March 28, 2003

Dear Friend of Meadowood:

The Meadowood Farm Planning Analysis (PA) is approved as of March 25, 2003. The decision is that Meadowood Farm will be managed for Balanced Use and as a Special Recreation Management Area (SRMA). This decision is the same as the Proposed Action set forth in the Proposed PA released in November 2002. The Environmental Assessment accompanying the Proposed PA addressed environmental impacts of each alternative including the Proposed Action. A Finding of No Significant Impact (FONSI) was made on November 6, 2002. As stated in the FONSI, implementation of the PA is not expected to result in significant impacts to the human environment, and preparation of an environmental impact statement is not required.

A copy of the Decision Record may be obtained by contacting the Bureau of Land Management, Eastern States, 7450 Boston Boulevard, Springfield, VA 22153, (703) 440-1719. The Decision Record will also be posted on the internet at www.es.blm.gov. Thank you for your continued interest in the Meadowood Farm SRMA, and we look forward to your continued interest in the wise management of the resources on this public property.

Sincerely,

Michael D. Nedd
State Director
Decision Record

Decision

The Meadowood Farm Planning Analysis (PA) is approved. The decision is that Meadowood Farm will be managed for Balanced Use and as a Special Recreation Management Area (SRMA). Hence, throughout the remainder of this Decision Record Meadowood Farm will be referred to as the Meadowood SRMA. This decision is the same as the Proposed Action set forth in the Proposed PA released in November 2002. The Environmental Assessment (ES-020-02-14) accompanying the Proposed PA addressed environmental impacts of each alternative including the Proposed Action. A Finding of No Significant Impact (FONSI) was made on November 6, 2002. As stated in the FONSI, implementation of the PA is not expected to result in significant impacts to the human environment, and therefore, preparation of an environmental impact statement is not required.

Approved Action

This section presents the Balanced Use concept and the rationale that is the basis for the decision. Other Alternatives considered may be found in the Proposed PA released in November 2002. It is stressed that not all activities will necessarily occur. Whether certain actions occur will be based on need/demand, available funding and staffing/personnel requirements. A copy of the Proposed Plan may be obtained by contacting the Bureau of Land Management, Eastern States, 7450 Boston Boulevard, Springfield, VA 22153.

The Balanced Use concept (previously the Proposed Action in the Proposed Planning Analysis/Environmental Assessment (PA/EA)).

Management of natural and cultural resources will be balanced with recreation, environmental education and equine use of the Meadowood SRMA. Boarding of private horses will be allowed. The Bureau of Land Management’s (BLM) Wild Horse and Burro (WH&B) program will be featured, and equine partnerships, horse-related programs, and a WH&B holding facility will be developed. The goals and objectives of these programs and activities will be balanced with the goals and objectives of the natural and cultural resource management programs. Environmental education programs will be developed, and an environmental education center will be constructed. Recreational non-motorized passenger vehicle use and motorized hobby activities will be allowed, however, these activities will be restricted to designated areas and times to ensure visitor safety and to minimize potential use conflicts. Recreational motorized passenger vehicle use will not be allowed. Wildlife, vegetation and riparian/wetland management will focus on species diversity, quality, protection and enhancement in balance with visitor-use activities.

Rationale for the Decision

The Act that authorized the transfer of the Meadowood SRMA to the Secretary of the Interior, Bureau of Land Management, stated in part “... the property would be managed for public use
Implementation of the Balanced Use concept meets the intent of the Act and addresses these planning issues:

The types of, and to what extent, competing recreational uses that will be allowed while preserving the recreational experiences of each visitor.

The desired level of equine use that meets the needs and demands of the BLM and public, while sustaining a healthy ecosystem (i.e., plants, animals, soils, and water).

The intensity (level) of recreational use that meets the needs and demands of the BLM and public, while sustaining a healthy ecosystem (i.e., plants, animals, soils, and water).

As well as meeting the planning issues, the Balanced Use concept provides a range of recreational and environmental education opportunities to the public. Visitor use will be regulated and only those activities authorized by BLM will be allowed. This meets BLM's mission to "sustain the health, diversity and productivity of the public land for the use and enjoyment of present and future generations" while allowing the BLM to monitor and evaluate activities and make adjustments in use levels to protect both known and potentially sensitive natural and cultural resources that might be discovered on the Meadowood SRMA in the future.

Further, the environmental analysis of the Balanced Use concept has shown that none of activities that will or may occur, will have a significant impact either adverse or beneficial on the quality of the human environment.

Approved by:  

Michael D. Nedd  
State Director, Eastern States  

Date  

3/25/03
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## Decision Record

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## Appendix
Chapter 1
Introduction

Purpose and Need

This document is the approved Planning Analysis (PA) for the Meadowood Special Recreation Management Area (SRMA). The land-use decisions in this document are the same as those in the proposed PA, which was released in November 2002. This PA provides guidance for management of the Meadowood SRMA. This land-use plan fulfills the land-use planning requirements of the Federal Land Policy and Management Act (FLPMA) of 1976.

This plan is the second plan prepared by Bureau of Land Management (BLM) for the Meadowood SRMA. The first plan addressed the acquisition of Meadowood Farm. The Decision Record for the acquisition Planning Analysis/Environmental Assessment (PA/EA) was signed on August 1, 2001.

Description of the Planning Area

The land-use decisions of this PA apply to the Meadowood SRMA, which is approximately 800 acres in size. Map 1 in Appendix A shows the general location and provides an overview of the surrounding area associated with the Meadowood SRMA. Map 2 in Appendix A shows the property boundary and surface features of the Meadowood SRMA.

Document Format

This document is organized by chapters with supporting documentation in the appendix. Chapter 1 contains introductory material. Chapter 2 presents the land-use decisions for the Meadowood SRMA. Chapter 3 is the record of public consultation and coordination. The list of preparers is also included in this chapter.
Chapter 2
Land-Use Decisions

Standard Management

The following list of standard management guidelines will apply in addition to the management constraints included in the land-use decisions. Standard Management is a combination of existing policies and Best Management Practices (BMP), and includes determinations made during the development of planning criteria. When not covered by statute or regulation, the rationale for implementing the standard management guidance is stated.

1. Meadowood Farm will be designated a Special Recreation Management Area (SRMA). When an area is identified as having the potential for high public use and or cultural/natural resource management, the SRMA designation is used for internal administrative and budgetary considerations. The SRMA designation does not restrict management options, activities or use of Meadowood Farm.

2. All future management actions will include evaluation of environmental impacts in compliance with the National Environmental Policy Act (NEPA).

3. Prior to disturbance of the surface on Meadowood Farm, site-specific evaluations will be made to determine the presence of significant resource values before initiating the action. Resources to be evaluated will include, but are not limited to, recreation opportunities, visual, soils, cultural, wetlands/riparian areas, and federally and state-listed special-status species.

4. All management actions will comply with the National Historic Preservation Act of 1966, as amended (16 U.S.C. 470), which provides protection for significant cultural resources. An appropriate level of inventory will be conducted for all actions with a potential to affect these resources. Actions will require consultation with the State Historic Preservation Officer and/or the Advisory Council on Historic Preservation (36 CFR 800).

5. Consultation with appropriate federally recognized Native American tribes will occur when a specific action is proposed.

6. The Bureau of Land Management (BLM) will avoid jeopardizing the continued existence of any federally- or state-listed special-status species, will actively promote species recovery, and will work to improve the habitat of special-status species. If a federally-listed special-status species would be affected by a proposed management action, consultation with the U.S. Fish and Wildlife Service pursuant to Section 7 of the Endangered Species Act of 1973, as amended, will be conducted. If a proposed management action would impact a state-listed special status species, the BLM will confer with the Virginia Department of Game and Inland Fisheries.
7. Management actions will conform to the objectives of the Virginia Air Quality Implementation Plan. The State Air Pollution Control Board promulgates Virginia's air quality regulations. These regulations cover stationary sources, such as industrial facilities, mobile sources, such as vehicle emissions, and ensure that certain projects conform to federal requirements.

8. Management actions will conform to the water quality management objectives developed by Virginia as required by the 1987 Water Quality Act Amendments to the Federal Water Pollution Control Act.

9. Measures for minimizing impacts on and enhancing soil, water, riparian/wetlands, wildlife, and vegetation resources will be outlined through BMPs developed in coordination with partner federal, state, and local agencies. Included among the local guiding regulations for the BMPs is the Chesapeake Bay Preservation Act of 1988.

10. Protection of migratory birds will be accomplished in accordance with the Migratory Bird Treaty Act and Executive Order 13186 of January 10, 2001, Responsibilities of Federal Agencies to Protect Migratory Birds.

11. Protection of bald eagles and similar species will be accomplished in accordance with the Bald and Golden Eagle Protection Act.

12. Exotic, invasive species will be addressed in accordance with the National Invasive Species Act and the Executive Order on Invasive Species of 1999.

13. Meadowood SRMA is closed to commercial mineral leasing/development and mineral material sales.

14. Proposed uses will be evaluated for their potential to release hazardous materials into the environment. Use of hazardous materials must comply with the Resource Conservation and Recovery Act. Disposal of hazardous materials on Meadowood SRMA is prohibited. The discovery of unpermitted hazardous material will be handled in accordance with the reporting, removal, and remediation requirements of the Comprehensive Environmental Response, Compensation and Liability Act.

15. Meadowood SRMA will not be available for disposal through sale or exchange, and it is a right-of-way avoidance area. Meadowood SRMA is being designated a right-of-way avoidance area because of its designation as a SRMA. In most cases, granting of rights-of-way for projects such as powerlines and pipelines, or county or state road projects, would not be compatible with current or future management objectives.

Chapter 2-2
16. All wildland and structural fires on Meadowood SRMA will be suppressed in an aggressive and safe manner. Applicable fire management practices will emphasize fire prevention, hazardous fuel reduction, rapid response, and use of appropriate suppression techniques.

17. Limited entry hunting will be allowed on Meadowood SRMA. Hunting will be permitted to assist the Virginia Department of Game and Inland Fisheries and Fairfax County to meet the county deer management population objectives in concert with the Meadowood wildlife habitat goals. For public safety, Meadowood SRMA will be closed to the general public during the hunts.

18. BLM reserves the authority to implement use fees at Meadowood SRMA. These fees may include permits for special events, organized groups, concessions, day use, and other uses. BLM also reserves the authority to close the property to other uses during special events.

19. Facilities at Meadowood SRMA will be brought into compliance with the Americans with Disabilities Act of 1990 (PL 101-336).

20. All trails will be closed to motorized and non-motorized vehicle use, unless designated open. Off-trail use by motorized and non-motorized vehicles, equestrian, and pedestrian traffic will be prohibited to protect public safety and the resources.

21. Swimming in the ponds at Meadowood SRMA will not be allowed due to health and safety concerns.

22. All Meadowood SRMA trails, existing and new, will be planned, constructed, and maintained following BMPs to ensure resource health and patron safety. The following are some materials that will be used to manage trails: BLM Trails Manual 9114 and H-9114-1, BLM Sign Handbook, USDA Forest Service Trail Construction & Maintenance Notebook, and USDA Forest Service Wetland Trail Design and Construction Notebook.

23. Visitor safety is a top priority at Meadowood SRMA. Meadowood SRMA management will follow standard safety practices found in BLM Manual 1112 and associated handbooks.
Meadowood SRMA Decisions

Wild Horse and Burro Program: BLM's Wild Horse and Burro (WH&B) program will be highlighted through conducting adoption events and construction of a permanent adoption/holding facility.

Equine Partnerships: The Meadowood SRMA will be available for developing both public and federal equine partnerships.

Horse Boarding: Boarding of privately owned horses will be allowed. The boarding of private horses will be administered under a concession contract or will be overseen by BLM personnel.

Environmental Education: Environmental education programs and facilities will be developed on the Meadowood SRMA. Environmental education activities will be developed in coordination with other agencies or groups to avoid duplication of programs currently available to the public on the Mason Neck Peninsula.

Camping: Camping by the general public on the Meadowood SRMA will not be allowed. However, camping by organized groups as authorized by the BLM in support of Environmental Education activities will be allowed.

Public Fishing: One of the ponds on the Meadowood SRMA will be open to public fishing. The Virginia Department of Game and Inland Fisheries has indicated that they will work closely with the BLM by stocking the pond free of charge if public fishing is allowed.

Motorized Hobby: Motorized hobby use will be allowed; a definition of motorized hobby may be found in the Proposed Plan. To minimize conflicts with other users of the Meadowood SRMA, motorized hobby use will be restricted to designated areas and times.

Trails Pedestrian: Pedestrian use of suitable, existing trails at the Meadowood SRMA will be allowed. Additional trails will be constructed where natural and cultural resources can support this activity.

Trails Equestrian: The public will be allowed to participate in equestrian trail riding on suitable, existing trails. Existing trails will be improved and maintained. Additional trails will be constructed where the resource can support the activity.

Trails Motorized: Motorized passenger vehicle use will not be allowed. The Meadowood SRMA is not large enough (800 acres) to accommodate pedestrian, equestrian and motorized
passenger vehicle trail use without increasing the potential for user conflicts and compromising public health and safety.

**Trails Non-motorized Passenger Vehicles:** Non-motorized passenger (e.g., bicycle) use of suitable, existing trails at Meadowood Farm will be allowed.

**Equestrian Facilities:** An outdoor riding ring will be constructed, as well as a WH&B holding facility. The existing indoor riding arena and the outdoor ring will be available for scheduled educational events, such as training clinics in support of the WH&B program, and public educational programs.

BLM will provide access to the facilities on a case-by-case basis, perhaps by using a permit and fee system. Groups and organizations wishing to use the facilities will be required to develop a plan which will include, but not be limited to, the following components: identification of the group, its purpose, type of event, proof of adequate insurance, attendance cap (not to exceed), traffic management, safety and emergency services, provisions for restrooms and drinking water facilities (if not provided in the facility), and other information as required by BLM. Use of the equestrian facilities (e.g., indoor arena, outdoor riding ring), exclusive of the riding trails, will be by permit only.

**Wildlife:** The existing forest will be managed for optimum diversity of wildlife habitats in an oak-beech-hickory-pine forest with a diverse shrub-forb understory. Conversion of at least 50 acres of historic hayfields to native grassland and creation of forest edges within grassland windrows will improve the overall quality of wildlife habitat for species such as eastern bluebirds and other edge-using species.

**Fisheries:** Stream riparian resources will be improved through weed removal and riparian improvement projects. An active fisheries management program will result in maintained and improved conditions for summer fish survival and all-around health in all managed fisheries.

**Vegetation:**

- **Forest:** The forest will be managed to restore hardwood diversity in areas where selective cutting has affected the species diversity. Forest management practices will also be used to promote species diversity in the understory.

- **Historic Hayfields:** A minimum of 50 acres of historic hayfields will be converted to native grassland. This will include the addition of small trees and shrubs in a wave-like pattern at the forest edges.

- **Pastures:** Up to 50 acres of historic hayfields will be converted to pasture. The additional pasture will be reseeded with a pasture mix of grasses and forbs.
Invasive, Nonnative Species: Invasive, nonnative species will be controlled through mechanical and chemical means.

Implementation and Monitoring

This PA is intended to provide the BLM with direction in land-use management for the foreseeable future. The PA will serve as the basis for budget development, and land-use allocation decisions. The PA will guide the development of activity plan(s) for the Meadowood SRMA. Activities will be implemented as funds are allocated through the budgeting process and personnel staffing is available to provide for public health and safety. The BLM will monitor the PA on an annual basis to track successful completion of actions and to identify potential needed changes to the PA.
Chapter 3
Consultation and Coordination

Public Participation

The Bureau of Land Management's (BLM) planning regulations require a process that is open to public involvement. Early in the planning process there was opportunity for public involvement for identification of issues and development of the planning criteria. There also were opportunities for the public to review draft planning documents and to file protests before planning decisions were approved. The Meadowood Farm Planning Analysis/Environmental Assessment (PA/EA) could have been released as either a Draft or a Proposed PA/EA. To maximize public involvement, BLM chose to release a Draft PA/EA for Meadowood Farm. When the Draft PA/EA was released, the BLM sought public comments before preparing a Proposed PA/EA. After considering public comments the Draft was modified and a Proposed PA/EA was released. When the Proposed PA was released, it was subject to a public 30-day protest period and a 60-day Governor's consistency review. After the Governor's consistency review and resolution of any protests, the PA/EA was approved.

A Notice of Intent to Prepare Meadowood Farm's PA/EA was published in the Federal Register on May 1, 2001. The notice was then amended to correct the final date for submission of comments as June 27, 2001. That correction was published in the Federal Register on June 22, 2001. The notices invited public participation in the development of issues and planning criteria through June 27, 2001. A public meeting was held in Lorton, Virginia on May 16, 2001. Approximately 80 people attended the meeting and all commented.

Upon distribution of the Draft PA/EA, public comments were accepted during a 30-day review period. A public meeting held on May 22, 2002 was attended by 109 people, with 29 people providing oral comments on the Draft PA/EA. Comments were considered and a Proposed PA/EA was prepared. It was released for a 30-day protest period and has been sent to the Governor for a 60-day consistency review. That Approved PA/EA and this Decision Record were prepared upon resolution of all protests.

Persons, Groups and Agencies Consulted

Federal Agencies

- U.S. Army Corps of Engineers, Norfolk District
- U.S. Fish and Wildlife Service, Mason Neck National Wildlife Refuge
- U.S. Geological Survey, Reston Office
- Environmental Protection Agency
Virginia State Agencies

Secretary of Natural Resources

Department of Historic Resources, State Historic Preservation Officer

Department of Game and Inland Fisheries

Department of Forestry

Department of Conservation and Recreation

Division of State Parks

Department of Environmental Quality

Virginia Marine - Resource Commission

Fairfax County Agencies

Office of the County Executive

County Archaeological Services

Fairfax County Urban Forestry Division

Fairfax County Parks and Recreation

Regional Agencies

Northern Virginia Regional Park Authority

Northern Virginia Soil and Water Conservation District

In addition to comments received from individuals, comments were provided by the following state, county and private organizations:

Academy of Model Aeronautics
Audubon Naturalist Society
Belmont Bay Community Association, Inc.
Birders World
Board of Supervisors, Mt. Vernon District
Congressmen (representing their respective districts) and Virginia Senators
Public Comments

Many of the comments received were “position or opinion statements.” Many of these were expressed in petitions or form letters supporting continuation or discontinuation of a particular land use, or expressed a like or dislike for a particular activity or land use. Generally, these statements offered little in the way of substantive information to support their position or opinion. All of the comments were analyzed by a systematic, objective, visible, and traceable process. All comments received were assigned a number, and the comments were reviewed and categorized by topic(s) addressed. To further clarify, an individual’s comment could appear under more than one topic, depending on the number of topics addressed in the submission. The list of topics under which comments were assigned is not the same as the topics addressed in the Meadowood Farm Plan. To more accurately categorize comments, a broader range of topics was developed based on comments received. Topics to which comments were assigned are listed in the Proposed PA/EA.

List of Preparers


Chapter 3-3
and the National Science and Technology Center, prepared the Meadowood Farm Proposed Planning Analysis/Environmental Assessment. The members of this team were:


Victoria Josupait, Recreation Planner. M.S. Recreation Administration, Aurora University, Aurora, Illinois. Three years with the Bureau of Land Management. Responsible for the Recreation section, and incorporation of public comments in this area.

Jinx Fox, Wild Horse and Burro Program Manager. M.S. Geology, Eastern Kentucky University. Seventeen years with U.S. Government. Responsible for Wild Horse and Burro and Equestrian related sections.


Bob Schoolar, GIS Specialist. B.S. Geophysical Science, Old Dominion University, Norfolk, Virginia. Twenty-five years with U.S. Government. Responsible for all aspects of map production.


GLOSSARY
(Including Acronyms and Abbreviations)

Activity Plan. A site-specific plan for the management of one or more resources, e.g., allotment management plan or habitat management plan. Activity plans provide the additional detail necessary to implement decisions made in the Resource Management Plan.

Cultural Resource. The fragile and nonrenewable remains of human activity, occupation, or endeavor reflected in districts, sites, structures, buildings, objects, artifacts, ruins, works of art, architecture, and natural features that were of importance in human events. These resources consist of (1) physical remains, (2) areas where significant human events occurred even though evidence of the event no longer remains, and (3) the environment immediately surrounding the resource.

Day Use Only- Meadowood Farm would be open to the public daily from sunrise to sunset, including weekends. Call the Meadowood Farm management office for specific hours of operation, and for information regarding use and access on federal holidays. Exceptions would/may be granted to individuals or organizations attending BLM authorized events and to allow access to the stables/pastures to care for equines that reside at Meadowood Farm.

Endangered Species. Any species formally recognized by the Fish and Wildlife Service as in danger of extinction throughout all or a significant portion of its range.

Environmental Assessment (EA). An analysis of environmental impacts of federally-permitted or authorized actions. EAs are prepared in accordance with the National Environmental Policy Act of 1969.

Federal Land Policy and Management Act of 1976 (FLPMA). Public Law 94-579, which gives the BLM legal authority to establish public land policy, to establish guidelines for administering such policy, and to provide for the management, protection, development, and enhancement of public land.

Forest Land. Land carrying forest growth, or if totally lacking, bearing evidence of former forest which contains 10 percent or more crown cover.

Habitat. A specific set of physical conditions that surround a single species, a group of species, or a large community. In wildlife management, the major components of habitat are considered to be food, water, cover, and living space.

Motorized Hobby. The use of any model, not controlled by a remote device, is tethered, and is used for entertainment purposes only. The motor/engine used in the model must have a displacement of 1 cubic inch or less or an electric motor with an equivalent or less power rating.

National Environmental Policy Act (NEPA) of 1969. Public Law 91-190, which established environmental policy for the nation. Among other items, NEPA requires federal agencies to consider environmental values in decision-making processes.

Open. Designated areas, routes, roads, and trails where unrestricted OHV use may occur (subject to operating regulations and vehicle standards set forth in BLM Manuals 8341 and 8343).

Planning Analysis (PA). A document that reviews options for the management of BLM-administered lands and minerals.

Special Recreation Management Area (SRMA). An area where special management or intensive recreation management is needed. Recreation activity plans are required, and greater managerial investment in facilities or supervision can be anticipated.

Special-Status Species. Wildlife and plant species either federally listed or proposed for listing as endangered or threatened, state-listed, BLM-determined priority species, or listed by the State Heritage organization.

Species of Concern. Species that are not yet listed as endangered or threatened, but that are
undergoing a status review. This may include species whose populations are consistently and widely dispersed or whose ranges are restricted to a few localities, so that any major habitat change could lead to extinction. A species that is particularly sensitive to some external disturbance factors.

**Threatened Species.** Any species formally recognized by the Fish and Wildlife Service as likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

**Wetlands.** Areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

**Wild Horses and Burros (WH&B).** The definition of wild horses and burros is taken from Federal Regulations, which state, “wild horses and burros means all unbranded and unclaimed horses and burros that use public lands as all or part of their habitat, that have been removed from these lands by the authorized officer, or that have been born of wild horses or burros in authorized BLM facilities, but have not lost their status under section 3 of the Act. Foals born to a wild horse or burro after approval of a Private Maintenance and Care Agreement are not wild horses or burros. Such foals are the property of the adopter of the parent mare or jenny. Where it appears in this part the term wild horses and burros is deemed to include the term free-roaming 43 CFR 4700.0-5 (b).”

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**Acronyms and Abbreviations**

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<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>BLM</td>
<td>Bureau of Land Management</td>
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<tr>
<td>BMP</td>
<td>Best Management Practice</td>
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<tr>
<td>CFR</td>
<td>Code of Federal Regulations</td>
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<tr>
<td>EA</td>
<td>Environmental Assessment</td>
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<tr>
<td>FLPMA</td>
<td>Federal Land Policy and Management Act of 1976</td>
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<tr>
<td>NEPA</td>
<td>National Environmental Policy Act of 1969</td>
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<td>OHV</td>
<td>Off Highway Vehicle</td>
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<td>PA/EA</td>
<td>Planning Analysis/Environmental Assessment</td>
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<td>SRMA</td>
<td>Special Recreation Management Area</td>
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<tr>
<td>WH&amp;B</td>
<td>Wild Horse and Burro</td>
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Meadowood Farm
Proposed Planning Analysis
Environmental Assessment
BLM Mission

The mission of the Bureau of Land Management is to sustain the health, diversity, and productivity of the public lands for the use and enjoyment of present and future generations.

Eastern States Mission

Eastern States has and will continue to play a central role in fostering the acquisition, management and conservation of public lands and their resources spanning the 31 states east of and bordering the Mississippi River.
IN REPLY REFER TO:
1610 (p)

Dear Reader:

Enclosed is the Bureau of Land Management’s Proposed Planning Analysis and Environmental Assessment (PA/EA) for Meadowood Farm located on the Mason Neck Peninsula in Fairfax County, Virginia. This analysis presents proposed decisions on the management of Meadowood Farm.

This Proposed Planning Analysis incorporates comments received from the public during the 30-day comment period which ended June 14, 2002. Comments were submitted by mail, electronic mail, and at a public meeting held May 22, 2002 at the Gunston Elementary School in Lorton, Virginia.

This document includes an analysis of three alternatives and the Proposed Action for future management of Meadowood Farm. The Proposed Action identifies the proposed decisions in the form of management objectives and allowed uses of Meadowood Farm. The Proposed Planning Analysis will not be implemented until after it is approved.

Any participant in the planning process who has an interest which may be adversely affected by the Proposed Action of the BLM as presented in this Proposed PA/EA may submit a written protest. Protests must include the following information:

1. Name, mailing address, telephone number, and the interest of the person filing the protest.
2. A statement of the issue or issues being protested.
3. A statement of the part or parts of the document being protested.
4. A concise statement explaining why the BLM Eastern States Director’s proposed decision is wrong.
All protests must be filed with the Director of the Bureau of Land Management, and submitted by mail or overnight mail as follows:

By US Postal Service:
Director, Bureau of Land Management
Attention: Ms. Brenda Williams,
Protest Coordinator
WO-210/LS-1075
Department of the Interior
Washington, DC 20240

By overnight mail:
Director, Bureau of Land Management
Attention: Ms. Brenda Williams,
Protest Coordinator (WO-210)
1620 L Street, N.W., Room 1075
Washington, DC 20036
Phone - (202) 452-5110

Announcement of the availability of the Proposed Plan and Finding of No Significant Impact (FONSI) will be published in local newspapers no later than November 18, 2002. Protests must be filed by December 18, 2002.

At the end of the 30-day protest period, and after a Governors’ consistency review, the final Approved Planning Analysis will be issued. Approval for the management decisions of Meadowood Farm will be withheld until all protests, if any, are resolved.

Sincerely,

Michael D. Nedd
State Director
Meadowood Farm

Proposed Planning Analysis and Environmental Assessment

U.S. Department of the Interior

Bureau of Land Management

__________________________
State Director
Eastern States
MEADOWOOD FARM

PROPOSED PLANNING ANALYSIS
AND
ENVIRONMENTAL ASSESSMENT

FINDING OF NO SIGNIFICANT IMPACT

The attached Proposed Planning Analysis/Environmental Assessment (No. ES-020-02-14) covers acquired land in Fairfax County, Virginia, known as Meadowood Farm. Based on the analysis contained in the EA, I have determined that environmental impacts associated with implementation of the land-use allocations and management actions discussed in the Plan are not expected to be significant. This decision will not affect any nationally significant resources, and there will be no known cumulative impacts resulting from implementation of this Plan. Therefore, I have concluded that an environmental impact statement is not required.

State Director, Eastern States

November 6, 2002
Date
Summary

This Planning Analysis/Environmental Assessment (PA/EA) analyzes alternatives and the Proposed Action for future management of Meadowood Farm on the Mason Neck Peninsula in Fairfax County, Virginia. The land area covered by this PA/EA can be found on Map 1 in Appendix A.

