

Alternatives, including the Proposed Action

Chapter 2

INTRODUCTION

Chapter 2 discusses the following information:

- A discussion of the changes made between the Draft EIS and the Final EIS
- An explanation of how the alternatives were developed
- A description of the alternatives considered in detail, including the “no action” alternative, which, if chosen, would continue current management direction.
- A description of alternatives considered but eliminated from detailed study.
- A comparison of the alternatives, including major features and effects.

Maps and other illustrations used throughout this Environmental Impact Statement (EIS) are graphic designs that explain or show relationships rather than true on-the-ground representation. Larger, more detailed maps are available for review in the Headquarter’s Office, Caribou-Targhee National Forest, Idaho Falls, Idaho.

Acre figures throughout this document are approximations.

Changes Made Between the Draft EIS and the Final EIS

Major changes between the Draft EIS and the Final EIS include the creation and analysis of a new alternative, Alternative H, based on comments received on the Draft EIS, and an updated Economic Analysis that reflects economic conditions in Oneida County. The Economic Section in the Draft EIS, Chapters 3 and 4, has been replaced with the updated analysis. The economic update also required changes in Issue Indicators in Chapter 1, Table 2.24 at the end of Chapter 2, and the Baseline Indicators Economic Section in Chapter 3. The Economic Analysis in Chapter 4 used two different models (F.E.A.S.T. and ImplanPro) to determine economic effects. Appendix B and the Economic Section in the Literature Cited/Consulted Chapter have been updated to reflect this new analysis.

Chapter 6, Public Involvement, includes the Content Analysis of the public comments received on the Draft EIS. It also includes a new section on the public meeting held in Malad, Idaho on December 7, 2000 on the Draft EIS and other briefings held subsequently.

All Appendices have been updated to reflect Alternative H. In addition, a new Appendix I has been added that addresses Sage grouse population trends. Appendix J, a new Appendix, includes the Biological Evaluation and Biological Assessment for Alternative H, the selected alternative in the Record of Decision. Appendix K, another new addition, is an example of a risk assessment for the herbicide Tebuthiuron. Other changes are shown in a new appendix, Appendix L. Appendix L includes a comprehensive listing of all changes made between the Draft EIS and Final EIS by chapter and subheading.

PROCESS USED TO FORMULATE ALTERNATIVES

Alternatives under consideration were developed from the following sources:

1. Monitoring and evaluation of current Grassland resources.
2. A review of existing legislation, including the Code of Federal Regulations, the National Forest Management Act and a review of Forest Service Manual policy and direction.
3. A review of current management direction in the 1985 *Caribou National Forest and Curlew National Grassland Land and Resource Management Plan*.
4. An assessment of existing conditions, disclosed in the *Initial Analysis of the Management Situation (AMS) for the Curlew National Grassland* dated February 1999 and subsequent public comments;
5. Issues identified during the public scoping process as a result of the release of the "Analysis of the Management Situation" in February 1999; the Notice of Intent and Scoping Statement released May 3, 1999; and comments received at a public meeting held in Malad, Idaho in November 1999;
6. Management concerns identified by the Interdisciplinary Team, including a review with the Intermountain Regional Office in Ogden, Utah.

Three significant planning issues were identified through these efforts: Riparian and Watershed Management, Vegetation/Wildlife Habitat Management, and Social and Economic Factors. These issues were used to develop a range of alternatives to the proposed action as described in the Notice of Intent, dated May 3, 1999.

Sixteen preliminary alternatives were initially identified, including the No Action and the Proposed Action. Nine of these preliminary alternatives were dropped from further analysis. (See "Alternatives Considered but Dropped From Further Consideration" beginning on page 2-38 for a discussion of these alternatives.)

ELEMENTS COMMON TO ALL ALTERNATIVES

Each of the final eight alternatives has identical or similar features to the others, and certain portions of a revised management plan would be the same for all alternatives. In many other respects, the alternatives are distinctly different from each other, especially in how they address the management concerns and issues generated through the formal public scoping process. Each alternative is, in effect, a stand-alone management plan, which, if chosen, would guide management of the Curlew National Grassland for the next ten to fifteen years.

It was the intent to make all of the alternatives meet the purpose and need of this amendment effort and to be fully implementable and achievable, subject to budget allocations. All of the alternatives represent the principles of multiple use and sustained yield management, maintain or improve ecosystem health, and attempt to comply with environmental laws, although they may do so in slightly different ways and at varying rates of achievement. While all the alternatives provide a wide range of multiple uses, goods, and services, some alternatives give more or less emphasis to particular ones.

A budget feasibility analysis was completed for each alternative based on treatment proposals and program administration contained in each alternative. Historically, the Forest Service has not received the funds necessary to fully implement its management plans. The budgets were allocated based on the emphasis in the alternative, the expected goods and services provided, and the necessary actions and expenditures required to deliver those goods and services. Management objectives in each alternative rely on adequate funding over the plan period and are subject to fluctuating budget levels and policy and legislative decisions.

Base level funding will be first committed to meeting permit obligations, environmental protection and mitigation needs. Dollars will be spent in the following priority:

1. Grazing allotment administration
2. Priority 1 monitoring
3. Riparian restoration actions, such as fencing or improvement projects
4. Vegetation treatments and other developments, such as ponds or tree rows.

All alternatives use a consistent lettering scheme and provide basic protection for Grassland resources and comply with environmental laws. As directed by federal law, Forest Service policy, regulations and guidance described in the Regional Guide for the Intermountain Region, all alternatives will:

1. Maintain basic soil, air, water and land resources.
2. Provide a variety of life through management of biologically diverse ecosystems, though they may differ in how they emphasize native plant and animal management.
3. Provide recreation opportunities and maintain scenic quality in response to the needs of national grassland users and local communities.

4. Protect heritage resources in accordance with applicable laws and regulations, while also providing recreational and educational opportunities.
5. Protect fossils and antiquity resources.
6. Suppress all wildfires to protect private property and public safety.
7. Treat noxious weeds as described in the 1996 Forest-wide Noxious Weed Environmental Assessment.
8. Sustain multiple uses, products and services in an environmentally acceptable manner.
9. Update resource direction identified in the “Initial Analysis of the Management Situation for the Curlew National Grassland (AMS)” that does not need to change in accordance with existing laws, regulations, and Forest Service Manual direction. This updated direction will be brought forward into a revised Grassland Management Plan. (See AMS, pages 8-11.)
10. Place emphasis on improved landownership and access patterns that benefit both private landowners and the public through cooperation with other landowners.
11. Improve financial efficiency for most programs and projects by minimizing expenses, recognizing however, that not all programs and projects produce revenue.
12. Emphasize cooperation with individuals, organizations, and other agencies to coordinate the planning and implementation of projects.
13. Promote rural development opportunities to enrich rural cultural life, to enhance the environment, to provide employment and to improve rural living conditions.
14. Constrain “no tillable” acres to 15,700 acres

Special soil/site features have been used to identify approximately 15,700 acres that should not be treated or should be treated using only certain techniques.¹ Management direction for these areas will be part of the revised management plan regardless of which alternative is selected for implementation. These areas have been identified on each of the alternative maps and include the following:

- A. Soil islands or stringers that developed at or near the high water mark of ancient Lake Bonneville (5,100 feet – 5,500 feet in elevation). Fine-textured, chalky soils on these areas prevent dense growth of sagebrush and understory species.

¹ See Process Paper C

- B. Some dune areas in the south unit (also associated with the ancient lake) should never have their cover entirely removed due to the potential for erosion. Treatments that thin the overstory cover may be used to achieve resource objectives but ground cover values need to be maintained at or above 60 percent.
- C. Areas where threetip sagebrush (*Artemisia tripartita*), green rabbitbrush (*Chrysothamnus viscidiflorus* var. *viscidiflorus*), and threadleaf rubber rabbitbrush (*C. viscidiflorus* var. *consimilis*) have canopy cover values greater than 5 percent need to be carefully evaluated by treatment method because of their ability to resprout after disturbance.
- D. Some settings appear to be more prone to invasion by annuals, especially cheatgrass, once disturbed. These areas need to be carefully identified prior to project work that will remove the perennial cover.

ELEMENTS COMMON TO ACTION ALTERNATIVES C, E, F G, and H

- **Constrain Bulbous bluegrass (*Poa bulbosa*) treatment to 2,500 acres**

Each of the action alternatives, with the exception of the No Action and Proposed Action alternative, constrain the treatment of bulbous bluegrass to 2,500 acres or less in the first decade. The treatment of bulbous bluegrass requires a five-year treatment program, and entire fields must be treated at one time in order for the treatment to be effective. Bulbous bluegrass underneath sagebrush currently occupies approximately 5,200 acres. Because of the radical treatment method of burning, plowing, and reseeding over a five-year period, it is not feasible to treat more than 2,500 acres (2200 acres in the greater than 15 percent sagebrush canopy cover class and 300 acres in the 6-15 percent sagebrush canopy cover class) in the first decade because of associated watershed, livestock grazing, and wildlife habitat impacts.
- **Buffer zones for vegetation treatments on the Curlew National Grassland because of adjacent land use**

Each of the alternatives includes a buffer zone between the Curlew National Grassland and adjacent land in other ownerships. Because of adjacent land use for agricultural production, buffer zones of ¼ mile in some alternatives to 500 feet in other alternatives were established to constrain vegetation treatments, particularly when adjacent land is in agricultural production or where sagebrush canopy cover is less than 15 percent. Buffer zones vary by alternative based on the emphasis in each alternative. The ¼ mile buffer was used in alternatives with emphasis on wildlife habitat to reduce habitat fragmentation and attempts to maintain dense sagebrush patches, specifically in the 16-24 percent canopy cover class in greater than 320-acre patch sizes. A 500-foot buffer was used in alternatives that emphasize other resources with the intent of maintaining dense sagebrush patches in greater than 320 acres.

ELEMENTS COMMON TO ACTION ALTERNATIVES C, D, F, G, and H

Restricting cross-country travel to designated routes

All motorized travel would be placed on designated routes during the snow-free season. Over-the-snow vehicles will not be restricted.

ALTERNATIVE DESCRIPTIONS

This section provides a narrative description, prescription tables, and prescription maps of each alternative under consideration. Alternative A is the No Action Alternative required under the National Environmental Policy Act. Alternative B is the Proposed Action. Alternatives C through H are action alternatives to the Proposed Action based on the issues identified through the scoping process discussed in Chapter 1 beginning on page 1-12.

