



**U.S. Department of the Interior  
Bureau of Land Management**

**Eastern States**

**June 2004**



# **Meadowood Special Recreation Management Area**

## **Integrated Activity Management Plan/ Environmental Assessment**



## **BLM Mission Statement**

The 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.

## **Eastern States Vision Statement**

As Guardians of the Past, and Stewards for the Future, Eastern States is committed to sustaining the health, diversity, and productivity of the public lands spanning the 31 states east of and bordering the Mississippi River for present and future generations.

## **Eastern States Mission Statement**

BLM-Eastern States will play a central role in the management and conservation of public lands and their resources in the 31 eastern states to enhance the quality of life for present and future generations.



# United States Department of the Interior

## Bureau of Land Management

Eastern States  
Lower Potomac Field Station  
10406 Gunston Road  
Lorton, VA 22079  
<http://www.es.blm.gov>



IN REPLY REFER TO:  
1220 (915) (P)

May 28, 2004

Dear Reader:

Thank you for your continued interest in the Bureau of Land Management-Eastern States (BLM-ES) Meadowood Special Recreation Management Area (SRMA). This *Integrated Activity Management Plan/Environmental Assessment* (IAMP/EA) represents an exciting step forward in making the Meadowood SRMA a popular destination for local and regional visitors.

The document describes in detail the program activities in the *Meadowood Farm Planning Analysis* approved in March 2003. It also reflects the input stemming from the many on-going discussions over the past year between BLM-ES and active citizens on the Mason Neck Peninsula, and our partners from Fairfax County Government and the Commonwealth of Virginia.

The decisions in the Meadowood SRMA IAMP may be appealed within 30 days of receipt of this document. You may appeal to the Interior Board of Land Appeals, Office of the Secretary, in accordance with the regulations contained in 43 CFR, Part 4. The appellant has the burden of showing that the decision being appealed is in error.

It is possible to request a stay of effectiveness of this decision during the time the Board is reviewing your appeal. You must file a petition pursuant to regulation 43 CFR 4.21 accompanying your notice of appeal. The stay petition is required to show sufficient justification based on these standards:

1. The relative harm to the parties if the stay is granted or denied,
2. The likelihood of the appellant's success on the merits,
3. The likelihood of immediate and irreparable harm if the stay is not granted, and
4. Whether the public interest favors granting the stay.

If you have any questions about the plan, feel free to contact me at (703) 339-3461. I look forward to continuing these dialogues as we implement the decisions from this activity plan.

Sincerely,

Gary Cooper  
Lower Potomac Field Station Manager

## Finding of No Significant Impact

Based on the analysis of potential environmental impacts contained in the attached environmental assessment, I have determined that the impacts are not expected to be significant. Therefore, the preparation of an environmental impact statement is not required.

## Decision Record

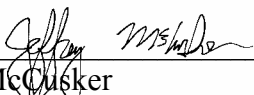
It is my decision to approve the Meadowood SRMA Integrated Activity Management Plan/Environmental Assessment (IAMP/EA).

Rationale: This EA has analyzed the actions in the IAMP/EA which will be implemented in accordance with the goals and objectives of the *Meadowood Farm Planning Analysis/EA*, and impacts from these actions can be mitigated.

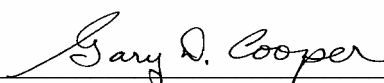
Approval of the Proposed Action will provide for the safe and enjoyable public use of Meadowood SRMA. It will also provide for protection of natural and cultural resources in accordance with Federal, State, and local laws.

### *Approval*

Recommended by:

  
\_\_\_\_\_  
Jeff McCusker  
Outdoor Recreation Planner  
BLM-Eastern States, Lower Potomac Field Station

\_\_\_\_\_  
5-28-04  
Date

  
\_\_\_\_\_  
Gary Cooper  
Field Station Manager  
BLM-Eastern States, Lower Potomac Field Station

\_\_\_\_\_  
5-28-04  
Date

Meadowood Special Recreation Management Area  
Integrated Activity Management Plan/Environmental Assessment

U.S. Department of the Interior

Bureau of Land Management

Eastern States

Lower Potomac Field Station

June 2004

## Table of Contents

	Page
Part 1 - Integrated Activity Management Plan .....	1
Section I. Introduction .....	1
Purpose of the Plan .....	1
Meadowood SRMA Facilities and Location.....	1
Physiography.....	1
Land Ownership.....	1
Population Centers.....	2
Vehicle and Visitor Access to Site.....	2
Other Nearby Recreation Facilities.....	2
Section II. Management Objectives and Standard Practices .....	3
Management Objectives.....	3
Standard Management Practices .....	3
Section III. Allowable Uses .....	6
Environmental Education.....	6
Volunteers and Partnerships .....	6
Accessibility.....	6
Recreation .....	7
Supplementary Rules/Access Restrictions.....	12
BLM Wild Horse and Burro Facility .....	13
Equestrian Partnerships.....	14
Private Horse Boarding.....	14
Digital Gateway .....	15
Riparian/Wetland and Ponds.....	15
Wildlife .....	15
Fisheries .....	16
Forestry .....	16
Section IV. Implementation and Monitoring Plan.....	17
Introduction.....	17
Public Education, Interpretation and Signage.....	17
Monitoring .....	17
Part 2 - Environmental Assessment .....	19
Purpose and Need .....	19
Conformance with Land Use Plan .....	19
Laws and Mandates Guiding the Management of Meadowood SRMA .....	20
Proposed Action and Alternatives .....	21
Affected Environment.....	21
Critical Elements of the Environment.....	22

## Table of Contents--continued

	Page
Part 2 - Environmental Assessment--continued	
Other Resource Impacts .....	27
Environmental Consequences of the No Action Alternative .....	39
List of Preparers .....	40
References .....	41
Glossary .....	G-1
Acronyms and Abbreviations .....	G-4
Appendix A	
Map 1 – General Location Map, Meadowood Special Recreation Management Area and Surrounding Areas	
Map 2 - Meadowood Special Recreation Management Area Activity Development Plan, Meadowood East Current Condition	
Map 3 - Meadowood Special Recreation Management Area Activity Development Plan, Meadowood West Current Condition	
Map 4 - Meadowood Special Recreation Management Area Activity Development Plan, Meadowood East 0 to 4 Years	
Map 5 - Meadowood Special Recreation Management Area Activity Development Plan, Meadowood West 0 to 4 Years	
Map 6 - Meadowood Special Recreation Management Area Activity Development Plan, Four Year Plan Objectives	
Map 7 - Meadowood Special Recreation Management Area Activity Development Plan, Vegetation Management	
Map 8 - Meadowood Special Recreation Management Area Activity Development Plan, Control Line Flying Area	

## **Part 1 - Integrated Activity Management Plan**

### **Section I. Introduction**

#### ***Purpose of the Plan***

This Integrated Activity Management Plan (IAMP) will authorize specific activities for the Meadowood Special Recreation Management Area (SRMA) in accordance with the *Meadowood Farm Planning Analysis/Environmental Assessment (PA/EA)*, and further expands on the allowable uses in that Plan. The vision for the management of the Meadowood SRMA is to focus on three core programs: recreation, environmental education/interpretation, and wild horses and burros. These core programs will be balanced with the management of natural and cultural resources.

The Environmental Assessment (EA) in Part 2 will document the analysis of impacts of the authorized activities on the quality of the human environment as the Preferred Alternative, as required by the National Environmental Policy Act (NEPA) of 1969.

#### ***Meadowood SRMA Facilities and Location***

The Meadowood SRMA is located in Fairfax County, Virginia, along Gunston Road in Lorton (see Appendix A, Map 1). The property is approximately 800 acres and is bordered by Gunston Road, Harley Road, Old Colchester Road, and Belmont Boulevard (see Appendix A, Maps 2 and 3). Meadowood SRMA consists of wooded acreage and open pastures. Support buildings on the property include a stable and indoor riding arena, office building, maintenance sheds, and blacksmith shed. There are four former residences on the property, one of which is scheduled to be demolished. Three of the residences are being converted to include office space, temporary quarters, and an Environmental Education (EE) and Interpretive Center.

There is a network of bladed, graveled 8-foot-wide farm roads through the property, which are planned to be used as recreational trails.

#### ***Physiography***

Meadowood SRMA is in the Coastal Plain Province, which is characterized in Virginia by broad rolling hills and moderate slopes. Topography of the Meadowood SRMA is characterized by gently rolling hills to relatively flat upland areas.

#### ***Land Ownership***

The Meadowood Farm was privately owned until the Department of the Interior (DOI), Bureau of Land Management (BLM), acquired it on October 18, 2001, under the authority of the 2001 Washington, D.C. Appropriations Act.<sup>1</sup> Section 165 of this Act authorized a complex set of land transactions facilitated by Fairfax County. These resulted in the

---

<sup>1</sup> This law 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).



acquisition of Meadowood Farm by BLM in exchange for federally-owned land in the former Lorton Correctional Complex.

### ***Population Centers***

Meadowood SRMA is located in the Washington, D.C.– Northern Virginia metropolitan area. Over five million people live in this region (Census Bureau 2000 data).

### ***Vehicle and Visitor Access to Site***

Access is from Gunston Road, Old Colchester Road, and Belmont Boulevard. Interstate 95 and U.S. Highway 1 provide access to the Mason Neck Peninsula.

### ***Other Nearby Recreation Facilities***

There are three developed recreation areas in the vicinity of the Meadowood SRMA property:

#### **Mason Neck State Park**

This Park is managed by Virginia's Department of Conservation and Recreation and is approximately one-quarter mile south of the southern boundary of the Meadowood SRMA, 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. There are 3 miles of self-guided hiking trails (no bridle paths) and an environmental education/visitor center. The Park provides waterfront access into Belmont Bay on the Potomac River; however, car top boat launching is the only water-oriented activity at the Park.

#### **Pohick Bay Regional Park**

Pohick Bay Regional Park, about 1,000 acres, is also managed by the Northern Virginia Regional Park Authority (NVRPA) and is less than one-half mile east of the Meadowood SRMA. 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.

#### **Occoquan Regional Park**

The NVRPA manages 400 acres of recreational land 6 miles northwest of the Meadowood SRMA. Recreational features include fishing access points, a boat ramp, soccer fields, softball and baseball fields, picnic shelters, and hiking/walking trails.

#### **Other Planned Recreation Development on Mason Neck**

At this time the only known planned recreation development being considered in the vicinity of the Meadowood SRMA is the establishment of a bicycle path. Fairfax County is planning development of a bicycle path that would parallel Gunston Road (State Route 242). This road is adjacent to the northeast boundary of the Meadowood SRMA (Personal communication, Fairfax County recreation officials, 1998).

## **Section II. Management Objectives and Standard Practices**

### ***Management Objectives***

Management of the Meadowood SRMA will focus on three core programs: recreation, environmental education, and wild horses and burros. 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. Boarding of private horses will be allowed, as well as horse-related programs that the BLM determines are appropriate. A visitor center and WH&B holding facility will be developed.

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 user 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.

Management of cultural resources will focus on the identification of archaeological and historical properties, determination of eligibility for listing on the National Register of Historic Places and public interpretation. Protection of historic properties and mitigation of potential effects will be directed through compliance with the National Historic Preservation Act (NHPA) of 1966 (as amended).

### ***Standard Management Practices***

The following list of Standard Management Practices will be applied in addition to management constraints of the Proposed Action. Standard Management Practices are a combination of existing policies and Best Management Practices (BMPs), and includes determinations made during the development of the "Meadowood Farm Planning Analysis/Environmental Assessment" criteria. When not covered by statute or regulation, the rationale for implementing the standard management guidance is stated as:

- 1) Meadowood is 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 SRMA.
- 2) All future proposed surface-disturbing actions will be subject to the National Environmental Policy Act (NEPA).
- 3) Prior to surface disturbing activities at Meadowood SRMA, site-specific evaluations will be performed to determine the presence of significant resource values. Resources to be evaluated will include, but are not limited to, recreation, visual, soils, cultural/historical, wetlands/riparian, and federally- and state-listed special-status species.

- 4) No federally- or state-listed special status species are known to exist on the Meadowood SRMA. However, all management actions will comply with the Endangered Species Act of 1973, as amended. During the implementation of this IAMP, and prior to any surface disturbing or other activities that affect special status species, BLM will conduct site surveys and consult with the U.S. Fish and Wildlife Service and the Virginia Department of Game and Inland Fisheries.
- 5) Management actions will be conducted in conformance with the objectives of the Virginia Air Quality Implementation Plan. The State Air Pollution Control Board promulgates the State of Virginia's air regulations.
- 6) Management actions will be conducted in a manner conforming to the water-quality management objectives developed by the State of Virginia, as required by the 1987 Water Quality Act Amendments to the Federal Water Pollution Control Act.
- 7) Measures for minimizing impacts on and enhancing soil, water, riparian/wetlands, wildlife, and vegetation resources will be outlined through BMPs developed in coordination with partnering Federal, State, and local agencies. Included among the local guiding regulations for the BMPs is the Chesapeake Bay Preservation Act of 1988.
- 8) 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.
- 9) Protection of bald eagles and similar species will be accomplished in accordance with the Bald and Golden Eagle Protection Act.
- 10) Exotic, invasive species will be addressed in accordance with the National Invasive Species Act and the Executive Order on Invasive Species of 1999.
- 11) Meadowood SRMA is closed to commercial mineral leasing/development and mineral material sales.
- 12) 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 hazardous materials will be handled in accordance with the reporting, removal, and remediation requirements of the Comprehensive Environmental Response, Compensation and Liability Act.
- 13) Meadowood SRMA will not be available for disposal through sale or exchange and is designated a right-of-way avoidance area. In most cases, granting of rights-of-way for projects such as power lines and pipelines, or county, or State road projects, would not be compatible with current or future management objectives.

