

**U.S. DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE**

**RECORD OF DECISION
ELK MANAGEMENT PLAN AND FINAL ENVIRONMENTAL IMPACT
STATEMENT**

**WIND CAVE NATIONAL PARK
Custer County, South Dakota**

The Department of the Interior, National Park Service (NPS) has prepared this Record of Decision (ROD) on the *Elk Management Plan/Environmental Impact Statement* (plan/EIS) for Wind Cave National Park (park) in accordance with the requirements of the National Environmental Policy Act of 1969, as amended (NEPA), its implementing regulations (40 CFR 1500-108), and NPS Director's Order #12, Conservation Planning, Environmental Impact Analysis and Decision-Making and accompanying DO-12 Handbook. This ROD includes a summary of the purpose and need for action, synopses of alternatives considered, a description of the selected alternative, a listing of measures to minimize environmental harm, the basis for the decision, findings on impairment of park resources and values, a description of the environmentally preferable alternative, summary of the consistency with Section 101(b) of NEPA, and an overview of public and agency involvement in the decision-making process.

PURPOSE AND NEED FOR ACTION

Proposal

Wind Cave National Park is proposing to manage the elk population that uses the park to prevent impacts to other natural resources, which would occur as the herd size increases. Previously, translocation of live elk had been the principal tool used to keep population numbers in line with park historic management goals. However, with the concurrent discovery of chronic wasting disease (CWD) in elk within the park and a 2002 National Park Service (NPS) Director's memo preventing movement of live animals when the population is known to be infected with CWD, translocation was no longer an option. Because the natural suite of elk predators has long been absent from South Dakota, the elk population would continue to increase to a size harming other park resources. Therefore, a planning process was needed to examine alternatives to translocation to maintain the elk population at a size in balance with vegetation, other ungulates and wildlife, park neighbors and other park resources and which would minimize adverse effects.

Background

Located in the southern Black Hills of South Dakota, Wind Cave National Park consists of 28,295 acres of mixed-grass prairie grasslands and ponderosa pine (*Pinus ponderosa*) forest. The park is home to a variety of native wildlife including elk (*Cervus elaphus nelsoni*), bison (*Bison bison*), pronghorn antelope (*Antilocapra americana*), deer (*Odocoileus* spp.), coyotes (*Canis latrans*), black-tailed prairie dogs (*Cynomys ludovicianus*) and the recently reintroduced endangered black-footed ferret (*Mustela nigripes*). The park is surrounded by a combination of 33 miles of seven-foot-high and four miles of four- to five-foot-high woven wire fence intended to contain bison and deter the movement of elk and other ungulates.

Prior to the establishment of Wind Cave National Park (1903), elk had been extirpated from the area; they were reintroduced to the park between 1914 and 1916. Park managers used several approaches to keep elk numbers under control in the park, including shooting, hazing and capture and translocation of live elk to other national parks, federal lands, American Indian Tribes, state, or private organizations. As a result of the varied historic management techniques, the population of elk wintering in the park varied dramatically over the years. In recent years, the park had been operating under a 1980 Elk Surplus Program Plan/Environmental Assessment and a 1994 Elk Management Strategy, both of which called for live trapping and relocation of elk to maintain the population between 350 and 400 animals.

The management goal of 350–400 elk (and a minimum of 400 bison) was based on range and forage conditions documented through a series of vegetation surveys conducted in the late 1950s and early 1960s. For example, despite some reduction efforts in the 1940s and early 1950s, the elk population had increased to an estimated 1,200 animals in the park by 1953; surveys confirmed the range was in poor condition as a result. The maximum numbers of 350–400 elk and 400 bison and surplus disposal programs to maintain population levels for each were established to allow native vegetative communities to recover and remain in good condition. Census counts and other monitoring of the elk population showed that maintaining the population at this level maintained desired sex/age ratios, protected lead cows and herd memory, and did not remove large numbers of elk from any one location in the park. Without the ability to implement park elk management strategies, the herd has increased at a rate estimated at between 10–12 percent annually. Since the 2002 memo preventing translocation, counts of elk wintering in the park have varied between 525 to more than 800.

Elk are currently able to enter and exit the park in a variety of locations, but in particular over a section of low fence that lies along the park's southwestern boundary. Many elk leave the park in the spring in a natural movement process. This is particularly true for elk in the southwestern area of the park. Preliminary results from a recent study (Sargeant et al. 2008 (this and all references cited in this ROD are as referenced in the final EIS)) indicate that egress rates of elk in the southwest are high, with 17 of 20 collared females and 6 of 6 collared males in this region exiting the park in 2005 and 2006. Although the exact number of elk leaving the park on average each spring is unknown, estimates range from about one-third to one-half of the wintering population.

Specific impacts from an increase in the elk population include increased foraging and competition between individual elk and with other ungulates, loss of hardwoods, shrubs and wooded riparian vegetation and wildlife habitat, depredation of crops on adjacent private and public leased lands, and greater potential spread of CWD among elk where populations are concentrated.

Purpose and Need Statements

An elk management plan is needed at Wind Cave National Park because the population is not regulated by natural ecosystem processes. This has and may continue to result in adverse effects on neighboring land uses, other wildlife species, native vegetation, wildlife habitat and wildlife health. The purpose of this plan/EIS is therefore to establish elk population levels that are in balance with natural system functions and native wildlife and vegetation communities in the park.

Objectives or specific goals of the plan/EIS include the following:

1. Retain the ability to manage the elk populations to meet biological objectives where wildlife health issues are present or emerge
2. Incorporate latitude for management strategies as information is obtained from relevant research.
3. Consider the varied concerns of interested parties.

4. Coordinate with other agencies responsible for elk management in order to achieve management goals and objectives.
5. Identify thresholds that will trigger elk population management actions, considering all relevant biological factors.

ALTERNATIVES CONSIDERED

Alternatives Development Process

The formulation of alternatives began with feasibility discussions among members of a Science Team, which was comprised of government scientists and technical experts. Among other responsibilities, the Science Team was tasked with reviewing existing data and determining the appropriate size of the elk population wintering in the park. To do so, the team looked at all wildlife species that use the same food and habitat as elk and prioritized them. Bison, because preservation of the population is mandated in the Wind Cave National Park enabling legislation and prairie dogs, because they are a keystone species in the park's prairie ecosystem, were valued higher than elk by the Science Team. Using a standardized forage allocation methodology and considering the range of likely weather conditions and other factors, the team recommended a target range of 232 to 475 elk (NPS 2006g). Because these factors will change each year, the ability to apply "adaptive management" principles was a feature of all action alternatives. In other words, information on the condition and availability of forage, climate and wildlife population variables including elk and bison counts, etc. will be periodically collected and used to decide how to manage the population.

Alternatives Analyzed in the EIS

The EIS analyzed six alternatives for the management of the park's elk herd.

