

Management Direction Package



**Dixie National Forest
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Part One – Vision

BROAD VISION STATEMENT FOR DIXIE AND FISHLAKE NATIONAL FORESTS

The Dixie and Fishlake National Forests are integral parts of the ecology, economy, and society in southern Utah. The forests contribute natural resource and recreation opportunities to the nation and surrounding communities in a manner that sustains healthy diverse ecosystems. The mountains, plateaus, and canyons of the forests collect and distribute water to the arid ecosystems, conserve high-elevation habitats, and provide a wide variety of recreation settings. Forest management activities maintain and improve these features.

SETTING OF THE DIXIE AND FISHLAKE NATIONAL FOREST

The Dixie National Forest (Dixie NF) is the largest of six national forests in Utah. It covers almost two million acres and stretches over 200 miles of land in the Garfield, Iron, Kane, Piute, Wayne, and Washington counties. There are four ranger districts on the forest with offices located in St. George, Cedar City, Panguitch, and Escalante. Interstate 15 runs along the western edge of the forest (the Pine Valley Ranger District (RD) is west of I-15). State Highway 89 runs north and south through the middle of the forest. State Highway 12, an All-American Road, bisects much of the forest from east to west. The forest is adjacent to the wonders of Zion, Bryce Canyon, and Capitol Reef National Parks, as well as the Grand Staircase-Escalante and Cedar Breaks National Monuments. (Ref Map)

The Fishlake National Forest (Fishlake NF) is located in south central Utah, with district offices in Richfield, Fillmore, Beaver, and Loa. The forest encompasses 1.5 million acres in Wayne, Garfield, Sevier, Piute, Beaver, Millard, Juab, and Sanpete counties. I-70 runs through the middle of the forest and I-15 runs along the west side. State Highway 89 also runs north and south through the middle of the forest. The Fishlake NF is extensively bordered by public lands managed by the Bureau of Land Management (BLM) and is bordered on the east by Capitol Reef National Park (Ref. Map)

The Teasdale RD on the Dixie NF and the Loa RD on the Fishlake NF have been combined and will be called the Fremont River RD. This new district will be managed by the Fishlake NF. However, the former Teasdale RD will still comply with direction in the Dixie NF Plan. (Ref. map)

Vegetative, Hydrological and Geological Features

The variety of vegetation is reflective of the soils, climatic patterns, disturbance history, and elevations of the Dixie and Fishlake National Forests. The lower and drier slopes are dominated by pinyon pine and juniper mixed with sagebrush and interspersed with an occasional meadow or riparian zone. Ponderosa pine appears at the mid elevations as moisture increases. Higher elevation areas are dominated by aspen mixed with Englemann spruce and subalpine fir. In the fall, gold and red leaves can be seen as

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thousands of acres of aspen change color. Other vegetation types occur at different elevations and moisture regimes including mixed conifer and mountain shrubs. Mixed conifer ecosystems offer a variety of green textures and colors based on the composition of the species. Bristlecone pine, one of the oldest living organisms on the planet, is locally endemic to the forests.

The current mix of vegetation on the forests is constantly changing. Natural disturbances such as fire or insects have affected the mix. Today many of these natural disturbance processes are not operating as they have in the past. Examples of the changes include many of the large aspen stands are being replaced by spruce/fir forest, and pinyon pine and juniper have invaded grass/forb and sagebrush areas, and sagebrush areas have a reduced grass/forb component.

Water is especially important in this semiarid climate. Streams from the forests "feed" the valleys with this most valuable commodity. Many local communities obtain at least part of their culinary water supply from spring sources within the forest boundary. In addition to culinary water uses, a system of ditches and diversions provides water for irrigation and agricultural operations.

Geographically, the Dixie and Fishlake National Forests straddle the divide between the Great Basin and the Colorado Plateau. There is a mix of sedimentary and volcanic rocks as this is the transition zone. On the Dixie NF, elevations vary from 2,800 feet near St. George to 11,322 feet at Blue Bell Knoll on Boulder Mountain. Boulder Mountain is one of the largest timbered high elevation plateaus in the United States. On the Fishlake NF, elevations vary from 12,169 ft at Delano Peak to about 4,800 ft near Oak City.

