samples for exposure to aldehydes, VOCs, and particulate matter	Low	Establish vehicle carrying capacity/ reduce vehicle numbers Review annually	
Wildlife	Wildlife harassment	No effect on population	Incident reports and photo surveys	Low	Increase law enforcement and information programs Review annually	
	Lynx habitat effectiveness	No effect on population	Cantivore and snowshoe hare track surveys Audibility logging	High	Close trail Review annually Increase law enforcement Review annually	
Sound	Distance and time human-caused sound is audible	CFR for vehicle sound		High		
	Surface water sampling of pH, Hydrogen, Ammonium, Calcium, Sulfate, Nitrate, and VOCs	State and Federal water quality standards	Spring runoff surface water sampling	Low	Determination and application of best management practices Reduce vehicle numbers Implement or require new technologies Review annually	
Safety	Conflicts between motorized and nonmotorized use Search and rescue Human and wildlife conflicts	Continuous improvement three-year sliding scale	Incident reports and GIS	Low	Increase law enforcement and information programs in areas of concern Review monthly	
	Encounter rates	Not to exceed 10 to 15 parties per day over 70% of the use season. Visitors are able to see, smell, and hear the natural environment at roadside pullouts and interpretive trails No worse than fair 30% of the winter season	Visitor survey	Low	Establish carrying capacity/ reduce visitor numbers Review every other year	
Visitor Experience	Smoothness of groomed surface	Visitors are highly satisfied (+90%) with their park experience	Visual observation	Low	Improve or increase grooming Reduce vehicle numbers Review annually	
	Visitor satisfaction levels with opportunities to experience park values and opportunities to view wildlife, scenery, and experience clean air and solitude.		Visitor survey	Low	Establish carrying capacities/ reduce visitor numbers Review every other year	

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Record of Decision for Winter Use

Monitoring and Adaptive Management

Table 9. Monitoring Standards, Methods, Intensity by Management Zone, Yellowstone and Grand Teton National Parks and the John D. Rockefeller, Jr., Memorial Parkway Winter Use Plan.

		9 Ungroomed Nonmotorized Trail or Area				
Management Zone →	Resource Value	Indicator	Preliminary Standard	Method	Monitoring Intensity*	Management Actions
Air Quality (Public Health)	Wildlife	Visibility	No degradation. Area free of any visible sign of human-caused pollutants	Photo survey and time lapse video Fixed site sampling of particulate matter (PM _{2.5} and PM ₁₀)	Moderate	Establish vehicle carrying capacity/ reduce vehicle numbers Review annually
		Wildlife harassment	No effect on population	Incident reports and photo surveys	Moderate	Increase law enforcement and information programs Review annually
Sound	Water/Snowpack	Human and grizzly bear conflicts during pre- or post denning period	No incidents	Mapping of denning areas	High	Increase law enforcement and information programs Close denning areas to human use in fall and spring Review annually
		Lynx habitat effectiveness	No effect on population	Carnivore and snowshoe hare track surveys	High	Close trail Review annually
Safety	Visitor Experience	Distance and time human-caused sound is audible	CFR for vehicle sound	Audibility logging	High	Increase law enforcement Review annually
		Surface water sampling of pH, Hydrogen, Ammonium, Calcium, Sulfate, Nitrate, and VOCs	State and Federal water quality standards	Spring runoff surface water sampling	Low	Determination and application of best management practices Review annually
Visitor Experience	Visitor Experience	Conflicts between motorized and nonmotorized use Search and rescue Human and wildlife conflicts	Continuous improvement three-year sliding scale	Incident reports and GIS	High	Increase law enforcement and information programs in areas of concern Review monthly
		Encounter rates	Not to exceed 10 to 15 parties per day over 70% of the use season. Visitors are able to see, smell, and hear the natural environment at roadside pullouts and interpretive trails	Visitor survey	Low	Establish carrying capacity/ reduce visitor numbers Review every other year
		Visitor satisfaction levels with opportunities to view wildlife, scenery, and experience clean air and solitude	Visitors are highly satisfied (+90%) with their park experience	Visitor survey	Low	Establish carrying capacities/ reduce visitor numbers Review every other year

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Record of Decision for Winter Use

Monitoring and Adaptive Management

Table 10. Monitoring Standards, Methods, Intensity by Management Zone, Yellowstone and Grand Teton National Parks and the John D. Rockefeller, Jr., Memorial Parkway Winter Use Plan.

Management Zone →	Resource Value	Indicator	Preliminary Standard	Method	Monitoring Intensity*	Management Actions
Air Quality (Public Health)	Visibility	No degradation. Area free of any visible sign of human-caused pollutants	Photo survey and time lapse video Fixed site sampling of particulate matter (PM _{2.5} and PM ₁₀)	Moderate	Establish vehicle carrying capacity/ reduce vehicle numbers Review annually	
	Wildlife harassment	No effect on population	Incident reports and photo surveys, and observation	Moderate	Increase law enforcement and information programs Review annually	
Wildlife	Human and grizzly bear conflicts during pre- or post denning period	No incidents	Mapping of denning areas Incident reports	High	Increase law enforcement and information programs Close denning areas to human use in fall and spring Review annually	
	Lynx habitat effectiveness	No effect on population	Carnivore and snowshoe hare track surveys Audubon logging	High	Close trail Review annually Increase law enforcement Review annually	
Sound	Distance and time human-caused sound is audible	CFR for vehicle sound	Spring runoff surface water sampling Snowpack sampling	Moderate	Determination and application of best management practices Implement or require new technologies Review annually	
	Surface water sampling of pH, Hydrogen, Ammonium, Calcium, Sulfate, Nitrate, and VOCs	State and Federal water quality standards	Incident reports and GIS	High	Increase law enforcement and information programs in areas of concern Review monthly	
Safety	Search and rescue Human and wildlife conflicts	Continuous improvement three-year sliding scale	Visitor survey	Low	Establish carrying capacity/reduce visitor numbers Review every other year	
	Encounter rates	Not to exceed 5 to 10 parties per day over 80% of the use season. Visitors are able to see, smell, and hear the natural environment and experience quiet and solitude	Visitor survey	Low	Establish carrying capacities/reduce visitor numbers Review every other year	

*High = Daily to weekly or in accordance with standard protocol for parameter; Moderate = Monthly to seasonally and during peak days or use periods; Low = Annually during peak use periods or at the end of the season.

Record of Decision for Winter Use

Monitoring and Adaptive Management

Table 11. Monitoring Standards, Methods, Intensity by Management Zone, Yellowstone and Grand Teton National Parks and the John D. Rockefeller, Jr., Memorial Parkway Winter Use Plan.

Management Zone →		II Sensitive Resource Area				
Resource Value	Indicator	Preliminary Standard	Method	Monitoring Intensity*	Management Actions	
Air Quality (Public Health)	Visibility/Success of closure	No degradation	Photo survey and time lapse video Fixed site sampling of particulate matter (PM _{2.5} and PM ₁₀)	Moderate	Evaluate success of closure Review annually	
Wildlife	Wildlife harassment	No incidents	Incident reports and photo surveys, and observation	Moderate	Evaluate success of closure Review annually	
	Human and grizzly bear conflicts during pre- or post denning period/ closure	No incidents	Mapping of denning areas Incident reports	High	Evaluate success of closure Review annually	
	Lynx habitat effectiveness	No effect on population	Carnivore and snowshoe hare track surveys	High	Evaluate success of closure Review annually	
Water/Snowpack	Surface water sampling of pH, Hydrogen, Ammonium, Calcium, Sulfate, Nitrate, and VOCs	State and Federal water quality standards	Spring runoff surface water sampling Snowpack sampling	Moderate	Evaluate success of closure Review annually	
Safety	Search and rescue Human and wildlife conflicts	No incidents	Incident reports and GIS	High	Evaluate success of closure Review annually	

*High = Daily to weekly or in accordance with standard protocol for parameter; Moderate = Monthly to seasonally and during peak days or use periods; Low = Annually during peak use periods or at the end of the season.

Record of Decision for Winter Use

Monitoring and Adaptive Management

Table 12. Adaptive Management Indicators, Standards, and Methods by Management Zone, Yellowstone and Grand Teton National Parks and the John D. Rockefeller, Jr., Memorial Parkway Winter Use Plan.