If alternative A (no-action) had been selected, no new management actions beyond those existing as of the commencement of the EIS analysis would have been taken to manage elk populations or their impacts to resources within the park. As noted above, current park resource management goals recommend maintenance of the elk herd at a level of approximately 350–400 elk through trapping and translocation, which are precluded due to the discovery of CWD in park deer and elk and the prohibition by the National Park Service of translocating live animals from a CWD-affected area. The translocation of elk from CWD areas is also discouraged by state wildlife agencies. The elk herd would therefore continue to grow under the no-action alternative; for analysis purposes, it was assumed to grow at least as large as it had historically, that is to 1,200 individuals.

Alternative B is the alternative the NPS has selected for implementation, and was identified as both the preferred and environmentally preferred alternative in the EIS. It is described below, under *Selected Alternative*.

Under alternative C (Roundup and Live Shipment or Euthanasia), elk would have been hazed into the existing park corral facility. The park would have sought a partner to be responsible for shipment, slaughter and distribution of meat. Elk would have been shipped to a slaughterhouse/processing facility and packaged meat would have then been donated to individuals in accordance with NPS Public Health Program guidelines. Samples for CWD testing would have been taken and no CWD-positive carcasses would be donated. If no partner was found, elk would have been killed at the park corral site and their carcasses would be incinerated. Incineration is the park's preferred method of carcass disposal, because incineration reduces the potential for environmental contamination.

Alternative D (Sharpshooting) would have involved firearms use, using qualified federal employees and/or authorized agents (state and tribal personnel, contractors, or skilled volunteers) in order to reduce and/or maintain the elk population. Sharpshooting activities could have occurred anytime during the year. All areas required for management activities would have been closed to the public. Where feasible, carcasses would have been removed from the backcountry and incinerated, although some may have been left in place if they were very difficult to remove or if wildlife managers believe their natural breakdown was environmentally preferred. CWD test samples would be taken from all carcasses.

Alternatives E and F were analyzed solely for maintenance of the elk population after initial reduction. At this time, the use of sterilization or contraceptives has not been proven through science to effectively manage wildlife populations. The park would not have used either of these alternatives unless future scientific studies prove these methods to be an effective and efficient means of elk population control and the preferred and adaptive management efforts fail to maintain elk population within the target range. Should this occur alternatives E and F would have been carried out in the following ways:

Under alternative E, following initial reduction using one of the methods in alternatives B–D, maintenance of the herd size would have been carried out through permanent surgical sterilization of a select number of reproductive female elk. The two techniques considered in the EIS, tubal ligations and ovariectomies, have not previously been used on elk. Experimentation on a small sample of elk would have likely occurred to monitor mortality and recovery rates. The National Park Service or contract veterinarians would have performed all surgical procedures. Sterilized cows would have been permanently marked (ear tag, freeze branding, etc.) to reduce the risk these animals being hunted outside the park or recaptured for sterilization inside the park.

Alternative F focused on treating cow elk with chemical fertility control agents to reduce the number of calves born each year. While no existing chemical contraceptive currently meets the needs of the park, such agents may become available in the future. To be considered feasible for the park's use as an elk management option, fertility control agents would have needed to meet the following criteria: be effective with a single treatment; be at least 85percent effective; have appropriate approvals and certifications; be safe for treated animals; result in no recognizable behavioral effects; be safe for non-target animals; and be effective for more than one year.

SELECTED ALTERNATIVE

Alternative B has been selected for implementation by the National Park Service. The emphasis of this alternative is to make maximum use of hunting on public and private lands outside the park to reduce and maintain the population of elk utilizing the park. This will be accomplished cooperatively with the South Dakota Department of Game Fish and Parks (SDGFP) through managed annual public hunting on lands surrounding Wind Cave National Park. Initial reduction activities are expected to occur over a period of one to five years, with annual maintenance activities conducted thereafter. Because this may not be sufficient to reduce the elk population parkwide alone, a monitoring and adaptive management approach is inherent in the alternative. If hunting outside the park does not fully accomplish initial reduction goals within a prescribed time frame, reduction methods described in other alternatives such as roundup and live shipping to a slaughterhouse or sharpshooting may be used to reach the target population range. The same will be true for maintenance. A more detailed description of the monitoring and thresholds for success as well as additional features of the back-up reduction methods the park will use are described in *Adaptive Management* below.

Initial Reduction Phase

As noted above, elk are currently able to enter and exit the park in a variety of locations, but in particular over a section of low fence that lies along the park's southwestern boundary. Through the initial use of this area of low-lying fence and the installation of additional moveable sections of fence panels (bison-proof gates; referred to hereafter as "gates"), the park will allow elk to leave the park in the spring, but discourage their return in the late summer / fall. As noted above in the *Background* section, an estimated one-third to one-half of the wintering population leave the park in the spring in a natural movement process. For example, of 104 collared elk studied by Sargeant et al. (2008), 37–38% left the park during the warmer months for at least some period of time. Elk normally return to the park in August and September in conjunction with increased human activity associated with the hunting beyond park boundaries. The raised gates will make re-entry into the park less probable, resulting in more elk being available as part of the huntable population outside park boundaries.

The SDGFP will administer the hunt according to its current regulatory authority granted in SDCL 41-2-18. The park area is flanked by two existing state hunting units (H3 and H4). The SDGFP will issue all hunting permits and retain all hunting fees.

The section of lower fence at Wind Cave National Park is approximately four miles of four-foot-high fencing (there are some portions that are five-foot-high resulting from strands of barbed wire on the top), with the remainder of the park surrounded by seven-foot-high fence. Elk have been observed crossing fences in both the high and low portions but substantially more cross at the lowered section. Because most elk leave the park through this lowered section of fence, it is possible that the majority of the initial reduction effort could be accomplished by simply raising the lowered section after the elk have left the park in the spring (the first year of management actions). However, recent observations indicate some stay outside the park for only short periods of time rather than the entire spring and summer (Sargeant et al. 2008). Also, elk wintering in the southwestern part of the park and likely to exit over the low section of fence will potentially comprise the majority of the reduction in the herd normally wintering in the park. It is unknown whether elk from other areas of the park will move to the southwest and exit in the following years. Therefore, this alternative assumes the insertion of additional spans of movable gates along the western and, to the extent possible, eastern boundaries of the park, with landowner consent. These gates will provide opportunities for movement out of the park by elk from the other geographic areas. Hazing elk out of the park either in the spring and summer, or during the fall hunt if too few elk have left "voluntarily," is also possible in alternative B.

The gates will be approximately 10–12 feet in width with movable top portions that will either swing open or slide up and down to aid elk movement. When open, the gates will maintain a fence height of four to five feet and will be specifically designed to encourage elk movement out of the park, while still keeping bison in the park.

