

**UNITED STATES DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE**

**RECORD OF DECISION**

**WHITE-TAILED DEER MANAGEMENT PLAN  
ENVIRONMENTAL IMPACT STATEMENT**

**Catoctin Mountain Park**

**Maryland**

The Department of the Interior, National Park Service has prepared this Record of Decision on the *White-tailed Deer Management Plan/ Final Environmental Impact Statement* for Catoctin Mountain Park. This Record of Decision includes a description of the background of the project, a statement of the decision made, a listing of measures to minimize environmental harm, synopses of other alternatives considered, the basis for the decision, findings on impairment of park resources and values, a description of the environmentally preferred alternative, and an overview of public and agency involvement in the decision-making process.

**BACKGROUND OF THE PROJECT**

The purpose of this action is to develop and implement a deer management plan that supports forest regeneration and provides for long-term protection, conservation, and restoration of native species and cultural landscapes. Action is needed to address declining forest regeneration and to ensure that natural processes (including the presence of deer) support native vegetation, wildlife, and the cultural landscape. Studies have determined that excessive deer browsing reduces forest regeneration, resulting in adverse changes to the forest structure, composition, and wildlife habitat. Excessive deer browsing in Catoctin Mountain Park could adversely affect the natural distribution, abundance, and diversity of native species throughout the park, including species of special concern, and has impacted native shrubs, trees, and forest systems that comprise the natural vegetation component of the Camp Misty Mount and Camp Greentop cultural landscapes. Furthermore, action is needed to foster greater cooperation with state and local governments currently implementing deer management actions to help achieve mutual deer management goals.

**DECISION**

**Description of the Selected Alternative**

The selected alternative, alternative C in the Final Environmental Impact Statement, continues current park deer management actions including limited fencing, use of repellents around landscaped areas, deer and vegetation monitoring, data management, and research. In addition, two lethal actions will be used in combination to reduce and control deer herd numbers. Qualified federal employees or contractors<sup>1</sup> will conduct sharpshooting to reduce the deer population, and

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<sup>1</sup> In addition to other federal contracting requirements, for the purposes of this plan, a contractor is a fully-insured business entity, nonprofit group, or other governmental agency engaged in wildlife management activities that include trapping, immobilization, and lethal removal through sharpshooting and chemical euthanasia. The contractor must possess all necessary permits and be able to pass any needed security clearances.

individual deer will be captured and euthanized in certain circumstances where sharpshooting is not appropriate.

### **Adaptive Management**

An adaptive management strategy will be implemented to better manage based on the uncertainty concerning the impacts the change in deer population densities will have on vegetation recovery. The management actions described in the selected alternative will be followed by monitoring to evaluate the results of the action. By using an adaptive management approach, park managers will be able to change the timing or intensity of management treatments to better meet the goals of the plan as new information is obtained.

### **Threshold for Taking Action**

The deer population is to be managed based on the success of forest regeneration. Tree seedlings will be monitored to determine at what point the browsing impacts would warrant implementation of the selected management alternative. The point at which action would be needed is called the “threshold for taking action.”

As the park monitors the forest for signs of overbrowsing impacts, the level of regeneration would be determined from data collected from vegetation plots throughout the park. Successful regeneration would mean that 67% or more of the plots contained 51 or more seedlings. Therefore, unsuccessful forest regeneration would be indicated when 33% or more of the plots contained fewer than 51 seedlings. This limit was selected as the threshold for taking action under this plan.

The action threshold may be modified based on the best available data for forest regeneration in a similar forest type, results of monitoring plot data, and deer density changes. Monitoring data will be compared to expectations (that forest regeneration will increase as deer density decreased). It is expected that it will take at least six years from the time that deer density was lowered until forest regeneration results will be seen in the monitored plots. If results after six years did not meet expectations, the action threshold will be evaluated along with the monitoring data to determine what adjustments might be necessary.

### **Deer Density Goal**

The park selected a range of 15 to 20 deer per square mile as the initial deer density goal. This range is supported by recent findings and research for regeneration in forest types similar to those in Catoctin. At least three years will be required to reach this goal, given the limited accessibility to some areas of the park and changes in population movements as the population decreases.