Weather

During winter and spring, deep snowpack accumulates in many of the high elevations. By late spring, temperatures warm up in the canyon country and low elevations, while the mountain snowpack begins to melt. The high mountain roads and trails are usually free of snow by mid to late June. Summer brings warm temperatures to most areas, with hot temperatures in the canyon country. Afternoon thunderstorms become common by June and can be expected into September. With these storms, flash flooding is a possible hazard in gullies and narrow canyons.

Temperature extremes can be impressive with summer temperatures exceeding 100 degrees Fahrenheit in the lower valleys and winter lows as cold as negative 30 degrees on some of the plateau tops.

Wildlife

The Dixie and Fishlake National Forests support a variety of wildlife species in Southwestern Utah. Healthy populations of wildlife, including big game, inhabit all vegetation types within the forests. Additionally, many lakes and reservoirs and hundreds of miles of streams provide good opportunities for anglers to catch native trout species such as the Bonneville and Colorado cutthroat trout. Two native species of wild turkey

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can be found in the forests the high spruce and fir landscapes and the low elevation riparian bottoms.

In addition to game species, the forests provide a home for numerous other species of wildlife. The forests contribute toward meeting recovery goals for several threatened, endangered, and sensitive species.

Recreation

The forests continue to provide a variety of developed and dispersed recreation opportunities. Pine Valley, Box Death Hollow, and Ashdown Gorge Wilderness Areas make up 83,000 acres of the Dixie NF. Areas also exist on both forests and accommodate such activities as: hiking, horseback riding, off-highway vehicle (OHV) riding, camping, picnicking, resort lodging on the forests and adjacent areas, biking, snowmobiling, cross-country, downhill skiing, fishing, hunting, and viewing scenery.

Forest campgrounds offer opportunities for family and group camping. On the Fishlake NF, sites range in size from 7 to 68 units. On the Dixie NF, campgrounds can accommodate from 6 to 98 units. Campgrounds on the Dixie and Fishlake National Forests can be found from 5,700 ft in elevation to 9,300 ft. Dispersed camping is also available throughout much of the forests.

Mountain bikers, hikers, OHV enthusiasts, and horseback riders will all find a trail to suit their interests. The Fishlake NF provides over 1,100 miles of non-motorized trails offer a variety of hiking, backpacking and horseback opportunities. The Fishlake NF has two National Recreation Trails: Fish Lake Shoreline Trail and the Skyline Trail in the Tushar Mountains, and the Dixie NF has the Cascade Falls National Recreation Trail. The Dixie has 1311 miles of hiking trails with 143 miles within wilderness areas. On the Fishlake NF, the Paiute ATV Trail is approximately 850 miles of designated routes that winds over three mountain ranges including side trails to communities. It is a combination of roads open to use by OHVs and trails wide enough for all-terrain vehicles (ATV's). Full-size 4x4 vehicles can use the road portions of this designated route. The Great Western Trail crosses the eastern portions of both forests on its way to the Mexican border from Canada. It also accommodates vehicle, horse, and foot traffic.

Historic and Cultural Sites

The areas now managed as part of the Dixie and Fishlake National Forests have been used by human beings for over 10,000 years. Our cultural history is rich and diverse. Both forests have numerous archaeological, historical and paleontological resources. Archaeological sites found on the forests include, lithic scatters, ceramic scatters, kill sites, tool manufacturing sites, habitation sites, Pectoglyphs and Pictographs, and ceremonial sites of the Paleo-Indians, Archaic, Fremont, Ancestral Puebloan (Anasazi), and Ute and Paiute cultures. Historic sites dating from the immigration of the Anglo cultures into the area in the 1800's include: sawmills, mines, homesteads, ranches, corrals, recreation facilities, Forest Service Administrative sites, campgrounds, Civilian Conservation Corps (CCC) Camps, and numerous roads and trails throughout the forests.

ROLES AND CONTRIBUTIONS OF THE NATIONAL FORESTS

Dixie National Forest

As a part of the world-renowned landscapes of Southern Utah, the Dixie National Forest provides a backdrop and serves as a gateway to surrounding high visibility National Parks and Monuments. Within its boundaries, the forest is marked by extreme landform contrast ranging from low elevation Mohjave Desert scrub, to desert mountains, to red rock canyons, and high-elevation plateaus and lakes. Nationally recognized highways and trails course through the Forest and provide ready access to unique natural highlights of the forest landscape.