The number and the locations of gates will be determined by identifying areas where elk are known to congregate or where elk currently or most likely will leave the park considering terrain and natural barriers. All gates will be installed in areas where adjacent owners have given their approval. Because the current four-foot fence along the southwestern boundary will be raised to seven feet, similar gates will be installed along this section of fence.

No gates will be installed along the north fence where the park shares a boundary with Custer State Park as there is no desire from Custer State Park for additional elk. In addition, no gates will be installed along the boundary fence adjacent to private property (south-central park boundary) where CWD was found in a captive elk herd.

The initial reduction will presumably result in one to two hundred additional elk being available for hunting outside the park. During what may be a multi-year initial reduction, as well as during the maintenance phase, the park will estimate the number of elk in the park in the winter (January) to help decide how many need encouragement or hazing to leave the park in the spring and summer. By February, this information will be communicated to the SDGFP for its use in determining the number of additional hunting tags to be issued for the upcoming fall elk hunt(s). Whenever possible, elk estimates will be determined by aerial survey. Remote video cameras may be used at the lowered gate areas to estimate the number of elk leaving the park during the spring.

A ground count of elk during the fall hunting season (October) will also help park staff decide whether some of the gates will need to be used to haze additional animals out of the park. If so, gates will be lowered and helicopters or other means of hazing elk (humans on foot, etc.) will be used to encourage the appropriate number to exit. If hazing is unsuccessful or reduction efforts require only a few elk be removed, sharpshooting in the park may be used. When the required number of elk leave the park, whether it be in spring, summer or, if needed, during the fall hunt, gates would be raised and the fence secured at seven feet until the hunting season is over for the year.

During initial reduction efforts, the park will manage toward the lower end of the target population range (232–475) so the park could evaluate the effect of population reduction on elk redistribution. It is believed that the majority of natural elk movement out of the park currently involves individuals from the southwest part of the park (Gobbler Knob area), and, to a lesser extent, those from the central Rankin Ridge/Beaver Creek area, although older data that indicated this movement pattern are currently being re-evaluated in an ongoing study. Earlier studies that indicated bulls do not migrate out as readily as cows are also being challenged by more recent analysis (Sargeant et al. 2008) that suggests that equal percentages of bulls and cows may leave the park in the spring. If bull elk prove to be less likely to leave the park than cows, different or additional reduction methods (i.e., sharpshooting) to maintain sex ratios may be required, especially for long-term maintenance. Sex ratios may become important when the population is being managed near the low end of population goals.

Despite the cost of the additional fence work, this method may provide a relatively efficient manner of reducing elk in the park. It is also possible that this method will work well for the first year, but as noted above may be substantially less effective in following years as elk with the tendency to move out of the park are hunted and removed from the population. Monitoring of elk numbers and movements is key to evaluating the success of this option (NPS 2006g). If after two years of operation the wintering population of elk in the park remains within plus or minus fivepercent of 482 animals, roundup and/or sharpshooting would be utilized.

Increased hunter access to private lands surrounding the park will help make this alternative feasible, particularly during the initial reduction phase when numbers of elk will be elevated over prior years. The SDGFP will work with neighboring landowners to facilitate this increased access. However, prior to meeting elk population goals within the park, there will also be the potential for increased crop depredation on private lands adjacent to or near the park boundary if this alternative was implemented.

Carcass Disposition / CWD Testing

Individual hunters outside the park will be responsible for elk carcasses reduced to possession as they currently are under SDGFP hunting regulations. Currently the SDGFP administers a voluntary CWD testing program which will continue under this alternative. These voluntary testing rates are considered by the SDGFP to be statistically sound samples for an accurate measurement of CWD prevalence and distribution within these two hunting areas (Kintigh 2007) and will continue under this alternative.

Maintenance Phase

For maintenance, as with initial reduction, the park will encourage animals to leave the park as often as every year through the open gates. If the population is well within threshold levels based on forage availability and other factors described above, no removal or the removal of only a few animals may be needed in a given year. Annual or frequent maintenance is preferred because it is likely to minimize the impact to park operations, SDGFP operations, and neighboring lands. If culling of only a few animals is required, the park could use selective sharpshooting.

As with the initial reduction, gates will be raised at the appropriate time of year to discourage elk from re-entering to the maximum extent possible, making them available for hunting outside the park. Winter counts and results of monitoring information will be used to determine the number of elk that need to leave the park or be removed each time maintenance actions are taken. Fall camera and ground counts will aid in determining if the target number of elk remained in the park. If more elk than the target number are present, appropriate gates will be opened and hazing with helicopters, people on foot or other means will be used to encourage additional animals to leave. Coordination with the SDGFP regarding the issuance of additional elk tags will be required.

Numbers of Elk Removed, by Year

The scenario for the approximate number of elk removed over the initial reduction phase of the selected alternative assumes the following:

- Starting population levels at or around 2009 predicted levels of 815 elk.
- The population of the Gobbler Knob and Rankin Ridge area is approximately 66percent and the population of the Boland Ridge area is 33percent of the population using the park;
- Animals from Gobbler Knob / Rankin Ridge areas leaving the park will all move to the west and animals from the Boland Ridge area leaving the park will all move to the east (assuming landowner consent);
- Sex ratios are those approximated at the time of the Science Team report which will equate to a ratio of 55 bulls to 100 cows;
- The annual population growth rate of the elk using the park is 12percent;
- The hunter harvest success ratios for hunting unit H3 will be 55percent of the bulls and 30percent of the cows and hunting unit H4 will be 30percent of the bulls and 25percent of the cows (Kanta 2007); and
- 75percent of the elk using the park were excluded from the park during the hunting seasons (either moving out on their own or through hazing).

With the above assumptions, it will take four years to reach the range of 232–475 animals using the park and six years to reduce the population of elk using the park to the target of 232 (low end of the range) and allow the population to begin fluctuating on its own. If after the second year of management actions the park's elk population is not within plus or minus fivepercent of 482 animals the initial reduction would be considered unsuccessful in reaching planned population goals and park management may then consider adding components of alternatives C and D for further population reduction.

At the low end of the range, the maximum number of animals that will need to be removed in a year is 28 to maintain the population at 232.

Annual elk population surveys will be used to refine the actual number of elk using the park to be removed during initial reduction and maintenance efforts.

Mitigation Measures

A variety of mitigation measures will be employed as part of the implementation of the selected alternative (or alternatives C or D if monitoring shows alternative B is not as effective in initial reduction as required and either of these management techniques are included to increase effectiveness) to ensure the protection of park resources, visitor experience and human health and safety related to elk management actions within Wind Cave National Park.