ALTERNATIVE A - NO ACTION (CURRENT PLAN DIRECTION)

Alternative A proposes to carry forward the direction of the current Forest Plan (1985). This alternative would promote the development of grassland agriculture and sustained-yield management of the forage, fish and wildlife, water, soil and recreation resources. "Grassland agriculture" is defined as practices that "maintain and improve soil and vegetation cover, and demonstrate sound and practical principles of land use for the areas in which they are located" (Bankhead-Jones Farm Tenant Act, 1937).

While Alternative A reflects the 1985 Land and Resource Management Plan Selected Alternative for implementation, it should be understood that only approximately 6,000 acres of sagebrush, not 18,000 acres as proposed in the 1985 Selected Alternative, have been treated over the last ten to fifteen years due to constraints such as drought, water and air quality concerns, wildlife needs and other emerging issues during this period of time.

Riparian areas would be managed at minimum custodial levels to comply with existing laws.

Direction for management of sage grouse habitat would include the following guidelines:

- No habitat manipulation within 1.9 miles of active sage grouse leks.
- No sagebrush control where sagebrush canopy cover is less than 20 percent or on steep slopes.
- No sagebrush control along streams, meadows or secondary drainages.
- Apply sagebrush treatments in irregular patterns.
- Avoid complete kill or removal of sagebrush.

This alternative would not provide direction for additional wildlife improvements.

Table 2.1 displays the existing condition of sagebrush canopy cover by class, the probable outcome of proposed treatments for the first ten years and the Desired Future Condition for this alternative.

Table 2.1. Alternative A - Percentage of Acres in Sagebrush Canopy Cover Classes Existing Condition, First Decade Outcome, and Desired Future Condition

Sagebrush Canopy Cover Classes	Existing Condition Percent of Sagebrush Acres	First Decade Outcome of Treatments Percent of Sagebrush Acres	Change + Or – over the Decade	Alt. A Desired Future Condition Percent of Sagebrush Acres
0% -5% canopy cover	17% of acres	29% of acres	+12%	33% of acres
6% -15% canopy cover	24% of acres	25% of acres	+1%	33% of acres
Greater than 15% canopy cover	59% of acres	46% of acres	-13%	33% of acres

This alternative would treat 18,750 acres of sagebrush over the next ten years to improve diversity in sagebrush canopy cover classes and increase forage production for livestock grazing. The majority of sagebrush acres would be managed on a 20-year rotation of vegetation treatments to provide forage for permitted livestock, generally on existing crested wheatgrass sites. Treatments would be large scale, generally up to 1,000 acres. Revegetation after treatment would occur through natural regeneration on the site. No seeding would occur.

No specific direction would be provided for mountain brush management.

No specific direction would be included for the treatment of bulbous bluegrass in sagebrush understories. If bulbous bluegrass sites are included in treatments, revegetation would avoid establishing monocultures and would maintain a variety of desirable grass, forbs and shrub species for forage production for livestock. No preference would be given to revegetation with native or non-native plant species, but rather site-specific analysis would determine the feasibility and cost of both types of revegetation.

Economic outcomes are a result of managing to achieve the goals and objectives of the 1985 Forest Plan.

The Grassland would be open to motorized cross-country travel from December 1 to August 31. Motorized travel would be placed on designated routes from September 1 to November 30. During the snow season, the Grassland would be open to over-the-snow vehicles.

Approximately 1,006 acres would be considered “not suitable” for livestock grazing. These areas include the developed campgrounds, administrative sites, the Sweeten Pond area, and the tree row areas. Approximately 98 percent of the Grassland would be considered “suitable” for livestock grazing. Although no specific livestock grazing utilization levels are defined in the current Forest Plan, the majority of acres would be grazed at a 60 percent use level outlined in

the allotment management plans for the Grassland. No riparian stubble height or riparian utilization levels would be defined in this alternative.

No additional direction would be provided for collaborative efforts with adjacent landowners.

Table 2.2 shows how management prescriptions would be applied on the Grassland in this alternative:

Table 2.2. Alternative A – Acres in Each Management Prescription

Prescription	Acres	Percent of Grassland
3.2 Roaded Natural	10,525	22%
6.1 Range	36,825	77%
8.1.1 Concentrated Development Sites	175	<1%
TOTAL	47,525	100%

MAP OF ALT A GOES HERE

ALTERNATIVE B - PROPOSED ACTION (From Notice of Intent)

Alternative B proposes to manage Grassland resources based on the needs for change and desired future condition statements identified in the Curlew National Grassland “Initial Analysis of the Management Situation,” dated February 1999. This alternative would amend current Forest Plan direction and create new management direction for vegetation, riparian, livestock grazing, wildlife, and other resources and uses on the Grassland, based on the proposed range of desired future conditions identified in Chapter 1 of this EIS. It is designed to address the issues of riparian areas, vegetation properly functioning condition and sage grouse habitat.

Of the alternatives proposed in the EIS, Alternative B, the Proposed Action, more nearly reflects actual management that has occurred on the Grassland over the past decade, while incorporating new standards and guidelines, including livestock utilization rates and riparian and wildlife improvements.

Under this alternative, a separate management plan for the Grassland would be developed that addresses ecological patterns, processes, and management direction for both riparian and upland resources, including restoration of rangeland vegetation composition. This alternative proposes to implement livestock grazing utilization standards, develop soil and watershed management direction, improve direction for sagebrush obligate wildlife species habitat, and develop policy for future utility proposals.

In this alternative, watersheds and riparian areas would be managed to maintain stability or accelerate recovery. This alternative would establish Riparian/Wetland emphasis areas (RWAs) for the maintenance of riparian and stream channel processes. Zone widths would be 75 feet for non-fish bearing reaches and 150 feet for fish bearing reaches. Range structural developments would be allowed provided they do not inhibit attainment of RWA goals. Riparian utilization levels would be 30 percent or a 6-inch stubble height, whichever is attained first.

Alternative B proposes to manage wildlife habitat by:

- Avoiding vegetation treatments within 0.25 miles of active sage grouse leks in habitats considered suitable for sage grouse nesting and brood rearing habitat.
- Constructing one additional pond in the Sweeten Pond area over the next ten years.
- Constructing ten additional miles of tree rows over the next ten years.

Table 2.3 displays the existing condition of sagebrush canopy cover by class, the probable outcome of proposed treatments for the first ten years, and the Desired Future Condition for this alternative.

Table 2.3. Alternative B - Percentage of Acres in Sagebrush Canopy Cover Classes Existing Condition, First Decade Outcome, and Desired Future Condition

Sagebrush Canopy Cover Classes	Existing Condition Percent of Sagebrush Acres	First Decade Outcome of Treatments Percent of Sagebrush Acres	Change + Or – Over the Decade	Alt. B Desired Future Condition Percent of Sagebrush Acres
0%-5% canopy cover	17% of acres	15% of acres	-2%	10% -30% of acres
6%-15% canopy cover	24% of acres	17% of acres	-7%	40% -60% of acres
Greater than 15% canopy cover	59% of acres	68% of acres	+9%	30% -50% of acres

A total of 5,850 acres of vegetation would be treated with prescribed fire over the next ten years.

Table 2.4 displays the proposed vegetation treatments in this alternative.

Table 2.4. Alternative B - Proposed Vegetation Management Treatments

Prescribed fire in sagebrush outside bulbous bluegrass areas	Prescribed fire in mountain brush	Prescribed fire/plow/seed in bulbous bluegrass areas ¹	Herbicide treatment	Revegetation preference on Bulbous bluegrass sites	Total Acres
2,000 acres in greater than 15% cc outside bulbous bluegrass areas	150 acres	1,200 acres in 6-15% cc 2,500 acres in greater than 15% cc	No treatment	Native and desired non-native	5,850 acres ¹

¹ The total acres of bulbous bluegrass treatment have been reduced by approximately 800 acres to reflect treatment of the North Carter field that was underway at the time this alternative was developed and proposed in the Notice of Intent.

This alternative would treat 2,000 acres of sagebrush in greater than 15 percent canopy cover over the next ten years to improve diversity of sagebrush canopy cover while increasing forage production in the understory. Sagebrush would be managed for the majority of acres in 6-15 percent and greater than 15 percent canopy cover classes for wildlife habitat quality and long-term maintenance. Revegetation on treated sites would occur through natural regeneration. No seeding would occur.

Approximately 150 acres of mountain brush would be treated using prescribed fire in this alternative.

Approximately 3,700 acres (1,200 acres in 6-15 percent canopy cover and 2,500 acres in greater than 15 percent canopy cover) of bulbous bluegrass sites would be prioritized for treatment using prescribed fire, plowing and reseeded to improve understory diversity. Bulbous bluegrass sites would be revegetated using both non-native and native grass, forbs and shrub seed mixes. Treated sites would generally tend to be at least 500 acres or larger.

Economic outcomes in this alternative are the result of managing Grassland resources to achieve a clearly defined range of desired future conditions as outlined in Chapter 1 of this DEIS.

The Grassland would be open to motorized cross-country travel from December 1 to August 31. Motorized travel would be placed on designated routes from September 1 to November 30. During the snow season, the Grassland would be open to over the snow vehicles.

Approximately 1,125 acres would be considered “not suitable” for livestock grazing in this alternative. These areas include the developed campgrounds, the Sweeten Pond area, and the existing tree rows and the proposed tree row development proposed in this alternative. Approximately 98 percent of the Curlew National Grassland would be suitable for livestock grazing; however, livestock forage utilization would be reduced from current levels. Upland forage utilization levels would be established at 45 percent for native vegetation and 50 percent for non-native vegetation.

Table 2.5 shows how management prescriptions would be applied on the Grassland in this alternative:

Table 2.5. Alternative B – Acres in Each Management Prescription

Prescription	Acres	Percent of Grassland
2.8.4 Riparian/Wetland Areas	921	<1%
3.3 Roaded Natural	11,123	23%
3.4 Special Wildlife Areas	507	<1%
4.1.1 Developed Recreation Sites	25	<1%
6.2 Range	34,774	73%
8.1.1 Concentrated Development Sites	175	<1%
TOTAL	47,525	100%

MAP OF ALT B GOES HERE

ALTERNATIVE C

Alternative C proposes to manage Grassland resources in conjunction with the needs of upland game birds, particularly Sage and Colombian sharp-tail grouse, and other sagebrush obligate wildlife species. It focuses on the issues of sagebrush overstory and understory composition, wildlife habitat, and riparian conditions.