The majority of forest visitors drive for pleasure and enjoy relaxing and viewing scenery. Interpretation of the unique natural, cultural, and historical settings occurs at facilities along the scenic highways to enhance the experience. Many visitors hike, fish, hunt, mountain bike, camp, ski, and ride OHVs. Some of these visitors seek and find a relative sense of solitude in the high plateaus and the wildernesses areas. In summer, visitors seek and find respite from the desert heat and the noise and stress of urban and suburban communities. In the winter, Brian Head ski resort attracts recreationists interested in downhill and cross-country skiing, and Duck Creek Recreation Area accommodates snowmobiles.

Among the Dixie National Forest's vast natural resources, the Paunsagant deer herd is known for producing outstanding trophy deer. Many of the rivers and creeks throughout the forest provide habitat for endemic trout populations, particularly Bonneville cutthroat trout and Colorado cutthroat trout. In addition to supporting wildlife biodiversity, these water resources provide culinary water to adjacent communities.

Fishlake National Forest

The Fishlake NF is known for its extensive aspen forest and the deep cold waters of Fish Lake. The plateaus and high elevation lakes of the forest characterize the forest's unique geologic features. The dispersed recreation experience is exceptional in the region, characterized by ATVs and dispersed camping. On the Fishlake NF, motorized recreation events such as the Rocky Mountain ATV Jamboree, attract visitors from across the nation. The setting has also made group camping and family reunions popular activities.

The outstanding ecological features of the Fishlake NF are important to humans, plants, wildlife, and aquatic species. The Tushar Mountains are the third highest mountain range in Utah, the upper elevations of which are characterized by a unique alpine meadow habitat. The Fishlake NF also provides habitat to support trophy elk populations on Monroe Mountain and the Pahvant mountain range. Many of the rivers and creeks throughout the forest provide habitat for endemic trout populations, particularly Bonneville cutthroat trout and Colorado cutthroat trout. In addition to supporting wildlife biodiversity, these water resources provide culinary water to adjacent communities.

FOREST-WIDE MANAGEMENT CHALLENGES

This section is intended to highlight the most pressing challenges in management of the forests across disciplines. The health of the Dixie and Fishlake National Forests depends on our ability to reconcile these challenges to forest and community sustainability.

Changes in Social Conditions

Demographics

Population growth and migration in the American West have increased demands on the forests. Increased visitor use of these forests is putting pressure on the landscapes, wildlife, and vegetation that depend on these lands. Local use of these forests has increased. However, much of the new use has come from population centers like Las Vegas and the Wasatch Front. In addition to the increased use of the forest, lands adjacent to the forests that once helped maintain natural systems are being developed for residential and commercial uses. The development of lands adjacent to the forest has increased concern about wildland-urban interface fire risks and encroachment on key wildlife habitats.

An increasing number of local and regional residents rely on the forests for recreation opportunities and for resources in ways that are not always compatible. The increased popularity of motorized recreation on, and off, existing trails has generated conflicts in use that have decreased the availability and the quality of non-motorized opportunities.

Economics

The forests' resources generate a variety of economic activities that contribute to the stability of communities. These activities do not always consider and contribute to the forests' desired conditions related to wildlife, watersheds, and vegetation

Technology

Technological advances have changed the day-to-day activities of forest visitors and the way people recreate. These changes have also affected impacts on the forests. Changes in motorized technology have increased the ability of humans and machines to go to remote places. Larger and more powerful ATVs and snowmobiles are available. In addition, the advent and popularity of cell phones has created additional demand for electronic sites. Technology is constantly changing and it is a challenge for the forests to address the demands that new and unforeseen advances in technology may bring.

Changes in Vegetative Conditions

Fire suppression and federal land management practices are one source of changes in vegetation conditions. Compounded with other changes in the forests' ecosystems, several threats to vegetative health and diversity have emerged. Increased access and uses have contributed to the introduction and spread of noxious weeds and other invasive plants. The distribution and health of aspen stands has significantly declined; pinyon-juniper stands occupy a larger percentage of the landscape and are denser than was historically the case; and rare and endemic plant habitat such as tall forb communities, rock garden communities, and bristle cone pine stands face threats.