Several factors could influence the number of years to reach the initial deer density goal. As the deer population decreases through successful reduction efforts, deer might become adapted to the sharpshooting operations and become more evasive, increasing the effort necessary to reach the removal numbers in any year. Existing reproduction and mortality rates might differ from the estimate documented in the Environmental Impact Statement. If reproduction rates are higher and mortality lower than estimated, the population growth will be greater than 20%, and more deer will need to be removed, potentially increasing the time required to reach the initial density goal. The converse would be true if reproduction rates are lower and mortality rates higher than estimated, resulting in fewer deer having to be removed, and efforts could take less time. Immigration of deer into the park could also have a significant effect on the number of deer to be removed, especially if the goal is toward a low population density.

The number of deer to be removed annually will be adjusted based on the results of the previous year's removal effort, the monitoring of forest regeneration, deer population density surveys, and growth projections. When a management action is first triggered, the approximate number of deer to be removed will be defined by the difference between the estimated deer population density and the initial density goal selected (e.g., 15 to 20 deer per square mile). Using this example, if the initial deer density is 104 deer per square mile, then between 84 and 89 deer per square mile will have to be removed. However, because this density goal may not be achieved in one year, annual removal goals will be revised based on the number of deer remaining in the herd after each year's removal actions and factoring in an annual growth rate. This process of determining the number of deer to be removed each year will be repeated until the herd density goal is reached.

However, because the goal is to manage for successful forest regeneration within the park, not for deer density, the number of deer to be removed may be adjusted based on the response of the vegetation to a lower deer density. If the vegetation is observed to be regenerating before the lower deer density is reached, management actions may then be modified or adjusted. Similarly, management actions will be adjusted if no change in the vegetation is observed after implementation. The following are examples of how this adaptive management approach could be implemented based on different outcomes:

- If forest regeneration occurs prior to meeting the initial deer density goal, the deer density goal will be adjusted upward to the density that will still allow regeneration to occur.
- If no response in forest regeneration occurs within 6 years after the initial deer density goal was reached, then the density goal could be lowered by five additional deer per square mile, with a six-year monitoring period before further reductions are made in density goals.
- If the initial deer density goal of 20 deer per square mile is not reached within six years, additional efforts will be made to reach the desired density through the use of other methods of removal, such as increasing the use of capture and euthanasia in areas where sharpshooting was not effective.
- If no response in forest regeneration occurs after a goal of 10 deer per square mile was reached, then methods and protocols will be reviewed to identify the variables that were limiting expected results, and the methods used will be adjusted as necessary to correct for such factors.

## **Methods**

### **Sharpshooting**

Sharpshooting will primarily occur at night (between dusk and dawn) during late fall and winter months when deer are more visible and fewer visitors are in the park. In some closed areas, sharpshooting may be done during the day if needed, which could maximize the effectiveness of the management action and minimize the overall time of restrictions. If sharpshooting is conducted during daylight hours, the areas will be closed to park visitors. The public will be notified of any park closures in advance of their occurrence. Exhibits regarding deer management will be displayed at visitor centers, and information will be posted on the park's website to inform the public of deer management actions. Visitor access could be limited as necessary while reductions are taking place, and NPS rangers will patrol public areas to ensure compliance with park closures and public safety measures.

Sharpshooting will be conducted using high-power, small caliber rifles from close range. Every effort will be made to make the shootings as humane as possible. Deer injured during the operation will be put down as quickly as possible to minimize suffering. Noise suppression devices and night vision equipment will be used to reduce disturbance to the public. All activities will be in compliance with all federal firearm laws administered by the Department of Justice, Bureau of Alcohol, Tobacco, and Firearms and Explosives.

As a safety measure, sharpshooting will not occur within 100 feet of a building or within 400 feet of the park boundary. Qualified federal employees or contractors trained in all aspects of direct reduction actions will perform these activities. Training will include safety measures to protect both visitors and employees. If more than one shooting location is used, areas will be adequately separated to ensure safety. Qualified federal employees or contractors will be experienced with sharpshooting methods and will have the necessary sharpshooting qualifications. They typically will be expected to coordinate all details related to sharpshooting actions, such as setting up bait stations, locating deer, sharpshooting, and disposition of the deer (donation of meat and/or disposal of waste or carcasses).

Bait stations may be used to attract deer to safe removal locations and may consist of small grains, apples, hay, or other food placed on the ground. The stations will be placed in park-approved locations away from public use areas to maximize the efficiency and safety of the reduction program. The amount of bait placed in any one location could range from 20 to 100 pounds, depending on the bait used and the number of deer in the immediate area.