Management Zone → Resource Value	Indicator	Standard	Preliminary Method	Monitoring Intensity*	Management Actions
Air Quality	Odor	Area free of odor of human-caused pollutants not less than 90% of a given 24-hour period	Park visitor survey	High	Implement or require new technologies Reduce vehicle numbers/ reduce carrying capacity
	Visibility	No degradation. Area free of any visible sign of human-caused pollutants not less than 95% of a each 24-hour period Particulate matter not to exceed	Photo survey and time lapse video Fixed site sampling of particulate matter (PM _{2.5} and PM ₁₀)	High	Implement or require new technologies Reduce vehicle numbers/ reduce carrying capacity
Sound	Distance and time human-caused sound is audible	% time vehicles audible at attraction sites not to exceed 50%	Audibility logging	High	Implement or require new technologies Reduce vehicle numbers/ Reduce carrying capacity
Water/ Snowpack	Water quality: pH, Hydrogen, Ammonium, Calcium, Sulfate, Nitrate, and VOC's	State and federal water quality standards	Spring runoff surface water sampling Snowpack sampling	Moderate	Determination and application of best management practices Implement or require new technologies Reduce vehicle numbers/ reduce carrying capacity
Visitor Experience	Perceptions of crowding at attraction sites	Visitors are able to see, smell, and hear the natural environment at popular attraction sites such as Old Faithful or Jackson lake	Visitor survey and Encounter rates	High	Establish carrying capacity Reduce visitor numbers
	Visitor satisfaction with opportunities to experience park values (wildlife viewing, scenery and clean air) affordable services and access to information.	Visitors are highly satisfied with their park experience	Visitor survey	High	Establish carrying capacity Reduce visitor numbers

*High = Daily to weekly or in accordance with standard protocol for parameter; Moderate = Monthly to seasonally and during peak days or use periods; Low = Annually during peak use periods or at the end of the season.

Record of Decision for Winter Use

Monitoring and Adaptive Management

Table 13. Adaptive Management Indicators, Standards, and Methods by Management Zone, Yellowstone and Grand Teton National Parks and the John D. Rockefeller, Jr., Memorial Parkway Winter Use Plan.

Management Zone →		Plowed Road				Management Actions	
Resource Value	Indicator	Preliminary Standard	Method	Monitoring Intensity*			
Air Quality (Public Health)	Odor	Area free of any noticeable odor of human-caused pollutants at least 90% of each 24-hour period	Park visitor survey	Moderate		Implement or require new technologies	Reduce emissions and carrying capacity
	Visibility	No degradation. Area free of any visible sign of human-caused pollutants at least 95% of each 24-hour period	Photo survey and time lapse video Fixed site sampling of particulate matter (PM _{2.5} and PM ₁₀)	Moderate		Implement or require new technologies	Reduce emissions and carrying capacity
Wildlife	Vehicle caused wildlife mortality	No significant adverse effects	Incident reports, roadside surveys, GIS, and visual observations	High		Sign and reduce speed limits in areas of recurring incidents	
	Bison movements on plowed roads	No significant adverse effects	Continue bison monitoring flights and photo surveys	High		Evaluate alternate transportation system	Close roads
	Wildlife harassment or displacement due to vehicle sound or movements	No significant adverse effects	Incident reports and photo surveys	High		Increase law enforcement and information programs	Close areas to use
Sound	Wildlife trapped by snow berms in road corridor	No significant adverse effects	Incident reports, roadside surveys, and visual observations	High		Increase number of exit berms – reevaluate location of existing exits	Evaluate alternate transportation system
	Distance and time human-caused sound is audible	Time vehicles audible at 100' distance not to exceed 50%	Audibility logging	High		Implement or require new technologies	Reduce sound emissions and vehicle numbers
Water/Snowpack	Water quality: pH, Hydrogen, Ammonium, Calcium, Sulfate, Nitrate, and VOCs	State and federal water quality standards	Spring runoff surface water sampling Snowpack sampling	Moderate		Determination and application of best management practices	Implement or require new technologies
Visitor Experience	Perceptions of crowding	Visitors are able to see, smell, and hear the natural environment at roadside pullouts and interpretive trails	Visitor survey Encounter rates	High		Establish vehicle carrying capacity	Establish visitor carrying capacity/reduce visitor numbers
	Visitor satisfaction levels with opportunities to experience park values and opportunities to view wildlife, scenery, and experience clean air and solitude.	Visitors are highly satisfied (190%) with their park experience	Visitor survey	High		Establish visitor carrying capacity/reduce visitor numbers	

*High = Daily to weekly or in accordance with standard protocol for parameter; Moderate = Monthly to seasonally and during peak days or use periods; Low = Annually during peak use periods or at the end of the season.

Record of Decision for Winter Use

Monitoring and Adaptive Management

Table 14. Adaptive Management Indicators, Standards and Methods by Management Zone, Yellowstone and Grand Teton National Parks and the John D. Rockefeller, Jr., Memorial Parkway Winter Use Plan.

Management Zone →		3 Groomed Motorized Route Clean and Quiet			
Resource Value	Indicator	Preliminary Standard	Method	Monitoring Intensity*	Management Actions
Air Quality (Public Health)	Odor	Area free of any noticeable odor of human-caused pollutants at least 90% of each 24-hour period	Park visitor survey	Moderate	Implement or require new technologies Reduce emissions and carrying capacity
	Visibility	No degradation. Area free of any visible sign of human-caused pollutants at least 95% of each 24-hour period	Photo survey and time lapse video Fixed site sampling of particulate matter (PM _{2.5} and PM ₁₀)	Moderate	Implement or require new technologies Reduce emissions and carrying capacity
Wildlife	Wildlife mortalities caused by oversnow vehicles	No significant adverse effects	Incident reports, roadside surveys, photo surveys, and visual observations	Low	Sign and reduce speed limits in areas of recurring incidents Increase law enforcement and information programs Close areas to use
		Wildlife harassment or displacement due to vehicle sound or movements	Incident reports, photo surveys, and visual observation	High	Eliminate grooming operations Close roads
	Bison use of groomed surfaces	No significant adverse effects	Photo surveys, air surveys, and telemetry	High	
	Lynx habitat effectiveness	No significant adverse effects	Camivore and snowshoe hare track surveys		
Sound	Distance and time human-caused sound is audible	Time vehicles audible at 100' distance not to exceed 50 %	Audibility logging	Moderate	Implement new technologies Reduce sound emissions or reduce vehicle numbers
		State and federal water quality standards	Spring runoff surface water sampling Snowpack sampling	High	Determination and application of best management practices Implement or require new technologies Reduce vehicle emissions and carrying capacity
Water/Snowpack	Perceptions of crowding	Visitors are able to see, smell, and hear the natural environment at roadside pullouts and interpretive trails	Visitor survey Encounter rates	High	Establish visitor carrying capacities Reduce visitor numbers
		Smoothness of groomed surface	Visual observation		Increase grooming Reduce vehicle numbers when threshold temperature is reached
Visitor Experience	Visitor satisfaction levels with opportunities to experience park values and opportunities to view wildlife, scenery, and experience clean air and solitude.	Visitors are highly satisfied (190%) with their park experience	Visitor survey	High	Establish visitor carrying capacities Reduce visitor numbers

*High = Daily to weekly or in accordance with standard protocol for parameter; Moderate = Monthly to seasonally and during peakdays or use periods; Low = Annually during peak use periods or at the end of the season.
 †Mogul study to determine temperature and vehicle numbers for this management action is ongoing (Alger and Cavanaugh 2000).

Record of Decision for Winter Use

Monitoring and Adaptive Management

Table 15. Adaptive Management Indicators, Standards and Methods and by Management Zone, Yellowstone and Grand Teton National Parks and the John D. Rockefeller, Jr., Memorial Parkway Winter Use Plan.