Under this alternative, a separate management plan for the Curlew National Grassland would be developed that would enhance sagebrush habitat for sagebrush obligate species. Vegetation treatments would be used to provide quality habitat and the quantity of habitat necessary to sustain life cycles and populations of these species. This alternative proposes to implement livestock grazing utilization standards, develop soil, watershed and riparian management direction, improve direction for sagebrush obligate wildlife species habitat, and develop policy for future utility proposals.

Watersheds and riparian areas would be managed to maintain stability or accelerate recovery and to provide late summer sage grouse brood habitat. This alternative would establish Riparian/Wetland Areas (RWAs) using a 150-foot special emphasis zone for riparian and stream channel processes. Deep-rooted vegetation (sedges/willows) would be established on 3 miles of perennial stream reaches over the next ten years. Improving trend would be emphasized on 10 percent of the non-functioning perennial stream reaches per year over the next ten years. New livestock facilities would be placed outside RWAs. Riparian utilization levels would be established at 20-50 percent or a 2-6-inch stubble height based on season of grazing, stream channel type, current and desired riparian condition.

Alternative C proposes to manage wildlife habitat by:

- Managing vegetation treatments to improve the quality and quantity of suitable sage grouse habitats, as described in the most current version of Idaho State Sage Grouse Guidelines, within 5 kilometers (3.2 miles) of occupied sage grouse leks, except where bulbouse bluegrass is present.
- Protecting suitable sage grouse habitats within five kilometers (3.2 miles) from all occupied leks.
- Managing sagebrush for 15-25 percent canopy cover within 0.25 miles of agricultural lands where sagebrush canopy cover is less than 15 percent, except where bulbous bluegrass in sagebrush understories dominate the site and are prioritized for treatment.
- Constructing one additional pond in the Sweeten Pond area over the next ten years.
- Constructing ten additional miles of tree rows over the next ten years.

Table 2.6 displays the existing condition of sagebrush canopy cover by class, the probable outcome of proposed treatments for the first ten years, and the Desired Future Condition for this alternative.

Table 2.6. Alternative C - Percentage of Acres in Sagebrush Canopy Cover Classes Existing Condition, First Decade Outcome, and Desired Future Condition.

Sagebrush Canopy Cover Classes	Existing Condition Percent of Sagebrush Acres	First Decade Outcome of Treatments Percent of Sagebrush Acres	Change + Or – Over the Decade	Alt. C Desired Future Condition Percent of Sagebrush Acres
0%-5% canopy cover	17% of acres	7% of acres	-10%	Less than 25% of acres
6%-15% canopy cover	24% of acres	14% of acres	-10%	Less than 25% of acres
Greater than 15% canopy cover	59% of acres	79% of acres	+20%	Greater than 50 % of acres

Approximately 4,000 acres of vegetation would be treated over the next ten years using a combination of brush beating, prescribed fire and plowing on bulbous bluegrass sites, and herbicide treatments outside of bulbous bluegrass areas. Table 2.7 displays the proposed vegetation treatments in this alternative.

Table 2.7. Alternative C – Proposed Vegetation Management Treatments

Prescribed fire in sagebrush outside bulbous bluegrass areas	Prescribed fire in mountain brush	Brush beat/ prescribed fire/ and plow/seed in bulbous bluegrass areas ¹	Herbicide treatment	Revegetation preference on Bulbous bluegrass sites	Total Acres
No treatment outside bulbous bluegrass areas	No treatment proposed	1,500 acres in less than 15% cc	2,500 acres of sagebrush in greater than 25% cc	Native only	4,000 acres

Under this alternative, vegetation treatments on the Grassland would take into account the vegetative condition of adjacent land ownerships and sage grouse needs. Approximately 2,500 acres of sagebrush in greater than 25 percent canopy cover would be treated using herbicides over the next ten years to attain 15-25 percent canopy cover to maintain sagebrush for sage grouse. The majority of sagebrush acres would be managed for sagebrush canopy cover in greater than 15 percent to enhance sage grouse nesting and brood rearing habitat. No seeding would occur on these acres.

No mountain brush treatment is proposed in this alternative.

Bulbous bluegrass in sagebrush understories would be treated and revegetated using a native only grass, forbs and shrub seed mix. This alternative proposes to treat 1,500 acres of bulbous bluegrass in less than 15 percent canopy cover by brush beating/plowing or prescribed fire over the next ten years to improve understory diversity for sage grouse. Vegetation treatments would be prioritized based on sage grouse biological needs, including pre-nesting, nesting and brood-rearing habitat. Treated sites would generally tend to be smaller in size than in other alternatives, generally less than 500 acres.

Economic outcomes are a result of managing Grassland resources for upland game bird habitat and other sagebrush/obligate species while providing for some livestock grazing.

Motorized travel would be restricted in this alternative to designated routes year-round. During the snow season, the Grassland would be open to over-the-snow vehicles.

Approximately 1,125 acres would be considered “not suitable” for livestock grazing in this alternative. These areas include the developed campgrounds, the Sweeten Pond area, and the existing tree rows and the proposed tree row development proposed in this alternative. Approximately 98 percent of the Curlew National Grassland would be “suitable” for livestock grazing in this alternative; however, livestock forage utilization would be reduced from current levels to provide vegetation cover for nesting grouse and to aid in riparian area recovery. Upland livestock utilization levels would be established at 30-40 percent or a residual vegetation height of seven inches, whichever occurs first and regardless of whether the vegetation is native or non-native.

This alternative proposes a *standard* that would establish a ¼ mile buffer when adjacent land is under agricultural crop production or where sagebrush canopy cover is less than 15 percent. Tree rows would be included in the ¼ mile buffer where they exist. A special riparian prescription would be applied to streams where headwaters are located on private, state, or other federal land outside the jurisdiction of the Forest Service.

Table 2.8 shows how management prescriptions would be applied on the Grassland in this alternative:

Table 2.8. Alternative C – Acres in Each Management Prescription

Prescription	Acres	Percent of Grassland
2.8.5 Riparian/Wetland Areas	921	<1%
3.4 Special Wildlife Areas	507	<1%
3.5 Upland Bird Habitat	45,897	96%
4.1.1 Developed Recreation Sites	25	<1%
8.1.1 Concentrated Development Sites	175	<1%
TOTAL	47,525	100%

MAP OF ALT C GOES HERE

ALTERNATIVE D

Alternative D proposes to manage the Grassland as a reference reserve or fish, wildlife, and plant preserve without livestock grazing. It is designed to address the issues of watershed condition and wildlife habitat.

Under this alternative, a separate management plan for the Curlew National Grassland would be developed that focuses on maintaining the Grassland as a reference reserve. Ecological patterns and processes would be allowed to evolve under natural conditions over time. No vegetation treatments would be proposed, and no livestock grazing would be permitted.

In this alternative, watersheds and riparian areas would be left to evolve under natural processes and as influenced by the upper portions of the watershed in other ownerships, except to maintain viable populations of wildlife species, if necessary.

Alternative D proposes to manage wildlife habitat by implementing vegetation treatments only when necessary to improve habitats to maintain minimum viable populations of wildlife species.

Table 2.9 displays the existing condition of sagebrush canopy cover by class, the probable outcome of proposed treatments for the first ten years, and the Desired Future Condition for this alternative.

Table 2.9. Alternative D - Percentage of Acres in Sagebrush Canopy Cover Classes Existing Condition, First Decade Outcome, and Desired Future Condition

Sagebrush Canopy Cover Classes	Existing Condition Percent of Sagebrush Acres	First Decade Outcome Percent of Sagebrush Acres	Change + Or – Over the Decade	Alt. D Desired Future Condition Percent of Sagebrush Acres
0%-5% canopy cover	17% of acres	6% of acres	-11%	Trend to
6%-15% canopy cover	24% of acres	15% of acres	-9%	late seral through
Greater than 15% canopy cover	59% of acres	79% of acres	+20%	natural succession

Under Alternative D vegetation treatments would be implemented only when necessary to improve habitats to maintain minimum viable populations of wildlife species. Prescribed fire would be the primary management tool used to achieve improvements of habitats to maintain minimum viable populations of wildlife species. The majority of sagebrush acres would be left to evolve under natural processes (with the exception of wildfire suppression). Sagebrush acres would be managed for late successional structure and composition. No long-term goals for treatment of sagebrush canopy cover would be set in this alternative.

No treatment of mountain brush would be proposed in this alternative.

Economic outcomes are a result of managing Grassland resources as a natural ecosystem with little or no intervention or human-induced management activities.

Motorized travel would be restricted in this alternative to designated routes year-round. During the snow season, the Grassland would be open to over-the-snow vehicles. Approximately 47,600 acres would be considered “not suitable” for livestock grazing in this alternative. No grazing would occur.

Livestock forage utilization would not be necessary in this alternative, since no livestock grazing would occur.

Table 2.10 shows how management prescriptions would be applied on the Grassland in this alternative:

Table 2.10. Alternative D – Acres in Each Management Prescription

Prescription	Acres	Percent of Grassland
3.6 Ecological Processes Custodial	47,318	98%
4.1.1 Developed Recreation Sites	32	<1%
8.1.1 Concentrated Development Sites	175	<1%
TOTAL	47,525	100%

MAP OF ALT D GOES HERE

ALTERNATIVE E

Alternative E proposes to manage Grassland resources for economic and social outcomes. It addresses the issues of sagebrush overstory, livestock grazing and economic and social values.

Under this alternative, a separate management plan for the Curlew National Grassland would be developed that addresses economic and social outcomes and meets legal requirements for soil, air and water. Vegetation management would be used aggressively to increase the production of forage, mainly for livestock grazing.

Watersheds and riparian areas would be managed to maintain stability and to provide forage production for livestock grazing and wildlife. In this alternative riparian/wetland areas (RWAs) would be managed using the green line (that vegetation directly adjacent to the stream channel) as a special emphasis zone for riparian and stream channel processes. Improving trend would be emphasized on 10 percent of the non-functioning perennial stream reaches per year over the next ten years. New livestock facilities would be placed outside RWAs. Riparian utilization levels would be established at 50 percent or a greater than 3-inch stubble height at the end of the grazing season.

Alternative E would manage wildlife habitat by avoiding vegetation treatments within 0.25 miles of active sage grouse leks in habitats considered suitable for sage grouse nesting and brood-rearing, except where bulbous bluegrass in sagebrush understories dominate the site and are prioritized for treatment.

