Rocky Flats

National Wildlife Refuge

Final
Comprehensive Conservation Plan

and
Environmental Impact Statement

September 2004

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ROCKY FLATS NATIONAL WILDLIFE REFUGE
COMPREHENSIVE CONSERVATION PLAN/
ENVIRONMENTAL IMPACT STATEMENT APPROVAL
U.S. FISH AND WILDLIFE SERVICE, REGION 6

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Abstract

The Rocky Flats site is a 6,240-acre former nuclear defense facility operated by the U.S. Department of Energy (DOE). The DOE is completing cleanup of the site under oversight by the U.S. Environmental Protection Agency (EPA) and the Colorado Department of Public Health and Environment. Under the Rocky Flats National Wildlife Refuge Act of 2001, the site will become the Rocky Flats National Wildlife Refuge following certification from the EPA that cleanup and closure have been completed. The Rocky Flats site is located at the interface of the Great Plains and Rocky Mountains, where it supports a diverse mosaic of vegetation communities. Many areas of the Rocky Flats site have remained relatively undisturbed for the past 30 to 50 years, allowing them to retain diverse natural habitat and associated wildlife. Important vegetation communities on the site include the rare xeric tallgrass grassland and the tall upland shrubland communities. Rocky Flats also supports populations of the threatened Preble's meadow jumping mouse, as well as a herd of about 160 deer.

The U.S. Fish and Wildlife Service has prepared this Final Comprehensive Conservation Plan and Environmental Impact Statement (CCP/EIS). It describes and analyzes four management alternatives for the site: Alternative A - No Action, Alternative B – Wildlife, Habitat and Public Use (Preferred Alternative), Alternative C – Ecological Restoration, and Alternative D – Public Use. Wildlife-dependent public uses are considered to be appropriate uses on National Wildlife Refuges, and were considered in the development of the alternatives. Some of the greatest benefits would come from road removal and revegetation, weed management, and Preble's habitat management. The greatest impacts to Refuge resources would be the result of reduced resource management in Alternative A, and increased visitor use in Alternatives B and D. The Final CCP/EIS provides responses to comments received on the Draft CCP/EIS.

The Final CCP/EIS is available for review at http://rockyflats.fws.gov. The U.S. Fish and Wildlife Service will issue a Record of Decision on the CCP no sooner than 30 days after the Notice of Availability for the Final CCP/EIS is published in the Federal Register. Comments concerning this Final CCP/EIS should be sent to:

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Acronym List

BOSMP	City of Boulder Open Space and Mountain Parks Department
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CCP	Comprehensive Conservation Plan
CDOW	Colorado Division of Wildlife
CDOT	Colorado Department of Transportation
CDPHE	Colorado Department of Public Health and Environment
CNHP	Colorado Natural Heritage Program
DOE	Department of Energy
DRCOG	Denver Regional Council of Governments
EIS	Environmental Impact Statement
ESA	Endangered Species Act
EPA	Environmental Protection Agency
FTE	Full-time employee
GPS	Global Positioning System
IPM	Integrated Pest Management
MMS	Maintenance Management System (database)
MOU	Memorandum of Understanding
NEPA	National Environmental Policy Act
NWR	National Wildlife Refuge
NWRS	National Wildlife Refuge System
NWTC	National Wind Technology Center
O&M	Operations and maintenance
RFCA	Rocky Flats Cleanup Agreement
RFCAB	Rocky Flats Citizen Advisory Board
RFCLOG	Rocky Flats Coalition of Local Governments
RMA	Rocky Mountain Arsenal National Wildlife Refuge
ROD	Record of Decision
RONS	Refuge Operations Needs System

Summary

Summary

THE ROCKY FLATS NATIONAL WILDLIFE REFUGE

This document is a Final Comprehensive Conservation Plan (CCP) and Environmental Impact Statement (EIS) for the Rocky Flats National Wildlife Refuge (Rocky Flats NWR). The CCP will guide management of Refuge operations, habitat restoration and visitor services for the next 15 years. The EIS evaluates and compares four alternatives to managing wildlife, habitats and human use of the proposed Refuge. It also discloses effects of restoration and visitor use on important physical, biological, social and cultural resources.

