

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

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

**THEODORE ROOSEVELT NATIONAL PARK**

Billings and McKenzie Counties, North 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 Theodore Roosevelt National Park (park) in accordance with the requirements of the National Environmental Policy Act of 1969, as amended (NEPA), its implementing regulations (40 CFR 1500-1508), and NPS Director's Order 12, Conservation Planning, Environmental Impact Analysis and Decision-Making and accompanying 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**

The park is proposing to manage its elk population in order to prevent adverse impacts to other park resources, which would occur if the herd size increases unchecked. In 1985, forty-seven elk (*Cervus elaphus*) were reintroduced to the South Unit of the park and a forage allocation model was developed to inform park managers of a maximum elk population objective. In 1993 and 2000, this population objective was exceeded, and live elk were translocated to other federal entities, Indian tribes, and states for reintroduction programs in North Dakota, South Dakota, and Kentucky. However, in 2002, the Director of the National Park Service issued a memorandum regarding chronic wasting disease (CWD), including a policy that prohibited translocation of elk from NPS units unless adequate testing had been completed. Since this memorandum was issued, the park has not tested enough elk for CWD (the test is lethal), and translocations for the purposes of population reduction have not occurred since 2000. In the absence of NPS management, or other effective population controls, the presence of high quality habitat found in the park creates the potential for the elk population to quickly exceed population objectives. The NPS is concerned that an unchecked elk population at the South Unit would create resource impacts that are not consistent with NPS *Management Policies 2006*. Allowing the elk to grow unchecked would also violate agreements with the State of North Dakota and the US Forest Service. For these reasons, a planning process was needed to examine alternatives 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 potential adverse effects.

**BACKGROUND**

Theodore Roosevelt National Park lies in the Little Missouri Badlands of western North Dakota. This 70,447-acre park is divided into the North Unit (24,070 acres), the South Unit (46,159 acres), and the Elkhorn Ranch Unit (218 acres). Elk were a prominent part of the native ungulate mix in this part of the state, but by the late 1800s, before establishment of the park (1947), elk were extirpated from the badlands of North Dakota.

Since its establishment, the park has restored missing components of the badlands ecosystem, including native wildlife historically found at the park. Pronghorn (*Antilocapra americana*), bison (*Bison bison*), and California bighorn sheep (*Ovis canadensis californica*) were reintroduced into the South Unit of the park in 1951, 1956, and 1959 respectively. Continuing this trend, and to enhance visitor experience, elk were reintroduced into the South Unit of the park in 1985. Together with resident mule deer (*Odocoileus hemionus*) and white-tailed deer (*Odocoileus virginianus*) populations, these species represent the historic ungulate assemblage in the badlands ecosystem of western North Dakota. Historically, predators of elk in the North Dakota badlands were grizzly bears, gray wolves, and mountain lions. Grizzly bears were extirpated by the late 1800s and wolves were extirpated from the area in the early 1900s. While mountain lions are present in small numbers in the park and on rare occasion take an elk, the minimal amount of predation on elk does not contribute to population control.

From 1985 to 1993, the elk population grew at an average rate of about 22 percent per year. This rapid growth led to concerns it could quickly become overpopulated, and could eventually have negative effects on park vegetation. As a result, a forage allocation model was developed in the early 1990s to provide park managers with a park-specific, science-based approach to establish ungulate population objectives that would maintain a healthy native plant community and provide sufficient forage for the major ungulates in the South Unit. Using that model, park management selected maximum population objectives for ungulates (i.e., bison, feral horses, and elk). These objectives represented maximum population sizes that would "trigger" reduction roundups to reduce the appropriate species in order to protect park resources. The objective selected for elk in the South Unit was approximately 360 animals.

Consistent with this management objective, park staff reduced the elk population through roundup and translocation in the fall of 1993 and again in early winter 2000, when elk population estimates exceeded 360 animals. However, since the 2002 NPS memorandum restricting translocation, elk have not been translocated for the purposes of population reduction in the park. From 2001 to 2004, early winter, pre-calving aerial surveys showed an average growth of about 20 percent annually. A recently completed population model accurately reconstructed the elk population growth that occurred between 1985 and 2006, taking into account survival, fecundity (reproductive capability), and removals by both hunters outside the park and the NPS. The model showed that growth varied from approximately 20 to 36 percent annually. The corresponding elk survival and reproduction rates in the South Unit are among the highest reported for an elk population. An aerial survey of elk in the park indicated that there were approximately 800 elk in early winter of 2007, and subsequent aerial surveys in 2009 and 2010 indicated that there were approximately 875 and 950 elk, respectively, in the South Unit. There is no indication at this time that natural mortality will increase or recruitment rates will decrease in the near future unless the population is allowed to increase to unnaturally high levels. In the absence of elk management inside the park, persistent grazing and browsing on plants by an unnaturally large elk population could negatively impact forage and other natural resources.

## PURPOSE AND NEED STATEMENTS

As a result of past and current actions within and outside Theodore Roosevelt National Park, several conditions have led to the increase of the park elk population to the approximately 950 that occur there as of February 2010. These conditions include only a few species and insufficient numbers of elk predators to effectively control the elk population in the park; apparent ineffectiveness of public hunting outside the park to control population size within the park; high reproductive, survival, and population growth rates for elk; negligible elk mortality such as winter kill; and the inability of the park to translocate elk without testing to show that the NPS is 99 percent confident that CWD would be detected if present in 1 percent or more of the population. These conditions are expected to continue, and the elk population is projected to increase. Large populations of elk could, over the long term, affect plant communities and other resources as a result of sustained, heavy grazing. Large elk populations could also affect other herbivores by competing for forage. Other considerations include: confirmation in 2010 of CWD presence in North Dakota; land use and users outside the park, including livestock grazing, hunting, and agriculture; visitors to the park; and the ability of the park to effectively manage resources.

As a result of these concerns, an elk management plan is needed:

- To prevent elk-related undesirable adverse impacts to natural resources in the park consistent with NPS policy;
- Because elk population growth is largely unchecked by controls such as natural predation, hunting, and nutritional restriction;
- To consider the concerns of area land owners and other land managers;
- Because the park has a responsibility to manage the elk population within the park as outlined in agreements with the USFS and NDGF; and
- To reevaluate current objectives and management options given the 2002 Director's Guidance Memorandum on CWD.

Therefore, the purpose of this plan/EIS is to develop and implement an elk management strategy compatible with the long term protection and preservation of park resources.

The following objectives were developed for this plan/EIS.

- Prevent major adverse impacts to physical and biological components of the park and surrounding environments.
- Develop and implement actions consistent with the guidance and bounds set by the NPS *Management Policies 2006*.
- Establish indicators to guide management of elk.
- Minimize scope or frequency of manipulating the elk population in the park, while maintaining long-term elk population viability.
- Incorporate management flexibility to account for information obtained regarding wildlife disease or other factors influencing elk populations.
- Provide public outreach opportunities to inform the public of the complexity of managing elk within the park.
- Coordinate and cooperate with stakeholders, such as other federal agencies, state, and private entities, including sharing data on the elk population and its management.
- To the extent practicable, enhance elk hunting opportunities on the lands surrounding the park.