Issues

Three issues were identified during the public scoping process: 1) What is the desired level of equine use that meets the needs and demands of the Bureau of Land Management (BLM) and the public, while sustaining a healthy ecosystem (i.e., plants, animals, soils, and water); 2) What types and to what extent can competing recreational uses be allowed while preserving the recreational experiences of each visitor; and 3) What intensity (level) of recreational use would meet the needs and demands of the BLM and the public, while sustaining a healthy ecosystem (i.e., air, plants, animals, soils, and water)?

Alternatives

For clarification in this Summary, the Proposed Action, which is a modified Alternative 3 (Preferred Alternative in the Draft PA/EA), is presented first and is followed by Alternatives 1, 2, and 4. In the body of the document, a modified Alternative 3 appears in the same order it appeared in the draft document, but is labeled the Proposed Action.

Proposed Action

Management Objective: Management of natural and cultural resources would be balanced with recreation, environmental education and equine use of Meadowood Farm. Boarding of private horses would be allowed. The Bureau's Wild Horse and Burro (WH&B) program, partnerships and horse-related programs, and a WH&B holding facility would be developed. The goals and objectives of these programs and activities would be balanced with the goals and objectives of the natural and cultural resource management programs. Environmental education programs would be developed and an environmental education center would be constructed. Recreational motorized passenger vehicles use would not be allowed. Recreational non-motorized passenger vehicle use and motorized hobby activities (see glossary) would be allowed, however, this use would be restricted to designated areas and times for visitor safety and to minimize potential use conflicts. Wildlife, vegetation, and riparian/wetland management would focus on species diversity, quality, protection and enhancement in balance with visitor use activities.

Alternative #1

Management Objective: Management of Meadowood Farm would be a continuation of existing management practices and activities established after the property was acquired by the BLM on October 18, 2001. Boarding of domestic private horses would continue and a hay
storage shelter would be constructed. The property would not be available to support the Bureau's WH&B program and horse-related partnerships. Existing facilities at Meadowood Farm would be available to boarders for trail riding or other equestrian activities on a day-use basis only. The property would remain closed to the general public. Recreational motorized and non-motorized passenger vehicles use would not be allowed, nor would the area be available for motorized hobby activities. Natural resource management activities would be limited to protection, and natural progression would occur through vegetative successional stages.

Alternative #2

Management Objective: Management for protection and enhancement of natural and cultural resources would guide recreational and equine use of Meadowood Farm. Boarding of private horses would be phased out. The Bureau's WH&B program, partnerships, and horse-related programs would be initiated. Day-use recreation and environmental education programs and activities would be offered; however, natural resource and cultural resource management goals and objectives would take precedence over these activities. Recreational motorized and non-motorized passenger vehicle use, and motorized hobby activities, would not be allowed.

Alternative #4

Management Objective: Management of recreation and environmental education programs and activities would guide natural and cultural resources management goals and objectives on Meadowood Farm. Boarding of private horses would continue. The Bureau's WH&B program, partnerships, and horse-related programs would be initiated and would include development of a WH&B holding facility. Recreation and environmental education programs and activities would be offered and would include construction of an environmental education center. Recreational motorized and non-motorized passenger vehicle use, and motorized hobby activities would be allowed, however, this use would be regulated and restricted to designated areas and times for visitor safety and to minimize potential conflicts. Wildlife, vegetation and riparian/wetland management would focus on protection and maintenance of existing resources.
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Chapter 1
Introduction

Purpose and Need

This Planning Analysis/Environmental Assessment (PA/EA) will provide guidance for management of the Bureau of Land Management (BLM) administered Meadowood Farm property in Fairfax County, Virginia.

When approved, this Planning Analysis will provide the land-use planning decisions required by the Federal Land Policy and Management Act of 1976 (FLPMA). The decisions will remain in effect until changed by a modification to this land-use plan or development of a new land-use plan. In either case, public participation will be an inherent part of the BLM's planning process.

The Environmental Assessment will document the analysis of impacts on the quality of the human environment, as required by the National Environmental Policy Act (NEPA).

Background

Meadowood Farm was privately owned until it was acquired by the Department of the Interior (DOI), BLM, on October 18, 2001. The acquisition was made possible through Section 165 of the 2001 Washington, D.C. Appropriations Act, which amended Section 1120(g) of the National Capital Revitalization and Self-Government Improvement Act of 1997 (D.C. Code, sec. 24-1201(g)) and Public Law 105-277 (The Lorton Technical Corrections Act of 1998). Section 165 authorized a complex set of land transactions facilitated by Fairfax County. These resulted in the acquisition of Meadowood Farm by BLM in exchange for federally owned land in the former Lorton Correctional Complex (Lorton).

The BLM Eastern States (ES) began the acquisition process in 1997 upon notification that Lorton would be closed and the property transferred from the District of Columbia Department of Corrections to the General Services Administration (GSA) for disposal. The Lorton Technical Corrections Act of 1998 presented the DOI, through the BLM, with an opportunity to select land at Lorton for possible transfer to DOI. The Act also provided an opportunity for DOI to acquire Meadowood Farm for recreation and public purposes in exchange for land at Lorton. When the GSA, BLM, the owners of Meadowood Farm, and Fairfax County agreed to the exchange, the BLM prepared a PA/EA addressing the acquisition and interim management of the property. The Decision Record for the acquisition PA/EA was signed on August 1, 2001. A copy of the acquisition PA/EA may be obtained by contacting ES at the address shown on the "Dear Reader" letter at the beginning of this document.
In response to public interest in BLM's acquisition and future management of Meadowood Farm, public (scoping) meetings were held in April 2000 and in May 2001. The purpose of these meetings was to identify issues or concerns the public would like to see addressed in the planning document and to develop a range of reasonable management alternatives.

The Draft PA/EA was released to the public on May 10, 2002, and contained a range of alternatives, including the preferred alternative, developed from input from those public meetings and information received during the scoping process.

Comments received on the Draft PA/EA resulted in additional data being incorporated into this document, the Proposed PA/EA. A total of 439 written comments, including form letters and petitions, was received on the Draft PA/EA. A public meeting held on May 22, 2002, was attended by 109 people, with 29 people providing oral comments on the Draft PA/EA. All the comments were analyzed using a systematic, objective, visible and traceable process, and are addressed in Chapter 5. The Proposed Action, which incorporates comments made on the Draft PA/EA, is presented in Chapter 2.

Description of the Planning Area

The Meadowood Farm property is located in Fairfax County, Virginia, along Gunston Road in Lorton. The property is approximately 800 acres and is bordered by Gunston Road, Old Colchester Road and Belmont Boulevard. Meadowood Farm consists of wooded acreage and open pastures. Support buildings on the property include a stable and indoor riding arena, maintenance sheds, and grooming stalls. There is one house that is being used by the BLM as the headquarters office for Meadowood Farm. There are four former residences on the property; one of which is scheduled to be demolished. See Appendix A, Maps 1 and 2, for the general location and surface features of the farm.

Planning Issues

Planning issues were identified by a team of BLM resource professionals using the scoping process, through public meetings, and through written comments received from interested people. Additional program issues were identified by the BLM to focus on specific questions about how Meadowood Farm and its resources should be managed. These issues or questions are
addressed in the analysis of the impacts of each of the alternatives and are resolved by the land-use decisions proposed in the Proposed PA/EA. For the Proposed PA/EA, the following issues/questions were identified:

What is the desired level of equine use that meets the needs and demands of the BLM and public, while sustaining a healthy ecosystem (i.e., plants, animals, soils, and water)?

What types and to what extent can competing recreational uses be allowed while preserving the recreational experiences of each visitor?

What intensity (level) of recreational use would meet the needs and demands of the BLM and public, while sustaining a healthy ecosystem (i.e., plants, animals, soils, and water)?

Planning Criteria

Planning criteria are rules for guiding the planning process. These rules include all applicable federal laws, regulations, executive orders, and policies. In addition, planning criteria may be specifically developed for a land-use plan. Laws and executive orders defining the BLM's responsibilities when preparing land-use plans and analyzing environmental impacts are:

The Clean Air Act, as amended, 42 U.S.C. 7401 et seq.
Executive Order 11988, as amended, Floodplain Management, May 24, 1977
Safe Drinking Water Act, as amended, 42 U.S.C. 300f et seq.
Safe Drinking Water Act Amendments of 1996
Clean Water Act of 1987
Executive Order 11990, Protection of Wetlands, May 24, 1977
Wild and Scenic Rivers Act, as amended, 16 U.S.C. 1271
Fish and Wildlife Coordination Act, as amended, 16 U.S.C. 661-664
Coastal Zone Management Act, 16 U.S.C. 1451-1464
Coastal Barrier Resources Act of 1982, 16 U.S.C. 3501-3509
Lacy Act, as amended
Federal Noxious Weed Act of 1974, as amended
Executive Order 13112, Invasive Species, Feb. 3, 1999
Executive Order 12898, Federal Actions to address Environmental Justice in Minority Populations and Low-Income Populations, Feb. 11, 1994
Executive Order 12372, Intergovernmental Review of Federal Programs, July 14, 1982

Document Format

This document is organized by chapters, with supporting documentation arranged in appendices. Chapter 1 lays out the background and introductory material. Chapter 2 is a discussion of the alternatives and the Proposed Action. Chapter 3 describes the affected environment. Chapter 4 discusses the impacts of each alternative, including the Proposed Action for management of Meadowood Farm. Chapter 5 addresses the comments received from public participation, and lists the persons, organizations and agencies contacted and/or who have had input into this document. It also lists the preparers of this document and includes a list of references. A Glossary is also included after Chapter 5. The appendices are:

Appendix A - Maps
Appendix B - Recreation and Visual Resources Management
Appendix C - Soils
Appendix D - Waste
Chapter 2
Alternatives

Introduction

This chapter presents management alternatives, including the Proposed Action, for Meadowood Farm. The alternatives were developed using public input, by an interdisciplinary team, and are based on the questions/issues and planning criteria discussed in Chapter 1. The Proposed Action is the proposed management decision. It is the result of resource evaluation by Bureau of Land Management (BLM) staff and the incorporation of comments from the public. It is an indication of how the BLM envisions Meadowood Farm being managed. This chapter also includes a list of standard management guidelines that are an inherent part of the Proposed Action.

The BLM has a common goal through the Proposed Action and the alternatives. That goal is to strive to assure that the public will have a safe and enjoyable experience and that a healthy ecosystem is maintained.

The Proposed Action and the Alternatives

The Proposed Action and each alternative consists of three elements: Management Objectives, Land-Use Allocations and Management Actions.

What are Management Objectives? Management Objectives outline BLM's management approach and the resource conditions to be maintained or enhanced. When approved, Management Objectives become land-use decisions to guide future actions.

What are Land-Use Allocations? Land-Use Allocations are decisions addressing what uses will be allowed, restricted or excluded. Land-Use Allocations also control what forms of management will be allowed or not allowed.

What are Management Actions? Management Actions are anticipated measures taken to ensure Management Objectives are met and Land-Use Allocations are followed. Not all Management Actions can be anticipated during preparation of a Land Use Plan (LUP). Also, some of the Management Actions listed might prove to be unnecessary or insufficient.

Alternative #1  (No Action)

Management Objective: Management of Meadowood Farm would be a continuation of existing management practices and activities established after the property was acquired by the BLM on October 18, 2001. Boarding of domestic private horses would continue and a hay storage shelter would be constructed. The property would not be available to support the Bureau's Wild Horse and Burro (WH&B) program and equine partnerships. Existing facilities at Meadowood Farm would be available to boarders for trail riding or other equestrian activities. The property would be closed to the general public. Recreational motorized and non-motorized passenger vehicles, and
motorized hobby activities (see glossary), would not be allowed. Natural resource management activities would be limited to protection and natural progression through vegetative successional stages.

**Alternative #2 (Minimum Use)**

**Management Objective:** Management for protection and enhancement of natural and cultural resources would guide recreational and equine use of Meadowood Farm. Boarding of private horses would be phased out. The Bureau's WH&B program, equine partnerships and horse-related programs would be initiated. Day-use recreation and environmental education programs and activities would be offered; however, natural and cultural resource management goals and objectives would take precedence over these activities. Recreational motorized and non-motorized passenger vehicles, and motorized hobby activities, would not be allowed.

**Proposed Action**

**Management Objective:** Management of natural and cultural resources would be balanced with recreation, environmental education and equine use of Meadowood Farm. Boarding of private horses would be allowed. The Bureau's WH&B program, equine partnerships, horse-related programs, and a WH&B holding facility would be developed. The goals and objectives of these programs and activities would be balanced with the goals and objectives of the natural and cultural resource management programs. Environmental education programs would be developed, and an environmental education center would be constructed. Recreational non-motorized passenger vehicle use and motorized hobby activities would be allowed, however, these activities would be restricted to designated areas and times to ensure visitor safety and to minimize potential use conflicts. Recreational motorized passenger vehicle use would not be allowed. Wildlife, vegetation and riparian/wetland management would focus on species diversity, quality, protection and enhancement in balance with visitor-use activities.

**Alternative #4 (Maximum Use)**

**Management Objective:** Management of recreation and environmental education programs and activities would guide natural and cultural resources management goals and objectives on Meadowood Farm. Boarding of private horses would continue. The Bureau's WH&B program, equine partnerships and horse-related programs would be initiated and would include development of a WH&B holding facility. Recreation and environmental education programs and activities would be offered and would include construction of an environmental education center. Recreational motorized and non-motorized passenger vehicle use and motorized hobby activities would be allowed, however, these activities would be regulated and restricted to designated areas and times to ensure visitor safety and to minimize potential conflicts. Wildlife, vegetation and riparian/wetland management would focus on protection and maintenance of existing resources.
Standard Management Common to All Alternatives

The following list of Standard Management Common to All Alternatives will apply in addition to management constraints of the Proposed Action. Standard Management Common to All Alternatives is a combination of existing policies and Best Management Practices (BMPs), and includes determinations made during the development of planning criteria. When not covered by statute or regulation, the rationale for implementing the standard management guidance is stated.

1. Meadowood Farm will be designated a Special Recreation Management Area (SRMA). When an area is identified as having the potential for high public use and or cultural/natural resource management, the SRMA designation is used for internal administrative and budgetary considerations. The SRMA designation does not restrict management options, activities or use of Meadowood Farm.

2. All future management actions will include evaluation of environmental impacts within the National Environmental Policy Act (NEPA) compliance process.

3. Prior to disturbance of the surface on Meadowood Farm, site-specific evaluations will be made to determine the presence of significant resource values before initiating the action. Resources to be evaluated will include, but are not limited to, recreation opportunities, visual, soils, cultural, wetlands/riparian areas, and federally and state-listed special-status species.

4. All management actions will comply with the National Historic Preservation Act of 1966, as amended (16 U.S.C. 470), which provides protection for significant cultural resources. An appropriate level of inventory will be conducted for all actions with a potential to affect these resources. Actions will require consultation with the State Historic Preservation Officer and/or the Advisory Council on Historic Preservation (36 CFR 800).

5. Consultation with appropriate federally recognized Native American tribes will occur when a specific action is proposed.

6. BLM will avoid jeopardizing the continued existence of any federally or state-listed special-status species, will actively promote species recovery, and will work to improve the habitat of special-status species. If a federally listed special-status species would be affected by a proposed Management Action, consultation with the U.S. Fish and Wildlife Service pursuant to Section 7 of the Endangered Species Act of 1973, as amended, would be conducted. If a proposed management action would impact a state-listed special status species, the BLM will confer with the Virginia Department of Game and Inland Fisheries.

7. Management actions will be conducted in conformance with the objectives of the Virginia Air Quality Implementation Plan. The State Air Pollution Control Board promulgates Virginia's air regulations. These regulations cover stationary sources, such as industrial facilities, mobile
sources, such as vehicle emissions, and ensure that certain projects conform to federal requirements.

8. Management actions will be conducted in a manner conforming to the water quality management objectives developed by Virginia as required by the 1987 Water Quality Act Amendments to the Federal Water Pollution Control Act.

9. Measures for minimizing impacts on and enhancing soil, water, riparian/wetlands, wildlife, and vegetation resources will be outlined through BMPs developed in coordination with partner federal, state, and local agencies. Included among the local guiding regulations for the BMPs is the Chesapeake Bay Preservation Act of 1988.

10. Protection of migratory birds will be accomplished in accordance with the Migratory Bird Treaty Act and Executive Order 13186 of January 10, 2001, Responsibilities of Federal Agencies to Protect Migratory Birds.

11. Protection of bald eagles and similar species will be accomplished in accordance with the Bald and Golden Eagle Protection Act.

12. Exotic, invasive species will be addressed in accordance with the National Invasive Species Act and the Executive Order on Invasive Species of 1999.

13. Meadowood Farm is closed to commercial mineral leasing/development and mineral material sales.

14. Proposed uses will be evaluated for their potential to release hazardous materials into the environment. Use of hazardous materials must comply with the Resource Conservation and Recovery Act. Disposal of hazardous materials on Meadowood Farm is prohibited. The discovery of unpermitted hazardous material will be handled in accordance with the reporting, removal, and remediation requirements of the Comprehensive Environmental Response, Compensation and Liability Act.

15. Meadowood Farm will not be available for disposal through sale or exchange, and it is a right-of-way avoidance area. Meadowood Farm is being designated a right-of-way avoidance area because it is being designated a SRMA. In most cases, granting of rights-of-way for projects such as powerlines and pipelines, or county or state road projects, would not be compatible with current or future management objectives.

16. All wildland and structural fires on Meadowood Farm will be suppressed in an aggressive and safe manner. Applicable fire management practices will emphasize fire prevention, hazardous fuel reduction, rapid response, and use of appropriate suppression techniques.
17. The BLM will allow limited entry hunting on Meadowood Farm. Hunting will be permitted to assist the Virginia Department of Game and Inland Fisheries and Fairfax County to meet the county deer management population objectives in concert with the Meadowood wildlife habitat goals. For public safety, Meadowood Farm will be closed to the general public during the hunts.

18. BLM reserves the authority to implement use fees at Meadowood Farm. These fees may include permits for special events, organized groups, concessions, day use, and other uses. BLM also reserves the authority to close the property to other uses during special events.

19. Facilities at Meadowood Farm will be brought into compliance with the Americans with Disabilities Act of 1990 (PL 101-336).

20. All trails will be closed to motorized and non-motorized vehicle use, unless designated open. Off-trail use by motorized and non-motorized vehicles, equestrian, and pedestrian traffic will be prohibited to protect public safety and the resources.

21. Swimming in the ponds at Meadowood Farm will not be allowed due to health and safety concerns.

22. All Meadowood Farm trails, existing and new, will be planned, constructed, and maintained following BMPs to ensure resource health and patron safety. The following are some materials that will be used to manage trails: BLM Trails Manual 9114 and H-9114-1, BLM Sign Handbook, USDA Forest Service Trail Construction & Maintenance Notebook, and USDA Forest Service Wetland Trail Design and Construction Notebook.

23. Visitor safety is a top priority at Meadowood Farm. Meadowood Farm management will follow standard safety practices found in BLM Manual 1112 and associated handbooks.
<table>
<thead>
<tr>
<th>Alternative 1 (No Action)</th>
<th>Alternative 2 (Minimum Use)</th>
<th>Proposed Action</th>
<th>Alternative 4 (Maximum Use)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MANAGEMENT OBJECTIVE:</td>
<td>MANAGEMENT OBJECTIVE:</td>
<td>MANAGEMENT OBJECTIVE:</td>
<td>MANAGEMENT OBJECTIVE:</td>
</tr>
<tr>
<td>Management practices in place after 10/18/01 would continue.</td>
<td>Meadowood Farm would be managed for natural and cultural resources with regulated visitor use.</td>
<td>Meadowood Farm would be managed for regulated visitor use with emphasis on recreation, natural resources, and equine and environmental education activities.</td>
<td>Meadowood Farm would be managed for a variety of recreation, environmental education, and equine purposes with emphasis on visitor use.</td>
</tr>
<tr>
<td>HORSES - General</td>
<td>HORSES - General</td>
<td>HORSES - General</td>
<td>HORSES - General</td>
</tr>
<tr>
<td>The number of horses and burros would not exceed a total of 50. Acreage allocated to pasture and facilities would be about 50 acres. A hay storage shelter would be constructed.</td>
<td>The number of horses and burros would not exceed a total of 50. Acreage allocated to pasture and facilities would be about 50 acres. A hay storage shelter would be constructed.</td>
<td>The number of horses and burros would not exceed a total of 100. Acreage allocated to pasture and facilities would be about 100 acres. Separate stables, corrals, and hay storage shelters would be constructed.</td>
<td>The number of horses and burros would not exceed a total of 150. Acreage allocated to pasture and facilities would be about 150 acres. Separate stables, corrals, and hay storage shelters would be constructed.</td>
</tr>
<tr>
<td>HORSES - WH&amp;B</td>
<td>HORSES - WH&amp;B</td>
<td>HORSES - WH&amp;B</td>
<td>HORSES - WH&amp;B</td>
</tr>
<tr>
<td>LUA: None.</td>
<td>LUA: Adoption events only; WH&amp;B could be held in temporary facilities.</td>
<td>LUA: Adoption events, individual adoptions by reservation, and holding facility for up to 50 animals.</td>
<td>LUA: Adoption events, walk-in adoptions, and holding facility for up to 50 animals.</td>
</tr>
<tr>
<td>MA: None.</td>
<td>MA: No permanent holding facilities constructed.</td>
<td>MA: A permanent adoption and holding facility would be constructed.</td>
<td>MA: A permanent adoption and holding facility would be constructed.</td>
</tr>
<tr>
<td>HORSE - Partnerships</td>
<td>HORSE - Partnerships</td>
<td>HORSE - Partnerships</td>
<td>HORSE - Partnerships</td>
</tr>
<tr>
<td>MA: None.</td>
<td>MA: BLM would consider equine partnerships.</td>
<td>MA: BLM would consider equine partnerships.</td>
<td>MA: BLM would consider equine partnerships.</td>
</tr>
<tr>
<td>HORSES - Boarders</td>
<td>HORSES - Boarders</td>
<td>HORSES - Boarders</td>
<td>HORSES - Boarders</td>
</tr>
<tr>
<td>MA: A contractor, concessionaire or BLM staff would oversee boarding.</td>
<td>MA: A contractor, concessionaire or BLM staff would oversee boarding until phased out.</td>
<td>MA: A contractor, concessionaire or BLM staff would oversee boarding.</td>
<td>MA: A contractor, concessionaire or BLM staff would oversee boarding.</td>
</tr>
<tr>
<td>ENVIRONMENTAL EDUCATION</td>
<td>ENVIRONMENTAL EDUCATION</td>
<td>ENVIRONMENTAL EDUCATION</td>
<td>ENVIRONMENTAL EDUCATION</td>
</tr>
<tr>
<td>LUA: No facilities or programs.</td>
<td>LUA: No facility constructed; events held occasionally.</td>
<td>LUA: Facility constructed; open to individuals daily, and to groups by reservation.</td>
<td>LUA: Facility constructed; open to individuals and groups daily.</td>
</tr>
<tr>
<td>MA: None.</td>
<td>MA: Host limited number of events.</td>
<td>MA: Construct and staff facilities.</td>
<td>MA: Construct and staff facilities.</td>
</tr>
<tr>
<td>Alternative 1 (No Action)</td>
<td>Alternative 2 (Minimum Use)</td>
<td>Proposed Action</td>
<td>Alternative 4 (Maximum Use)</td>
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<tr>
<td>--------------------------</td>
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<tr>
<td><strong>RECREATION - Camping</strong></td>
<td><strong>RECREATION - Camping</strong></td>
<td><strong>RECREATION - Camping</strong></td>
<td><strong>RECREATION - Camping</strong></td>
</tr>
<tr>
<td>LUA: Not allowed.</td>
<td>LUA: Not allowed; except as</td>
<td>LUA: Not allowed; except as authorized</td>
<td>LUA: Allowed in designated areas.</td>
</tr>
<tr>
<td>MA: None.</td>
<td>authorized by BLM for</td>
<td>authorized by BLM for environmental education.</td>
<td>MA: Developing guidelines for very limited camping.</td>
</tr>
<tr>
<td></td>
<td>environmental education.</td>
<td>MA: Developing guidelines for very limited</td>
<td>MA: Camping areas would be developed.</td>
</tr>
<tr>
<td><strong>RECREATION - Fishing</strong></td>
<td><strong>RECREATION - Fishing</strong></td>
<td><strong>RECREATION - Fishing</strong></td>
<td><strong>RECREATION - Fishing</strong></td>
</tr>
<tr>
<td>MA: None.</td>
<td>MA: None.</td>
<td>MA: Designate areas and times of use,</td>
<td>MA: Designate areas and times of use; develop public fishing access.</td>
</tr>
<tr>
<td><strong>RECREATION - Motorized Hobby</strong></td>
<td><strong>RECREATION - Motorized Hobby</strong></td>
<td><strong>RECREATION - Motorized Hobby</strong></td>
<td><strong>RECREATION - Motorized Hobby</strong></td>
</tr>
<tr>
<td>LUA: Not allowed.</td>
<td>LUA: Not allowed.</td>
<td>LUA: Allowed in designated areas and times.</td>
<td>LUA: Allowed in designated areas and times.</td>
</tr>
<tr>
<td>MA: None.</td>
<td>MA: None.</td>
<td>MA: Designate areas and times of use.</td>
<td>MA: Designate areas and times of use.</td>
</tr>
<tr>
<td><strong>RECREATION - Trails Pedestrian</strong></td>
<td><strong>RECREATION - Trails Pedestrian</strong></td>
<td><strong>RECREATION - Trails Pedestrian</strong></td>
<td><strong>RECREATION - Trails Pedestrian</strong></td>
</tr>
<tr>
<td>LUA: Not allowed.</td>
<td>LUA: Allowed in designated areas and times.</td>
<td>LUA: Allowed in designated areas and times.</td>
<td>LUA: Allowed in designated areas and times.</td>
</tr>
<tr>
<td>MA: None.</td>
<td>MA: Existing trails maintained. Designate areas and times of use.</td>
<td>MA: Suitable existing trails improved and new trails constructed. Designate areas and times of use.</td>
<td>MA: Suitable existing trails improved and new trails constructed. Designate areas and times of use.</td>
</tr>
<tr>
<td><strong>RECREATION - Trails Equestrian</strong></td>
<td><strong>RECREATION - Trails Equestrian</strong></td>
<td><strong>RECREATION - Trails Equestrian</strong></td>
<td><strong>RECREATION - Trails Equestrian</strong></td>
</tr>
<tr>
<td>LUA: Allowed for boarders only.</td>
<td>LUA: Allowed in designated areas and times.</td>
<td>LUA: Allowed in designated areas and times.</td>
<td>LUA: Allowed in designated areas and times.</td>
</tr>
<tr>
<td>MA: Existing trails maintained.</td>
<td>MA: Existing trails maintained. Designate areas and times of use.</td>
<td>MA: Suitable existing trails improved and new trails constructed. Designate areas and times of use.</td>
<td>MA: Suitable existing trails improved and new trails constructed. Designate areas and times of use.</td>
</tr>
<tr>
<td>Alternative 1 (No Action)</td>
<td>Alternative 2 (Minimum Use)</td>
<td>Proposed Action</td>
<td>Alternative 4 (Maximum Use)</td>
</tr>
<tr>
<td>---------------------------------------------------------------</td>
<td>----------------------------------------------------------------</td>
<td>------------------------------------------------------</td>
<td>----------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>RECREATION - Trails Motorized</strong></td>
<td><strong>RECREATION - Trails Motorized</strong></td>
<td><strong>RECREATION - Trails Motorized</strong></td>
<td><strong>RECREATION - Trails Motorized</strong></td>
</tr>
<tr>
<td>LUA: Not allowed.</td>
<td>LUA: Not Allowed.</td>
<td>LUA: Not Allowed.</td>
<td>LUA: Allowed in designated areas and times.</td>
</tr>
<tr>
<td><strong>MA: None.</strong></td>
<td><strong>MA: None.</strong></td>
<td><strong>MA: None.</strong></td>
<td>**MA: Suitable existing trails maintained. designate areas and times of use.</td>
</tr>
<tr>
<td><strong>RECREATION - Trails Non-motorized Passenger Vehicles</strong></td>
<td><strong>RECREATION - Trails Non-motorized Passenger Vehicles</strong></td>
<td><strong>RECREATION - Trails Non-motorized Passenger Vehicles</strong></td>
<td><strong>RECREATION - Trails Non-motorized Passenger Vehicles</strong></td>
</tr>
<tr>
<td>LUA: Not allowed.</td>
<td>LUA: Not allowed.</td>
<td>LUA: Allowed in designated areas and times.</td>
<td>LUA: Allowed in designated areas and times.</td>
</tr>
<tr>
<td><strong>MA: None.</strong></td>
<td><strong>MA: None.</strong></td>
<td>**MA: Suitable existing trails improved and maintained. Designate areas and times of use.</td>
<td>**MA: Suitable existing trails improved and new trails constructed. Designate areas and times of use.</td>
</tr>
<tr>
<td><strong>RECREATION - Equestrian Facilities</strong></td>
<td><strong>RECREATION - Equestrian Facilities</strong></td>
<td><strong>RECREATION – Equestrian Facilities</strong></td>
<td><strong>RECREATION - Equestrian Facilities</strong></td>
</tr>
<tr>
<td>LUA: No additional facilities.</td>
<td>LUA: No additional facilities.</td>
<td>LUA: Outdoor riding ring built; horse shows and clinics allowed by BLM permit.</td>
<td>LUA: Outdoor riding ring built; horse shows and clinics allowed by BLM permit.</td>
</tr>
<tr>
<td><strong>MA: None.</strong></td>
<td><strong>MA: None.</strong></td>
<td><strong>MA: Outdoor riding ring constructed.</strong></td>
<td><strong>MA: Outdoor riding ring constructed.</strong></td>
</tr>
<tr>
<td><strong>WILDLIFE</strong></td>
<td><strong>WILDLIFE</strong></td>
<td><strong>WILDLIFE</strong></td>
<td><strong>WILDLIFE</strong></td>
</tr>
<tr>
<td><strong>MA: None.</strong></td>
<td><strong>MA: Wildlife and habitat management plans developed.</strong></td>
<td>**MA: Wildlife and habitat management plans developed.</td>
<td><strong>MA: None.</strong></td>
</tr>
<tr>
<td><strong>FISHERIES</strong></td>
<td><strong>FISHERIES</strong></td>
<td><strong>FISHERIES</strong></td>
<td><strong>FISHERIES</strong></td>
</tr>
<tr>
<td>LUA: Existing resource maintained.</td>
<td>LUA: Existing resource improved.</td>
<td>LUA: Existing resource improved and enhanced.</td>
<td>LUA: Existing resource improved and enhanced.</td>
</tr>
<tr>
<td><strong>MA: Maintain through riparian maintenance.</strong></td>
<td>**MA: Improve through maintenance and improvement of riparian areas.</td>
<td>**MA: Active management in cooperation with state and local conservation groups.</td>
<td>**MA: Active management in cooperation with state and local conservation groups.</td>
</tr>
</tbody>
</table>