The Rocky Flats site is a 6,240-acre former nuclear defense facility operated by the U.S. Department of Energy (DOE). All weapons manufacturing was performed in a 600-acre area in the middle of the site known as the Industrial Area. In 1992, the mission of the Rocky Flats site changed from weapons production to environmental cleanup and closure. The DOE is completing the cleanup in accordance with the Rocky Flats Cleanup Agreement (RFCA) under oversight by the U.S. Environmental Protection Agency (EPA) and the Colorado Department of Public Health and Environment (CDPHE).

Under the Rocky Flats National Wildlife Refuge Act of 2001 (Refuge Act), the 6,240-acre Rocky Flats Environmental Technology Site will become the Rocky Flats NWR following certification from the EPA that cleanup and closure have been completed. At that time, the U.S Fish & Wildlife Service (Service) will assume management responsibility for most of the site.

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The Refuge provides habitat for elk.

Five sequential steps must be completed before Rocky Flats becomes a Refuge. These steps are:

1. Service completes final CCP/EIS and issues a Record of Decision
2. DOE completes site cleanup except for operations and maintenance of cleanup monitoring facilities
3. EPA certifies completion of the cleanup
4. DOE transfers land to Department of the Interior
5. Department of the Interior establishes the Refuge and Service begins management and implementation of the CCP

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Big Bluestem in the xeric tallgrass prairie.

The Service understands that some members of the public remain apprehensive about potential public use at Rocky Flats NWR due to the site's history. In all alternatives, the Service would brief visitors about the site's transformation from a nuclear weapons production facility to a National Wildlife Refuge. In the alternatives that allow for expanded public use, the Service would address public concerns about the safety of the Refuge by providing clear information that educates visitors about access restrictions and public use opportunities. This information would be available at all trailheads. The Service also would work with the DOE to develop signage and fencing or another means of boundary demarcation to clearly identify all areas that would be retained by DOE and are closed to public access.

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The Service would conserve the diversity of native fauna.

Refuge Significance

In the Refuge Act, Congress identified the following significant qualities about the Rocky Flats site:

- The majority of the site has generally remained undisturbed since its acquisition by the government.
- The site preserves valuable open space and striking vistas of the Front Range mountain backdrop.
- The site provides habitat for many wildlife species, including a number of threatened and endangered species, and is marked by the presence of rare xeric tallgrass prairie plant communities.

Refuge Purpose

The Refuge Act identified four purposes of the Rocky Flats NWR:

- Restoring and preserving native ecosystems.
- Providing habitat for, and population management of native plants and migratory and resident wildlife.
- Conserving threatened and endangered species.
- Providing opportunities for compatible scientific research.

The Refuge Act also provided some direction for managing the Refuge. The Service is to manage the Refuge to ensure that wildlife-dependent public uses and environmental education and interpretation are the priority public uses of the Refuge.

Vision

During the initial planning process, the Service developed the following vision statement to describe what will be different in the future as a result of the CCP and to capture the essence of what the Service is trying to accomplish at the Refuge:

> *Rocky Flats National Wildlife Refuge is a healthy expanse of grasslands, shrublands and wetlands, including rare xeric tallgrass prairie, where natural processes support a broad range of native wildlife. The Refuge provides striking mountain and prairie views*

and opportunities to appreciate the Refuge resources in an urbanized area through compatible wildlife-dependent public uses and education. Working with others, the Refuge conserves the unique biotic communities and sustains wildlife populations at the interface of mountains and prairies on Colorado's Front Range.

GOALS

The Service also developed a set of goals to guide the planning effort and Refuge management:

Wildlife and Habitat Management

Conserve, restore and sustain the biological diversity of the native flora and fauna of the mountain/prairie interface with particular consideration given to threatened and endangered species.