Table 2.11 displays the existing condition of sagebrush canopy cover by class, the probable outcome of proposed treatments for the first ten years, and the Desired Future Condition for this alternative.

Table 2.11. Alternative E - Percentage of Acres in Sagebrush Canopy Cover Classes Existing Condition, First Decade Outcome, and Desired Future Condition

Sagebrush Canopy Cover Classes	Existing Condition Percent of Sagebrush Acres	First Decade Outcome of Treatments Percent of Sagebrush Acres	Change + Or – Over the Decade	Alt. E Desired Future Condition Percent of Sagebrush Acres
0 % -5% canopy cover	17% of acres	26% of acres	+9%	Greater than 50% of acres
6 % -15% canopy cover	24% of acres	23% of acres	-1%	Less than 25% of acres
Greater than 15% canopy cover	59% of acres	51% of acres	-8%	Less than 25% of acres

Approximately 17,200 acres of vegetation would be treated using a combination of prescribed fire and herbicide treatments. These treatments are designed to sustain high levels of grass production for livestock grazing. Table 2.12 displays proposed vegetation management in this alternative.

Table 2.12. Alternative E – Proposed Vegetation Management Treatments

Prescribed fire in sagebrush outside Bulbous bluegrass areas	Prescribed fire in mountain brush	Prescribed fire/plow/seed in bulbous bluegrass areas	Heavy Herbicide treatment	Revegetation preference on Bulbous bluegrass treated sites	Total Acres Treated
7,500 acres in greater than 15% cc outside bulbous bluegrass areas	200 acres	300 acres in 6-15% cc 2,200 acres in greater than 15% cc	7,000 acres in greater than 15% cc outside bulbous bluegrass areas to attain 0-5% cc	Native and desired non-native	17,200 acres

This alternative proposes to treat 7,500 acres outside of bulbous bluegrass sites that have sagebrush with canopy cover greater than 15 percent using prescribed fire to attain 0-5 percent sagebrush canopy cover over the next ten years to improve forage production and availability for livestock. It would treat an additional 7,000 acres outside of bulbous bluegrass sites that have sagebrush with canopy cover greater than 15 percent using herbicides to attain 0-5 percent canopy cover over the next ten years to improve sagebrush canopy cover diversity and increase forage production for livestock. The majority of sagebrush acres are managed for sagebrush canopy cover in less than 5 percent canopy cover to enhance/maintain grass and forbs production for livestock grazing. Revegetation on these acres would occur through natural regeneration. No seeding would occur.

Alternative E proposes to treat 200 acres of mountain brush over the next ten years using prescribed fire to attain early seral structure and composition.

Approximately 2,500 acres of bulbous bluegrass (2200 acres in greater than 15 percent canopy cover and 300 acres in less than 15 percent canopy cover) are proposed for treatment over the next ten years using prescribed fire, plowing, and herbicide applications to increase forage production for livestock grazing. Revegetation on bulbous bluegrass sites would be accomplished with non-native and native species emphasizing forage production. Treated sites would generally tend to be at least 500 acres or larger.

Economics outcomes are the result of managing Grassland resources for economic and social benefits while meeting applicable laws and regulations.

The Grassland would be open to motorized cross-country travel from December 1 to August 31. Motorized travel would be placed on designated routes from September 1 to November 30. During the snow season, the Grassland would be open to over-the-snow vehicles.

Approximately 1,006 acres would be considered “not suitable” for livestock grazing. These areas include the developed campgrounds, the Sweeten Pond area, and the tree row areas. Approximately 98 percent of the Grassland would be “suitable” for livestock grazing in this alternative. When forage production drops to 600 pounds per acre on non-native vegetation

sites, these sites would be prioritized for treatment. Upland forage utilization levels would be established at 50-60 percent for both native and non-native vegetation.

This alternative proposes a **guideline** that would establish a 500-foot buffer when adjacent land is under agricultural crop production or where sagebrush canopy cover is less than 15 percent. Tree rows would be included as part of the 500-foot buffer where they exist. A special riparian prescription would be applied to streams where headwaters are located on private, state, or other federal land outside the jurisdiction of the Forest Service.

Table 2.13 shows how management prescriptions would be applied on the Grassland in this alternative:

Table 2.13. Alternative E – Acres in Each Management Prescriptions

Prescription	Acres	Percent of Grassland
2.8.6 Riparian/Wetland Areas	60	<1%
3.4 Special Wildlife Areas	507	<1%
4.1.1 Developed Recreation Sites	32	<1%
6.3 Range Management	46,751	98%
8.1.1 Concentrated Development Sites	175	<1%
TOTAL	47,525	100%

MAP OF ALT E GOES HERE

ALTERNATIVE F

Alternative F proposes to manage Grassland resources using the Forest Service concept of Properly Functioning Condition which assesses vegetation types and identifies those types which are properly functioning ecologically and those that are at risk or non-functioning. It is designed to address the issues of sagebrush overstory and understory composition, mountain brush condition, riparian condition and watershed condition.

Under this alternative, a separate management plan for the Curlew National Grassland would be developed that addresses ecological patterns, processes, and management direction for both riparian and upland resources, including restoration of rangeland vegetation composition. This alternative would implement livestock grazing utilization standards, develop soil and watershed management direction, improve direction for sagebrush obligate wildlife species habitat, and develop policy for future utility proposals.

Watersheds and riparian areas would be managed to maintain stability or accelerate recovery. This alternative would propose to manage riparian/wetland areas (RWAs) using a 150-foot special emphasis zone for riparian and stream channel processes. Deep-rooted (sedges/willows) vegetation would be established on 3 miles of perennial stream reaches by 2010. Improving trend would be emphasized on 10 percent of the non-functioning perennial stream reaches per year over the next ten years. New livestock facilities would be placed outside RWAs. Riparian utilization levels would be established at 20-50 percent or a 2-6-inch stubble height, based on season of use, stream channel type, existing versus the desired riparian condition.

Alternative F would manage wildlife habitat by avoiding vegetation treatments within 0.25 miles of active sage grouse leks in habitats considered suitable for sage grouse nesting and brood-rearing, except where bulbous bluegrass in sagebrush understories dominate the site and are prioritized for treatment.

Table 2.14 displays the existing condition of sagebrush canopy cover by class, the probable outcome of proposed treatments for the first ten years, and the Desired Future Condition for this alternative.

Table 2.14. Alternative F - Percentage of Acres in Sagebrush Canopy Cover Classes Existing Condition, First Decade Outcome, and Desired Future Condition

Sagebrush Canopy Cover Classes	Existing Condition Percent of Sagebrush Acres	First Decade Outcome of Treatments Percent of Sagebrush Acres	Change + Or – Over the Decade	Alt. F Desired Future Condition Percent of Sagebrush Acres
0%-5% canopy cover	17% of acres	9%	-8%	10% of acres
6%-15% canopy cover	24% of acres	31%	+7%	50% of acres
Greater than 15% canopy cover	59% of acres	60%	+1%	40% of acres

Alternative F proposes to treat 12,300 acres of vegetation over the next ten years. Approximately 9,600 acres outside of bulbous bluegrass sites that have canopy cover greater than 15 percent

would be treated using herbicides only to attain 6-15 percent canopy over the next ten years to improve sagebrush canopy cover diversity. Table 2.15 displays vegetation management treatments proposed in this alternative.

Table 2.15. Alternative F – Proposed Vegetation Management Treatments

Prescribed fire in sagebrush outside bulbous bluegrass areas	Prescribed fire in mountain brush	Prescribed fire/plow in bulbous bluegrass areas	Light Herbicide treatment	Revegetation preference on Bulbous bluegrass sites	Total Acres Treated
No treatment outside bulbous bluegrass areas	200 acres	300 acres in 6-15% cc 2,200 acres in greater than 15% cc	9,600 acres in greater than 15% cc outside bulbous bluegrass areas to attain 6-15% cc	Native only	12,300 acres

The majority of sagebrush acres are managed for 6-15 percent and greater than 15 percent canopy cover to provide balance in sagebrush canopy diversity. Revegetation on these acres after treatment would occur through natural regeneration. No seeding would occur.

Approximately 200 acres of mountain brush would be treated in this alternative using prescribed fire as the primary management tool to achieve a mix of age and structural classes.

This alternative proposes to treat 2,500 acres of bulbous bluegrass in the sagebrush understory (2,200 acres in the greater than 15 percent sagebrush canopy cover and 300 acres in the less than 15 percent sagebrush canopy cover) to improve understory diversity. Treatments would include prescribed fire, plowing and reseeding. Only native grasses, forbs and shrub seed mix would be used for revegetation on treated bulbous bluegrass sites. Treated sites would generally be at least 500 acres or larger.

Economics in this alternative are an outcome of managing Grassland resources for properly functioning vegetation and riparian conditions.

Motorized travel would be restricted in this alternative to designated routes year-round. During the snow season, the Grassland would be open to over-the-snow vehicles.

Approximately 1,006 acres would be considered “not suitable” for livestock grazing. These areas include the developed campgrounds, the Sweeten Pond area, and the tree row areas. Approximately 98 percent of the Curlew National Grassland would be “suitable” for livestock grazing; however, livestock forage utilization would be reduced from current levels. Upland forage utilization levels would be established at 40-50 percent for both native vegetation and non-native vegetation.

This alternative proposes a **guideline** that would establish a ¼ mile buffer when adjacent land is under agricultural crop production or where sagebrush canopy cover is less than 15 percent. Tree rows would be included as part of the ¼ mile buffer where they exist. A special riparian

prescription would be applied to streams where headwaters are located on private, state, or other federal land outside the jurisdiction of the Forest Service.

Table 2.16 shows how management prescriptions would be applied on the Grassland in this alternative:

Table 2.16. Alternative F – Acres in Each Management Prescription

Prescription	Acres	Percent of Grassland
2.8.5 Riparian/Wetland Areas	921	<1%
3.4 Special Wildlife Areas	507	<1%
4.1.1 Developed Recreation Sites	25	<1%
6.4 Range Management	45,897	96%
8.1.1 Concentrated Development Sites	175	<1%
TOTAL	47,525	100%

MAP OF ALT F GOES HERE

ALTERNATIVE G – (Preferred Alternative in Draft EIS)

Alternative G proposes to manage Grassland resources to improve riparian areas in the short-term while balancing use between livestock grazing and the needs of upland game birds, particularly Sage and Columbian sharp-tail grouse. This alternative would amend current Forest Plan direction and create new management direction for riparian area fencing, livestock grazing, wildlife, and other resources and uses on the Grassland, based on riparian condition, the life cycle needs of upland game bird species and traditional livestock grazing. It is designed to address the issues of riparian areas, livestock grazing, vegetation condition and sage grouse habitat.