Management Zone →		4 Groomed Motorized Route			
Resource Value	Indicator	Preliminary Standard	Method	Monitoring Intensity*	Management Actions
Air Quality (Public Health)	Visibility	No degradation. Area free of any visible sign of human-caused pollutants at least 95% of each 24-hour period	Photo survey and time lapse video Fixed site sampling of particulate matter (PM _{2.5} and PM ₁₀)	High	Implement or require new technologies Reduce emissions and carrying capacity
	Odor	Area free of any noticeable odor of human-caused pollutants at least 95% of each 24-hour period	Visitor survey	Moderate	Implement or require new technologies Reduce emissions and carrying capacity
Wildlife	Wildlife mortalities caused by over-snow vehicles	No significant adverse effects	Incident reports and roadside surveys, photo surveys, and visual observations	Low	Sign and reduce speed limits in areas of recurring incidents Increase law enforcement and information programs Close areas to use Increase law enforcement
	Wildlife harassment or displacement due to vehicle sound or movements	No significant adverse effects	Incident reports and photo surveys	High	Eliminate road grooming operations Close roads
	Bison use of groomed surfaces	No significant adverse effects	Photo and air surveys	High	
Sound	Lynx habitat effectiveness	No significant adverse effects	Carnivore and snowshoe hare track surveys	High	
	Distance and time human-caused sound is audible	Time vehicles audible at 100' distance not to exceed 50 %	Audibility logging	High	Require or implement new technologies Reduce vehicle emissions or reduce vehicle numbers
Water/Snowpack	Water quality: pH, Hydrogen, Ammonium, Calcium, Sulfate, Nitrate, and VOCs	State and federal water quality standards	Spring runoff surface water sampling Snowpack sampling	High	Determination and application of best management Require or implement new technologies Reduce vehicle emissions or reduce vehicle numbers
	Perceptions of crowding	Visitors are able to see, smell, and hear the natural environment at roadside pullouts and interpretive trails	Visitor survey Encounter rates	High	Establish visitor carrying capacities/ reduce visitor numbers
Visitor Experience	Smoothness of groomed surface	No worse than fair 20% of a 24-hour period	Visual observation		Groom more frequently Reduce vehicle numbers when threshold temperature is reached ¹
	Visitor satisfaction levels with opportunities to experience park values and opportunities to view wildlife, scenery, and experience clean air and solitude	Visitors are highly satisfied (+90%) with their park experience	Visitor survey	High	Establish visitor carrying capacities/reduce visitor numbers

*High = Daily to weekly or in accordance with standard protocol for parameter; Moderate = Monthly to seasonally and during peak days or use periods; Low = Annually during peak use periods or at the end of the season.
¹Mogul study to determine temperature and vehicle numbers for this management action is ongoing (Alger and Gwallney 2000).

Record of Decision for Winter Use

Monitoring and Adaptive Management

Table 16. Adaptive Management Indicators, Standards and Methods by Management Zone, Yellowstone and Grand Teton National Parks and the John D. Rockefeller, Jr., Memorial Parkway Winter Use Plan.

Management Zone →	5 Groomed Motorized Trail Clean and Quiet				
Resource Value	Indicator	Preliminary Standard	Method	Monitoring Intensity*	Management Action
Air Quality (Public Health)	Odor	Area free of any noticeable odor of human-caused pollutants	Park visitor survey	Low	Implement or require new technologies Reduce emissions and carrying capacity
	Visibility	No degradation. Area free of any visible sign of human-caused pollutants	Photo survey and time lapse video Fixed site sampling of particulate matter (PM _{2.5} and PM ₁₀)	Low	Implement or require new technologies Reduce emissions and carrying capacity
Wildlife	Wildlife harassment or displacement from habitat as a result of vehicle sound or movements	No significant adverse effects	Incident reports and photo surveys, and visual observations	High	Sign and reduce speed limits in areas of recurring incidents Increase law enforcement and information programs Close areas to use
	Bison use of groomed surfaces Lynx habitat effectiveness	No significant adverse effects	Photo and air surveys Carnivore and snowshoe hare track surveys	Low High	Eliminate grooming operations Mitigate effects or close trail
Sound	Distance and time human-caused sound is audible	Time vehicles audible at 100' distance not to exceed 25 %	Audibility logging	High	Implement or require new technologies Reduce vehicle emissions and carrying capacity
	Water quality: pH, Hydrogen, Ammonium, Calcium, Sulfate, Nitrate, and VOC's	State and federal water quality standards	Spring runoff surface water sampling Snowpack sampling	High	Discrimination and application of best management practices Implement or require new technologies Reduce vehicle emissions and carrying capacity
Visitor Experience	Perceptions of crowding	Visitors are able to see, smell, and hear the natural environment at roadside pullouts and interpretive trails. Moderate levels of solitude and quiet available	Visitor survey Encounter rates	High	Establish visitor carrying capacities Reduce visitor numbers
	Smoothness of groomed surface	No worse than fair 30% of the winter season	Visual observation	Low	Increase grooming Reduce vehicle numbers when threshold temperature is reached ¹ Establish visitor carrying capacities Reduce visitor numbers
	Visitor satisfaction levels with opportunities to experience park values and opportunities to view wildlife, scenery, and experience clean air and solitude.	Visitors are highly satisfied (+90%) with their park experience	Visitor survey	High	

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¹Mogul study to determine temperature and vehicle numbers for this management action is ongoing (Alger and Givaltney 2000).

Record of Decision for Winter Use

Monitoring and Adaptive Management

Table 17. Adaptive Management Indicators, Standards and Methods by Management Zone, Yellowstone and Grand Teton National Parks and the John D. Rockefeller, Jr., Memorial Parkway Winter Use Plan.

Groomed Motorized Trail						
Management Zone →	Resource Value	Indicator	Preliminary Standard	Method	Monitoring Intensity*	Management Action
Air Quality (Public Health)	Odor		Area free of any noticeable odor of human-caused pollutants	Park visitor survey	Low	Implement or require new technologies Reduce emissions and carrying capacity
	Visibility		No degradation. Area free of any visible sign of human-caused pollutants	Photo survey and time lapse video Fixed site sampling of particulate matter (PM _{2.5} and PM ₁₀)	Low	Implement or require new technologies Reduce emissions and carrying capacity
Wildlife	Wildlife harassment or displacement from habitat as a result of vehicle sound or movements		No significant adverse effects	Incident reports and photo surveys, and visual observation	Moderate	Sign and reduce speed limits in areas of recurring incidents Increase law enforcement and information programs Close areas to use
			No significant adverse effects	Photo and air surveys Carnivore and snowshoe hare track surveys	Low High	Eliminate grooming operations Mitigate effects or close trail
Sound	Distance and time human-caused sound is audible		No significant adverse effects	Audibility logging	High	Implement new technologies Reduce sound emissions or reduce vehicle numbers
			Time vehicles audible at 100' distance not to exceed 25 %		High	Implement new technologies Reduce sound emissions or reduce vehicle numbers
Water/Snowpack	Surface water sampling of pH, Hydrogen, Ammonium, Calcium, Sulfate, Nitrate, and VOCs		State and federal water quality standards	Spring runoff surface water sampling Snowpack sampling	Low	Determination and application of best management practices Implement or require new technologies Reduce vehicle emissions and carrying capacity
			Visitors are able to see, smell, and hear the natural environment at roadside pullouts and interpretive trails. Moderate levels of solitude and quiet available	Visitor survey Encounter rates	High	Establish visitor carrying capacities Reduce visitor numbers
Visitor Experience	Perceptions of crowding		No worse than fair 30% of the winter season	Visual observation	Low	Increase grooming Reduce vehicle numbers when threshold temperature is reached ¹
			Visitors are highly satisfied (190%) with their park experience	Visitor survey	High	Establish visitor carrying capacities Reduce visitor numbers

*High = Daily to weekly or in accordance with standard protocol for parameter; Moderate = Monthly to seasonally and during peak days or use periods; Low = Annually during peak use periods or at the end of the season.
¹Mogul study to determine temperature and vehicle numbers for this management action is ongoing (Alger and Gwalthney 2000).

Record of Decision for Winter Use

Monitoring and Adaptive Management

Table 18. Adaptive Management Indicators, Standards and Methods by Management Zone, Yellowstone and Grand Teton National Parks and the John D. Rockefeller, Jr., Memorial Parkway Winter Use Plan.