- In order to inform and educate the public about elk management actions, as well as to mitigate potential negative effects to the visitor experience, educational and interpretive measures will be implemented. These will include such tools as brochures/publications, inclusion of elk management information on the park website, exhibits at the visitor center, etc.
- Whenever possible, management actions that could potentially affect the visitor experience will be scheduled during the time of lowest visitation (late fall/winter).
- Backcountry areas being used for management actions will be closed to the public to ensure their safety and to mitigate negative effects to their experience.
- Elk management actions are designed to contribute to research on diseases such as CWD and actions to prevent or limit their spread. If in the future, disease testing of animals removed from the park no longer contributes in a meaningful way to research or management efforts, testing protocols will be reviewed, modified, or suspended.
- Post-planning communication with park neighbors will be designed to inform them of specific management actions, report on the success of the plan/EIS, and to foster two-way communication.
- All elk management activities will be conducted in a manner which ensures human health and safety of staff and contractors (use of specific task-related safety protocols [e.g., CWD testing, fence modifications], additional staff training), as well as compliance with all applicable related policies and regulations. All hazers and their animals will display distinguishing markings (e.g., blaze orange vests, flags) to identify themselves to potential hunters outside park boundaries.
- Known cultural resources will be avoided, whenever possible, during elk management activities. Though not anticipated, in the event that management activities are determined to affect cultural resources known to be eligible for the National Register of Historic Places, effects to these resources will be assessed in accordance with Section 106 of the National Historic Preservation Act. In areas that have not been inventoried, particularly for archeological resources, ground-disturbing activities will be preceded by appropriate surveys and Section 106 compliance.

Estimated Cost

Park staff estimated the cost of initial reduction and maintenance based on a series of assumptions. These include the number of elk exiting the park, either voluntarily or with the help of hazing; hunter harvest success ratios in hunting units H3 and H4 for bulls and cows; annual population growth for the herd and the geographical distribution of elk exiting the park. Given these assumptions (described in more detail in the EIS), initial reduction costs will be about \$175,000 and maintenance will cost about \$3000 per year. (The park is considering replacing sections of the fence in an unrelated project; the estimates provided here are to raise the now four-foot section of fence and install gates periodically along this same stretch of fence.)

Adaptive Management

Flexibility in the plan/EIS to incorporate data described above, such as elk and other wildlife population counts, precipitation and forage production, results of vegetation monitoring and any new and relevant research will be an important piece of ensuring its success. These data will be evaluated to determine the success of the plan/EIS and the need for any changes each year after its implementation.

Potential changes in management would likely be small increases or decreases in target elk populations within the 232 to 475 range identified by the Science Team. At the same time, and as monitoring data related to cumulative impacts indicate, management to numbers lower than this range may be considered if extreme environmental conditions (drought, for example), disease, concentrated and reversible impacts (to shrubs or riparian vegetation for example) or other unforeseeable factors lead park managers to believe this is warranted.

In addition to evaluating how to adjust the size of the elk population, the ability to meet the plan/EIS's objectives is uncertain given that the selected alternative has never been tried. Hunter participation and success and the willingness of elk to use gates are unknowns that could greatly alter its effectiveness. Given this uncertainty, the selected alternative includes options to incorporate tools described in alternatives C and D if needed. Assuming a starting herd size of about 815, it could take 4 years to get into the range of 232-475 animals using the park and 6 years to reduce the population of elk using the park to the target of 232 (low end of the range) and allow the population to begin fluctuating on its own. The park has determined that this is achievable if the population of elk using the park is within plus or minus five percent of 482 animals after two years. If it is not within this range after two years, the park may use round-up as described in alternative C (and summarized below) to complete initial reduction. Sharpshooting (alternative D) may also be used to help complete initial reduction under either alternative B or C and is likely to be the primary tool to help maintain the size of the herd should alternative B fail as a maintenance measure. Each of these alternatives is described below; no additions or changes to this ROD are anticipated if either round-up or sharpshooting is required.

Alternative C – Round-up and Live Shipment or Euthanasia

The focus of this alternative is the movement of elk with helicopters or other methods into the existing corral facility within the park. From there, they may be live shipped to a slaughterhouse and processing facility where meat would be packaged and made available for donation or killed at the corral site and their carcasses incinerated. Live shipment and donation of processed meat would be dependent on the park finding a partner(s) to be responsible for transport of live elk, processing, and distribution of meat. Should no partner be found, elk would be killed at the corral site in the most humane method possible. Carcasses would be incinerated by means of an air-curtain incinerator. The park would also consider landfilling some carcasses consistent with the current method used to dispose of incidental animals that die due to other than direct management techniques, and/or test positive for CWD.

To the extent possible, roundup of elk would occur by geographic area, with capture and live transport taking from three to five days per area. Roundup would be accomplished with the aid of a helicopter contractor in January or February. Elk would be herded into the existing corral facility using helicopters and park staff. Some elk may be released from the corrals to ensure the park is able to maintain sex ratios, age classes and the number of elk in each area of the park. Only elk held 48 hours or less would be released to minimize the impact of concentrating animals on the prevalence of CWD in the herd.

With the exception of large bulls that may be euthanized for safety reasons, all live elk, including older calves weighing at least 100 pounds, would be transported to a processing plant where they would be killed. It is estimated that approximately 100–110 cows or 60–80 bulls could be transported in one truck

to a processing facility. A waiver from the NPS policy prohibiting transport of live elk from an area in which CWD has been identified would be required (NPS 2002b).

Facility (corral) modifications may include the construction of an additional squeeze chute (or modification of existing chute) to make antler removal safe and efficient. In addition, some modifications may be required for efficient and safe removal of carcasses of euthanized elk.

Some back roads would be closed to visitors during management actions. The public would be prohibited from accessing the corral areas during management actions for safety reasons.

Test samples for CWD would be taken from all slaughtered animals by qualified technicians; all carcasses would be tagged with a unique identifying mark to facilitate tracking of test results. To maximize efficiency, elk may be killed and processed in identified lots (e.g., 10 elk per lot). Slaughtering and processing areas and tools would be decontaminated between lots to prevent potential CWD contamination among lots. If a particular carcass(s) is identified as CWD positive, the entire lot to which it belongs would be destroyed and disposed of in an approved manner.

The park would take every precaution to ensure those to whom the meat is distributed are aware of the fact that the elk was once part of a herd where CWD was present. No processed meat would be distributed to the public prior to CWD test results being received. All donations of CWD-negative meat to the public would comply with NPS Public Health Program guidelines (NPS 2006h) which require that those consuming the meat be fully informed and take full responsibility for any long-term unanticipated effects of eating meat from animals coming from a CWD-affected area. Because of these same guidelines, processed meat would be donated only to individuals.

If partners willing to be responsible for live shipping, processing, and donation of meat cannot be identified, elk would be euthanized within the park's corral facility and incinerated.

