

Briefing Statement

Bureau: National Park Service
Issue: Record of Decision Is Signed for the Final White-tailed Deer Management Plan and Environmental Impact Statement
Unit: Valley Forge National Historical Park
Date: October 5, 2009

Background: White-tailed deer population monitoring between 1983 and 2009 indicates an increase in deer density from 31-35 to 241 deer per square mile within Valley Forge National Historical Park. An increasing number of deer in the park over the past two decades has resulted in unacceptable changes in the species composition, structure, abundance, and distribution of native plant communities and associated wildlife. Additionally, browsing of tree seedlings and shrubs by deer in the park has prevented forest regeneration, thereby degrading habitat for many animal species. Congress directed the National Park Service (NPS) to develop a plan to address the issue of deer management at Valley Forge NHP and work began on the White-tailed Deer Management Plan and Environmental Impact Statement (EIS) in 2006.

The purpose of the plan is to provide a deer management strategy that supports long-term protection, preservation, and restoration of native vegetation, wildlife, and other natural and cultural resources. Extensive public involvement, including a project web-site, brochure, four public meetings, and over 80 briefings to civic organizations, local elected officials and others, led to the development of four conceptual alternatives. These alternatives were fully developed using the best available science, and their impacts on the human and natural environment evaluated. This information was presented in the Draft White-tailed Deer Management Plan/EIS (Draft plan/EIS).

A Notice of Availability of the Draft plan/EIS was published in the *Federal Register* on December 19, 2008. The Draft plan/EIS described and analyzed three action alternatives for management of the white-tailed deer herd, as well as a no action alternative. A response to chronic wasting disease (CWD) was developed cooperatively with the Pennsylvania Game Commission (PGC) and integrated into each alternative to address the elevated risk of the disease in proximity to the park and because of the efficiencies and cost savings associated with incorporating CWD response into the deer management plan.

The Draft plan/EIS identified Alternative D, Combined Lethal and Nonlethal Actions, as the NPS preferred alternative. A total of 3,884 public comments were received on the Draft plan/EIS, the majority of which were not substantive. (A substantive comment is defined as one that: (1) questions, with a reasonable basis, the accuracy of information presented in the EIS and/or the adequacy of the environmental analysis; (2) presents reasonable alternatives other than those presented in the EIS; and/or (3) causes changes or revisions in the proposal.) Changes to the Draft plan/EIS as a result of public comment comprised factual updates to baseline data and clarifications added to the text. Appendix E: Review of White-tailed Deer Reproductive Control, was substantially updated to more accurately reflect the current state of the science and comments received through peer review. No substantive changes were made to the preferred alternative or other alternatives evaluated.

Current Status: The Record of Decision (ROD) was signed by the Northeast Regional Director on October 1, 2009. It documents approval of the plan, selects the alternative to be implemented, and sets forth stipulations required for implementation. The National Park Service has selected Alternative D, Combined Lethal and Nonlethal Actions, which was identified as the NPS preferred alternative in the Final White-tailed Deer Management Plan/Environmental Impact Statement (Final plan/EIS), released to the public for the required 30-day no-action period beginning August 28, 2009 and ending September 28, 2009. Alternative D was selected because it best meets plan objectives.

The selected alternative continues current park deer management actions including vegetation and deer population monitoring, maintenance of small fenced areas, roadkill removal, public education, coordination with the PGC, and CWD monitoring and response. In addition, the selected alternative incorporates lethal and nonlethal actions to quickly reduce and then maintain the deer population at a certain level in the park that protects native plant communities and promotes forest regeneration and habitat. Initially, the selected alternative will use lethal reduction via sharpshooting and capture/euthanasia to quickly reduce the deer population and achieve the initial deer density goal. When an acceptable reproductive control agent becomes available maintenance of population levels will be conducted via reproductive control. Until an acceptable and effective reproductive control agent becomes available, however, population maintenance will be conducted using lethal methods. The initial target deer density is 31 to 35 deer per square mile (165-185 individuals park-wide). The target number would be adjusted based on the success of forest regeneration (threshold of 8,079 tree seedlings per acre).

The selected alternative includes measures to respond to detection of CWD. A full CWD Response Plan is provided as an appendix in the Final plan/EIS (Appendix C). As long as the closest confirmed case of CWD is more than 60 miles from the park boundary, all meat obtained as a result of lethal reduction actions will be donated to a local food bank or food pantry for the purpose of redistribution for human consumption.