Public Use, Education and Interpretation

Provide visitors and students high quality recreational, educational and interpretive opportunities and foster an understanding and appreciation of: the Refuge's xeric tallgrass prairie; upland shrub and wetland habitats; native wildlife; the history of the site; and the National Wildlife Refuge System (NWRS).

Safety

Conduct operations and manage public access in accordance with the final Rocky Flats' cleanup decision documents to ensure the safety of the Refuge visitors, staff and neighbors.

Effective and Open Communication

Conduct a variety of communication outreach efforts to raise public awareness about the Refuge programs, management decisions, and the mission of the Service and the NWRS.

Working with Others

Foster beneficial partnerships with individuals, government agencies, non-governmental organizations, and others to promote resource conservation, compatible wildlife-related research, public use, site history, and infrastructure.

Refuge Operations

Based on available funds, provide facilities and staff to fulfill the Refuge vision and purpose.

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Goldfinch and a variety of bird species present opportunities for wildlife observation.

PUBLIC INVOLVEMENT

Throughout the CCP/EIS development process, the Service has solicited input from the public. Public involvement in the planning process ensured that interested and affected individuals, organizations, agencies and governmental entities were consulted and provided opportunities to participate. Public involvement has:

- Informed the public about Rocky Flats NWR (planning updates, website, public meetings, presentations).
- Provided public input on key issues.
- Provided help in determining management direction of Rocky Flats NWR.

THE REFUGE'S RESOURCES

The Rocky Flats site is located at the interface of the Great Plains and Rocky Mountains. The western half of the site is characterized by the relatively level Rocky Flats pediment, which gives way to several finger-like drainages that slope down to the rolling plains in the eastern portion of the site.

A diverse mosaic of vegetation communities is found at Rocky Flats. Two of these vegetation communities, the xeric tallgrass prairie and the tall upland shrubland, are considered to be rare in the region. Other vegetation communities include riparian woodland, riparian shrubland, wetlands, mesic mixed grassland, xeric needle and thread grassland, reclaimed mixed grassland, and ponderosa pine woodland.

Many areas of the Rocky Flats site have remained relatively undisturbed for the last 30 to 50 years, allowing them to retain diverse habitat and associated wildlife. These wildlife communities are supported by the regional network of protected open space that surrounds Rocky Flats on three sides and buffers wildlife habitat from urban development. Preble's meadow jumping mouse (Preble's), a threatened species, occurs in every major drainage on the Refuge, as well as wetlands and shrubland communities

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Research on wildlife populations would be a component of most alternatives.

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A field of wildflowers.

adjacent to the Rock Creek and Woman Creek drainages. A resident herd of about 160 deer inhabit the site and elk are occasionally present.

Cultural resource surveys have identified and recorded 45 cultural sites or isolated artifacts at Rocky Flats. None of the identified cultural resources are recommended as eligible for listing in the National Register of Historic Places. However, the Lindsay Ranch within the Rock Creek drainage provides opportunities to interpret the early history of settlement and ranching on the prairie.

The Rocky Flats site is located at the intersection of Jefferson, Boulder and Broomfield counties. The site is surrounded by open space to the north, east and west, and urban development to the northeast and southeast. Other nearby land uses include mining operations, wind energy research, and water collection and storage facilities.

ACTIVITIES OUTSIDE THE SCOPE OF THIS EIS

The legislation establishing Rocky Flats NWR requires that the Department of Energy (DOE) retain jurisdiction, authority and control over portions of the Rocky Flats site necessary for cleanup response actions. DOE anticipates that it will need to retain land in and around the current Industrial Area in order to maintain institutional controls and protect cleanup and monitoring systems.

Management alternatives for the DOE-retained lands are not considered in this CCP because the lands will not be part of the Refuge and the Service will not have authority to decide how those lands should be managed. The Service is recommending a fence that allows wildlife movement be built around the retained area to distinguish Refuge lands from DOE jurisdiction. The

DOE does not anticipate transferring any lands that would require additional safety requirements for either the Refuge worker or the visitor.