Management Zone →		Ungroomed Motorized Trail ⁷				
Resource Value	Indicator	Preliminary Standard	Method	Monitoring Intensity*	Management Action	
Air Quality (Public Health)	Odor	Area free of any noticeable odor of human-caused pollutants	Park visitor survey	Low	Implement or require new technologies Reduce emissions and carrying capacity	
	Visibility	No degradation. Area free of any visible sign of human-caused pollutants	Photo survey and time lapse video Fixed site sampling of particulate matter (PM _{2.5} and PM ₁₀)	Low	Implement or require new technologies Reduce emissions and carrying capacity	
Wildlife	Wildlife harassment or displacement from habitat as a result of vehicle sound or movements	No significant adverse effects	Incident reports and photo surveys, and visual observation	Moderate	Sign and reduce speed limits in areas of recurring incidents Increase law enforcement and information programs Close areas to use Mitigate effects or close trail	
	Lynx habitat effectiveness	No significant adverse effects	Carnivore and snowshoe hare track surveys	High	Implement new technologies Reduce sound emissions or reduce vehicle numbers	
Sound	Distance and time human-caused sound is audible	Time vehicles audible at 100' distance not to exceed 25 %	Audibility logging	High	Determination and application of best management practices Implement or require new technologies Reduce vehicle emissions and carrying capacity	
	Surface water sampling of pH, Hydrogen, Ammonium, Calcium, Sulfate, Nitrate, and VOCs	State and federal water quality standards	Spring runoff surface water sampling Snowpack sampling	Low	Establish visitor carrying capacities Reduce visitor numbers	
Visitor Experience	Perceptions of crowding	Visitors are able to see, smell, and hear the natural environment at roadside pullouts and interpretive trails. Moderate levels of solitude and quiet available	Visitor survey Encounter rates	High	Establish visitor carrying capacities Reduce visitor numbers	
	Visitor satisfaction levels with opportunities to experience park values and opportunities to view wildlife, scenery, and experience clean air and solitude	Visitors are highly satisfied (+90%) with their park experience	Visitor survey	High	Establish visitor carrying capacities Reduce visitor numbers	

*High = Daily to weekly or in accordance with standard protocol for parameter; Moderate = Monthly to seasonally and during peak days or use periods; Low = Annually during peak use periods or at the end of the season.

Record of Decision for Winter Use

Monitoring and Adaptive Management

Table 19. Adaptive Management Indicators, Standards, and Methods by Management Zone, Yellowstone and Grand Teton National Parks and the John D. Rockefeller, Jr., Memorial Parkway Winter Use Plan.

Management Zone →		Groomed Nonmotorized Trail				
Resource Value	Indicator	Preliminary Standard	Method	Monitoring Intensity*	Management Actions	
Air Quality (Public Health)	Odor	Area free of any noticeable odor of human-caused pollutants	Park visitor survey	Low	Implement or require new technologies Reduce emissions and carrying capacity	
	Visibility	No degradation. Area free of any visible sign of human-caused pollutants	Photo survey and time lapse video Fixed site sampling of particulate matter (PM _{2.5} and PM ₁₀)	Low	Implement or require new technologies Reduce emissions and carrying capacity	
Wildlife	Wildlife harassment or displacement from habitat as a result of visitor activity or movements	No significant adverse effects	Incident reports and photo surveys	High	Increase law enforcement and visitor information Use of designated trails only Close areas to use	
	Lynx habitat effectiveness	No significant adverse effects	Carnivore and snowshoe hare track surveys	High	Eliminate grooming operations Mitigate effects or close trail	
Sound	Distance and time human-caused sound is audible	Time vehicles audible at 500' distant from trailhead or motorized route not to exceed 10 % during daylight hours (8AM-4PM)	Audibility logging	High	Implement new technologies Reduce sound emissions or reduce vehicle numbers	
	Perceptions of crowding	Visitors are able to see, smell, and hear the natural environment and to experience quiet and solitude	Visitor survey Encounter rates	High	Establish visitor carrying capacities Reduce visitor numbers	
Visitor Experience	Visitor satisfaction levels with opportunities to experience park values and opportunities to view wildlife, scenery, and experience clean air and solitude	Visitors are highly satisfied (+90%) with their park experience	Visitor survey	High	Establish visitor carrying capacities Reduce visitor numbers	

*High = Daily to weekly or in accordance with standard protocol for parameter; Moderate = Monthly to seasonally and during peak days or use periods; Low = Annually during peak use periods or at the end of the season.

Record of Decision for Winter Use Monitoring and Adaptive Management

Table 20. Adaptive Management Indicators, Standards and Methods by Management Zone, Yellowstone and Grand Teton National Parks and the John D. Rockefeller, Jr., Memorial Parkway Winter Use Plan.

Management Zone →	9 Ungroomed Nonmotorized Trail or Area				
Resource Value	Indicator	Preliminary Standard	Method	Monitoring Intensity*	Management Actions
Air Quality (Public Health)	Odor	Area free of any noticeable odor of human-caused pollutants	Park visitor survey	Low	Implement or require new technologies Reduce emissions and carrying capacity
	Visibility	No degradation. Area free of any visible sign of human-caused pollutants	Photo survey and time lapse video Fixed site sampling of particulate matter (PM _{2.5} and PM ₁₀)	Low	Implement or require new technologies Reduce emissions and carrying capacity
Wildlife	Human bear conflicts during pre- and post denning periods	No significant adverse effects	Mapping of denning areas	Moderate	Increase law enforcement and visitor information Use of designated trails only Close areas to use
	Wildlife harassment or displacement from habitat as a result of visitor activity or movements	No significant adverse effects	Incident reports and photo surveys	High	Increase law enforcement and visitor information Use of designated trails only Close areas to use
	Lynx habitat effectiveness	No significant adverse effects	Carnivore and snowshoe hare track surveys	High	Mitigate effects or close trail
Sound	Distance and time human-caused sound is audible	Time vehicles audible at 500' distant from trailhead or motorized route not to exceed 10 % during daylight hours (8AM-4PM). Visitors are able to see, smell, and hear the natural environment. Frequent opportunities to experience quiet and solitude are available	Audibility logging	High	Implement new technologies Reduce sound emissions or reduce vehicle numbers
	Perceptions of crowding	Visitors are highly satisfied (79%) with their park experience	Visitor survey Encounter rates	High	Establish visitor carrying capacities Reduce visitor numbers
Visitor Experience	Visitor satisfaction levels with opportunities to experience park values and opportunities to view wildlife, scenery, and experience clean air and solitude	Visitors are highly satisfied (79%) with their park experience	Visitor survey	High	Establish visitor carrying capacities Reduce visitor numbers

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Record of Decision for Winter Use

Monitoring and Adaptive Management

Table 21. Adaptive Management Indicators, Standards, and Methods by Management Zone, Yellowstone and Grand Teton National Parks and the John D. Rockefeller, Jr., Memorial Parkway Winter Use Plan.

Management Zone →	10 Backcountry Nonmotorized Trail or Area				
Resource Value	Indicator	Preliminary Standard	Method	Monitoring Intensity*	Management Actions
Air Quality (Public Health)	Odor	Area free of any noticeable odor of human-caused pollutants	Park visitor survey	Low	Reduce emissions and carrying capacity Implement or require new technologies
	Visibility	No degradation. Area free of any visible sign of human-caused pollutants	Photo survey and time lapse video Fixed site sampling of particulate matter (PM _{2.5} and PM ₁₀)	Moderate	Reduce emissions and carrying capacity Implement or require new technologies
Wildlife	Human bear conflicts during pre- and post denning periods	No significant adverse effects	Mapping of denning areas	High	Increase law enforcement and visitor information Use of designated trails only Close areas to use
	Wildlife harassment or displacement from habitat as a result of visitor activity or movements	No significant adverse effects	Incident reports and photo surveys	High	Increase law enforcement and visitor information Use of designated trails only Close areas to use
	Lynx habitat effectiveness	No significant adverse effects	Carnivore and snowshoe hare track surveys	High	Mitigate effects or close trail to use
Water Quality/Snowpack	Water quality: pH, hydrogen, ammonium, calcium, sulfate, nitrate, and VOCs	State and federal water quality standards	Spring runoff surface water sampling Snowpack sampling	Moderate	Determination and application of best management practices Implement or require new technologies Reduce vehicle emissions and carrying capacity
Sound	Distance and time human-caused sound is audible	Time vehicles audible at 500' distant from trailhead or motorized route not to exceed 10 % during daylight hours (8AM-4PM). Vehicles not audible beyond 1000' from TH or motorized route.	Audibility logging	Moderate	Implement new technologies Reduce sound emissions or reduce vehicle numbers
	Perceptions of crowding	Visitors are able to see, smell, and hear the natural environment. Frequent opportunities to experience quiet and solitude are available	Visitor survey Encounter rates	Moderate	Establish visitor carrying capacities Reduce visitor numbers
Visitor Experience	Visitor satisfaction levels with opportunities to experience park values and opportunities to view wildlife, scenery, and experience clean air and solitude	Visitors are highly satisfied (+90%) with their park experience	Visitor survey	Moderate	Establish visitor carrying capacities Reduce visitor numbers

*High = Daily to weekly or in accordance with standard protocol for parameter; Moderate = Monthly to seasonally and during peak days or use periods; Low = Annually during peak use periods or at the end of the season.