NPS Public Health Service guidance pertaining to the donation of meat will be followed. Meat from any animal confirmed to be infected with chronic wasting disease (CWD) will not be donated, and the carcass will be disposed of in accordance with NPS disposal guidelines if CWD is found.

### Capture and Euthanasia

Capture and euthanasia will only be used in circumstances where sharpshooting is not appropriate due to safety or security concerns. This is expected to be 3% or less of the total number of deer being removed. The preferred technique for this method will be for qualified federal employees or contractors to trap deer, approach them on foot, and euthanize them. Activities will occur at dawn or dusk when few visitors are in the park.

Deer will be captured with nets or traps and euthanized as humanely as possible. Euthanasia methods may include a combination of penetrating captive bolt gun and potassium chloride or exsanguination, firearm technique, or other humane technique. Several methods of wildlife trapping may be used, including but not limited to drop nets and box traps. Most trapping methods involve using bait to attract deer to a specific area or trap. Box traps involve a confined space that will safely hold the deer so that staff can approach it. Drop net traps also often use bait to attract deer to the drop zone, where suspended nets are triggered to drop over the deer and restrain it for staff to approach. The method of capture will be selected based on the specific circumstances (location, number of deer, accessibility, and reasons why sharpshooting was not advised) for each deer or group to be removed.

Deer may also be immobilized by darting with a tranquilizer gun. This method may be used in cases where deer had not been successfully attracted to a trap area. Similarly, if for some reason the penetrating captive bolt gun or firearm technique may not be used to euthanize a trapped animal, injecting a lethal dose of a drug (under supervision of a veterinarian or NPS park practitioner) may be used. However, when chemicals are used for either immobilization or for euthanasia, the meat from that animal may not be donated as food, and the carcass may be unsuitable for surface disposal. If this is the case, the carcasses will be buried as described above.

Qualified federal employees or contractors trained in the use of penetrating captive bolt guns, firearms, or tranquilizer guns will perform these actions. Training will include safety measures to protect both visitors and NPS employees. Federal employees or contractors will also be qualified to handle live deer in order to prevent disease transmission and prevent any harm to an animal or an employee. Appropriate safety measures will be followed when setting drop nets or box traps.

Because capture and euthanasia will typically result in increased stress levels in captured deer compared to sharpshooting, this method of population control will only be used in select situations and will supplement the sharpshooting method described earlier.

The number of deer removed by capture and euthanasia will be recorded, including the age and sex, location of removal, circumstance requiring removal and capture, and lethal method used.

### Gender Preference

There will be a preference for removing does as this will reduce the population level more efficiently over the long term. As the population composition shifts, reproduction rates should decrease because fewer females will be reproducing. During the first three years of treatment, both does and antlered deer (bucks) will be removed based on opportunity. Buck-only removal will not control population growth, as deer populations are largely dependent on the number of does with potential for reproduction.

Records will be kept on the age and gender of all deer removed from the park to aid in defining the local population composition. This information will be compared with composition data collected during park population surveys.

## Disposal

In cases where one to a few deer have been shot or euthanized at a given site, the waste or carcasses will be scattered and left above ground to be naturally scavenged and/or decompose. This will be dependent on the suitability of meat for donation, amount of waste or carcasses, and distance from trails, roads, and facilities.

In cases where the meat from deer is unsuitable for donation to charity or surface disposal, the carcasses and waste will be buried. Disposal pits will be in one or more of the following locations within the park: Camp Misty Mount pasture, Camp Greentop paddock, and/or Camp Round Meadow bulk storage area. All of the locations listed are in previously disturbed areas and none contain archeological resources. Disposal pits will be approximately eight feet wide by eight feet long by four feet deep. They will be dug prior to direct reduction activities and covered and surrounded with privacy fencing to prevent entry and reduce visibility. Soil removed from the pits will remain on site and be covered to prevent erosion. Carcasses and waste will be transported to the pit(s) within 12 hours of direct reduction. The soil covering the filled pit will be covered with straw or wood chip to prevent erosion. The fence will be secured between uses to prevent entry.

If the pits are not completely filled between direct reduction activities or if the soil is frozen, the pit will be covered with tarps or plywood. When conditions permit, the carcasses and waste will be covered with soil or the pit filled. When the weather and season are appropriate, the soil covering the pits will be seeded with an NPS approved seed mix and mulched. Any soil not used to refill the pits will be used in other locations within the park.