- 14) 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.
- 15) BLM will allow limited entry hunting 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, the Meadowood hunts will be coordinated with other land managers on the Mason Neck Peninsula, and Meadowood SRMA will be closed to the non-hunting public during the hunts.
- 16) BLM reserves the authority to implement user 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.
- 17) All areas, including trails, will be closed to motorized and non-motorized vehicle use, unless designated open. Use outside of designated open areas by motorized and non-motorized vehicles, equestrians, and pedestrian traffic will be prohibited to protect public safety and the resources.
- 18) Swimming in the ponds at Meadowood SRMA will not be allowed due to health and safety concerns.
- 19) 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 construct and maintain trails: BLM Trails Manual 9114 and H-9114-1, BLM Sign Handbook, USDA, Forest Service Trail Construction & Maintenance Notebook, USDA, Forest Service Wetland Trail Design and Construction Notebook, and The Virginia Greenways and Trails Toolbox.
- 20) 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.
- 21) All management actions will comply with the NHPA of 1966, as amended. During the implementation of this IAMP, and prior to any surface disturbing or other activities that may affect cultural resources, projects will be subject to the review and recommendations of BLM's Cultural Resources program, the Virginia Department of Historic Resources (DHR), and the Fairfax County Archaeology Program. All surveys will meet the professionally-recognized standards defined by the Department of the Interior and the State of Virginia DHR.

### **Section III. Allowable Uses**

This section describes the allowable management activities planned for Meadowood SRMA over the next 4 years (see Appendix A, Maps 4, 5, and 6). Implementation would be phased in gradually, dependent on available funding. Some actions may require additional engineering and environmental studies before they could be implemented.

#### ***Environmental Education***

BLM will develop and support EE programs and an Interpretive Center at the Meadowood SRMA. The exact nature of this program and any associated infrastructure will be determined through collaboration with partner groups, educators, and other interested parties.

These programs will provide diverse audiences opportunities to understand resource management goals and the importance of natural and cultural resources to individuals and communities in a variety of indoor and outdoor settings. Staff will work with students and teachers to provide science education with programs and materials on Virginia, public lands, and natural resources.

The EE and Interpretive Center will use the infrastructure and natural resources at the site to provide outdoor learning experiences for people of all ages. The purpose of the Center will be to promote land stewardship, and the Center will serve as a regional resource for environmental education.

#### ***Volunteers and Partnerships***

Volunteers and partners will be needed to help develop, manage, and operate the various programs at Meadowood SRMA. The BLM will enter into partnerships with Federal, State, county, and non-profit organizations to achieve mutual resource management, educational, and interpretive goals. The partnerships may consist of state and local agencies, elementary, middle and high schools, home-schooled children, colleges, universities, friends groups, churches, Girl Scouts and Boy Scouts, and community groups.

#### ***Accessibility***

The BLM is required to comply with two Federal laws in making its facilities and programs accessible to all:

- Architectural Barriers Act (ABA) (Public Law 90-480) - This Act, passed in 1968, requires that all buildings and facilities constructed in whole or in part by Federal funds must be accessible to, and usable by, physically disabled persons. This includes any construction, renovation, restoration, remodeling, or site development completed by the agencies.
- Section 504 of the Rehabilitation Act of 1973 (P.L. 93-112), as amended. Section 504 states that all Federal programs, activities, and services must be accessible to disabled visitors, including those with physical, hearing, visual, and learning

impairments (federally-assisted programs must also comply with this Section). DOI regulations for implementation of this law were issued in 1982.

The BLM is committed to making its programs and facilities accessible to disabled visitors. BLM will be conducting evaluations at the Meadowood SRMA, identifying access deficiencies, developing action plans, and completing retrofits. New facilities will be built using universal design principles.

## ***Recreation***

### ***Camping***

Public camping is not allowed at Meadowood SRMA. BLM-sponsored environmental education events may allow for group camping without a permit if the participants are involved in an activity covered by a Memorandum of Understanding, Partnership Agreement, or Sponsorship Agreement with the BLM. Camping allowed in conjunction with an environmental education program will take place near the EE and Interpretive Center. Fees may be charged to the partner organization depending on the nature of the agreement to cover staff costs for monitoring and security as well as building access, site preparation, and clean up.

### ***Fishing***

Public fishing will be allowed adjacent to the EE Center and *Wood Thrush Trail* according to Commonwealth of Virginia Fishing Regulations. Additional pond fishing may be allowed at the pond adjacent to Gunston Road in the future, depending on demand for the activity and other designated uses in that area. There will be access to the pond from the EE Center along a pedestrian only, wheelchair accessible path. A wheelchair accessible fishing pier/viewing deck will be built parallel to the shore on the west side of the pond. This pier will accommodate pedestrians and individuals in wheelchairs interested in fishing, or enjoying the sites and sounds from the pier.

To ensure a quality experience and avoid overcrowding, individuals fishing at Meadowood SRMA may be required to sign in and out at the EE Center. A capacity limit may be set to limit the number of people who can fish at one time. The purpose of a capacity number is to maintain a safe, quality recreation experience and to protect the fishery resource. Signs will be posted at the pond to indicate the species, size, weight, and number of fish that individuals are allowed to keep. Fish that do not meet the posted criteria, or are in excess of the allowed limit, must be released back into the pond.

### ***Use of Control Line Model Airplanes***

Flying control line model airplanes (defined for this Plan as a tethered model, not controlled by a remote device, used for entertainment or educational purposes only, with an engine displacement of 1 cubic inch or less, or an electric motor with an equivalent or lower power rating) will be allowed on Meadowood SRMA's western parcel in Field #1 on the two circles, where the activity had occurred when the parcel was privately owned (see Appendix A, Map 8).

The established circles will be used for flying as the area had previously been modified for this purpose, and meets the requirements of the activity (see Appendix A, Map 8). Additionally, the tree-lined location provides a sound buffer to the surrounding neighborhood. A club which previously used the site, Northern Virginia Control Line Association (NVCL), has a small shed at the flying circles to house maintenance equipment for the circles. BLM may enter into an agreement with NVCL to allow the shed to remain, and for the group to maintain the flying circles using equipment stored in the shed.

Control Line flying will be permitted at the Meadowood SRMA during the years 2004-2005 from July 1, through March 31, from 8:00 a.m. to sunset, a maximum of 3 days per week, initially Tuesdays, Fridays, and Saturdays. The days of the week available for flying may be changed by the Lower Potomac Field Station Manager (LPFSM) based on visitor use.

During the periods from April 1 through June 30, 2004, and April 1 through June 30, 2005, a breeding bird survey will be done in the western parcel to meet Federal responsibilities under the Migratory Bird Treaty Act, and Executive Order 13186. During this period, control line flying will be allowed in the field north of the visitor center on Belmont Boulevard at a site located 50 feet from the *Wood Thrush Trail* access on the west side and 180 feet from the trail on the north. Flying will allowed one day per week, initially on Saturdays. The Lower Potomac Field Station Manager may change flying times to accommodate other visitor use.

During the 2004 breeding bird survey, the western parcel will be closed to the public. Limited use may be allowed during the 2005 breeding season, depending on an evaluation by the BLM. When the results of the 2004 and 2005 breeding surveys have been evaluated, the BLM will determine periods of use in Open Field #1 for subsequent years.

Mitigation of potential resource damage and user safety issues necessitates the implementation of restrictions for control line flying at Meadowood SRMA. The following rules will apply:

1. On-site storage of fuel or accelerants, such as gasoline, is prohibited due to the fire potential. Field #1 will be a no smoking area in efforts to minimize the potential for a wildfire. BLM reserves the right to rescind access to this area for control line model airplane flying if these and other established rules are not followed to ensure the protection of the resources and visitors.
2. Vehicles will only be permitted on the established access road to the Field #1. A parking area will be established to the east side of the northern flying circle. Overflow parking will be available northeast of the flying site at the old chipping mill. BLM will post signs with use rules and restrictions in this area.
3. Special control line flying events (e.g., competitions, educational events, or those with an entry fee, etc.) will require a Special Recreation Permit (SRP) as detailed in the SRP section below.

***Trails-Pedestrian***

This Plan calls for a number of single- and multi-use trails to be maintained and developed during implementation (see Appendix A, Map 6). Pedestrian trail use will be allowed on posted trails within the hours of operation at Meadowood SRMA. Pedestrian trail use is defined as walking, hiking, or jogging. To provide a variety of recreation opportunities while minimizing user conflicts, compatible trail activities will share trails in part or whole. Uses that may cause potential user conflicts and visitor safety risks will occur on separate trails. Pedestrian trail users will share some trails with equestrian users, and other trails with non-motorized passenger vehicles. Multi-use trails will have appropriate signage and instruction on how to safely meet others along the trail to reduce user conflicts and potential safety issues. New trails will be constructed to connect the eastern and western parcels. Another new trail may be constructed to connect the wayside information kiosk planned for Gunston Road with the rest of the trail system at Meadowood SRMA.

BLM will implement seasonal and/or temporary restrictions and closures as needed to minimize resource impact during wet seasons, wildlife mating season, maintenance, etc. A trail monitoring and maintenance program will be developed and implemented to assess trail conditions on an ongoing basis. Changes to access will be clearly posted for visitors at trailheads. Updated trail and site conditions will be available daily on a recorded telephone message. Pedestrian trail use will not require check-in at the EE Center or a permit.

Along the trail system, BLM will develop interpretive signs to educate visitors on cultural sites, vegetation, and wildlife. Additionally, BLM will identify wildlife watching areas where visitors can safely observe animals in their natural habitat.

***Trails-Equestrian***

Public, equestrian trail use (defined as horseback riding) will be allowed on posted trails at Meadowood SRMA. These trails will be open to public access based on demand, sustainability, trail/resource condition, and visitor safety. Additional trails for pedestrian/equestrian use may be developed north of the main East–West trail on the western parcel. Consideration for developing additional trails will depend on demand, sustainability, trail and resource condition, and visitor safety. A connection trail is planned for access between the western and eastern Meadowood parcels with a road crossing at Belmont Boulevard.

Existing equestrian trails on Mason Neck include those located on private and public, county, and State lands (e.g., Pohick Bay Regional Park Trail System) as well as the planned Fairfax County multi-use trail along Gunston Road. The addition of equestrian trails at Meadowood SRMA will enhance trail riding opportunities for local equestrians as well as equestrians who will trailer their horses to the area to trail ride. Trails will be routed around the horse boarding stables and wild horse and burro corrals in order to avoid potential health or safety conflicts.

Activities that may cause potential user conflicts and visitor safety risks will occur on separate trails or areas. For visitor safety, mountain biking will not be allowed on trails with equestrian access; however, it may be necessary for these trails to intersect. Trail intersections will be well signed, and bicyclists will be required to dismount, wait for any



equestrian traffic to clear, and then walk their bikes across the intersection before continuing their ride. Multi-use trails will have appropriate signage and instruction on how to safely encounter other users along the trail (e.g., yield triangles) and informational brochures will be available at kiosk(s) and visitor contact points.

The surfaces of the existing trails and interior roadways are comprised of the native sandy soils and pebbles. This trail surface is ideal for horses and will be maintained by grading. Where needed, more sandy soil fill material will be added. Drainage bars may be installed along sloping trails to divert surface water runoff and minimize surface erosion. Trail segments which are located in low, poorly drained areas will be enhanced with sandy gravel fill or may be re-routed to higher ground. Interior roadways may be crowned and ditched to control surface erosion. Additional erosion control measures will be identified and used where appropriate.

BLM may limit trail access due to seasonal or temporary conditions in order to ensure visitor safety, maintain trail surfaces, and minimize impacts during wet or inclement conditions, or wildlife mating seasons. Trail closures or restrictions will be clearly posted at trail access points and available on an updated recorded telephone message at Meadowood SRMA.

### ***Trails-Motorized Passenger Use***

Motorized passenger use trail activities are not allowed at Meadowood SRMA. Trails-motorized passenger use refers to any motorized conveyance, including but not limited to vehicles with combustion engines, and electric, solar, hydrogen, or battery power.

### ***Trails-Non-Motorized Passenger Use***

As proposed in the *Meadowood Farm PA/EA* (November 2002), these activities will be allowed. Non-motorized passenger use trail activities are defined as mountain biking and horse-drawn carriages and carts. These activities may be seasonal depending on trail conditions and will be restricted to designated areas and times to minimize user conflicts, safety issues, and resource degradation.

Mountain biking may be allowed at designated times and areas on Meadowood SRMA's western parcel, based on demand for the activity and site conditions. For visitor safety, the trail would be shared with pedestrians only. Mountain biking would not be allowed on trails with equestrian access; however, it may be necessary for these trails to intersect. Trail intersections would be well signed, and mountain bikers would be required to dismount their bikes, wait for any equestrian traffic to clear, and then walk their bike across the intersection before remounting to ride again. Multi-use trails will have appropriate signage and instruction on how to safely meet others along the trail (yield triangle) to avoid user conflicts and potential safety issues.

### ***Equestrian Facilities***

BLM will construct an outdoor riding ring (i.e., arena). The new outdoor riding ring, as well as the existing indoor riding arena, will be available for scheduled educational events, such as training clinics in support of the Wild Horse and Burro (WH&B) Adoption and Compliance program and public educational programs such as 4-H and Pony Club Riding Programs. It is

anticipated that these facilities would be built on the 0 to 4-year timeframe, with the exact locations within Fields 4 and/or 5 still to be determined (see Appendix A, Map 4). The availability of the indoor arena for outside public use is anticipated to be limited as long as private horse boarding is present. The outdoor arena will also be available for competitive and educational events, such as day shows or competitions, and training clinics by these non-profit, educational organizations; however, larger horse shows and events for the general equestrian public will not take place. The size of events will depend on the parking available in Fields 4 and 5 (see Appendix A, Map 4). The outdoor riding ring will likely be located in the vicinity of the stables or near the wild horse and burro corrals, and would be available to use through issuance of a Special Recreation Permit (SRP) by the BLM.