DESCRIPTION OF ALTERNATIVES

Four alternatives were developed following the public scoping process and a workshop involving the planning team and Service staff. The alternatives are analyzed in detail in this CCP/EIS and summarized briefly below.

ALTERNATIVE A: NO ACTION

In the No Action Alternative, the Service would not develop any public use facilities and would not implement any new management, restoration, or education programs at Rocky Flats. In this alternative, the Service would continue to manage the 1,800-acre Rock Creek Reserve in accordance with the Rock Creek Reserve Integrated Natural Resources Management Plan (DOE 2001).

Management activities within the Rock Creek Reserve would include ongoing resource inventories and monitoring, habitat restoration, weed control, and road removal and revegetation. Public use opportunities would be limited to guided tours.

ALTERNATIVE B: WILDLIFE, HABITAT AND PUBLIC USE (PREFERRED ALTERNATIVE)

Alternative B, the Service's Preferred Alternative, emphasizes both wildlife and habitat conservation along with a moderate level of wildlife-dependent public use. Refuge-wide habitat conservation would include management of native plant communities, removal and revegetation of unused roads and stream crossings, management of deer and elk populations, and protection of Preble's meadow jumping mouse habitat. Restoration would strive to replicate pre-settlement conditions.

Visitor use facilities would include about 16 miles of trails, a seasonally staffed visitor contact station, trailheads with parking, and developed overlooks. One trail down to the Lindsay Ranch would be open soon after Refuge establishment, while the remainder of the public use facilities would open after 5 years, when restoration is well underway. Most of the trails would use existing roads. Public access would be by foot, bicycle, horse, or car. A limited public hunting program would be developed in collaboration with Colorado Division of Wildlife (CDOW).

On- and off-site environmental education programs would focus on the prairie ecosystem and would primarily target high school and college students.

The Service would provide compatible scientific research opportunities that focus on wildlife habitat and interactions between wildlife and human use. Partnerships would be sought from federal, state and municipal agencies and private entities to help achieve Refuge goals and to conserve contiguous lands.

ALTERNATIVE C: ECOLOGICAL RESTORATION

Alternative C emphasizes Refuge-wide conservation and restoration of large areas of wildlife habitat. Restoration and management activities would strive to replicate pre-settlement conditions. Restoration efforts would focus on disturbed areas such as road corridors, stream crossings, cultivated fields and developed areas.

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The Lindsay Ranch barn would be an interpretive site in Alternative B.

Limited public use and minimal facility development would occur in this alternative. Any facilities on the Refuge would be built for specific resource protection and management purposes. A single, 3,700-foot long trail would provide access to the Rock Creek drainage, but access would be limited to guided tours only. Environmental education programs would be limited to local distribution of educational materials about the Refuge and its ecological resources.

In Alternative C, the Service would facilitate increased opportunities for applied research relating to long-term habitat changes and species of special concern. Partnerships would be expanded with governmental agencies, educational institutions and others to assist in wildlife and habitat protection, resource stewardship and the preservation of contiguous lands.

Alternative D: Public Use

In Alternative D, the Service would emphasize wildlife-dependent public uses. Wildlife and habitat management would focus on the restoration of select plant communities and ongoing conservation and management of existing native plant and wildlife species. Certain roads and other disturbed areas not used for trails or public use facilities would be restored with native vegetation.

A broad range of public use opportunities would be provided, including wildlife observation and photography, interpretation, environmental education and a limited hunting program. Access through the Refuge would be provided by a 21-mile trail system that would accommodate hiking, bicycling and equestrian use. Most of the trails would be constructed along existing roads. A visitor center would be constructed at the Refuge. Environmental education efforts would include on- and off-site programs for kindergarten through college age students.

Research opportunities would focus on the integration of public use into the Refuge environment and interactions between wildlife and visitors. Partnerships would be sought with various public agencies to help sustain Refuge goals and preserve contiguous lands. The Service also would work with local communities and tourism organizations to promote wildlife-dependent public uses on the Refuge.