The carcasses will be disposed of in accordance with NPS Public Health Service guidelines if CWD is found.

## **Monitoring**

Throughout the removal efforts, vegetation monitoring will be conducted to document any changes in deer browsing and forest regeneration that might result from reduced deer numbers. However, it will take several years for vegetation to respond to lower deer numbers and will be directly dependent on how quickly the population is reduced. Likewise, the number of deer to be removed in subsequent years will be adjusted based on the success of previous removal efforts, projected growth of the population, and vegetation and deer monitoring results.

Vegetation monitoring will be conducted annually to document vegetation recovery. If the park objectives are being met and forest regeneration is successful at the target deer density goal, removal efforts will be maintained at the level necessary to keep the deer population at the target density. Management adjustment of the removal goal in either direction from the initial density goal could be made based on how close the conditions indicated by vegetation monitoring are to the park's forest regeneration objectives.

## **Mitigating Measures**

As described above, a number of mitigation measures will be implemented to reduce the risk of injury to employees and park visitors. In addition, measures will be taken to reduce the stress to deer during deer removal actions, minimize impacts to cultural resources, and to reduce impacts to visitor experience.

## **OTHER ALTERNATIVES CONSIDERED**

*No-Action Alternative* — The existing deer management plan would continue under alternative A, including limited fencing, use of repellents in landscaped areas, monitoring, data management, and research. No new actions would occur to reduce the effects of deer overbrowsing.

*Alternative B: Combined Non-Lethal Actions* — Alternative B would include all actions described under alternative A, but it would also incorporate several non-lethal actions to protect forest seedlings, promote forest regeneration, and gradually reduce deer numbers in the park. The additional actions would include the construction of large-scale exclosures, increased use of repellents in areas where large fenced exclosures would not be appropriate or feasible, and reproductive control of does.

*Alternative D: Combined Lethal and Non-Lethal Actions* — Alternative D would also include all the actions described under alternative A above, but it would incorporate a combination of specific lethal and non-lethal actions from alternatives B and C. These actions would include the initial reduction of the deer herd through sharpshooting, along with capture and euthanasia in areas where sharpshooting would not be appropriate. Reproductive control of does (and direct reduction, if needed) would be used for long-term maintenance of lower herd numbers.

## **BASIS FOR DECISION**

In determining and selecting the preferred alternative, each alternative was evaluated based on its ability to meet the plan's objectives and the potential impacts on the environment. Alternative C was selected as the NPS alternative. *Alternative C: combined Lethal Actions — Sharpshooting and Capture and Euthanasia is the only alternative that fully meets all of the plan objectives.*

Alternative D is similar to alternative C in its ability to meet the objectives, but alternative C has more certainty of success than alternative D. Alternative D includes the use of a yet unproven reproductive control technology. In particular, alternative D would fully meet all of the vegetation objectives only if reproductive control is effective as a maintenance tool. The effectiveness is uncertain at this time. Alternative C will also fully meet the objective for visitor experience relating to minimization of disruption to visitor use. Alternative D only partially meets that objective, because it is likely that reproductive control applications would coincide with high visitor use periods and require limiting visitor access to areas of the park.

Alternative B only partially meets each of the objectives because of the lack of immediate reduction in deer numbers and the uncertainty that the deer density goal would be achieved even over an extended period of time.

Alternative A (no action) fails to meet four of the eight objectives and only partially meets three others, since no action would be taken to reduce deer numbers or effect a change in condition that are the basis of the purpose of and need for this plan.

## **FINDINGS ON UNACCEPTABLE IMPACTS OR IMPAIRMENT OF PARK RESOURCES AND VALUES**

The *White-tailed Deer Management Plan / Environmental Impact Statement* considered the impacts of implementing the selected alternative on a number of resources or impact topics. These impact topics included vegetation, soils and water quality, white-tailed deer herd health, other wildlife and wildlife habitat, sensitive and rare species, cultural resources, visitor use and experience, visitor and employee safety, socioeconomic resources, and park management and operations. In determining the impacts related to specific impact topics, the National Park Service must also consider whether or not the action would result in an unacceptable impact to the resource or result in impairment to specific park values or resources.