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Conflicting Management Strategies for Range and Wildlife

Big game and other species populations are managed by the Utah Department of Wildlife Resources (UDWR). The US Fish and Wildlife Service (USFWS) has oversight of threatened, endangered, and sensitive species. Habitat for all wildlife on the National Forest is managed by the USDA Forest Service. The Forest Service also administers a variety of permitted uses such as livestock grazing and timber. Coordination between these agencies is critical to providing sustainable forage for wildlife and livestock. However, despite UDWR, USFWS, and Forest Service attempts to work collaboratively, the missions of the agencies are not always coordinated. The result is on-the-ground difficulties in managing for ecosystem health.

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DESIRED CONDITIONS

Desired Condition statements are an attempt to describe the preferred state of the Dixie and Fishlake National Forests. The statements are written in the present tense, however, the desired condition may currently exist or it may be a target that will take many decades to reach. The statements try to paint a “word picture” of a condition. Occasionally, these word pictures are supplemented with photographs.

It is important to understand that the described desired conditions are intertwined and provide support for each other. Nevertheless, they occasionally conflict. In such a situation, a project-specific evaluation may be required to resolve the conflict. The desired conditions are organized along resource disciplines.

The following desired conditions apply to both forests. More specific desired conditions have also been prepared for some geographic areas. This geographic area specific information can be found in the Strategy section of this document.

VEGETATION – DESIRED CONDITION

Guiding Vision for Vegetation

- The composition, structure, and function of vegetative conditions ensure resilience to natural role disturbances.
- The composition, abundance, and patchwork of vegetation conditions provide high water quality to local communities.
- Vegetative conditions provide sustainable levels of products such as forage or wood fiber for public needs at local and regional levels consistent with other desired conditions and ecosystem processes.
- Diversity of structure, species composition, and successional stages provide habitat for a variety of wildlife species.

General

Landscape vegetation diversity includes an ever-changing patchwork of plant communities and structural conditions that are resilient, and operate at site potential. Disturbances play their natural role in stimulating vegetation diversity. Abundant ground cover and resilient plant communities support stable watershed conditions. Standing dead trees along with down woody debris provide vital ecologic functions, such as habitats, nutrient cycling, and soil protection.

Desired Conditions by Specific Vegetation Groups

Aspen

Aspen ecosystems contain a variety of age classes and structural components distributed across the landscape. Aspen systems regain dominance, reclaimed mainly from Englemann spruce/subalpine fir and mixed conifer types accompanied by marked increases in understory vegetation and groundcover. Conifers occupy less than 15% of the canopy (Campbell and Bartos, 2001). Mature and old aspen stands comprise about 30% of the structural class distribution. Young aspen comprise about 40% of the structural class distribution. Dominant aspen trees are generally less than 100 years old. Other age classes are evenly distributed between early, young, and mid age classes. Diverse aspen conditions support a large variety of animals. (See Terrestrial and Aquatic Desired Conditions) Associated herbaceous and woody vegetation are highly variable. Perennial grasses and forbs dominate these areas with a range of shrub cover resulting in minimal bare ground within aspen systems. Site productivity generally determines individual stand densities. Aspen regeneration success is achieved through an integrated sprout protection program.

Pinyon/Juniper

The extent of pinyon and juniper (p/j) ecosystems is reduced closer to historical levels (O'Brien, 1999). Areas formerly dominated by p/j begin to be restored to grass/forb/shrub systems. Increases in grass, forbs, and shrubs contribute to improve watershed conditions (see Hydrology desired conditions). Mature and old structure

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conditions account for about 40% of p/j acres generally located within shallow, rocky soils and rough topography where fuels are sparse. The remainder occurs in earlier successional stages containing a patchwork of shrubs and forage components. Natural disturbance regimes (generally fire) encourage an ever-changing patchwork restraining p/j from becoming dominant within sagebrush systems. Stand densities are generally low due to low site productivity. A variety of successional and structural stages promote habitats for a variety of species. (See Terrestrial and Aquatic Desired Conditions) Microbiotic crusts, which are generally found only in lower elevation p/j or dry sagebrush types, are present, protected, or re-established.