## ALTERNATIVES CONSIDERED

### ALTERNATIVES DEVELOPMENT PROCESS

The formulation of alternatives for this plan/EIS began with discussions among members of the science team convened for this project (including scientists and technical experts with a scientific background in elk management, research, and range ecology; NPS staff; and others with background experience with the park or park ecosystems). Among other responsibilities, the science team was tasked with evaluating existing data, including the existing forage allocation model, and recommending an appropriate elk population size for the South Unit of the park. To continue to protect vegetation, prevent degradation, and avoid the need for restoration (as required by NPS *Management Policies 2006*), the science team recommended using the forage allocation model to identify the initial maximum elk population objectives for this plan/EIS (see appendix B of attachment 1 to the EIS for a more detailed evaluation of why this model was recommended for use). When considering a minimum population size, the science team reviewed elk population growth from the time elk were reintroduced to the South Unit in 1985, studies on genetic diversity, vegetation, and movement data that indicated there is an exchange of individual elk between those found at the park and those in the Killdeer Mountains of North Dakota and the Missouri Breaks of Montana.

Based on the data it reviewed, the science team recommended maintaining an elk population between a minimum of 100 and a maximum of 400 elk. Managing elk based on this range will allow the elk herd and associated grazing pressure to fluctuate within a range of variability that will be consistent with management

toward natural conditions required by NPS *Management Policies 2006*. It will also provide flexibility to implement management actions at any point within this range, depending on monitoring results. Recognizing that successful management of natural systems is a challenging and complicated undertaking, all of the action alternatives in the plan/EIS incorporated adaptive management approaches to meet the objectives of the plan. Each alternative includes a management action followed by a period of monitoring to evaluate the results of the action. By using an adaptive management approach, managers will be able to change the timing, method, or intensity of management treatments to better meet the goals of the plan as new information is obtained.

## **ALTERNATIVES ANALYZED IN THE EIS**

This EIS analyzed seven alternatives for the management of the park's elk herd. The action alternatives (B through F and the Preferred Alternative) would be conducted in two phases: an initial reduction phase followed by a maintenance phase. Alternative A is the no-action alternative and would not have been conducted in phases. The Preferred Alternative involves a combination of elements from other alternatives, and is summarized in the next section of this Record of Decision.

**Alternative A:** Alternative A is the no-action alternative. Under this alternative, the park would have continued existing management practices and would not have initiated any new management actions beyond those available when the elk management planning process started. The park did not have an existing elk management plan, and none of the park's planning documents called for specific actions related to management of the elk population. Then-existing efforts related to elk management would have been maintained, including opportunistic and targeted surveillance for CWD research and monitoring, public outreach, and educational and interpretive measures related to elk ecology and their impact on park resources. No park closures or restrictions related to elk management actions would have been expected under alternative A. Under this alternative, the elk population would have been allowed to grow without management action within the park.

**Alternative B:** Under Alternative B, firearms would have been used as the sole method to remove elk from the park. Authorized agents under direct NPS supervision would have assisted in conducting efficient, humane removal of animals to meet resource management objectives. 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 have been required. The park would have developed specific guidelines for firearms use. The park could have used contractors, skilled volunteers, and/or NPS employees with demonstrated skills and proficiencies in the safe use of firearms to reduce the elk herd. For the purposes of the plan, a contractor would have been a fully insured business entity, nonprofit group, or other entity engaged in wildlife management activities that include direct reduction with firearms. The contractor would have possessed all necessary permits. Skilled volunteers would have included individuals identified through an NPS-developed system. Before assisting with removal actions with firearms, individuals would have needed to meet a number of requirements established by the park, including a demonstrated level of firearm proficiency. Other skilled volunteers would have needed to demonstrate appropriate proficiency depending on their proposed involvement (field dressing, CWD testing, etc.). Those skilled volunteers that qualified for participation would have become part of a pool of available personnel that could have supplemented elk management teams. All skilled volunteers would have been directly supervised in the field by NPS personnel during any elk management actions.

**Alternative C:** Under alternative C, roundup and euthanasia would have been used as the sole method to control the elk population. Roundups would have been conducted, herding elk into the park's capture and handling facility. From there, live elk would have been transported to a commercial processing facility, where they would have been euthanized, tested for CWD, and processed for distribution, donation, or disposal, as appropriate. In instances where transport to the commercial processing facility would not have been an available option, elk would have been euthanized at the park handling facility by qualified NPS employees and authorized agents skilled in specific euthanasia techniques. Carcasses would then have been tested for CWD, and processed for distribution, donation, or disposal.

**Alternative D:** Under alternative D, the NPS would have sought to use translocation (roundup and relocation of animals to willing recipients outside the park) to control the elk population. All applicable state and federal permits required to implement this alternative would have been obtained. This option would have involved multiple roundups—at least one for testing a sample number of elk to establish the prevalence of CWD, and subsequent roundups for the actual translocation of animals. However, several circumstances could have influenced implementation of this option, including the recently confirmed presence of CWD in North Dakota, the availability of willing recipients, and management considerations for the park. Under this alternative, if enough willing participants to take elk could not have been located, or if CWD were found, elk would have been euthanized rather than translocated.

**Alternative E:** Under alternative E, the NPS would have sought to enhance elk hunting opportunities outside the park, working cooperatively with the North Dakota Game and Fish Department (NDGF), as well as the US Forest Service and adjacent landowners, to implement actions outside the park to reduce and maintain the elk population. The park would have sought support from the state of North Dakota and worked cooperatively with NDGF to identify supporting landowners to ensure adequate area was available to fully implement this alternative. If support were obtained, the NPS would have dispersed elk beyond the boundary of the park. NPS employees could have manipulated the park's boundary fence to facilitate dispersal as necessary. Once elk were dispersed, the NPS would have worked with the NDGF to enhance hunting opportunities outside the park. The NPS would have cooperated with NDGF to ensure all animals removed outside the park were screened for CWD.

**Alternative F:** Alternative F would have considered chemical (non-surgical) fertility control solely for maintenance of the elk population after an initial reduction phase. This option would have been unlikely to result in adequate initial reduction elk population within the lifetime of the plan; therefore, it was proposed only for use as a population maintenance tool. Under this alternative, the park would have initiated a fertility control program for elk population maintenance using either an agent approved for use in free-ranging elk or approved for off-label veterinary use. Any fertility control agent would have been applied in the field or through the use of a roundup using treatments recommended by the prescribing veterinarian. The park would have monitored the status of ongoing fertility control research. If advances in technology would benefit elk management in the park, then the choice of a fertility control agent could have changed. The final choice would have been determined by availability, cost, efficacy, duration, and safety at the time the action was implemented. An agent considered for use would have needed to meet the criteria outlined in the EIS.

**Preferred Alternative (Combined Management Techniques):** The preferred alternative, as identified in the EIS, allows the park to use a suite of management actions (direct reduction with firearms; translocation; euthanasia) to control the elk population. The NPS has selected the Preferred Alternative for implementation; it is described below under *Selected Alternative*.

## SELECTED ALTERNATIVE

The NPS has selected the Preferred Alternative, as identified in the EIS, for implementation. This alternative utilizes a suite of techniques contained in alternatives B (direct reduction with firearms by federal employees and designated agents), C (roundup and euthanasia), and D (testing and translocation) to control the elk population. Under this alternative, the park's goal will be to complete the initial reduction phase of elk management within 5 years. To begin, initial reduction will involve direct reduction of elk through the use of firearms. This effort will be managed by the NPS and carried out by qualified federal employees and/or skilled public volunteers. Skilled volunteers using firearms will work as members of teams and will be supervised and directed in the field by NPS personnel. All personnel equipped with firearms and engaged in direct reduction of elk will have the appropriate skills and proficiencies for wildlife removal under challenging field conditions. Other skilled volunteers could be utilized to support meat removal, transport, research, or storage efforts. Skilled volunteers will include individuals identified through an NPS-developed system. Before assisting with removal actions with firearms, volunteers will need to meet a number of requirements including a demonstrated level of firearm proficiency established by the park (additional details about the proficiency test is provided in the

"Methods" description below). Skilled volunteers will also be screened for fitness. Compliance with all relevant NPS directives related to firearms use in parks, as well as federal firearm laws will be required.

