

Rocky Flats National Wildlife Refuge

Planning Update

Volume Three, Spring 2003

Presentation of the Alternatives

The U.S. Fish and Wildlife Service (Service) developed four management alternatives as part of the Comprehensive Conservation Plan (CCP) process. The alternatives are based on the refuge purpose, significance, goals, legal mandates and comments gathered during the public scoping period in the fall of 2002.

The Service is pleased to present the alternatives in this booklet and during the upcoming public workshops to be held May 21st, 22nd, 28th, and 29th, 2003. The workshops will involve a brief open house, presentation of the alternatives, small group discussions, and a question and answer period.

Each of the four alternatives presents a different approach for future refuge management, with a varied focus on wildlife and habitat resource management and public uses. In this update, you will

find narrative descriptions and maps of the alternatives as well as a comparison chart that summarizes how each alternative will fulfill the refuge goals. The Service invites you to provide input on these alternatives and actions you feel are most appropriate for the future of the Refuge. We emphasize that no decisions concerning refuge management have been made.

We appreciate your continued involvement in the CCP process, and look forward to receiving your ideas on the preliminary management alternatives. A questionnaire is included for submitting written suggestions. The deadline for comment submissions is June 20, 2003.

Public Workshop Schedule

- *Westminster*
Wednesday, May 21, 2003
6:00 - 8:30 pm
College Hill Library
Front Range Community College
Library Room L-107
3645 W. 112th Avenue
Westminster, CO 80031
- *Boulder*
Thursday, May 22, 2003
6:30 - 9:00 pm
East Recreation Center
Mountain View & Flatirons Rooms
5660 Sioux Drive
Boulder, CO 80303
- *Broomfield*
Wednesday May 28, 2003
1:00 - 3:30 pm
Broomfield Recreation Center
Lakeshore Room 3
280 Lamar Street
Broomfield, CO 80020
- *Arvada*
Thursday May 29, 2003
6:30 - 9:00 pm
Senior Recreation Center - Room E
6842 Wadsworth Boulevard
Arvada, CO 80003

Come hear presentations about the Refuge management alternatives and engage in discussions about various alternatives. Meetings will begin promptly according to the listed schedule.



Left: Rodents and small mammals such as rabbits serve as a source of prey at Rocky Flats.

Alternative Management Plan Development

Alternative Development

The U.S. Fish and Wildlife Service planning process requires examining a range of different futures (alternatives) for managing Rocky Flats National Wildlife Refuge. Development of alternatives is an important component of the decision making process since they allow managers, stakeholders, and interested citizens to explore varying approaches to protecting resources, managing use, and directing facility development. The development of alternatives ensures that impacts, trade-offs, ideas and concerns voiced by the public and stakeholders are analyzed prior to selecting a final management approach for the Refuge.

Each alternative developed by the Service is based on a different concept of what the future management of the Refuge could be. The No Action alternative is based on existing management direction as described in the *Rock Creek Reserve Integrated Management Plan*; the other three alternatives provide a range of approaches for managing the Refuge during its first 15 years of existence.

In formulating these alternatives, the Service and core planning team considered three primary questions:

- WHY was the Refuge established and what are its establishment purposes?
- WHAT is the vision for future management of the Refuge (*what kind of place do we want Rocky Flats National Wildlife Refuge to be after cleanup?*)
- HOW do we turn this vision into reality?

Right: The Service discusses different ways to craft alternative plans.

Statements of purpose and significance for Rocky Flats National Wildlife Refuge provide answers to the WHY questions and form the foundation for the comprehensive conservation plan (CCP). The primary function of the CCP is to address the WHAT and HOW questions.

Public comments have been very important in identifying issues and development of possible scenarios – *or alternatives* – for the future management of the Refuge. Upon analyzing further public input received in the Spring of 2003, the Service could refine the alternatives and adopt a selected course of action for managing the Refuge.

The Alternatives

Four alternatives are described in this Planning Update. For each alternative there is a concept statement or “theme” that describes, in general terms, the guiding philosophy or overall direction for that alternative. Additionally, there is a narrative description of the management directions and actions that would be taken for conserving and restoring wildlife habitat and other natural resources, public uses, access, and facilities. The alternatives are conceptual in nature, and focus on what future resource conditions and visitor uses should occur at Rocky Flats National Wildlife Refuge rather than on details concerning how recommendations should be achieved. For example, the exact acreage of grassland restoration or the specifics of restoration practices (e.g. grazing, burning) will not be addressed in the alternatives, but will eventually be outlined in step-down plans.