Alternative D - Sharpshooting

Initial reduction would be accomplished via direct reduction with firearms, using qualified federal employees and/or authorized agents (state and tribal personnel, contractors, or skilled volunteers). Personnel engaged in direct reduction of elk for this plan would have the appropriate skills and proficiencies in the use of firearms and protecting public safety. In addition, these personnel would have experience in the use of firearms for the removal of wildlife. A contractor is defined as a fully insured business entity, nonprofit group, or other entity engaged in wildlife management activities that include the lethal removal through sharpshooting. The contractor would possess all necessary permits. Skilled volunteers would need to achieve a level of firearm proficiency established by the park prior to assisting with elk removal actions. Those skilled volunteers that qualify for participation would become part of a pool of available personnel to be used to supplement elk management teams. In addition, all skilled volunteers would need to be directly supervised by NPS personnel during elk management actions.

Compliance with all relevant NPS directives related to firearms use in parks, as well as federal firearm laws administered by the Bureau of Alcohol, Tobacco, and Firearms would be required. The park would develop very specific guidelines for firearms use.

Sharpshooters may use noise suppressors to help in both minimizing the stress to and scattering of elk, and to improve efficiency in reducing elk numbers. Noise suppressors would also minimize disturbance to the public.

Aerial or ground surveys in the winter would aid in determining the number of elk requiring lethal removal. Reduction efforts would most likely occur in the fall and winter, coinciding with the time of lowest visitation rates to the park. However, reduction efforts could occur anywhere between August 1 and March 1. Areas undergoing elk reduction management activities would be closed to the public.

If sharpshooting is used to supplement initial reduction, it is likely that the majority of carcasses would be removed from the park's backcountry. The park would not donate meat under this alternative due to logistical issues related to maintaining the sanitary conditions of the meat while transporting carcasses from the field to a processor. Instead, elk carcasses would be sling-loaded via helicopter to designated locations along roads where carcasses would be stored in the short term until they could be transported to an incinerator site. It is estimated that approximately 20-25 elk carcasses could be removed in a day using one helicopter.

Samples for CWD testing would be taken from all carcasses, with the majority of this effort occurring at a central site into which carcasses are sling-loaded. Locations of elk carcasses not brought to the central site (i.e., left in the field) would be mapped and a follow up visit conducted by field personnel to obtain CWD test samples as soon as possible. In compliance with State Historic Preservation Officer guidance, dragging of carcasses across the landscape would occur only when the ground was dry or frozen and no known cultural sites existed in the area.

A certain number of carcasses would be left in the field, primarily for ecological reasons as several species of wildlife and soil nutrients would benefit. With the park's 44 square mile area, it is estimated that up to 60 carcasses could be left in the field per year (NPS 2006i). It may be desirable to leave all calf carcasses in the field as CWD has not been detected in free-ranging elk less than 6 months old (NPS 2006c).

If sharpshooting is used for maintaining the size of the herd, qualified federal employees and/or authorized agents would conduct operations. It is anticipated that selective removal of elk by park staff during the three months of winter when the most elk are in the park would be adequate to keep the population within the target range. Additional elk could be hazed out of the park during the hunting season using unsilenced gunshots or other noisemakers if needed, although lethal removal inside the park may continue to utilize noise suppressors to maximize efficiency, unsilenced weapons may aid in redistributing the population away from selected areas.

BASIS FOR DECISION

In the fall of 2007, after completion of the analysis of environmental consequences of the alternatives, preliminary cost information, logistics and other information, the park undertook a series of discussions and exercises designed to identify the "preferred alternative." These efforts included evaluation of how well alternatives met the stated objectives of the plan/EIS, the level of ease/difficulty of implementation of each alternative, costs, and the environmental benefits and adverse impacts for each. Re-evaluation of these factors and of public comments after preparation of the final EIS did not change the NPS preference for alternative B; therefore the rationale for the preferred alternative as presented in the final EIS is summarized below.

Objectives or specific goals of the plan/EIS include the following:

1. Retain the ability to manage the elk populations to meet biological objectives where wildlife health issues are present or emerge
2. Incorporate latitude for management strategies as information is obtained from relevant research.

3. Consider the varied concerns of interested parties.
4. Coordinate with other agencies responsible for elk management in order to achieve management goals and objectives.
5. Identify thresholds that will trigger elk population management actions, considering all relevant biological factors.

Regarding Objective one, alternatives B, C, and D fully meet the objective of managing present and future wildlife health issues. While it is anticipated under alternative B that approximately 60percent of harvested elk carcasses would be tested for CWD (versus the 100percent of carcasses under alternatives C and D), this approach is believed to provide a sound statistical sample from which accurate measurements of prevalence/distribution of disease rates can be determined in an area where CWD is known to exist (Powers 2007; Kintigh 2007). In addition, alternative B would not involve the corralling of live animals (and the possibility of disease transfer) as would alternatives C, E, and F, under which some or all animals would be ultimately released back into the park. As noted, alternatives C and D also meet this objective well and would allow for the possibility of more specific biological research/data collection due to the park-directed handling of individual carcasses not possible under alternative B.

Regarding Objective two, alternatives B, C, and D fully meet the objective of incorporating latitude into management strategies through the use of their adaptive management approach. The adaptive management process would include evaluating the effects of management actions on other resources within and, where necessary, outside the park to identify whether and how elk management actions or thresholds may need to be modified to meet the objectives of the plan/EIS. It should also be noted that alternative B (as well as alternatives C and D) would allow for a more efficient assessment of a management strategy's success when compared to alternatives E and F where evaluation of effectiveness may require a considerably longer period of time.

Regarding Objective three, alternative B better integrates concerns of a wide range of parties (land management agencies, tribes, and private entities) interested in addressing elk over-population issues. Under this alternative, hunters would utilize carcasses / elk meat versus the "wasting of resources" possible under alternative C and certain under alternative D. The "wasting of resources" was a primary concern expressed by many members of the public.

Regarding Objective four, alternative B fully meets the objective of coordinating with other agencies involved in elk management in order to achieve multiple goals and objectives when compared to other action alternatives (the SDGFP manages hunts; the park coordinates with the SDGFP on elk population numbers, hunting tags, etc.). Coordination with other agencies regarding elk management in the Black Hills currently occurs in a less formal manner and would likely continue under other action alternatives. However, it would be enhanced in alternative B beyond other alternatives, as all aspects of the hunt as well as planning and management activities would require full coordination with the SDGFP.

Regarding Objective five, alternative B fully identifies specific management action thresholds based on elk population numbers and condition of forage, as do all action alternatives. This information would guide the park as to when specific elk management actions should occur to avoid unwanted impacts to park resources. The use of tools in alternatives B, C, and D for maintenance efforts are particularly effective when compared to alternatives E and F where action thresholds would likely be more difficult to assess in a timely manner.

In summary, alternatives B, C, and D would all meet objectives one, two and five, but alternative B would meet objectives three and four to a larger degree than all other alternatives. Alternatives E and F, even in

combination with other initial reduction tools, would not meet objectives to the same degree as alternatives B, C, or D.