OBJECTIVES AND STRATEGIES

The Service has developed objectives and strategies for each alternative. An objective is a general statement about what the Service wants to achieve on the Refuge, while a strategy is a specific action, tool, technique or combination of the above used to meet objectives. Because each alternative has a different emphasis, the objectives and strategies vary by alternative. The following summarizes key objective topics addressed for each alternative in the CCP/EIS:

Resident deer populations are found at the Refuge.

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Sharp-tailed grouse is a likely candidate for reintroduction.

Wildlife and Habitat Management

- Preble's habitat management
- Xeric tallgrass management
- Mixed grassland prairie management
- Road restoration and revegetation
- Weed management
- Deer and elk management
- Prairie dog management
- Species reintroduction

Public Use, Education and Interpretation

- Public access
- Visitor experience
- Interpretation
- Environmental education
- Hunting
- Recreation facilities

Safety

- Staff safety
- Visitor safety

Open and Effective Communication

- Outreach efforts

Working with Others

- Emergency response partnerships
- Conservation partnerships
- Research partnerships
- Volunteer partnerships

Refuge Operations

- Staffing
- Operations and management facilities
- Cultural resource management

ENVIRONMENTAL CONSEQUENCES

The proposed Refuge management alternatives would pose a variety of benefits and impacts to resources at Rocky Flats. Some of the greatest benefits would come from road removal and revegetation, weed management, and Preble's habitat management activities. The greatest impacts to Refuge resources would be the result of reduced resource management in Alternative A and increased visitor use in Alternatives B and D. These and other effects are summarized below and described in detail in the CCP/EIS.

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Lupine and many other wildflowers can be found on the Refuge.

Preble's Habitat Management. All of the alternatives include protection and maintenance of the Refuge's Preble's habitat. This would result in moderate, long-term benefits to Preble's and other species that depend on riparian habitat.

Pond Restoration. Alternative C would remove the Lindsay Ponds and restore those areas to a native wetland. This would result in a major impact to existing native fish populations that use the ponds and also would impact future fish reintroductions.

Grassland Management. Tallgrass and mixed grassland management strategies, along with weed and fire management and road removal and revegetation in all alternatives, would benefit grassland communities on the Refuge. However, many of the benefits would be limited to the Rock Creek Reserve in Alternative A and would be reduced overall in Alternatives A and D because prescribed fire and grazing would not be available as Refuge-wide grassland restoration tools.

In Alternatives B and C, the planned restoration of non-native grasses in the hay meadow and other areas to native prairie would benefit the overall quality and diversity of mixed grassland habitat on the Refuge.

Road Restoration and Revegetation. In all of the alternatives, the removal and revegetation of unused roads and stream crossings would provide a major long-term benefit to a variety of vegetation communities and related wildlife species. These benefits would be greatest in Alternative C and the least in Alternative A.

Weed Management. In all of the alternatives, implementation of Integrated Pest Management (IPM) practices would benefit a variety of wildlife habitat types on the Refuge. These benefits, however, would be greatly reduced in Alternative A where proactive weed control would only be applied to the Rock Creek Reserve and an IPM plan would not be completed.

Deer and Elk Management. The establishment and achievement of population targets for deer and elk in Alternatives B, C and D would benefit both those species and the habitat on which they depend. However, proposed monitoring levels in Alternatives A and D may not be sufficient to develop effective population targets.

In Alternative A, the Service would not actively pursue population targets, which could result in long-term impacts to ungulate populations and their habitat and adverse impacts on habitat quality for Preble's and other species due to overbrowsing or overgrazing.

Trail Development and Use. While the impacts of new trail construction in Alternatives B and D would be negligible, public use of some trails could result in moderate long-term adverse impacts to wildlife species due to an increased human presence that may alter wildlife movement and foraging patterns. These impacts would be more pronounced in Alternative D, where several trails run adjacent to riparian areas and could disturb potential raptor nesting habitat. The combination of trails in the Rock Creek drainage in Alternative D could result in a moderate to major impact to wildlife and habitat in that area. Some trail impacts could be reduced by the enforcement of seasonal trail closures.