Record of Decision for Winter Use

Monitoring and Adaptive Management

Table 22. Adaptive Management Indicators, Standards, Methods by Management Zone, Yellowstone and Grand Teton National Parks and the John D. Rockefeller, Jr., Parkway Winter Use Plan.

Management Zone →		II Sensitive Resource Area				
Resource Value	Indicator	Preliminary Standard	Method	Monitoring Intensity*	Management Actions	
Air Quality (Public Health)	Visibility	No degradation.	Photo survey and time lapse video Fixed site sampling of particulate matter (PM _{2.5} and PM ₁₀)	Moderate	Evaluate success of closure	
Wildlife	Wildlife harassment or displacement from habitat as a result of visitor activity or movements	No incidents	Incident reports and photo surveys	High	Evaluate success of closure	
	Human / grizzly bear conflicts during pre or post denning periods	No incidents	Mapping of denning areas	High	Evaluate success of closure	
	Lynx habitat effectiveness	No adverse effects	Carnivore and snowshoe hare track surveys	High	Evaluate success of closure	

*High = Daily to weekly or in accordance with standard protocol for parameter; Moderate = Monthly to seasonally and during peak days or use periods; Low = Annually during peak use periods or at the end of the season

Attachment B—Summary of Public Comments on the FEIS

Summary of Public Comment on the FEIS

Introduction

After the FEIS was published on October 10, 2000 the public was invited to comment up until October 31. The total body of comment divides into two basic types. First, the content of most of the documents fell into categories of repeated topics, statements and rationale that were not explicit to the FEIS analysis. NPS read all pieces of mail and coded the statements that were made in each. A summary of this body of comment is provided in a table with accompanying conclusions. In this category, there were about 10,880 responses in the form of letters, postcards and e-mails. Of these, 6,717 were form letters and 4,163 were not.

A second set of letters and e-mails, numbering 55, is distinguished by more discussion specific to the FEIS and the process that produced it. They generally provide greater amounts of detail and rationale for their statements. This set of correspondence includes the cooperating agencies, other federal, tribal, state or local agencies (or their representatives), concessioners, advocacy groups, and a number of individuals. Most had commented earlier on the Draft EIS. These letters were read and summarized point by point for the decision maker, to whom copies of the letters were also submitted. This attachment contains a general summary of the letters, by group type.

Summary of Coded Comments

Comment letters were coded in order to determine the following information:

- Support for or against a specific alternative
- Support for or against individual components of a specific alternative
- Support for or against a specific mode of recreational oversnow travel
- Flaws in the analysis presented in the FEIS
- Pertinent new information or data that was omitted from the FEIS
- New alternatives that were not analyzed in the FEIS

Categories of comments and the number received are listed in the following table. The comments are listed with the most often received comments descending to the least often received comments. An individual document may contain from one to many separate comments.

Count	Classification
6446	I support elimination of snowmobiles in the three park units.
5491	I support Alternative G.
5424	The NPS has the responsibility under its mandate to protect resources.
4724	Snowcoaches are a good means of allowing access while eliminating effects on wildlife and visitor experience.
3324	I support the use of snowmobiles in the parks.
2392	The analysis is flawed, science is bad; numbers that Sierra Club gave you . . . are biased; etc.
2177	The snowmobile industry is trying hard to meet needs for cleaner, quieter snowmobiles.
1735	Snowmobilers have a right to personal access to the park.
1480	Snowmobiles don't impact resources, or have minimal impact.
1413	Snowmobiles have significant impacts on air quality and the natural soundscape.
1361	Support for specific alternative Revised E.
1182	Snowmobiles have significant impacts on wildlife.
890	Snowmobiles have significant impacts on the winter visitor experience.
867	I believe that banning snowmobiles is an overkill reaction to problems associated with current snowmobile technology.
663	Support for specific EIS alternative A.
653	Alternative G will have devastating economic impacts.
567	People should be allowed to visit the parks using any means of access they wish.
381	Summer/winter comparisons . . . i.e., buses versus snowmobiles, emissions, crowding, wildlife impacts.
323	The parks are for all the people, not just the "elite."
225	Alternative G discriminates against snowmobilers; if snowmobiling is eliminated, skiing should be eliminated too.
225	No Comment.
184	I would like to see a phase-in of clean and quiet snowmobiles.
142	Economic impacts of eliminating snowmobile use are overstated.
111	No Road Grooming.
96	Support for specific EIS alternative C.
94	I support clean, quiet and more environmentally friendly snowmobiles or snowcoaches.
91	Support for specific EIS alternative F.
65	People who are walking and skiing disturb wildlife more than people who ride on machines.
59	Support for specific EIS alternative E.
52	The analysis is good(for whatever reason).
45	The snowmobile industry is not responsive to needed technological changes for environmental protection.
35	Support for specific EIS alternative B.
18	No Vehicles.
16	Pro-snowplane—Snowplanes don't impact resources.
12	Support for specific EIS alternative D.
9	Support for specific alternative Natural Regulation Alternative.
8	NEPA process is flawed and not enough time to comment on FEIS.
7	Duplicates.
5	There is no feasibility analysis for snowcoach operation, snowcoaches will make the park inaccessible.
2	NPS is not responsive to people who snowmobile or snowplane.
2	There should be a multiple-use alternative.
1	NPS should not use military ordinance for avalanche control.
1	NPS ignored reasonable suggestions from the cooperating agencies.
1	NPS' selection was not driven by facts or need for action.

One type of comment that was not included in the overall document count were e-mails received from an internet polling site named "vote.com." The e-mails that were received were the result of an ongoing poll about snowmobile use. People responding to the poll were asked to vote a "yes" or "no" to the question "Should snowmobiles be banned from Yellowstone Park?" Adjacent to the "yes" vote was the statement, "People could still take winter tours in cleaner, quieter snow coaches." Adjacent to the "no" vote was the statement, "Banning recreational snowmobile users from the park would hurt local businesses." The results were 619 "yes" votes and 1970 "no" votes. There was some conflicting information concerning the privacy policy statement of "Vote.com." The site states that the vote is confidential, but the results received included the e-mail address of each person voting. A comment was also received expressing concern about the "Vote.com" comments.

Summary of Individual Letter Contents

Federal Government, Tribal Governments

Comments on the FEIS were received from: U.S. Environmental Protection Agency, U.S. Bureau of Reclamation, The Shoshone-Bannock Tribes, Senator Michael B. Enzi of Wyoming, and from Donald A. Manzullo of the U.S. House of Representatives' Committee on Small Business.

EPA has no environmental objections to the FEIS preferred alternative. EPA finds that the FEIS adequately discloses the impacts of all alternatives, and is improved from the DEIS by adequately responding to comments from EPA, other agencies and the public.

The tribes recommend the implementation of Alternative F, citing the description of the alternative as rationale. They further state that the trust obligations owed by the U.S. to American Indian tribes outweighs any commitment to snowmobilers or other recreationists, or to the states of Wyoming, Montana and Idaho. They feel that government to government consultation was inadequate.

U.S. Bureau of Reclamation expresses concerns about the ongoing business, research, data collection and administrative travel necessary for BOR to carry out its duties within the parks. They indicate the FEIS is unclear about the options BOR has for necessary travel, since most of the routes used by the agency are designated for snowcoach travel only, and that the agency must travel in the parks to collect data necessary in forecasting

snowmelt, and reservoir function including flood control. Winter access is necessary to meet agency responsibilities.

U.S. Senate, Senator Michael B. Enzi of Wyoming expresses deep concerns about how NPS has mishandled the opportunity to provide clear direction and a vision for management. He states that NPS has chosen to proceed with a politically biased, predetermined conclusion that excludes the community and places the parks out of reach for most Americans in the winter. Senator Enzi states that snowcoach access only is infeasible for several reasons, and that it is evident the snowmobile industry has available technology to comply with any NPS noise or emission standards NPS might impose. He also states that NPS violated NEPA and several other laws in this process.

Donald A. Manzullo, U.S. House of Representatives, Committee on Small Business references testimony from the July 13, 2000 hearing before the House Small Business Tax, Finance & Exports Subcommittee (The Impact of Banning Snowmobiles Inside National Parks on Small Business, Serial No. 106-68). He states that NPS has ignored the main thrust of the concerns expressed during the DEIS public comment period by reiterating support for alternative G. He feels that a snowcoach only system will not work and that the economic impacts from this alternative are large.