Chapter 2-8
<table>
<thead>
<tr>
<th>Alternative 1 (No Action)</th>
<th>Alternative 2 (Minimum Use)</th>
<th>Proposed Action</th>
<th>Alternative 4 (Maximum Use)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>VEGETATION - Forest</strong>&lt;br&gt;LUA: Existing forested acreage maintained.</td>
<td><strong>VEGETATION - Forest</strong>&lt;br&gt;LUA: Existing forested acreage maintained.</td>
<td><strong>VEGETATION - Forest</strong>&lt;br&gt;LUA: Existing forested acreage maintained.</td>
<td><strong>VEGETATION - Forest</strong>&lt;br&gt;LUA: Existing forested acreage maintained.</td>
</tr>
<tr>
<td><strong>MA:</strong> Removal of safety hazards only.</td>
<td><strong>MA:</strong> Stand composition and health improved.</td>
<td><strong>MA:</strong> Stand composition maintained and health improved.</td>
<td><strong>MA:</strong> Natural forest succession supported.</td>
</tr>
<tr>
<td><strong>VEGETATION - Pasture</strong>&lt;br&gt;LUA: Not to exceed 50 acres.</td>
<td><strong>VEGETATION - Pasture</strong>&lt;br&gt;LUA: Not to exceed 50 acres.</td>
<td><strong>VEGETATION - Pasture</strong>&lt;br&gt;LUA: Not to exceed 100 acres.</td>
<td><strong>VEGETATION - Pasture</strong>&lt;br&gt;LUA: Not to exceed 150 acres.</td>
</tr>
<tr>
<td><strong>MA:</strong> Invasive/non-native species control program initiated.</td>
<td><strong>MA:</strong> Invasive/non-native species control program implemented.</td>
<td><strong>MA:</strong> Invasive/non-native species control program implemented and incorporated into environmental education.</td>
<td><strong>MA:</strong> Invasive/non-native species control program initiated.</td>
</tr>
<tr>
<td><strong>VEGETATION - Historic Hayfields</strong>&lt;br&gt;LUA: 100 acres.</td>
<td><strong>VEGETATION - Historic Hayfields</strong>&lt;br&gt;LUA: 100 acres of grasslands.</td>
<td><strong>VEGETATION - Historic Hayfields</strong>&lt;br&gt;LUA: 50 acres of grasslands and 50 acres of pastures.</td>
<td><strong>VEGETATION - Historic Hayfields</strong>&lt;br&gt;LUA: 0 acres of grasslands and 100 acres of pastures.</td>
</tr>
<tr>
<td><strong>MA:</strong> None. Allowed to grow and reseed naturally.</td>
<td><strong>MA:</strong> Convert to native grasses.</td>
<td><strong>MA:</strong> 50 acres converted to grassland and 50 acres to pasture.</td>
<td><strong>MA:</strong> Converted 100 acres to pasture.</td>
</tr>
<tr>
<td><strong>RIPARIAN/WETLAND AND PONDS</strong>&lt;br&gt;LUA: Existing acreage maintained.</td>
<td><strong>RIPARIAN/WETLAND AND PONDS</strong>&lt;br&gt;LUA: Existing acreage maintained.</td>
<td><strong>RIPARIAN/WETLAND AND PONDS</strong>&lt;br&gt;LUA: Existing acreage maintained.</td>
<td><strong>RIPARIAN/WETLAND AND PONDS</strong>&lt;br&gt;LUA: Existing acreage maintained.</td>
</tr>
<tr>
<td><strong>MA:</strong> Protected and maintained in current condition.</td>
<td><strong>MA:</strong> Protected and maintained in current condition.</td>
<td><strong>MA:</strong> Protected and maintained in current condition.</td>
<td><strong>MA:</strong> Protected and maintained in current condition.</td>
</tr>
</tbody>
</table>
Chapter 3
Affected Environment

Introduction

This Chapter presents a description of the environment at Meadowood Farm. There are 20 elements (Table 3-1) that are to be considered in evaluating the impact of a federal action. Of these 20 elements, 15 are considered to be critical environmental elements and must be addressed. However, some of the critical elements are not present or would not be affected by selection of one of the alternatives or the Proposed Action.

<table>
<thead>
<tr>
<th>Environmental Elements</th>
<th>Present</th>
<th>Not Present</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air Quality *</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Areas of Critical Environmental Concern *</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Coastal Zone Management *</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Cultural Resources *</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Environmental Justice *</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Farm Lands (Prime or Unique) *</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Flood Plains*</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Invasive, Nonnative Species *</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Minerals **</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Native American Religious Concerns *</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Recreation and Visual **</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Socioeconomic**</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Soils **</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Threatened and Endangered Species *</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Waste, Hazardous or Solid *</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Water Quality, Surface and Ground *</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Wetland/Riparian Zones *</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Wild and Scenic Rivers *</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Wilderness *</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Wildlife and Vegetation **</td>
<td>x</td>
<td></td>
</tr>
</tbody>
</table>

*Critical, covered by statute
**Not Covered by Statute
Air Quality and Climate

All information in this section is taken from the Fairfax County Air Quality Monitoring Annual Summary for 1998.

The climate in Fairfax County is mild with an average temperature of approximately 57 degrees Fahrenheit. Average rainfall is approximately 42 inches per year and occurs primarily as rain, although during the winter months, snow and sleet are not unusual. The predominant wind direction in the summer months is from the southwest. In the winter and late fall, the predominant winds are from the northwest. Higher wind speeds are generally associated with winds coming from the northwest.

Fairfax County’s air quality program consists of monitoring for the Environmental Protection Agency’s (EPA) criteria pollutants which are: ozone (O₃), carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), lead (Pb), and particulate matter (PM₁₀). Also monitored are other non-criteria pollutants, total suspended particulates (TSP), nitric oxide (NO), and meteorological parameters (wind direction, wind speed, temperature, and rainfall).

The monitoring site nearest the Meadowood Farm property is the Gunston Monitoring Station. Sulfur dioxide, carbon monoxide, and nitrogen dioxide are not monitored at the Gunston Monitoring Station. However, by interpreting data from other stations at which the criteria pollutants are monitored, the standard defined by the EPA may be exceeded on selected days in a given year, but the overall air quality in Fairfax County is generally within EPA standards throughout the year. There have been no violations of the county standards for TSP levels and lead.

Areas of Critical Environmental Concern

The Federal Land Policy and Management Act (43 U.S.C. sections 1701, 1761-1771) provides for the designation of Areas of Critical Environmental Concern (ACEC), and establishes national policy for the protection of such lands. The ACEC designation is used to protect important historic, cultural, and scenic values; fish, wildlife or other natural resources, systems, or processes; human life and safety; or to identify natural hazards. To be considered an ACEC, an area must be managed by BLM and must meet the criteria of relevance and importance as established in 43 CFR 1610.7-2 and BLM Manual 1613.

Currently, there are no areas on Meadowood Farm that have been identified for nomination as an ACEC. However, after more intensive inventories are conducted, area(s) might be identified that would qualify for ACEC designation. If they are found, a land-use plan modification involving the public would be completed prior to a decision to make the area(s) an ACEC.
Coastal Zone Management

The Virginia coastal zone is defined as Tidewater Virginia in the Code of Virginia, Section 28.2-100. This zone encompasses 29 counties, 15 cities and 43 towns. Tidewater Virginia also includes all of the waters therein, and out to the three-mile Territorial Sea boundary. All of Virginia’s Atlantic coast watershed, as well as parts of the Chesapeake Bay and the Albemarle-Pamlico Sound watersheds, are included.

Virginia established a federally approved Coastal Resources Program in 1986. This authorizes the state to require that federal actions in its coastal zone be consistent with the state's Coastal Resources Program. Fairfax County is one of the counties covered by Virginia’s Coastal Resource Program. The 15 CFR 930.31 states in part that a federal development project is a federal activity involving the planning, construction, modification, or removal of public works, facilities, or other structures, and the acquisition, utilization, or disposal of land or water resources. Therefore, any actions, including this land-use plan and all future activities, will be subject to a coastal zone consistency review.

Cultural Resources

The Meadowood Farm property has not been surveyed for cultural resources, although four surveys have been conducted within the vicinity. The property is set in an area of moderate to high potential for cultural resource sites (Hill, et al. 2000). Specific locations of cultural resource sites are unknown. These potential sites may range in age from the Paleo-era to the first half of the 20th Century. In particular, the property that now comprises Meadowood Farm has been associated with notable local families including Haislip, Magruder, Wiley, Massey and Cocke (Hill, et al. 2000).

In the early 1980s, two cultural resource surveys were conducted within one-half mile of Meadowood Farm. An underwater survey in Belmont Bay, about 1 mile from Meadowood Farm, was conducted in 1994, and in 2000, a cultural resource inventory was conducted in Pohick Bay Regional Park (Hill, et al. 2000). Twenty-six archeological sites have been recorded in the vicinity of Meadowood Farm. Of these sites, 16 need more work to determine their eligibility for listing on the National Register of Historic Places. In addition to the archeological sites, there are five historic properties ranging from a 1783 boundary marker to an early 20th Century family cemetery (Hill, et al. 2000).

Historically, the Meadowood Farm property was used primarily for agricultural purposes with limited support activities, such as harvesting trees for mulch and excavating sand and gravel for internal roads. These activities, ongoing for over 300 years, have probably impacted cultural resources sites on Meadowood Farm.
Environmental Justice

Executive Order (E.O.) 12898 directs federal agencies to address whether their programs, policies and activities would have a disproportionately high and adverse human health or environmental effect on minority populations and low-income populations. There are no communities, businesses or multiple-family dwellings in a 1-mile radius of Meadowood Farm that are known to be inhabited or owned by predominantly minority or low-income families or individuals. Furthermore, there are no known minorities or low-income families who inhabit the dwellings on Meadowood Farm who could be affected by the decisions of this land-use plan.

Farmlands, Prime and Unique

Prime Farmland is one of several kinds of important farmland defined by the U.S. Department of Agriculture (USDA). The USDA defines prime farmland as land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops, and is available for these uses. The land can be cropland, pastureland, rangeland, forestland, or other land, but not urban built-up land.

The USDA considers prime farmland to be of major importance in meeting the nation's short- and long-range needs for food and fiber. Prime farmland has an adequate and dependable supply of moisture from precipitation or irrigation. The temperature and growing season are favorable. The level of acidity or alkalinity is acceptable. Prime farmland has few or no rocks and is permeable to water and air. It is not excessively erodible or saturated and is not frequently flooded during the growing season.

Unique farmland is land other than prime farmland that is used for the production of specific high-value food and other fiber crops. It has the special combination of soil quality, location, growing season, and moisture supply needed to economically produce sustained high quality and/or high yields of a specific crop when treated and managed according to acceptable farming methods. Examples of such crops are citrus, tree nuts, olives, cranberries, fruits, and vegetables.

The USDA Natural Resource Conservation Service has classified the Matapeake, Mattapex, Sassafras and Woodstown soils series as being prime farmland if not built-up (urban) land or water. These soils series are present on Meadowood Farm (see Soils section later in this Chapter and Appendix C for a more in-depth discussion of the soils found on Meadowood Farm). However, on Meadowood Farm these soils series are not being used to support the nation's short- and long-range needs for food and fiber, so this property is not considered to be prime or unique farmland.
Flood Plains

A flood plain, as defined in E.O.11988, as amended, is the lowland and relatively flat areas adjoining inland and coastal waters (and flood-prone areas of offshore islands) including, at a minimum, that area subject to a one percent or greater chance of flooding in any given year. Meadowood Farm is considered to be upland, does not adjoin inland or coastal waters, and is not considered to be subject to a one percent or greater chance of flooding in a given year. Therefore, Meadowood Farm is not within a flood plain as defined in E.O. 11988.

Invasive, Exotic Species

An exotic species is defined as any species that is not native to a geographic area. A significant portion of the flora of Northern Virginia is exotic. Exotic species are present as naturalized species within the various plant communities or are planted as landscape trees and shrubs within the boundaries of Meadowood Farm. An invasive species is one that spreads rapidly and occurs in greater abundance than may be desirable. Thus, the determination that a species is invasive is not clear cut and is subjective, particularly without detailed ecological studies for a particular geographic region. Many different lists exist of invasive and exotic species, and there is not a universal agreement among ecologists and botanists as to which exotic species should be considered to be invasive versus naturalized and common throughout this region. However, as a standard for this planning document, exotic species of plants and animals addressed as invasive are those so considered by the U.S. Department of Agriculture or the Virginia Department of Conservation and Recreation.

There were many exotic species identified on Meadowood Farm during resource assessments conducted by George Mason University in the 2002 growing season. The major species identified are Japanese stilt grass, Japanese honeysuckle, lespedeza, trumpet vine, multiflora rose, orchard grass, paulownia, deodar cedar, tree of heaven, giant foxtail, green foxtail, and English plantain. Except for paulownia, deodar cedar, green foxtail, and English plantain, these exotic species are also considered invasive species. The stilt grass and the honeysuckle are the most invasive species on Meadowood Farm. The orchard grass appears to be a cultivated co-dominant in the historic hayfields.

Exotic vertebrate animals documented on the farm include the house mouse, the Norway rat, the European starling, and the English sparrow. Though native to North America, the brown-headed cowbird is considered by many to be invasive in this area because it takes advantage of openings in the forest, forages in adjacent artificially short grasses, and parasitizes the nests of many species of song birds.
Minerals

The upper part of the Mason Neck Peninsula, southeast of Old Colchester Road, has areas with high sand and gravel potential. These Pleistocene to Miocene-age terrace deposits of the coastal plain generally occur in areas with elevations that exceed 120 feet above mean sea level.

Southwest of the Meadowood Farm tract, about 5 miles along the regional strike, an established sulfide and associated minerals trend is present (Sweet, 1983). Therefore, there is moderate potential for these minerals on Meadowood Farm. The coastal plain sediments are in excess of 50 feet thick in the Meadowood Farm area, so the actual existence of any inferred mineralization would have to be proven by exploration of the underlying Piedmont rocks.

There is no potential for oil and gas in these thin coastal plain sediments due to lack of source and reservoir rock and thermal maturation for petroleum generation and accumulation. The sediments overlie the igneous and metamorphic crystalline bedrock of the Piedmont.

There is one sand and gravel pit on Meadowood Farm that has been supplying, for about 20 years, natural aggregate for maintenance on unpaved farm roads (Dave Chapin, personal communication). It is located about 700 feet west of the large horse barn (see Appendix A Map 2). The pit is U-shaped, is approximately 200 feet in diameter, and covers about 0.75 acre.

The approximately 500-foot diameter on the closing 130-foot contour of the small hill where the pit is located indicates an area of potential terrace deposit aggregate of about 4.5 acres. Assuming the current usage rate (0.75 acre pit in 20 years), this hill area could yield aggregate for about 100 years.

Native American Religious Concerns

Native Americans were not consulted for this action. The property has been in private ownership for over 200 years. Federally recognized Native American tribal use of the property for religious activities has not occurred.

Recreation and Visual Resources

Recreation

General Description Virginia’s Outdoor Recreation Plan identified Fairfax County as being in the Northern Virginia Outdoor Recreation Planning Region (Region 8). The region covers approximately 1,300 square miles and is home to more than 1.4 million people. Therefore, it is considered to be primarily urban in character. The predominant physiographic feature of the region is that of the Piedmont. The gently rolling hills and forested areas of the Piedmont offer opportunities for horseback riding, picnicking and camping. The coastal plains of eastern Fairfax County provide additional opportunities for sunbathing, boating, swimming, fishing and other
water-oriented recreation. Although there are various parks nearby that provide fishing and boating opportunities, there are no public shoreline fishing sites on the Mason Neck Peninsula, and public pond fishing opportunities are rare in this area (J.Odenkirk, personal communication, August 7, 2002). Virginia’s Outdoor Recreation Plan identified Fairfax County as offering some of the most state-of-the-art recreation facilities in the Nation (1996 Virginia Outdoors Plan).

The recreation opportunities which may be offered at Meadowood Farm and correspond to those discussed in the 2002 Commonwealth of Virginia, Department of Conservation and Recreation’s, *Virginia Outdoors Plan: Our Commonwealth*, can be found in Table 3-2. The activities selected for this table were chosen based upon their direct application to the types of recreation activities that potentially would take place on Meadowood Farm. The report indicates the median age of the population of the county has increased over the past 50 years, from 27.3 in 1950 to 37 in 1998. This change in median age affects recreation activities of community members.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Supply</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hiking/backpacking</td>
<td>672 miles</td>
</tr>
<tr>
<td>Hunting</td>
<td>28,309 acres</td>
</tr>
<tr>
<td>Horseback riding</td>
<td>134 miles</td>
</tr>
<tr>
<td>Nature study/programs</td>
<td>35 sites</td>
</tr>
<tr>
<td>Jogging/fitness trail use</td>
<td>30 miles*</td>
</tr>
<tr>
<td>Camping</td>
<td>1,775 sites</td>
</tr>
<tr>
<td>Picnicking</td>
<td>5,438 tables</td>
</tr>
<tr>
<td>Fishing (lake, river, bay use)</td>
<td>30,072 acres</td>
</tr>
</tbody>
</table>

*Figures from 1996 Virginia Outdoors Plan

**Social:** The 1996 Virginia Outdoors Plan examined demographic changes. The results indicated that “... richness and variation has the potential to affect recreation and outdoor resources in a variety of ways.” In the analysis, communities need to help land managers define their own needs and cultural patterns, differentiate their own sets of recreation patterns, and therefore, identify appropriate approaches which are needed to serve their specific social ethnic group. Rather than equate a lack of participation in any planning effort to uninterested community members, land managers need to look at cultural patterns, economics and available information as factors that might lead to this lack of participation. Public land managers might need to partner with other groups to better serve this diverse population.

**Meadowood Farm:** The Meadowood Farm property, up until October 18, 2001, was privately owned and not open to the general public. The owner of the property conducted a commercial horse-boarding business with approximately 50 horses boarded at the facility. The owners of the horses boarded at Meadowood Farm used existing roads on the property for trail riding and other areas for equestrian events such as jumping. A few bridle paths have been established on the
property. Recreation activities such as bird watching, nature study, hunting, and control line model airplane flying also occurred on the farm. However, these activities were restricted to individuals or groups who were granted permission to use Meadowood Farm by the owners.

When Meadowood Farm was acquired by the BLM, it was closed to the general public to protect natural and cultural resources while this land-use plan was being prepared. A special recreation permit was issued to allow the horse boarding operation to continue until the planning process is complete and land-use allocations are determined. The rationale for continuing the horse boarding operation was based primarily on the logistical difficulty of individuals finding alternative horse boarding facilities.

Nearby Recreation Areas: There are three developed recreation areas in the vicinity of the Meadowood Farm property (see Appendix A Map 1). These areas are:

Mason Neck State Park: Mason Neck State Park is managed by Virginia’s Department of Conservation and Recreation and is approximately one-quarter mile south of the southern boundary of Meadowood Farm, approximately 5.5 miles by car. The Park is 1,814 acres in size and is a day-use only facility, however group camping can be arranged by permit. There are picnic tables, but no shelters are provided. Also in the Park there are 3 miles of self-guided hiking trails (no bridle paths) and an Environmental Education Center and Visitor Center. Water is adjacent to the park on the west boundary, however, car top boat launching is the only water-oriented activity at the park.

Occoquan Regional Park: Occoquan Regional Park is managed by the Northern Virginia Regional Park Authority (NVRPA). The Park offers 400 acres of recreational space and is approximately 6 miles northwest of Meadowood Farm. Recreational features include: fishing access points, a boat ramp, soccer fields, softball and baseball fields, picnic shelters, and hiking/walking trails.

Pohick Bay Regional Park: Pohick Bay Regional Park, about 1,000 acres, is also managed by the NVRPA and is less than one-half mile east of Meadowood Farm. Recreational features include: 18-hole golf course, driving range, family campground, group camping, boat rentals, boat ramp, outdoor swimming pool, bridle paths (4 miles), nature trails, picnic shelters, tables, and grills.

Planned Recreation Development on Mason Neck: At this time the only known planned recreation development being considered in the vicinity of Meadowood Farm is the establishment of a bicycle path. Fairfax County is considering development of a bicycle path that would parallel Gunston Road (State Route 242). This road is adjacent to the northeast boundary of Meadowood Farm, however, it is planned for the opposite side of the road (Personal communication, Fairfax County recreation officials, 1998).
Recreation Opportunity Spectrum Classification

An explanation of the Recreation Opportunity Spectrum (ROS) is found in Appendix B.

Meadowood Farm is not adjacent to, nor in proximity of, other BLM-administered public domain lands in Virginia. At present, Meadowood Farm has no recreational facilities except horse trails on the property. However, as mentioned previously, individuals boarding their horses at Meadowood Farm may use the property for recreational equestrian activities. The ROS classification which best fits Meadowood Farm is “Urban” (Appendix B).

Economic and Social

Fairfax County is part of the large urban population center of the Washington, D.C. Metropolitan Statistical Area. Fairfax County is the most populous county in Virginia. Table 3-3 shows the increase in population from 1990 to 2000, in both absolute and percentage values. Table 3-4 shows 1999 population estimates for communities in the Meadowood Farm area.

Table 3-3. Fairfax County Population Figures

<table>
<thead>
<tr>
<th>Total Population 1990</th>
<th>818,358</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Population 2000</td>
<td>969,749</td>
</tr>
<tr>
<td>Total % of change from 1990-2000</td>
<td>18.5%</td>
</tr>
</tbody>
</table>

Table 3-4. 1999 Population Figures for Cities Within Close Proximity to Meadowood Farm

<table>
<thead>
<tr>
<th>City*</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lorton, VA</td>
<td>&lt;20,000</td>
</tr>
<tr>
<td>Alexandria, VA</td>
<td>128,283</td>
</tr>
<tr>
<td>Fairfax, VA</td>
<td>21,498</td>
</tr>
<tr>
<td>Mason Neck, VA</td>
<td>&lt;20,000</td>
</tr>
<tr>
<td>Springfield, VA</td>
<td>&lt;20,000</td>
</tr>
</tbody>
</table>

*within Fairfax County near planning area

Transportation

The Virginia Department of Transportation (VDOT) is responsible for maintaining the roads in the area around Meadowood Farm. Two, two-lane paved roads border the property. There is a left-turn lane from Route 1 (south) to Gunston Road, however, there are no turn lanes for making either a left or right turn from Gunston Road into Meadowood Farm. The VDOT estimates that approximately 2 million vehicles use Routes 1, 235, 241, and 626 monthly as people travel from destination to destination. Traffic on roads going to Meadowood Farm is expected to be highest during the peak times of visitor use at nearby recreation areas (see discussion under recreation).
Topography and Soils

Topography

Meadowood Farm is in the Coastal Plain Province. The Coastal Plain Province is characterized by broad rolling hills and moderate slopes. However, areas of flat to low-relief may be found along major rivers and near the Chesapeake Bay. The topography of Meadowood Farm is characterized by gently rolling hills to relatively flat upland areas (see Appendix A Map 3).

Soils

Table 3-5 shows the series number and series name of soils found on Meadowood Farm. A detailed description of the soils is found in Appendix C. The location of these soils series on Meadowood Farm is shown in Appendix A Map 4.

<table>
<thead>
<tr>
<th>Soil Number</th>
<th>Soil Series</th>
<th>Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Mixed Alluvial Land</td>
<td>75</td>
</tr>
<tr>
<td>6</td>
<td>Hyattsville Fine Sandy Loam</td>
<td>43</td>
</tr>
<tr>
<td>34</td>
<td>Woodstown Fine Sandy Loam</td>
<td>21</td>
</tr>
<tr>
<td>37</td>
<td>Beltsville Silt Loam</td>
<td>43</td>
</tr>
<tr>
<td>38</td>
<td>Mecklenburg Silt Loam</td>
<td>34</td>
</tr>
<tr>
<td>44</td>
<td>Caroline Silt Loam</td>
<td>3</td>
</tr>
<tr>
<td>45</td>
<td>Matapeake Silt Loam</td>
<td>6</td>
</tr>
<tr>
<td>46</td>
<td>Mattapex Silt Loam</td>
<td>1</td>
</tr>
<tr>
<td>49</td>
<td>Lunt Fine Sandy Loam</td>
<td>45</td>
</tr>
<tr>
<td>54</td>
<td>Sassafras Fine Sandy Loam</td>
<td>95</td>
</tr>
<tr>
<td>61</td>
<td>Rolling Land Gravelly Sediments</td>
<td>18</td>
</tr>
<tr>
<td>64</td>
<td>Hilly Land Loamy Sediments</td>
<td>149</td>
</tr>
<tr>
<td>89</td>
<td>Tidal Marsh</td>
<td>13</td>
</tr>
<tr>
<td>118</td>
<td>Marine Clay</td>
<td>257</td>
</tr>
</tbody>
</table>
Waste, Hazardous or Solid

On August 24, 2001, Analytical Services Incorporated (ASI) of Jessup, Maryland performed a Modified Phase I Environmental Site Assessment (ESA) on Meadowood Farm. The Modified Phase I ESA indicated there were Recognized Environmental Conditions (RECs) on the Meadowood Farm property. These RECs, caused by fuel spills, were mitigated by removal in accordance with the Commonwealth of Virginia standards prior to BLM acquiring the property. There currently are no RECs on the Meadowood Farm property. Copies of the ESA are available for review at the Eastern States Office in Springfield, Virginia.