Offer of Assistance:

On August 20, 2009, the NPS met with a representative of Protection, Needs, and Care of Animals (PNC, Inc.). During this meeting, PNC, Inc. made an offer of assistance with implementation of non-lethal deer management actions. The offer entailed partial funding for the installation of a small amount of fencing in forested areas of the park, funding for a limited number of doses of a chemical reproductive control agent, and funding for three individuals to assist with delivery of the agent. All elements of this offer were conditional upon eliminating lethal removal as a deer management tool.

This offer represents limited implementation of actions described under Alternative B (Combined Nonlethal Actions) in the Final plan/EIS on pages 2-24 to 2-35. The NPS did not select this alternative for implementation because it would only allow the NPS to partially achieve the objectives of the plan (see Table 7 on pages 2-69 to 2-71 in the Final plan/EIS). Additionally, Alternative B would result in long-term, major adverse impacts to park resources, and public safety (see Chapter 4, Environmental Consequences in the Final plan/EIS). Adverse impacts result primarily from the fact that the rate of population decline using only reproductive control would be very gradual.

As described in the Final plan/EIS, the use of reproductive controls alone would take 18-19 years to achieve the deer density goal (see pages 2-24, 2-32, 4-22, 4-33, and 4-45 of the Final plan/EIS). Therefore, the abundance and diversity of plant communities would continue to decline in areas outside rotational fences, or 85-90% of the forested area park. No forest regeneration would occur outside fencing, and once fencing was rotated these revegetated areas would again be exposed to heavy deer browsing and resulting removal of the forest understory. Additionally, the amount and quality of wildlife habitat in the park would continue to decline, archeological resources outside of fenced areas would continue to erode due to loss of plant cover and trampling by deer, and the incidence of deer-vehicle collisions would remain high.

Although the NPS appreciates the offer made by PNC, Inc. it was declined because of the unavoidable adverse effects of Alternative B described above.

Communications:

An electronic version of the Record of Decision and Final plan/EIS may be obtained through the Planning, Environment and Public Comment website at <http://parkplanning.nps.gov> or through the park website at <http://www.nps.gov/vafo/parkmgmt/white-tailed-deer.htm>. Copies of the Final plan/EIS and ROD are available at the Chester County Public Library, Montgomery County-Norristown Public Library, Phoenixville Public Library, Tredyffrin Township Public Library, Lower Providence Community Library, and Upper Merion Township Library. A hard copy (limited availability) or CD of the Final plan/EIS and the ROD may be obtained from: Superintendent, Valley Forge NHP, 1400 North Outer Line Drive, King of Prussia, Pennsylvania 19406.

For Additional information:

<http://www.nps.gov/vafo/parkmgmt/white-tailed-deer.htm>

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Supplemental Information: Management Alternatives Considered During Development of the Plan

A full range of reasonable alternatives were developed using the best available science, as well as input from the public, and evaluated based on each alternatives ability to achieve the stated plan objectives and on their impacts to the human and natural environment.

Alternative A, the no action alternative, would continue the park's existing deer management activities of monitoring deer population size and vegetation, small scale fencing of selected vegetation, removal of deer killed on roadways, public education, coordination with the PGC, and continuation of limited CWD surveillance; no new deer management actions would be implemented.

CWD response is based on the proximity of a confirmed case of CWD to the park boundary and the location of the park relative to a state-established CWD containment zone. Under Alternative A, while CWD is still more than 60 miles from the park boundary, deer would be tested opportunistically for the presence of CWD (opportunistic surveillance). Should a confirmed case of CWD be detected within 60 miles of the park boundary, then deer exhibiting clinical signs of CWD would be removed from the population and tested for disease (targeted surveillance). Should CWD be detected within five miles of the park boundary or if the park fell within a state-established CWD containment zone, then staff time would be dedicated to searching for deer exhibiting clinical signs of CWD and these animals would be removed from the population and tested (enhanced targeted surveillance).

Under this alternative, plant species diversity would continue to decline, the forest understory and associated wildlife habitat would continue to be degraded, and forest regeneration would not be expected to occur. If CWD were introduced into the park, no actions would be taken to minimize the probability of occurrence or reduce the likelihood of spread of CWD. There would be few opportunities to work in partnership with state agencies on disease response.

Costs: Recurring annual costs for Alternative A would range from \$14,828 to \$32,567 depending on the proximity of CWD to the park boundary. Overall costs associated with the life of the plan (15 years) would range from \$253,482 to \$403,257.

Alternative B would combine several non-lethal actions including large-scale rotational fencing of 10% to 15% of the park's forested area and reproductive control of does to gradually reduce deer population in the park. Fencing would be rotated once adequate tree regeneration was observed.