State Government, Agencies

Comments were received from the governors of the States of Idaho, Montana and Wyoming, and from State Senator Colin Simpson of Wyoming. All three states were cooperating agencies in the effort.

Governor Kempthorne of Idaho attaches to his letter a note from Carl Wilgus, cooperating agency representative from the State of Idaho, stating that the NPS has ignored, discounted or minimized the good faith input from the State of Idaho. Mr. Wilgus states that the NPS has repeatedly missed deadlines and then unreasonably expected the cooperating agencies to comply with unreasonable deadlines. He states the NPS prematurely selected a preferred alternative before reviewing all of the public comment on the DEIS. Among the Governor's comments are the following. The revised alternative E submitted by the cooperating agencies was not adequately considered by the NPS. The cooperating agencies were denied representation on the identification (sic) team. The choice of alternative G is not grounded in either

scientific fact or public support. The elimination of snowmobiles will only create greater congestion and safety problems in other popular locations outside the parks. The loss of the personal freedom to ride snowmobiles into the parks is an irreversible and irretrievable commitment of resources. The economic analysis presented in the DEIS is flawed because the NPS failed to recognize the "Law of Dimensioning Returns" (sic) (that the revenue generated in the winter allows local businesses to stay open, covers the cost of operations and keeps the community alive.) None of the alternatives presented in the FEIS are acceptable to the State of Idaho. The State of Idaho strongly supports revised alternative E.

The Honorable Colin B. Simpson, Wyoming State Legislature states that by eliminating the preferred access for 60% of current visitors, NPS is clearly acting in the biased interest of a minority of its clients. He indicates the ban is unreasonable and unsubstantiated, and agrees with the letter from Park County Commissioners (WY). Among other statements in the letter are: adaptive management provisions could deny access to the park without due consideration of benefits and enjoyment; negative economic impact on gateway communities; and the FEIS is flawed by not addressing economic feasibility of snowcoaches.

Governor Marc Racicot of Montana would like thorough consideration of the Montana Preferred Alternative that was submitted during the comment period on the DEIS. Governor Racicot was not satisfied with the NPS response to Montana's alternative that was published in the FEIS. In addition, the Governor expresses the following: the lack of effort to reach a broader consensus (by NPS); request for a complete evaluation of the Montana alternative to be conducted and provided to them; request that the NPS include flexibility in Record of Decision regarding cleaner and quieter snowmobile technology; and request that the NPS include flexibility with regard to snowcoach only travel to plan for the possibility that the proposal will not work.

Governor Jim Geringer of Wyoming is extremely disappointed in the NPS's failure to fully comply with the procedures outlined in the National Environmental Policy Act (NEPA). He states the FEIS contains many information gaps, which are the result of an unrealistic timeframe and a flawed NEPA process. Wyoming does not support alternative G and indicates that the analysis presented in the FEIS does not support that alternative as a final

decision. Other concerns noted include: the state was not adequately consulted and its information was ignored; cleaner quieter snowmobiles have an appropriate role to play in the parks; NPS has failed to conduct a feasibility study of a mass transportation system to service all entrances; and the Record of Decision should include some type of escape clause or back-up plan to guarantee public access in the event snowcoaches fail to provide reliable service from all entrances. The Governor indicates support for adaptive management including the utilization of cleaner and quieter snow machines in the parks, as they are developed and notes there are currently no emission or sound standards for snowcoaches. He states that NPS will continue to use snowmobiles, and only when the NPS adopts coach only travel will it be fair to impose it on others.

Local Government Agencies

Comments were received from commissioners of: Park and Gallatin Counties, Montana; Park, Fremont and Teton Counties, Wyoming; and Teton and Fremont Counties, Idaho. A comment was also submitted by the Teton County (WY) Historic Preservation Board. Five counties were cooperating agencies in the effort.

The counties' general responses to the FEIS preferred alternative are:

- Park County Commissioners, Montana, express their total dissatisfaction with the FEIS. The timeline was unacceptable and the NPS has failed to comply with NEPA and its procedural requirements.
- Fremont County, Wyoming states that "the winter use plan you are planning to implement is unjust, and based on politics and emotions rather than science."
- Park County, Wyoming implores NPS to change its decision from the preferred alternative in the FEIS.
- Teton County Board of Commissioners, Wyoming, believes the selected preferred alternative did not receive adequate analysis and continues to be disappointed in how the NEPA process was used in the development of the winter use plans. Teton County initiated the "Clean Snowmobile Challenge", whose results indicate there are feasible ways to create a clean, quiet machine.
- Teton County Commissioners, Idaho, cannot support the preferred alternative G, stating the only alternative they can support is A, no action. They note agreement with Fremont County ID in declaring that the Reclamation Road is an RS2477 highway and is under local jurisdiction.

- Fremont County Board of Supervisors, Idaho, state: "Our greatest concerns come from the unknown outcomes as a result of the FEIS. Snowcoaches are the answer to all questions, according to alternative G, yet there is no plan for having clean and quiet, or adequate numbers, of said vehicles in place in the proposed 3 years."

- Gallatin County Commission, Montana, states: "Generally we do not find that the analysis and information that you use supports the preferred alternative. We base our concerns on inconsistencies between your statement of desired conditions, the data you provide, the criteria developed by the park service and a departure from the criteria developed at Idaho Falls in October 1998." Much of the letter quotes liberally from the Draft EIS to support their comments.

- Teton County Historic Preservation Board, Wyoming, indicates the board's consensus is supportive of preferred alternative G.

Common themes in all letters from the counties include the following:

- The preferred alternative has no basis in scientific fact. Instead of resolving issues that forced the development of the EIS, the NPS has opened the door to further litigation.
- Alternative G still provides for the administrative use of snowmobiles by employees living in the interior of Yellowstone. This is a glaring contradiction.
- The NPS made changes to the schedule without consultation or the consent of the cooperating agencies.
- The counties have repeatedly documented how delays in providing information and modeling data have precluded the counties from fulfilling their obligations.
- NPS reversed its decision to allow the cooperating agencies to participate on the FEIS planning team.
- The alternatives workshop in which the counties participated did not provide them with the opportunity to provide meaningful input.
- The FEIS ignores the utility of setting an overall carrying capacity for visitors.
- The FEIS ignores the utility of setting an overall carrying capacity for wildlife.
- The cooperating agencies do not support the incorporation of individual elements of the revised alternative E into the FEIS. The revised alternative E as submitted by the counties was not intended to be dissected and is only effective if incorporated as a whole.

- Leave the door open to all new technological advances for snowmobiles and allow them in the parks.

- The NPS has chosen to disregard and misconstrue the input the recommendations of the cooperating agencies.
 - YNP was set aside as a preserve for recreational enjoyment and use, and should be continued to be managed with this intent.
 - The economic impacts of eliminating snowmobiles will be devastating.
 - Over regulation by the federal government has been the demise of many industries.
 - NPS does not discuss or acknowledge the existence of current snowmobile technology that would help solve the problem.
 - The counties strongly disagree with the characterization of how the alternatives were formulated; banning snowmobiles goes far beyond what was agreed to.
 - Alternative G eliminates conflicts, but at the expense of an entire user group. It appears the resources could be protected and conflicts minimized while accommodating all user groups.
 - There is much doubt about the feasibility of going to snowcoaches only, and how this affects other users and commercial operators. A feasibility analysis should have been done.
 - The majority of winter visitors have told you that your preferred alternative is the one they prefer the least.
 - We challenge NPS to demonstrate how they've been cooperative and how cooperation is consistent with the preferred alternative.
- #### Environmental Groups
- Comments were received from groups or from individuals identifying themselves as speaking in behalf of a group. Comments were received from the following groups.*
- Jefferson County Environmental Network, Lakemills, Wisconsin
 - Predator Conservation Alliance, Bozeman, Montana
 - Blue Water Network, San Francisco, California
 - American Lands Alliance, Washington D.C.
 - Wildlands Center for Preventing Roads, Boulder, Colorado
 - Aspen Wilderness Workshop, Aspen, Colorado
 - Native Forest Network, Bozeman, Montana
 - Wyoming Chapter of the Sierra Club, Jackson, Wyoming
 - Greater Yellowstone Coalition, Bozeman, Montana
 - Schubert and Associates, Glendale, Arizona

- The Ecology Center, Inc., Missoula, Montana

Comments from these groups fall into several categories. Some groups express support for Alternative G. Some groups give qualified support to the alternative. Others express support for eliminating snowmobiles, but also see the need to eliminate any groomed trails and motorized oversnow use in the parks.