Following each year of the initial reduction phase, the NPS will evaluate the program in order to determine if population goals are being met. Allowing some room for adjustments, approximately 500 elk will have to be removed over the first 2 years (an average of at least 250 elk per year) for direct reduction with firearms to be considered successful in meeting reduction goals. The number of elk killed outside the park during the state-sponsored hunting seasons (E3/E4 units) will be considered when evaluating goal success. If overall reduction goals are achieved, the park will continue to use direct reduction with firearms.

If fewer than approximately 500 elk are removed by direct reduction with firearms in the first 2 years, this activity will be temporarily suspended in year 3 and supplemental methods (e.g., roundup or other capture methods followed by euthanizing and/or translocating elk) will be used to reduce the elk population to approximately 200 animals. Whether elk are euthanized or translocated will depend on whether adequate sampling has occurred to meet CWD surveillance goals, whether CWD is detected in the herd, and/or whether there are willing recipients that can meet all federal and state requirements to transport and receive live elk.

Once the elk population objective for initial reduction is met, maintenance will be achieved using the same direct reduction methods described above. Although unlikely, direct reduction with firearms could be supplemented by capture and euthanasia or testing and translocation in the event the use of firearms is unsuccessful during the maintenance phase. If translocation is to be used for maintenance, additional CWD testing will likely be required.

## **METHODS**

### **Direct Reduction with Firearms**

Direct reduction with firearms will involve the use of teams that will assist with all related field activities (shooting, field dressing, data collection, CWD testing, handling/transport of salvageable meat) and subsequent management actions (data collection, shipping). Up to five teams comprised of a single team leader and up to four skilled volunteers will be involved with direct reduction activities. Teams will work together for up to one week and then a new set of volunteers will begin their commitment. Team leaders will be temporary or permanent NPS (or other government) employees that meet the same qualifications as the team members. They will also be familiar with badlands terrain and park operations and will have additional training in first aid, radio operations, volunteer supervision, use of firearms, CWD testing, and other procedures developed for the elk reduction program. Skilled volunteers will be required to demonstrate appropriate skills related to firearms proficiency and a certain level of physical fitness. Assessment of firearm proficiency will require potential volunteers to choose a field shooting position and place a specified number of shots (using non-leaded ammunition) into a standard target at a distance to be determined by the NPS. Volunteers will likely need to demonstrate a minimum level of physical ability in order to participate in elk reduction activities. A self-health assessment and/or concurrence from a medical doctor could therefore be required of volunteers. Only those meeting the requirements will be considered for team participation.

The five team leaders will first conduct a pilot effort employing all of the same protocols that will be used during reduction efforts (e.g., locating and shooting elk, collecting biological samples, recovering and storing meat and other products, and processing other data collected while in the field) for the purposes of training, evaluating, and modifying field protocols to ensure that reduction teams are properly equipped and as efficient as possible. This effort will also provide the NPS with reasonable expectations for future efforts that will involve the full teams, including skilled volunteers.

Teams will generally access and scout assigned areas on foot. Because of the difficulty reduction teams may have efficiently locating elk and because this reduction is not a fair-chase recreational "hunt," the monitoring effort outlined in the EIS for alternative A will be implemented prior to the reduction effort. Real-time GPS

collars will be deployed on a sample of female elk, and team leaders will check locations of collared animals on a daily basis. This information will be used to guide each team's efforts for that day. Each team will be outfitted with a GPS datalogger that will track the movements of the team for future analyses. This level of monitoring will greatly increase the efficiency of the reduction effort and provide the NPS with an objective basis for why the alternative succeeded or failed (response of elk to teams, effort of teams, etc.).

Using these data, teams will locate groups of elk to facilitate reduction activities, although individual elk located opportunistically will also be considered for removal. Teams will take advantage of opportunities to take a number of elk at any given time, depending on the situation. Team leaders will remain in close physical proximity to the team and will ensure that only cow elk are targeted, but may or may not indicate a specific animal or animals, depending on the conditions. Team leaders will determine the number of animals that will be taken at a given time, but the team will work together to determine other specifics, such as the best approach and which team members will do the shooting. Only non-lead bullets will be used, and elk injured during the operation will be put down as quickly as possible to minimize suffering.

Qualified team members will be responsible for taking biological samples. Every effort will be made to remove all salvageable meat from the field, although some carcasses could be left because of the difficulty to retrieve them given terrain, weather, etc. The locations of these carcasses will be marked using GPS, and if any samples from these carcasses test positive for CWD, park staff will retrieve them to the extent possible and dispose of them appropriately.

Salvageable meat will be transported to a storage facility in or near the park. To enhance the efficiency of reduction operations, teams will be supplemented by experienced wranglers familiar with pack horses/mules, as well as preparing and packing game in rough terrain, who will remove meat from the field and transport it to the storage facility. This will allow the team leaders and skilled volunteers to focus their efforts on locating and shooting elk, and minimize time spent processing and transporting meat.

Additional personnel could be utilized at the storage facility for subsequent management activities, such as loading salvageable meat into refrigeration trucks for temporary storage, collecting data, and shipping meat for distribution or donation. The meat will be held, processed, and donated in accordance with guidance from the NPS Office of Public Health. As long as there are no positive CWD tests, meat will be donated to state agencies, American Indian tribes, approved charities, or other organizations in accordance with General Services Administration regulations regarding the authority of the federal government to transfer government property to other entities. These regulations will allow transfer of the elk meat to various groups including other government entities (state, city, Tribal, or other authority) and non-profit organizations. The park expects to donate the majority of the meat to NDGF, which could then make the decision to distribute the meat to whomever they choose, including to the individuals that participated in the skilled volunteer program or to other people or organizations as they deem appropriate. The NPS will work with the NDGF to ensure that a substantial amount of the meat donated is distributed to tribes and charities. Any meat retained by the NPS will be donated to such organizations directly.

### **Roundup and Euthanasia**

If roundup and euthanasia are used under the selected alternative, these actions will be implemented as described in the EIS for alternative C. Roundups will be conducted and elk will be herded to the park's capture and handling facility. Live elk will be transported from this location to a commercial processing facility, where they will be euthanized, tested for CWD, and processed for distribution, donation, or disposal, as appropriate. If this is not an available option, elk will be euthanized at the park handling facility by qualified NPS employees and volunteers skilled in specific euthanasia techniques. Carcasses will be tested for CWD and processed for distribution, donation, or disposal, as discussed in the following section.

## Testing and Translocation

If testing and translocation are used under the selected alternative, these actions (roundup and relocation of animals to willing recipients outside the park) will be implemented as described in the EIS for alternative D. All applicable state and federal permits required to implement this alternative will be obtained. Any elk removed by direct reduction with firearms and/or roundup and euthanasia will be tested for CWD to contribute to the sample size needed to determine the prevalence of the disease in the elk population prior to translocation. If enough samples are not obtained from these methods, testing and translocation could involve multiple roundups: at least one for testing a sample number of elk to establish the prevalence of CWD, and subsequent roundups for the actual translocation of animals. Several circumstances could influence implementation of this option, including the presence of CWD, the availability of willing recipients, and management considerations for the park.