Alternative B would be more easily implemented than other action alternatives. Alternative B is considered environmentally superior (see discussion of environmentally preferable alternative below) and preliminary estimates show it would be less expensive. Alternative B would be easier to implement than other alternatives because it would require no modification of the park corral, roundups, or handling and care of live animals as would alternative C, E or F. In addition, it does not require carcass removal or disposal of hundreds of animals, a considerable task possible under alternative C and certain under alternative D. Concerns over sanitary conditions of elk meat while it remains in the field awaiting transport by helicopter and during transport itself, as well as liability concerns prevent the park from considering donating carcasses in alternative D. At the same time, it is possible that some adjacent landowners may be concerned about the numbers of elk on their lands if elk are not removed through hunting as anticipated under alternative B. Resolution of such issues would be part of the adaptive management strategy.

FINDINGS ON IMPAIRMENT OF PARK RESOURCES AND VALUES

The NPS is required to evaluate the potential effects of proposals as to the likelihood they would cause “impairment” of park resources and/or values. An action results in impairment when its impacts “harm the *integrity* of park resources or values” (NPS 2006d, secs. 1.4.4 and 1.4.5). “Whether an impact meets this definition depends on the particular resources and values affected; the severity, duration and timing of the impact; the direct and indirect effects; and the cumulative effects of the impact in question and other impacts” (sec. 1.4.5).

Established by the 1916 Organic Act, one of the primary purposes of the national park system is the mandated conservation of park resources and values. NPS managers must always seek ways to avoid, or to minimize to the greatest degree practicable, adversely impacting park resources and values. Although the NPS has the discretion to allow certain impacts within parks, that discretion is limited by the statutory requirement that park resources and values remain unimpaired unless a specific law directly provides otherwise. An impact to any park resource or value may constitute impairment, but an impact would be more likely to constitute impairment to the extent that it has a major or severe adverse effect upon a resource or value whose conservation is:

- necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park,
- key to the natural or cultural integrity of the park, or
- identified as a goal in the park’s General Management Plan or other relevant NPS planning documents.

The following process was used to determine whether the analyzed alternatives had the potential to impair park resources and values:

- Review of the park’s enabling legislation, General Management Plan (NPS 1994b), Resource Management Plan (NPS 1994c), Statement for Management (NPS 1994d), Draft Resource Management Plan (NPS 2003) and various other relevant planning documents to ascertain the park’s purpose and significance, resource values, and resource management goals or desired future conditions.
- Thresholds were established for each resource of concern to determine the context, intensity, and duration of impacts, as defined in the “Impact Thresholds” section above in this chapter.

- An analysis was conducted to determine if the magnitude of impact to any resource would reach the level of “impairment,” as defined by NPS *Management Policies 2006* (NPS 2006d).

Application of this process revealed that implementation of the selected alternative will not result in impairment of park resources and values at Wind Cave National Park.

ENVIRONMENTALLY PREFERABLE ALTERNATIVE

The National Park Service is required to identify the environmentally preferable alternative in the ROD. The Council on Environmental Quality NEPA regulations identify the environmentally preferred as the one that “...causes the least damage to the biological and physical environment; it also means the alternative which best protects, preserves and enhances historic, cultural and natural resources (Q 6a).”

The CEQ NEPA regulations also indicate that the environmentally preferable alternative is the one that “will promote the national environmental policy as expressed in NEPA Section 101 (Forty Most Asked Questions Concerning CEQ’s National Environmental Policy Act Regulations 40 CFR 1500 – 1508; Question 6a).

In many respects, alternatives B, C, and D are quite similar to one another in effects to natural and cultural resources. Effects which differ notably among them related to such things as beneficial impacts to the elk herd from restoring greater migratory movement under alternative B; reduced negligible adverse effects to individual elk realized by reduced stress under alternative D; and increased vegetation trampling outside the park and along the fence line expected under alternative B.

After careful consideration of all factors involved, alternative B (Hunting Outside the Park) was selected as the environmentally preferable alternative. The fact that alternative B would effectively reduce and maintain the elk within target population goals while preserving the current natural distribution/movement of elk into and out of the park were prime contributors to its selection.

Specifically, alternative B was environmentally superior because it:

- Accomplishes the goal of reducing herd size to the target population goals.
- Preserves to a large degree the natural elk distribution patterns/movements into and out of the park allowing the elk to continue as free-ranging wildlife.
- Does not require carcass disposal (hunters would presumably consume elk meat from harvested animals), thereby minimizing impacts to air quality and soils expected under alternative D and possible under alternative C.
- Provides better utilization of meat from killed elk, an important issue for many commenters (not an option under alternative D and only a possibility under alternative C).
- Requires no modification to the park corral (alternative C, and possibly alternatives E and F do require modifications), or potential contamination of soils and water quality from exsanguination (more likely to occur in alternative C).
- Does not increase the chance of elk to elk contact or contamination of the corral by CWD infected elk (as do alternatives C, E, and F).
- Minimizes the adverse effect on visitor experience because carcasses would not be left in the field (as would alternative D).
- Provides hunting opportunities for the public with a state-managed (SDGFP) infrastructure that is already in place (e.g., hunting licenses, CWD testing, etc.,).

CONSISTENCY WITH PURPOSES (SECTION 101(B)) OF THE NATIONAL ENVIRONMENTAL POLICY ACT

The National Environmental Policy Act requires an analysis of how each alternative meets or achieves the purposes of the act, as stated in section 101(b). The following purpose statements make up section 101(b):

- Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations.
- Assure for all Americans safe, healthful, productive, and esthetically and culturally pleasing surroundings.
- Attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences.
- Preserve important historical, cultural, and natural aspects of our national heritage, and maintain, wherever possible, an environment that supports diversity and variety of individual choice.
- Achieve a balance between population and resource use that will permit high standards of living and a wide sharing of life's amenities.
- Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

The following sections discuss each of these purposes and the degree to which each of the action alternatives meet them:

Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations. As noted in the analysis, alternatives B, C, or D include both initial reduction and maintenance phases, whereas alternatives E and F are only envisioned as maintenance strategies and would require pairing with the initial reduction tools in alternative B, C, or D. Alternatives B, C, or D would fulfill responsibilities of each generation as trustee of the environment for succeeding generations by, in the long-term, contributing to a more natural park ecosystem characterized by an environmentally sustainable number of elk using the park. Because they are only maintenance options, alternatives E or F would only preserve the population at these levels, rather than create them and so would not meet the intent of this criterion as well. The positive effects of creating an environmentally sustainable elk population would be particularly evident for the herd itself, as well as for vegetation (promotion of healthy plant communities, minimization of loss of species diversity/reduced reproduction) and wildlife (improved habitat/reduced competition) resources.