Most groups that support Alternative G indicate that snowmobiles should be removed from the parks sooner than 3 years if at all possible. They state that there is broad public support for eliminating snowmobiles in parks, and are optimistic about elements in the business community that welcome snowcoach transport. Other related comments are:

- Snowmobilers have been given too much time to “develop their rights.”
- There is no right to engage in a nonconforming use.
- NPS should better lay out its plan for transition to snowcoach only.
- Snowmobiles should be removed at the soonest time possible. Three year “phase-in” is unacceptable due to continuing impacts of noise, wildlife harassment, air pollution, and visitor disruption.
- Continued snowmobile use needs to be brought into compliance with laws.
- Snowmobile ban in the parks will not affect the snowmobile industry.
- Community business leaders recognize there could be benefits of a snowmobile ban.
- There are many places outside the parks that provide snowmobiling opportunities.
- There is broad public support for eliminating snowmobiles from parks.
- Sen. Thomas’ solution of separating snowmobilers and skiers is inadequate because it doesn’t address environmental impacts or noise.
- Snowmobilers disregard regulations, disrupting the integrity of wilderness and wildlife habitat.
- Changes will decrease noise, polluted air stresses to wildlife, and offer visitors a quality experience.
- Any trail grooming should still be done without conflicts with important wildlife habitat.
- The decision should also close YNP’s east entrance and eliminate the use of military ordinance.
- Interpretation, information and education should be emphasized in winter management.
- NPS risks violation of statutes, regulations and executive orders. The ROD should express the role of monitoring and that violations would be cause to halt offending uses.

- Implementation of a snowcoach system represents benefits that far exceed those raised in the FEIS.

- NPS can be a catalyst for innovation in snowcoach technology.

- Snowcoach transport should be attractive for visitors and fit the unique winter setting of the parks. NPS should determine the best design for this purpose and include current manufacturers, purchasers and clientele served by existing snowcoaches.

- A transition task force should be convened—composed of NPS, affected businesses and concessioners, local officials and environmental groups.

- NPS should initiate education and outreach to assist in the marketing of new winter recreation opportunities, to the benefit of gateway economies.

- NPS should investigate programs and funding strategies to facilitate the creation of a snowcoach mass-transit system, and affected local businesses should be given initial preference in the new system.

Those who express qualified support state that the preferred alternative is an improvement over current management. They indicate:

- Pleased that the plan replaces snowmobile use with snowcoaches.

- Snowmobiles affect air, water, sound, visitor experience, wildlife, and bison movement.

- Snowcoach use would continue to facilitate bison leaving the park in the winter. Winter use should only be allowed to the extent that it doesn’t have this impact.

- Would prefer alternative F in the DEIS, along with closure of YNP’s east entrance.

Those who do not support the preferred alternative also generally express the idea that the “decision” is probably the only legal recourse for NPS because of its mandate. They note that, while the plans represent an improvement over current management, concerns remain. Replacing snowmobiles with snowcoaches also should not be permitted. They indicate:

- The parks wildlife and ecosystem will continue to suffer from groomed routes for snowcoaches.

- Continued snowmobile use has unacceptable impacts and they should be removed immediately.

- NPS has no legal mandate to provide motorized access.

- The Biological Assessment fails to consider the impacts of road grooming on federally listed species.

- The FEIS is deficient.

- A complete ban on groomed routes and termination of all oversnow motorized use should have been considered in the EIS (a “true no-action alternative).

- There are no regulations permitting road grooming or snowcoach operation.

- FEIS failed to properly analyze the adverse impact of road grooming on bison.

- NPS failed to properly consider and respond to several issues raised in comments on the DEIS.

- The FEIS range of alternatives is inadequate, based on the settlement agreement as mandated by the judge.

- Many of the analysis points raised in the FEIS actually affirm the contentions in the lawsuit.

- Reserves the right to participate in further litigation.

Business Community, Including Park Concessioners

Comments were received from groups or from individuals identifying themselves as speaking in behalf of a group. Comments were received from the following groups.

- Riverton Community Development Association, Riverton, Wyoming.

- Pahaska Tepee Resort, Cody, Wyoming.

- International Leisure Hosts, Ltd., dba Flagg Ranch Resort, Tempe, Arizona.

- Cody Chamber of Commerce, Cody, Wyoming.

- Jackson Hole Chamber of Commerce, Jackson, Wyoming.

- West, South and East Gate Operators, YNP, West Yellowstone, Flagg Ranch, Pahaska Tepee.

- Mattracks Inc., Karlstad, Minnesota.

- Mr. David McCray, Two Top Snowmobile Rental, West Yellowstone, Montana.

- Mr. F.W. Howell, Yellowstone Arctic Yamaha, West Yellowstone, Montana.

- Mr. Pat Povah, Hamilton Stores, Yellowstone, Wyoming.

- Mr. Randy Roberson, Yellowstone Vacations, West Yellowstone, Montana.

Comments from most groups expressed firm opposition to alternative G. Some continue to express strong support for revised alternative E, and believe as stated in previous comments that E would meet the purpose and need for action. Statements from this body of comment include:

- Closing YNP to public snowmobiling will shift use to other public lands, and result in impacts on them.

- Alternative E is acceptable if the advisory groups are not packed with anti-multiple use advocates.

- Actions of the federal government to eliminate access to most of the area in the county destroys our means of making a living.

- Object to portions of the plan that limit or eliminate access or types of

access to the parks. This includes snowcoach only access, adaptive management, NPS managed snowcoaches, controlled stops in the parks, and limited to no access at the east entrance of YNP.

- Object to portions of the plan that have a negative economic impact on gateway communities—eliminating snowmobiles takes away the preferred mode of travel for 60% of YNPs historic visitors.

- Object to portions of the plan that allow administrative snowmobile use, that ignores safety concerns relative to snowcoaches, ignores inconvenience of snowcoaches, ignores other technical difficulties with implementing the alternative.

- “Snowcoaches only” is not financially feasible for a number of reasons.

- The FEIS fails to adequately analyze the effects of increased snow coach operations on air quality, wildlife, the NPS budget, visitor demographics and the economy.

- If numbers are a concern, we believe that all alternatives have a provision for establishing carrying capacities.

- Concerned that the interim use limits, if implemented this year, would prohibit fulfilling existing reservations.

- Because of the greater mileage most people would come to West Yellowstone, causing even greater congestion there.

- Snowcoach travel is too slow and too uncomfortable.

- Increasing snowcoaches will cause greater safety hazards. More people would be hurt in a single accident.

- Snowcoaches are too expensive, 20 snowcoaches would cost 1,400,000 a year and would sit idle for 9 months.

- Cleaner and quieter snowmobiles are available for purchase.

- The implementation of alternative G will result in devastating economic effects.

- From the east gate the only desirable destination would be Canyon

- Mechanical breakdowns (snowcoaches) would keep visitors waiting in the cold until help arrives.

- The increased speed and number of snowcoaches would increase safety hazards.

- The preferred alternative and the FEIS are biased against snowmobiles.

- In order to accommodate current use levels there would be lines of snowcoaches at the entrance gates.

- Snowcoaches have a 10% breakdown rate—who would retrieve them?

- The parking and storage requirements for the snowcoaches would be space and cost prohibitive.

- If snowmobiles must be banned, plow the road and use buses instead.

The “West, South and East Gate Operators”, YNP, West Yellowstone, Flagg Ranch, Pahaska Tepee corporately submitted a letter, stating that Alternative G will deny rather than provide access to the visiting public. The express the right of the public to enjoy the park is of paramount importance, second only to protecting the park for the future. Other statements include:

- Enjoyment of snowcoach travel vastly diminishes after 90 miles. The alternative eliminates enjoyment of travel to a number of popular places in the park.

- Flagg Ranch stipulates that the alternative would eliminate access from the south. If the road to Flagg Ranch is not plowed, the ranch will not open in the winter and it will not be a destination.

- From Pahaska, the only possible destination within the 90 mile enjoyment level would be the Grand Canyon of the Yellowstone. Also snowcoaches over Sylvan are not advisable due to safety concerns.

- Other objections to snowcoaches only are: Insufficient speed, safety, inadequate technology, capital investment necessary, mode of travel is not cheaper (than snowmobiles), the public prefers snowmobiles, and it would be devastating to the economy.