As defined in National Park Service Management Policies (2006), an unacceptable impact is an impact that falls short of impairment, but is still not acceptable within a particular park's environment. Unacceptable impacts are impacts that, individually or cumulatively, would

- be inconsistent with a park's purposes or values, or
- impeded the attainment of a park's desired future conditions for natural and cultural resources as identified through the park's planning process, or
- create an unsafe or unhealthful environment for visitors or employees, or
- diminish opportunities for current or future generations to enjoy, learn about, or be inspired by park resources or values, or
- unreasonably interfere with
  - park programs or activities, or
  - an appropriate use, or
  - the atmosphere of peace and tranquility, or the natural soundscape maintained in wilderness and natural, historic, or commemorative locations within the park
  - NPS concessioner or contractor operations or services.

National Park Service Management Policies (2006) state an action constitutes impairment when an impact would harm the integrity of park resources or values, including the opportunities that otherwise would be present for the enjoyment of those resources or values. To determine impairment, the National Park Service must evaluate the particular resources and values that would be affected; the severity, duration, and timing of the impact; the direct and indirect effects of the impact; and the cumulative effects of the impact in question and other impacts. An impact to any park resource or value may, but does not necessarily, constitute an impairment. An impact would be more likely to constitute impairment to the extent that it affects 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 to opportunities for enjoyment of the park; or



- identified in the park's general management plan or other relevant NPS planning documents as being of significance.

Based on the impact analyses, it has been determined that the selected alternative (Alternative C) will not result in any unacceptable impacts or cause impairment to park resources and values. When considering the criteria for unacceptable impacts, the selected alternative is consistent with the park's purpose and values and takes steps to minimize the adverse effects that excessive deer browsing has had on the natural vegetation component of park's natural and cultural integrity. The selected alternative helps achieve the attainment of the desired future conditions, including a viable deer population and a naturally regenerating and sustainable forest. Safety measures will be included to protect visitors and employees as deer management actions occur. Finally, the selected alternative will provide opportunities to enjoy enhanced scenery in a more naturally sustainable environment and will not interfere with any of the above listed activities or uses associated with unacceptable impacts. In addition, there is no potential for impairment under the selected alternative, as described in the impact analysis. The selected alternative will provide beneficial impacts to the park's natural and cultural integrity and the park's significant resources through supporting forest regeneration and providing for long-term protection of the park's native species and cultural landscapes.

It should be noted, however, that the continuation of current deer management (the no action alternative) would likely result in unacceptable impacts over the long term. There is the potential for unacceptable impacts as the ongoing decline of native plant communities as a result of deer browsing would continue to affect park resources and the scenery that are essential to the park's purpose and values. The deer population would remain in excess of the density necessary to allow natural forest regeneration and deer herd health would continue to decline. A naturally regenerating and sustainable forest as described by the desired conditions would not be available for visitors to experience if the deer population remains at or above current levels and deer browsing damage continues to occur.

In addition, if current deer management were to continue, there is the potential for impairment to vegetation, white-tailed deer herd health, other wildlife and wildlife habitat, and sensitive and rare species over the long term. Excessive deer browsing would continue to impact native shrubs, trees, and forest systems that comprise and affect the integrity of the natural vegetation component of resources the park was established to protect. In addition, the white-tailed deer herd has already exceeded the habitat's nutritional carrying capacity and surveys have shown that the herd is in poor condition. Under current management, wildlife habitat would continue to be degraded or restricted, and impairment of certain wildlife species and habitat could occur over the long term. Providing no control on deer population growth would result in adverse, long-term moderate to major impacts to the listed plant species not currently being protected, and browsing impacts to those sensitive species palatable or preferred by deer could result in species reduction, potentially impairing sensitive and rare species over the long term.

## **CONSISTENCY WITH THE PURPOSES 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). Each alternative analyzed in a NEPA document must be assessed as to how it meets the following purposes:

- (1) fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;
- (2) assure for all Americans safe, healthful, productive, and esthetically and culturally pleasing surroundings;
- (3) attain the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences;
- (4) preserve important historic, cultural, and natural aspects of our national heritage and maintain, wherever possible, an environment that supports diversity and variety of individual choice;
- (5) achieve a balance between population and resource use that will permit high standards of living and a wide sharing of life's amenities; and
- (6) enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

The Council on Environmental Quality has promulgated regulations for federal agencies' implementation of the *National Environmental Policy Act* (40 CFR Parts 1500–1508). Section 1500.2 states that federal agencies shall, to the fullest extent possible, interpret and administer the policies, regulations, and public laws of the United States in accordance with the policies set forth in the act (sections 101(b) and 102(1)); therefore, other acts and NPS policies are referenced as applicable in the following discussion.