Under this alternative, a separate management plan for the Curlew National Grassland would be developed that addresses ecological patterns, processes, and management direction for both riparian and upland resources, including restoration of rangeland vegetation composition weighted more toward heavier sagebrush canopy cover during the first ten-year planning period. This alternative proposes to implement livestock grazing utilization standards, fence all perennial streams, develop soil and watershed management direction, improve direction for sagebrush obligate wildlife species habitat, and develop policy for future utility proposals.

In this alternative, where riparian areas are not currently in riparian pastures, all perennial streams would be fenced to exclude livestock grazing (75 feet from middle of the stream on each side of non fish-bearing streams and 150 feet from the middle of the stream on each side of fish-bearing streams,) except water gaps for cattle access. Riparian fencing would occur first before any other treatments were initiated. It is the greater need and first priority in this alternative. Water gaps would be placed no closer than .5 mile and would be no greater than 50 feet of stream length. Gaps would be hardened as specified by a hydrologist. Occasional grazing would be permitted in fenced riparian enclosures once every five years to maintain plant vigor.

Riparian pasture grazing utilization would retain a minimum of 6 inches of vegetation height, or no more than 30 percent utilization on the greenline, whichever is attained first, at the end of the grazing season on riparian *Carex* species. Fifty percent of woody species would be retained. Bank disturbance would not exceed 40 percent total (both banks), or 20 percent annually (both banks).

Alternative G proposes to manage wildlife habitat by:

- Managing vegetation treatments to improve the quality and quantity of suitable sage grouse habitats, as described in the most current version of Idaho State Sage Grouse Guidelines, within 5 kilometers (3.2 miles) of occupied sage grouse leks, except where bulbouse bluegrass is present.
- Constructing one additional pond in the Sweeten Pond area over the next ten years.

Table 2.17 displays the existing condition of sagebrush canopy cover by class, the probable outcome of proposed treatments for the first ten years, and the Desired Future Condition for this Alternative.

Table 2.17. Alternative G - Percentage of Acres in Sagebrush Canopy Cover Classes Existing Condition, First Decade Outcome, and Desired Future Condition

Sagebrush Canopy Cover Classes	Existing Condition Percent of Sagebrush Acres	First Decade Outcome of Treatments Percent of Sagebrush Acres	Change + Or – Over the Decade	Alt. G Desired Future Condition Percent of Sagebrush Acres
0%-5% canopy cover	17% of acres	10% of acres	-7%	10%
6%-15% canopy cover	24% of acres	19% of acres	-5%	35%
Greater than 15% canopy cover	59% of acres	71% of acres	+12%	55%

Approximately 5,000 acres of vegetation would be treated with prescribed fire over the next ten years to improve understory diversity. Table 2.18 displays the proposed vegetation management treatments in this alternative.

Table 2.18. Alternative G – Proposed Vegetation Management Treatments

Prescribed fire/plow in bulbous bluegrass areas	Light Herbicide treatment Outside bulbous bluegrass areas to attain 6-15% cc	Revegetation preference on Bulbous bluegrass sites	Total Acres
2,500 acres in greater than 15% cc	2,500 acres in greater than 15%cc	Native and desired Non-native	5,000 acres

This alternative would treat 5,000 acres of sagebrush in greater than 15 percent canopy cover over the next ten years. Approximately 2,500 acres in greater than 15 percent canopy cover would be treated outside of bulbous bluegrass areas using a light herbicide treatment to attain a 6-15 percent sagebrush canopy cover to provide for more balance between sagebrush canopy cover and forage production. Sagebrush would be managed for the majority of acres in 6-15 percent and greater than 15 percent canopy cover classes. No seeding would occur on these sites.

Approximately 2,500 sagebrush acres in greater than 15 percent canopy cover with bulbous bluegrass in the understory would be prioritized for treatment using prescribed fire and plowing to improve understory diversity. Treated sites would be revegetated using both non-native and native grass, forbs and shrub seed mixes. Treated sites would generally tend to be at least 500 acres or larger.

Economic outcomes in this alternative are the result of managing Grassland resources to protect riparian areas and to achieve a balance between livestock grazing and quality and quantity of wildlife habitat needed to sustain wildlife.

Motorized travel would be restricted in this alternative to designated routes year-round. During the snow season, the Grassland would be open to over-the-snow vehicles.

Approximately 1,006 acres would be considered “not suitable” for livestock grazing in this alternative. These areas developed campgrounds, the Sweeten Pond area, and the existing tree rows. Approximately 98 percent of the Curlew National Grassland would be “suitable” for livestock grazing; however, livestock forage utilization would be reduced from current levels. Upland forage utilization levels would be established at 40-50 percent for both native and non-native vegetation.

This alternative proposes a *standard* that would establish a ¼ mile buffer when adjacent land is under agricultural crop production or where sagebrush canopy cover is less than 15 percent. Tree rows would be included in the ¼ mile buffer where they exist. A special riparian prescription would be applied to streams where headwaters are located on private, state, or other federal land outside the jurisdiction of the Forest Service.

Table 2.19 shows how management prescriptions would be applied on the Grassland in this alternative:

Table 2.19. Alternative G – Acres in Each Management Prescription

Prescription	Acres	Percent of Grassland
2.8.7 Riparian/Wetland Areas	4,850	11%
3.4 Special Wildlife Areas	507	<1%
3.7 Upland Bird Habitat/Range	41,961	88%
4.1.1 Developed Recreation Sites	32	<1%
8.1.1 Concentrated Development Areas	175	<1%
TOTAL	47,525	100%

Map of Alt G Goes Here

ALTERNATIVE H – SELECTED Alternative in Record of Decision

Introduction to the Alternative

In response to public comments on the Draft Environmental Impact Statement and Draft Grassland Plan, Alternative H was developed to manage the resources using a combination of features primarily from Alternative F and Alternative G. It features an emphasis on adaptive management and monitoring to resolve uncertainties regarding management of the Grassland resources. An adaptive management strategy offers an avenue to describe and evaluate the consequences of changing conditions and knowledge. Monitoring and additional analysis are used to chart the course for future management actions within the framework of the Grassland Plan.

In Alternative H, management would focus on treatments necessary to maintain the current acreage of mature sagebrush in the greater than 15 percent canopy coverage, with priority for vegetation treatment focused in areas where sagebrush canopy cover is greater than 25 percent, while increasing the amount of acres in the 6-15 percent canopy cover class to improve habitat for sage grouse nesting and brood rearing. Treatments reflect management actions that will move upland vegetation toward properly functioning conditions including the desired canopy cover and understory vegetation composition. With new information, technology and monitoring results, treatment methods and/or locations may change. These changes would be evaluated when individual treatments are proposed in specific locations on the Grassland.

Management would also emphasize improving conditions on streams that are “at risk” or “non-functioning” and maintaining those that are in properly functioning condition. Treatments and management standards also would improve wildlife habitat and understory vegetation diversity.

Livestock grazing would be managed to a level consistent with the desired resource conditions. The alternative is designed to respond to public comments and address the issues of sagebrush overstory and understory composition, economic changes as a result of decreased forage production and related livestock carrying capacity, wildlife habitat, riparian condition and watershed condition.

Under this alternative, the Goals, Objectives, Standards and Guidelines in the Curlew National Grassland Plan would emphasize maintenance of the existing sagebrush canopy cover classes with improvement in understory diversity, particularly in areas dominated by bulbous bluegrass. Management direction in the Grassland Plan for both riparian and upland resources would include maintenance and improvement of rangeland vegetation composition, condition, and production levels. This alternative would:

- Allow adaptive livestock grazing utilization levels based on site conditions and needs
- Develop soil and watershed management direction
- Improve direction for sagebrush obligate wildlife species habitat
- Develop policy for future utility corridor proposals

- Move the Grasslands towards properly functioning conditions, both in riparian and upland ecosystems

Specific Management Strategies

Watersheds and riparian areas would be managed to maintain stability or accelerate the present rate of recovery. This alternative would manage riparian/wetland areas (RWAs) using a 150-foot special emphasis zone on fish bearing streams and a 75-foot buffer on non-fish bearing streams. An estimated five miles of perennial streams that are considered functioning, but “at risk,” would be corridor fenced to increase the rate of achieving full properly functioning condition (PFC). Water gaps would be located in appropriate locations to allow livestock access and would be hardened. Corridor stream enclosures could be grazed periodically for short durations to maintain streamside plant vigor. The Grassland-wide standards and guidelines for livestock utilization would apply to these areas unless specific objectives have been established. Additional water developments may be necessary to improve livestock distribution.

Perennial streams that are not currently fenced into riparian pastures (approximately nine miles) would be fenced into riparian pastures using existing pasture boundary fence realignments, where feasible. Riparian utilization levels in riparian pastures would be established at 20-50 percent or a two- to six-inch stubble height, based on season of use, stream channel type, existing versus the desired riparian condition, and PFC status of stream.

Alternative H would manage wildlife habitat by maintaining a .25-mile (1/4 mile) buffer around active sage grouse leks during sagebrush treatments. Restoration treatments would be prioritized in areas where sagebrush canopy cover exceeds 25 percent and are not considered good habitat for nesting and brood rearing or winter habitat. No new tree rows would be planted in this alternative.

Table 2.20 displays the existing condition of sagebrush canopy cover by class, the probable outcome of proposed treatments for the first ten years, and the Desired Future Condition for this alternative.

Table 2.20. Alternative H - Percentage of Acres in Sagebrush Canopy Cover Classes Existing Condition, First Decade Outcome and Desired Future Condition

Sagebrush Canopy Cover Classes	Existing Condition Percent of Sagebrush Acres	First Decade Outcome of Treatments Percent of Sagebrush Acres	Change + Or – Over the Decade	Alt. H Desired Future Condition Percent of Sagebrush Acres
0%-5% canopy cover	17% of acres	9% of acres	-8%	17% of acres
6%-15% canopy cover	24% of acres	31% of acres	+7%	24% of acres
Greater than 15% canopy cover	59% of acres	60% of acres	+1%	59% of acres

Alternative H proposes to treat a total of 12,100 acres of vegetation over the next ten years. Since the emphasis is on canopy cover outcomes, acres disturbed by wildfire events would be deducted from the total acres proposed for treatment.