Alternative Plan Explanations

No Action (Alternative A)

The No Action alternative serves as a baseline for comparing the future resource conditions and public uses prescribed by the other three management alternatives. The No Action alternative follows the recommendations outlined in DOE's *Rock Creek Reserve Integrated Natural Resources Management Plan* (2000).

Draft Proposed Action (Alternative B)

The Service's planning policy requires that we select one of the alternatives as the *Draft Proposed Action* prior to presenting the alternatives to the public. The proposed action is the alternative that the Service believes best fulfills the Refuge purpose and the statutory mission and responsibilities of the National Wildlife Refuge System. Despite having identified the proposed action, the Service has not made any final decisions concerning the alternatives and is soliciting input from the public on what approaches are most appropriate for the future of Rocky Flats.

Alternative Maps

Maps illustrating future conditions under each alternative are presented on the following pages. Each alternative is represented by a restoration and a visitor use map. The restoration map depicts the extent of road, stream crossing and grassland restoration across the site. The visitor use map illustrates the level of public use, facility development and recreation opportunities.

Below: The xeric tallgrass prairie is one of three resource management zones of Rocky Flats.



Map Definitions

Wildlife-dependent Recreation

The six forms of wildlife-dependent recreation activities identified by Congress as the System's priority public uses are: hunting, fishing, wildlife observation, photography, environmental education and interpretation. The majority of these uses are initiated through developed trails that traverse portions of a Refuge. Although not classified as a wildlife-dependent recreational use, bicycling and horseback riding are considered as a mode of transportation for accessing the interpretive areas from regional trail systems.

Restoration

Restoration implies returning landscape disturbances to a more natural condition. Restoration efforts at Rocky Flats National Wildlife Refuge would focus on removing most existing gravel and paved roads and stream crossings. Areas that have undergone agricultural conversion or have been invaded by non-native plants would be priority candidates for restoration efforts.

Resource Management Zones

Habitat management zones represent general areas of distinct vegetation patterns, soil structure, and landscape physiography, and provide a framework for establishing priorities for future habitat restoration as well as the type and levels of public use. Three management zones have been designated at Rocky Flats to assist in planning efforts:

1. *Xeric Tallgrass Prairie.* The Refuge supports xeric tallgrass prairie. The majority of this unique prairie is found in the western portion of the site, extending eastward along several finger-like plateaus on cobbly soils. The tallgrass plant species provide habitat for a variety of mammals, ground-nesting birds, and reptiles.

2. *Other Grasslands.* Other grassland communities dominate the broad ridges, hillsides and valley floors of the site, as well as the rolling landscape in the eastern portion of Rocky Flats. This community is the largest on the site, and is important to grassland birds, small mammals and large mammals such as mule deer.

3. *Riparian/Wetland Area.* The plains riparian community is present in drainages throughout the Rocky Flats site, and is characterized by a diverse mix of trees, shrubs, and grasses. The community provides important habitat for many of the bird and mammal species on the Refuge, such as the threatened Preble's meadow jumping mouse.

Tall upland shrubland community is found on north-facing slopes above wetlands and seeps. Although the tall upland shrubland represents less than one percent of the total vegetation cover of the site, it contains over half of the plant species found throughout Rocky Flats. This community is used by many animals and birds throughout the year for cover, roosting, and breeding.

Summary of Alternatives

Alternative A - No Action

This alternative provides a baseline for evaluating impacts in the other alternatives. Under Alternative A, the Service would continue to manage the future Rocky Flats NWR as described in the *Rock Creek Reserve Integrated Natural Resources Management Plan* (D.O.E., 2000). The Service would emphasize resource stewardship as the overriding consideration in management activities, and would focus on the the 1800-acre Rock Creek Reserve comprising the northern third of the Refuge. Stewardship would involve inventorying and monitoring, restoration, weed control and removal of the majority of roads that traverse the Reserve area.

Access to the Refuge would be permitted by “arrangement only” with the Service, and visitation would be limited to guided tours. No new visitor facilities would be built. The Service would foster partnerships that focus on fire suppression and wildlife population control with appropriate federal, state and local agencies.

Alternative B - "DRAFT PROPOSED ACTION" Wildlife, Habitat and Public Use

Alternative B would emphasize the conservation of wildlife and their habitats while allowing a moderate level of wildlife-dependent public use. Ecosystem conservation and restoration of wildlife habitats would occur throughout the entirety of the Refuge. Intensive conservation practices would include revegetation of all unnecessary road corridors, stream crossings, hay meadows, and other disturbed areas.