### ***Special Recreation Permits***

The LPFSM will issue SRPs for commercial, competitive or group recreation activities according to 43 CFR Parts 2930 et al. published in the Federal Register on October 1, 2002. The following Supplemental Rules will also apply:

- 1) To protect the site and users, the following activities will not receive SRPs at Meadowood SRMA:
  - a) Activities involving motorized vehicles, other than to access the site on designated roads;
  - b) Activities involving the use of firearms, other than for hunting during periods approved by the BLM; and
  - c) Activities involving model rocketry or explosive devices.
- 2) A SRP at Meadowood SRMA will be needed when (additional to criteria in 43 CFR 2930):
  - a) The LPFSM determines that any part of the site must be closed to the public for the proposed activity to be conducted safely;
  - b) The LPFSM determines that the proposed activity will require BLM staff time outside of normal working hours for permit to be issued or the activity to be monitored;
  - c) The proposed activity involves surface disturbance in undisturbed areas;
  - d) The proposed activity will require exceeding the capacity of available designated parking spaces in the SRMA or surrounding areas; and
  - e) The LPFSM determines that the proposed activity may disrupt BLM horse-related activities.
- 3) Additional guidelines:
  - a) An applicant may request alternate rain days or locations for a one-time event. BLM will require an event plan with all SRP applications; and
  - b) Permits will be required for any equestrian driving (horse drawn carriages and carts) and all competitive equestrian events and will be considered by BLM on a case-by-case basis.

### ***Supplementary Rules/Access Restrictions***

The Meadowood SRMA trails will be open to the public daily from sunrise to sunset throughout the year. The BLM offices and designated administration sites will be open as designated by the BLM. Initially, access may be restricted due to visitor safety concerns and staff availability. Fences and gates will be installed where administrative access would be issued. Users found violating regulations may be cited under various BLM authorities.

Motor vehicle use to the public in the Meadowood SRMA is limited to the following access roads and areas (see Appendix A, Map 4):

1. The established road from Old Colchester Road to the flying circles in the west parcel, when that area is open to the public;
2. The gravel road from Belmont Boulevard to the paved visitor contact parking area;
3. The paved road from Gunston Road to the graveled parking areas at the horse barn and BLM compound is open for BLM employees, official visitors, and boarders or their guests only. No unauthorized vehicles are permitted south of the main BLM office in this area; and
4. The gravel road from Gunston Road to the Mustang Trail and areas 4, 5, 6, and 7 will only be open as needed for horse adoptions or other special activities.

### ***Administrative Sites***

The areas shown on the maps in Appendix A as “Administrative Areas” shall be used for BLM administrative purposes, and will be open to the public on a limited basis, at times and for purposes established by the LPFSM. These areas are:

1. The BLM compound east of the indoor horse arena and horse stalls at 10406 Gunston Road, including cleared areas up to the fenced horse pastures;
2. The indoor horse arena and stalls at 10406 Gunston Road;
3. The house, garage, and manure disposal area located on the western edge of Field #5; and
4. The landscaped area around the EE and Interpretive Center at 10705 Belmont Boulevard.

### ***Parking***

See Appendix A, Maps 4 and 5 for general location of existing and proposed parking areas.

**Western Parcel**

**Field #1.** Up to six parking spaces will be available for passenger vehicles (e.g., cars, SUVs). The surface will be gravel or paving stones to allow water infiltration. The primary use for parking in this area is for participants in control line flying.

**“Overflow” Parking at the Chipping Mill.** Up to 14 parking spaces will be available for vehicles.

**Belmont Boulevard Parking.** Four to six parking spaces will be developed to accommodate a combination of horse trailers and passenger vehicles. A cleared area with a gate currently exists, and may be expanded: the actual number of spaces will depend on the design factors at the site.

**Old Colchester Road.** Space for 2 vehicles is currently available. When the abandoned house is demolished and removed from the access road to Field #1, this site may be developed as a parking and picnic area. Trails will be routed around the horse boarding stables and wild horse and burro corrals in order to avoid potential health or safety conflicts.

**Gunston Road Wayside Information Kiosk/Parking.** The exact location of the site will depend on negotiations with the Virginia Dept. of Transportation. The site will provide information for recreationists visiting all the recreation sites on Mason Neck and could serve as a trailhead for the Meadowood trail system.

**Eastern Parcel**

**Harley Parking (Field #6).** Ten to 12 parking spaces will be developed to accommodate vehicles with horse trailers.

**Temporary Special Event Parking (Field #6).** Thirty to 60 parking spaces, suitable for horse trailers, will be provided based on demand. Design will minimize disturbance to the meadow and visual impacts.

**Contact Station NW Parking.** Seven parking spaces are currently available for vehicles.

**Contact Station SE Parking.** A multi-use parking area will be developed to accommodate vehicles, (school) buses, plus four spaces for vehicles with trailers.

***BLM Wild Horse and Burro Facility***

BLM will build a wild horse and burro (WH&B) facility at Meadowood SRMA. The facility will be used to hold repossessed or unadopted animals as well as to hold WH&B adoptions several times a year and adoptions by appointment. This facility will be built along with a visitor center that will serve to educate the public about the BLM and its programs, and will provide an equine and resource management component to the environmental education programs offered at Meadowood SRMA.

The facility will be constructed to house up to 50 head; however, BLM plans to normally hold no more than 25 head per day, and more with adoption events. The WH&B facility will be located in the eastern open fields off Gunston Road in the vicinity of the easternmost residence building. The facility will be comprised of corrals and pastures, shelters, and an alleyway, loading area, and haltering chute. A kiosk or other educational display area will provide information to the public on the WH&B program. The exact location, and the final dimensions and layout of the corrals, will be dependent upon cultural surveys and clearance for the site. There may be support structures needed for feed and equipment storage. The entire facility will be located to reduce visual impacts from Gunston Road. Access to the facility will likely be the existing driveway off Gunston Road. Parking for adoptions may be located on open ground near the corrals, or off of Harley Road. Access will be monitored and controlled at all times to ensure animal and visitor safety.

### ***Horse Manure Composting***

The WH&B facility, equestrian partnerships, and boarding operations described below will all result in a significant amount of horse manure being generated at Meadowood on a daily basis. Davis and Swinker (2002) state that an average 1,000-pound horse produces 50 pounds of manure per day. With 75-100 head of total horses at Meadowood, this could generate as much as 900 tons of manure per year. The BLM will work with Federal and State Agricultural specialists to develop a manure composting system to generate compost for use on fields at Meadowood SRMA, and to generate revenue for the government.

### ***Equestrian Partnerships***

BLM will enter into partnerships with Federal, State, county, and non-profit organizations at Meadowood SRMA. These partnerships may include providing stabling, facilities and pastures for Federal and other public service or non-profit organizations' horses as well as providing a location for training. In the event that the existing stable housed both private boarders (see section below) and BLM partners, BLM will establish rules for joint use of the indoor arena and other common areas. Every effort will be made to reduce use conflicts between the different groups. BLM will remain the final decision maker in cases of disagreement between different groups.

The incorporation of partners' horses into the existing facilities will require that BLM cross-fence existing pastures in order to separate various groups of horses. Private horses would be separated from partner horses in the pastures, as well as in the barn, in order to reduce potential injuries. Additional stabling, pastures and other facilities may be constructed at Meadowood SRMA.

BLM received supportive comments from the public to consider therapeutic riding at Meadowood SRMA. BLM will consider requests by the Northern Virginia Therapeutic Riding Association for a location of such a uniquely beneficial program at Meadowood SRMA.

### ***Private Horse Boarding***

Approximately 46 privately owned horses currently board at the Meadowood SRMA. The owners of the horses use the indoor riding arena, as well as the trails and an outside riding

area. Horse boarding may continue under a concession lease, permit, contract, or agreement. The boarding facilities would include portions of the large stable and indoor arena, as well as portions of the horse grazing pastures. The pastures will be cross-fenced (divided) to allow more flexibility in groups of animals turned out and to afford better pasture management through grazing rotation.

Additional support structures may be built to support boarding and other equine operations at Meadowood SRMA. These will include a separate hay storage building in order to reduce the risk of fire in the stable. A temporary manure storage area will be constructed. Run-in sheds may be built in some pastures to provide shelter to animals during inclement weather.

### ***Digital Gateway***

A BLM Digital Gateway/Interpretative Center may be constructed through partnerships (see Appendix A, Map 4) that will include a “digital gateway” which will provide live, interactive visual and audio broadcasts of land management activities throughout the United States to participants in a theater or conference setting at the Meadowood SRMA visitor center. The digital gateway will provide an avenue for informing and educating the public about land management and stewardship issues.

### ***Riparian/Wetland and Ponds***

Resource commitments and project-by-project mitigation measures to protect riparian resources will be made where there is increased land disturbance and impacts from use. Trail and facility construction would be completed to avoid short- and long-term impacts on riparian/wetland areas. Exotic invasive species such as Japanese stilt grass will be removed and replaced with native seed mixes and plantings to improve riparian habitat.

All riparian/wetland protection and improvements will be conducted in accordance with Best Management Practices (BMP) developed in coordination with partnering Federal, State, and local agencies, and under the Chesapeake Bay Preservation Act of 1988. Also, some riparian improvement projects will be implemented to speed riparian habitat recovery where needed. Periodic intensive maintenance will keep sediments and aquatic vegetation from filling-in the ponds. Maintenance will be coordinated with the Virginia Department of Game and Inland Fisheries.

### ***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. In addition, deer population control in coordination with the Virginia Department of Game and Inland Fisheries will help to protect and enhance forest biodiversity. See Appendix A, Map 7 for a vegetation map showing wildlife habitats.

At least 50 acres of existing hayfields will be converted to native grassland. Wildlife habitat will be further improved through the creation of forest edges within grassland windrows. BLM will conduct intense grassland management along with other IAMP activities. An indicator of success of the vegetation conversion will be the increased activities and presence of bobwhite quail and selected grassland songbirds. Eastern bluebirds and other edge-using

species would also benefit. Species requiring larger blocks of grassland (such as some ground nesting birds) would not benefit from these improvements. The conversion of historic hayfields to native grasslands would temporarily disrupt some wildlife use patterns; however, long-term benefits would outweigh these temporary displacements. Conversion to warm season native grass/prairie-type area is best done in phases. Once established, these grasslands would provide better habitat quality for many species of wildlife.

Prescribed fire and broadcast or drill-seeding are the recommended tools for creation and maintenance of the grasslands. Maintenance cycles would be 3 to 5 years to allow time to optimize structural diversity of habitats.

### ***Fisheries***

The stream fishery will be improved by 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 through cooperative use of local technical management expertise. The BLM has entered into a Memorandum of Agreement with the State of Virginia for angler and fishery management on two of Meadowood SRMA's three ponds. Initially, fishing will be allowed only at the pond adjacent to the EE Center.

### ***Forestry***

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

## **Section IV. Implementation and Monitoring Plan**

### ***Introduction***

Plan implementation consists of on-the-ground facility and program development, additional site assessment and resource monitoring to ensure that plan goals and objectives are being met. The implementation period for the IAMP is 4 years, subject to available funding and staff resources. Monitoring may also reveal the need for plan amendments or decisions to not implement certain activities because of resource impacts or conflicts.

### ***Public Education, Interpretation and Signage***

To protect Meadowood SRMA's natural and cultural resources, provide for public health and safety and to provide an enjoyable outdoor recreation experience, the following informational materials and signage will be used:

1. Various media including newspaper, radio, television, and the Internet will be used to inform the public about route designations. Maps will be made available to the public and routes and suggested modes of travel will be indicated on these maps in addition to "Tread Lightly" information.
2. Additionally, the BLM-Eastern States' Meadowood SRMA Web site will contain information about recreation opportunities and the associated management measures for those activities. The Web site will also provide a local telephone number with information updated on an as needed basis, including current park hours, temporary and seasonal trail/site closures, maintenance activities, educational events, and other pertinent visitor information.
3. A wayside kiosk will be constructed on BLM property along Gunston Road along with signs off-site on major highways in partnership with the other recreation providers on Mason Neck: Mason Neck National Wildlife Refuge, Mason Neck State Park, Mason Hall, and the Northern Virginia Regional Park Authority, Pohick Bay Regional Park. Signs will be placed onsite to post use regulations and guide visitor use.

### ***Monitoring***

The success of management actions to accomplish management goals can only be determined based on monitoring.

BLM maintains the authority to temporarily or permanently, partially, or completely suspend any activity at Meadowood SRMA based on actual or potential safety issues and adverse resource impacts. BLM will develop and implement a monitoring system to provide information that will assist management in making resource decisions. The monitoring system will be adaptable and applicable to all uses at Meadowood SRMA. The monitoring system will be designed to identify and address emerging situations that may adversely impact the resource and/or visitor experience. The following are some of the components that will be included in the monitoring system: identification of key monitoring issues,



monitoring questions, limits of acceptable change (LAC) and the indicators that will trigger action when surpassed, evaluation timing, personnel required to collect and evaluate the monitoring data, report findings, and recommend adjustment/mitigation measures.

All routes and uses remain under a "conditionally open" status. The designated uses will be allowed only if the use does not impair the condition and health of the land. The uses would be scrutinized more intensely by BLM monitoring if it is determined necessary by the authorized officer.

Based on monitoring, or on any of the above discussion, restrictions on travel may be adjusted if the impacts or expected results are not occurring.

## Part 2 - Environmental Assessment

**Title:** Meadowood Special Recreation Management Area (SRMA) Integrated Activity Management Plan/Environmental Assessment (IAMP/EA)

**EA Number:** ES-020-04-06

**Date Prepared:** May 28, 2004

**Prepared By:** Bureau of Land Management-Eastern States (BLM-Eastern States)  
Lower Potomac Field Station

**Contact:** Howard Levine, BLM-Eastern States, Planning and Environmental Coordinator

**Phone:** (414) 297-4463

**E-mail:** [howard.levine@blm.gov](mailto:howard.levine@blm.gov)

**Lands Involved:** Meadowood SRMA, Lorton, Virginia

**County:** Fairfax

**State:** Virginia

**BLM Office:** BLM-Eastern States Lower Potomac Field Station

**Proposed Action:** See Section II – Allowable Uses – Meadowood SRMA IAMP.

### ***Purpose and Need***

The BLM NEPA Handbook directs that, all internally or externally Proposed Actions on or affecting public lands or resources, under BLM jurisdiction, must be reviewed for NEPA compliance. Environmental concerns must be assessed in an environmental document, i.e., an Environmental Assessment (EA) and, if warranted, a detailed Environmental Impact Statement (EIS).

