

Briefing Statement

Bureau: National Park Service
Issue: White-tailed Deer Management Plan / EIS
Unit: Valley Forge National Historical Park
Date: February 27, 2009

Background: White-tailed deer population monitoring between 1986 and 2007 indicates an increase in deer density from 35 to 193 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. In 2000, Congress directed the NPS to develop a plan to address the issue of deer management at Valley Forge NHP.

Work began on the White-tailed Deer Management Plan/EIS in 2006. Extensive public involvement, including a project web-site, brochure, two public meetings, and over 50 briefings to civic organizations, local elected officials, etc. led to the development of four conceptual alternatives. These alternatives have now been fully developed using the best available science and their impacts on the human environment evaluated.

All alternatives (including the no-action alternative) include response to chronic wasting disease (CWD) due to the elevated risk of CWD and because the direct relationship between the White-tailed Deer Management Plan's objectives, alternatives, and impact analysis and the goals, response strategies, and environmental impacts of CWD response make integration both feasible and cost-effective. Response to CWD was developed cooperatively with the Pennsylvania Game Commission and a full CWD Response Plan is provided as an appendix. A cooperative approach to CWD response was necessary due to the scale of the management area identified as necessary to address CWD (minimum 79 mi²) relative to park size (5.3 mi²).

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

The No-Action Alternative (A) assumes continuation of current deer management activities. These actions include deer population and vegetation monitoring, maintaining small fenced areas to protect selected vegetation, removal of deer killed on roadways, public education, coordination with the Pennsylvania Game Commission and continuation of limited CWD surveillance.

CWD response is based on the proximity of a confirmed case of CWD to the park boundary and 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, no new actions would be taken to reduce the effects of deer browse on park vegetation. 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 \$253,782 to \$403,257.

Alternative B would combine several non-lethal actions to address issues related to white-tailed deer. These actions are large-scale rotational fencing of 10% to 15% of the park's forested area and reproductive control of does to gradually reduce the 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 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. No forest regeneration would occur outside fencing, and once fencing was rotated these areas would again be exposed to heavy deer browsing and removal of the forest understory. 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. There would be few opportunities to work in partnership with the Pennsylvania Game Commission on disease response.

Costs: Recurring annual costs for Alternative B would range from \$733,713 to \$759,317, depending on the proximity of CWD to the park boundary. Overall costs associated with the life of the plan (15 years) would range from \$12,614,807 to \$13,417,832.

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. The initial target deer density would be 31-35 deer per square mile (165-185 individuals park-wide). Deer density would be adjusted based on the success of forest regeneration (threshold of 8,000 tree seedlings per acre).

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 deer 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 and perpetuation of existing forest cover. 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 Pennsylvania Game Commission 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 \$44,558 to \$135,762, depending on the proximity of CWD to the park boundary. Overall costs associated with the life of the plan (15 years) would range from \$1,381,832 to \$1,449,332.

Alternative D is the NPS Preferred Alternative. This alternative would combine lethal and non-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 as well as capture and euthanasia, where appropriate. The initial target deer density would be 31-35 deer per square mile (165-185 individuals park-wide). Deer density would be adjusted based on the success of forest regeneration (threshold of 8,000 tree seedlings per acre). Reproductive control of does would be implemented to maintain the deer population at the appropriate density.

Under Alternative D, actions described under Alternative A would continue. Actions to address CWD would remain the same as described under Alternative C. If CWD were to be detected within five miles of the park boundary or the park fell within a state-established CWD containment zone AND reproductive control is being implemented then the park may return to lethal actions for a period of time for the purposes of 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 D during implementation of lethal actions would range from \$99,113 to \$150,317. Recurring annual costs for Alternative D during implementation of reproductive control actions would range from \$183,063 to \$194,517. Overall costs associated with the life of the plan (15 years) would range from \$2,778,282 to \$2,845,782. Costs would vary, depending on the proximity of CWD to the park boundary.

Current Status: The *Draft* White-tailed Deer Management Plan/EIS was available for review and comment by the public between December 19, 2008 and February 17, 2009. In addition, two public meetings were held to present the plan and solicit input in January 2009. NPS received over 1,400 pieces of correspondence and an estimated 1,900 comments on the draft plan/EIS, and these are currently being reviewed. A final plan is expected in August 2009 and implementation in winter 2009/2010.

For Additional information:

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

Congressional Districts:

Pennsylvania:

Jim Gerlach – 6th Congressional District

Joe Sestak – 7th Congressional District

Bob Casey – U.S. Senate

Arlen Specter – U.S. Senate

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