## TIMING

Annual management actions associated with the selected alternative could occur for approximately 13 weeks between mid-October and January 31. Although the implementation period could be shortened or extended depending on factors such as success rate and weather conditions, activities will be conducted during this time of year to minimize the number of visitors that could be affected by management actions; to minimize the potential for removing elk that are in late stages of pregnancy; to take advantage of the fact that most elk are inside the park at this time of year; and to potentially increase hunting opportunities outside the park during a portion of the elk hunting season. Actions will generally be conducted on weekdays (Monday–Friday) when park visitation is lowest, including time for coordination and orientation for skilled volunteers. All reduction actions in the field will generally occur during daylight hours.

## NUMBERS OF ELK REMOVED

The following discussion presents a hypothetical scenario based on a starting population size of 1,000 elk, and is intended for comparative purposes only. The actual numbers of elk to be removed during both initial reduction and maintenance will be determined based on elk population estimates from annual surveys conducted throughout the life of this plan. Information related to numbers of elk taken during state-sponsored hunts outside park boundaries will be used in calculating the numbers of elk to be removed during NPS management actions within the park.

### Initial Reduction

The park's goal under this alternative will be to complete the initial reduction phase of elk management within 5 years. Providing for factors such as weather and the likelihood elk would change their behavior to avoid interactions with direct reduction teams (i.e., elk might become more aware of shooting, which would increase the effort necessary to reach the removal numbers in any given year), the NPS has estimated approximately 170 to 230 elk could be removed in the park per year using direct reduction with firearms that includes skilled volunteers. Based on hunter harvest data from 1997 to the present (see chapter 3 of the EIS), it is estimated that, on average, at least 45 elk would be harvested outside the park during the initial reduction phase of elk management. As a result, it is estimated at least 215 to 275 elk could be removed per year in and around the park.

Considering ideal conditions that allow for the removal of at least 275 elk per year, a hypothetical scenario where the elk population in the South Unit is 1,000 animals before initial reduction, a 25percent annual elk population growth rate, and an elk population goal of 200, the initial reduction would take 5 years at this removal rate. This would result in the removal of approximately 1,358 elk during initial reduction.

In addition to those mentioned above, several other factors could influence this number, resulting in either greater or lesser numbers of elk being removed during the initial reduction phase. For example, if hunter harvest outside the park is higher or lower than estimated for this project, it could influence the time required to reach

initial population goals. In addition, if reproduction rates are higher and mortality lower than estimated, the population growth would be greater than 25 percent and more elk would need to be removed, potentially increasing the time necessary to reach the initial population goal and the number of elk that need to be removed. Conversely, if reproduction rates are lower and mortality rates higher than estimated fewer elk would need to be removed, and efforts could take less time.

## **Maintenance**

Maintenance actions could be implemented each year following completion of the initial reduction phase, with a focus on the removal of adult female elk. The science team concluded that if approximately 25 percent of adult female elk were removed annually (approximately 10 to 12 percent of the population based on sex ratios), the park would observe a temporary increase in elk populations in the short-term, followed by a long-term, gradual decline that would maintain the population at around 200 elk. Therefore, if there are 200 elk in the South Unit after initial reduction, 20 to 24 elk would be removed annually to maintain the population. Similar to the initial reduction phase, the number of elk killed outside the park during the state-sponsored hunting seasons (E3/E4 units) will be considered when setting and evaluating maintenance phase reduction success.

In a scenario where initial reduction takes 5 years to reduce the elk population to 200 animals, it is estimated a total of 200 to 240 elk would be removed for maintenance between years 6 and 15. In a scenario where initial reduction is complete by year 3, it is estimated a total of approximately 240 to 288 elk would be removed for maintenance between years 4 and 15. These totals would include both elk removed by the NPS inside the park, as well as those removed outside the park by hunters. For the purposes of the analysis in the plan/EIS, it is assumed the maintenance phase will involve the use of direct reduction with firearms. Although unlikely, these methods could be supplemented or replaced by capture and euthanasia or testing and translocation in the event direct reduction with firearms is unsuccessful. If translocation is to be used for maintenance, additional CWD testing will be required.

Factors that could influence initial reduction could also influence maintenance activities, such as weather, changes in elk behavior, and differences in reproductive and mortality rates. In addition, with many fewer elk on the landscape, they would be more difficult to locate for removal.

## **MITIGATION MEASURES**

A variety of mitigation measures will be employed as part of the implementation of the selected alternative to ensure the protection of park resources, visitor experience, and human health and safety related to elk management actions within Theodore Roosevelt National Park. Additional measures are also provided to minimize the waste of salvageable meat from elk removed by direct reduction with firearms.

- The park will provide educational and interpretive information to the public about elk ecology, potential impacts from elk on other park resources, and success of elk management actions in achieving the desired condition.
- To the extent feasible, efforts will be made to minimize safety concerns and disturbances to the public, such as scheduling elk management activities during periods of lower visitor use. Actions will generally be conducted from mid-October through January to minimize the number of visitors that could be affected by management actions; to minimize the potential for removing elk in the late stages of pregnancy; to take advantage of the fact that most elk are inside the park at this time of year; and to potentially increase hunting opportunities outside the park during a portion of the elk hunting season. Actions will generally be conducted on weekdays (Monday–Friday) when park visitation is lowest, including time for coordination and orientation for skilled volunteers. All reduction actions in the field will occur during daylight hours.
- Efforts will be made to ensure management actions are conducted as humanely as possible to minimize elk suffering. If elk are seriously injured during implementation of non-lethal management activities, American Veterinary Medical Association guidelines for euthanasia will be followed.

- Firearm use will comply with all relevant regulations, policies, and plans, including NPS directives related to firearms use in parks, as well as federal firearm laws administered by the Bureau of Alcohol, Tobacco, and Firearms.
- If helicopters are required for any elk management activities, operations will be conducted consistent with the interagency helicopter operations guide. Only qualified personnel will participate in helicopter operations.
- Skilled volunteers will be able to demonstrate appropriate skills related to firearms proficiency and a certain level of physical fitness. Assessment of firearm proficiency will require potential volunteers to choose a field shooting position and place a specified number of shots into a standard target at a distance to be determined by the NPS. Volunteers will be informed of the need to be in good physical condition as the activity will be very strenuous in rough terrain and difficult weather conditions. A self-health assessment and/or concurrence from a medical doctor could therefore be required of volunteers. Only those meeting the requirements will be considered for team participation.
- To minimize impacts to park resources, direct reduction teams will access backcountry areas on foot. Vehicles will not be used in the backcountry.
- Every effort will be made to remove all salvageable meat from the field, although a small number of CWD negative carcasses could be left because of the difficulty to retrieve them given extreme terrain, weather, etc. Recovered meat will be held, processed, and donated in accordance with guidance from the NPS Office of Public Health. As long as there are no positive CWD tests, it is expected that the NPS will donate the majority of the meat to North Dakota Game and Fish in accordance with General Services Administration regulations regarding the authority of the federal government to transfer government property (elk carcasses in this case) to other entities. NDGF could then make the decision to distribute the meat to whomever they choose, including to the individuals that participated in the skilled volunteer program or to other people or organizations as they see fit. The NPS will work with the NDGF to ensure that a substantial amount of the meat donated is distributed to tribes and charities. Any meat retained by the NPS will be donated to such organizations directly.