### ***Conformance with Land Use Plan***

The IAMP consists of actions that conform with the approved land use plan for the Meadowood SRMA (*Meadowood Farm PA/EA*, November 2002). The State Director signed the Decision Record on March 25, 2003.

The *Meadowood Farm PA/EA* contains the broad environmental analysis of activities approved for Meadowood SRMA. This EA provides additional information onsite for specific activities to meet the broad planning goals and objectives.

## ***Laws and Mandates Guiding the Management of Meadowood SRMA***

The following laws, policies, and regulations guide management on the Meadowood SRMA:

Federal Land Policy and Management Act (FLPMA) of 1976 – Public Law 94-579, 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 the public land.

National Environmental Policy Act (NEPA) of 1969 – The NEPA requires that all Federal agencies conduct detailed planning in full consultation with the public on any action that may significantly affect the quality of the human and natural environment.

National Historical Preservation Act (NHPA) of 1966 – The NHPA requires all Federal agencies to administer federally owned, administered, or controlled prehistoric and historic resources in a spirit of stewardship for the inspiration and benefit of present and future generations. 36 CFR 800 and Section 106, in particular, stipulates that prior to the expenditure of any Federal funds on any project, the agency must take into account the effect of the undertaking on any historic properties.

Archaeological Resources Protection Act (ARPA) of 1979 – The ARPA provides protection for archaeological resources on public lands by prohibiting the "excavation, removal, damage or defacing of any archaeological resource located on public lands or Indian lands," and set up criminal penalties for these acts. It also encourages increased cooperation and exchange of information between governmental authorities, the professional archaeological community, and private individuals having archaeological resources and data which were obtained before October 31, 1979.

In addition to these rules the IAMP will include all applicable Federal laws, regulations, executive orders, and policies. The additional laws, which will define BLM's responsibilities when analyzing environmental impacts, include:

- American Indian Religious Freedom Act of 1978, 42 U.S.C. 1996
- Clean Air Act, as amended, 42 U.S.C. 7401 et seq.
- Clean Water Act of 1977, 33 U.S.C. 1251, et seq.
- Clean Water Act of 1987
- Coastal Barrier Resources Act of 1982, 16 U.S.C. 3501-3509
- Coastal Zone Management Act, 16 U.S.C. 1451-1464
- Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended, 42 U.S.C. 9615
- Endangered Species Act of 1973, as amended, 16 U.S.C. 1531, et seq.
- Executive Order 11988, as amended, Floodplain Management, May 24, 1977
- Executive Order 11990, Protection of Wetlands, May 24, 1977
- Executive Order 12088, Federal Compliance with Pollution Control Standards (Amended by Executive Order 12580 Superfund Implementation), October 13, 1978, February 23, 1987

- Executive Order 12372, Intergovernmental Review of Federal Programs, July 14, 1982
- Executive Order 12898, Federal Actions to address Environmental Justice in Minority Populations and Low-Income Populations, February 11, 1994
- Executive Order 13112, Invasive Species, February 3, 1999
- Federal Noxious Weed Act of 1974, as amended
- Fish and Wildlife Coordination Act, as amended, 16 U.S.C. 661-664
- Migratory Bird Treaty Act and Executive Order 13186, January 10, 2001
- Resource Conservation and Recovery Act of 1976, 42 U.S.C. 6901, et seq.
- Safe Drinking Water Act Amendments of 1996
- Safe Drinking Water Act, as amended, 42 U.S.C. 300f, et seq.
- Surface Mining Control and Reclamation Act of 1977, 30 U.S.C. 1201, et seq.
- Wild and Scenic Rivers Act, as amended, 16 U.S.C. 1271
- Wilderness Act of 1964, 16 U.S.C. 1121, et seq.

The Proposed Action does not conflict with any known State or local planning or zoning ordinance. This action is not specifically addressed in the County's Comprehensive Land Use Plan. The proposal, however, is compatible and consistent with other land uses occurring within the area.

### ***Proposed Action and Alternatives***

#### ***Proposed Action***

The Proposed Action consists of the activities and actions set forth in Section III-Allowable Uses of the attached Meadowood SRMA Integrated Activity Management Plan (Part 1).

#### ***No Action Alternative***

The National Environmental Policy Act of 1969 requires BLM to consider this alternative. Under the no action alternative, BLM would not implement the activities approved by the *Meadowood Farm PA/EA* and the IAMP. Interim management would consist of custodial management of the property, with the exception of the horse boarding facility.

No other alternatives were analyzed, as it would have been required amendment of the current land use plan (*Meadowood Farm PA/EA*, November 2002).

#### ***Affected Environment***

Refer to the *Meadowood Farm PA/EA* (November 2002) and the attached IAMP (Part 1) for descriptions of the affected environment and other resource information.

### ***Critical Elements of the Environment***

The table below shows the status of critical elements that are analyzed in this Environmental Assessment.

Critical Elements	Present			Affected		
	Yes	No	Possible	Yes	No	Possible
Air Quality	X				X	
Areas of Critical Environmental Concern		X			X	
Coastal Zone	X				X	
Cultural Resources/Paleo Resources	X					X
Environmental Justice		X			X	
Prime and Unique Farm Land		X			X	
Floodplains	X				X	
Invasive/Noninvasive Species	X				X	
Native American Religious Concerns		X			X	
Special Status Species/Threatened and Endangered Species		X			X	
Waste, Hazardous and Solid	X				X	
Water Quality, Surface and Ground	X					X
Wetlands and Riparian Zones	X					X
Wild and Scenic Rivers		X			X	
Wilderness Values		X			X	

### ***Air Quality***

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. 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).

Indirect or cumulative impacts to air quality on Mason Neck would not occur.

### ***Areas of Critical Environmental Concern (ACEC)***

The Meadowood SRMA is not an ACEC, nor is it located near one. The Proposed Action does not, therefore, affect ACECs.

### ***Coastal Zone***

Virginia established a federally-approved Coastal Resources Program in 1986. This authorizes the Commonwealth of Virginia to require that Federal actions in the coastal zone be consistent with its 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, included in this Plan and all future activities, will be subject to a coastal zone consistency review. No indirect or cumulative impacts to Virginia's coastal zone would occur from implementing the Proposed Action.

### ***Cultural and Paleontological Resources***

#### **Historical Context of Meadowood SRMA**

The Virginia Department of Historic Resources (DHR) maintains comprehensive databases, archives, and regional Cultural and Historical Overviews for the State of Virginia. Historical Overviews broadly discuss the types of archaeological and historical sites within a region and generally define the context of the historical landscape within a defined geographic boundary.

Specific to Meadowood SRMA, an archaeological assessment and Historical Overview was completed for BLM in 2000 by Archaeological Testing Consultants, Inc. (ATC). This assessment provides a basic outline of the prehistoric and historic resources identified around the region and identifies high, medium, and low areas of potential for containing archaeological sites within Meadowood SRMA. The Historic Overview for Meadowood SRMA was based on archival references, informant interviews, and the knowledge obtained from other regional overviews. Collectively, this information provides a general picture of the archaeological and historical site potential within Meadowood SRMA.

Few archaeological surveys have been conducted within the Meadowood SRMA tract. Therefore, a baseline of identified cultural resources within the property is minimal. Two archaeological surveys were completed in 2003 and account for approximately 6 acres of the approximately 800 acres within Meadowood SRMA. Both surveys identified distinct prehistoric and historic occupations (sites) within the small sample of the property subjected to surveys.

The Meadowood SRMA maintains a high to moderate probability of containing historic and prehistoric cultural resources throughout the entire 800-acre tract. In particular, archival and historic literature review indicates a very high potential for historic sites (particularly 18<sup>th</sup> and 19<sup>th</sup> Century home sites, farmsteads and transportation features) within key areas of the property. Archaeologists believe most historic sites located within Meadowood SRMA will be identified in an archaeological (below ground) context. With a few possible exceptions, historically significant standing structures and above ground features are absent from the modern landscape.

Meadowood SRMA is also situated within favorable physiographic settings for prehistoric settlement. The location of the property within the Potomac River watershed and the presence of significant secondary drainages and upland terraces, influences the tendency for higher prehistoric site potential. In general, the Mason Neck region demonstrates an

abundance of prehistoric site activity, though relatively few archaeological sites have been formally tested and evaluated within the region.

The nature and extent of historic and prehistoric cultural resources at Meadowood SRMA remains unknown. Archaeologists have a rough understanding of what types of cultural resources might be contained beneath the modern landscape at Meadowood SRMA, and the potential of which appears to be exciting. In order to effectively manage these resources, however, additional archaeological surveys and site evaluations are needed.

### ***Environmental Justice***

Executive Order 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 and low-income populations. Would the proposed action directly, indirectly or cumulatively affect minority or low-income populations? The Meadowood SRMA is in a rural area, and there are no communities, businesses or multiple-family dwellings in a 1-mile radius of the Meadowood SRMA that are known to be inhabited or owned by predominantly minority or low-income families or individuals.

### ***Prime and Unique Farm Land***

Meadowood SRMA does not contain prime or unique farmland. The activities proposed will not, therefore, affect prime or unique farmlands.

### ***Floodplains***

The Proposed Action will not adversely affect any floodplains.

### ***Invasive/Noninvasive Species***

Meadowood SRMA currently contains exotic and invasive plants. These species crowd out native plant species and create a zonal monoculture, which does not support plant diversity. The most common exotic and invasive species which have been identified at Meadowood SRMA include Japanese Honeysuckle, Japanese Stiltgrass, Chinese Lespedeza, Korean Carpet Clover, Trumpet Vine, Multiflora Rose, Orchard Grass, Royal Paulownia, Tree of Heaven (Ailanthus), Giant Foxtail, Green Foxtail, English Plantain, Japanese Broome, and Garlic Mustard.

### ***Mitigating Measures***

BLM will develop a weed management strategy which includes measures to remove and reduce the spread of exotics and invasive species, and replace them with appropriate native plant species. The control measures may include hand or mechanical pulling, mowing prior to vegetation going to seed, prescribed burns, or herbicide application (Tu, Hurd, & Randall, 2001). BLM will implement the strategy, using volunteers, where appropriate (e.g., hand-pulling select species such as Japanese honeysuckle). Areas to be targeted for priority control include transition zones, trails, and waterways. BLM will coordinate with other agencies on Mason Neck to jointly implement measures to address invasive and exotic species throughout the Peninsula.

***Native American Religious Concerns***

There are no known or suspected traditional cultural properties and/or sites of Native American religious concern at this time.

***Special Status Species/Threatened and Endangered Species***

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

State-listed species or state species of concern that may occur on Meadowood SRMA 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 SRMA, extensive inventories (to be completed in coordination with the Virginia Department of Natural Heritage in 2004) for state- and federally-listed species will be completed.

To date, no information has warranted formal consultation with the U.S. Fish and Wildlife Service.

***Mitigating Measures***

Presently, there are no federally-listed or state-sensitive species known to exist on Meadowood SRMA. The BLM is required by regulations to manage threatened and 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.

***Waste-Hazardous or Solid***

The *Meadowood Farm PA/EA* discussed the Modified Phase I Environmental Site Assessment (ESA) performed at the time of acquisition. Based on the Modified Phase I report, the following sites were identified:

**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.

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

**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 pot holes.

**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.

No other hazardous waste issues have been identified.



***Water Quality, Surface and Ground***

Water quality may be affected by increased recreational use through compaction or erosion of trails and recreational areas. In addition, application of fertilizers, inadequate manure management, and parking lot construction could affect water quality. Potential impacts include chemical pollution, increased sediment, and reduced ground-water infiltration.

Potential increased sedimentation and non-point source pollution caused by equines on this pasture land could negatively affect aquatic and riparian species. This will be addressed through appropriate pasture and waste management practices, including fertilizing and seeding pastures, controlling weeds, and grazing rotation. Increased wildlife congregation in the remaining habitat could decrease vegetative quality and quantity. Doubling pasture acreage would increase habitat for brown-headed cowbirds and starlings. Creation and management of native grasslands in every open field that is not used for equine activities will help to mitigate these impacts. In addition, this also justifies the need for appropriate deer herd reductions.

***Mitigating Measures***

BLM will create and enhance vegetative buffers adjacent to waterways, pastures, trails and roadways to increase natural filtering and reduce sedimentation and other non-point source pollutants and runoff.

Trails will be constructed and maintained to reduce water crossings and placement along steep slopes and erosive areas and reduce erosion and compaction. Parking areas will be located and designed so as to minimize run-off; low areas and slopes will be avoided, slopes reduced, and diversion ditches placed where appropriate. Parking lots will be surfaced with gravel or other materials to allow water infiltration, and reduce surface-water run-off.

The horse pastures will be managed to allow for quick degradation of manure by dragging the pastures on a periodic basis. Pasture rotation, fertilization, and seeding will result in enhanced vegetative cover, which will reduce surface-water run-off and erosion, and increase ground-water infiltration. The outdoor riding ring will be constructed of gravel, bluestone, and other permeable footing. The ring construction will minimize surface-water run-off and enhance infiltration; there will be negligible run-off from the ring.

The BLM is studying development of a composting system for the horse manure now generated by the approximately 50 horses at Meadowood SRMA, and the additional 25-50 horses that may be held at the site through the creation of the WH&B Adoption Facility and various equestrian partnerships. The projected 900 tons of manure that will be generated at Meadowood SRMA, annually will be either composted onsite in a location so that no water pollution occurs, or stored in a location onsite and removed so that no water pollution occurs.

A water-monitoring program will be initiated to document water-quality and quality parameters, and allow for early identification of both positive and negative impacts from activities at Meadowood SRMA. BLM will work closely with Fairfax County in developing the monitoring program so that it compliments ongoing water-quality monitoring that is

occurring elsewhere in the County (Fairfax County Environmental Quality Advisory Council, 2003).