Fourteen miles of trails would be developed mostly through conversion of existing roads. Trails would afford opportunities for interpretation, wildlife observation and photography on portions of the site. Additional facilities would include a seasonally staffed visitor contact station, trailheads with vehicular parking, developed overlooks and interpretive trails. There would be a limited deer hunting program. The Lindsay Ranch barn would be stabilized as in Alternative A, and would serve as an interpretive resource.

The public would access the Refuge by vehicle, foot or bicycle. Some trails would be foot only. No dogs or other domestic animals would be permitted. On- and off-site environmental education programs would focus on the prairie ecosystem and primarily target high school and college students. The Service would support compatible scientific research that studies wildlife habitat and the interaction of wildlife and humans. Partnerships would be sought from federal, state, municipal agencies and others to help sustain the Refuge’s goals and to conserve contiguous lands.

Alternative C - Ecological Restoration

Alternative C would emphasize ecosystem conservation with a focus on restoration to the extent possible of presettlement conditions throughout the Refuge. Restoration would occur within disturbed areas - road corridors, stream crossings, cultivated fields, and developed areas.

Due to the emphasis on restoration, only limited public use activities and minimal facility development would occur on the Refuge under this alternative. Facilities would be built for specific resource protection and management purposes, and one trail would accommodate guided tours of the Rock Creek Reserve. Environmental education programs will be limited to the publication and local distribution of learning materials about the Refuge and prairie ecosystem.

Increased opportunities for applied research that relates to the restoration of the native landscape and habitat for species of special concern would occur under Alternative C. Partnerships would be expanded with governmental agencies, educational institutions, and others to assist in sustaining wildlife and their habitats, resource stewardship and the preservation of contiguous lands.

Alternative D - Public Use

Alternative D, provides the highest level of wildlife-dependent recreational opportunities for refuge visitors. The restoration of select plant communities and protection of existing plant communities is the focus of wildlife habitat management. Roads and some disturbed areas that do not accommodate visitor facilities would be removed and revegetated with native species.

Visitors would be able to explore the Refuge and participate in wildlife observation and photography, interpretation, environmental education, and a limited hunting program. Seventeen miles of roads would be converted to a trail system accommodating foot travelers, bicyclists, and horseback riders. Some trails would be foot only. A visitor center would be considered along the west edge of the boundary. Environmental education efforts would increase under alternative D and include on and off-site programs for kindergarten through junior high school ages, as well as high school and college level students.

To support the public use oriented management approach, research would focus on the integration of public use within a refuge environment. Partnerships would be sought with various public agencies as described in Alternative B, and with tourism organizations, school districts, and others.