Sagebrush, Grasses and Forb

Sagebrush (mainly basin big sage, mountain big sage, Wyoming big sage, silver sage, and black sage) along with a variety of grasses and forbs present a range of successional stages, sizes, and ages across the landscape. In these sagebrush systems 20-40% of the acres are in mid seral or climax successional stages. Herbaceous layers and microbiotic crusts are well developed. This cover type is an irregular patchwork of successional stages. Grass, forb, and shrub ecosystem increases generally result from p/j treatments. Ground cover is characterized by perennial vegetation, moss, microbiotic crusts, litter, and/or naturally occurring rock that stabilizes soil and minimizes surface runoff.

Mountain brush

Mountain brush communities (combinations of mainly curl leaf mountain mahogany, birch leaf mountain mahogany, serviceberry, manzanita, currant, ceanothus, nine bark, bitterbrush, cliffrose, Gambel oak, Sonoran scrub oak, and sagebrush of various species) along with a variety of grasses and forbs consist of multiple vegetation layers with alternating vertical dominance. Alternating prominence of shrub and herbaceous components relate to disturbance history. Sprouting species, such as the oaks, dominate where they are present. Soil type, elevation, precipitation patterns, and disturbance history influence specific combinations of species present. Ground cover, characterized by perennial vegetation, moss, litter, and naturally occurring rock, stabilizes soil and minimizes surface runoff.

Meadows

Meadows (generally open tree-less herbaceous community types dominated by grasses, forbs, and/or sedges) are restored, enhanced, or protected. Meadows encompass a broad environmental spectrum including: wet meadows (perennially saturated), dry meadows (only wet early in growing season), alpine meadows (high elevation), bogs (always wet, somewhat stagnant), and seeps. Ground cover is sufficient to provide protection from erosion.

Englemann spruce-subalpine fir

Englemann spruce-subalpine fir communities are composed either of pure Englemann spruce or mixed stands of spruce, subalpine fir and aspen. The mature and old structure components represent about 40% of the spruce-fir systems with the remainder distributed within younger structural classes (Reynolds et al. 1992, Graham et al. 1999, Utah Goshawk Amendment). Insect and disease populations are generally at endemic levels.

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Localized insect or disease outbreaks are generally confined by a variety of structural and successional stages. Total acres in spruce-fir systems are reduced due to aspen reestablishment.

Mixed Conifer

Mixed conifer ecosystems are pure or mixed stands of, Douglas-fir, subalpine fir, white fir, ponderosa pine, blue spruce, limber pine, Englemann spruce, and aspen. Specific species composition is generally controlled by elevation, aspect, soil type, and disturbance history. Mixed conifer forests are a variety of age classes, densities, and successional stages in varying patch sizes. Mature and old structure represents about 40% of conifer systems (Reynolds et al. 1992, Graham et al. 1999, Utah Goshawk Amendment). Other structural classes are evenly distributed between early, young, and mid age stands. Insect outbreaks occur in localized areas due to a variety of densities, structural, and successional stages. Total acres in mixed conifer systems are likely to decline due to aspen reestablishment or returning drier mixed conifer areas to historic ponderosa pine dominated systems.

Ponderosa pine

Ponderosa pine dominated systems generally occur at mid elevations on drier sites with ponderosa pine comprising more than 75% of the tree species composition. The mature and old structure components represent about 40% of the ponderosa systems with the remainder distributed within younger structural classes (Reynolds et al. 1992, Graham et al. 1999, Utah Goshawk Amendment). Insect and disease populations are generally at endemic levels. A variety of structural and successional stages generally confines localized outbreaks of insects. Stand densities will vary depending upon stand-level objectives and site productivity. Low intensity disturbances occur at relatively short intervals.

Riparian

Riparian area vegetation is a diverse mix of species and structural stages. Riparian area vegetation includes (though not limited to): conifers, aspen, willows, box elder, maple, dogwood, birch, alder, cottonwoods, sedges, rushes, and grasses. The stream substrate, gradient, elevation, and disturbance history determine plant occurrence. Plant communities are healthy and self-perpetuating. Woody vegetation provides a variety of size classes, wildlife habitats, stream shading, snags and down logs, aesthetic values, and supports other ecosystem functions. (See Terrestrial and Aquatic Desired Conditions) Riparian areas are dynamic and resilient to disturbances in structure, composition, and processes as a result of interactions among geology, soil, water, and vegetation. (See Watershed desired condition)

Unique Vegetation

Unique or small population communities (such as Bristlecone pine or tall forb) display diversity in age and structure over the range of the community. These unique communities retain their viability through site-specific analysis and applying the most current knowledge to management. Restoration of historic unique plant community sites occurs where site features and availability of local genetic stock make projects feasible.