Under Alternative B, actions described under Alternative A, including those to address CWD, would continue. In addition, should CWD be detected within five miles of the park boundary or if the park fell within a state-established CWD containment zone, then deer would be live tested via tonsillar biopsy and CWD-positive deer would be removed from the population. Live testing for CWD would occur during initial treatment of deer with a reproductive control agent.

Reproductive control would not reduce deer density significantly during the life of this plan. Therefore, plant species abundance and diversity would continue to decline in areas outside rotational fences, or 85-90% of the forested area of the park. No forest regeneration would occur outside fencing, and once fencing was rotated these revegetated areas would again be exposed to heavy deer browsing, resulting removal of the forest understory, and destruction of associated wildlife habitat. If CWD were introduced into the park, there would be a high likelihood of disease spread within the park deer population and to deer populations surrounding the park. Under Alternative B, there would be few opportunities to work in partnership with the PGC on disease response.

Costs: Recurring annual costs for Alternative B would range from \$246,103 to \$1,163,907 depending on the proximity of CWD to the park boundary. Overall costs associated with the life of the plan (15 years) would range from \$8,056,657 to \$14,025,682.

Alternative C would combine several lethal actions to address issues related to white-tailed deer. Under this alternative qualified federal employees or contractors would directly reduce the deer population in the park through sharpshooting and capture and euthanasia, where appropriate.

Under Alternative C, actions described under Alternative A, including those to address CWD, would continue. In addition, should CWD be detected within five miles of the park boundary or if the park fell within a state-established CWD containment zone, then active lethal surveillance would be initiated for the purposes of assessing disease presence, prevalence, and distribution. Active lethal surveillance would provide for a rapid reduction in the deer population to the initial target deer density and, if appropriate, a one-time reduction in the deer population to not fewer than 10 deer per square mile. A lower limit of 10 deer per square mile was selected to remain consistent with the range in deer density that will allow for forest regeneration (10-40 deer per square mile) provided in the scientific literature. These actions may also minimize the likelihood of CWD becoming established, minimize the likelihood of amplification and spread if the disease is introduced, and promote elimination of CWD, if possible.

A combination of lethal actions would result in achieving the initial target deer density within four years. Heavy browsing would be eliminated, allowing a diverse native plant community to develop. Forest regeneration would be restored, promoting re-establishment of the forest understory, perpetuation of existing forest cover, and an increase in associated wildlife habitat. The likelihood of CWD becoming established and the likelihood of amplification and spread of CWD would be minimized. There would be many opportunities to partner and cost-share with the PGC on disease response. As long as the closest confirmed case of CWD was more than 60 miles from the park boundary all meat would be donated to local food pantries.

Costs: Recurring annual costs for Alternative C would range from \$56,113 to \$176,817 depending on the proximity of CWD to the park boundary. Overall costs associated with the life of the plan (15 years) would range from \$1,461,332 to \$1,528,832.

Alternative D is the NPS selected alternative. This alternative combines lethal and non-lethal actions to address issues related to white-tailed deer. Under this alternative qualified federal employees or contractors will directly reduce the deer population in the park through sharpshooting as well as capture and euthanasia, where appropriate. Maintenance of population levels at the target deer density of 31-35 deer per square mile will be conducted via reproductive control when an acceptable agent becomes

available. Until an acceptable and effective reproductive control agent becomes available, population maintenance will be conducted using lethal methods.

Under Alternative D, actions described under Alternative A would continue. Actions to address CWD would remain the same as described under Alternative C. If a confirmed case of CWD were detected within five miles of the park boundary or the park fell within a state-established CWD containment zone, then lethal reduction actions, if already being implemented, will be accelerated to achieve the target deer density more quickly. If use of a reproductive control agent is already being implemented, then the park will return to lethal removal actions. Lethal removal actions will continue until CWD monitoring, conducted for a period of time consistent with current knowledge of the environmental persistence of CWD infectious agents, reveals no additional CWD-positive deer within the park. At that time, if an appropriate reproductive control agent is available, the park will reinstitute reproductive control methods for population maintenance. Additionally, during the CWD response, a one-time population reduction action could be implemented to achieve a deer density of not fewer than 10 deer per square mile. This action will be based on the success of state agencies in lowering deer densities to fewer than 31-35 deer per square mile in areas surrounding the park for the purposes of disease management.

Costs: Recurring annual costs for Alternative D during implementation of lethal actions would range from \$112,363 to \$176,817. Recurring annual costs for Alternative D during implementation of reproductive control actions would range from \$108,363 to \$194,517. Overall costs associated with the life of the plan (15 years) would range from \$2,036,082 to \$2,925,282. Costs would vary depending on the proximity of CWD to the park boundary.