### **Alternative A: No Action**

Alternative A would meet the purpose of the *National Environmental Policy Act* to some degree because limited protection of certain rare species and habitats would be continued, as well as the monitoring program. It would not fulfill the responsibilities of each generation as the trustee of the environment for succeeding generations and in preserving important aspects of our national heritage (purposes 1 and 4), because damage to forest vegetation and rare species would continue as a result of excessive browsing by high numbers of deer and continued deer population trends. Alternative A would do little to enhance the quality of renewable forest resources (purpose 6), and the expected long-term major adverse impacts on vegetation, wildlife habitat, rare species, and deer herd health would not ensure healthful, productive, or esthetically pleasing surroundings (purpose 2).

### **Alternative B: Combined Non-Lethal Actions**

This alternative would meet many of the purposes in the *National Environmental Policy Act* to some degree, or even to a moderate degree when considering long-term results. However, it would provide only limited direct protection for forest resources (only 6%–12% of woody vegetation would be protected by exclosures over the life of the plan), and it would rely heavily on an unproven technology (reproductive control) that might not be successfully implemented for a large free-ranging deer population. Therefore, none of the NEPA purposes would be met to a large degree. In particular, the exclosures would detract from esthetically pleasing surroundings (purpose 2), and reproductive control methods would present an element of risk to health or safety or other unintended consequences (purpose 3). The lack of protection for a large percentage of the park, and the time it would take for any reproductive control to be effective, would mean that succeeding generations might not see desired results for some time (purpose 1), and probably not within the 15-year life of this plan. The adaptive management component of alternative B would help achieve some balance between population and resource use (purpose 5), but the limited history of reproductive control success and the limits on how much forest vegetation can be included in exclosures means that it would not be possible to completely approach the maximum attainable recycling of resources (purpose 6).

### **Alternative C: Combined Lethal Actions (Selected Alternative): and Alternative D: Combined Lethal and Non-Lethal Actions**

Alternatives C and D are very similar in the extent to which they would meet NEPA purposes. The evaluation of these alternatives by the interdisciplinary team showed that both would fulfill the responsibilities of each generation as a trustee of the environment for succeeding generations (purpose 1) to a large degree, since both would immediately reduce deer numbers and sustain that reduction through maintenance actions. Both alternatives C and D include adaptive management, which would help achieve a balance between population and resource use (purpose 5), although alternative C would have a higher likelihood of fully approaching the maximum attainable regeneration of depletable resources (i.e., forest vegetation) due to its higher certainty of success (purpose 6). Alternative D involves some concern about unintended consequences (purpose 3), since it would rely on technology that has not been proven in free-ranging deer as a maintenance tool. Risks to health and safety (purpose 3) associated with the reproductive control method would also be a concern under alternative D. Overall, both alternatives C and D would preserve important historic, cultural, and natural aspects of our national heritage in the long term (purpose 4), although alternative C would provide for more certain results.

## **ENVIRONMENTALLY PREFERRED ALTERNATIVE**

The National Park Service is required to identify the environmentally preferred alternative in its NEPA documents for public review and comment. Guidance from the Council on Environmental Quality states that the environmentally preferred alternative means it is “the alternative 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” (CEQ 1981). Alternative C has been identified as the environmentally preferred alternative because it is the alternative that would best protect the biological and physical environment by ensuring an immediate reduction in deer herd numbers that could be sustained with proven methods over the life of the plan. Alternative C would also best protect, preserve, and enhance the historic, cultural, and natural processes that support the park’s cultural landscape and forest since there would be little, if any, uncertainty involved with implementing the selected methods to maintain low deer numbers. Although alternatives C and D are very close in meeting the goal that identifies the environmentally preferred alternative, alternative C was selected primarily because

of its greater certainty in achieving the goal. Alternatives A and B were not considered environmentally preferred because of their lack of effect on deer herd numbers, which would result in potential adverse effects on the biological and physical resources of the park over the life of the plan.