Based on the Modified Phase I report the following sites were identified:

1. Horse Graveyard: A horse graveyard is located just west and adjacent to the office building. The burial dates vary, with some dating back several years, and the graves are still being attended by the horse owners.

2. Bedding Disposal Area: The Bedding Disposal Area consists of a large stockpile, approximately 400 cubic yards, of mixed wood chips and horse manure.

3. Buried Stump Area: There is an area of buried stumps near the eastern property boundary. This area could pose a potential hazard to the public because subsurface water channeling has resulted in surface subsidence and several potholes.

4. Biological Waste: Biological waste is limited to horse manure which has been spread over the fields or hauled away by the local farmers. Disposal of all veterinary sharp needles is done in compliance with state laws at an approved facility.

Water Quality, Surface and Ground

The water supply on Meadowood Farm is from three sources. At 10406 Gunston Road, a spring-fed pump house supplies water to the office, stables, one residence, and the horse pastures. A well at this site, drilled in 1976, has not been used for human consumptive purposes for some time. Both of these sources are unsuitable for human consumption due to the presence of coliform and nitrates. Bottled water is currently being delivered for human consumption, and plans are underway for connection to the municipal water supply. At 10530 Gunston Road, a residence (currently unoccupied) is served by a well that also tested as unsuitable for drinking purposes. At 10207 Old Colchester Road, a well supplying an unoccupied residence was recently abandoned following County procedures. At 10705 Belmont Boulevard, a residence is supplied by municipal water lines.

The habitable structures on Meadowood Farm are all served by individual septic tank and disposal field systems. These systems were serviced and inspected by a certified inspector prior to acquisition by the BLM.
Natural or naturalized surface water features include Thompson Creek and its tributaries, Massey Creek and its tributaries, three ponds created by artificial dams, and several springs. Current monitoring indicates runoff from the property is good to excellent in water quality.

**Water Quality Sampling:** According to the Phase II report, on August 29, 2001, and again on September 10, 2001, ASI collected six water samples from the subject property. The water quality samples were collected from six locations: the spring house at 10406 Gunston Road (prior to the sanitization of the spigot); a hydrant fed by the same spring house; the office faucet at 10406 Gunston Road; a 332-foot deep well at 10406 Gunston Road; a spring in the rear of the residence at 10530 Gunston Road; and the kitchen faucet (fed from a shallow well) at 10530 Gunston Road. All water samples were analyzed for nitrate and nitrite by USEPA Method 300.0, total Coliform, and E. Coliform by USEPA Method 9223 and Fecal Coliform by USEPA Method 9221C. Results of analysis show nitrate and nitrite concentrations are less than federally established Maximum Contaminant Level (MCL) for a safe drinking water supply. However, total coliform was present in four of the samples (the spring house and the 332-foot deep well at 10406 Gunston Road, and the kitchen faucet and back-yard spring at 10530 Gunston Road). The MCL for total coliform (which includes fecal coliform) is zero. Therefore, the water at both locations is not suitable for potable use. Also, in October 2001, a sample from the office kitchen faucet indicated total coliform was present. These results are listed in Table 3 of the Phase II report. According to Mr. John Dixon, Environmental Health Specialist, Fairfax County Health Department, any rain event could result in coliform presence in a spring-fed water supply system, and the coliform could be expected to die-off in the intervals between rain events.

**Wetlands/Riparian Areas**

There are 30 acres of wetlands on the 800 acres of Meadowood Farm (see Appendix A Map 2). According to the national wetlands inventory, there are six different wetland types on the property. These are identified and described in Table 3-6. The following discussion of Resource Protection Areas (RPAs) includes wetland and non-wetland riparian areas.

The Potomac River is a major tributary to the Chesapeake Bay, and jurisdictions within the Potomac River watershed are subject to the requirements of the Chesapeake Bay Preservation Act of 1988 (CBPA). The CBPA requires counties, cities, and towns of Tidewater Virginia to designate and map RPAs and Resource Management Areas (RMAs) in order to protect the water quality of the Chesapeake Bay.
Table 3-6. Acres of Wetlands (Wetlands Defined by Wetland Type) at Meadowood Farm Property

<table>
<thead>
<tr>
<th>ATTRIBUTE</th>
<th>COUNT</th>
<th>SUM AREA (ft²)</th>
<th>ACRES</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEM1E - Palustrine, Emergent, Persistent, Seasonally Flooded/Saturated</td>
<td>1</td>
<td>18,097</td>
<td>0.42</td>
</tr>
<tr>
<td>PEM1Eb - Palustrine, Emergent, Persistent, Seasonally Flooded/Saturated</td>
<td>1</td>
<td>2,134</td>
<td>0.05</td>
</tr>
<tr>
<td>PFO1A - Palustrine, Forested, Broad-leaved Deciduous, Temporarily Flooded</td>
<td>2</td>
<td>847,616</td>
<td>19.46</td>
</tr>
<tr>
<td>PFO1Cb - Palustrine, Forested, Broad-leaved Deciduous, Seasonally Flooded, Beaver</td>
<td>1</td>
<td>353,453</td>
<td>8.00</td>
</tr>
<tr>
<td>PFO1Eb - Palustrine, Forested, Broad-leaved Deciduous, Seasonally Flooded/Saturated</td>
<td>1</td>
<td>273,846</td>
<td>1.38</td>
</tr>
<tr>
<td>PUBHh - Palustrine, Unconsolidated Bottom, Permanently Flooded, Diked/Impounded</td>
<td>3</td>
<td>51,217</td>
<td>2.10</td>
</tr>
<tr>
<td>Total Acres Wetlands</td>
<td>12</td>
<td>1,283,613</td>
<td>31.41</td>
</tr>
</tbody>
</table>

Fairfax County’s Chesapeake Bay Preservation Ordinance (Chapter 118 of the Code of the County of Fairfax, Virginia) divides the county into RPAs and RMAs. Development and land disturbing activities (with a few exceptions) are prohibited in RPAs. RMAs are regulated to protect RPAs and water resources from degradation resulting from development and land disturbing activity. The regulatory requirements in RMAs are expressed in the form of performance criteria. These performance criteria range from general issues (i.e., minimize impervious areas, minimize land disturbance areas, and maximize preservation of indigenous vegetation) to specific requirements for nutrient pollutant removal from storm-water runoff, maintenance agreements for storm-water management systems that incorporate best management practices, erosion and sedimentation controls, and septic field sizing and maintenance.

The Fairfax County Ordinance defines RPAs in Section 118-1-7(b) of the Ordinance as:
- a. A tidal wetland;
  b. A tidal shore;
  c. A tributary stream;
  d. A non-tidal wetland connected by surface flow and contiguous to a tidal wetland or tributary stream;
  e. A buffer area as follows:
    (i) Any land within a major flood plain; and
    (ii) Any land within 100 feet of a feature listed in Sections 118-1-7(b)(1)-(4).

The Fairfax County Ordinance defines RMAs in Section 118-1-7(c) to encompass the entire county by stating, "RMAs shall include any area not designated as an RPA." The total acreage of RPAs mapped by the county on Meadowood is 150 acres (Appendix A Map 5). Currently the Fairfax County Department of Public Works and Environmental Services has a team working on the update of this map based on the perennial streams and the tributaries to these perennial streams. It is estimated that ground truthing will increase the total RPA acreage by 75 to 100 acres. This encompasses mainly Thompson Creek and Massey Creek and their tributaries.
In addition, various seep spring wetlands have been identified on the property by the resource assessment conducted by George Mason University. These are important pockets of biodiversity and microhabitats that have potential for state-listed invertebrates.

**Equine Operations**

Meadowood Farm currently supports a commercial horse boarding operation that uses the stables and indoor arena, outside riding area, and fenced horse pastures. There is room for approximately 50 horses at the stables. The privately owned, boarded horses are separated into two large fenced pastures by sex (mares and geldings are pastured separately). The smaller paddocks are used for horses requiring isolation or reduced forage. The current pasture allocation is approximately 50 fenced acres. The boarders have free access to ride on trails throughout the property as well as in the indoor arena. The majority of trail riding by boarders is done along the interior dirt access roads and along the edges of the open fields. The existing horse population causes some soil erosion in areas with steep inclines next to the stables, as their hooves tend to dig into, rather than compact, the sandy soils. Although the unfenced open fields on Meadowood Farm historically have been used for hay production, currently all of the horse feed (i.e., hay and grain) as well as the stall bedding (baled wood shavings) are purchased off-site.

These privately owned horses are generally turned out in the pastures, and are stalled when the weather or other reasons (e.g., illness, injury, preference of owner) dictate. Animals in the boarding stables produce approximately 164 cubic feet (two manure spreader loads) of mixed manure/wood shavings per day from the stables. This mix was spread on the historic hay fields, resulting in the addition of organic materials to the soil horizon. The amount of manure/bedding waste that is produced varies according to the season and weather, as most of the horses remain outside in good weather. According to Davis and Swinker, with the Colorado State University Cooperative Extension, on average, a 1,000-pound horse produces 45 to 50 pounds of manure per day, or 9 tons per year. Horse manure contains valuable fertilizer elements as well as 40 percent moisture content. That which is deposited in pastures at Meadowood Farm degrades quickly under sunlight and precipitation, and becomes mixed with the upper soil horizon.

**Wildlife**

According to the World Wildlife Fund (WWF), Meadowood Farm lies in the northern end of the Southern Mixed Forests Ecoregion. This ecoregion is designated by the WWF as having Globally Outstanding biodiversity for its species richness and species endemism. Region-wide there is a high amount of total species richness of vertebrates, snails, butterflies, and plants. However, the Southern Mixed Forests Ecoregion has only 1 to 4 percent of its original habitat area remaining intact. Therefore, protection and restoration of the habitat in this ecoregion is a high priority for wildlife and biodiversity conservation.
More than 125 species of birds have been observed from the Meadowood Farm property. They range from ducks and shorebirds, to woodpeckers and hawks, and include warblers and tanagers. Upland game birds residing on the property include woodcock, northern bobwhite and eastern turkey. Isolated mixed hardwood forests along the east coast are commonly considered migratory song bird attractions, and the forests of Meadowood Farm are not an exception. Fifteen to twenty species of migratory songbirds are common in spring surveys. Waterfowl, flycatchers, and kingfishers take advantage of the ponds and streams for cover, resting, and foraging. Seven species of woodpeckers are especially common in the patches of standing dead trees on the property. Forest edge and grassland species include bluebirds, sparrows, meadowlarks, and phoebes. Brown-headed cowbirds, song bird nest parasites that are short grass prairie residents, are also drawn to the close-cut grass areas. European starlings and English sparrows are common exotic birds around the horse barn developments.

Reptiles and amphibians are diverse and numerous. From the species known to occur on Pohick Bay Regional Park, as many as 37 reptiles and amphibians may occur on Meadowood Farm. To date, 15 amphibian species, (4 salamanders and 11 frogs), and 15 reptile species (5 turtles, 2 lizards, and 8 snakes) have been documented to exist on the property.

Approximately 43 species of mammals could occur on Meadowood Farm. Already 21 species have been documented on the property. Among them are the southern flying squirrel and three other species of the squirrel family. Raccoon, fox, and beaver activity are common, and signs of these species and others are easy to see along the creeks. Two exotic mammals, the house mouse and the Norway rat, also occur on the property. White-tailed deer find cover in the wooded areas of the property and graze the pastures mostly in the mornings and the evenings. Fairfax County as a whole has a deer/human conflict issue where deer/auto collisions are frequent and dangerous. In addition, over browse by white-tailed deer is documented to have negative effects on migratory song bird habitat and native vegetation. The county objective for deer densities in Fairfax County is between 15 and 20 deer per square mile. Currently, the Mason Neck population density is approximately 30 to 45 deer per square mile. The county and state are working together to decrease local deer populations and deer/car collisions (for more information go to www.co.fairfax.va.us/comm/deer/deermgt.htm on the internet).

**Fisheries**

Streams on the property have not yet been inventoried. By casual observation there appears to be at least five to six species of fish present in the streams such as Thompson Creek, Massey Creek, and their tributaries.

There are three man-made ponds on Meadowood Farm (Appendix A Map 2). The previous owner of the property stocked two of these ponds for private recreational fishing. The third pond was originally created for a swimming pool. All ponds contain some fish species. A species inventory was conducted on May 15, 2002, in coordination with the Virginia Department of Game and Inland Fisheries (DGIF). The DGIF indicated at that time that they will stock fish in the ponds free of charge if the ponds are open to public fishing and DGIF is allowed to manage.
them cooperatively with the BLM (J. Odenkirk, DGIF, May 15, 2002). The species inventory of May 15, 2002, indicated the following:

**Jackson Pond** (Pond near Belmont Blvd)

**Size:** approximately 0.7 acres.

**Environmental Conditions:** extreme filamentous green algae problem, tannin stained water, maximum depth of 10 feet, moderate riparian cover and good bank fishing access.

**Species encountered:** Two species: largemouth bass and bluegill. Both are self-sustaining in the pond. These are the two preferred fish for a small pond mixed community. There was a high ratio of bass to bluegill (8 bass, 5 bluegill collected). Both populations were composed of very large individuals, indicating intense predation by bass despite the dense algal mats. Bass were up to 24 inches (7 pounds and over) and bluegills were up to 8 inches.

**Gunston Pond** (Pond near Gunston Rd)

**Size:** approximately 1 acre.

**Environmental Conditions:** extreme algae and naiad infestation, maximum depth of 7 feet, moderate riparian cover and excellent bank fishing access - all in a park-like setting.

**Species Encountered:** Species collected included black crappie, largemouth bass, bluegill and redear sunfish. All of these species are self-sustaining in the pond. All are desirable species in small ponds except for crappie, due to their propensity to overpopulate and stunt while competing with other species. Catch rates were much higher here (more in line with a "normal" farm pond) and size structures were lower than Jackson Pond, although another trophy bass and many large redear sunfish and bluegill were observed.

**Swimming Pool Pond** (Not Inventoried)

This small pond is split by the Meadowood Farm property line. Less than .3 acres is BLM administered property.

**Threatened and Endangered Species**

There is a bald eagle nest site within one-quarter-mile of the Meadowood Farm property. Along the stream banks there is habitat for small-whorled pagonia (also a federally listed species).

State-listed species or state species of concern that may occur on Meadowood Farm include the wood turtle, the Northern Virginia well amphipod, Pizzini’s amphipod, the tidewater amphipod, and the river bulrush. Prior to any new activities on Meadowood Farm, extensive inventories (proposed to begin in 2003) for state and federally listed species will be completed. Coordination of this has already begun with the Virginia Department of Conservation and Recreation. Consultation has begun and will continue with the U.S. Fish and Wildlife Service. To date, no information that warrants formal consultation has been gathered.
Wild and Scenic Rivers/Wilderness Areas

There are no rivers or streams running through or in proximity of Meadowood Farm that are classified as, or eligible for, study under the Wild and Scenic Rivers Act (16 U.S.C. 1271 of 1968 as amended).

There are no federally managed lands on or in the vicinity of Meadowood Farm that meet the criteria for designation as wilderness under the Wilderness Act of 1964 as amended (16 U.S.C. 1121).

Vegetation

The various vegetation types on Meadowood Farm range from deciduous forest to wetland vegetation to artificially maintained historic hayfields. Overall, the native vegetation composition is a cross between that of the Piedmont and the Coastal Plain. The property, as stated in the Wildlife Section, lies in the northern end of the Mixed Forests Ecoregion as identified by the WWF. The vegetation types are shown by percent cover in Table 3-7. This information is based on interpretation of 1993 color infrared aerial photography and updated with 1997 color aerial photography (see Appendix A Maps 6 and 7). Major vegetation dominants and co-dominants are being identified and tabulated for the property by a resource assessment conducted by the George Mason University (communication with George Taylor, George Mason University, August 2002).

<table>
<thead>
<tr>
<th>Vegetation Cover</th>
<th>Acres</th>
<th>Percent Cover</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forest (non-riparian)</td>
<td>608</td>
<td>76%</td>
</tr>
<tr>
<td>Pasture</td>
<td>50</td>
<td>6%</td>
</tr>
<tr>
<td>Historic Hayfields</td>
<td>108</td>
<td>12%</td>
</tr>
<tr>
<td>Wetland and Riparian Vegetation</td>
<td>31</td>
<td>4%</td>
</tr>
<tr>
<td>Non-Vegetated Human Caused Disturbances¹</td>
<td>15</td>
<td>2%</td>
</tr>
<tr>
<td>Open Water Ponds (3)</td>
<td>2</td>
<td>0.3%</td>
</tr>
<tr>
<td>Total</td>
<td>804</td>
<td>100.0</td>
</tr>
</tbody>
</table>

¹ Includes roads, structures, parking area, lawns and sand/gravel pit.

The previous owner of Meadowood Farm maintained the pastures and hayfields through seeding a diversity of species, and periodically liming, treating with herbicide, and fertilizing. The predominant species in the historic hayfields appears to be orchard grass and red fescue, and clover, dandelions, and red fescue seem to be the prevalent species in the pastures. More common exotic, invasives in the hayfields include orchard grass and lespedeza.
The mixed hardwoods of the forested areas are a result of 60 to 70 years of secondary succession after the area was logged in the 1930s. The forested areas contain a great diversity of tree species and understory tree, shrub and forb species. There is also a diversity of combinations of overstory and understory plant species throughout the property. The exotic, invasive Japanese stilt grass occurs sporadically in patches in the upland forest and in extensive areas bordering streams. As the forest continues to mature, it appears the conifers will continue to decline.

An ecologically important area not identified above is an ecotone. An ecotone is transition area between two major habitat or vegetation types. A common example of this is the forest/hayfield ecotone. Ecotones are highly attractive to wildlife in that they afford opportunity to take advantage of a greater diversity of food, foraging, and cover opportunities.
Chapter 4

Environmental Consequences

Introduction

This chapter describes the environmental consequences or impacts of implementing each of the alternatives. For analytical purposes, it is assumed the Land-Use Allocations and Management Actions for each alternative presented in Chapter 2 would be implemented. The impact analysis is based on the Reasonable Foreseeable Development Scenarios that are projected to occur under each of the alternatives. Further, the analysis focuses on the environmental elements presented in Chapter 3 that are present on Meadowood Farm.

The environmental consequences section identifies the direct, indirect and cumulative impacts, both adverse and beneficial, that might occur. Further National Environmental Policy Act (NEPA) review and compliance with statutory/regulatory regulations will be required when Management Actions, such as construction of facilities or trails, are initiated.

For the purpose of analysis “short-term” impacts described in this document are those that would last 5 years or less; “long-term” impacts would last more than 5 years. The analysis presented in this chapter is based on available information and on the professional judgment of resource specialists who prepared the document. The impact discussion will be limited to Management Actions shown in Table 2-1 that could impact elements listed in Table 3-1.

Environmental Elements Not Present or Would Not Be Affected

The following environmental elements (see Table 3-1) have been examined and are not present and/or will not be affected by selection of any of the alternatives or the Proposed Action: Areas of Critical Environmental Concern, Farm Lands (prime or unique), Flood Plains, Environmental Justice, Native American Religious Concerns, Waste - Hazardous or Non-hazardous, Wilderness, and Wild and Scenic Rivers.

Acreage figures shown in this chapter are estimates made for analysis purposes and comparison of alternatives in this land-use plan. The actual acreage that could be impacted, adverse or beneficial, will be determined on a site-specific basis when a specific project or activity is proposed.
Impacts of Implementing Alternative #1 (No Action)

Management Objective
Management practices in place after October 18, 2001, the date of Bureau of Land Management (BLM) acquisition of the property, would continue.

Reasonable Foreseeable Development (RFD) Scenario

Horses
A hay storage shelter would be constructed. Equestrian facilities and pastures would encompass approximately 50 acres.

Wild Horses and Burros (WH&B): There would be no WH&Bs at Meadowood Farm.

Partners: Meadowood Farm would not be available for federal or other equine partnerships.

Boarders: Boarding of domestic, privately owned horses would be allowed. The boarding facility would hold up to 50 animals.

Environmental Education:
There would be no environmental education programs or facilities.

Recreation:
Camping would not be allowed.

Fishing would not be allowed.

Motorized hobby activities (see glossary) would not be allowed.

Existing trails would be maintained for equestrian use by boarders. New trails would not be constructed.

Recreational motorized passenger vehicle use would not be allowed.

Recreational non-motorized passenger vehicle use would not be allowed.

Wildlife:
Wildlife habitat would not be actively managed.
Fisheries:
Fisheries in streams and ponds would be maintained as a result of riparian area maintenance.

Vegetation:
Forest: Existing forested acreage would be maintained. Silvicultural practices would not be applied to forestland except for removal of safety hazards.

Pasture: Would not exceed 50 acres. An invasive/non-native species control program would be initiated.

Historic Hayfields: Would be allowed to grow and reseed naturally through the various vegetative successional stages.

Riparian/Wetlands Areas including Ponds:
Would be protected and maintained in their current condition.

Impacts to Resources

Air Quality and Climate: Impacts to air quality would be generated from two sources: (1) fugitive dust generated from farm maintenance vehicles operating on unpaved roads would increase suspended particulates in the immediate area during dry conditions; and (2) exhaust from the use of farm machinery, passenger and transport vehicles, and other machinery or tools powered by internal combustion engines would have a negative effect.

Monitoring of air quality on Meadowood Farm has not been conducted; therefore, baseline data is not available. Under this alternative a measurable change in the regulated air pollutants nitrogen oxides (NOx), sulfur oxides (SOx) and particulates (Pm) would not occur. Impacts from the referenced sources would be limited to the immediate vicinity of the activity and would be of short duration (24 hours or less).

Based on the RFD Scenario, indirect or cumulative impacts to air quality on Mason Neck would not occur.

Coastal Zone Management: There could be direct impacts to Virginia’s coastal zone by the construction of a hay shelter. In accordance with 15 Code of Federal Regulations (CFR) 930, a coastal zone consistency review would be conducted by the Commonwealth of Virginia as part of the development of an environmental assessment (EA) that would be prepared prior to the start of construction of the hay shelter. No indirect or cumulative impacts to Virginia’s coastal zone would be anticipated from implementing the activities identified in the RFD Scenario.

Cultural Resources: Potential impacts that could occur to cultural resources would be from farm maintenance work and equine activity resulting from commercial horse boarding. This use
could result in inadvertent disturbance of historic properties because the existence and location of these sites, if any, are unknown. Impacts would be limited to displacement of resources through equine movement in pastures and trails, and from farm vehicle travel. In accordance with the Standard Management Common to All Alternatives, cultural surveys would be conducted prior to starting ground disturbing activities. If sites with the potential of being historic or prehistoric properties would be located, consultation would take place with the State Historic Preservation Officer, the Advisory Council on Historic Preservation, and other interested people or groups as appropriate.

**Minerals:** The existing sand and gravel pit has been stabilized, but this would not preclude its use in the future as a source of surfacing material on existing travel ways on Meadowood Farm. This use would be minimal and the pit size would not increase. If the pit is used, new disturbance would only occur in previously disturbed areas. No activities under this alternative would create indirect or cumulative impacts to mineral resources.

**Recreation Resources:** No recreational facility development or recreation opportunities for the general public (such as hiking, bird watching or equestrian trail riding) would occur under this alternative. Meadowood Farm would remain closed to the public, with the exception of horse boarding. Equestrian activities would not impact other recreation activities since Meadowood Farm would be closed to other recreational uses.

Under this alternative, user impacts on the resources, such as soil compaction, trampling, and erosion would not occur except from horse boarding. However, there would be lost recreational opportunities in that only a few people would benefit from using Meadowood Farm for recreation purposes.

**Visual Resource Management:** Meadowood Farm would be managed as a Visual Resource Management (VRM) Class III resource. The existing visual resource associated with Meadowood Farm could be impacted by construction of a hay storage shelter. This impact would be reduced by proper siting of the new facility and by use of building materials and/or colors which would not contrast with the existing landscape. The guidelines for meeting the goals of VRM Class III would be applied. With the incorporation of the measures referenced above, no indirect or cumulative impacts to the visual resource would occur. No activities under this alternative would create indirect or cumulative impacts to visual resources.

**Economic and Social:** There would not be an increase in consumer spending (lodging, meals, gasoline) because visitor use of Meadowood Farm would basically remain unchanged from its current level. There would not be any activities at Meadowood Farm that could affect the existing economic and social setting. Since there would be no permanent population changes associated with this alternative, there would be no impacts to local schools, hospitals, housing, water/sewer, and other basic community infrastructure elements.
Soils: Two types of impacts to soils could occur: soil compaction and soil erosion. These impacts could cause a loss of soil productivity and an increase in turbidity of local aquatic areas. Farm maintenance vehicles on roads and in the pastures would cause soil compaction. Soil compaction decreases air and water infiltration into the soil profile, thus reducing soil productivity. The impact of soil compaction would be long term and irreparable where trails, roads, or facilities are located.

Soil erosion results in a loss of the organic layer and topsoil. This leads to a decrease in available plant nutrients and makes it difficult for an area to support vegetation. The application of a mulch and prompt reseeding of areas where vegetation would be removed or in areas where detectable erosion would occur would mitigate soil erosion. Under normal climatic and moisture conditions, areas where erosion would occur should recover quickly (less than 6 months); therefore, this impact would be short term. There would be some erosion in steep areas of the existing pastures and on steeper segments of trails or roads due to the impact of horse hoofs and vehicle travel on the sandy soil. However, the erosion due to horse traffic and vehicle travel would be localized to isolated areas and would not adversely impact resources outside the immediate vicinity of where erosion would occur. BLM would work cooperatively with local and regional organizations to stabilize areas where erosion occurred through application of mulch, reseeding and/or installation of drainage structures. No indirect or cumulative impacts to soils would be expected to occur under this alternative.

Traffic/Transportation: There would be no noticeable impact on daily traffic patterns. Existing vehicle numbers traveling to and from Meadowood Farm would not increase or decrease. Impacts to local traffic would remain consistent with the traffic that is presently occurring in conjunction with the commercial boarding operation (e.g., boarders, farriers, veterinarians, feed, and bedding delivery traffic).

Water Quality, Surface and Ground: There would be no adverse effects on the drinking water supply from activities identified in the RFD Scenario. Because of the absence of potable water, a public drinking-water supply system is expected to be established on Meadowood Farm by winter 2002. There could be impacts to water quality due to runoff from onsite disposal of manure cleaned from stables. Offsite disposal or composting of manure, or a combination of these, could be applied to minimize water quality degradation. No direct, indirect, or cumulative negative impacts to water quality would occur under this alternative.

Riparian/Wetlands and Ponds: Some resource commitments and general project-by-project restrictions would be required to maintain protection of riparian resources. Riparian habitat would improve as weed species would be controlled. Periodic intensive maintenance would be required to avoid the ponds filling in due to sedimentation and aquatic vegetation growth.

Wildlife: Under the RFD Scenario for this alternative, the existing forest habitat would grow and change naturally, allowing for use by any wildlife species that find the habitats suitable. The species that currently use Meadowood Farm would continue to find habitat on the property. Deer
would continue to use the existing fields for grazing and bedding. Horse pastures and mowed fields would continue to provide habitat for brown-headed cowbirds and starlings. Spring mowing would continue to decrease cover and foraging space for wildlife, an important period for wildlife because of reproductive needs.

**Fisheries:** The health of fish populations in streams would be maintained as a result of riparian area maintenance. This could be accomplished through weed removal projects and establishment of riparian vegetation where needed.

**Federal and State Listed Species:** There are no federally listed or state sensitive species known to exist on Meadowood Farm. The BLM is required by regulations to manage threatened or endangered species or state sensitive species and their habitat. If federally listed or state sensitive species are encountered, management actions would be taken immediately to ensure the continued existence of the species and/or their habitat.