### ***Wetlands and Riparian Zones***

The 30 acres of wetlands within the study area would not be adversely impacted by the proposed action because Best Management Practices (BMPs) developed by state and local agencies including those developed under the Chesapeake Bay Preservation Act of 1988.

### ***Wild and Scenic Rivers***

There are no designated or eligible wild and scenic rivers in the vicinity of Meadowood SRMA.

### ***Wilderness Values***

There are no Wilderness Areas or areas suitable for Wilderness designation at Meadowood SRMA.

### ***Other Resource Impacts***

Beyond the impacts to “critical elements” described above, the proposed IAMP activities may affect other resource values. These resources include: soils, vegetation, visual resources, and outdoor recreation.

### ***Soils***

As equestrian activities increase, there may be a potential for overgrazing and erosion in the fenced pastures of Fields 2, 3, 4 and 5, shown on Appendix A, Map 4. Parking lot construction and maintenance will impact soils in the construction areas however these impacts will not be significant if the mitigating measures below are applied. Impacts from parking lots will primarily be due to erosion during and after construction. Trail construction and use may cause both erosion and compaction, depending upon level of use, trail slope, maintenance, and adjacent vegetative cover.

### ***Mitigating Measures***

BLM will monitor on-the-ground conditions in cooperation with the Northern Virginia Soil and Water Conservation District in order to develop and implement adaptive management strategies to minimize impacts. In order to insure that overgrazing, erosion, or soil compaction does not occur in the horse pastures, BLM will fertilize, seed, and cross-fence the horse pastures. A rotational grazing system will be used when feasible to allow pastures time to “rest” and grasses to grow. The water sources in pastures will be located so as to avoid low areas, drainages, and areas where the horses naturally congregate, such as gateway areas.

Parking areas will be designed and constructed to minimize surface disturbance. Soil compaction will occur in the parking areas; however, gravel or pavers will be used to reduce erosion and allow continued infiltration. Trail compaction will be negligible due to the sandy nature of the soils. The trails will be regraded and drainage bars installed where soil compaction causes drainage problems.

## ***Vegetation***

### **Forest Habitat Existing Situation**

Intense development and urbanization within Fairfax County has reduced the amounts of open space and natural vegetation that are suitable for wildlife habitat. Approximately 11.9 percent of the land within the County is used for parks and recreation, and 12 percent is vacant or used for natural uses (Fairfax County, 2003). Some of these land parcels are not considered valuable for wildlife habitat, because of recreation development (e.g., ball fields). As open space and natural resources are reduced, the county is protecting and enhancing existing open space. Forest vegetation covers approximately 600 acres of Meadowood SRMA. See Appendix A, Map 7 for a vegetation map. The majority of the forest lies on sloping and riparian terrain.

### **Impacts**

Adverse impacts to the existing forest habitat from the Proposed Action are minimal. Potential impacts include the spread or introduction of invasive species as well as increased potential for erosion and damage to vegetation along trails. Eliminating OHV trespass in portions of Meadowood SRMA, particularly the western section, will provide benefits by reducing the current damage to vegetation as well as erosion from vehicle tracks.

There are approximately 2,000 feet of new hiking trail that will be constructed within forest habitat to connect the East and West parcels (see Appendix A, Maps 4 and 6). The wayside kiosk for visitor information and the parking areas on Old Colchester Road and Belmont Boulevard will also be constructed within forested areas; however, at all three sites, the forest cover has been disturbed by previous construction, cutting and pruning for road corridors and utility lines. At the most, 1.5 acres of tree cover could be removed for these facilities.

### **Mitigating Measures**

The existing forest habitat will be maintained and managed for optimum diversity of wildlife habitat in an oak-beech-hickory-pine forest with a diverse shrub-forb understory. Silvicultural practices will be applied for forest-stand composition maintenance and health improvement. This management will enhance and diversify wildlife habitat within the forest. BLM's management strategy at Meadowood SRMA includes close coordination with the Virginia Department of Forestry and Fairfax County to develop management strategies to address forest composition, invasive species, potential erosion, wildlife habitat, and water-quality issues in the forested portions of Meadowood SRMA.

Aggressive trail monitoring and maintenance will reduce the potential for erosion along trails. Trails will be clearly marked and signed to minimize incidents of the public wandering off designated trails and damaging vegetation. Levels of use will be closely monitored to ensure that both pedestrian and equestrian uses do not exceed the capacity of the trails or cause damage to forest and water resources. Eliminating illegal all terrain vehicle and off-highway vehicle trespass will serve to further diminish erosion and damage to forest habitat.

The forest habitat and forest trails will be managed to control invasive species such as Japanese honeysuckle and Japanese stilt grass. BLM will develop an Invasive Weed Management Strategy for Meadowood during 2004. The Plan will address monitoring and treatment of Japanese honeysuckle and stilt grass as well as other invasive species.

Site-specific forest habitat projects, such as selective ecotone or transition management along the edges of the open fields, will be established to enhance wildlife habitat and forest health. These transition areas will be comprised of open field edges along forests that will be allowed to grow up, and may include plantings and other site-specific enhancements. In the eastern open field edges, localized selective beech tree cuttings, accompanied by plantings of other hardwood and understory tree species, may be used. Canker worm control on the eastern portions of may be required to maintain forest health. Deer population reductions and temporary 15–20 acre deer exclosure fences may be used to protect new plantings. Forest habitat improvements in the western open fields will include treatment for invasive weeds and treatment to control weedy pines and sweet gum.

Maintaining healthy forest vegetation and stable ground conditions at Meadowood SRMA will provide continued stream protection and beneficial impacts on surface and shallow ground waters and streams flowing onto, through, and out of the property. Streams on the property are located predominantly within the forested areas. Shade from the tree canopy maintains cooler water temperatures so that the water holds more oxygen. Streamside forests also offer food, nesting sites, and protection to a great number of streamside wildlife including birds, turtles, beaver, and snakes. Additionally, tree roots stabilize vulnerable stream banks and provide cover to fish, crayfish, and aquatic insects. Forested areas act as buffers that reduce high amounts of excess nutrients and suspended solids from runoff.

The design of the visitor use and parking areas on Gunston Road, Old Colchester Road, and Belmont Boulevard will be done to minimize disturbance to natural vegetation, and landscaping will incorporate existing natural trees and shrubs as much as possible. Guidelines will be incorporated into construction activities to prevent the establishment of weeds during and after construction, and these sites will be managed to prevent growth of weeds.

### **Open Fields Habitat Existing Situation**

Approximately 160 acres at Meadowood SRMA are open fields or grasslands. The open fields are located on both the eastern and western parcels (see Appendix A, Maps 3 and 5). Some of the open fields are currently used as horse pastures in support of the horse boarding operations. The majority of open fields were used for hay production prior to BLM's acquisition of Meadowood SRMA. Manure from the horse operations was spread upon these open fields. Two ponds are located within the fields. The soils in the open fields consist of sandy, well-drained materials with high infiltration rates which reduce surface runoff from precipitation. In some areas, invasive or non-native plants, such as fescue and Chinese and Korean Lespedezas, are a problem because they have replaced native species and reduced wildlife habitat.

**Impacts**

There will be slight impacts from the Proposed Action upon the open field habitats. Impacts from the Proposed Action could include lower vegetation density and changes in plant composition, and accelerated erosion, and water quality impacts (i.e., increased organics, suspended sediments).

The portions of the eastern open fields that would be converted to a WH&B facility will result in some loss of vegetation and wildlife habitat in the open fields. The vegetation consists primarily of dense, invasive fescue and other grasses. Impacts to vegetation will include loss or reduction of forage (i.e., vegetation) in the holding corrals and working areas. Wildlife in the immediate area consists predominantly of deer and birds. It is likely that the species using the area would move to adjacent open fields and co-exist with the facility.

Impacts to open fields from the proposed trails and parking areas include reduction in vegetation, potential introduction of invasive plant species, and potential erosion. In addition, recreational flying activities in the western fields will impact other users, wildlife, and vegetation in the immediate area of use.

**Mitigation Measures**

BLM will employ a variety of methods to mitigate impacts from the Proposed Action in the open fields of Meadowood SRMA. Creation and management of native grasslands in open fields not used by horses will help to mitigate impacts from horse pastures. The conversion of at least 50 acres of historic hayfields to native grassland and the creation of forest edges within grassland windrows will improve the overall quality and diversity of vegetation and wildlife habitat in open fields. BLM has identified areas where we will initiate intense grassland management along with other activities identified within the plan.

BLM will focus on the bobwhite quail and selected grassland songbirds as keystone species. Monitoring for these species' increased presence and activities will be used as an indicator of the success of the vegetation conversion. Eastern Bluebirds and other edge species will also benefit from these conversions; however, species that require larger blocks of grasslands, such as some ground nesting bird species, may not benefit from these improvements. While the conversion of historic hayfields to native grasslands would temporarily disrupt some wildlife use patterns, once established, these native grasslands will provide improved habitat quality for many species of wildlife.

In the interim before environmental documentation is completed for burning schedules, burn plans and seeding, 3-year intervals on mechanical treatment for open field maintenance would optimize diversity of wildlife habitat. At the same time, fire danger and the loss of the fields to ecological succession would be minimized. For visitor safety, Meadowood SRMA will be closed on days when prescribed burns occur. Burn efforts will be coordinated with local fire officials.

Invasive plant control measures will be developed in coordination with the state and county to address site-specific and regional or state problems. In particular, Chinese and Korean Lespedezas and other invasive, shade-intolerant species along trails in clearings, including

the forest edges, will be managed through natural species conversion and invasive weed management plans.

Impacts to forage in pastures and the resulting potential erosion or water quality impacts will be mitigated by closely monitoring pasture condition (forage types and density), seeding, fertilizing or liming pastures when indicated by soil testing. Cross-fencing pastures and rotating pasture use will be done in order to allow pastures to “rest” and grasses to grow.

Some of the fields have sandy soils in with high infiltration rates, reducing potential surface water runoff from precipitation. In addition, portions of the existing horse pastures and eastern open fields drain into and through internal low spots that act as natural sediment ponds, allowing sediment carried by surface runoff to be deposited.

The WH&B facility corrals and working areas will result in loss of vegetation in some of those areas; however, the pastures associated with the facility will be monitored closely and managed to limit overgrazing. Several native sparrow species would benefit from the change in habitat. BLM will implement native grassland treatments adjacent to the facility to mitigate impacts and increase diversity.

### ***Recreation: Social/Experiential Impacts***

Due to the variety of activities planned to occur at Meadowood SRMA and the relatively compact nature of the parcel, real and perceived conflicts may occur between different user groups. 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. Disruption of achieving recreational goals may result in a displacement of users or confrontation between users.

Real and perceived conflicts between user groups may cause several problems, including but not limited to displacement of some users, a compromised recreational experience, confrontation between user groups, overcrowding, overuse – strain on and deterioration of the resource, reduced visitor safety, and potential accidents between user groups.

### **Recreation Activity Impacts on Other Recreation Activities**

Multi-use trails may be one source of friction between user groups. For instance, bicyclists that do not follow appropriate speed limits and etiquette for passing from behind may startle pedestrians sharing trails with mountain bikers. This scenario could cause pedestrians to feel unsafe or to have a diminished recreational experience. Similarly, mountain bikers may feel frustrated with the slower pace at which pedestrians progress along the trails. Additionally, the equine waste on the trails may be a nuisance to pedestrians that are not used to sharing trails with horses. Control line flying in the field behind the visitor center on Belmont Boulevard will be within 50 feet of the *Wood Thrush Trail*, one day per week during the period from April 1 through June 30 of 2004 and 2005, and in the western parcel in the established flying circles (see Appendix A, Map 8) from July 1 through March 30 of 2004 and 2005. After that, control line seasons will be set based on the results of the bird breeding surveys.

Interactions between user groups may not be person-to-person like the examples provided above. For example, patrons watching wildlife on site may be disturbed by the loud voices of other visitors, or by the sound of the motors on the motorized hobby airplanes.

An increase in user recreation activities such as control line flying, walking, and horseback riding will 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 will be implemented.

### **Non-Recreation Activity Impacts on Recreation Activities**

Non-recreation activities onsite may also impact recreational pursuits. For example, during special events and WH&B adoptions, the number of visitors coming to Meadowood SRMA will increase dramatically. During these events, parking is temporarily increased allowing many more people than normal to access the site simultaneously. This will result in greater noise and traffic congestion on Meadowood SRMA roads and parking areas as well as on public roads such as Gunston Road. Although these visitors are onsite for a specific event or reason, they may be inclined to explore the site to see what it has to offer, which will likely mean an increase in trail use, as well as increased activity in other areas.

Proposed partnerships at Meadowood SRMA are not anticipated to have an impact on recreational visitors. The proposed partnerships would either occur in areas already in use by the private boarders, or in areas that are not currently open or planned for recreation activity.

### **Boarding Operation Impacts on Recreation Activities**

The current concession contract for private equestrian boarding at Meadowood SRMA impacts public equestrian visitors, because the current contract allows only boarders to access the main barn and indoor and outdoor riding rings. This precludes public riders from accessing the existing indoor and outdoor rings for riding and training due to health and security issues.

### **Illegal Activity Impacts on Recreation Activities**

Trespass and other illegal activities negatively affect legal visitors to Meadowood SRMA. Individuals trespassing create their own trails onto and throughout the SRMA by removing trees and trampling vegetation. This raises safety issues for the trespasser and the visitors, as these trails have not been authorized, designed, signed, and are not monitored and maintained creating the potential for visitors to inadvertently get lost or injured on these trails. Additionally, the illegal damage to trees and vegetation is visually unattractive and may lead to degradation of the resource.

### **Vegetation Treatment Impacts on Recreation Activities**

In efforts to manage a healthy ecosystem at Meadowood SRMA, including wildlife habitat, various vegetation (native and invasive) management techniques will be implemented. Examples of these techniques include, but are not limited to, prescribed burning, chemical applications, bush hogging, or mowing. These treatments may have an impact on recreation activities in that smoke from prescribed burns, airborne particles from mowing, and direct contact with chemically treated vegetation may cause temporary physical irritation/

discomfort that would affect a recreation experience onsite. Additionally, for health and safety reasons, areas being treated may be temporarily restricted or closed. Initially, these treatments will be tested on Meadowood SRMA's western parcel and monitored for effectiveness and potential impacts. Treatment methods may be adjusted if necessary.