## **PUBLIC AND AGENCY INVOLVEMENT**

One of the intents of the *National Environmental Policy Act* is to encourage the participation of federal and state-involved agencies and affected citizens in the assessment procedure, as appropriate. The public involvement activities for the *White-tailed Deer Management Plan / Environmental Impact Statement* fulfilled the requirements of the *National Environmental Policy Act* and *NPS Director's Order #12*. The following section describes the public and agency involvement efforts engaged in during the development of this plan/EIS.

### **Scoping**

The National Park Service divides the scoping process into two parts: internal scoping and external or public scoping. Internal scoping involved discussions among NPS personnel regarding the purpose of and need for management actions, issues, management alternatives, mitigation measures, the analysis boundary, appropriate level of documentation, available references and guidance, and other related topics.

Public scoping is the early involvement of the interested and affected public in the environmental analysis process. The public scoping process helps ensure that people have an opportunity to comment and contribute early in the decision-making process. For this planning document and impact statement, project information was distributed to individuals, agencies, and organizations early in the scoping process, and people were given opportunities to express concerns or views and to identify important issues or even other alternatives.

The internal scoping process began on October 28, 2003, at Catoctin Mountain Park, Maryland. During a two-day meeting, NPS employees identified the initial purpose of and need for action, management objectives, issues, and impact topics. Various roles and responsibilities for developing the deer management plan were also clarified.

In addition, the park had coordinated with many technical experts for five years prior to starting the planning process and established a Science Team to provide input to this plan. Comprised of subject matter experts, the Science Team was formed to advise and provide technical recommendations to the National Park Service on matters regarding scientific data and analysis. The team met periodically to review and supplement necessary background information and needed data. The team also recommended impact analysis techniques and various management options, and they provided technical review of draft documents.

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 places a high priority on meeting the intent of public involvement in the NEPA process and giving the public an opportunity to comment on proposed actions.

## **Public Meetings and Outreach**

For deer management at Catoctin Mountain Park, two public involvement meetings were held to give the public opportunities to comment prior to the release of the *Draft White-tailed Deer Management Plan / Environmental Impact Statement*. The first meeting was held on November 9, 2004, in Thurmont, Maryland, and was attended by 22 people. The second public meeting, an alternatives development workshop, was held on April 20, 2005, in Thurmont, Maryland. The purpose of the workshop was to gather public concerns regarding each alternative so that the National Park Service could improve upon them during the planning process. A total of 36 participants attended and were divided into four work groups. Comments were collected for each of the alternatives being considered. Participants could also provide comments, in writing or through the Internet using the NPS Planning, Environment and Public Comment (PEPC) website. A third public meeting was held on January 6, 2007, in Thurmont, Maryland. The purpose of this meeting was to provide the opportunity for public comment on the *Draft White-tailed Deer Management Plan / Environmental Impact Statement*. A total of 17 attendees signed in during the meeting.

## **Public Comment**

At the first public meeting, the park received a total of 64 comments. While these included some comment letters and the testimony of one person at the public meeting, the majority of these were comments recorded on flip charts at the public meeting. A majority of the comments expressed concern about impacts of the Catoctin deer herd on vegetation or forest regeneration (27 comments) and impacts to wildlife and wildlife habitat (29 comments). Others commented on the preliminary alternatives presented and/or proposed new alternatives or alternative elements, which were considered in the development of the final alternatives. In total, one comment supported the no-action alternative, 4 supported the use of fencing and repellents, 7 supported direct reduction, 7 supported hunting, and 14 proposed new alternatives or alternative elements. Some of the alternatives proposed were considered but dismissed for various reasons, as discussed in chapter 2 of the *Draft White-tailed Deer Management Plan / Environmental Impact Statement*.

Comments and concerns regarding the four alternatives gathered at the alternatives development workshop can be summarized as follows:

- *Alternative A* — This alternative would not meet the purpose of and need for the proposed action to manage the deer population in Catoctin Mountain Park; and it would adversely affect neighboring properties as the deer population would continue to be overabundant and damage yards, orchards, and farms.
- *Alternative B* — This alternative would be costly and ineffective; fencing would have overall negative effects, keeping visitors and other wildlife out of the park; repellents require multiple applications and would be both costly and labor intensive; and non-lethal actions would drive deer onto neighboring properties, negatively affecting local farmers.
- *Alternative C (Preferred Alternative)* — This alternative would need to focus on the taking of does as a means of population control, and it would pose certain safety risks with the use of rifles in the park.
- *Alternative D* — The non-lethal methods of the alternative would be too costly and ineffective; reproductive controls could pose a human health risk due to the potential contamination of the deer meat and associated human consumption; and lethal actions pose a potential safety risk related to the use of firearms in the park.