Approximately 9,600 acres outside of bulbous bluegrass sites that have sagebrush canopy cover greater than 15 percent would be proposed for treatment. Priority would be given to areas on the Grassland where sagebrush canopy cover is greater than 25 percent. Treatment methods would be used to move these areas back to the 16-25 percent and 6-15 percent cover class. Given current options, the analysis in this alternative is based on thinning the sagebrush using herbicides or mechanical methods to maintain the existing sagebrush canopy cover over the next ten years. The focus of treatments would be to improve sagebrush canopy cover diversity and improve understory conditions in both species diversity and forage production. Prescribed fire or other methods could be used if they will achieve the desired resource objectives. The methods and locations of vegetation treatments would be analyzed at the site-specific level. Table 2.21 displays possible vegetation management treatments that could be used with this alternative.

Table 2.21. Alternative H – Potential Vegetation Management Treatments²

Prescribed fire in mountain brush	Bulbous bluegrass treatments	Herbicide, mechanical, or other treatments	Revegetation preference on bulbous bluegrass sites	Total Acres Treated
None planned	300 acres in 6-15% cc 2,200 acres in greater than 15% cc	9,600 acres in greater than 15% cc outside bulbous bluegrass areas to attain 6-15% cc with priority for thinning treatments in areas where sagebrush canopy cover exceeds 25%.	Native and/or Desired Non-Native	12,100 acres

The majority of sagebrush acres are managed for 6-15 percent and greater than 15 percent canopy cover to provide balance in sagebrush canopy diversity and move towards properly functioning conditions. Generally, revegetation would occur through natural regeneration unless site conditions after treatment would warrant reseeding to restore understory vegetation or provide watershed protection.

In addition, this alternative proposes to treat 2,500 acres of bulbous bluegrass in the sagebrush understory (2,200 acres in the greater than 15 percent sagebrush canopy cover and 300 acres in the less than 15 percent sagebrush canopy cover) to improve understory diversity. Treatments would include prescribed fire, plowing and reseeding or other methods, such as ground or aerial herbicide applications, if available and appropriate. A mix of native and/or desired non-native grasses, forbs and shrub seed mix would be used for revegetation on treated bulbous bluegrass sites. Treated sites would vary in size, from a few acres up to and including entire fields,

² These are treatments proposed at this time and are used as a basis for the analysis. Deviations from these treatments would be analyzed in the site-specific NEPA documents for those treatments. This adaptive management approach will allow flexibility to assure the resource objectives of the Alternative and subsequent Grassland Management Plan are being met.

depending on vegetation objectives, method or type of thinning treatment used, and economic viability.

Economics in this alternative are an outcome of managing Grassland resources to maintain current sagebrush canopy cover and maintain or improve riparian conditions.

Motorized travel would be restricted in this alternative to designated routes year-round. During the snow season, the Grassland would be open to over-the-snow vehicles.

Approximately 1,006 acres would be considered “not suitable” for livestock grazing where fencing will continue to be used to exclude livestock grazing. These areas include the developed campgrounds, the Sweeten Pond area, and the tree row areas.

Approximately 98 percent of the Curlew National Grassland would be “suitable” for livestock grazing; however, livestock forage utilization standards would be reduced from current allowable use, which is an average of 60 percent Grassland-wide. Average percent utilization of upland herbaceous vegetation across the Grassland would be 50 percent by dry weight each year. This alternative may require more intensive livestock management to achieve desired resource goals, objectives, standards and guidelines. Allowable use levels in individual pastures, however, would be determined in the Allotment Planning Process and Annual Operating meetings. The Grassland Plan would include guidance allowing for heavier use levels on some sites, such as crested wheatgrass areas, where higher use may be needed periodically to maintain overall plant vigor. Use levels may be lower in areas important to nesting sage grouse to maintain adequate residual vegetation for hiding cover and/or on native understory sites. These levels would be determined using an interdisciplinary, adaptive management process.

This alternative proposes a **guideline** that includes consideration of adjacent land use during site-specific project analysis and maintenance of wildlife buffers where needed.

Table 2.22 shows how management prescriptions would be applied on the Grassland in this alternative:

Table 2.22. Alternative H – Acres in Each Management Prescription

Prescription	Acres	Percent of Grassland
2.8.8 Riparian/Wetland Areas	921	<1%
3.4.1 Special Wildlife Areas	507	<1%
4.1.2 Developed Recreation Sites	25	<1%
6.5 Rangeland Vegetation/ Upland Game Bird Habitat Management	45,987	96%
8.1.2 Concentrated Development Sites	175	<1%
TOTAL	47,525	100%

Alternative H MAP on this page

ALTERNATIVES CONSIDERED BUT DROPPED FROM FURTHER ANALYSIS

Nationally, a wide spectrum of management scenarios that could be employed on the Grassland has been considered. These scenarios range from returning the Grassland to private ownership to no change in management to the creation of wilderness areas on the grassland (Duran, L.A.)

These management scenarios or alternatives were considered in detail by the interdisciplinary team during the development of alternatives, but they were eliminated from detailed consideration in the analysis process for the reasons described under each scenario.

Return to Private Land

It could be argued that the Grassland provides no real use for the public, and thus there is no reason to maintain it as public land. Perhaps these lands should be transferred to private ownership. Some ranchers indicate they want to buy more land, but none is available; as a result they are forced to use grazing allotments on federal lands. Turning the Grassland over to private ownership would assist ranchers in continuing their current livelihood.

This alternative was eliminated from detailed consideration for several reasons. Several regulations apply to the Forest Service's administration of national grasslands. Foremost among these are the general regulations pertaining to the national grasslands set forth at 36 CFR 213 (hereafter "the 213 Regulations"). Among other things, the 213 regulations direct that: the national grasslands be "permanently held" by the Department of Agriculture; the national grasslands be administered under "sound and progressive principles of land conservation and multiple use, and to promote development of grassland agriculture and sustained-yield management of the forage, fish and wildlife, timber, water, and recreation resources..." the national grassland resources are managed so as "to maintain and improve soil and vegetative cover and to demonstrate sound and practical principles of land use for the areas in which they are located"; and that to the extent feasible, policies for the administration of national grasslands "exert a favorable influence for securing sound land conservation practices on associated private lands."

The interdisciplinary team believes a considerable real value and use for the public exists on the Grassland and that these values and uses are the primary reason for maintaining the Grassland as public land. The multiple values and uses include recreation and camping, wildlife and fish habitat, hunting and fishing, and forage for livestock. Transferring the Grassland to private ownership is not consistent with the purposes for which the Grassland was established or to the tenets of the Bankhead-Jones Act, or the broader tenets of the National Forest Management Act, which also applies. The Forest Service does not have the authority to transfer Grassland lands into private ownership.

Turn Administration of the CNG Over to the Bureau of Land Management (BLM)

The Taylor Grazing Act of 1934 was the basis for the establishment of the BLM, which occurred in 1946. Since that time, the BLM has been the primary agency for range management and grazing on federal lands. It is equipped and experienced to deal with the Grassland, since grazing is the main land use of these lands. Given this time of federal budget cuts, the consolidation of all public grazing lands within one federal agency may be most efficient.

This alternative was eliminated from detailed consideration, because the Forest Service does not have the authority to transfer Grassland lands to the Bureau of Land Management. Under the Bankhead-Jones Act, these lands are to be permanently held for administration by the Department of Agriculture for administration for purposes of Title III of the Act. Under the Act, the Secretary of Agriculture has the authority to transfer Grassland lands to another federal agency for public purposes. To date, the Secretary of Agriculture has not indicated any inclination towards such a transfer. In addition, the Chief of the Forest Service recognized the uniqueness of the National Grasslands in his memorandum to Regional Foresters, dated April 22, 1999, by requiring individual management plans be prepared for each of the National Grasslands under Forest Service administration.

Research Mandate for Sustainable Agriculture

Land Utilization Projects were initially established to help people in rural areas; thus, the Grassland should be used solely for conducting research on Great Basin ecosystems. This should include agricultural or human impact topics, such as perennial/native grasses, long-term sustainable cropping techniques, Holistic Resource Management (HRM) ranching, rural sustainability/viability, and economic issues of subsidies and price supports (Wald and Albersweth, 1989). Such a mandate could occur within continued administration by the Forest Service but would require drastically different goals for management.

This alternative was eliminated from detailed consideration, because use of the Grassland solely for research is not consistent with the purposes for which the Grassland was established or the tenets of the Bankhead-Jones Act, or the broader tenets of the National Forest Management Act, which also applies. While the Forest Service has a research mission, in part, managing the Grassland solely for research would not provide for soil stabilization, promoting the development of grassland agriculture, developing and protecting recreational facilities and protecting fish and wildlife under Bankhead-Jones or the broader provisions of the National Forest Management Act.

Creation of Wilderness Areas

The Wilderness Act of 1964 established the Wilderness Preservation System. Part of the goal in wilderness preservation is protecting biodiversity and genetic diversity. It would be beneficial to develop wilderness areas on the Grassland as they represent unique ecosystems. Current rules for wilderness designation require contiguous land areas untouched by human development. Such stringent rules may need alteration in the case of the Grassland, since most areas have been marked by a grid-work of section roads every square mile.

This alternative was eliminated from detailed consideration, because lands within the Grassland do not meet the criteria for wilderness recommendation or designation. In the west, wilderness recommendation and designation require large, contiguous areas of federal land relatively untouched by the hand of man. Most of the Grassland is intermingled with private land and marked by a network of roads and fences and non-native seedings. Creating large contiguous areas of lands would require purchasing intermingled private land, but the hand of man would still be obvious.

Intermingled Lands Management

The interdisciplinary team designed an alternative to respond to adjacent land use and the constraints it may place on management activities within the Forest Service portion of the Grassland.

The team attempted to integrate livestock pasture boundaries, non-native seeded areas, sagebrush canopy cover, sage grouse nesting areas, existing sage grouse leks, adjacent sagebrush in juxtaposition to adjacent private land use, and riparian meadows for brood-rearing to determine if a feasible alternative could be developed that would concentrate livestock grazing on certain portions of the Grassland while emphasizing sage grouse habitat on other portions.