### **Mitigating Measures**

In an effort to mitigate the potential impacts to participants in recreation activities, BLM will incorporate adaptive management principles in the long-term operation and management of Meadowood SRMA. Adaptive management is defined as the concept where information highly valuable for increasing management effectiveness can be obtained by carefully documenting management activities and results as well as relationships and trends in resource conditions (U.S. Forest Service, 2003).

BLM will incorporate a series of mitigation measures that have been determined based on information gathered during public input processes and on the research and subject matter expertise of the planning team. These mitigation measures will include, but not be limited to:

1. Temporarily closing or restricting use of damaged trails. This information, along with trail condition information, will be posted on the Meadowood SRMA Web site and on a local telephone message established to provide visitors with information before arriving onsite.
2. Monitoring trail conditions, and surveying trail users about their satisfaction with the trails. If trends show dissatisfaction with trail conditions, remedial actions will be taken.
3. Limiting control line flying to reduce the potential for visitors to be disturbed by noise from control line flying.
4. Monitoring the capacity (carrying capacity) benchmarks outlined below.

### ***Carrying Capacities***

Capacity (carrying capacity) is defined as the maximum number of users that can pass through a given area (e.g., trail) during a given time period under existing trail conditions; it also refers to the amount of use a given resource can sustain before an irreversible deterioration in the quality of the resource begins to occur (American Trails, 2003).

These carrying capacity benchmarks have been established as a guide to comparing use levels with impacts in order to protect Meadowood SRMA's natural resources, provide a quality recreation experience, and address public safety. The capacity numbers and ranges were derived through the collective professional judgment of the planning team, and are based on the data regarding the current conditions, including infrastructure limitations. They will be adjusted based on monitoring resource conditions and visitor satisfaction.



**Trails-Non-Motorized Passenger Vehicles**

An initial carrying capacity of 3-4 non-motorized passenger vehicles (i.e., mountain bikes) per mile of trail will be established during normal trail conditions in order to protect the resources and provide a safe, quality recreation experience. The range of acceptable use may be adjusted over time based on monitoring, analysis and adaptive management decisions. Indicators for monitoring will include, but not be limited to, trail widening, soil erosion and compaction, vegetation damage, and rutting.

**Trails-Pedestrians**

An initial carrying capacity of 12-15 pedestrians per mile of trail will be established during normal trail conditions in order to protect the resources and provide a safe, quality recreation experience. This range of acceptable use may be adjusted over time based on monitoring, analysis, and adaptive management.

Application of appropriate trail design, including consideration of location, slope, drainage, and maintenance, will allow BLM to develop and implement trails that are enjoyable to use and straightforward to monitor and maintain.

**Trails-Equestrian**

An initial carrying capacity of 3-5 equestrians per mile of trail will be established during normal trail conditions in order to protect the resources and provide a safe, quality recreation experience. This range of acceptable use may be adjusted over time based on monitoring, analysis and adaptive management.

These numbers are estimates for analysis purposes only. Monitoring and adaptive management will assess use over time to respond to on-the-ground conditions. Management may change as a result.

**Fishing** (at the Pond adjacent the Contact Station & Wood Thrush Trail):

Accessible: The construction of the new fishing pier/observation deck will be designed for at least three (3) individuals using a wheelchair or mobility device to fish at one time.

Pier: Up to four (4) individuals will be able to fish from the pier at the same time.

Shoreline: Between 6-10 individuals will be allowed to fish along the shoreline.

Total capacity on the deck, regardless of activity (fishing or not) will not exceed 12-15 people. Total capacity fishing on the deck would be 15 people.

**Control Line Flying**

Carrying capacity will be determined by the parking available at the site in established parking areas and along the access road.

***Recreation Impacts: Environmental***

Soil erosion may diminish recreational experiences because of trail rutting. Damaged trails require time and effort to return to a safe and viable condition for use. This will require BLM to close or limit access to areas while they are being rehabilitated. Closures and limitations may result in increased usage on other Meadowood SRMA trails, or may cause some visitors to be displaced and go elsewhere for recreation opportunities.

Soil displacement and erosion may cause sediment to increase in the streams and creeks on site, which may lead to disruption of the watershed impacts to water quality which could lead to compromised wildlife habitat and water sources.

Increased activity throughout the Meadowood SRMA has the potential to disturb wildlife onsite. Prolonged disturbance may cause temporary or permanent displacement of wildlife which could impact visitors interested in viewing wildlife in their natural habitat.

Unauthorized uses onsite, such as accessing unauthorized areas, may lead to vegetation trampling.

Breeding migratory birds in the control line flying area may be impacted by the noise of model airplane motors. To study this problem more fully, the BLM is contracting to have a breeding bird study conducted by an independent research organization during the 2004 and 2005 breeding seasons in the area of the flying circles in the West Meadow. The results will determine:

- 1) Whether flying or other activities can be done in the West Meadow area during the period of April 1 to July 1 of each year without impacting breeding activities of migratory species; and
- 2) Whether any use may be made of these fields during the 2005 breeding season from April 1 to July 1 (based on 2004 data).

A temporary flying site to be used one day each week during the bird breeding survey is located in the field behind the Belmont Boulevard Environmental Education (EE) Center. This location has active visitor use. The *Wood Thrush Trail* is located 50 feet from the temporary flying circle. There are ongoing maintenance activities at the EE Center using motorized equipment, so control line flying during the spring months from April 1 through June 30 of 2004 and 2005 will not introduce additional impacts to the site.

**Mitigating Measures**

Appropriate application of trail design, monitoring, and maintenance techniques is expected to keep trails viable and enjoyable for visitors.

In an effort to reduce the environmental impacts, which include disturbance of wildlife and recreational activities, management will employ a variety of techniques, including but not limited to temporary and seasonal trail closures. BLM will implement a communications system which will inform visitors of changes to access and site conditions (e.g., trails are

snow packed and icy in shaded areas). Trail closures or restrictions will be clearly posted at trailheads and will be available on a recorded telephone message that will be updated on a daily basis.

### ***Impacts to Boarders***

The Proposed Action allows private boarding operations to continue at Meadowood SRMA. This will provide benefits to the northern Virginia horse-owning community by increasing boarding opportunities in a highly urbanized area with scarce boarding opportunities. The total number of private horses will be reduced to allow room for Partner and BLM horses; however, BLM will minimize potential impacts to individual boarders by reducing the number of boarders by attrition, as boarders move their horses from Meadowood SRMA on their own, to the extent practicable.

Private boarders will benefit from the enhanced security due to the presence of BLM Partners at the facility. Private boarders may be impacted when BLM Partners use the indoor or outdoor arenas for training and riding. BLM will work with its partners to schedule times when the partners will have sole use of portions of the facilities. Efforts will be made to reduce conflicts over use of the facilities. For example, Federal training may take place during early morning hours and weekdays when few boarders use the facilities. In the event of conflicts, BLM will be the ultimate decision maker.

### ***Impacts to BLM Equestrian Partners***

BLM Partners will benefit from the Proposed Action in many ways. Access to stabling, pastures, and the indoor riding facility will provide the Partners and their horses with better facilities than currently available. Partners will be able to use the indoor riding arena for training and programs during inclement weather, when they would otherwise reschedule or postpone activities. For example, the U.S. Army Caisson Platoon does not have an indoor facility to train new soldiers. There is also inadequate pasture for the U.S. Army horses at Ft. Meyer. Meadowood SRMA will provide a healthier environment for Partner horses as well as a safer facility for year-round training and programs.

Access to Meadowood SRMA facilities under the Proposed Action would greatly enhance the scope and capability of the regional therapeutic riding program. The program has been hampered from providing year-round services and expanding to meet high demand due to the high land values and scarcity of appropriate facilities in the county. There are currently 75-80 disabled clients riding in the program; however, the program is unable to operate year-round or meet the current demand for services. Approximately 40-50 accepted clients with disabilities (i.e., physical, cognitive, and emotional) remain on a waiting list because the program has been unable to expand. The 1-2-year wait for space in the program discourages many potential clients from even applying. The Proposed Action would provide facilities for year-round work with clients with disabilities, opportunity for expansion, and adequate pasture and stalls. The Proposed Action benefits the public by providing the therapeutic riding program with the resources (i.e., stabling, pasture, and indoor arena) to work with a much greater number of disabled clients.

### ***Impacts of Proposed Action to Equestrians***

The Proposed Action will benefit area and regional horseback riders by expanding recreational opportunities for equestrian activities. In particular, the addition of miles of horseback riding trails at Meadowood SRMA offsets, to some degree, the increasing closure of riding opportunities throughout the region due to development and population growth. Both local equestrians as well as equestrians who trailer their horses to Meadowood SRMA will be able to ride in a safe and scenic environment at Meadowood SRMA. Providing public equestrian access to the trails increases the potential to develop a large, interconnected trail system between State, Federal and regional/county public properties at Mason Neck and complements the Fairfax County multi-use trail along Gunston Road.

Availability of Meadowood SRMA equestrian facilities will increase local avenues for educational and training clinics and events. This would benefit educational and non-profit equestrian activities such as 4-H and therapeutic riding. In addition, the trails could be used for competitive trail rides and possibly horse driving. While large horse shows and events would not occur at Meadowood SRMA, the Proposed Action would increase opportunities in the Region for smaller, educational equestrian activities (e.g., 4-H, therapeutic riding clinics).

### ***Visual Resources***

Meadowood SRMA is managed as a Visual Resource Management (VRM) Class III area. The BLM objective for VRM Class III areas is to partially retain the existing character of the landscape. The level of change to the characteristic landscape 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 predominantly natural features of the characteristic landscape.

The Meadowood SRMA property is one of the few remaining rural and natural landscapes within Fairfax County. The horse pastures and former hay fields reflect the rich agricultural heritage, extending back several hundred years, of the northern Virginia region. Local residents and many of the visitors who travel down this road to visit the Federal, State, and regional properties on the Peninsula treasure the viewshed of Meadowood SRMA along Gunston Road and Harley Road. Numerous comments from both local and non-local members of the public advocated preserving the open fields, horse pastures, and forest edges as part of an increasingly rare rural viewshed in the region.

Under the Proposed Action, BLM will maintain the viewshed at Meadowood SRMA. The views of open fields and horse pasture along Gunston Road and Harley Road will remain. The horse pastures and open fields will be maintained by fertilizing, seeding, pasture rotation, mowing, or otherwise cutting grasses as needed in order to maintain the visual openness and reduce weeds. There will be some modification of existing fencing of the horse pastures; however, visual aspects will be minimized by using similar fencing materials (wood panels). The WH&B facility and additional horse facilities will be constructed to reduce impacts from Gunston Road. Any additional horse pastures and facilities will be located and constructed to complement the existing facilities. A public parking area, located at the trail kiosk next to Harley Road, will be constructed to look as natural as possible, surfaced with gravel or pavers to maintain a natural surface. The views of Meadowood

SRMA along Belmont Boulevard and Old Colchester Road, which consist primarily of forest, will remain much the same. The open fields located near the EE and Interpretive Center and in the western parcel may be allowed to grow up through natural succession, in part; however, the overall experience and aspect of Meadowood SRMA will continue to be that of a natural, rural setting.

### **Cumulative Impacts**

Cumulative impacts are the results of incremental impacts of the Proposed Action added to other past, present, or reasonably foreseeable future actions regardless of what agency (Federal or non-federal) or person undertakes the actions.

For the property at Meadowood, potential cumulative impacts would be limited to BLM's activities combined with other local actions. Examples of other local actions would be real estate developments and other recreational activities with environmental impacts. The IAMP authorizes the gradual development of several recreational and environmental education programs at Meadowood SRMA. These programs will attract visitors to Meadowood SRMA who are engaged in a variety of outdoor recreation pursuits (as discussed above).

BLM estimates that fewer than 100 people will visit the property during weekdays and up to 250 people will visit on weekends and holidays in the spring, summer, and fall. A smaller number of visitors will use the trails in the winter. Some of the visitors will walk to the property from the adjacent neighborhood, while the majority of people are expected to drive to the SRMA.

BLM plans to have several small adoption events throughout the year. These events will attract 100-250 people per day for up to 3 days. Gunston Road and Old Colchester Road would experience higher than normal traffic on these days.

Daily visitor use to Meadowood SRMA 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 SRMA 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.

### **Mitigation**

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 (*Meadowood Farm PA/EA*, November 2002). BLM will actively maintain trails to reduce erosion, rebuild stream crossings and drainage features to meet BMPs, and reduce soil loss and protect water quality.

***Environmental Consequences of the No Action Alternative***

Under the No Action Alternative, BLM would allow a lower level of use under the provisions of the *Meadowood Farm PA/EA*, approved on March 25, 2003. Certain activities, such as more intensive recreational use, trail development, interpretation, reintroduction of native grasslands and other vegetation manipulation projects, and the environmental education program, would not occur. Impacts would be confined to lost opportunities. Given the increased demand for outdoor recreational facilities on Mason Neck and surrounding areas, some demand would not be met. Existing facilities may experience higher than expected use levels which may exceed their limits and would constitute a cumulative impact as well.

## **List of Preparers**

A team of specialists from the Fairfax County Government, BLM-Eastern States State Office, BLM-Eastern States Jackson Field Office, BLM-Eastern States Milwaukee Field Office, and the National Science and Technology Center prepared the *Meadowood SRMA Integrated Activity Management Plan/Environmental Assessment*. Team members are:

Marcella Davis, Program and Environmental Educational Specialist. Environmental education program.

Troy Ferone, Cultural Resource Program Leader. Cultural Resource related sections.

Jinx Fox, Wild Horse and Burro Program and Equestrian Expert. Wild Horse and Burro and Equestrian related sections.

