Chronic Wasting Disease Management Plan and Environmental Impact Statement, Shenandoah National Park Public Scoping/Draft Alternatives Meetings 2013





The National Park Service (NPS) is requesting your input in developing a Chronic Wasting Disease Management Plan and Environmental Impact Statement (plan/EIS) for Shenandoah National Park. Chronic wasting disease (CWD) is an infectious, self-propagating, neurological disease that can affect white-tailed deer. It impacts the neurological system of the animal and is eventually fatal. CWD has not been detected in Shenandoah National Park; however, it has been detected near Gore, Virginia, within 22 miles of the park, and advance planning is needed. Your participation is vital to our planning process. There are a number of ways to be involved, including attending one of the public scoping / draft alternatives meetings or submitting written or electronic comments (see page 7 of this newsletter for information about how to submit comments).

#### Public Scoping/Draft Alternatives Meetings

Scoping is the first step to involve the public in the planning process. Scoping includes holding meetings and providing opportunities for the public to comment so that their concerns are identified early and the analysis is focused on important issues. The NPS would also like feedback on the preliminary alternatives that have been drafted for this plan/EIS. Because the plan/EIS will analyze complex ecological, cultural, and social issues, your participation is encouraged and needed.

Each meeting will be in an open house format with a presentation. NPS staff will be on hand to visit with you, answer questions, and solicit your input. Attendees may also submit comments in writing on forms available at the meeting, on-line, or by mail as described in this newsletter. Directions to the meetings are on the park's website.

#### Public Scoping Meeting Times & Locations

March 12 - Ivy Creek Foundation 1780 Earlysville Rd. Charlottesville, VA 7-9 PM

March 13 - James Madison University nTelos Room (#259) in the College of Integrated Science and Technology Building Harrisonburg, VA 7-9 PM March 14 - Washington Fire Hall 10 Firehouse Lane Washington, VA 7-9 PM

# Chronic Wasting Disease Background

CWD is in the family of diseases known as the transmissible spongiform encephalopathies (TSE) or prion diseases. It is a self-propagating neurological disease that affects captive and free-ranging deer, causing brain lesions that result in progressive weight loss, behavioral changes, and eventually death in affected animals. There is currently no evidence that the disease is transmissible to humans or domestic livestock. Although originally detected in the western United States, as of January 2013, CWD has been found in free-ranging populations in 17 states and 2 provinces. The rate of transmission of CWD appears to be greater when concentrations of deer are greater, as is the case with some white-tailed deer populations in eastern national parks. There is also evidence that other human-caused factors, such as changes in land use patterns, influence the spread of CWD.

As of September 2012, 108 deer have tested positive for CWD in Hampshire and Hardy Counties, West Virginia; the Virginia Department of Game and Inland Fisheries confirmed four deer in Frederick County, Virginia, tested positive for CWD. The first documented case of CWD in Virginia was in January 2010. Shenandoah National Park is within a 30-mile radius of the confirmed West Virginia and Virginia CWD cases; the closest case was 22 miles from the park in West Virginia.



In 2012, Shenandoah National Park completed a CWD detection and assessment plan to provide the park with a range of strategies to detect and respond to the threat of CWD near the park. These strategies provide short-term solutions to monitor and respond to the presence of CWD near Shenandoah National Park. To date, CWD has not been found within the park boundary.

The CWD Management Plan/EIS will take the next, comprehensive step of evaluating alternative approaches for long-term management of CWD. The plan will include alternatives to effectively manage the disease within the parameters of NPS management policies and the park's purpose, significance, and desired future conditions of its resources.



## Purpose

The purpose of this plan is to reduce the likelihood of establishment, and decrease the progression, of CWD within Shenandoah National Park.



### Need

- CWD is established and spreading in the region around the West Virginia/Virginia border near Gore, Virginia, and represents a threat to herds of white-tailed deer, which have become part of the visitor experience at the park.
- The risk of CWD introduction and spread is high because of the density of the deer population in specific areas of the park as well as deer movement in and out of the park. There is no known treatment to eliminate CWD once it is established in the population; therefore, a variety of management options must be considered to limit the prevalence and to minimize spread of the disease.
- CWD is a nonnative disease process. Consistent with NPS management policies, CWD should be managed or eliminated, if prudent and feasible.