Assure for all Americans safe, healthful, productive, and esthetically and culturally pleasing surroundings. Alternative B may be more “productive” or “aesthetically pleasing” in that excess elk would be put to what some members of the public may describe as a useful purpose (hunting/consumption of meat). This is in contrast to the potential public perception of the “wasting of resources” related to incineration of elk carcasses under alternatives C and D, the choice to minimize reproduction in alternatives E and F, and leaving carcasses in the field in alternative D.

Attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences. Alternative B would attain a wide range of beneficial uses of the environment without degradation or other undesirable and unintended consequences by reducing the elk population so that it minimizes adverse impacts on other resources to a slightly larger

degree than would alternatives C or D. Alternative B would perform better than other alternatives, including E and F, in protecting the health and safety of park staff and contractors, as each of these requires dangerous tasks such as herding elk into squeeze chutes (alternatives C, E, and F), removing antlers (alternative C), euthanizing or loading live animals onto trucks (alternative C), shooting elk in close quarters with other sharpshooters (alternative D), carcass handling and removal (alternatives C and D), etc. In addition, the resource would be put to a useful purpose (consumption of meat by hunters) under alternative B (not true for alternatives C and D). Alternative B would not include the potential disease transmission risk from elk being corralled and closely held, an unintended consequence possible under alternatives C, E, and F. However, hunter safety would be more compromised in this alternative than others due to their anticipated increased numbers in hunting units adjacent to the park.

Preserve important historical, cultural, and natural aspects of our national heritage, and maintain, wherever possible, an environment that supports diversity and variety of individual choice.

Alternatives B, C, and D each meet this criterion in that they create an elk population to minimize impacts on the ecosystem at the park, which would preserve natural aspects, such as the bison herd and prairie dog colonies, in a healthy state well into the future. Because the bulk of elk management efforts would occur outside park boundaries under alternative B, it would minimize impacts to these resources, considered part of the national heritage of this national park unit. At the same time, analysis of non-park resources outside the park (e.g., cultural resources) indicates only negligible adverse impacts. Alternative B may also increase choice on the park of the public by providing hunting opportunities that are not available under other alternatives.

Achieve a balance between population and resource use that will permit high standards of living and a wide sharing of life's amenities. Alternative B would also provide for a balance between population and resource use by its promotion of the continued public enjoyment of the park and adjacent lands, its socioeconomic contributions, and its promotion of a healthy park ecosystem (also aspects of alternatives C and D). Hunting outside the park under alternative B would further contribute to the wide sharing of life's amenities, particularly in that the resource (elk) would be put to a consumptive use and not "wasted" (incinerated) as is proposed under alternative C and possibly alternatives D, E or F. This issue is considered a notably positive characteristic of alternative B.

Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources. This criterion is less relevant to the plan/EIS, as it is geared toward discussion of "green" building or management practices.

PUBLIC INVOLVEMENT EFFORTS IN THE PLANNING PROCESS

Internal Scoping

As defined in a Memorandum of Understanding (MOU), the NPS and the SDGFP are cooperating agencies for the preparation of the Wind Cave National Park elk management plan (NPS and SDGFP 2003). This same document identifies the NPS as the lead agency, responsible for all aspects of developing the plan/EIS, including selection of a preferred alternative for public review, and documenting the selection of an alternative to implement by preparing a record of decision. Under this MOU, the NPS has sole approval authority and responsibility for proposed actions within Wind Cave National Park. As a cooperating agency, the SDGFP is responsible for effective coordination of planning efforts and for sharing expertise on regional wildlife management issues (hunting/trapping, CWD, threatened and endangered species, general ecological information and socioeconomic concerns) (NPS and SDGFP 2003).

Internal scoping efforts conducted in the summer of 2004 included staff members from the park, the NPS Biological Resource Management Division, the NPS Midwest Regional Office, the NPS Environmental Quality Division, the SDGFP, Custer State Park, the USFS (Black Hills National Forest), the USGS (Biological Resources Division) and contractors. This group worked to define the purpose, need and objectives of the plan/EIS, as well as to identify preliminary action alternatives, mitigation measures, and associated issues and impact topics to present to the public for comment. Other issues addressed included the history of elk management in the park, the goals of public participation, and a preliminary list of potentially interested and affected parties (NPS 2005b).

In 2006 (February 27 through March 2), an alternatives development workshop was held. All previously involved groups (listed above) were invited. In addition to NPS staff and contractors, representatives from the SDGFP and the USFS were present. This meeting resulted in the development of alternatives for analysis in the draft plan/EIS, taking into consideration public scoping comments received in August of 2005.

Public Scoping

The NPS intent in the public involvement process is to provide opportunities for the interested and affected public to be involved in meaningful ways, to listen to their concerns and values, and to consider these in shaping decisions and policies. Public scoping is a key part of the public involvement process, and one which is vital to NPS analysis of the issues surrounding elk management at Wind Cave National Park.

The public scoping process began with the publication of a Notice of Intent on December 17, 2004 in the Federal Register (Federal Register, Volume 69, Number 242). In August of 2005, five public scoping meetings were held across South Dakota in Sioux Falls, Pierre, Rapid City, Hot Springs, and Custer. Presentations by NPS staff related to elk management and the NEPA planning process were made twice at each meeting. These presentations were designed to provide the public with background information on the planning process, as well as to encourage comments and questions related to elk management strategies within Wind Cave National Park. In addition, posters related to elk management issues were displayed. Posters included information on the history of elk management within the park, management issues that need to be addressed, the purpose and need for and objectives of an elk management plan, information on CWD, methods of elk management which have been used in other parks, and information on how to become involved in the planning process. Park and contracting staff were available to answer questions, facilitate discussion and record public comments and suggestions.

Prior to the scoping meetings, 314 brochures were mailed to potentially interested parties including federal, state and local agencies, tribes, conservation groups and private individuals. Brochures were also available at the public meetings. Brochure information included a short overview of the history of elk management in the park, the purpose and need for action, planning objectives, and environmental issues. It also extended an invitation to the public to attend the upcoming public scoping meetings and explained the park's desire to provide information and solicit the public's suggestions and comments related to elk management issues. It also provided information on the variety of ways in which the public could comment on the planning efforts.

A total of 42 members of the public attended the public meetings. These included unaffiliated individuals as well as representatives from recreation, preservation and media groups, the USFS, and the Office of U.S. Representative Herseth Sandlin (South Dakota). Most public participants provided their comments verbally at the meetings (recorded on flipcharts). In addition, several members of the public provided comments through email, fax or letter; or directly through the NPS PEPC (Planning, Environment and

Public Comment System) website. In total, 49 commenters provided input to the park on the proposed elk management planning efforts.

The majority of public scoping comments focused on

- the need to explore a variety of control management options, including lethal options;
- support for/opposition to hunting inside the park;
- manipulation of the park's boundary fence (gates, raising fence, etc.) to allow or deny elk access to the park during certain times of the year;
- concerns related to the "wasting of resources" (CWD-negative elk carcasses, hides, etc.);
- agricultural losses caused by overgrazing elk on lands adjacent to the park; and
- support for/opposition to reintroduction of wolves to the park.
- The concern for the "wasting of resources" mentioned above was an issue raised by numerous commenters during public scoping. It was of particular concern that the meat of elk killed be used (e.g., donating to charities). The overriding theme was that it is not acceptable to "waste" the resource.