Vicki Josupait, Recreation Planner, BLM-National Science and Technology Center. Recreation section and incorporation of public comments in this area.

Howard Levine, Planning and Environmental Coordinator, BLM-Eastern States. Preparation of environmental assessment.

Jeff McCusker, Outdoor Recreation Planner, Lower Potomac Field Station. Overall document editing.

Ed Ruda, Lands Program Leader, Meadowood Integrated Activity Management Plan Team Lead.

Bob Schoolar, Geographic Information Specialist. Map production.

Geoffrey Walsh, Wildlife Management Biologist. Wildlife Habitat, Threatened and Endangered Species, and Exotic Invasive Species.

Willie Woode, Conservation Specialist, Northern Virginia Soil and Water Conservation District.

## References

- American Trails. 2003. Trails, greenway, & outdoor recreation terms. In Glossary of terms [On-line]. Available: <http://www.americantrails.org/glossary.html>
- Fairfax County Environmental Quality Advisory Council, 2003. Annual Report on the Environment. Available: <http://www.fairfaxcounty.gov/gov/eqac/report/>
- Davis, J.G., and Swinkler A.M. 2002. Colorado State University Extension Service Online Fact Sheets: Horse Manure Management. Available: <http://www.ext.colostate.edu/PUBS/LIVESTK/publive.html>
- Niccolucci, M.J., Watson, A.E., Williams, D.R. 1994. The nature of conflict between hikers and recreational stock users in the John Muir Wilderness. *Journal of Leisure Research*, Vol. 26, No. 4, 372-285.
- Tu, M., Hurd, C., and Randall, J.M., 2001, Weed Control Methods Handbook: Tools and Techniques for Use in Natural Areas. Available: <http://tncweeds.ucdavis.edu/handbook.html>
- U.S. Forest Service. 2003. Adaptive management: Adaptive management strategy. In Sierra Nevada forest plan amendment [On-line]. Available: <http://www.fs.fed.us/r5/snfpa/am/>



# GLOSSARY

(Including Acronyms and Abbreviations)

**Activity Development Plan.** A site-specific plan depicting potential management scenarios of one or more resources, e.g., allotment management plan or habitat 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 SRMA would be open to the public daily from sunrise to sunset, including weekends. Call the Meadowood SRMA 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 SRMA.

**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 U.S. 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, 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.

**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.

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

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

**National Environmental Policy Act (NEPA) of 1969.** Public Law 91-190, 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.

**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.

**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.

**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.

**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.

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

**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.

**Threatened Species.** Any species formally recognized by the U.S. 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 (I)).”

**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**

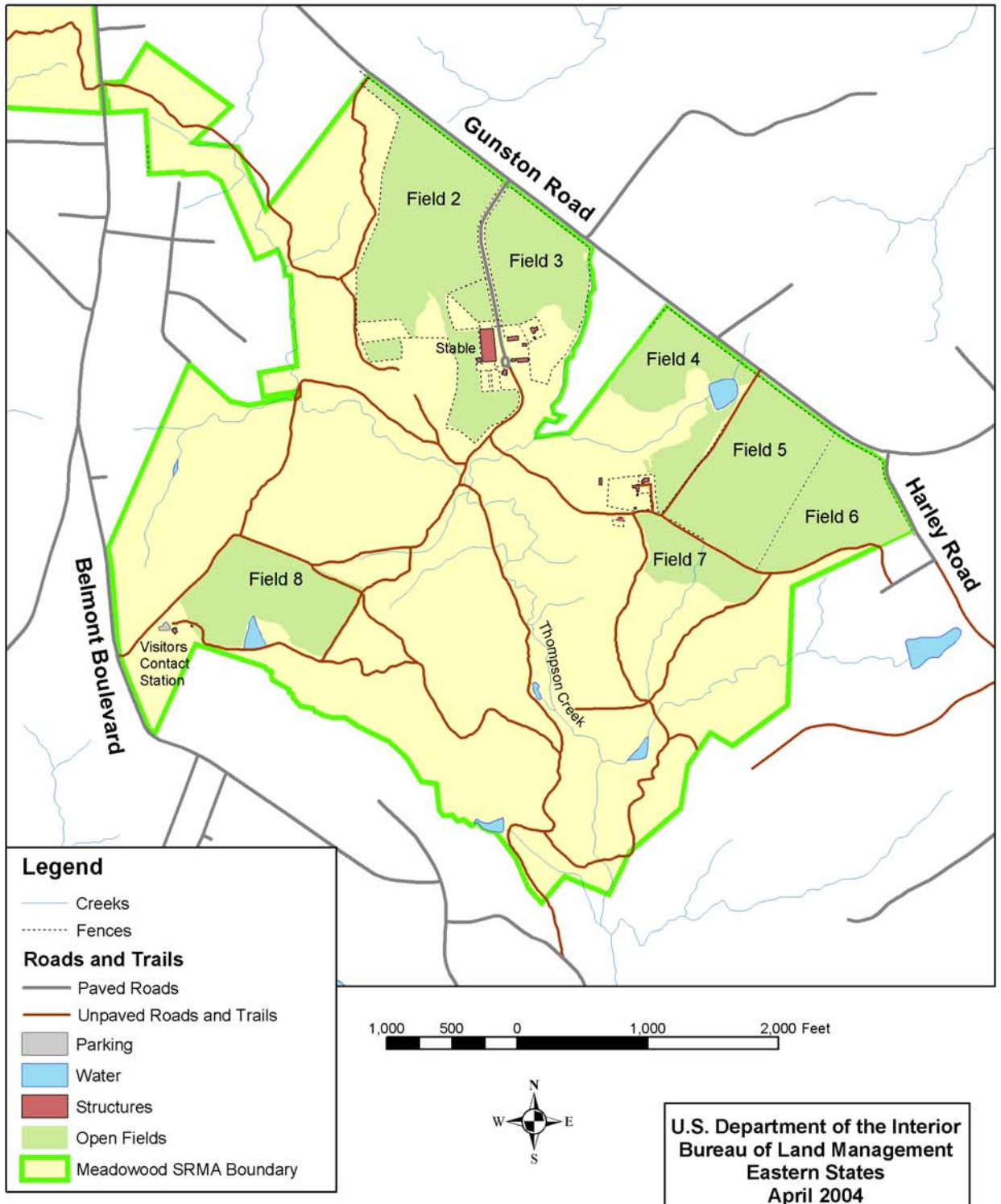
ADA	Americans with Disabilities Act of 1990
AMA	Academy of Model Aeronautics
ARPA	Archaeological Resources Protection Act of 1979
BLM	Bureau of Land Management
BMP	Best Management Practice
CBPA	Chesapeake Bay Preservation Act of 1988
CFR	Code of Federal Regulations
COE	Army Corps of Engineers
CRMP	Cultural Resource Management Plan
DGIF	Virginia Department of Game and Inland Fisheries
DHR	Department of Historic Resources
DOI	Department of the Interior
EE	Environmental Education
EPA	Environmental Protection Agency
ES	Eastern States
EO	Executive Order
FLPMA	Federal Land Policy and Management Act of 1976
LAC	Limits of Acceptable Change
NEPA	National Environmental Policy Act of 1969
NHPO	National Historic Preservation Act of 1966
NRHP	National Register of Historic Places
NVRPA	Northern Virginia Regional Park Authority
OHV	Off Highway Vehicle
PA/EA	Planning Analysis/Environmental Assessment
RMA	Resource Management Area
RPA	Resource Protection Area
SHPO	State Historic Preservation Office
SRP	Special Recreation Permit
SRMA	Special Recreation Management Area
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
VDOT	Virginia Department of Transportation
WH&B	Wild Horse and Burro

## **Appendix A**

### **Maps**



**Meadowood Special Recreation Management Area Activity Development Plan  
Meadowood East Current Condition**

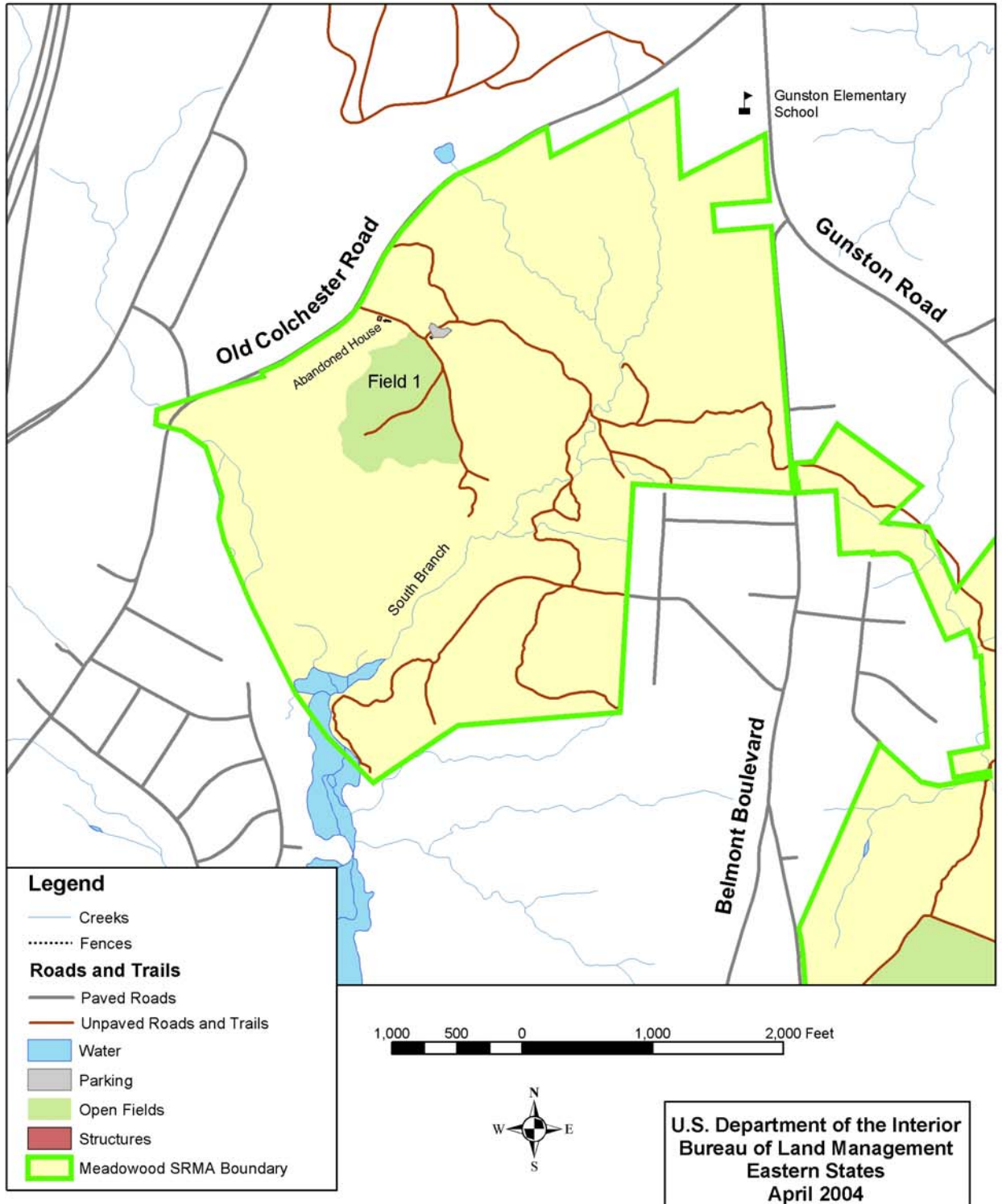


No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of this data for individual use or aggregate use with other data.

**Map 2**



**Meadowood Special Recreation Management Area Activity Development Plan  
Meadowood West Current Condition**

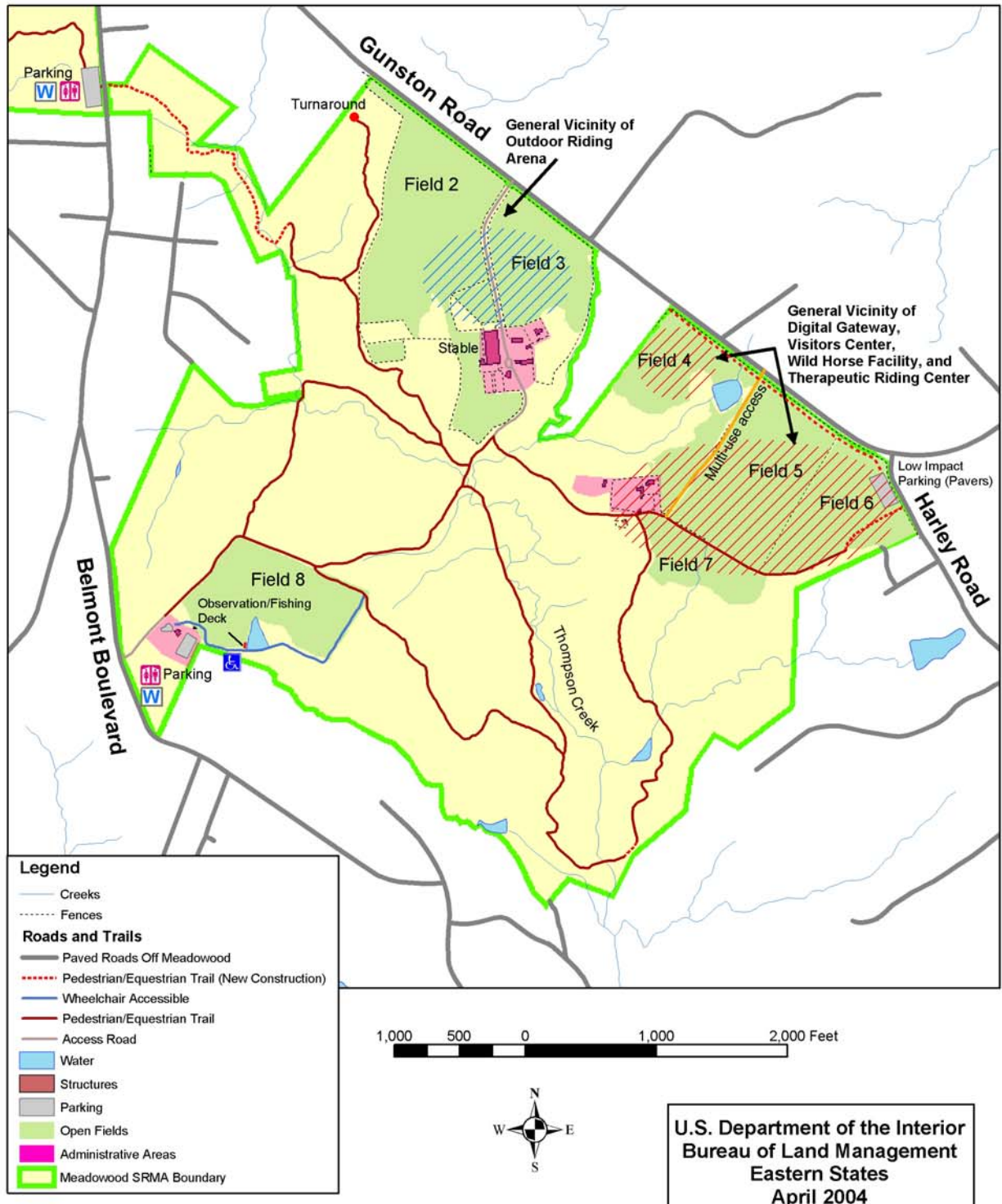


No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of this data for individual use or aggregate use with other data.