**Vegetation:**

- **Forest:** The current mixed hardwood forest of beech-oak with some pockets of pine would continue to mature, with the pines diminishing. The current understory of mountain laurel and holly would continue to flourish.
- **Historic Hayfields:** The historic hayfields would continue to be dominated by red fescue and orchard grass. With continuation of mowing for field maintenance, there would be a need for periodic fertilization to maintain grassland.
- **Pastures:** The grass in the existing pastures would continue to be heavily grazed by horses, allowing the continued persistence of clover and dandelions, and cultivated grasses.
- **Invasive, Nonnative Species:** Invasive, nonnative species would be controlled through mechanical and chemical means. Should orchard grass be addressed as an invasive species to be removed and replaced, the species composition of the historic hayfields would change.

**Impacts of Implementing Alternative #2 (Minimum Use)**

**Management Objective**

Meadowood Farm would be managed for natural and cultural resources with regulated visitor use.

**Reasonable Foreseeable Development (RFD) Scenario**

**Horses**

Meadowood Farm would hold up to 50 equine partnership and BLM horses. A hay storage shelter would be constructed and the existing pastures would be cross-fenced. The equestrian facilities would encompass approximately 50 acres currently used for pasture. Equine facilities would not be available for use by the general public.
Wild Horses and Burros (WH&B): WH&B adoption events would be held. However, no WH&Bs would be held on a long-term basis at Meadowood Farm, and adoptions would only occur at scheduled adoption events. Therefore, permanent facilities to support the WH&B program would not be constructed.

Partners: BLM would consider both public and federal equine partnerships at Meadowood Farm. Equine partnerships that would provide the most benefit to the public and complement BLM goals and programs would be pursued in order to use the equine facilities at Meadowood Farm for the best public use. Examples of potential equine partnerships could include availability of the facilities for therapeutic riding, educational clinics, and boarding federal horses.

Boarders: Boarding of domestic privately owned horses would be phased out.

Environmental Education:
An Environmental Education Center would not be constructed. Environmental education events would be held using existing facilities.

Recreation:
Camping would not be allowed except for special environmental education activities authorized by BLM.

Fishing would not be allowed.

Motorized hobby activities (see glossary) would not be allowed.

Existing trails would be maintained for pedestrian and equestrian use.

Recreational motorized passenger vehicle use would not be allowed.

Recreational non-motorized passenger vehicle use would not be allowed.

Wildlife:
Wildlife habitat would be actively managed.

Fisheries:
Fisheries in streams and ponds would improve as a result of riparian areas protection and enhancement.

Vegetation:
Forest: Existing forested acreage would be maintained. Silvicultural practices would be applied to improve forest stand composition and health.
Pasture: Would not exceed 50 acres. An invasive/non-native species control program would be implemented.

Historic Hayfields: Would be converted to native grasslands.

Riparian/Wetlands Areas including Ponds: Would be protected and enhanced.

Impacts to Resources

Air Quality and Climate: Impacts to air quality would be similar to Alternative 1. There would not be a change in the amount of fugitive dust generated by vehicle traffic on unpaved roads since Meadowood Farm would remain closed to recreational motorized and non-motorized passenger vehicle use. There would be a minimal increase in suspended particulates from equestrian and pedestrian use of unpaved trails and roads. There would also be an increase in the regulated air pollutants due to the occasional WH&B adoption events and increased visitor use of Meadowood Farm. However, in both instances these increases would be sporadic, short term and would be limited to the immediate vicinity of the activity.

Prescribed burning could be used under Alternative 2 to remove hazardous fuels, i.e. vegetative residue or for wildlife habitat improvement. Smoke from prescribed fires could release several “criteria air pollutants” identified by the Environmental Protection Agency (EPA). The need for prescribed fire would be evaluated during preparation of an activity plan. Site-specific burn actions would be addressed in a detailed prescribed fire operations plan. All burning would be in compliance with Virginia’s smoke management guidelines.

Based on the RFD Scenario, indirect or cumulative impacts to air quality on Mason Neck would not be expected to occur under Alternative 2.

Coastal Zone Management: Impacts that would occur under Alternative 2 would be the same as Alternative 1 because there would be no construction other than a hay storage shelter. As in Alternative 1, there would be a coastal zone consistency review by the Commonwealth of Virginia prior to construction of the hay shelter. No indirect or cumulative impacts to Virginia’s coastal zone would occur from the construction of the hay shelter.

Cultural Resources: Potential impacts that could occur to cultural resources would be the same as Alternative 1, but there would be a greater chance of disturbance because there would be more ground disturbing activities. Impacts to cultural resources could include inadvertent disturbance of cultural artifacts because the existence and location of cultural sites is unknown. Impacts could occur through displacement of resources by equine and pedestrian movement in the pastures and on trails. Vegetation manipulation, such as diskng and planting, could also impact cultural resources. Since commercial boarding would be phased out, impacts would potentially be reduced because the WH&Bs would be contained in a smaller area when on site and the number of horses in the open pastures and trails would be reduced.
In accordance with the Standard Management Common to All Alternatives, cultural surveys would be conducted prior to starting ground disturbing activities. If sites with the potential of being historic or prehistoric properties would be located, consultation would take place with the State Historic Preservation Officer, the Advisory Council on Historic Preservation, and other interested people or groups as appropriate.

**Minerals:** The existing sand and gravel pit has been stabilized, but this would not preclude its use in the future as a source of surfacing material on existing travel ways on Meadowood Farm. This use would be minimal and the pit size would not increase. If the pit would be used, new disturbance would only occur in previously disturbed areas. No activities under this alternative would create indirect or cumulative impacts to mineral resources.

**Recreation Resources:** As recreational opportunities would increase at Meadowood Farm under this alternative, both adverse and beneficial impacts would be realized. Beneficial impacts would include public access to Meadowood for pedestrian and equestrian trail use, and opportunities to engage in environmental education programs. The benefits of the uses in this alternative would include opportunities for increased physical and educational activity in a natural setting.

Potential adverse impacts could include user conflicts and resource damage. A conflict is defined as goal interference attributed to another’s behavior (Niccolucci, Watson, & Williams, 1994). Niccolucci et al. (1994) also indicate that conflict episodes are cumulative and have a foundation in previous events. People who would perceive a conflict with their recreational goals could confront the source that has kept them from achieving their goal, or they could be displaced by the conflict and seek another location to achieve their recreational goals.

Other adverse impacts could include more users on the trail to investigate the novel recreational opportunity in the area, which could lead to user conflicts, off trail exploration, litter, equine and human waste issues, soil displacement, and disturbance of wildlife. The cumulative, long-term effects of these consequences could lead to permanent vegetation change/loss, soil compaction, channeling, erosion, and relocation of wildlife.

In efforts to mitigate resource impacts, seasonal-use restrictions would be required to avoid negative effects on wildlife and on the resources (e.g., in the wet season). Other mitigating measures could include use limitations, trail layout and design, separation of incompatible uses, and trail rotation.

**Camping:** Under Alternative 2, Meadowood Farm would be managed as a day-use-only facility. Limited camping would be allowed for environmental education purposes as authorized by the BLM. The impacts of allowing limited camping could include trampling of vegetation, littering, human waste issues, temporary displacement of wildlife and soil compaction. These impacts would be minimized by “Leave No Trace” camping ethics, and by proper campsite layout and design. Efforts would be made to ensure no sensitive plant or animal species would
be in the areas where camping would be allowed. Camping would be restricted to areas that would not be susceptible to soil comparison. Provisions would be made for human waste disposal by construction of facilities or supplying temporary waste disposal facilities. Littering would not be expected to be significant because the policy of "pack it in, pack it out" would apply to all authorized activities. Trampling of vegetation could not be avoided, but the vegetation would recover when the campers would leave. Since camping opportunities would not be open to the general public, indirect or cumulative impacts on resources or camping opportunities on the Mason Neck Peninsula would not occur.

**Visual Resource Management:** Meadowood Farm would be managed as a VRM Class III resource. The potential for impacts to the visual resource at Meadowood Farm would be increased by construction of a hay storage shelter and temporary corrals for the WH&B program. These impacts would be reduced by proper siting of newly constructed facilities and use of building materials and/or colors that would not contrast with the existing landscape. The guidelines for meeting the goals of VRM Class III would be applied during design and construction of new facilities. With the incorporation of the measures referenced above, no indirect or cumulative impacts to the visual resource would occur.

**Economic and Social:** There would be no construction of horse arenas, horse stabling facilities, or an environmental education center under this alternative, although some enlargement of existing facilities would occur to accommodate increased public use. Consequently there would be minimal changes in area employment or income in either the short or long term as a result of construction activity at Meadowood.

There would be no expected impacts to local schools, hospitals, housing, water/sewer, and other basic infrastructure elements.

Some area residents who enjoy recreating in a less developed setting could believe that Alternative 2 would provide lifestyle benefits from enhanced open space and solitude as compared to the more development-oriented recreational opportunities found in Alternatives 3 and 4. Other individuals who would be prevented from pursuing recreational activities that would be prohibited under this alternative could experience a loss in social well being.

Permanent elimination of some recreational activities under this alternative (e.g., control line model airplane flying) could create adverse economic impacts to local businesses.

**Soils:** The impacts that would occur to soils would be the same as those described under Alternative 1. There would not be an increase in erosion potential. However, there could be an increase in soil compaction. This increase could come from the unloading and loading of WH&Bs, parking of vehicles, and from limited BLM authorized environmental education camping. However, very few areas that have not already been compacted by various human activities and vehicles would be affected. No indirect or cumulative impacts to soils would occur under this alternative.
Traffic/Transportation: Daily visitor use to Meadowood Farm would not have noticeable impacts on traffic numbers, types or patterns. During adoption events, however, both the number and types of vehicles and traffic patterns could be affected. Vehicles turning into or exiting Meadowood Farm could adversely affect traffic patterns. Types of vehicles could include semi-trucks delivering livestock for the adoption, and adopters driving pick-up trucks with horse trailers. These vehicles could affect traffic flow because they require a wider turning radius and would be slower when starting from a stop. These impacts would be greatest at the beginning and end of the adoption event. To minimize the impacts of the increased traffic, the BLM would work with local authorities and the Virginia Department of Transportation to manage traffic on local roads during adoption events.

Water Quality, Surface and Ground: There would be no adverse effects on the drinking water supply from activities identified in the RFD Scenario. Because of the absence of potable water, a public drinking-water supply system is expected to be established on Meadowood Farm by winter 2002. The general quality of surface water and peak flow runoff would improve due to riparian habitat improvements. There could be impacts to water quality due to runoff from onsite disposal of manure cleaned from stables. Offsite disposal or composting of manure, or a combination of these, could be applied to minimize water quality degradation. No direct, indirect, or cumulative negative impacts to water quality would occur under this alternative.

Riparian/ Wetlands and Ponds: Increased visitation would require increased resource commitments and general project-by-project restrictions would be required to protect riparian resources. Trail and facility construction would avoid Resource Protection Areas (RPAs) or would be completed using boardwalks to avoid long-term impacts to riparian/wetland areas. Riparian habitat would improve as weed species would be controlled. All riparian/wetland protection and improvements would be conducted in accordance with Best Management Practices (BMPs) as mentioned in Chapter 2. Also, intensive riparian improvement projects would be implemented to speed riparian habitat recovery where needed. Periodic intensive maintenance would be required to avoid the ponds filling in due to sedimentation and aquatic vegetation growth.

Wildlife: Under the RFD Scenario for this alternative, the existing forest habitat would be managed for optimum diversity of wildlife habitats in an oak-beech-hickory-pine forest with a diverse shrub-forb understory. Conversion of 100 acres of historic hayfields to native grassland and creation of forest edges within grassland windrows would improve the overall quality of wildlife habitat. Eastern bluebirds, other edge-using species, and species requiring large blocks of grassland (such as some ground-nesting birds) would benefit from these habitat improvements. The conversion of historic hayfields to native grasses would temporarily disrupt some deer use patterns. Once established however, these grasslands would provide better habitat quality for deer.

Increased visitation would disrupt some wildlife activities or temporarily displace wildlife. Wherever the visitor activities would cause more than temporary displacement (i.e., disruption of
reproductive success of wildlife), seasonal, time of day, and/or area use restrictions would be implemented.

Improvement of riparian habitat would enhance the survival of aquatic species in streams and ponds. Horse pastures would continue to provide habitat for brown-headed cowbirds and starlings.

**Fisheries:** The health of fish populations in streams and ponds would be improved with maintenance and improvement of riparian areas. This could be accomplished through weed removal projects and establishment of riparian vegetation where needed.

**Federal and State Listed Species:** There are no federally listed or state sensitive species known to exist on Meadowood Farm. The BLM is required by regulations to manage threatened or endangered species or state sensitive species and their habitat. If federally listed or state sensitive species are encountered, management actions would be taken immediately to ensure the continued existence of the species and/or their habitat.

**Vegetation:**

**Forest:** The current forest would be intensively managed to restore hardwood diversity in areas where selective cutting affected the species mix. Forest management practices would also be used to promote species diversity in the understory.

**Historic Hayfields:** The historic hayfields would be converted to native grassland, which would include the addition of small trees and shrubs in a wave-like pattern at the forest edge to increase ecotone diversity and provide habitat for migratory songbirds.

**Pastures:** The grass in the existing pastures would continue to be heavily grazed by horses, allowing the continued persistence of clover, dandelions, and cultivated grasses.

**Invasive, Nonnative Species:** Invasive, nonnative species would be controlled through mechanical and chemical means. Increased visitation activities would increase the possibility that invasive species would be inadvertently introduced from outside this property. Also, the disturbance of existing vegetation would increase, providing opportunities for existing invasive species to spread.

**Impacts of Implementing the Proposed Action**

**Management Objective**

Meadowood Farm would be managed for regulated visitor use with emphasis on recreation, natural resources, and equine and environmental education activities.
Reasonable Foreseeable Development (RFD) Scenario

**Horses:**
Meadowood Farm would hold up to a total of 100 equines. The total number of animals would be a combination of WH&Bs and domestic horses. The equestrian facilities would cover approximately 100 acres, including the current 50 acres already used as pasture. Up to 50 horses would remain at the current facility (i.e., stables, current pastures, and indoor arena), which reflects the historic number of animals boarded at the facility. Additional fencing, stabling, corrals, animal shelters, hay storage shelters, and an outdoor riding arena would be constructed. Expansion of facilities would occur on historic hayfields or pasture land and would be situated to minimize visual and other resource impacts.

**Wild Horses and Burros (WH&Bs):** A permanent WH&B holding facility would be constructed separate from the domestic horse stabling. This WH&B facility would be situated on the historic hayfields or pasture land and would be located to minimize visual impacts from public roads. The facility would contain small paddocks or corrals with attached shelters and feed bunks. The paddock fencing would be either portable pipe corral panels or wood fencing with a height of 6 to 7 feet. Several smaller pastures would be constructed adjacent to the facility to house mares with foals until the foals are weaned or are old enough to be adopted, as well as animals that would be separated for rehabilitation. While the WH&B facility would optimally be managed for a population of 25 head and under, it would be constructed for and anticipated to hold up to 50 animals for adoption events. The facility would also be used to hold repossessed and returned equines. Educational demonstrations would be conducted in both the indoor and outdoor riding rings.

Adoption events would be held on a recurring basis (e.g., monthly or bi-monthly) and also by appointment for individuals. An adoption event would have specified dates, times, and number of animals available for adoption by qualified adopters. Except for adoption events, and demonstrations, there would be no appreciable traffic increase associated with the WH&B facility.

**Partners:** Under the Proposed Action, BLM would consider both public and federal equine partnerships at Meadowood Farm. Equine partnerships that would provide the most benefit to the public and would complement BLM goals and programs would be instrumental in maximizing the use of the equine facilities at Meadowood Farm for the best public use. Examples of potential equine partnerships would include availability of the facility for therapeutic riding, educational clinics, and federal horses.

**Boarders:** Boarding of privately owned horses would be allowed under the Proposed Action. Boarding private horses would occur under a concession or contract, or be overseen by BLM personnel. To minimize conflicts between boarders, partners, and the general public, BLM would designate areas and times for boarder, partner, and public use of the facilities.
Environmental Education:
An Environmental Education Center with parking for automobiles and buses to accommodate groups would be constructed. The facilities would be open to individuals on a daily basis and to groups on a reservation basis.

Recreation:
Camping would not be allowed except for special environmental education activities authorized by BLM.

Fishing would be allowed in support of environmental education and youth-related programs. Public fishing would be allowed on at least one pond.

Motorized hobby activities (see glossary) would be allowed. This regulated use would be restricted to designated areas and times.

Existing trails would be available and improved for pedestrian and equestrian use. New trails would be constructed.

Recreational motorized passenger vehicle use would not be allowed.

Recreational non-motorized passenger vehicle use would be allowed. This regulated use would be restricted to designated areas and times.

Meadowood Farm would be available for equine related clinics.

An outdoor riding arena with parking areas would be constructed for public use.

Wildlife:
Some wildlife habitat management activities would occur.

Fisheries:
Fisheries in streams and ponds would be managed in cooperation with state and local conservation groups to enhance overall conditions and to enhance and maintain a quality recreational public fishery in at least one pond.

Vegetation:
Forest: Existing forested acreage would be maintained. Silvicultural practices would be applied for forest stand composition maintenance and health improvement.

Pasture: Would not exceed 100 acres. A proactive invasive/non-native species control program would be implemented and incorporated into environmental education.
Historic Hayfields: Would be converted to approximately 50 acres of pasture and 50 acres of native grasslands.

Riparian/Wetlands Areas including Ponds: Would be protected and enhanced through state and local partnerships.

Impacts to Resources

Air Quality and Climate: Sources of impacts to air quality would be the same as Alternatives 1 and 2. However, there would be an increase in these impacts because construction activities could increase suspended particulates during drier periods and the use of construction machinery could increase the regulated air pollutants referenced in Alternative 1. Increases in visitor use and in the types of recreational use allowed would also increase impacts to air quality. There would also be an increase in the regulated air pollutants due to the occasional WH&B adoption events and increased visitor use of Meadowood Farm. These increases in the amount of fugitive dust or in regulated pollutants would not affect the overall air quality in the Mason Neck area. Both of these impacts would be sporadic, short term, and would be limited to the specific area and time that construction and recreational activities would occur.

Prescribed burning could be used under the Proposed Action to remove hazardous fuels, i.e. vegetative residue or for wildlife habitat improvement. Smoke from prescribed fires can release several “criteria air pollutants” identified by the EPA. The need for prescribed fire would be evaluated during preparation of an activity plan. Site-specific burn actions would be addressed in a detailed prescribed fire operations plan. All burning would be in compliance with Virginia’s smoke management guidelines.

Based on the RFD Scenario, indirect or cumulative impacts to air quality on Mason Neck would not be expected to occur.

Coastal Zone Management: There could be direct impacts to Virginia’s coastal zone by the construction of hay storage shelters, a WH&B holding facility, an environmental education center and new trails. In accordance with 15 CFR 930, a coastal zone consistency review would be conducted by the Commonwealth of Virginia as part of the development of an EA that would be prepared prior to the start of construction projects or other land-use plan implementation activities. No indirect or cumulative impacts to Virginia’s coastal zone would occur from implementing the activities identified in the RFD Scenario.

Cultural Resources: The potential for impacts to cultural resources would increase due to the increased types of recreational use, increased number of horses, and proposed construction activities at Meadowood Farm. Impacts to cultural resource could include inadvertent disturbance of cultural artifacts because the existence and location of cultural sites is unknown. Impacts could occur through displacement of resources by equine and pedestrian activities, and non-motorized passenger vehicle use.
In accordance with the Standard Management Common to All Alternatives, cultural surveys would be conducted prior to starting ground disturbing activities. If sites with the potential of being historic or prehistoric properties would be located, consultation would take place with the State Historic Preservation Officer, the Advisory Council on Historic Preservation, and other interested people or groups as appropriate.

**Minerals:** The existing sand and gravel pit has been stabilized, but this would not preclude its use in the future as a source of surfacing material on existing travel ways on Meadowood Farm. This use would be minimal and the pit size would not increase. If the pit would be used, new disturbance would only occur in previously disturbed areas. No activities under the Proposed Action would create indirect or cumulative impacts to mineral resources.

**Recreation Resources:** Changes in current recreation use by visitors at Meadowood Farm would bring about both beneficial and adverse impacts. A major benefit of the Proposed Action would be the increased variety of quality recreation activities that would be offered, however, the increased activity at Meadowood Farm would also have adverse impacts.

The presence of Meadowood Farm, and the fact that it is now public land, could provide numerous recreational opportunities to the residents on Mason Neck Peninsula and the surrounding Washington, D.C. metropolitan area.

Benefits from recreation can be organized into four main categories: personal benefits (individual), social and cultural benefits (community), economic, and environmental (O’Sullivan, 1999). These broad categories can be broken down further. The following are some examples of benefits attributed to recreation, based on completed research.

According to O’Sullivan (1999), personal benefits could include better mental health and health maintenance, stress management, self confidence, balance between work and play, personal development and growth, life satisfaction (quality of life), prevention of hypertension, strokes, colon cancer, and reduction of numerous other ailments. These individual benefits are more subjective than some of the other benefits due to personal experience, preference and expectations, values, and goals.

Community satisfaction/pride, socialization opportunities, family bonding and understanding and tolerance of others are examples of social and cultural benefits (O’Sullivan, 1999). Economic benefits attributed to recreation include reduced health care and crime costs, enhanced property values, and decreased absenteeism (O’Sullivan, 1999). Finally, under environmental benefits, O’Sullivan (1999) includes the following benefits: stewardship and preservation opportunities, environmental ethics, preservation of natural, cultural and historic sites, and ecosystem sustainability. It is anticipated that these and other benefits would be realized in association with Meadowood Farm in this Proposed Action.
BLM’s mission is to “sustain the health, diversity and productivity of the public lands for the use and enjoyment of present and future generations.” BLM would monitor and evaluate all activities and would use restrictions to establish thresholds for proper use levels. Monitoring and evaluating would take place on an ongoing basis, to remain consistent with the agency mission and to ensure public safety and the health of the resource. If the results from monitoring and evaluating impacts indicated that mitigating measures were ineffective, BLM could amend the Meadowood Farm land-use plan.

**Camping:** The type and magnitude of the impacts of camping under the Proposed Action would be the same as those discussed under Alternative 2.

**Fishing:** Under the Proposed Action, fishing in support of environmental education would be allowed on the Meadowood Farm ponds. Additionally, limited public fishing would be allowed on at least one of the ponds at Meadowood Farm. BLM would also make accommodations to provide fishing in compliance with the 1990 Americans with Disabilities Act (ADA). This would result in some direct impacts to the areas used to access the ponds, as well as the area around the ponds. These impacts, which could include vegetation trampling, could lead to long-term negative consequences including permanent loss or change of vegetation, soil compaction, and erosion. These impacts could be mitigated by use restrictions, and site layout and design. Benefits from this Proposed Action would include an increase in recreational opportunities for the public, a new setting for shoreline fishing, and the improved health of a managed pond and fishery.

**Motorized Hobby:** The Proposed Action would allow for public motorized hobby use at designated areas and times, thereby enhancing the opportunity for individuals to receive some of the general benefits from recreational activities described at the beginning of the Recreation Resources section. Additionally, some motorized hobby activities could provide hands-on educational opportunities in the fields of science and mathematics.

Engine sounds associated with motorized hobby vehicles could be considered an adverse impact from this activity. These sounds could create conflicts with other uses such as outdoor environmental education activities, wildlife watching, hiking, and horseback riding. A conflict is defined as goal interference attributed to another’s behavior (Niccolucci, Watson, & Williams, 1994). Niccolucci et al. (1994) also indicate that conflict episodes are cumulative and have a foundation in previous events. An individual who perceives a conflict with their recreation goals may confront the source that has kept them from achieving their goal, or they may be displaced by the conflict and seek another location to achieve their recreation goals.

Other adverse impacts could include vegetation trampling by activity participants and spectators. The cumulative effect of vegetation trampling could lead to long-term negative consequences, including permanent loss or change of vegetation, soil compaction, and erosion. The space requirements and sound would be locally disturbing to wildlife activities such as nesting or care
for young in the spring and early to late summer. Use restrictions would be developed to avoid negative impacts on wildlife and other resources (e.g., in the wet season).

Currently, the Fairfax County, Department of Planning and Zoning, noise ordinance for residential and commercial sites indicates that noise levels should not exceed 55 and 60 decibels respectively at the property line. (D. Gregg, personal communication, Aug. 14, 2002). Impacts from motorized hobby use would be mitigated by identifying a site that could sustain this use and would be situated such that the associated sound would comply with the county noise ordinance. According to O’Keefe and Prescott (2000), moving closer to a noise source by half the total distance will increase sound intensity by 6 decibels (dB). Similarly, moving twice the distance from a sound source will decrease the perceived sound level from the start point by 6 dB (O’Keefe and Prescott, 2000). By coordinating with Fairfax County officials and utilizing this and other research, motorized hobby use would be brought into compliance with the established noise ordinance.

To mitigate impacts, times and areas for public motorized hobby activities would be designated. BLM would monitor and evaluate impacts, such as sound, vegetation trampling, use levels, and wildlife habitat use on an ongoing basis. This information would be used to establish thresholds for proper use levels and to ensure public safety. As previously stated, if monitoring and evaluating efforts indicate that mitigating measures are ineffective, BLM could amend the Meadowood land-use plan.

**Trails-Pedestrian:** Under the Proposed Action, pedestrian use of suitable, existing trails at Meadowood Farm would be allowed. Additional trails would be constructed where the resource could support the activity. The Proposed Action would result in an increase in pedestrian trail activity opportunities at Meadowood Farm, as well as on the Mason Neck Peninsula.

Benefits from the additional trails would include an increase in recreational opportunities for the public. Additionally, individual recreation users could derive numerous other benefits as described at the beginning of this section.

Both short- and long-term impacts would be realized from the use and construction of trails at Meadowood Farm. These impacts would include more users on the trails, which could lead to user conflicts, off-trail exploration, litter, human waste issues, soil displacement, and disturbance of wildlife. The cumulative, long-term effects could lead to permanent vegetation change/loss, soil compaction, channeling, erosion and relocation of wildlife.

In efforts to mitigate resource impacts and safety issues, BLM would designate areas and times for pedestrian trail activities. Mitigation actions could include temporary or seasonal closures of trails during nesting season, or when trail conditions would be more susceptible to damage (e.g., wet trails). Other mitigating measures could include trail layout and design, separation of incompatible uses, and trail rotation. Compatible trail activities would share trails in part or
whole. BLM would explore options to connect pedestrian trails on site with other pedestrian trails on the Peninsula.

**Trails-Equestrian:** The Proposed Action would allow the public to participate in equestrian trail riding on suitable, existing trails. Existing would be improved and maintained, and additional trails would be constructed where the resource could support the activity.

Benefits from the additional trails would include an increase in recreational opportunities for the public, and a choice in riding venues on the Mason Neck Peninsula. Horseback riding is currently available on the Peninsula at Pohick Bay Regional Park. As mentioned at the beginning of the Recreation Resources section, there would be numerous benefits from the types of recreational opportunities that would be offered at Meadowood Farm.

The negative consequences of increased equestrian trail activity could include more users on the trail that could lead to user and safety conflicts, soil displacement, equine and human waste issues, litter and disturbance to wildlife. The cumulative, long-term effects could include displaced visitors seeking other sites for their recreation, soil compaction, channeling, erosion and relocation of wildlife.

In efforts to mitigate impacts, BLM would designate areas and times for equestrian trail activity. BLM would monitor and evaluate probable impacts, such as noise, vegetation trampling, use levels, and wildlife habitat use on an ongoing basis. This information would be used to establish thresholds for proper use levels and to ensure public safety. Mitigation actions could include use restrictions in areas to avoid negative effects on wildlife and on the resources. Compatible trail activities would share trails in part or whole. However, BLM could separate uses that would not be compatible due to safety and user conflict issues. Other mitigating measures could include use limitations and trail rotation. In efforts to provide additional recreational opportunities, BLM would explore options to connect equestrian trails onsite with other equestrian trails on the Peninsula.