Individuals in all groups expressed a concern that the alternative of a public hunt was removed and placed under alternatives considered but not carried forward. Between the two scoping efforts, 40 letters and e-mails were received in addition to the comments made by the 36 participants during the alternatives development workshop. A total of 24 comments had concerns about the potential implementation of lethal management alternatives. The remaining comments were of a general nature about alternatives, lethal methods, and requests for information on deer repellents, the use of reproductive control, and suggestions for a public hunt or a change in park legislation to allow a managed public hunt.

Correspondence received during the public comment period on the draft environmental impact statement included letters, electronic mail, transcripts from public meetings, and comments on the National Park Service (NPS) Planning, Environment and Public Comment (PEPC) website. The park received correspondence from 24 individuals, 5 recreational groups, and 2 conservation/preservation groups. The correspondence contained 192 comments on various topics. (See Appendix E of the Final Environmental Impact Statement for more information including responses to comments).

### **Agency Consultation and Coordination**

Throughout the development of this plan, the park has consulted with state and federal agencies, either informally or as required by law. Some agencies participated informally as members of the science or planning teams, while other agencies were officially contacted for input. The details of these consultations are listed below.

#### U.S. Fish and Wildlife Service

A letter dated May 21, 2004, from Catoctin Mountain Park initiated informal consultation with the U.S. Fish and Wildlife Service about the presence of federally listed rare, threatened, or endangered species in the vicinity of the park. The U.S. Fish and Wildlife Service replied on August 11, 2004, that, except for the occasional transient individuals, no federally proposed or listed endangered or threatened species are known to exist within the project impact area, and that no biological assessment or further consultation under Section 7 of the *Endangered Species Act* would be required.

In September, 2005, the U.S. Fish and Wildlife Service was again contacted during the preparation of the Draft Environmental Impact Statement concerning any changes in the status of federally listed rare, threatened, or endangered species in the vicinity of the park. Their response was the same as in 2004 and no biological assessment or further section 7 consultation of the *Endangered Species Act* would be required. The park will continue to coordinate with the U.S. Fish and Wildlife to ensure that no species are listed prior to or during the implementation of deer management actions.

#### Maryland Department of Natural Resources

A letter dated May 21, 2004, initiated informal consultation with the Wildlife and Heritage Service of the Maryland Department of Natural Resources about the presence of state listed rare, threatened, or endangered species in the vicinity of the park. The response on July 13, 2004, listed seven such species, which were included in the Environmental Consequences analysis.

Maryland State Historic Trust

On June 19, 2006, Catoctin Mountain Park submitted the *Draft White-tailed Deer Management Plan/Environmental Impact Statement* for review in accordance with Section 106 of the *National Historic Preservation Act* to the state Historic Preservation Officer. The Maryland Historical Trust responded in a letter on July 12, 2006 that this undertaking will have no adverse effect on historic properties.

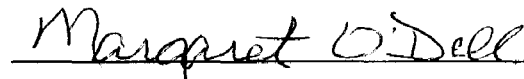
United States Environmental Protection Agency

In January 2007, in accordance with the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act, the United States Environmental Protection Agency (EPA) reviewed the *Draft White-tailed Deer Management Plan/Environmental Impact Statement*. In a letter dated January 25, 2007, EPA rated the DEIS, Lack of Objections (LO).

**CONCLUSION**

The selected alternative (Alternative C) fully meets all of the plan objectives and has the most certainty of success in supporting forest regeneration and providing for long-term protection, conservation, and restoration of native species and cultural landscapes of Catoctin Mountain Park. As described in the description of the selected alternative and the Mitigation Measures and Monitoring sections, all practical means to avoid or minimize environmental harm from the selected alternative have been adopted. In addition, none of the impacts related to the implementation of the selected alternative will affect a park's 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. Therefore the selected alternative will not result in the impairment of park resources or values or violate the NPS Organic Act.

Approved:



Date 4-17-09

Regional Director  
National Capital Region, National Park Service