Comparison of Alternatives

GOALS	Alternative A - No Action Continue current habitat and wildlife management practices that focus on the Rock Creek drainage. Limit habitat and wildlife management in other areas to the protection of existing conditions. Restrict general public use. Continue limited compatible scientific research opportunities.	Alternative B - Wildlife, Habitat & Public Use* Implement extensive habitat and wildlife management and conservation focused on the restoration to presettlement conditions. Accommodate wildlife-dependent public use. Facilitate compatible scientific research that focuses on habitats, wildlife, and public use. *Draft Proposed Action
Wildlife & Habitat Management	<p>Weeds - Continue current inventory, control, and monitoring programs and comply with State and local weed control laws</p> <p>Xeric Tallgrass - Restore habitat and increase weed control in Rock Creek only</p> <p>Riparian Habitat - Increase weed control, evaluate restoration activities in Rock Creek only and remove road crossings</p> <p>Disturbed Areas - Remove and revegetate 14 miles of roads in Rock Creek only</p> <p>Species Introductions - Allow state to reintroduce game or extirpated species at their discretion</p> <p>Prairie Dogs - Limit prairie dog populations to short grass and mixed grasslands</p> <p>Restoration Tools - Use prescribed burning, vegetation monitoring, and herbicide application</p>	<p>Weeds - Substantial reduction of total invaded acreage and comply with State and local weed control laws</p> <p>Xeric Tallgrass - Maintain and restore where necessary</p> <p>Riparian Habitat - Restore and maintain major drainages to support Preble's & other native species, remove road crossings</p> <p>Disturbed Areas - Restore approx. 300 acres of hay meadows and roads. Remove and revegetate all roads (48.5 miles) not needed for access or trails</p> <p>Species Introductions - Evaluate suitability of reintroducing sharp-tailed grouse and other native species</p> <p>Prairie Dogs - Limit prairie dog populations to short grass and mixed grasslands</p> <p>Restoration Tools - Intensively monitor and use burning, grassland grazing, reseeding with native flora, and IPM</p>
Public Use, Education & Interpretation	<p>Interpretation - Organized guided tours only</p> <p>Environmental Education - none</p> <p>Hunting - none</p> <p>Trails - none</p> <p>Facilities - none</p> <p>Lindsay Ranch - Stabilize the barn</p>	<p>Interpretation - Interpretive trails and programming</p> <p>Environmental Education - On and off-site programs for high school and college-level students</p> <p>Hunting - Youth and/or disabled hunting two weekends a year, using primitive hunting methods (e.g. archery, slugs)</p> <p>Trails - Trail system with connections to surrounding trails for hiking and limited biking. Seasonal off-trail use in southern 1/2 of site</p> <p>Facilities - Seasonally staffed contact station, interpretive panels, trailheads, parking, and wildlife observation and photography facilities.</p> <p>Lindsay Ranch - Stabilize, maintain and interpret the barn</p>
Safety	<p>Staff - All staff will be appropriately trained about the site, the institutional controls and any safety hazards and requirements prior to beginning their assignment</p> <p>Visitors - Inform all visitors about opportunities and restrictions for public access through outreach</p>	<p>Staff - All staff will be appropriately trained about the site, the institutional controls and any safety hazards and requirements prior to beginning their assignment</p> <p>Visitors - Inform all visitors about opportunities & restrictions for public access through outreach and by staff on site</p>
Open & Effective Communication	<p>Outreach - No public outreach or education programs</p>	<p>Outreach - Outreach will be conducted throughout the life of the plan and in communities surrounding the Refuge. It will inform the public about stewardship, the Service and NWR System, CCP implementation, and will communicate about risk.</p>
Working With Others	<p>Emergency - Establish agreements with all adjacent fire districts and develop agreements with state and law enforcement agencies as needed</p> <p>Conservation - Work with Division of Wildlife to manage wildlife and coordinate highway planning along Indiana Street with adjacent landowners</p> <p>Research - Maintain agreements with university and federal agencies for research focused mainly on radionuclide contaminants</p>	<p>Cultural - Develop partnerships to manage & interpret cultural resources</p> <p>Emergency - Establish agreements with all adjacent fire districts and develop agreements with state and law enforcement agencies as needed</p> <p>Conservation - Coordinate wildlife and habitat management, mineral rights issues, and highway planning along Indiana with local open space agencies and adjacent landowners</p> <p>Research - Evaluate proposals for compatible scientific research that focus on habitat, wildlife, and public use</p> <p>Other - Develop a volunteer program and support the establishment of a "Friends" group for Rocky Flats NWR.</p>
Refuge Operations	<p>Staffing - 1 part-time employee supported by Rocky Mountain staff with collateral duties at Rocky Flats</p> <p>O & M Facilities - Minimal facility development</p>	<p>Staffing - 3 full-time employees</p> <p>O & M Facilities - Small office space, satellite maintenance and storage facilities (primary facilities at RMA), portable toilets</p>

Alternative C - Ecological Restoration

Maximize habitat and wildlife management and conservation focused on the restoration to presettlement conditions. Limit general public use. Implement compatible scientific research that focuses on habitat and wildlife.

Alternative D - Public Use

Focus habitat and wildlife management on the restoration of select plant communities and the conservation of existing native plant communities and wildlife species. Provide opportunities for a diversity of compatible public uses. Facilitate compatible scientific research focused on wildlife and habitat and the related impacts of public use.

Differences from B include:

Weeds - Greater reduction of total invaded acreage than B
Xeric Tallgrass - More restoration than Alternative B
Disturbed Areas - Restore approx. 300 acres of hay meadows and roads. Remove and revegetate all roads (59 miles) not needed for access or trails
Prairie Dogs - Limit prairie dog populations to short grass and mixed grasslands
Restoration Tools - Intensively monitor to a greater degree than Alternative B

Differences from B include:

Weeds - Do not allow weed infestation to increase
Disturbed Areas - Restore approx. 300 acres of hay meadows and roads. Remove and revegetate all roads (47.5 miles) not needed for access or trails
Prairie Dogs - Allow prairie dog populations to expand naturally within short grass or mixed grasslands and accommodate relocation of prairie dogs from off-site
Restoration Tools - Monitor public use, implement seasonal closures of certain areas (no burning or grazing)