This alternative was dropped from consideration, because the Team felt this alternative, with the exception of proposed lower forage utilization rates, was basically the same as Action Alternatives B and F. In addition, the team was unable to find an effective way to manage some portions of the Grassland for sage grouse while managing other portions for livestock grazing. Over time, adjacent land use could change which would negate land allocations that would be made in this alternative. Existing pasture boundaries did not lend themselves to this approach.

The team felt strongly that adjacent land use plays a prominent role in management decisions on the Grassland. In place of this alternative, the team created a grassland-wide standard/guideline that requires a buffer on site-specific projects when adjacent private land has been plowed and seeded to agricultural crops or where sagebrush canopy cover is less than 15 percent.

Additionally, a riparian prescription was developed that would be applied in Alternatives C, E, F, G, and H where water sources begin on private or other public lands and flow onto the Grassland. This prescription emphasizes the importance of collaborative stewardship with private landowners in order to achieve the goals and objectives of the Grassland Plan.

Intermingled Land Management Focused on Riparian and Wildlife Habitat

This alternative is very similar to the Intermingled Lands Management Alternative described above. The primary focus was to emphasize adjacent land use and the constraints placed on Grassland management, particularly in riparian areas and wildlife habitat. This alternative featured direction to coordinate management activities with adjacent landowners in terms of their future objectives, contracts and schedules.

Because this alternative only varied slightly from the Intermingled Lands Management Alternative, it was combined with that alternative and dropped as a stand-alone alternative.

Alternative X – Restore Grassland to Native Plant and Animal Pre-settlement Conditions

This alternative proposed extensive restoration of the Grassland by converting existing conditions to native plants and animals reflective of pre-settlement conditions. Developments, including tree rows, Sweeten Pond, fences and roads, would be removed. Seeded areas of crested wheatgrass and bulbous bluegrass would be returned to native vegetation. Native birds and other native animals would be reintroduced and non-native wildlife would be removed. Grazing would be eliminated, and natural fire would be allowed to manage the landscape.

Alternative X was dropped from consideration, because major watershed disturbance could be expected in the short-term to replace existing vegetation. The removal of all non-native plants and animals would be highly unlikely without a major funding investment. Because of the intermingled private lands, the risk to property and public safety would be too great if natural fire was allowed to manage the landscape over the long-term.

Alternative Y – Watershed Management

This alternative emphasized managing the Grassland based on watershed condition and riparian properly functioning condition ratings. In this alternative some management activities, such as prescribed fire and/or plowing, would be constrained based on these ratings. Forage utilization levels would be set depending on watershed and riparian conditions. Adjacent land use would be considered in designing site-specific projects.

Alternative Y was dropped from consideration because management by watershed and riparian condition is embodied in Action Alternative F. Alternative F was primarily designed to respond to watershed condition, riparian properly functioning condition, and wildlife habitat improvement.

Conformance with the Forest and Rangeland Renewable Resources Planning Act (RPA)

The NFMA regulations at 36 CFR 219.12(f)(6) require at least one alternative be developed that responds to and incorporates the Resources Planning Act (RPA) Program's tentative resource objectives for each national forest/grassland as displayed in regional guides. However, the 1990 RPA Program establishes national guidance for the national forests/grasslands by providing program emphasis and trend rather than specific, quantified output targets for individual Forest Service programs. As a result, no resource objectives were quantified for each region to display in regional guides, which would then be passed on to individual forests/grasslands.

The RPA is updated every five years and has three components: (1) roles in natural resource management for Forest Service management; (2) Forest Service program responses to contemporary issues; and (3) long-term strategies to guide the program development and budget process. It emphasizes four high priority themes: (1) recreation, wildlife and fisheries resource enhancement; (2) environmentally acceptable commodity production, (3) improved scientific

knowledge about natural resources; and (4) response to global resource issues. This guidance was used in developing action alternatives for this DEIS.

IDENTIFICATION OF THE ENVIRONMENTALLY PREFERRED ALTERNATIVE

Regulations implementing the National Environmental Policy Act (NEPA) require agencies to specify the alternative(s) considered to be environmentally preferable (40 CFR 1505.2(b)). Forest Service policy further defines this as the alternative that best meets the goals of section 101 of NEPA. This calls on Federal, State, and local governments and the public to create and maintain conditions under which humans and nature can exist in productive harmony. In determining the environmentally preferred alternative, I referred to the goals of Section 101:

1. Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;
2. Assure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings;
3. Attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences;
4. Preserve important historic, cultural, and natural aspects of our national heritage and maintain wherever possible an environment which supports diversity and variety of individual choice;
5. Achieve a balance between population and resource use, which will permit high standards of living and a wide sharing of life's amenities; and
6. Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

Alternatives *D* and *H*—*Selected Alternative* are the Environmentally Preferred Alternatives. Over the long term, Alternative H would cause “the least damage to the biological and physical environment” (CEQ 40 Most Asked Questions, #6A). Over the short term, Alternative D would cause the least damage due to the removal of livestock grazing.

Alternative H is the best balance between maintaining ecosystem processes while considering the needs of sagebrush obligate species. The emphasis of this alternative is to maintain current levels of higher density sagebrush stands for sagebrush obligate species such as the sage grouse while providing for diversity. The treatments that will likely be proposed will help maintain a mosaic of canopy coverages over the long-term, benefitting more wildlife species.

While Alternative D would remove livestock grazing, the lack of sagebrush management would not be environmentally preferable over the long term. Sagebrush stands would move further away from properly functioning conditions and become denser, resulting in a loss of diversity.

Riparian conditions would improve the most with Alternatives D and G but those alternatives would not provide for diversity in the uplands.

IDENTIFICATION OF THE SELECTED ALTERNATIVE

Alternative H has been identified as the **Selected Alternative**.

How Alternative H Addresses the Forest Service Natural Resource Agenda

● **Watershed Health and Restoration**

Alternative H proposes to establish specific riparian special emphasis zones with specific riparian and upland livestock grazing utilization levels; corridor fence all streams assessed to be “at risk” from properly functioning condition (approximately five miles) with water gaps for livestock access; fence all remaining riparian areas into riparian pastures where they are not currently fenced into riparian pastures (approximately 9 miles) and allow grazing in riparian pastures based on stream PFC status; establish upland livestock utilization rates at 50 percent with annual monitoring of key areas and livestock utilization mapping; emphasize soil restoration and encourage collaboration with adjacent landowners for watershed conservation, erosion and runoff control.

● **Sustainable Grassland Ecosystem Management**

Alternative H addresses ecological patterns and processes for riparian and upland resources; moves vegetation through management treatments toward a properly functioning condition; emphasizes restoration of rangeland vegetation composition, particularly understory diversity on 2,500 acres of bulbous bluegrass; uses prioritized vegetation treatments in areas where sagebrush canopy cover is greater than 25 percent to improve the quality of suitable sage grouse habitat.

● **Roads**

Alternative H proposes to place motorized recreation users on designated routes year-round while providing open cross-country travel to over-the-snow vehicles. An extensive public road system is already in place. A Roads Analysis for the Curlew National Grassland was completed as part of this planning process. The Roads Analysis identifies potential opportunities for improvements in the transportation system on the Grassland. These opportunities will be addressed through site-specific project implementation. (See Curlew National Grassland Roads Analysis Report in the Project File for list.)

● **Recreation**

Alternative H proposes to sustain or improve key recreational opportunities of hunting and wildlife viewing.

How Alternative H Addresses the Government Performance Results Act (GPRA)

●Goal 1. Ecosystem Health

Alternative H proposes reduced livestock utilization levels to improve watershed condition; proposes to fence riparian areas assessed to be “at risk” from properly functioning condition to accelerate the rate of recovery toward properly functioning condition; fences all other perennial waters into riparian pastures with more focused livestock management based on the stream’s PFC status; emphasizes sage grouse habitat to insure viable populations in Curlew Valley; vegetation treatments move sagebrush communities toward PFC; improves vegetation understory diversity by treating 2,500 acres of bulbous bluegrass; encourages consultation with permittees, recreationists, private landowners, and the local Sage Grouse Working Group to provide multiple sustainable benefits to people.

●Goal 2. Multiple Benefits to People

Alternative H proposes to sustain or improve key recreational opportunities for hunting and wildlife viewing; maintains and improves Sweeten Pond special wildlife area; improves understory diversity to increase forage and improve wildlife habitat; continues livestock grazing at or near current authorized use levels. Actual adjustments in the level of grazing will be made in the Allotment Management Plan process.

●Goal 3. Scientific and Technical Assistance

Alternative H is adaptive and proposes modest changes in levels of use as rural Oneida County continues to diversify economically under the County Economic Development Action Plan; proposes monitoring to enhance scientific understanding of how ecosystems respond to management; identifies research and inventory needs that will potentially involve research by the Forest Service, other State and Federal agencies, and colleges and universities.

●Goal 4. Effective Public Service

Alternative H proposes projects, that when scheduled, will generally be within the financial capability of the unit; proposes to limit motorized travel to designated routes, eliminating proliferation of non-system motorized roads and trails; emphasizes cooperation with adjacent landowners.

How Alternative H addresses the Range of Desired Future Conditions identified in the Initial Analysis of the Management Situation (See Chapter 1, page 1-6)

Soil

Alternative H incorporates soil quality standards and provides management direction to improve erosion and runoff control in cooperation with adjacent landowners.

Terrestrial Ecosystems:

Alternative H moves sagebrush canopy cover toward a more properly functioning condition while maintaining important sagebrush habitat (16-24 percent canopy cover) for sage grouse. While Alternative H allows prescribed fire in the treatment of bulbous bluegrass areas, treatment methods outside of these areas focus on thinning sagebrush canopy cover using light and heavy herbicide applications in areas where sagebrush canopy cover is greater than 25 percent. It includes adaptive management and focused monitoring to improve scientific knowledge about how sage grouse and other sagebrush obligate species use Grassland habitats. Alternative H improves understory diversity on 2,500 acres where bulbous bluegrass is dominant in the understory using a mix of native and non-native seed mixes. It establishes grazing utilization standards that provide adaptability to meet wildlife habitat needs while allowing livestock grazing to continue. Alternative H incorporates updated direction and identification for utility corridors.