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Threatened, Endangered, and Sensitive plants

Activities or the lack of activity will not result in the listing of a new species. Site specific actions, based on best current knowledge, recovery plans, conservation strategies and agreements, are applied to prevent declining or promote increasing population trends and distribution of these plants. Monitoring of plants that have been identified endangered, threatened, sensitive, proposed, or candidate plant species continues.

Noxious Weed Infestations

Established noxious weed infestations do not increase, occur at low densities, or are reduced where appropriate. New infestations of noxious weeds are contained, reduced, or eradicated. The State of Utah and individual counties maintain current noxious weed lists.

Exotic species

Native plants from local genetic sources dominate landscapes. However, the use of exotic (non-native) species may be used to rebuild soils, limit invasive species expansion, limit noxious weed expansion, or limit erosion until native species can reoccupy the area. Exotic species may also be used in areas where native plants are likely to be poor competitors (such as campgrounds, rock pits, frequent disturbance areas, road banks or other heavy use areas) or fire breaks (wildland-urban interface) to help modify fire behavior. In addition some exotic plants have become established (examples: Kentucky bluegrass, smooth brome, crested wheat grass) and are considered “naturalized.” They will continue to remain significant components of those systems.

DISTURBANCE PROCESSES – DESIRED CONDITIONS

Guiding Vision for Disturbance Processes

- Disturbance events such as native insects and diseases, fires, winds and floods are essential elements of dynamic and sustainable ecosystems.
- Human initiated disturbances mimic natural role disturbances and are planned within known resilience limits.
- Reintroduction of fire, either as prescribed fire or wildfire use fire, is an essential disturbance component for restoring ecosystem dynamics, viability and function.
- Societal concerns, requirements and considerations may limit natural role disturbance processes or events.

Disturbance processes (insects, diseases, fires, winds, floods) perform their natural roles in timing, intensities, duration, and scales. Human initiated disturbances (livestock grazing, tree harvest, recreation activities, prescribed fire) are designed to mimic natural role disturbances and operate within known resilience limits with any product removals being sustainable through time. In some cases social considerations may limit the role of natural disturbance processes or events.

Fire

Ecosystems are restored and maintained, consistent with land uses and historic fire regimes, through wildland fire use and prescribed fire. Human life (firefighter and public safety) is always the highest priority with property, natural and cultural resources being lower priorities. Restoring fire to fire dependent plant communities contributes to long-term resiliency, integrity, and sustainability of ecosystems. Reintroducing wildland fire or prescribed fire, to its natural role will require careful and appropriate application. Social concerns (such as; proximity to structures, smoke management requirements, public health and safety) may limit the scale of fire short of historical levels. Other treatment techniques do not mimic the same effects as fire and can possibly influence future successional pathways. (Utah Fire Amendment 2000)

All fires of human origin (accidental or arson) are considered unwanted fires and are fully suppressed. Natural ignitions are suppressed when the area is not covered by an approved fire management plan. The full range of suppression tactics is available forest-wide, consistent with local management objectives. (Utah Fire Amendment 2000)

Hazardous fuels are reduced around communities at risk (i.e., in the wildland-urban interface) and in ecosystems, restoring fuel loads to more historic levels. Defensible space is created around structures (defensible space is defined as: the space where fuel has been modified to reduce wildfire intensity and where fire fighters can safely be placed to fight fire in cooperation with adjacent owners and other agencies). These wildland-urban interface areas retain some ecological functions, such as soil protection, some habitats, and nutrient cycling. Treated wildland-urban interface zones serve as a

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fire break for fire traveling from developed areas onto national forests as well as influencing fire spread from national forests to adjacent private land. Wildland-urban interface areas with adjacent structures require periodic maintenance to retain defensible space characteristics.

Insects and Disease

Many insects, diseases, fungi, bacteria, and viruses are essential to ecosystem processes (for example; pollination, decay processes, nutrient recycling, food for higher organisms, provide habitat, or population control of forest “pests”). Ever-changing landscapes provide a variety of species composition, structural and successional stages along with adequate snags and down wood and debris to assure continuation of these essential insects, diseases, and associated processes.