- The burden is on NPS to conduct a feasibility study of the alternative.

- Flagg Ranch cannot be a destination resort without a plowed road to it. The contract requires the plowed road. NPS assured Flagg Ranch that its contract would be honored.

- Interim snowmobile limits will limit the ranch’s ability to operate. This is also a breach of contract.

- Elimination of snowmobiles is a breach of the contract, which doesn’t expire until 2009.

- Not plowing the road from Colter Bay to Flagg Ranch would make all of Yellowstone inaccessible to those who have traditionally entered from the south entrance.

Matracks Inc., Karlstad, Minnesota, is the only respondent in this group to support the selection of alternative G as the preferred alternative and offers the following implementation suggestions:

- Suggests a passenger capacity of 6 to 15. A smaller vehicle does not achieve mass transit goals and larger vehicles may cause damage to resources.

- The NPS should implement EPA emission standards for snowcoaches.

- The NPS should require the use of rubber tracked vehicles instead of metal or cleated tracks to reduce the sound

levels of snowcoaches. These vehicles have a less aggressive track and may also run of pavement without causing damage.

- Snowcoaches should be of a single inclusive enclosure (no trailers with passengers).

Snowmobile or Snowcoach Industry, Advocates

Comments were received from:

- Birch, Horton, Bittner and Cherot and William P. Horn, Attorneys for the International Snowmobile Manufacturers Association.

- Mr. Virgil Koehler, American Council of Snowmobiles.

- Utah Snowmobile Association, Salt Lake City, Utah.

- Idaho State Snowmobile Association, Boise, Idaho.

- Ms. Adena Cook, Public Lands Director, Blue Ribbon Coalition, Idaho Falls, Idaho.

- Ms. Beth Walsh, Moran, Wyoming.

- Mr. Jim Gerber, St. Anthony, Idaho.

All comments in this group are opposed to the selection of alternative G. Some support the implementation of a revised alternative E but indicate that since this alternative was not included in the FEIS their support is given to alternative A, the no action alternative. Reasons for opposition to the implementation of alternative G in the parks for the following reasons:

- A 21 day review period is unacceptable for such a dramatic change in alternative preference.

- The expertise of a significant cross section of professionals (cooperating agencies) has been totally ignored.

- The snowmobile industry has made many improvements in technology since 1970.

- The benefit of snowcoach travel in the parks is pure conjecture.

- The misuse and abuse of the NEPA process in preparation of this FEIS is appalling.

- The FEIS was crafted to support a decision made in Washington D.C. requiring significant shifts from the DEIS alternatives.

- The FEIS fails to utilize constructive It would drastically reduce winter recreation use and enjoyment in derogation of the acts creating Yellowstone National Park and the national park system.

- Alternative G was concocted after the fact and the NPS has not allowed the public sufficient time to explore the plan and register informed comments.

- Alternative G would violate existing concessions contracts—(Flagg Ranch in particular).

- Alternative G would have devastating effects on the economies local communities.

- Snowmobiles produced after 1976 emit no more than 73 dB(A) at 15 MPH when tested using SAE J1161.
- Several studies are cited that indicate that deer are more likely to move away from ski trails than snowmobile trails and that they are unaffected by snowmobile traffic.
- A University of Wisconsin study found that snowmobile traffic has no effect on the grain yield of winter wheat.
- Six of the seven alternatives offered in the FEIS provide almost no range of proposals that could possibly be considered as conscientious multiple use management of public lands.
- The change in the preferred alternative from "B" to "G" without allowing the public to comment proves that land managers are only listening to the well-funded voices of the minority extreme advocacy groups.
- Comments submitted by ISSA, and the state of Wyoming.
- The FEIS exaggerates the environmental effects of snowmobiles.
- The economic analysis presented in the FEIS is superficial and inadequate.
- The FEIS fails to adequately define what would constitute acceptable impacts from snowmobiles.
- Revised alternative E was not seriously considered.
- The FEIS version of the "Existing Condition" and "Desired Condition" was significantly altered from the version in the DEIS.
- Alternative G is totally new and has not been validated by the public.
- The NPS has manipulated visitor use numbers to serve its own purposes.
- The FEIS describes natural soundscapes as a resource not a value.
- The Duffield study is pure conjecture, the FEIS should have incorporated the more factual State of Wyoming study.
- Additional information in the FEIS on social values, soundscapes and emissions need validation before any conclusions can be reached.
- The NPS was arbitrary and capricious in its decision to ban snowmobiles and require snowcoaches instead.
- The analysis of water quality for alternatives A through F states that there is no evidence of measurable changes in water quality from snowmobile emissions yet in alternative G the FEIS concludes that alternative G addresses the issue of water quality better than other alternatives.
- Snowcoaches will result in a loss of personal freedom and a poor experience in the parks.
- Snowcoaches will be cost prohibitive for many.
- Constructing new winter facilities at Colter Bay makes no sense because

the facilities at Flagg Ranch are currently under utilized.

- Construction new winter facilities at Colter Bay would negatively effect lynx habitat.
- If the park service does not plow the road from Colter to Flagg it will result in longer EMS response times.

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BILLING CODE 4310-01-P

DEPARTMENT OF THE INTERIOR

National Park Service

Notice of Inventory Completion for Native American Human Remains and Associated Funerary Objects from Connecticut in the Possession of the Peabody Museum of Natural History, Yale University, New Haven, CT

AGENCY: National Park Service

ACTION: Notice.

Notice is hereby given in accordance with provisions of the Native American Graves Protection and Repatriation Act (NAGPRA), 43 CFR 10.9, of the completion of an inventory of human remains and associated funerary objects in the possession of the Peabody Museum of Natural History, Yale University, New Haven, CT.

This notice is published as part of the National Park Service's administrative responsibilities under NAGPRA, 43 CFR 10.2 (c). The determinations within this notice are the sole responsibility of the museum, institution, or Federal agency that has control of these Native American human remains and associated funerary objects. The National Park Service is not responsible for the determinations within this notice.

A detailed assessment of the human remains and associated funerary objects was made by Peabody Museum of Natural History professional staff in consultation with representatives of the Mashantucket Pequot Tribe.

In 1873, human remains representing one individual were donated to the Peabody Museum of Natural History by J. D. Fish. The remains were recovered near Mystic, CT. No known individual was identified. No associated funerary objects are present.

Based on the documentary evidence, examination of the human remains, and consultation with representatives of the Mashantucket Pequot Tribe, this individual is identified as Native American. The remains appear to be prehistoric or protohistoric in age. Cultural affiliation has been determined on the basis of geographic origin of the

remains, physical characteristics that identify them as Native American, published accounts of the traditional territory of the Mashantucket Pequot Tribe, and historical information provided by the Mashantucket Pequot Tribe. Historical documents indicate that the Mashantucket Pequot Tribe has occupied the area where the remains were recovered since the Late Woodland period, circa A.D. 1000.

In 1874, human remains representing three individuals were donated to the Peabody Museum of Natural History by Mrs. E. O. Dunning. The remains were recovered near Mystic, CT. No known individuals were identified. The one associated funerary object is a metal spoon.

Based on the documentary evidence, examination of the human remains, and consultation with representatives of the Mashantucket Pequot Tribe, these individuals are identified as Native American. The remains and the spoon probably date to the period of Euro-American contact. Cultural affiliation has been determined on the basis of geographic origin of the remains, physical characteristics that identify them as Native American, published accounts of the traditional territory of the Mashantucket Pequot Tribe, and historical information provided by the Mashantucket Pequot Tribe. Historical documents indicate that the Mashantucket Pequot Tribe has occupied the area where the remains were recovered since the Late Woodland period, circa A.D. 1000.

In 1948, human remains representing one individual was donated to the Peabody Museum of Natural History by Eva Butler. The remains were recovered near Groton, CT, on the property of the Spicer Ice and Coal Co. during excavation for a drain. No known individual was identified. No associated funerary objects are present.

Based on the documentary evidence, examination of the human remains, and consultation with representatives of the Mashantucket Pequot Tribe, this individual is identified as Native American. The remains appear to be prehistoric or protohistoric in age. Cultural affiliation has been determined on the basis of geographic origin of the remains, physical characteristics that identify them as Native American, published accounts of the traditional territory of the Mashantucket Pequot Tribe, and historical information provided by the Mashantucket Pequot Tribe. Historical documents indicate that the Mashantucket Pequot Tribe has occupied the area where the remains were recovered since the Late Woodland period, circa A.D. 1000.