Aquatic Ecosystems

Alternative H establishes special Riparian/Wetland Areas, including management direction to corridor fence perennial streams that have been assessed as “at risk” from properly functioning condition in order to accelerate the rate of recovery of these streams. It includes fencing all other perennial streams into riparian pastures, in areas not already fenced into riparian pastures, using existing pasture boundary fences where feasible. Alternative H establishes adaptable grazing utilization standards based on each stream’s PFC status. It incorporates focused annual monitoring on key species and includes annual livestock utilization mapping.

Table 2.23. Comparison of Alternative Components

Alternative Components	Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F	Alternative G	Alternative H
Riparian Management								
Livestock Utilization	~60%	30% or 6 inches	20-50% or 2-6 inches	No grazing	50% or 3 inches on green line	20-50% or 2-6 inches	30% or 6 inches	20-50% or 2-6 inches
RWA widths	None	75 ft. non-fish 150 ft. fish	75 ft. non-fish 150 ft. fish	None	Green line	75 ft. non-fish 150 ft. fish	75 ft. non-fish 150 ft. fish	75 ft. non-fish 150 ft. fish
Miles of streamside improvements	None	None	3 miles	None	None	3 miles	None	None
Other	Existing Riparian Pastures	Existing Riparian Pastures	None	None	None	None	Existing riparian pastures. All other perennial streams fenced to RWA widths	Corridor fence “at risk streams. Fenced all others into riparian pastures.
Wildlife Management								
Lek buffer zone	1.9 miles	.25 miles	3.2 miles	None	.25 miles	.25 miles	3.2 miles	.25 miles
Wetland improvements	None	One pond	One pond	None	None	None	One pond	None
New tree rows	None	10 miles	10 miles	None	None	None	None	None
Desired Future Conditions for Sagebrush								
Acres in 0-5% cc	34%	10-30%	Less than 25%	Trend to late	Greater than 50%	10%	10%	17%
Acres in 6-15% cc	33%	40-60%	Less than 25%	Seral stage	Less than 25%	40%	35%	24%
Acres in greater than 15% cc	33%	30-50%	Greater than 50%		Less than 25%	50%	55%	59%
Vegetation Management								
Prescribed Fire outside of Bulbous bluegrass areas	18,750 acres	2,000 acres	None	None	7,500	None	None	Limited to None to achieve sagebrush canopy cover goals only
Revegetation Method	Natural Regen	Natural Regen			Natural Regen			
Fire/Plow/Reseed on Bulbous bluegrass areas	None determined	3,700 acres	1,500 acres	None	2,500 acres	2,500 acres	2,500 acres	2,500 acres
Revegetation method		Native/ Non-native	Native only		Native/ Non-native	Native only	Native/Non-native	Native/Non-native
Herbicide	None determined	None	2,500 acres Light Herbicide	None	7,000 acres Heavy Herbicide	9,600 acres Light Herbicide	2,500 acres Light Herbicide	9,600 acres Light to heavy
Treatment size	Greater than 500 acres	Greater than 500 acres	Less than 500 acres	None	Greater than 500 acres	Greater than 500 acres	Greater than 500 acres	None identified
Mountain Brush	None treated	150 acres Rx fire	None treated	None	200 acres Rx fire	200 acres Rx fire	None Treated	None
Travel Management	Open from 12/1-8/31	Open from 12/1-8/1	Designated routes Year-round	Designated routes Year-round	Open from 12/1-8/1	Designated routes Year-round	Designated routes Year-round	Designated routes Year-round
Acres not grazed	1,006	1,125	1,125	47,600	1,006	1,006	1,006	1,006
Livestock upland utilization levels	~60%	45% native 50% non-native	30-40% or 7 inches	No grazing	50-60%	40-50%	40-50%	50%
Intermingled lands buffer zones	None	None	¼ mile (S)	None	500 feet (G)	¼ mile (G)	¼ mile (S)	¼ mile (G)

Table 2.24. Summary of Effects By Alternative

Issues/Indicators	Alt A	Alt B	Alt C	Alt D	Alt E	Alt F	Alt G	ALT H
Watershed Condition								
Max acres disturbed at one time	7,400	2,500	750	0	1,350	1,350	1,250	1,250
% of CNG disturbed at one time	15%	6%	1%	0%	3%	3%	3%	3%
Potential Erosion Over Natural in tons per year	10,360	3,500	1,050	Natural	1,890	1,890	1,750	1,750
Riparian Condition								
Miles trending toward PFC ¹	10 miles in Riparian pastures moderately improved	14 miles moderately improved	24 miles substantially improved	24 miles greatly improved	24 miles slightly improved	24 miles substantially improved	14 miles in exclosures greatly improved	5 miles in exclosures greatly improved
	14 miles outside of Rip pastures no change						10 miles in riparian pastures moderately improved	19 miles in riparian pastures moderately improved
Rate of Recovery	Rip pastures good Other areas static	Better than Alt A	Better than Alt B	Better than Alts C&F	Slightly better Than Alt A	Better than Alt B	Better than All except Alt D	Better than Alt B
Ranking 1-7 with 1 being best	(6)	(4)	(3)	(1)	(5)	(3)	(2)	(3)
Sagebrush Canopy Cover								
Grassland								
% of acres in 0-5% cc – Year 10	29%	15%	7%	6%	26%	9%	10%	9%
% of acres in 6-15% cc – Year 10	25%	17%	14%	15%	23%	31%	19%	31%
% of acres in >15% cc – Year 10	46%	68%	79%	79%	51%	60%	71%	60%
Greater Curlew Valley Area								
% of acres in Grass/Ag – Year 10	50%	50%	50%	50%	50%	50%	50%	50%
% of acres <10% cc – Year 10	29%	25%	23%	20%	28%	24%	22%	24%
% of acres in 11-25% cc – Year 10	14%	16%	18%	18%	15%	18%	18%	18%
% of acres in >25% cc – Year 10	7%	9%	9%	12%	7%	8%	10%	8%
Meets PFC in 10 yrs (CNG)	No	No	No	No	No	No	No	No
Meets LT goal in 10 yrs (CNG)	No	No	Yes	None Set	No	No	No	No
PFC Magnitude of departure (CNG)	Mod to High	Low to Mod	Mod to High	Mod to High	High	Low	Low to Mod	Low
Mountain Brush								
% of acres in early seral	0%	11%	0%	0%	15%	15%	0%	0%
% of acres in late seral	100%	89%	100%	100%	85%	85%	100%	100%

Issues/Indicators	Alt A	Alt B	Alt C	Alt D	Alt E	Alt F	Alt G	ALT H
Trending toward PFC	No	Yes	No	No	Yes	Yes	No	No
PFC Magnitude of departure	High Disturbance Moderate Succession	Moderate Disturbance Moderate Succession	High Disturbance Moderate Succession	High Disturbance Moderate Succession	Moderate Disturbance Moderate Succession	Moderate Disturbance Moderate Succession	High Disturbance Moderate Succession	Moderate Disturbance Moderate Succession
Vegetation Understory								
Acres of Pobu treated	0	3,700	1,500	0	2,500	2,500	2,500	2,500
Acres of Pobu remaining	5,200	1,500	3,700	5,200	2,700	2,700	2,700	2,700
Percent of natives in seed mix	0%	100%	100%	0%	50%	100%	50%	50%
Wildlife Habitat								
Number of 320-acre patches in greater 15% cc in Year 10	7 patches	12 patches	19 patches	19 patches	0 patches	3 patches	12 patches	6 patches
Percent of sagebrush acres in potential sage grouse nesting habitat (16-24% cc) in Year 10	18%	24%	26%	26%	19%	24%	24%	37%
Meets, Partially Meets, or Does Not Meet Draft 2000 Sage Grouse Plan	Does not meet	Partially meets	Best meets	Partially meets	Does not meet	Partially meets	Meets	Partially meets
Number of acres in greater than 15% cc treated with Rx fire	18,750	4,500	None	None	9,700	2,200	2,500	2,200
Miles of tree rows in Year 10	21	31	31	21	21	21	21	21
Riparian Viability Ranking of Alternatives With 1 being best and 7 being worst	7	5	3	1	6	3	2	3
Economics								
Percent change in jobs (Oneida)	19%	5%	-22%	-81%	-6%	-2%	-6%	5%
Percent change in income (Oneida)	23%	6%	-24%	-86%	15%	6%	-3%	13%
Total Payments to Oneida County	\$204,918	\$204,037	\$203,274	\$202,160	\$104,574	\$204,102	\$203,670	\$204,240
Present Net Value	14.422	14.110	13.192	11.713	13.324	12.783	13.372	13.229
Total Projected Annual Grazing Program Cost including treatments	\$226,875	\$215,715	\$203,100	\$165,000	\$242,250	\$249,800	\$232,000	\$249,300
Total Projected Annual Grazing Program Value (Fair Market Value)	\$148,771	\$127,826	\$86,702	\$0	\$121,710	\$111,255	\$107,383	\$123,425
Livestock Grazing								
Acres managed without livestock	1,006	1,125	1,125	47,600	1,006	1,125	1,125	1,125
Estimated Forage - Year 0	38.4M ²	38.4M	38.4M	39.2M	38.4M	38.4M	38.4M	38.4M
Potential Head Months - Year 0	19,600-27,900	15,800-22,500	11,400-16,200	0	18,000-25,600	14,600-20,800	14,100-20,100	16,246-23,124
Estimated Forage - Year 10	44.3M	35.3M	30.7M	31.2M	42.3M	36.6M	33.6M	36.6M
Potential Head Months - Year 10	21,700-31,500	15,000-25,400	9,900-13,200	0	19,200-27,900	14,200-19,200	13,000-18,200	15,725-21,850

Issues/Indicators	Alt A	Alt B	Alt C	Alt D	Alt E	Alt F	Alt G	ALT H
Intermingled								
Size of buffers	None	None	.25 miles (S) ³	None	500-ft (G)	.25 miles (G)	.25 miles (S)	.25 miles (G)
Air Quality								
Annual Average Acres burned	1,875	585	150	0	1,020	270	250	250
PM ₁₀ /Tons released	104.4	36.6	8.3	0	56.8	15.0	13.9	13.9

1 Actual improvement rate depends on the condition of the riparian area and the channel and continuing disturbances to the channel/riparian area. The terms slightly, moderately, substantially and greatly reflect the level of livestock use by alternative. Slightly means the level of livestock use is high and only a slight amount of overall riparian/channel improvements will be realized. Greatly means livestock use is minimal and improvements will occur as rapidly as natural progression will allow.

2 Shown in millions of pounds per year

3 S=Standard and G=Guideline