Differences from B include:

Interpretation - Roadside signage along Highway 93 only
Environmental Education - Off-site education materials for high school and college level students and on-site programs limited to teacher-led university level classes focused on habitat restoration and biology
Hunting - No hunting
Trails - One trail for organized guided tours only
Facilities - Information panel, access road
Lindsay Ranch - Remove all structures and restore area to native vegetation

Differences from B include:

Interpretation - Wide variety of opportunities including trails, programs, and a volunteer naturalist programs
Environmental Education - On & off-site programs for K - College level students and develop outdoor classroom facilities.
Trails - Extensive trail system with connections to surrounding trails for hiking, biking, and equestrian use and seasonal off-trail in southern 1/2 of site
Facilities - Staffed visitor center, trailheads, parking, and wildlife observation and photography facilities
Lindsay Ranch - Rehabilitate, maintain and interpret the barn

Same as B

Same as B

Same as B

Same as B

Differences from B include:

Research - Develop a list of research needs to be addressed by the Refuge staff and external researchers and focus on basic and applied wildlife and habitat questions

Differences from B include:

Research - Research will include studies of the impact of public use on the Refuge wildlife and other natural resources

Differences from B include:

Staffing - 4 full-time employees
O & M Facilities - satellite maintenance and storage facilities (primary facilities at RMA), portable toilets

Differences from B include:

Staffing - 5 full-time employees
O & M Facilities - small office building, primary maintenance and storage facilities, restroom facilities

Refuge Legislation, Vision & Goals

Refuge Vision

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 recreation 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.



Above: Sharp tailed grouse will be considered for reintroduction.

Refuge Purpose

- Restoring and preserving native ecological systems
- Providing habitat for, and population management of, native plants and migratory and resident wildlife
- Conserving threatened and endangered species [including species that are candidates for listing under the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.)]
- Providing for opportunities for compatible scientific research.

Refuge Significance

- The majority of the Rocky Flats site outside the industrial area has not been disturbed since acquisition
- Rocky Flats maintains mountain vistas for many Denver metropolitan area communities
- The Rocky Flats site provides habitat for wildlife, a threatened and endangered species, and is marked by a rare tallgrass prairie plant community



Center: Blazing Star is common in the grasslands of the Refuge.

Refuge Goals

1. Wildlife and Habitat Management

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

2. Public Use, Education & 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.

3. 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.

4. 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 U.S. Fish and Wildlife Service and the National Wildlife Refuge System among visitors, students and nearby residents.

5. Working with Others

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

6. Refuge Operations

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



Conservation Plan Schedule

There are five major stages in producing a CCP. In the first and second phases, the planning team reaffirms the Refuge's purpose, identifies issues and concerns for the refuge, drafts a refuge vision and goals, and collects information necessary for the planning process. This sets the stage for the third phase that focuses on *developing alternative management approaches* to achieving desired future conditions and resolving issues.

Once public comments are received in written form and at public meetings in May 2003, the Service will reconsider the range of alternatives and make modifications and revisions. Then, a draft CCP and environmental impact statement (EIS) will be prepared, and include the revised alternatives and proposed action.



Above: Yucca is commonly found in grassland areas of Rocky Flats.

Contact Information

Public comments will be accepted by written letter or e-mail at the following addresses:

Rocky Flats NWR
Comprehensive Conservation Plan
Attn: Laurie Shannon,
Planning Team Leader
U.S. Fish and Wildlife Service
Rocky Mountain Arsenal NWR
Building 121
Commerce City, CO 80022
Ph: 303/289 0980
Fax: 303/289 0579

Email: rockyflats@fws.gov
Online: <http://rockyflats.fws.gov>

The Planning Schedule

The three-year CCP process will involve the following five planning stages:

Planning Stage	Dates
1. Preplanning	May 2002 - July 2002
2. Public Involvement and Scoping	Aug. 2002 - Oct. 2002
3. Develop and Analyze Alternatives	Nov. 2002 - May 2003
4. Prepare Draft CCP/EIS (For Public Review)	June 2003 - Jan. 2004
5. Final CCP/EIS and Record of Decision (ROD)	Feb. 2004 - Dec. 2004

U.S. Fish & Wildlife Service
Rocky Flats National Wildlife Refuge
Rocky Mountain Arsenal NWR
Building 121
Commerce City, CO 80022

FIRST CLASS MAIL
POSTAGE & FEES PAID
CITY OF DENVER
PERMIT NO 5267

RETURN SERVICE REQUESTED