## ESTIMATED COSTS

The park estimated the costs of implementing the selected alternative based on input from the interdisciplinary team. An in-depth breakdown of costs can be found in the EIS. Based upon the available data, the park has estimated that implementation of the selected alternative will cost between \$1,734,567 and \$2,253,111 over the 15-year life of the plan. This breaks down to an average annual cost to the park of between \$115,637 and \$150,208.

## ADAPTIVE MANAGEMENT

For this plan, adaptive management starts with the hypothesis that elk population size is a primary factor that would limit grasslands in elk use areas from reflecting a "lightly grazed system." Monitoring under this plan will test for changes in both the elk population as well as shifts in grassland vegetation patterns in elk use areas (see "Actions Common to All Action Alternatives Section" and appendix B of the EIS for more details). If a difference is evident, then elk management actions could be altered. If not, data will be examined to identify the most important variable(s) affecting grassland conditions. These could include drought, fire, and other wildlife, in addition to elk population size. Potential changes could then include alterations to elk population goals necessary to meet desired conditions. For example, using best available science, the park could adjust its elk management actions in one of several ways:

- If there is an identifiable trend toward lightly grazed conditions attributable to elk use in areas previously displaying high grazing pressure, then no change in elk population management will be necessary.
- If there is an identifiable trend toward highly or moderately grazed conditions attributable to elk use in areas previously displaying light grazing pressure, then the elk population level will be adjusted.

- If conditions in areas displaying high or moderate grazing pressure do not change (i.e., are not trending towards a lightly grazed system), then the elk population level will be adjusted.
- If there is no change in conditions for areas displaying high or moderate grazing with the elk population fluctuating between 100 and 400 animals, then other factors affecting grassland ecosystems will be further explored while maintaining the elk population within this range.
- If conditions similar to those found today (with a population assumed to be 1,000) continue, the number of elk removed during maintenance could be reduced and a larger population could be maintained.

In addition, given uncertainties over the potential success of implementing direct reduction with firearms for initial reduction of the elk population, the selected alternative involves an approach for shifting management actions. Assuming a starting elk population of 1,000 animals, it is expected that direct reduction with firearms would take 5 years to reach the goal of 200 elk. However, if fewer than approximately 500 elk are removed by direct reduction with firearms in the first 2 years, this activity will be temporarily suspended in year 3 and supplemental methods (e.g., roundup or other capture methods followed by euthanizing and/or translocating elk, as described for alternatives C and D in the plan/EIS) will be used to reduce the elk population to 200 animals. Whether elk are euthanized or translocated will depend on whether adequate sampling has occurred to meet CWD surveillance goals, whether CWD is detected in the herd, and/or whether there are willing recipients that can meet all federal and state requirements to transport and receive live elk. Each of these options is described below; no additions or changes to this ROD are anticipated if euthanasia and/or translocation are used following year 2.

### **Euthanasia**

If euthanasia is conducted, elk would be rounded up and driven to the park's handling facility in the South Unit. Under this scenario, elk would be held at the park's handling facility until a full truckload has been captured and loaded, at which point they would be transported to the commercial facility for CWD testing, euthanasia, processing, and distributing (donating) or disposing of the meat. CWD testing/tracking and distribution of carcasses would be conducted in accordance with NPS directives and specific guidance provided by the park (e.g., CWD sampling, tracking, etc.). If samples are found to be CWD positive, those corresponding carcasses would be disposed of per state guidelines (see "State of North Dakota Statutes and Guidelines" section in chapter 1 of the EIS). CWD-negative lots and carcasses would be available for distribution or donation.

If a processing facility cannot be identified, euthanasia would be conducted by qualified park staff or authorized agents at the capture and handling facility within the South Unit. Under this scenario, elk would be euthanized using methods approved by the AVMA. CWD samples and other data would be collected by trained NPS personnel or authorized agents. To be as humane as possible, the park would attempt to reach a goal of no more than 5 percent handling mortality. Carcasses would be stored in refrigeration trucks located at the handling facility until CWD test results are obtained. If necessary, carcasses would be moved temporarily to a meat locker facility for the CWD test holding period. CWD-negative carcasses would be donated to the extent practicable, while those that are CWD positive would be landfilled per state guidelines (see the "State of North Dakota Statutes and Guidelines" section of chapter 1 of the EIS).

Elk would be identified for euthanasia based on objectives for population sex and age ratios. Elk to be euthanized would be kept in separate pens from those to be released back into the park. Based on the previous roundups conducted at the park, 150 elk could be herded through the chute per day; however, these animals could not be euthanized the same day due to the time involved. If it is necessary to keep live animals overnight, NPS staff will be responsible for ensuring the welfare of captured animals.

### **Translocation**

The 2002 Director's Guidance Memorandum on CWD allows translocation of elk only after sampling has been conducted that would detect the disease (with 99 percent confidence) if it were present in 1 percent or more of

the elk population. For a population of 1,000 (hypothetical population size prior to initial reduction) sampling of approximately 368 elk would be required. Under the scenario described above, where translocation could be used in year 3, it is assumed that approximately 430 elk would have been removed through shooting and tested for CWD in the first 2 years. Therefore, no additional elk would have to be tested prior to translocation in year 3. CWD-negative carcasses generated by shooting would be donated to the extent practicable, while those that are CWD positive would be landfilled per state guidelines (see the "State of North Dakota Statutes and Guidelines" section of chapter 1 of the EIS). Soon after the final EIS was released, CWD was confirmed in one mule deer located off park lands in southwestern North Dakota.

Assuming CWD is not found in tested elk and willing recipients are available, subsequent roundups for initial reduction by translocation would be conducted. These would be completed as soon as possible after the final test results are received, but no more than 2 years after receiving the results. Elk would only be translocated to willing recipients, which could include tribes, non-profit groups, or other agencies (state and federal). Parties interested in receiving live elk from the park would be responsible for their transport; ensuring the transport occurs in a humane manner; and ensuring compliance with all state and federal laws. A memorandum of understanding that specifies the conditions of the transfer would be developed between the NPS and the recipient, and would require close coordination with state veterinarians and agricultural boards to ensure all requirements are met. The NPS would ensure that the terms of any such agreement are met and would require assurances that subsequent releases of elk would be conducted humanely; that there would be no immediate commercial gain; and that sufficient land would be available to support the translocated herd. Some handling-related mortality could be expected under this method due to stress on the elk; to be as humane as possible, the park would attempt to reach a goal of no more than 5 percent handling mortality. As necessary, the park would reevaluate handling methods if associated mortality becomes an issue.

## **BASIS FOR DECISION**

Following the close of the public comment period on the draft plan/EIS, comments were compiled into a public comment report and distributed internally for review. An interdisciplinary team, working with senior park and NPS managers, considered the public comments, cost efficiency, how effectively the alternatives would meet the stated objectives of the plan, and the environmental benefits and adverse impacts for each alternative. Collectively, these factors were evaluated to arrive at the NPS preferred alternative, which consists of a suite of techniques contained in alternatives B (direct reduction with firearms by federal employees and designated agents), C (roundup and euthanasia), and D (testing and translocation). Further input was solicited from interested parties during another comment period for the preferred alternative, and was considered when refining the preferred alternative.