**Map 3**



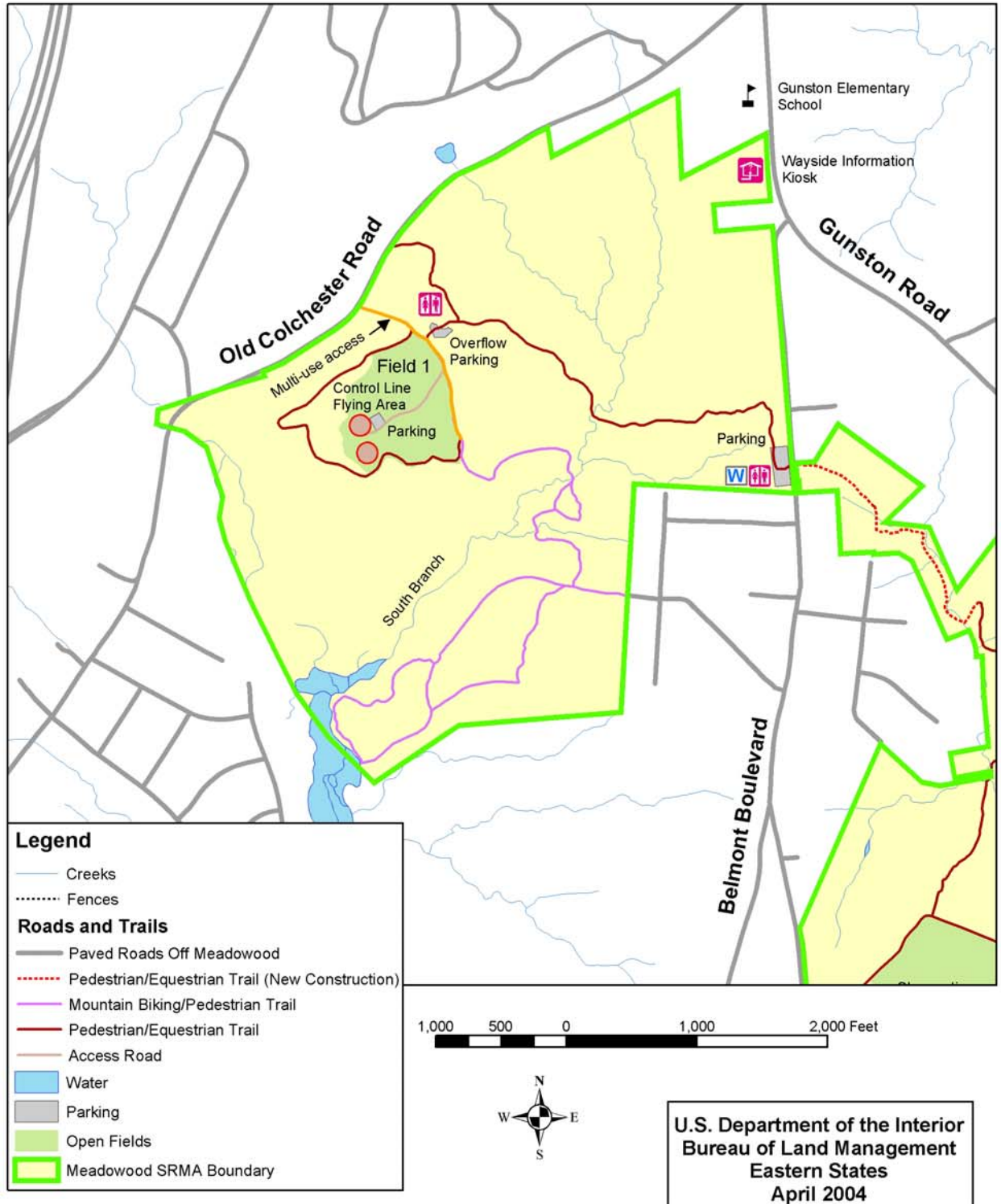
# Meadowood Special Recreation Management Area Activity Development Plan Meadowood East 0 to 4 Years



No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of this data for individual use or aggregate use with other data.

Map 4

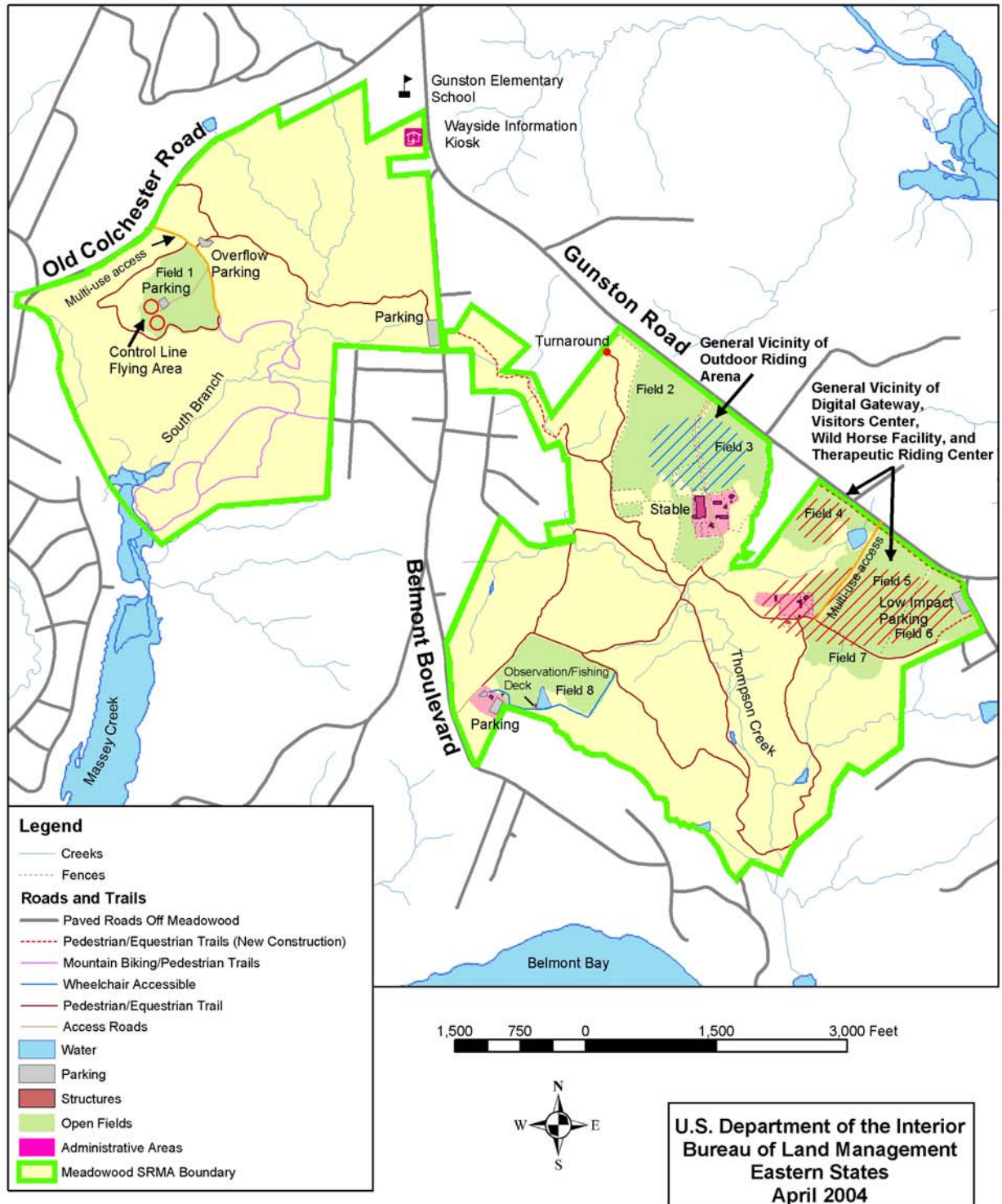
# Meadowood Special Recreation Management Area Activity Development Plan Meadowood West 0 to 4 Years



No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of this data for individual use or aggregate use with other data.

**Map 5**

# Meadowood Special Recreation Management Area Activity Development Plan Four Year Plan Objectives

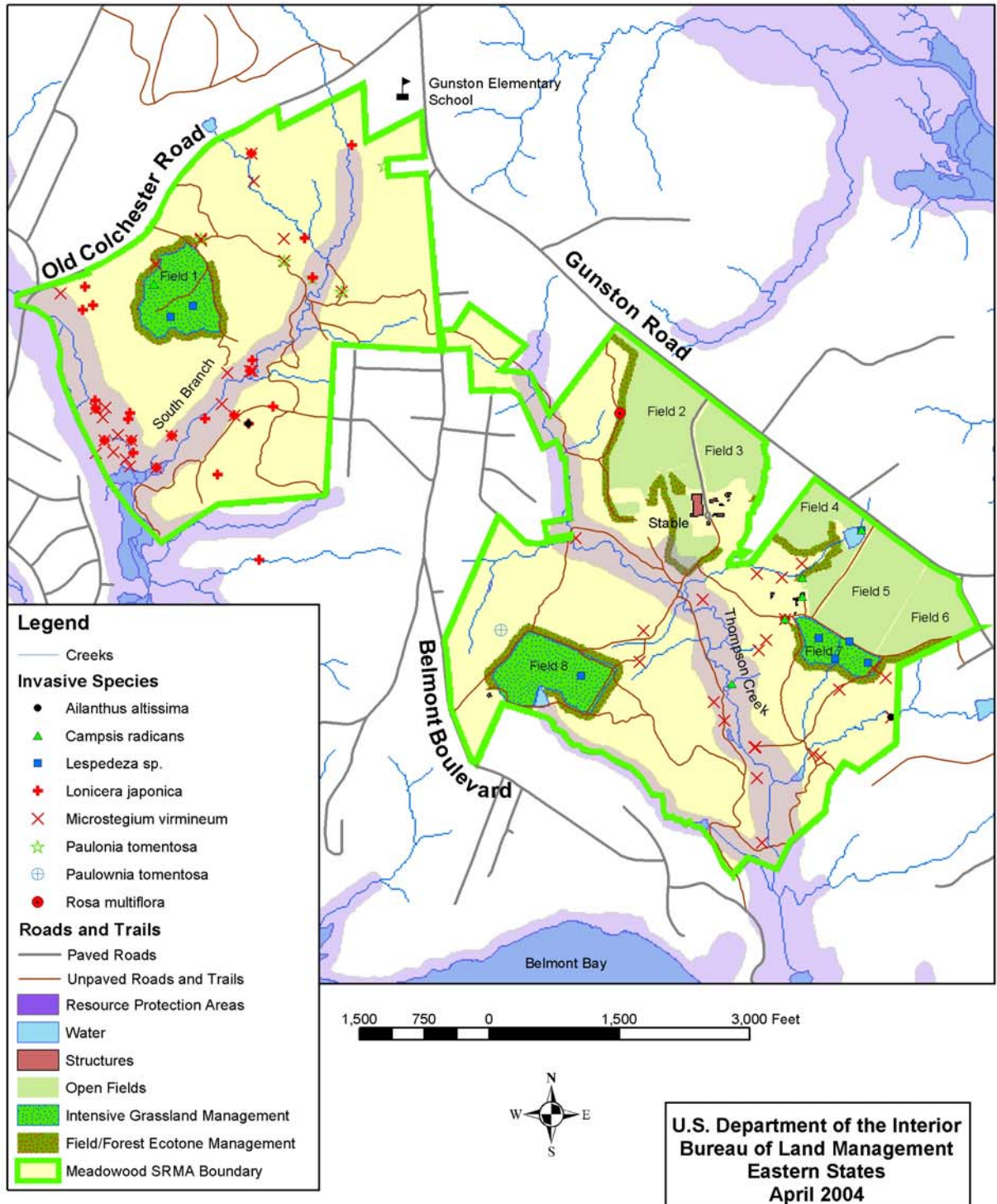


No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of this data for individual use or aggregate use with other data.

**Map 6**



# Meadowood Special Recreation Management Area Activity Development Plan Vegetation Management



No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of this data for individual use or aggregate use with other data.

Map 7

# Meadowood Special Recreation Management Area Activity Development Plan Control Line Flying Area



## Legend

### Roads and Trails

-  Paved Roads Off Meadowood
-  Mountain Biking/Pedestrian Trail
-  Pedestrian/Equestrian Trail
-  Access Road
-  Open Fields
-  Meadowood SRMA Boundary

200 100 0 200 400 Feet



U.S. Department of the Interior  
Bureau of Land Management  
Eastern States  
April 2004

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of this data for individual use or aggregate use with other data.

Map 8