The remaining comments included, among other things, issues related to the use of reproductive controls to manage the park's elk population, testing for and tracking of CWD prevalence, effects of management actions on park operations and visitor experience, the condition of the park's ecosystem related to wildlife management, and the humane treatment of elk.

Public input was used by park staff, the SDGFP, and contractors to develop the final range of alternatives to be considered for analysis in this plan/EIS.

Public Review of the Draft Plan/EIS

A notice of availability of the draft EIS was published in the Federal Register on June 20, 2008, which is the same day the 60-day public review of the draft began. Public meetings to receive comments and answer questions on the draft took place during the week of July 21–24, 2008. Four meetings, in Sioux Falls, Pierre, Hot Springs, and Custer were conducted, with several park specialists and EIS contractors on hand to address concerns. A short presentation summarizing elk management at the park preceded the public comment input process. Participants who wished their comments to be on record were encouraged to provide them in writing on comment sheets provided at the workshop, or to verbally dictate them to a recorder at each of the public input sessions. Posters summarizing findings were stationed in the room. The Wind Cave National Park Superintendent, Chief of Resource Management, biologist and biological technicians answered the public participants' questions. Seven people attended the Sioux Falls meeting, there were no attendees at the Pierre meeting, five people attended the Hot Springs meeting and twelve attended the Custer meeting.

In addition, electronic comments could be submitted to the park's website or to the NPS Planning, Environment and Public Comment (PEPC) website or be submitted by mail or fax. The public review period for the draft plan/EIS closed August 18, 2008. The park received 33 pieces of correspondence which contained 167 comments on various topics. Of these, 24 were from individuals, one was from a conservation/preservation group, two from other organizations, two from tribal entities, two from state entities, and two from federal government entities. Comments were divided into "substantive" and "non-substantive" groups as prescribed by the Council on Environmental Quality NEPA regulations. According to CEQ, substantive comments raise an issue regarding law or regulation, agency procedure or performance, compliance with stated objectives, validity of impact analyses, or other matters of practical

or procedural importance. Non-substantive comments offer opinions or provide information not directly related to the issues or impact analysis. Non-substantive comments were acknowledged and considered by the NPS, but did not require responses. Substantive comments were grouped into issues and “concern statements” prepared for responses. Members of the park team responded to the concern statements and these responses are addressed in Appendix N of the final EIS.

Each person or entity that received the draft plan/EIS received a paper copy of the final plan/EIS. The electronic version of the final document was also posted on the NPS PEPC website (<http://parkplanning.nps.gov>). Following the publication of a notice of availability of the final EIS in the Federal Register, a 30-day waiting period began before the Record of Decision allowing implementation of the selected alternative was signed. The NPS fully considered public comments and responses to them as recorded in the final EIS before its final decision to select alternative B.

Agency Consultation

U.S. Fish and Wildlife Service

A list of threatened and endangered species in Custer County was obtained by accessing the USFWS website for South Dakota Field Office on May 18, 2006. In addition, the park completed informal consultation with the USFWS indicating alternative B will have “no effect” or at the most will not be “likely to adversely affect” black-footed ferrets. The letter sent by the park to USFWS (dated June 18, 2008) is part of appendix G of the final EIS. The USFWS indicated it had “no objection” to implementing the plan on July 17, 2008.

The reintroduction of sterilized wolves to accomplish elk population goals was discussed in detail and ultimately dismissed as an alternative. Management of the gray wolf, listed as “endangered” under the Endangered Species Act, is the purview of the U.S. Fish and Wildlife Service. Informal discussions occurred between the park and the USFWS regarding the reintroduction of sterilized gray wolves as an elk management tool. The USFWS determined that this would be considered a “take” under the Endangered Species Act (Larson 2006a) and would require a permit. Ultimately, the USFWS indicated that the agency would not support this option (via email dated 06/01/2006) and would not have the resources to expend on the establishment of a population of wolves that would not contribute to the recovery goals of the species, would not contribute to the breeding population, and whose focus for reintroduction would be maintenance of elk populations (Larson 2006b; appendix G of the EIS).

In addition, it is possible that the gray wolf would be de-listed by the USFWS in the future, at which time management of the species would revert to the State of South Dakota for lands outside Wind Cave National Park. The SDGFP, a cooperating agency in this plan/EIS, voiced strong opposition to the reintroduction of predators as an elk management tool in a letter to the park dated July 12, 2006 (SDGFP 2006a; appendix H of the EIS).

State Historic Preservation Officer (SHPO)

As part of the consultation process, a letter was sent to inform the SHPO of the park’s plans to prepare an Elk Management Plan and EIS. The letter requested the department’s participation. The plan/EIS was sent to the SHPO for review and comment, and the agency’s response agreeing that no adverse effects to cultural resources will occur if the elk management plan were implemented is included in the EIS. The state responded in a letter dated August 4, 2008 stating the South Dakota Historic Preservation Officer concurred with the determination of no adverse effect.

South Dakota State Veterinarian

As part of the consultation process, a letter was sent to inform the State Veterinarian of the park's plans to prepare an elk management plan and EIS. The letter requested the department's participation (appendix L of the final plan/EIS).

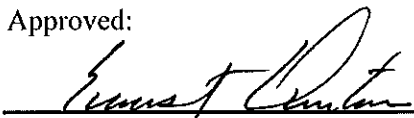
American Indians

A number of tribes and tribal organization may have an interest in the park's elk management efforts. As part of the consultation process, a letter was sent to inform the American Indians of the park's plans to prepare an elk management plan and EIS. The letter requested their participation (appendix M of the final EIS). As part of the government-to-government consultation process, copies of the draft plan/EIS were sent to the tribes for their review and comment.

CONCLUSION

The selected alternative fully meets all of the plan objectives and will be more easily implemented than other action alternatives. It is also environmentally superior and cost estimates show it will be less expensive than other action alternatives. Alternative B incorporates all practical means to avoid or minimize environmental harm, as do alternatives C and D should they be needed as back-up strategies to meet reduction targets. None of the impacts related to the implementation of alternative B, or of alternative C or D should they be needed, will affect a park's resource or value whose conservation is necessary to fulfill specific purposes identified in the establishing legislation for the park; key to the national or cultural integrity of the park; or identified as a goal in the park's general management plan or other relevant NPS planning documents. Therefore the selected alternative (or back up alternatives C or D) will not result in the impairment of park resources or values or violate the NPS Organic Act.

Approved:



12-3-2009

Ernest Quintana, Regional Director
Midwest Region, National Park Service

Date