The objectives or specific goals for this plan/EIS that the alternatives, including the preferred alternative, were evaluated against include the following:

1. Prevent major adverse impacts to physical and biological components of the park and surrounding environments.
2. Develop and implement actions consistent with the guidance and bounds set by the NPS *Management Policies 2006*.
3. Establish indicators to guide management of elk.
4. Minimize scope or frequency of manipulating the elk population in the park, while maintaining long-term elk population viability.
5. Incorporate management flexibility to account for information obtained regarding wildlife disease or other factors influencing elk populations.
6. Provide outreach opportunities to inform the public of the complexity of managing elk within the park.
7. Coordinate and cooperate with stakeholders, such as other federal agencies, state, and private entities, including sharing data on the elk population and its management.
8. To the extent practicable, enhance elk hunting opportunities on the lands surrounding the park.

The selected alternative would fully meet objectives 1, 2, 3, 5, 6, and 7 if successful. It reduces the elk population to levels that have historically showed viability, while maintaining lightly grazed conditions and reducing impacts on adjacent lands (objective 1). Consistent with NPS *Management Policies 2006*, the preferred alternative will prevent impairment, resource degradation, and the need for restoration from sustained heavy use by elk; it will promote natural conditions; it will allow for cooperation with others when managing resources; and it will use scientifically valid information to guide decisions on population management (objective 2). The preferred alternative will allow for the management of the elk population using indicators such as population size (based on the forage allocation model) and vegetation condition (based on seral stage monitoring) (objective 3). It will allow for adaptive management based on desired conditions, monitoring of the elk population and vegetation, and efficiency/effectiveness of management (objective 5). It will provide increased educational and interpretive opportunities related to elk (objective 6). The preferred alternative also represents an approved management plan developed with public and agency input. Data will be shared with the state, and NPS will work with the state on issues such as hunting opportunities outside the park (objective 7).

The selected alternative partially meets objective 4. Based on the hypothetical scenario described in the EIS, actions will occur frequently (annually), but the scope (number of animals removed) of the actions will be minimized after the first 3 to 5 years. Most elk (approximately 1,188 to 1,358) will be removed during the first 3 to 5 years, but only 20 to 24 will need to be removed in each of the remaining years. If roundup and euthanasia are used, the NPS will seek to use a commercial facility to conduct all euthanasia activities, and this could minimize the scope of NPS involvement. However, if this were not possible, the NPS will have to conduct these activities themselves at the park. If roundup and translocation are used, the exact scenario depends on NPS identifying willing recipients. Regardless of the methods used, the preferred alternative will ultimately maintain the elk population at levels that have historically showed viability.

The selected alternative also partially meets objective 8. Management actions will be conducted in the fall and winter in order to potentially increase dispersal and therefore the number of elk outside of the park for hunting. However, once the maintenance phase is reached, the selected alternative will substantially reduce the elk population and thereby will also reduce long-term elk hunting opportunities in the two state hunting units adjacent to the park.

## **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: “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.” (*Management Policies 2006, sec. 1.4.5*).

One of the primary purposes of the National Park Service is 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. However, the laws do give the NPS the management discretion to allow impacts to park resources and values when necessary and appropriate to fulfill the purposes of a park. Although Congress has given the NPS the management discretion to allow certain impacts within a park system unit, that discretion is limited by the statutory requirement that the agency must leave park resources and values unimpaired, unless a particular law directly and specifically 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 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.

Impairment may result from NPS activities in managing the park, visitor activities, or activities undertaken by concessioners, contractors, and others operating in the park. The following process was used to determine whether the alternatives had the potential to impair park resources and values:

1. The park's enabling legislation, the general management plan, the strategic plan, and other relevant background documents were reviewed with regard to the unit's purpose and significance, resource values, and resource management goals or desired future conditions.
2. Management objectives specific to resource protection goals at the park were identified.
3. Thresholds were established for each resource of concern to determine the context, intensity and duration of impacts.
4. An analysis was conducted to determine if the magnitude of impact reached the level of "impairment," as defined by NPS *Management Policies 2006*.

The following impact topics were evaluated for impairment. The analysis revealed that implementation of the selected alternative will not result in impairment of any of these park resources or values at Theodore Roosevelt National Park:

1. Soils, Erosion, and Water Resources: Although minor to moderate adverse impacts are expected, the reduction and maintenance of the elk population at levels consistent with a lightly grazed system would result in long-term beneficial effects to soils and water quality by reducing vegetative cover loss, erosion, and sedimentation. The beneficial long-term impacts would offset the expected short-term adverse impacts expected as a result of implementing the Selected Alternative. No impairment to park soils or water resources would occur.
2. Vegetation: Although moderate adverse impacts are expected, the beneficial long-term impacts on vegetation under the preferred alternative would offset some of these adverse impacts. Current and future generations would be able to continue to enjoy the park's vegetation. No impairment to park soils or water resources would occur.
3. Elk Population: Activities associated with the Selected Alternative are expected to result in moderate to major adverse impacts. However, The reduction and maintenance of the elk population at levels consistent with a lightly grazed system would result in long-term beneficial effects to the elk population and their habitat by reducing the potential for sustained, heavy use; decreasing competition; increasing available forage and cover; reducing human-influenced impacts on movement from hunting; and reducing the potential for spreading diseases of concern if they are introduced into the park. Although temporary major adverse impacts to elk would occur during annual management actions, there would be no impairment of elk because a viable population would be maintained within the South Unit.
4. Other Wildlife and Wildlife Habitat: Activities associated with the Selected Alternative are expected to result in minor to moderate adverse impacts. However, the reduction and maintenance of the elk population at levels consistent with a lightly grazed system would result in long-term beneficial effects to other wildlife and wildlife habitat by reducing the potential for sustained, heavy use of vegetation by elk, thereby increasing available resources, especially for species that rely on grasses, shrubs, and saplings. Other ungulates and herbivores such as prairie dogs would also benefit from increased forage and habitat, and the decreased potential for transmission of diseases. Although temporary moderate impacts to wildlife could occur during annual management actions, there would be no impairment to wildlife and wildlife habitat; viable wildlife populations would be maintained within the South Unit.
5. Special Status Species: Implementation of the Selected Alternative is expected to result in negligible to moderate adverse impacts. However, the reduction and maintenance of the elk population at levels consistent with a lightly grazed system would result have long-term, beneficial

effects for the upland sandpiper, long-billed curlew, Baird's sparrow, grasshopper sparrow, lark bunting, Sprague's Pipit, and the chestnut-collared longspur. Current and future generations will be able to enjoy the park's special status species. No impairment to the park's Special Status Species would occur.

6. Wilderness: Negligible to moderate adverse impacts on the natural character of the wilderness area are expected as a result implementation of the Selected Alternative. However, the reduction and maintenance of the elk population at levels consistent with a lightly grazed system would result in long-term beneficial effects to wilderness by eliminating the potential for sustained heavy use by elk and preserving the vegetation that contributes to the natural and untrammeled character of the wilderness area. No impairment to Wilderness would occur.

## **ENVIRONMENTALLY PREFERABLE ALTERNATIVE**

The Council on Environmental Quality (CEQ) NEPA regulations define the environmentally preferable 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)."

After careful consideration of all the factors involved, alternative D (testing and translocation) was identified as the environmentally preferable alternative. The fact that alternative D would quickly and effectively reduce and maintain the elk herd 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 as the environmentally preferable alternative.