## Objectives

The following objectives have been identified for this plan/ EIS. Any alternatives considered must meet these objectives to a large degree to be considered reasonable and viable alternatives.

- Reduce the likelihood of CWD establishment, if possible.
- Should CWD become established, slow the spread of CWD within the park.
- Monitor disease progression and impacts on park resources.
- Evaluate the success of the management actions.
- Provide a framework for the NPS to cooperate with other state and federal agencies on the management of CWD.
- Develop public support for CWD management through education.
- Minimize disruption to visitor use and experience from management actions.
- Minimize the potential for health and safety issues for park staff and visitors during CWD management activities.



### Phased Approach Flowchart



## **Preliminary Action Alternatives**

The planning team developed two preliminary alternatives for consideration. These alternatives may be modified after additional analysis and/or to incorporate input from the public. Any alternative selected must meet the project objectives to a large degree, while addressing purpose and need for action.

#### Alternative 1: Phased Approach

A phased approach to managing CWD was developed in which different actions would be taken depending on the proximity of the disease to the park and the prevalence of the disease in the park. The flowchart illustrates this approach. Generally, action would be initiated if a positive case is found in the park or within 5 miles of the park (this assumes that if the disease is within 5 miles, it is likely to be in the park). Testing would commence to assess the percent of deer that are infected (prevalence). If there is a cluster of cases less than 30 miles from the park, steps would be taken to immediately reduce the number of deer in high deer density areas within the park areas, focusing on areas that are closest to the cluster. The deer population in these "hot spots" would be culled to match the density of deer in surrounding areas in order to reduce the risk of the spread of the disease. If a cluster is 30 miles or more from the park, testing would be initiated, but deer in high density areas would not be culled. After 5 years, if no positive cases are found, the park would resume targeted and opportunistic surveillance as described in the 2012 Chronic Wasting Disease Detection and Assessment Plan/ Environmental Assessment.

#### Alternative 2: Preemptive Approach

Under this alternative, the NPS would seek to reduce deer density ahead of the disease in an attempt to reduce positive conditions for CWD transmission, no matter how close the disease is to the park boundary. If the preemptive approach is selected as the preferred alternative, the NPS would immediately begin culling deer in high-density areas to match the density of deer in surrounding areas. The NPS would decide which areas to address based on overall risk factors. Given the current location of the disease, the north district of the park is most geographically at risk and would be targeted first; however, given its high density deer population, Big Meadows would also be a high priority regardless of the proximity of the disease. Other areas with high-density deer populations, such as Skyland and areas along Skyline Drive, could also be targeted. Information from upcoming studies should provide additional information on deer movement patterns within the park that could further inform this decisionmaking process.

The actions under this alternative would not be more aggressive than those included in the phased approach; however, deer reduction would be initiated sooner and would result in a different outcome because of the difference in timing. Deer density would be reduced to about 25 deer per square mile, based on the assumption that this is equivalent to densities in the surrounding forests. A lower limit (e.g., 10 deer per square mile) may be set depending on state actions and new information about deer densities in the local area or effective CWD management strategies. Culling would be used to reduce deer densities as quickly and effectively as possible. The NPS would decrease high deer density areas to the level of surrounding population densities prior to disease detection in or near the park. Deer densities would be maintained for the lifetime of this plan or until there is a clear and consistent increase in CWD and prevalence becomes greater than 10%. Maintenance of reduced deer density would be accomplished by culling every year. Management strategies would be reevaluated if there continued to be a clear and consistent increase in CWD.

## Alternatives Considered but Dismissed from Further Analysis

Several other options were considered by the planning team but were preliminarily dismissed from further analysis for the reasons listed after each option. Public comment on these options is welcome.