**Trails-Motorized Passenger Use:** Under the Proposed Action, motorized passenger vehicle use would not be allowed. Levels of use for public motorized passenger vehicle use on trails would not be affected at Meadowood Farm in the short or long term; therefore there would be no cumulative impacts on the Farm. This would not impact current recreational opportunities on the Mason Neck Peninsula.

**Trails-Non-motorized Passenger Use:** Under the Proposed Action, non-motorized passenger (e.g., bicycle) use of suitable, existing trails at Meadowood Farm would be allowed. Benefits from this use would include an increase in recreational opportunities for the public. Additionally, individual recreation users could derive numerous other benefits as described at the beginning of this section.
The adverse consequences associated with non-motorized passenger trail activity could include more users on the trails, which could lead to user and safety conflicts, soil displacement, human waste issues, litter and disturbance to wildlife. The cumulative, long-term effects could include displaced visitors seeking other sites for their recreational goals, soil compaction, channeling, erosion and relocation of wildlife.

In efforts to mitigate impacts, BLM would designate areas and times for non-motorized passenger trail use. BLM would manage trails to mitigate user conflicts, resource damage, wildlife disturbance, and to provide a safe recreation environment. Mitigation actions could include use restrictions in areas to avoid negative effects on wildlife and on the resources, including temporary or seasonal closures of trails during nesting season, or when trail conditions would be more susceptible to damage (e.g., wet trails). According to Chavez and Hoger (1998), wet trail riding has been identified as problematic by resources managers, but similar damage from wet trail use may be caused by other users as well. Compatible trail activities would share trails in part or whole. However, BLM could separate uses that would not be compatible due to safety and user conflict issues. Other mitigating measures could include use limitations and trail rotation.

**Recreation - Equestrian Facilities:** Currently, the equestrian facilities at Meadowood Farm are used solely by the boarding operation and private boarders under a special recreation permit. Under the Proposed Action, an outdoor riding ring would be constructed, as well as a WH&B holding facility. The existing indoor riding arena and the outdoor ring would be available for scheduled educational events, such as training clinics in support of the WH&B program, public educational programs such as 4-H and Pony Club Riding Programs, and other suitable non-profit educational programs. The outdoor ring could also be available for small competitive events, such as day shows or competitions by these organizations; however, larger horse shows and events for the general equestrian public would not take place.

BLM would provide access to the facilities on a case-by-case basis, perhaps by using a permit and fee system. Groups and organizations wishing to use the facility would be required to develop a plan which must include, but not be limited to, the following components: identification of the group and its purpose, type of event, proof of adequate insurance, attendance cap (not to exceed), traffic management, safety and emergency services, provisions for restrooms and drinking water facilities (if not provided in the facility), and other information as required by BLM. This plan would be submitted with the permit request for consideration. Use of the equestrian facilities (e.g., indoor arena, outdoor riding ring), exclusive of the riding trails, would be by permit only.

**Visual Resource Management:** Meadowood Farm would be managed as a VRM Class III resource. The potential for impacts to the visual resource at Meadowood Farm would be increased under the Proposed Action by construction of hay storage shelters, an environmental education center and parking lots, and permanent WH&B facilities. These impacts would be reduced by proper siting of newly constructed facilities and use of building materials and/or
colors that would not contrast with the existing landscape. The guidelines for meeting the goals of VRM Class III would be applied during design and construction of new facilities. No activities under this alternative would create indirect or cumulative impacts to visual resources.

**Economic and Social:** There would be a marginal increase in short-term employment and income in the study areas associated with project related construction activity (e.g., horse arenas, horse stabling facilities, environmental education center) as well as some long-term employment and income changes resulting from the provision of visitor services. These employment and income changes would be negligible in the local or regional employment context in both the short and long terms.

Since there would be no permanent population changes associated with the Proposed Action, there would be no impacts to local schools, hospitals, housing, water/sewer, and other basic infrastructure elements. Likely increased visitation to the Meadowood facility from enhanced recreational opportunities would not be expected to result in traffic problems in the immediate area. However, WH&B events could lead to adverse social effects resulting from local traffic congestion and resulting traffic delays, depending on the number of people who attend these events. It is expected that several hundred people consisting of adopters and sightseers could attend adoption events. However, as more adoption events would be held it is anticipated numbers of people would stabilize. Experience over the short term with any adverse traffic issues surrounding WH&B events would be addressed and resolved by BLM management as conditions warrant. Some area residents who are interested in developed recreational opportunities could believe that the Proposed Action, as compared to Alternatives 1 and 2, would provide enhanced social benefits from increased recreation and environmental education opportunities.

The economics of boarding privately owned horses would be periodically reviewed to assure that there would be a fair monetary return to the American taxpayers.

**Soils:** Impacts to soils as described under Alternatives 1 and 2 would occur also under the Proposed Action. In addition, a third impact, the physical removal, leveling and mixing of the surface soil layer (A horizon) during facility construction would affect soil productivity. Impacts to soils would increase overall because of increased visitor use, additional types of recreational uses allowed, and construction activities. Of the three impacts to soils, soil compaction would increase the most under the Proposed Action. This increase would come from the construction of trails, structures and increased equine use of pastures. Where new trails and structures would be constructed, the impacts would be long term and irreparable. In construction areas where vegetation would be removed and soil disturbed, the application of mulch and seed would minimize soil loss through erosion. Use of stable surfacing material and the use of drainage control measures would prevent erosion from newly constructed facilities such as trails. No indirect or cumulative impacts to soils would occur under the Proposed Action.
**Traffic/Transportation:** Visitor use and participants in adoption events would impact traffic numbers on a daily and periodic basis. Local residents could experience increased travel times on Gunston Road due to the combined vehicle traffic using Meadowood Farm and other recreation areas on Mason Neck. This impact would occur primarily on weekends and holidays. During adoption events the types of vehicles entering and leaving Meadowood Farm from Gunston Road would include semi-trucks delivering livestock for the adoptions, and adopters with pick-up trucks towing horse trailers. Vehicles entering and leaving Meadowood Farm could increase travel times of residents on Mason Neck who travel on Gunston Road as part of their routine travel. To minimize impacts caused by increased numbers and types of vehicles, the BLM would work with local authorities and the Virginia Department of Transportation to manage traffic on local roads.

**Water Quality, Surface and Ground:** There would be impacts to both surface and ground water quality from activities identified in the RFD Scenario. Construction of trails, roads and facilities would inhibit ground water recharge. Site-specific measures would be identified to minimize impacts on ground water and surface water. These measures could include proper siting of surface disturbing features, minimizing the size of the facilities, and insuring proper drainage patterns would be incorporated into the project design. Because of the absence of potable water, a public drinking-water supply system is expected to be established on Meadowood Farm by winter 2002. Doubling pasture allocation and horse numbers from Alternative 1 would increase non-point source pollution in pastures from horse waste. There also could be impacts to water quality due to runoff from onsite disposal of manure cleaned from stables. Offsite disposal or composting of manure, or a combination of these, could help minimize water quality degradation.

**Riparian/Wetland and Ponds:** Increased land disturbance and recreational activities would require additional resource commitments and general project-by-project restrictions to protect riparian resources. Trail and facility construction would avoid RPAs or would be completed using boardwalks to avoid long-term impacts on riparian/wetland areas. Riparian habitat would improve as weed species would be controlled. All riparian/wetland protection and improvements would be conducted in accordance with BMPs as mentioned in Chapter 2. Also, some riparian improvement projects would be implemented to speed riparian habitat recovery where needed. Regular cooperative management of pond fisheries would be performed, which would assist in avoiding the ponds filling due to sedimentation and aquatic vegetation growth.

**Wildlife:** Under the RFD Scenario, the existing forest would be managed for optimum diversity of wildlife habitats in an oak-beech-hickory-pine forest with a diverse shrub-forb understory. Conversion of at least 50 acres of historic hayfields to native grassland and creation of forest edges within grassland windrows would improve the overall quality of wildlife habitat for species such as eastern bluebirds and other edge-using species. The conversion of historic hayfields to native grasses would temporarily disrupt some deer use patterns. Once established however, these grasslands would provide better habitat quality for deer.
Pasture land would be doubled from existing acreage under the Proposed Action, as would the number of equines on Meadowood Farm. Increased sedimentation and non-point source pollution caused by equines on this pasture land would negatively affect aquatic and riparian species. Increased wildlife congregation in the remaining habitat would decrease vegetative quality and quantity. Doubling pasture acreage would increase habitat for brown-headed cowbirds and starlings.

An increase in user visitation and activities, such as motorized hobby, pedestrian, and equestrian use, would disrupt some wildlife activities or temporarily displace wildlife. Wherever visitor activities would cause more than temporary displacement, (i.e., disruption of reproductive success of wildlife), seasonal, time of day, and/or use restrictions would be implemented.

**Fisheries:** Fisheries in streams and ponds could be improved as stream riparian resources would be improved through weed removal and riparian improvement projects. An active fisheries management program would result in maintained and improved conditions for summer fish survival and all-around health in all managed fisheries through cooperative use of local technical management expertise.

**Federal and State Listed Species:** There are no federally listed or state sensitive species known to exist on Meadowood Farm. The BLM is required by regulations to manage threatened or endangered species or state sensitive species and their habitat. If federally listed or state sensitive species are encountered, management actions would be taken immediately to ensure the continued existence of the species and/or their habitat.

**Vegetation:**

**Forest:** The current forest would be managed to restore hardwood diversity in areas where selective cutting affected the species mix. Some forest management practices would also be used to promote species diversity in the understory.

**Historic Hayfields:** At least 50 acres of historic hayfields would be converted to native grassland. Wherever possible, this would include the addition of small trees and shrubs in a wave-like pattern at the forest edges to increase ecotone diversity and provide for migratory songbirds.

**Pastures:** Up to 50 acres of historic hayfields would be converted to pasture. The additional pasture would be reseeded with a pasture mix of grasses and forbs. The grass in the existing and new pasture would be heavily grazed by horses, allowing the spread of clover dandelions, and cultivated grasses.

**Invasive, Nonnative Species:** Invasive, nonnative species would be controlled through mechanical and chemical means. Increased land disturbance and visitation activities would increase the possibility that invasive species would be inadvertently introduced from outside the
property. Also, the disturbance of existing vegetation would increase, providing opportunities for existing invasive species to spread.

Impacts of Implementing Alternative #4 (Maximum Use)

Management Objective

Meadowood Farm would be managed for a variety of recreation, environmental education, and equine purposes with emphasis on visitor use.

Reasonable Foreseeable Development (RFD) Scenario

Horses:

Meadowood Farm would hold up to a total of 150 federal and private horses and burros. The total number of animals would be a combination of WH&Bs and domestic horses. The equestrian facilities and pastures would cover approximately 150 acres, including the current 50 acres already used as pasture. Up to 50 horses would remain at the current facility (i.e., stables, current pastures, and indoor arena), which reflects the historic number of animals boarded at the facility. Additional fencing, stabling, corrals, animal shelters, hay storage shelters, and an outdoor riding ring would be constructed. Expansion of facilities would occur on historic hayfields or pasture land and would be situated to minimize visual and other resource impacts.

Wild Horses and Burros (WH&B):

A permanent WH&B holding facility with a capacity for about 50 WH&Bs would be constructed separate from the domestic horse stabling. This WH&B facility would be situated on the historic hayfields or pasture land and would be located to minimize visual impacts from public roads. The facility would contain small paddocks or corrals with attached shelters and feed bunks. The paddock fencing would be either portable pipe corral panels or wood fencing with a height of 6 to 7 feet. Several smaller pastures would be constructed adjacent to the facility to house mares with foals until the foals are weaned or are old enough to be adopted, as well as animals that would be separated for rehabilitation. The facility would also be used to hold repossessed and returned equines. Educational demonstrations would be conducted in both the indoor and outdoor riding rings.

Adoption events would be held on a recurring basis (e.g., monthly) and the corrals would also be open during the business week for adoptions. Each adoption event would have specified dates and times when animals would be available for adoption by qualified adopters. During the events, adopters would be required to apply to BLM and be approved, select and pay for their adopted animal(s), and have appropriate transportation to take their animal(s) home.

Partners:

Meadowood Farm would be available for about 50 federal or other equine partnerships. BLM would pursue equine partnerships that would provide the most benefit to the public and complement BLM’s programs and goals for management of Meadowood Farm.
Examples of potential equine partnerships could include availability of the facility for activities such as therapeutic riding, educational clinics, and stabling of federal horses.

**Boarders:** Boarding of privately owned horses would be allowed under this alternative. Boarding private horses would occur under a concession or contract, or be overseen by BLM personnel. In an effort to minimize conflicts between boarders, partners, and the general public, BLM would designate areas and times for boarder, partner, and public use of the facilities.

**Environmental Education:**
An Environmental Education Center with parking for automobiles and buses to accommodate groups would be constructed. The facilities would be open to individuals and groups on a daily basis.

**Recreation:**
- Camping would be allowed in designated areas.
- Fishing would be allowed in support of environmental education. Public fishing would be allowed on at least one pond.
- Motorized hobby activities (see glossary) would be allowed. This regulated use would be restricted to specially designated areas and times.
- Existing trails would be available and improved for pedestrian and equestrian use. New trails would be constructed.
- Motorized passenger vehicle use would be allowed. This regulated use would be restricted to designated areas and times. Existing trails would be improved and new trails would be constructed.
- Non-motorized passenger vehicle use would be allowed. This regulated use would be restricted to designated areas and times. Existing trails would be improved and new trails would be constructed.

Meadowood Farm would be available for horse shows and equine related clinics.

An outdoor riding arena with parking areas would be constructed for public use.

**Wildlife:**
Wildlife habitat would not be actively managed.
Fisheries:
Fisheries in streams and ponds would be managed in cooperation with state and local conservation groups to enhance overall conditions and to enhance and maintain a quality recreational public fishery in at least one pond.

Vegetation:
Forest: Existing forested acreage would be maintained. Silvicultural practices would not be applied except to allow natural forest succession.

Pasture: Would not exceed 150 acres. An invasive/nonnative species control program would be initiated.

Historic Hayfields: Would be converted to pasture.

Riparian/Wetlands Areas including Ponds:
Would be protected and enhanced through state and local partnerships.

Impacts to Resources

Air Quality and Climate: Sources of impacts to air quality associated with the RFD Scenario would be the same as the Proposed Action. However, there would be an increase in these impacts because construction activities could increase suspended particulates during construction activities during drier periods, and the use of construction machinery, motorized passenger vehicle use and motorized hobby use could increase the regulated air pollutants referenced in Alternative 1. There would also be an increase in the regulated air pollutants due to the occasional WH&B adoption events and increased visitor use of Meadowood Farm. These increases in the amount of fugitive dust or the increases in regulated pollutants would not affect the air quality in the Mason Neck area. Both of the impacts would be sporadic, short term, and would be limited to the specific area and time that construction and recreational activities would occur.

Prescribed burning could be used under Alternative 4 to remove hazardous fuels, i.e. vegetative residue or for wildlife habitat improvement. Smoke from prescribed fires can release several “criteria air pollutants” identified by the EPA. The need for prescribed fire would be evaluated during preparation of an activity plan. Site-specific burn actions would be addressed in a detailed prescribed fire operations plan. All burning would be in compliance with Virginia’s smoke management guidelines.

Based on the RFD Scenario, indirect or cumulative impacts to air quality on Mason Neck would not occur under Alternative 4.

Coastal Zone Management: There could be direct impacts to Virginia’s coastal zone by the construction of hay storage shelters, a WH&B holding facility, environmental education center,
and new trails. In accordance with 15 CFR 930, a coastal zone consistency review would be conducted by the Commonwealth of Virginia as part of the development of an EA that would be prepared prior to the start of construction projects or other land-use plan implementation activities. No indirect or cumulative impacts to Virginia’s coastal zone would occur from implementing the activities identified in the RFD Scenario.

**Cultural Resources:** The potential for impacts to cultural resources would increase due to the increased number of equines at Meadowood Farm and increased use of the property by the public for equestrian, pedestrian, motorized and non-motorized recreational activities. The impacts that could occur would be the same as the Proposed Action.

In accordance with the Standard Management Common to All Alternatives, cultural surveys would be conducted prior to starting ground disturbing activities. If sites with the potential of being historic or prehistoric properties would be located, consultation would take place with the State Historic Preservation Officer, the Advisory Council on Historic Preservation, and other interested people or groups as appropriate.

**Minerals:** The existing sand and gravel pit has been stabilized, but this would not preclude its use in the future as a source of surfacing material on existing travel ways on Meadowood Farm. This use would be minimal and the pit size would not increase. If the pit would be used, new disturbance would only occur in previously disturbed areas. No activities under this alternative would create indirect or cumulative impacts to mineral resources.

**Recreation Resources:** As recreational opportunities would be increased at Meadowood Farm, adverse and beneficial impacts would be realized. Benefits from this alternative would include an increase in recreational opportunities for the public. Additionally, individual recreation users could derive numerous other benefits as described at the beginning of the Recreation Resources section under Implementing the Proposed Action section.

Potential adverse impacts from this alternative could include greater user conflicts, resource damage, and more serious safety issues than those discussed under the Proposed Action. Other adverse impacts could include crowded trails, off-trail exploration, litter, equine and human waste issues, soil displacement, and disturbance of wildlife. The cumulative, long-term effects of these consequences could lead to serious accidents/injuries, permanent vegetation change/loss, soil compaction, channeling, erosion and relocation of wildlife.

Compatible trail activities would share trails in part or whole. However, BLM could separate uses that would not be compatible due to safety and user conflict issues. In efforts to mitigate resource impacts, seasonal-use restrictions would be required to avoid negative effects on wildlife, and on the resources (e.g., in the wet season). Other mitigating measures could include use limitations, trail layout and design, separation of incompatible uses, and trail rotation.
**Camping:** The types of impacts of camping under Alternative 4 would be the same as those identified in Alternative 2. However, the magnitude of the impacts would increase under Alternative 4 since camping would be open to the general public. There could also be an increase in user conflicts, resource damage, and safety issues. As under Alternative 2, these impacts would be minimized by proper campsite layout and design, ensuring no sensitive plant or animal species would be in the area, restricting areas where camping would be allowed to avoid additional soil compaction, and providing for human waste disposal by construction of facilities or supplying temporary waste disposal facilities. A policy of "pack it in, pack it out" would apply to all activities to minimize littering. In addition the number of individuals allowed to camp at Meadowood Farm would be restricted. Trampling of vegetation could not be avoided but this impact would be minimized by confining camping to areas designated for that purpose. Since the number of individuals allowed to camp would be restricted, allowing camping would not have indirect or cumulative impacts on resources or camping opportunities on the Mason Neck Peninsula.

**Fishing:** Fishing in support of environmental education would be allowed on the Meadowood Farm ponds. Additionally, limited public fishing would be allowed on at least one of the ponds at Meadowood Farm. BLM would also make accommodations to provide fishing in compliance with the 1990 Americans with Disabilities Act. This would result in some direct impacts to the areas used to access the ponds, as well as the area around the ponds. These impacts, which could include vegetation trampling, could lead to long-term negative consequences including permanent loss or change of vegetation, soil compaction, and erosion. These impacts could be mitigated by use restrictions, and site layout and design. Benefits from public fishing would include an increase in recreational opportunities for the public, a new setting for shoreline fishing, and the improved health of a managed pond and fishery.

**Visual Resource Management:** Meadowood Farm would be managed as a VRM Class IV resource. The change from Class III to Class IV would be based on the amount of construction expected to occur, the diverse recreational opportunities being offered, and the relatively small size of Meadowood Farm. Construction projects would include construction of hay storage shelters, an environmental education center and parking lots, permanent WH&B facilities, and trails. These impacts could be reduced by proper siting of new facilities construction and use of building materials and/or colors which would not contrast with the existing landscape. The guidelines for meeting the goals of VRM Class IV would be applied during design and construction of new facilities. No activities under this alternative would create indirect or cumulative impacts to visual resources.

**Economic and Social:** There would be a marginal increase in short-term employment and income in the study areas associated with project related construction activity (e.g., horse arenas, horse stabling facilities, environmental education center) as well as some long-term employment and income changes resulting from the provision of visitor services. These employment and income changes would be negligible in the local or regional employment context in both the short and long terms.
Since there would be no permanent population changes associated with this alternative, there would be no impacts to local schools, hospitals, housing, water/sewer, and other basic infrastructure elements. Likely increased visitation to the Meadowood facility from enhanced recreational opportunities would not be expected to result in traffic problems in the immediate area. However, WH&B events could lead to adverse social effects resulting from local traffic congestion and resulting traffic delays, depending on the number of people who attend these events. Several hundred people, consisting of adopters and sightseers, could attend adoption events. However, as more adoption events would be held, it is anticipated numbers of people would stabilize. Experience over the short term with any adverse traffic issues surrounding WH&B events would be addressed and resolved by BLM management as conditions warrant.

Some area residents who are interested in developed recreational opportunities could believe that Alternative 4, as compared to Alternatives 1, 2, and the Proposed Action, would provide enhanced social benefits from increased recreation (e.g., camping) and environmental education opportunities.

The economics of boarding privately owned horses would be periodically reviewed to assure that there would be a fair monetary return to the American taxpayers.

**Soils:** Under this alternative the types of impacts to soils described under the Proposed Action would occur. Impacts to soils would increase overall because of increased visitor use, additional types of recreational uses allowed, and additional construction activities. Of the three impacts to soils, soil compaction would increase the most under Alternative 4. This increase would come from the additional construction and use of trails, construction of structures, and increased horse use of pastures. The construction activities would also cause the mixing of the surface soil layer. Where new trails and structures would be constructed, the impacts would be long term and irreparable. In construction areas where vegetation would be removed and soil disturbed, the application of mulch and seed would minimize soil loss through erosion. Use of stable surfacing material and the use of drainage control measures would prevent erosion from newly constructed facilities such as trails. No indirect or cumulative impacts to soils would occur under this alternative.

**Traffic/Transportation:** The types of impacts would be similar to the Proposed Action, but greater in magnitude because more visitors and recreationists would be expected. Daily visitor use and participants in WH&B adoption events would impact traffic numbers on a daily and periodic basis. This could result in increased travel times for residents who live on Mason Neck. The types of vehicles entering and leaving Meadowood Farm would also be similar to the Proposed Action. To minimize impacts caused by increased numbers and types of vehicles, BLM would work with local authorities and the Virginia Department of Transportation to manage traffic on local roads.
**Water Quality, Surface and Ground:** There would be impacts to both surface and ground water quality from activities identified in the RFD Scenario. Construction of trails, roads and facilities would inhibit ground water recharge. Site-specific measures would be identified to minimize impacts on ground water and surface water. These measures could include proper siting of surface disturbing features, minimizing the size of the facilities, and insuring that proper drainage patterns would be incorporated into the project design. Because of the absence of potable water, a public drinking-water supply system is expected to be established on Meadowood Farm by winter 2002.

Tripling pasture allocation and horse numbers from Alternative 1 would increase non-point source pollution in pastures from horse waste. There also could be impacts to water quality due to runoff from onsite disposal of manure cleaned from stables. Offsite disposal or composting of manure, or a combination of these, could be applied to minimize water quality degradation.

**Riparian/Wetlands and Ponds:** Increased land disturbance and recreational activities would require additional resource commitments and general project-by-project restrictions to protect riparian resources. Trail and facility construction would avoid RPAs or would be completed using boardwalks to avoid long-term impacts on riparian/wetland areas. Riparian habitat would improve as weed species would be controlled. All riparian/wetland protection and improvements would be conducted in accordance with BMPs as mentioned in Chapter 2. Also, some riparian improvement projects would be implemented to speed riparian habitat recovery where needed. Regular cooperative management of pond fisheries would be performed which would assist in avoiding the ponds filling in due to sedimentation and aquatic vegetation growth.

**Wildlife:** Under the RFD Scenario for this alternative, the existing forest habitat would grow and change naturally, allowing for use by any wildlife species that find the habitats suitable. All of the historic hayfields would be converted to pasture; therefore, habitat for eastern bluebirds, other edge-using species, and species requiring large blocks of grassland (such as some ground-nesting birds) would be virtually eliminated. The conversion of historic hayfields to pasture would permanently alter deer-use patterns in those areas.

Pasture land would be tripled from existing acreage under this alternative, as would the number of equines on Meadowood Farm. Further increase in sedimentation and non-point source pollution caused by equines on the pasture land would increase the negative effects on aquatic and riparian species. Additional increases in wildlife congregation in remaining habitat would further decrease vegetative quality and quantity. Tripling pasture acreage would further increase habitat for brown-headed cowbirds and starlings.

Increase in user visitation and activities, such as motorized hobby, pedestrian, and equestrian use, would disrupt some wildlife activities or temporarily displace wildlife. Wherever visitor activities would cause more than temporary displacement (i.e., disruption of reproductive success of wildlife), seasonal, time of day, and/or area use restrictions would be implemented.
**Fisheries:** Fisheries could be improved as riparian resources would be improved through weed removal and riparian improvement projects. An active fisheries management program would result in maintained and improved conditions for summer fish survival and all-around health in all managed fisheries through cooperative use of local technical management expertise.

**Federal and State Listed Species:** There are no federally listed or state sensitive species known to exist on Meadowood Farm. The BLM is required by regulations to manage threatened or endangered species or state sensitive species and their habitat. If federally listed or state sensitive species are encountered, management actions would be taken immediately to ensure the continued existence of the species and/or their habitat.

**Vegetation:**

**Forest:** The current mixed hardwood forest of beech-oak with some pockets of pine would continue to mature, with the pines diminishing. The current understory of mountain laurel and holly would continue to survive. However, this forest would become highly stressed from increased visitor use, increased water runoff, and more concentrated wildlife use, resulting in an understory depleted of species diversity. Construction of buildings, parking areas, roads and trails would further fragment the forest.

**Historic Hayfields:** All historic hayfields would be converted to pasture.

**Pastures:** The additional pasture would be reseeded with a mix of grasses and forbs. The grass in the existing and new pasture would be heavily grazed by horses, allowing the spread of clover, dandelions, and cultivated grasses.

**Invasive, Nonnative Species:** Invasive, nonnative species would be controlled through mechanical and chemical means. Greater land disturbance and visitation activities would further increase the possibility that invasive species would be inadvertently introduced from outside the property. Also, the disturbance of existing vegetation would further increase, providing more opportunities for existing invasive species to spread.
Chapter 5
Consultation and Coordination

Public Participation

The Bureau of Land Management’s (BLM) planning regulations require a process that is open to public involvement. Early in the planning process there was opportunity for public involvement for identification of issues and development of the planning criteria. There were also opportunities for the public to review draft planning documents and now there is an opportunity to file protests before planning decisions are approved. A Planning Analysis/Environmental Assessment (PA/EA) may be released as either a Draft or a Proposed PA/EA. To maximize public involvement, BLM chose to release a Draft PA/EA for Meadowood Farm. When a Draft PA/EA is released, the BLM seeks public comments before preparing a Proposed PA/EA. After considering public comments, the Draft may be modified before a Proposed PA/EA is released. A Proposed PA is subject to a public 30-day protest period and a 60-day Governor’s consistency review. After the Governor’s consistency review and resolution of any protests, the PA/EA may be approved.

A Notice of Intent to Prepare Meadowood Farm’s PA/EA was published in the Federal Register on May 1, 2001. The notice was then amended to correct the final date for submission of comments as June 27, 2001. That correction was published in the Federal Register on June 22, 2001. The notices invited public participation in development of issues and planning criteria through June 27, 2001. A public meeting was held in Lorton, Virginia on May 16, 2001. Approximately 80 people attended the meeting and all commented.