The park has identified alternative D as best meeting the CEQ definition of the environmentally preferable because it

- Reduces elk numbers in the park in the most efficient manner (roundups)
- Allows for a rapid initial reduction, thus reducing potential impacts to park resources from high elk populations more quickly than other alternatives
- Causes only minimal disruption to park visitors and park operations
- Allows for non-lethal control of elk that are translocated
- Requires less frequent manipulation of the elk population than other alternatives
- Reduces the number of animals that have to be killed over the life of the plan

## **PUBLIC INVOLVEMENT IN THE PLANNING PROCESS**

### **INTERNAL SCOPING**

An internal scoping meeting was held May 25 and 26, 2004 in Medora, North Dakota to discuss the development of an Elk Management Plan for Theodore Roosevelt National Park. During the meeting, NPS employees identified the purpose of and need for action, management objectives, issues, and impact topics. Various roles and responsibilities for developing the elk management plan were also clarified. The results of the meeting were captured in a report now on file as part of the administrative record. Representatives from the NPS - Washington Office/Environmental Quality Division (EQD), NPS - Washington Office/Biological Resource Management Division (BRMD), NPS - Midwest Region, Theodore Roosevelt National Park (including a former employee), NDGF, USFS, U.S. Geological Survey (USGS), and Greystone Environmental Consultants, Inc. (Greystone) attended this meeting.

In addition, the park had coordinated with many technical experts prior to starting the planning process and established a Science Team to provide input to this plan, as described in "Chapter 1: Purpose of and Need for Action." Comprised of subject matter experts, the Science Team was chartered to provide technical

recommendations to the NPS on matters regarding scientific data and analysis. The team met periodically providing technical background information and research references for this plan. The team participants were limited to persons with scientific background in elk management, research, and range ecology; NPS staff; and others with background experience with the park or park ecosystems. The first of 12 Science Team meetings was held on March 1, 2005.

## PUBLIC SCOPING

### Public Meetings and Comments

Public scoping efforts for this planning process focused on the means or processes to be used to include the public, the major interest groups, and local public entities. Based on past experience, park staff place a high priority on meeting the intent of public involvement in the NEPA process and giving the public opportunities to comment on proposed actions.

The public scoping process began on August 31, 2004 with the publication of a Notice of Intent in the *Federal Register* (FR) (FR, Volume 69, Number 168). The NPS hosted five public scoping meetings throughout North Dakota in support of this effort. Public service announcements were provided to local television and radio news agencies and local newspapers, and an announcement was published in the FR (FR Vol. 69 No. 168; August 31, 2004) to notify the public of these meetings. Approximately 1,000 public scoping meeting brochures were also distributed by mail. These meetings were conducted during the weeks of November 29 and December 6, 2004.

Meetings were organized in an open-house format between 5:30 and 8:30 pm, allowing the public to browse informational posters, interact with park staff, and listen to a brief presentation at their own pace. A series of full-color display boards was presented to help illustrate the project background and potential environmental impacts, issues, concerns, and alternatives used at other parks facing similar management issues. These display boards provided an overview of the NEPA process, general project issues, elk biology, chronic wasting disease, and current management practices at the park. Park and contractors were located at the display boards to answer questions; facilitate discussions; and record thoughts, ideas, and concerns raised by the public.

Twice during each open house, the NPS offered brief slideshow presentations pertaining to elk history and status at the park as well as a summary of the NEPA process. During each meeting, the public was offered a variety of opportunities to provide feedback or submit questions, including flip charts, comment forms (and drop box), and pre-addressed comment forms for postal delivery. Participants were given information regarding the NPS web-based comment forum, Planning, Environment, and Public Comment (PEPC), and were encouraged to submit their comments electronically using this system. The addresses for submitting comments were printed on all news releases and the project newsletter for the benefit of people who could not attend the open houses, but still wanted to provide comments.

Meeting locations, meeting dates, and the number of public participants at each meeting are listed below:

| Meeting Location        | Date              | Number of Participants |
|-------------------------|-------------------|------------------------|
| Dickinson, North Dakota | November 29, 2004 | 75                     |
| Minot, North Dakota     | November 30, 2004 | 17                     |
| Fargo, North Dakota     | December 1, 2004  | 39                     |
| Bismarck, North Dakota  | December 2, 2004  | 103                    |
| Medora, North Dakota    | December 6, 2004  | 78                     |

A total of 312 people attended public meetings and provided the NPS with 440 pieces of correspondence. An additional 242 pieces of correspondence were received by mail or electronically through PEPC and email.

A Content Analysis Process was used to compile and correlate similar public comments into a format useable by the decision-makers and the planning team. Content analysis assists the team in organizing, clarifying, and addressing technical information pursuant to NEPA regulations and in identifying the topics and issues to be evaluated and considered throughout the planning process.

The process included seven steps:

1. Entering correspondence that was not received directly into PEPC into the database;
2. Reviewing all correspondence;
3. Developing a coding structure;
4. Identifying and coding comments pulled from correspondence;
5. Analyzing the comments to identify issues and themes;
6. Creating concern statements; and
7. Preparing the Content Analysis Report.

A coding structure was developed to help sort comments into logical groups by topic and issue. The coding structure was derived from an analysis of the range of topics discussed during internal NPS scoping, past planning documents, NPS legal guidance, and the comments themselves. The coding structure was designed to capture all comments and content, rather than to restrict or exclude any content.

Analysis of the public comments involved the assignment of codes to statements made by the public in their letters, email messages, and written comment forms. Codes were assigned within the PEPC database for each individual comment in a correspondence. All comments were read and analyzed including those of a technical nature; opinions, feelings, and preferences of one element or one potential alternative over another; and comments of a personal or philosophical nature. All comments were considered, whether they were presented by several people saying the same thing or by a single person expressing a unique viewpoint. After reviewing and categorizing all of the comments within each correspondence, 1,646 comments were identified and coded appropriately.

A Comment Analysis Report was then prepared that summarized concern statements as well as the full text of all comments corresponding to the appropriate concern statement. All scoping comments were considered to be important as useful guidance and public input to the public scoping process. With regard to development of the draft plan/EIS, comments in favor of or against the proposed action or alternatives, those that only agreed or disagreed with NPS policy, and those that offered opinions or provided information not directly related to the issues or impact analysis were considered non-substantive comments. Non-substantive comments can provide background for a draft or final EIS but do not require a specific purpose.

Of the 1,646 comments received, 1,203 were related to the alternatives; 21 comments were concerned with the purpose and need of the plan; 15 comments were related to park operations; 56 comments recognized socioeconomics as a key component; 18 comments dealt with visitor experience; 15 comments were regarding vegetation and riparian areas; and 50 comments were related to wildlife and wildlife habitat. The remaining comments were of a general nature concerning consultation and coordination, hunting units, visitor conflict and safety, and water resources.

## **Public Notification**

The Notice of Intent (NOI) to prepare an elk management plan/environmental impact statement was published in the *Federal Register* on August 31, 2004 (FR, Volume 69, Number 168).

Following the NOI, a newsletter was mailed in the fall of 2004 to the project's preliminary mailing list of government agencies, organizations, businesses, and individuals. The newsletter announced the public scoping meetings, and provided background on elk management at the park. It also summarized the purpose of and need for an elk management plan and the plan objectives.

## **PUBLIC REVIEW OF THE DRAFT PLAN/EIS**

A notice of availability for the draft plan/EIS was published in the *Federal Register* on December 15, 2008. Following the release of the draft plan/EIS, a 90-day public comment period was open between December 17, 2008, and March 19, 2009. This extended public comment period was announced through the park's website ([www.nps.gov/thro](http://www.nps.gov/thro)); through mailings sent to interested parties, elected officials, and appropriate local and state agencies; and through press releases and newspapers. The draft plan/EIS was made available through several outlets, including the NPS PEPC website at <http://parkplanning.nps.gov/>, and available on CD or hardcopy by

contacting the park Superintendent. After reviewing the draft plan/EIS, the public was encouraged to submit comments regarding the draft plan/EIS through the NPS PEPC website, emailing the park directly, faxing the park, or by postal mail sent directly to the park.