- Fencing the entire park. Constructing a fence around the entire park would be extremely intensive, costly, and require a great deal of time and effort to monitor, repair, and react to deer that get into the fence. Pushing all of the park's deer into surrounding areas would not be socially or ecologically responsible. In addition, the impacts to visitor use and experience, cultural landscapes, and possibly archeological resources would be unacceptable.
- Fencing deer out of high-density deer population areas like Big Meadows to break up high concentrations of deer. Fencing deer from specific areas is not a solution by itself and would result in adverse impacts to the cultural landscapes, visual characteristics, and ecology of the Big Meadows area as well as adverse effects on visitor access, including the possibility of increased deervehicle conflicts.
- Change of habitat Big Meadows. Changing habitat in Big Meadows so that it would not be as attractive to deer would have adverse impacts on the cultural landscape. It would be very difficult to change any habitat that would preserve the character of Big Meadows without also creating more edge habitat. Edge habitats attract deer and create areas with higher concentrations of deer.
- Use of predators. It is not possible to supplement existing predator populations (e.g., coyotes) to target sick deer or to achieve the rate of population reduction required for preventing the spread of CWD. Artificially supplementing existing predator populations could also have adverse ecological implications and could create an ecological imbalance. Restoring other native predators (e.g., wolves) would require the support of several local, state, and federal agencies, is beyond the scope of this plan, and the outcome in terms of successful restoration, management of CWD, and deer densities are unknown for this region.

- Non-lethal reduction. Options for non-lethal reduction could include fencing, habitat modification, and reproductive controls. All non-lethal activities require a large commitment of resources and still do not reduce the density of the deer population within a useful timeframe for disease management. The NPS must be able to respond quickly in order to comply with agency guidance and to act in a socially and ecologically responsible manner. Some non-lethal options may be considered as tools for use in the alternatives developed for the plan, especially in certain areas or as maintenance options. A solely non-lethal alternative would not adequately reduce the deer population density in the park fast enough to reduce the likelihood of CWD establishment or to slow the increase of the disease
- General eradication/depopulation. General eradication or depopulation would be against NPS policy for a native species and is not really possible in an open environment like the park.
- Hazing or aversive conditioning. These methods would be ineffective in terms of disease management. Hazing only relocates animals for a short period of time and does not impact disease management.
- Reducing environmental contamination (presence of infectious prions in the environment). Infected deer carcasses serve as sources of environmental contamination, and soils may act as a reservoir for infectious prions in the environment. However, the science associated with CWD management has not evolved enough to prescribe a course of action for reducing the presence or spread of infectious prions. Actions can be taken to increase education about not dumping deer remains near the park boundary; however, this is not a proven long-term solution.

## How to Comment

There are several ways to provide input on the plan/EIS:

Attend a public meeting.

If you are unable to attend one of the public meetings, the NPS accepts electronic (preferred) and written public comments.

Submit comments electronically at: http://parkplanning.nps.gov/SHEN.

Submit written comments by mail to the following central address for this project: National Park Service Denver Service Center c/o Erin Flanagan P.O. Box 25287 Denver, CO 80225

Your comments will be most beneficial if received by April 30, 2013

Please include your full name and address with the comments, so we may add you to our mailing list for future notices about this planning process. Before including your address, phone number, e-mail address, or other personal identifying information in your comment, you should be aware that your entire comment—including your personal identifying information—may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.



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This project is on the Web!! http://parkplanning.nps.gov/SHEN

## NEPA and Where We are in the Process

The NPS is preparing this plan/EIS in accordance with the National Environmental Policy Act (NEPA), which requires federal agencies to analyze impacts to the natural and human environment for any major federal actions, such as the development of this plan. The following highlights important steps in the NEPA process and an anticipated timeline:

| February 2013    | Notice of Intent to Prepare CWD/Management Plan/EIS   |
|------------------|---|
| March 2013       | Public Scoping/Draft Alternatives Meeting *(We are here)                                    |
| April 2013       | Public Scoping Period Concludes   |
| Spring 2013      | NPS Reviews Public Scoping/Draft Alternatives Comments and Gathers Data                     |
| Summer/Fall 2013 | Draft Plan/EIS Developed  |
| Winter 2014      | Draft Plan/EIS to Public for Review and Comment (60 days)/Public Meetings on Draft Plan/EIS |
| 2014             | NPS Prepares Final Plan/EIS and Makes Decision  |