Upon distribution of the Draft PA/EA, public comments were accepted during a 30-day review period. Comments were considered and this Proposed PA/EA was prepared. It is being released for a 30-day protest period and has been sent to the Governor for a 60-day consistency review. The Approved PA/EA and Decision Record will be prepared after any protests and/or inconsistencies have been resolved.

Copies of this Proposed PA/EA have been furnished to the Lorton public library. Copies will also be sent to all persons on the existing mailing list and anyone who requests a copy to review. In addition, the following agencies and organizations will be sent a copy of the Proposed PA/EA, along with a request to review the document.

**Federal Agencies**

- U.S. Army Corps of Engineers, Norfolk District
- U.S. Fish and Wildlife Service, Mason Neck National Wildlife Refuge
- Environmental Protection Agency
- U.S. Geological Survey, Reston Office
Comments and Responses

Comments on the Draft PA/EA were received in individual letters, form letters, and petitions. During the Draft PA/EA comment period, a public meeting was held on May 22, 2002, at Gunston Elementary School in Lorton, Virginia. Rudiger and Green Reporting Service from Fairfax, Virginia recorded the meeting. Of the 109 people who attended the meeting, 29 provided oral comments. Individuals who spoke at the public meeting were requested to submit their comments in writing; in addition the transcript from the meeting was treated as written comments. A copy of the transcript from the public meeting and all of the original written comments received are on file at the Eastern States Office, 7450 Boston Boulevard, Springfield, Virginia 22153.

In addition to comments received from individuals, comments were provided by the following state, county and private organizations:

Academy of Model Aeronautics
Audubon Naturalist Society
Belmont Bay Community Association, Inc.
Birders World
Board of Supervisors, Mt. Vernon District
Congressmen (representing their respective districts)
Commonwealth of Virginia
   House of Delegates
   Department of Conservation and Recreation
   Department of Game and Inland Fisheries
Many of the comments received were “position or opinion statements.” Many of these were expressed in petitions or form letters supporting continuation or discontinuation of a particular land use, or expressed a like or dislike for a particular activity or land use. Generally, these statements offered little in the way of substantive information to support their position or opinion. All of the comments were analyzed by a systematic, objective, visible, and traceable process. All comments received were assigned a number, and the comments were reviewed and categorized by topic(s) addressed. To further clarify, an individual’s comment could appear under more than one topic, depending on the number of topics addressed in the submission.

The list of topics under which comments were assigned is not the same as the topics addressed in the Meadowood Farm Plan. To more accurately categorize comments, a broader range of topics was developed based on comments received. Topics to which comments were assigned were:

I. Plan in General

II. Natural Environment
   A. Air
   B. Cultural Resources
   C. Visual Resources
   D. Soils
   E. Water Quality
   F. Riparian/Wetlands
   G. Ponds
   H. Wildlife
      1. General
      2. Listed Species
3. Invasive Species

I. Vegetation
   1. Forests
   2. Pastures
   3. Hayfields
   4. Invasive Species

J. Land Preservation
K. Environmental Partnerships

III. Recreation
   A. Motorized Passenger Use
   B. Motorized Hobby Use
      1. Tethered
      2. Radio Controlled
      3. Noise
      4. Availability of Suitable Area
   C. Non-motorized Passenger Use (Bicycles)
   D. Swimming
   E. Trails - Pedestrian Use/Hiking
   F. Camping
   G. Fishing
   H. Hunting
   I. Dog Park/Dogs Allowed
   J. Multi-Use Trails
   K. Wildlife Viewing
   L. Partnerships

IV. Socio/Economic
   A. Social
   B. Economics
   C. Transportation
   D. Traffic

V. Equines
   A. Boarding
   B. Wild Horses and Burros (WH&B)
   C. Partnerships
   D. Trail Use

VI. Environmental Education
   A. Interpretive Trails
   B. Facilities

VII. Other - Not in the Realm of the Plan
To avoid repetition, similar comments were grouped and answered with a single response. In this Proposed Plan the comments have been responded to in two ways: 1) they are responded to in the following discussion, or 2) if the comment pointed out a data gap or error within the body of the document, the comment was responded to by correcting the error or supplying additional data in the Plan.

When reviewing the comments we have purposely avoided citing the number of comments opposed to or favoring a particular action, the number of signatures on petitions, the number of petitions received, or the number of form letters received. Land-use decisions made by the BLM are based on the best available data, public input and the expertise of the interdisciplinary team, not on the number of commenters favoring one land use over another. As was stated at public meetings and in the various communications inviting public comment, substantive comments were being sought, but this was not a plebiscite in favor of or against the various land and resource uses being considered on Meadowood Farm.

Following is a list of the comments and the responses:

**PLAN IN GENERAL**

Comment: All actions on Meadowood Farm should be in compliance with the Chesapeake Bay Preservation Act of 1988 and other regional and local statutes. The Chesapeake Bay Preservation Act should be included in the list of statutes in Chapter 1.

Response: Prior to implementing an action, the BLM will work with all appropriate state, county and local agencies to insure the action is in compliance with the appropriate statutes. BLM’s land-use activities will meet or exceed, but not be less than, guidelines recommended by regional, state and local statutes. The Chesapeake Bay Preservation Act is a state and not a federal statute, and therefore it is not included in the list of federal statutes.

Comment: The Plan lacks specifics to where, when and how much, and merges plan level (land-use plan level) with project level (activity planning level) actions.

Response: At the land-use plan level the goal is to identify those land uses that would be allowed. The land uses identified may or may not occur and will be dependent on budget and staffing needs. The “how much” of a particular use that may be allowed is based on a Reasonable Foreseeable Development (RFD) Scenario developed by the Interdisciplinary Team. The land use that occurs can be less than the amount indicated but not more, unless a plan modification is completed. The where and when a specific land use would be allowed will be determined at the activity planning level. Admittedly, the line between what constitutes a “land use” and what is an “activity” is not always clear.
Comment: The Finding of No Significant Impact (FONSI) is not valid because magnitudes of adverse environmental impacts are not stated and serious analysis has not been conducted.

Response: Factors considered in determining significant impacts on the quality of the human environment are set forth in 40 CFR 1508.27. No data was found or submitted that indicates the Proposed Action or alternatives, if implemented, would have a significant impact on the quality of the human environment. Both adverse, favorable, as well as the magnitude of impacts on the quality of the human environment were considered when analyzing the Proposed Action and the alternatives.

Comment: Commenters expressed opinions supporting one or more of the alternatives, or parts of the alternatives, and opinions disagreeing with one or more of the alternatives or parts of the alternatives.

Response: Most, but not all, of these comments were submitted as form letters or petitions. The majority of these comments were opinion statements and did not include data to show why an alternative or parts of an alternative were satisfactory or unsatisfactory.

Comment: The document should be modified to acknowledge model airplane flying on Meadowood Farm as an existing use prior to the BLM acquiring Meadowood Farm...the BLM took action to exclude activities on Meadowood Farm...description of existing facilities does not include recognition of the existing improved facility for flying control line model airplanes... model airplane flying has minimal impact on birds or wildlife... site used was not in proximity to wetlands... modify Table 2-1 to reflect suggested changes...there would be no adverse impacts to other users or resources at Meadowood Farm.

Response: It is acknowledged in Chapter 3, Recreation section, that control line model airplane flying was an existing use prior to the BLM acquiring the property. Motorized hobby use, which would include control line model airplane flying, is part of the Proposed Action. No data was found or presented which would preclude this activity from occurring on Meadowood Farm. Motorized hobby activities would not be limited to one organization or group of individuals but would be open to the general public at a designated time and place.

When the BLM acquired Meadowood Farm, a management decision to exclude certain activities and allow others to continue was made until planning could be completed. This decision was based on economic, logistical, cultural and natural resource considerations.
Comment: The term “motorized hobby” needs to be clarified... there needs to be an explanation of exactly what is permissable.

Response: A definition of the term “motorized hobby” as used in the Meadowood Farm PA/EA has been placed in the glossary. Motorized hobby means the use of any model that is not controlled by a remote device, is tethered, and is used for entertainment purposes only. The motor/engine used in the model must have a displacement of 1 cubic inch or less or an electric motor with an equivalent or less power rating.

Comment: The comment period on the Draft PA/EA should be extended.

Response: The BLM would have considered extending the comment period if new, highly controversial, or complex issues were identified during the comment period. However, no new issues meeting these criteria were submitted during the 30-day comment period.

Natural Environment

Air
Comment: Air pollution from model engines is not a factor and the Environmental Protection Agency (EPA) has not regulated their use.

Response: No data was found that would indicate exhaust from model airplanes or individuals driving to Meadowood Farm would cause a measurable increase in the regulated pollutants identified by the EPA. (See discussion of Air Quality in Chapter 3)

Comment: Air should be added as the fifth essential component of a healthy ecosystem.

Response: Air has been added as a component of a healthy ecosystem.

Cultural
Comment: The Mason Neck Peninsula is historically significant and additional information would be required prior to surface disturbing activities.

Response: On-the-ground pedestrian surveys to discover cultural resources have not been conducted on Meadowood Farm. In 2000, however, a literature search was conducted by Archeological Testing and Consulting Inc. of Silver Spring, Maryland. Based on that literature search, the BLM is aware of the probability of significant cultural resources on Meadowood Farm. The BLM will conduct pedestrian surveys and consultation with the State Historic Preservation Officer in accordance with the National Historic Preservation Act, Section 106 before ground disturbing activities occur. However, the BLM has not developed an
implementation/activity plan for any site-specific activities on Meadowood Farm. This will occur after a land-use plan is adopted.

The BLM is aware of the historical importance of this area and especially of the Old Colchester Road, Washington/Rochambeau Route. Consideration of these resources will be documented when the BLM conducts a pedestrian survey. This survey will meet BLM Class III standards and Virginia Phase 1b standards.

Comment: BLM should contact county archeologists to determine the actual locations of sites on Mason Neck so they can be protected.


Comment: A modest visitor center to enhance natural/cultural history interpretation may be needed.

Response: The type and size of a visitor center has not been decided at this time. Future development would be dependent on budgetary and staffing requirements. Specific natural/cultural objectives are to be addressed in an activity/implementation plan to be developed after a land-use plan has been approved. An activity/implementation plan is developed from the decisions made in the land-use plan.

Comment: Cultural and historic resources should be an important part of an environmental education, interpretive program on Mason Neck.

Response: Cultural resources would be included as a part of the development of an environmental education program. Specific activities would be developed during the activity/implementation planning effort. Cultural resource surveys would be conducted before that time, to determine what themes are in the area and how they should be interpreted.

Visual Resources

Comment: The attraction of Mason Neck is its beauty and nature. Maybe you can illustrate what a WH&B holding facility would look like.

Response: At this time no plans or architectural drawings have been developed for the construction of a WH&B holding facility. When developed, the design and location would be in accordance with VRM Class III (See discussion under Visual Resource Management in Chapter 4).
Soils
Comment: Concern was expressed about the potential of increasing soil erosion and siltation into streams.

Response: All actions when implemented would include erosion control measures such as installation of drainage structures, and/or prompt reseeding of areas where vegetation would be removed or the soil surface disturbed. Site-specific measures would be developed during the implementation phase.

Comment: There is severe erosion and undercutting in the stream beds and on the gravel horse trails.

Response: The BLM is aware of the existing erosion problems on Meadowood Farm. Working in cooperation with the county we are in the process of developing measures to control these erosion areas.

Comment: The use of the term Patapsco is not accurate when referring to Marine Clay soils. The more accurate description would be the term Steepland, Loamy and Gravelly Sediment or just refer to it as Marine Clay.

Response: The use of the term Patapsco has been dropped when referring to the Marine Clay soil series.

Water Quality
Comment: Concern was expressed about water quality. These concerns were... more effluent from increased numbers of individuals and horses at the farm... increased sedimentation affecting fish distribution in Chesapeake Bay... correct existing erosion problems to prevent silt-laden runoff from entering Belmont Bay... there is no reference that BLM will comply with state or local environmental requirements such as the Chesapeake Bay Preservation Act of 1988 and other regional or local regulations... current runoff from the Meadowood property has good to excellent water quality, this should be maintained or improved... practices that increase sedimentation and non-point source pollution would diminish, not increase the recreational value of Meadowood Farm.

Response: The BLM would use Best Management Practices (see Chapter 2) in coordination with federal, state, and county standards to maintain high water quality standards on Meadowood Farm. These practices would meet or exceed the standards of Virginia’s Coastal Resources program, Chesapeake Bay Preservation Act of 1988, and other regional and local statutes covering water quality. A coastal zone consistency review would be obtained prior to the start of surface disturbing or construction activities. In addition, the BLM would work cooperatively with the Northern Virginia Soil and Water Conservation District to develop a Soil and
Water Quality Conservation Plan that meets federal, state, regional and local standards.

**Riparian/Wetlands**

**Comment:** The Resource Protection Area (RPA) map for Meadowood Farm is inaccurate.... Will the negative effects on the aquatic and riparian species be significant or insignificant?... Virginia has an ever-shrinking number of wetlands to fulfill natural filtration... the whole area of watershed and water quality management should be addressed... hope consideration will be given to not cut off one part of a creek from another part.

**Response:** Many of the comments received concerning riparian/wetlands were the same as those concerning water quality and were often part of the same comment. Therefore, refer back to the response to comments concerning water quality. The RPA map would be corrected through on-the-ground inventories and working with local agencies which have more accurate data. At this time no data has been collected or presented that would show that the Proposed Action would have unmanageable impacts on aquatic or riparian species. The BLM adheres to a policy of “no net loss” when managing wetlands and riparian areas. Further, the BLM will work with other agencies on the Mason Neck Peninsula to insure that its management actions consider watershed management. This would entail working cooperatively with other agencies to implement projects to improve water quality or protect riparian/wetland areas.

**Ponds**

**Comment:** Comments related to the ponds on the property were concerned either with the availability of public fishing opportunities or the overall management of ponds on Meadowood Farm.

**Response:** The BLM is committed to maintaining all wetland/riparian ecosystems in a healthy, functioning condition.

**Wildlife**

**General**

**Comment:** Motorized hobby use could affect wildlife populations... Northern Virginia Control Line built and maintained birdhouses; birds nested in the bird houses and were not disturbed by model airplane flying... increasing acreage for horse pasture would crowd out wildlife... quail, woodcock, and meadowlark were common in the area; the Lynch development of pasture put an end to the habitat these birds require... forest tree species should be encouraged to grow... management of wildlife and wildlife habitat needs to be coordinated with other state and public agencies... grasslands should be planted with native species and maintained as meadows... more detailed habitat descriptions are needed... establish preservation
of wildlife habitat as your highest management priority... migratory birds and their routes are an important part of Mason Neck wildlife.

Response: Meadowood Farm provides for the reproductive success of many species of wildlife. It is the BLM’s intent to continue to provide for and in some cases increase the reproductive success of this diversity of wildlife species while implementing the proposed land uses in the Proposed Action. No data was found nor submitted that shows that land uses listed as part of the Proposed Action should not occur because of undue impacts on wildlife. Guidance for implementing these land uses are outlined in the wildlife habitat Best Management Practices in Chapter 2. Input for this guidance will come from resources such as the Virginia Department of Game and Inland Fisheries, the U.S. Fish and Wildlife Service, and Web site information such as the Maryland Partners in Flight Web site. Inventory of flora and fauna on Meadowood Farm will be an ongoing process. As more information is obtained, it will be used to guide future land use decisions.

**Listed Species**

Comment: Listed species should be identified and measures to manage these species should be implemented.

Response: The BLM, as stated in Chapter 2, will take all measures to be in compliance with the Endangered Species Act. In addition, the BLM will take measures to protect and conserve all state-listed species. Further, it is Bureau policy to not adversely affect sensitive species or through its actions be responsible for the listing of a species. Prior to any new activities on Meadowood Farm, the BLM would conduct extensive inventories for state and federally listed and or sensitive species. Coordination of this program has already begun with the Virginia Department of Conservation and Recreation and the U.S. Fish and Wildlife Service. Should there be listed species encountered, the BLM, in coordination with both the state and the U.S. Fish and Wildlife Service, will modify any proposed action so that it will not adversely affect any listed sensitive species.

**Vegetation**

Comment: Comments on vegetation uniformly expressed a concern about management of vegetation (wildlife habitat) and visitor use (balanced use).

Response: Balanced use may be defined as “visitor use that does not compromise the diversity and health of the plant and animal species and their associated ecosystems found on Meadowood Farm.” See Chapter 2 Standard Management Common to All Alternatives for the measures that will be followed to ensure there is balanced use.
**Forest**

Comment: Comments concerning forest management focused primarily on using caution when planning to manipulate forest vegetation through various silvicultural practices. Aggressive land-disturbing projects or logging were not preferred items.

Response: The BLM does not plan to conduct major forest harvesting practices. However, the BLM will take a pro-active approach to resolve issues such as insect infestations, diseases, and exotic invasive species in order to maintain and promote forest ecosystem health.

**Pastures**

Comment: Comments ranged from “no problem with alternatives of pasture expansion” to “pasture expansion should be very limited so as to minimize potential impacts to the environment.”

Response: The pasture allocations in the proposed action are based upon the “ideal situation” for private, domesticated horses. The BLM will take into careful consideration the potential impacts upon the adjacent habitats, the soils, and the water quality as the BLM locates and manages the WH&B adoption facility. As part of this, the BLM will establish and follow Best Management Practices for wildlife and wildlife habitat, and soil and water quality conservation.

**Hayfields**

Comment: Comments ranged from “maximize the native grassland establishment and management,” to “native grassland conversion should not be done for economic and environmental reasons”, and to “conduct more in depth studies to determine what to do.”

Response: The BLM has consulted various local, state, and federal sources and has determined that if the hayfield areas are maintained in a non-forested habitat state, conversion of the present vegetation to native grasses would be very positive for wildlife and vegetation diversity with a minimum exotic, invasive species risk. The BLM plans to take advantage of partnerships and experience with the Virginia Department of Conservation and Recreation and the Department of Game and Inland Fisheries for the optimum success of this management.
**Invasive Species**

Comment: Concern was expressed about controlling exotic, invasive species, both plants and animals.

Response: The Bureau recognizes that Meadowood Farm is home to many exotic plants and animals (See Chapter 3). However, only exotic species considered invasive (See Chapter 3) by the USDA and the state of Virginia will be addressed and managed as exotic invasive species. Additional information obtained since the Draft PA/EA was released in May 2002 summarizes the exotics and exotic invasive species in Chapter 3.

**Land Preservation**

Comment: Concern was expressed regarding the protection and preservation of resources at Meadowood Farm.

Response: The BLM will work to achieve its mission to “sustain the health, diversity and productivity of the public lands for the use and enjoyment of present and future generations” by employing the Secretary of the Interior’s “4 C’s” which are communication, consultation, cooperation, all in the service of conservation (Norton, 2001). BLM expects to provide safe, quality recreation opportunities while protecting the natural, cultural, and historic resources at Meadowood Farm.

**Natural Environment Partnerships**

Comment: The BLM should actively seek assistance from the community and local government and educational institutions to identify plants and animals to assist with management of resources on Meadowood Farm.

Response: The BLM is and will continue to be involved in many informal and formal partnerships, which assisted in the resource assessment and planning on the Meadowood Farm property. Existing and continuing partnerships include those with George Mason University, Pohick Bay Regional Park, Mason Neck State Park, Virginia Department of Game and Inland Fisheries, and citizens of the surrounding areas.

**Recreation**

**Recreation Opportunity Spectrum (ROS)**

Comment: The ROS classification for Meadowood Farm was “urban” but it should have been classified as “primitive.”

Response: The definition of the ROS classification of “primitive” can be found in Appendix B. The assigning of the “urban” classification was based on the relatively small size of Meadowood Farm, the relatively high population density of the nearby area, and that the sights and sounds of man are readily evident. Areas that are classed as primitive using the ROS criteria are at a minimum 5,000 acres in size.
**Intensity, Level of Use**

Comment: There was concern expressed about the long-term impacts associated with various recreation and other activities being considered for Meadowood Farm.

Response: Because demand and use numbers for activities at Meadowood Farm are unknown at this time, it is difficult to predict the long-term impacts associated with these activities. As discussed in several sections under the Recreation section of Chapter 4, BLM intends to monitor and evaluate impacts from various activities at Meadowood to establish thresholds for proper use levels. If the mitigating measures and established thresholds are ineffective, BLM would amend the Meadowood land-use plan to protect natural and cultural resources and the health and safety of recreational users.

**Motorized Passenger Use**

Comment: Comments were received regarding the use of motorized passenger vehicles at Meadowood Farm. The majority of these comments were opinion statements, many of which were expressed in petitions.

Response: Comments regarding motorized passenger use are addressed in the Trails - Motorized Passenger Use section under Recreation Resources in Chapter 4.

**Motorized Hobby Use**

Comment: Comments were received regarding motorized hobby use at Meadowood Farm. The majority of these comments were opinion statements, many of which were expressed in petitions and form letters.

Response: Data gathered at this time, coupled with input from specialists on the BLM Interdisciplinary Team (List of Preparers), indicates that motorized hobby activity use could occur at Meadowood Farm without seriously impacting other activities. Designated times and areas would be determined during the activity planning stage. More information on motorized hobby activities at Meadowood Farm can be found in the Trails-Motorized Hobby section under Recreation Resources in Chapter 4.

**Radio Control Model Airplane Use**

Comment: Comments were received regarding the inclusion of a flying site for radio control model aircraft at Meadowood.

Response: Based on documents provided by the Academy of Model Aeronautics (AMA), it is unlikely that BLM could accommodate radio control model airplane flying at Meadowood Farm. Specifically, the 285 acres of overflight area suggested for radio control ("Radio Control Flying Site Suggestions", n.d.) and the 120 - 645 acres suggested for basic free flight facilities ("Aeromodeling Flying Sites Suggestions", n.d.) would need to be level and clear of obstacles. Additionally,
Herland (2002), Refuge Manager at the USFWS Shawangunk National Wildlife Refuge, indicates that frequent retrieval of free flight planes in areas adjacent to the flying site is expected. Also, free flight and radio control planes have the potential to crash and retrieval could occur anywhere on Meadowood and adjacent properties (Herland, 2002). According to the AMA figures, these activities would require approximately 15-80% of the Meadowood Farm parcel, which is not feasible based on other anticipated uses and adverse impacts to soils, wildlife, vegetation and other resources on site.

**Non-motorized Passenger Use (Bicycles)**

Comment: Concern was expressed about non-motorized passenger vehicles regarding safety on trails, use conflicts/compatibility, and environmental impacts.

Response: Management actions for this potential use are described in the Trails - Non-motorized Passenger use section under Recreation Resources in Chapter 4.

**Swimming**

Comment: Would swimming be allowed on Meadowood Farm?

Response: As noted in Standard Management Common to All Alternatives, swimming would not be allowed in any body of water on Meadowood Farm.

**Trails – Pedestrian**

Comment: Comments were received regarding pedestrian use and safety on trails, and connection of trails on the Mason Neck Peninsula.

Response: These comments are addressed in the Trails - Pedestrian use section under Recreation Resources in Chapter 4, and under the Multi-Use Trails public comment response below.

**Multi-use Trails**

Comment: Interest was expressed in the connection of Meadowood Farm trails (pedestrian and equestrian) with other multi-use trails on the Mason Neck Peninsula.

Response: As indicated in Chapter 4, additional trails could be constructed where the resource can support the activity. If feasible, BLM would partner with other agencies on the Peninsula in efforts to provide expanded recreation opportunities that would be safe and sustainable. Comments regarding pedestrian and equestrian use of trails are addressed in the Trails sections in Chapter 4 under Recreation Resources.
Camping
Comment: Interest was expressed in camping on Meadowood Farm.
Response: Comments received regarding camping use at Meadowood Farm are addressed in the Camping section under Recreation Resources in Chapter 4.

Fishing
Comment: There was an expression of support for recreational public fishing opportunities at Meadowood Farm.
Response: Under the Proposed Action, BLM would allow public fishing.

Hunting
Comment: There was an expression of interest or wanting to know the status of hunting on Meadowood Farm.
Response: See Number 17 under the Standard Management Common to All Alternatives in Chapter 2. BLM does not anticipate recreational hunting at Meadowood on a regular basis. However, it might be necessary, at times, to reduce the overpopulation of certain species of wildlife. At the time of printing, BLM has not determined if the population reduction would be carried out by trained wildlife staff, or if a limited permit system would be implemented for the public. BLM anticipates that while wildlife population reduction is taking place, part or all of Meadowood would have limited entry, or would be closed to other recreation activities. Additionally, BLM would attempt to coordinate population control efforts with other land managers on Mason Neck to optimize success.

Dog Park
Comment: Portions of Meadowood Farm should be designated a Dog Park.
Response: Under the Proposed Action, BLM would not provide an off-leash dog park at Meadowood Farm. However, BLM might allow visitors to bring their dogs to Meadowood Farm. Certain restrictions would be established to minimize impacts from this activity, and to maintain public and animal safety.

Wildlife Viewing
Comment: Will wildlife watching or a watchable wildlife program be implemented at Meadowood Farm?
Response: BLM anticipates that wildlife watching would occur at Meadowood as part of organized environmental education programs, as well as on an individual basis. Management actions, including use restrictions and other mitigating measures at Meadowood Farm, would be expected to provide long-term wildlife watching opportunities.
**Recreation-related Partnerships**

Comment: Comments were received regarding BLM’s potential participation in recreation-related partnerships.

Response: BLM expects to explore partnerships that could help provide expanded recreation opportunities while not duplicating offerings on the Peninsula. These partnerships would be established to provide the best possible recreation opportunities to the public. Some examples of potential partnerships could include connecting trails, as discussed in Chapter 4, under Trails - Pedestrian and Trails – Equestrian in the Recreation section.

**Economic and Social**

Comment: A thorough analysis of demographic (needs assessment) should be performed to determine how to best serve citizens within the service area.

Response: A demographic (needs assessment) is outside the scope of the land-use plan. However, the BLM has held public meetings and requested input from individuals living in the Lorton and Mason Neck vicinity. That input has helped the BLM throughout the planning process.

Comment: There were comments concerning the economics of control line model airplane flying and horse boarding/equestrian activity in Alternative 2.

Response: While approved use or non use of Meadowood Farm for model airplane flying or horse boarding/equestrian activity could impact some individual hobby and equestrian related businesses, there would be negligible employment and income impacts (as a percentage of county totals) in Fairfax County from reduced or increased consumer purchases associated with these activities.

Comment: “Moreover, the stable generates revenue that helps the federal government maintain the property as a whole, thus saving the taxpayer money.”

Response: The economics of boarding privately owned horses will be periodically reviewed to assure that there is a fair monetary return to the American taxpayers. See discussion in Chapter 4, Economic and Social Impact Section, pertaining to the Proposed Action and Alternative 4.

Comment: Interest was expressed in BLM’s proposed land uses and vehicle traffic in the area.

Response: Traffic concerns pertaining to the Proposed Action and Alternative 4 are addressed in the Economic and Social Impact Section of Chapter 4.
Equines

Comment: Comments were received supporting continued use of Meadowood Farm for horses and equestrian activities. These comments were opinion statements expressed by individuals and in petitions. However, the opinions differed greatly in their recommendations on how equestrian activities should be conducted. Several comments pointed out the need for additional equestrian facilities open to the general public and groups such as 4-H clubs.

Response: Under the Proposed Action, BLM would continue to manage portions of Meadowood Farm for horses and equestrian use. BLM would provide new opportunities for individuals and groups to enjoy equestrian activities.

Boarding

Comment: Comments were received expressing both support for and opposition to the boarding of privately owned horses. These comments were opinion statements made by individuals and in petitions. Concern was expressed that use of Meadowood Farm by private individuals would interfere with use of the facility for public benefit.

Response: Under the Proposed Action, BLM would allow boarding to continue. This use would be monitored to ensure that it does not interfere with other public uses of Meadowood Farm and that the boarding operation would generate a fair monetary return to the American taxpayers.

Wild Horses and Burros (WH&B)

Comment: The BLM should use the property only for BLM's original intent, as a WH&B adoption facility.