Six public meetings were held in February 2009 to present the plan, provide an opportunity to ask questions, and encourage public involvement and community feedback regarding elk management at Theodore Roosevelt National Park as follows:

- February 23, 2009 from 5:00 pm to 8:30 pm at the Grand Dakota Lodge in Dickinson, North Dakota.
- February 24, 2009 from 5:00 pm to 8:30 pm at the Holiday Inn in Fargo, North Dakota.
- February 25, 2009 at the Canad Inn from 5:00 pm to 8:30 pm in Grand Forks, North Dakota.
- February 26, 2009 from 5:00 pm to 8:30 pm at the International Inn in Minot, North Dakota.
- February 27, 2009 from 5:00 pm to 8:30 pm at the Best Western Seven Seas in Mandan, North Dakota.
- February 28, 2009 from 2:30 pm to 5:00 pm at the Community Center in Medora, North Dakota.

These meetings were announced to the public and numerous media outlets on February 11, 2009 through a park press release and through PEPC. A total of 304 meeting attendees signed in during the six meetings. The meetings began with a brief open house format where attendees had the opportunity to ask questions and observe informational displays illustrating the study area, the purpose, need, and objectives of the plan, and summaries of the six proposed alternatives, as well as information on CWD, the history of elk management at the park, and the project timeline. The open house format was followed by a formal presentation by park staff, explaining the specifics of the plan and the proposed alternatives. The presentation was followed by another open house format that allowed the attendees to submit comments, and discuss issues with the project team in small groups. If the commenter did not want to make comments at the meetings, comment sheets were available at the sign-in table. Attendees could fill out the forms and submit them at the meeting or mail them to the park at any time during the public comment period. Those attending the meeting were also given a public meeting informational handout, which provided additional information about the NEPA process, commonly asked questions regarding the project, and additional opportunities for comment on the project, including directing comments to the NPS PEPC website at <http://parkplanning.nps.gov/>.

During the comment period for the draft plan/EIS, 390 pieces of correspondence were received including emails, hard copy letters via mail, comment sheets and flipchart comments submitted at the public meetings, and correspondences entered directly in the PEPC system. Letters received by email or through the postal mail, as well as the comments received from the public meetings, were entered into the PEPC system for analysis.

Once all the correspondences were entered into PEPC, each was read, and specific comments within each correspondence were identified. A total of 911 comments were derived from the correspondences received. During coding, comments were classified as substantive or non-substantive. A substantive comment is defined in the NPS Director's Order 12 Handbook (Section 4.6A) as a comment that does one or more of the following:

- Question, with a reasonable basis, the accuracy of information presented in the EIS;
- Question, with reasonable basis, the adequacy of the environmental analysis;
- Present reasonable alternatives other than those presented in the EIS; and/or
- Cause changes or revisions in the proposal.

As further stated in Director's Order 12, substantive comments "raise, debate, or question a point of fact or policy. Comments in favor of or against the proposed action or alternatives, or comments that only agree or disagree with NPS policy, are not considered substantive." 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 "Attachment 2: Comment Response Report" of the plan/EIS.

## **PUBLIC REVIEW OF THE PARK PREFERRED AND ENVIRONMENTALLY PREFERABLE ALTERNATIVES**

Based on comments received from the public during the draft plan/EIS public comment period, the NPS identified a preferred alternative and an environmentally preferable alternative. The public was then given an opportunity to submit comments regarding these two alternatives during a 30-day comment period, from August 10, 2009, and September 9, 2009. During the comment period for the park preferred and environmentally preferable alternatives, 11,986 pieces of correspondence were received. Correspondences were received by one of the following methods: email, hard copy letter via mail, or entered directly into the Internet-based PEPC system. Letters received by email or through the postal mail were entered into the PEPC system for analysis. Of the 11,986 pieces of correspondences received, 11,132 were form letters.

Once all the correspondences were entered into PEPC, each was read, and specific comments within each correspondence were identified. A total of 46,435 comments were derived from the correspondences received. For this phase of the project, comments were also classified as substantive or non-substantive. Substantive comments were grouped into issues and “concern statements” prepared for responses. Members of the planning team responded to the concern statements and these responses are addressed in “Attachment 2: Comment Response Report” of the EIS.

## **AGENCY CONSULTATION**

### **U.S. DEPARTMENT OF AGRICULTURE – U.S. FOREST SERVICE**

The U.S. Forest Service is a cooperating agency for this project and has participated in internal planning meetings, including the internal scoping meeting and alternatives development meeting.

### **U.S FISH AND WILDLIFE SERVICE**

As described in the “Issues Dismissed from Further Consideration” section in chapter 1 of the EIS, no federally listed species or critical habitat occur in the project area. As a result, in accordance with Section 7 of the Endangered Species Act of 1973, the NPS has determined the project will have “no effect” on federally-listed species, and consultation is not required. However, given the long-term nature of this plan, should any federally-listed species be identified or newly designated (including critical habitat), the NPS would initiate consultation with the USFWS concerning any potential effects.

### **NORTH DAKOTA STATE HISTORIC PRESERVATION OFFICE**

In accordance with Section 106 of the National Historic Preservation Act, consultation with the North Dakota State Historic Preservation Office (NDSHPO) concerning impacts to cultural resources was initiated by the NPS, as needed. In a letter to the park dated May 3, 2010 regarding the effect of elk plan implementation on cultural resources, the NDSHPO concurred with the NPS Assessment of No Adverse Effect.

### **NORTH DAKOTA AGENCIES**

During development of this plan, representatives from the following state agencies were consulted:

- North Dakota Game and Fish Department
- North Dakota Natural Heritage Inventory Program
- North Dakota State Historic Preservation Office
- North Dakota Farm Bureau
- North Dakota Department of Transportation

## NORTH DAKOTA COUNTIES AND LOCAL AGENCIES

Representatives from McKenzie and Billings Counties were consulted and provided input on the alternatives during development of this plan. Additional opportunities for comment were afforded to representatives of McKenzie and Billings Counties during public review.

## TRIBAL CONSULTATION

The appropriate level of Tribal government has been consulted during development of this plan/EIS. Representatives from the following Tribes were consulted:

- Oglala Lakota Tribal Council
- Cheyenne River Sioux Tribal Council
- Three Affiliated Tribes (Mandan, Hidatsa, and Arikara Nation)
- Lower Brule Sioux Tribal Council
- Spirit Lake Dakotah Nation
- Standing Rock Sioux Tribal Council

Some of these Tribes provided input on alternatives. Additional opportunities for comment were afforded to representatives from these Tribes during the public review period.

## CONCLUSION

The selected alternative, which was developed with considerable public input and support, fully meets all but two of the plan objectives (and partially meets those two), and will allow for substantial stakeholder involvement and an adaptive mix of reduction tools in managing a dynamic elk population. It incorporates elements of the environmentally preferable alternative identified in the plan/EIS, and involves all practical means to avoid or minimize environmental harm and ensure human safety during implementation. The preferred alternative will not result in the impairment of park resources or values or violate the NPS Organic Act. The preferred alternative is therefore selected as the alternative for accomplishing the goals set forth in the EIS.

Approved:



Date:

8-4-2010

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Ernest Quintana, Director  
Midwest Region, National Park Service