Response: The BLM’s mission is based on sound multiple use management of the lands and resources it administers. No data was presented or found that showed the Bureau's WH&B program could not coexist with other horse-related uses or provide opportunities for equestrian-related partnerships. Further, the authorizing legislation transferring the property to the BLM stated that Meadowood Farm should be managed for “recreation and public purposes.” Therefore, the use of Meadowood Farm to highlight the Bureau’s WH&B Program, in conjunction with many other activities, is part of the Proposed Action.

Comment: Clarification was requested on the static population of animals to be maintained and how a WH&B facility would be constructed.

Response: In the Proposed Action, BLM envisions an average of 25 WH&Bs to be present on Meadowood Farm on a permanent basis. These animals would be available for
Comment: What would construction of a WH&B facility entail?

Response: No site-specific architectural drawing or plans have been developed for a WH&B facility at Meadowood Farm. However, such a facility would at a minimum consist of a barn with corrals so that animals could be viewed from outside the barn and from a central walkway inside the barn. The fencing for the corrals would be either metal pipe fence panels or wooden panels, and would be at least 6 feet high. The facility would also consist of load-in and load-out chutes and parking areas.

Comment: What is an adoption event, what would it involve, and how many people would attend?

Response: An adoption event is a scheduled day(s) where the public could apply to adopt, and if approved, adopt WH&Bs. Generally these events are scheduled to occur on weekends. Estimating the number of people that might attend an adoption event is difficult in the Mason Neck area because it is in close proximity to a major metropolitan area. People would come to adopt and some people (sightseers) would want to see a WH&B from the western range lands. The BLM anticipates that as more adoption events would be held, the number of adopters and the number of "sightseers" attending would decrease and stabilize.

Partnerships

Comment: Comments were received expressing both support for and opposition to equestrian partnerships. These comments were opinion statements made by individuals and in form letters and petitions.

Response: BLM anticipates that equestrian partnerships at Meadowood Farm would be developed. The partnerships would be considered by BLM on a case-by-case basis and would be evaluated on the basis of what would be in the best interest of the BLM and its programs, groups and organizations, and in the general public interest.

Trail Use

Comment: Comments were received in support of public riding trails being developed at Meadowood Farm. Many of these comments stressed the importance of trail development being tied into existing equestrian trails on adjacent lands.

Response: As indicated under the Recreation section in the Proposed Action, public use equestrian trails would be developed. Trails would be constructed so as to
minimize erosion or other adverse impacts to resources. Trails would be constructed in cooperation with other groups and/or public agencies.

**Environmental Education**

**Comment:** There were no substantive comments regarding environmental education. However, there was interest expressed in the resource values to be addressed in environmental education programs, the use of partnerships, the creation of additional facilities/structures, and possible conflicts with boarders’ access to the barn.

**Response:** Environmental education at Meadowood Farm would be partnership-based, drawing on public, private, and non-profit relationships. It would utilize existing structures as much as possible and would address the full range of resource values found on the property.
List of Preparers

The Meadowood Farm Proposed Planning Analysis/Environmental Assessment was prepared by a team of specialists from the Eastern States Office, Jackson Field Office, Milwaukee Field Office, and the Washington Office - Assistant Directorate of Renewable Resources and Planning and the National Science and Technology Center. The members of this team are:


Victoria Josupait, Recreation Planner. M.S. Recreation Administration, Aurora University, Aurora, Illinois. Three years with the Bureau of Land Management. Responsible for the Recreation section, and incorporation of public comments in this area.

Jinx Fox, Wild Horse and Burro Program Manager. M.S. Geology, Eastern Kentucky University. Seventeen years with U.S. Government. Responsible for Wild Horse and Burro and Equestrian related sections.


Bob Schoolar, GIS Specialist. B.S. Geophysical Science, Old Dominion University, Norfolk, Virginia. Twenty-five years with U.S. Government. Responsible for all aspects of map production.


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Appendix A
Maps
Appendix B
Recreation and Visual Resources

Recreation Opportunity Spectrum Class Descriptions

Recreation opportunities can be expressed in terms of three main components: activities, settings, and experiences. For management and conceptual convenience, possible mixes of these components have been arranged along a spectrum, or continuum. This Recreation Opportunity Spectrum (ROS) provides a framework for stratifying and defining classes of outdoor recreation opportunity environments.

**Primitive**

**Activity:** Camping, hiking, enjoying scenery or natural features, photography, hunting (big game, small game, upland birds, waterfowl), swimming, diving (skin and scuba), fishing, canoeing, sailing, and river running (non-motorized craft).

**Setting:** The area is characterized by an essentially unmodified natural environment of fairly large size. Concentration of users is very low and evidence of other users is minimal. The area is managed to be essentially free from evidence of man-induced restrictions and controls. Only facilities essential for resource protection are used. No facilities for comfort or convenience of the user are provided. Spacing of groups is informal and dispersed to minimize contacts between groups. Motorized use within the area is not permitted.

**Experience Opportunity:** There are opportunities for isolation from the sights and sounds of man, to feel a part of the natural environment, to have a high degree of challenge and risk, and to use outdoor skills.

**Semi-Primitive Non-Motorized**

**Activity:** Camping, hiking, enjoying scenery or natural features, photography, hunting (big game, small game, upland birds, waterfowl), swimming, diving (skin and scuba), fishing, canoeing, sailing, and river running (non-motorized craft).

**Setting:** The area is characterized by a predominantly unmodified natural environment of moderate to large size. Concentration of users is low, but there is evidence of other area users. On-site controls and restrictions may be present, but are subtle. Facilities are provided only for the protection of resource values and the safety of users. Spacing of groups may be formalized to disperse use and limit contacts between groups. Motorized use is not permitted.

**Experience Opportunity:** There are some opportunities for isolation from the sights and sounds of man, but this is not as important for this classification as it is for primitive opportunities. Opportunities are available to have a high degree of interaction with the natural environment, to have moderate challenge and risk, and to use outdoor skills.

**Rural**

**Activity:** Camping, hiking, enjoying scenery or natural features, photography, swimming, diving (skin and scuba), fishing, canoeing, sailing, and river running (motorized craft), power boating, picnicking, rock collecting, wood gathering, auto touring, water skiing and other water sports, interpretive services use, rustic resorts and organized camps, competitive games, spectator sports, bicycling, jogging, outdoor concerts, and modern resorts.
**Setting:** The area is characterized by a substantially modified natural environment. Resource modification and utilization practices are obvious. Sights and sounds of man are readily evident, and the concentration of users is often moderate to high. A considerable number of facilities are designed for use by a large number of people. Facilities are often provided for specific activities. Developed sites, roads, and trails are designed for moderate to high use. Facilities for intensive motorized use are available.

**Experience Opportunity:** Opportunities to experience affiliation with individuals and groups are prevalent as is the convenience of the sites and opportunities. These factors are generally more important than the natural setting. Opportunities for wildland challenges, risk taking, and testing of outdoor skills are unimportant, except in specific activities involving challenge and risk.

**Urban**

**Activity:** Camping, hiking, enjoying scenery or natural features, nature study, photography, swimming, diving (skin and scuba), fishing, canoeing, sailing, and river running (non-motorized craft), power boating, picnicking, rock collecting, wood gathering, auto touring, water skiing and other water sports, interpretive services use, rustic resorts and organized camps, competitive games, spectator sports, bicycling, jogging, outdoor concerts, and modern resorts.

**Setting:** The area is characterized by a substantially modified natural environment. Resource modification and utilization practices are obvious. Sights and sounds of man are readily evident, and the concentration of users is often moderate to high. A considerable number of facilities are designed for use by a large number of people. Facilities are often provided for specific activities. Developed sites, roads, and trails are designed for moderate to high use. Facilities for intensive motorized use are available.

**Experience Opportunity:** Opportunities to experience affiliation with individuals and groups are prevalent as is the convenience of the sites and opportunities. Experiences of the natural environment and the use of outdoor skills are largely unimportant.

**Visual Resources Management (VRM)**

The visual resource inventory process contained in BLM Handbook H-8410-1 provides BLM managers with guidance for determining visual values. The inventory consists of scenic quality evaluation, sensitivity level analysis, and delineation of distance zones. Based on these three factors, BLM-administered lands are placed into one of four visual resource inventory classes. These inventory classes represent the relative value of the visual resource. Classes I and II are the most valued, Class III represents a moderate value, and Class IV has the least value. Management objectives have been assigned to each Class. An area may be inventoried as VRM Class III but the decision may be made to manage it as a VRM Class IV or vise versa. Cultural modifications may detract from the scenery, or complement, or improve the overall scenic quality of an area. Cultural modifications in the land form/water and vegetation values and addition of structures will be considered when examining proposed resource management actions.

The VRM inventory and management classes were designed to address larger tracts of land than that of Meadowood Farm. Visual Resource Management objectives discussed in the Planning Analysis and Environmental Assessment PA/EA will pertain only to the level and type of disturbance to visual resources that can be expected to occur under the alternatives and only to the specific tract and not to the general setting in which the tract is located.
The following VRM class definitions from BLM Handbook H-8410-1 have been amended for purposes of developing and implementing the Meadowood Farm PA/EA. Amendments incorporate the visual resource values provided by existing cultural features significant to the character of the Meadowood Farm landscape.

**VRM Class I Objective**

The objective of this class is to preserve the existing natural and cultural character of the landscape. This class provides for natural ecological changes; however, it does not preclude very limited management activity. The level of change to the characteristic landscape should be very low and must not attract attention away from the existing landscape character.

**VRM Class II Objective**

The objective of this class is to retain the existing natural and cultural character of the landscape. The level of change to the characteristic landscape should be low. Management activities may be seen, but should not attract the attention of the casual observer. Any changes must repeat the basic elements of form, line, color, and texture found in the predominant natural and/or cultural features of the characteristic landscape.

**VRM Class III Objective**

The objective of this class is to partially retain the existing natural and cultural character of the landscape. The level of change to the characteristic landscape should be moderate. Management activities should be moderate. Management activities may attract attention but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant natural and/or cultural features of the characteristic landscape.

**VRM Class IV Objective**

The objective of this class is to provide for management activities which require major modification of the existing character of the natural and cultural landscape. The level of change to the characteristic landscape can be high. These management activities may dominate the view and be the major focus of the casual observer's attention. However, every attempt should be made to minimize the impact of these activities through careful location, minimal disturbance, and repetition of the basic elements.
The following soil series descriptions were obtained from the Natural Resources Conservation Service (NRCS) Soil Survey and the General Ratings for Urban Development, published by the Fairfax County Soil Science Office, August, 1993.

1 - Mixed Alluvial Land (Hydric Soil) - This soil type has a high shrink-swell potential and has high water table conditions. This series may also be subject to land slippage on unstable slopes and is rated as poor for foundation support and septic drain fields because of high seasonal groundwater tables in drainage ways, or low lying areas, and flooding following storms. The series has a low erosion potential.

6 - Hyattsville Fine Sandy Loam - This soil has moderate problems with high seasonal groundwater tables in drainage ways and low lying areas. It is also noted as having poor values for foundation support. It is rated as having a low erosion potential and is rated as poor for septic drain fields because of high seasonal groundwater tables in drainage ways, or low lying areas.

34 - Woodstown Fine Sandy Loam - This is a moderately well-drained soil and permeability is moderate. Run-off is also moderate. It is rated as having moderate capabilities for foundation support. Most areas where this soil type occurs are used for growing agricultural crops or pine forest. This series is rated as having a low erosion potential and is rated as poor for septic drain fields because of high seasonal groundwater tables in drainage ways, or low lying areas.

37 - Beltsville Silt Loam - The Beltsville series consists of very deep, moderately well drained, slowly to very slowly permeable soils and are found on upland areas. It is rated as having moderate capabilities for foundation support and is moderately susceptible to erosion. Areas where this series has been observed are used for crops and some pasture, however, large areas of this series have been included in residential developments. This series is rated as having a moderate erosion potential and is rated as poor for septic drain fields because of perched ground water above soil or rock layers.

38 - Mecklenburg Silt Loam - This soil type has a moderate shrink-swell potential and has a slow to very slow permeability rate. It is rated as having low bearing values for foundation support. It has perched groundwater above the restrictive soil and or rock layers. This series is rated as having a moderate erosion potential and is rated as poor for septic drain fields because of clays with a shrink-swell potential.

44 - Caroline Silt Loam - Soils in this series are very deep, well drained and have moderately slow or slow permeability with moderate to very rapid run-off. It is considered marginal for foundation support because of clays with moderate to high shrink-swell potential. This series is
rated as having a moderate erosion potential and is rated as poor for septic drain fields because of clays with a shrink-swell potential.

45 - Matapeake Silt Loam - This series is very deep, well drained with moderate to moderately slow permeability. Surface run-off is medium and the erosion potential is moderate. This series is rated as good for foundation support with little to no shrink-swell potential. This series is rated as having a moderate erosion potential and is rated as fair for septic drain fields.

46 - Mattapex Silt Loam - The Mattapex series is very deep and moderately well drained. Permeability is moderate to moderately slow, and surface runoff is slow to medium. This series is rated as moderate for foundation support because of perched ground water above restrictive soil or rock layers. This series is rated as having a moderate erosion potential and is rated as poor for septic drain fields.

49 - Lunt Fine Sandy Loam - The Lunt series are very deep and well drained with moderate permeability and generally occur on slopes of two to 25 percent. This series is rated as poor to marginal for foundation support and septic drain fields because of potentially unstable slopes, clays with high shrink-swell potential, and perched ground water above restrictive soil or rock layers. This series is rated as having a moderate erosion potential.

54 - Sassafras Fine Sandy Loam - The Sassafras series are very deep, well drained with moderate or moderately slow permeability. This series is rated as good for foundation support and septic drain fields and has a moderate erosion potential.

61 - Rolling Land Gravelly Sediments and 64 - Silty/Clayey Sediments - No description was available for these soils/series from the NRCS. The Fairfax County Soil Science Office rated these soils as marginal for foundation support and septic drain fields because potentially unstable slopes, clays with high shrink-swell potential, and perched ground water above restrictive soil and rock layers. Both soil types have a high erosion potential.

89 - Tidal Marsh - No description was available for this soil from the NRCS. The Fairfax County Soil Science Office rated this soil as poor for foundation support and septic drain fields because of flooding hazard and high seasonal groundwater tables. This soil type has a low erosion potential.

118 - Marine Clay - The Marine Clay series is very deep and excessively drained with rapid to moderately rapid permeability. Internal free water is common three to six months of the year. Construction on the Marine Clay is not recommended because of the very high shrink-swell potential. In Fairfax County, damage has occurred to many homes built on this soil series from cracking, chimneys pulling away from the house, and doors not closing. The construction difficulties can be overcome by using proper design and engineering.
Appendix D
Hazardous and Solid Waste

1. **Sand and Gravel Pit:** The sand and gravel materials have been used from this site in the past to maintain unpaved roads on the property.

2. **Stock Waste Pile:** The waste pile consists of approximately 400 cubic yards of mixed wood chips and horse manure.

3. **Oil Spills:** There were diesel-stained soils at the office/stable complex and at a former wood chipping mill (which was dismantled prior to acquisition) on the western side of the property, probably resulting from overfills and a leaking motor at the mill. Soil sampling was conducted at four spots and subsequent Commonwealth of Virginia-approved remedial measures were undertaken at each site.

4. **Buried Stump Area:** An area of buried stumps lies near the eastern property boundary. The soil beneath and between the stumps is being washed away by water channeling through the fill. This has resulted in pot holes 5-7 feet deep and 3-4 feet wide which are hidden by tall grasses.

5. **Chemical Storage Area:** A physical inspection of the property revealed that the limited amount of chemicals present are in small quantities and are properly stored. Most of these chemicals are used for maintenance of equipment and the waste products are collected and disposed of by a contractor.

6. **Biological Waste:** Biological waste is present in the form of horse manure. This waste has historically been spread over the fields or hauled away by the local farmers. All veterinary supplies such as sharp needles and other medical supplies are managed by the veterinary staff, and are disposed off site at a Commonwealth of Virginia approved facility.

7. **Septic Tanks and Disposal Field Systems:** The habitable structures are all served by individual septic tank and disposal field systems, which were serviced and inspected prior to acquisition.

8. **Abandoned Wells:** One water well at 10406 Gunston Road (the office/stable complex) has been functionally abandoned for an indefinite amount of time. Another, at 10207 Old Colchester Road was recently abandoned under Fairfax County oversight.
Off-Site Features:

Rainwater Concrete Co. Inc. Landfill: This active landfill is located up gradient from the western Meadowood Farm property boundary. The groundwater flow in the area is expected to generally follow surface topography trends. The landfill is leaking solvents and is expected to do so in the foreseeable future. This landfill is currently in a Phase II monitoring program and proposed ground water protection standards are being developed for the landfill. It is possible that impacted groundwater may potentially be discharged to surface water on the Meadowood Farm property, or it is possible that the chlorinated solvents may have sunk deeper into the underlying aquifer and have not discharged into surface water.
**Activity Plan.** A site-specific plan for the management of one or more resources, e.g., allotment management plan or habitat management plan. Activity plans provide the additional detail necessary to implement decisions made in the Resource Management Plan.

**Area of Critical Environmental Concern (ACEC).** An area within the public lands where special management attention is required to protect and prevent irreparable damage to important historic, cultural, or scenic values, fish and wildlife resources or other natural systems or processes, or to protect life and safety from natural hazards.

**Closed.** Designated areas, routes, roads and trails where the use of OHVs is permanently or temporarily prohibited. Use by emergency vehicles and beach maintenance vehicles is allowed.

**Cultural Resource.** The fragile and nonrenewable remains of human activity, occupation, or endeavor reflected in districts, sites, structures, buildings, objects, artifacts, ruins, works of art, architecture, and natural features that were of importance in human events. These resources consist of (1) physical remains, (2) areas where significant human events occurred even though evidence of the event no longer remains, and (3) the environment immediately surrounding the resource.

**Cumulative Impacts.** Cumulative Impacts on the environment result from incremental impacts of the action when added to other past, present and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

**Day Use Only-Meadowood Farm would be open to the public daily from sunrise to sunset, including weekends. Call the Meadowood Farm management office for specific hours of operation, and for information regarding use and access on federal holidays. Exceptions would/may be granted to individuals or organizations attending BLM authorized events and to allow access to the stables/pastures to care for equines that reside at Meadowood Farm.

**Direct Impacts.** Direct impacts are caused by the action and occur at the same time and place.

**Endangered Species.** Any species formally recognized by the Fish and Wildlife Service as in danger of extinction throughout all or a significant portion of its range.

**Environmental Assessment (EA).** An analysis of environmental impacts of federally-permitted or authorized actions. EAs are prepared in accordance with the National Environmental Policy Act of 1969.

**Erosion.** The loss of soil caused by water or wind ("A Strategic Plan,"1995).

**Flooding.** The temporary covering of the soil surface by water from any source. Shallow water standing during or shortly following rain is excluded from the definition of flooding. Marshes and swamps are excluded from the definition of flooding because water is more than a temporary covering.

**Federal Land Policy and Management Act of 1976 (FLPMA).** Public Law 94-579, which gives the BLM legal authority to establish public land policy, to establish guidelines for administering such policy, and to provide for the management, protection, development, and enhancement of public land.

**Forest Land.** Land carrying forest growth, or if totally lacking, bearing evidence of former forest which contains 10 percent or more crown cover.

**Forest Product.** Forest products would include any forest land product, including but not limited to timber, plywood, chips, post poles, Christmas trees, greenery, nuts, chemicals, and resins.

**Groundwater.** Water within the earth that supplies wells and springs.
**Habitat.** A specific set of physical conditions that surround a single species, a group of species, or a large community. In wildlife management, the major components of habitat are considered to be food, water, cover, and living space.

**Medium Quality Plant Community.** Plant communities that show visible changes from the historical species composition and community structure, but which will improve with appropriate management and time.


**Mesic.** Related to conditions of moderate moisture or water supply. Used to describe organisms occupying moist habitats.

**Herbaceous.** A plant with little or no woody tissue that dies back at the end of the growing season.

**Mitigating Measure.** A management practice which is used or implemented to avoid or minimize environmental harm or improve existing environmental conditions.

**High Quality Community.** Plant communities that show little change from the historical species composition and community structure, or have excellent recovery from historic alterations.

**Motorized Hobby.** The use of any model, not controlled by a remote device, is tethered, and is used for entertainment purposes only. The motor/engine used in the model must have a displacement of 1 cubic inch or less or an electric motor with an equivalent or less power rating.

**Historic Property.** Sites of human activity, an object, a building, or a prehistoric or historic district included on, or eligible for inclusion on the National Register of Historic Places. A site that potentially meets the criteria for inclusion on the National Register of Historic Places is treated as illegible until further scientific investigations are completed.

**National Environmental Policy Act (NEPA) of 1969.** Public Law 91-190, which established environmental policy for the nation. Among other items, NEPA requires federal agencies to consider environmental values in decision-making processes.

**National Register of Historic Places.** A register of districts, sites, buildings, structures, and objects, significant in American history, architecture, archaeology, and culture, established by the National Historic Preservation Act of 1966 and maintained by the Secretary of the Interior.

**Hydrocarbons.** Organic chemical compounds of hydrogen and carbon atoms that form the basis of all petroleum products, including oil and gas.

**Indirect Impacts.** Indirect impacts are caused by the action and are later in time or further removed in distance, but are reasonably foreseeable.

**Neotropical Migratory Bird.** Birds that breed in temperate areas of the U.S. and Canada and migrate south to winter in the Caribbean, Mexico, Central or South America; includes many of the songbirds.

**Interdisciplinary.** Characterized by interactive participation or cooperation of two or more disciplines or fields of study.

**Occurrence.** A specific record of a single or group of plant or animal species.

**Intermittent Stream.** A stream that does not flow year round but has some association with ground water for surface or subsurface flows.

**Off-Highway Vehicle (OHV).** This term replaces "off-road vehicle (ORV)"; and means any motorized vehicle capable of or designed for
travel on or immediately over land, water, or other natural terrain.

**Open.** Designated areas, routes, roads, and trails where unrestricted OHV use may occur (subject to operating regulations and vehicle standards set forth in BLM Manuals 8341 and 8343).

**Planning Analysis (PA).** A document that reviews options for the management of BLM-administered lands and minerals.

**Prime Farmland.** Land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops, and is available for these uses (the land could be cropland, pastureland, rangeland, forest land, or other land, but not urban built-up land or water).

**Public Domain.** Public lands which were originally (that is upon the admittance of a state to the United States) owned by the federal government and have since that time remained in continuous federal ownership.

**Reasonable Foreseeable Development (RFD).** A description of anticipated future development of minerals or other resources, used as a basis for assessing the environmental impacts of Resource Management Plan decisions.

**Recreation Opportunity Spectrum (ROS).** A continuum used to characterize recreation opportunities in terms of setting, activity, and experience opportunities. The spectrum contains six classes: Primitive, Semi-Primitive Non-Motorized, Semi-Primitive Motorized, Rural, Urban, Residential Beach.

**Resource-Based Outdoor Recreation.** Resource-based outdoor recreation is dependent on some particular element or combination of elements in the natural or cultural environments. Examples would be hunting, fishing, camping, boating, and studying nature.

**Right-of-Way.** The public or federal land authorized to be used or occupied pursuant to a right-of-way grant.

**Right-of-Way Grant.** A document authorizing the use of public or federal lands for the construction, operation, maintenance, and termination of a project (e.g., utility line, road).

**Riparian.** Situated on or pertaining to the bank of a river, stream, or other body of water. Normally used to refer to the plants of all types that grow rooted in the water table of streams, ponds, and springs.

**Riparian Area.** Riparian areas are a form of wetland transition between permanently saturated wetlands and upland areas. These areas exhibit vegetation or physical characteristics reflective of permanent surface or subsurface water influence. Excluded are such sites as ephemeral streams or washes that do not exhibit the presence of vegetation dependent upon free water in the soil.

**Scoping Process.** An early and public process for determining the nature, significance, and range of issues to be addressed related to a proposed action.

**Significance.** A high degree of importance as indicated by either quantitative measurements or qualitative judgments. Significance may be determined by evaluating characteristics pertaining to location extent, consequences, and duration.

**Silviculture.** The art, science, and practice of establishing, tending, and reproducing forest stands of desired characteristics.

**Soil Association.** A mapping unit used on general soil maps in which two or more defined taxonomic units occurring together in a characteristic pattern are combined because the scale of the map or the purpose for which it is being made does not require delineation of the individual soils.
Soil compaction. The compression of soil when activities such as hiking, horse riding, or camping packs soil tighter than it is normally packed. Compaction can reduce the potential for water flow within the soil, forcing water to the soil surface (“A Strategic Plan,” 1995).

Special Recreation Management Area (SRMA). An area where special management or intensive recreation management is needed. Recreation activity plans are required, and greater managerial investment in facilities or supervision can be anticipated.

Special-Status Species. Wildlife and plant species either federally listed or proposed for listing as endangered or threatened, state-listed, BLM-determined priority species, or listed by the State Heritage organization.

Species of Concern. Species that are not yet listed as endangered or threatened, but that are undergoing a status review. This may include species whose populations are consistently and widely dispersed or whose ranges are restricted to a few localities, so that any major habitat change could lead to extinction. A species that is particularly sensitive to some external disturbance factors.

Threatened Species. Any species formally recognized by the Fish and Wildlife Service as likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

Unique Farmland. Land other than prime farm land that is used for the production of specific high value food and other fiber crops. It has the special combination of soil quality, location, growing season, and moisture supply needed to economically produce sustained high quality and/or high yields of a specific crop when treated and managed according to acceptable farming methods. Examples of such crops are citrus, tree nuts, olives, cranberries, fruit, and vegetables.

User-Oriented Outdoor Recreation. User-oriented outdoor recreation can be provided almost anywhere for the convenience of the user. Examples of user-oriented outdoor recreation would be golf, tennis, baseball, archery, skeet, and playground activities.

Visual Resource Management (VRM). The planning, designing, and implementation of management objectives for maintaining scenic value and visual quality on public lands.

Wetlands. Areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

Wild Horses and Burros (WH&B). The definition of wild horses and burros is taken from Federal Regulations, which state, “wild horses and burros means all unbranded and unclaimed horses and burros that use public lands as all or part of their habitat, that have been removed from these lands by the authorized officer, or that have been born of wild horses or burros in authorized BLM facilities, but have not lost their status under section 3 of the Act. Foals born to a wild horse or burro after approval of a Private Maintenance and Care Agreement are not wild horses or burros. Such foals are the property of the adopter of the parent mare or jenny. Where it appears in this part the term wild horses and burros is deemed to include the term free-roaming 43 CFR 4700.0-5 (l).”

Woodland. Forest land on which trees are present but form only an open canopy, the intervening areas being occupied by lower vegetation. Forest lands which produce or are capable of producing no more than 20 cubic feet per acre per year of commercially important tree species.
## Acronyms and Abbreviations

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<th>Acronym</th>
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<tr>
<td>ACEC</td>
<td>Areas of Critical Environmental Concern</td>
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<td>AMA</td>
<td>Academy of Model Aeronautics</td>
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<td>ASI</td>
<td>Analytical Services Incorporated</td>
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<td>ATV</td>
<td>All Terrain Vehicle</td>
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<td>Bureau of Land Management</td>
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<td>BMP</td>
<td>Best Management Practice</td>
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<td>CBPA</td>
<td>Chesapeake Bay Preservation Act of 1988</td>
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<td>Code of Federal Regulations</td>
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<td>COE</td>
<td>Army Corps of Engineers</td>
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<td>DGIF</td>
<td>Virginia Department of Game and Inland Fisheries</td>
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<td>Department of the Interior</td>
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<td>EA</td>
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<td>Finding of No Significant Impact</td>
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<td>FLPMA</td>
<td>Federal Land Policy and Management Act of 1976</td>
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<td>General Service Administration</td>
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<td>Land Use Plan</td>
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<td>Off Highway Vehicle</td>
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<td>Planning Analysis/Environmental Assessment</td>
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