Outbreaks of bark beetles and defoliators occur in cycles generally linked to stand density, age, species composition and are often triggered by climatic influences. Localized outbreaks of bark beetles or defoliators are generally confined by a variety of structural and successional stages. If outbreaks of bark beetles or defoliators have the potential to impact recovery of threatened, endangered, or sensitive species, then a timely evaluation will be conducted to determine need of treatment. In some situations social considerations may trigger treatments, such as impacts to critical watersheds or may lead to high wildfire hazard.

Several native diseases, which are wood decay fungi, have the potential to impact desired conditions especially related to timber management or wildlife habitat objectives. The three major native diseases involved are: s-type Annosus root disease (impacts primarily white fir and Douglas-fir), Indian paint fungus (a heart rot that impacts primarily white fir), and tomentosus (a heart rot that impacts spruce). None of these native diseases have direct control possibilities and will persist. In some instances, management actions are used to minimize the spread or influence of these native diseases which can be implemented, as needed, to meet desired conditions and ecosystem processes.

Dwarf mistletoe, a parasitic plant that is generally host specific, will continue to be part of ecosystems providing habitat and a food source for wildlife.

There are no known exotic insects or diseases within the Dixie or Fishlake National Forests. If exotic insects or diseases are identified, then prompt evaluation will be required to determine potential impacts on desired conditions followed by appropriate and timely treatments if necessary.

Human Disturbances

Human influences play major or substantial roles in plant community composition, structural distribution, and disturbance intensities, patterns, and duration. Human activities (such as; timber harvest, domestic livestock grazing, fire use, or recreation) mimic historical disturbance(s) and are designed to meet desired conditions, move toward desired conditions, or at least do not impair desired conditions. Associated product removal does not exceed sustainable capabilities. Examples include:

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Livestock grazing is permitted as an appropriate tool for achieving site-specific conditions and livestock grazing may also help meet social and economic desired conditions.

Tree harvesting is an appropriate tool for achieving site specific structural and species composition desired conditions. Tree harvesting may also help meet social and economic desired conditions.

Previous structure and species modification projects, such as chainings, are maintained for their original purpose, integrated into the landscape patchwork of structural and successional features, or continue on successional pathways.

Prescribed fire and wildfire use fire are appropriate tools to achieve or move towards desired conditions in accordance with Fire Management Plans, project level assessments, or other assessments such as wilderness plans and in compliance with air quality standards, public safety, or other requirements.

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WILDLIFE AND FISH – DESIRED CONDITIONS**Guiding Vision for Wildlife and Fish**

- There are sufficient populations, distributions and genetic variability to ensure the long term persistence of native wildlife and fish.
- Native and desired non-native wildlife and fish populations exist within habitat capabilities. This includes game species.
- Species at risk trends are stable or reversed. No new species are added as a result of human action or inaction
- Diverse and dynamic habitats are dominated by native vegetation that support life phase events and processes.

Introduction

The abundance and distribution of native wildlife and fish found on the Dixie and Fishlake National Forests have sufficient populations and distributions to ensure their long-term persistence. Wildlife and fish species contribute to biodiversity of ecosystems, recognizing that there are inherent limitations for restoring historic conditions.

Native and desired non-native wildlife and fish populations are healthy. Populations exist within habitat capabilities, including predator/prey and food chain relationships, and are resilient to disturbances of various sizes and intensities. Disturbance regimes such as fire, beetle infestations, and floods occur at frequencies and magnitudes that maintain the mosaic of structural and age variances over time, supporting disturbance-dependent species. Disturbed habitats recover over time restoring disturbed lands to desired conditions or at least to conditions present prior to the disturbance. Time needed for restoring conditions varies depending on the site potential. Natural processes shape the vegetative composition and structure where possible. Management activities, such as prescribed fire, wildland fire use for resource benefit, and mechanical treatments, emulate natural processes. Age classes presently in low quantities (primarily mature and old age classes) increase over time moving the age classes over the landscape toward desired vegetative conditions (see Vegetation Desired Conditions).

Species of Concern

Declining population trends of terrestrial and aquatic species are halted and/or reversed. Hence, species are not listed as endangered or threatened under the Endangered Species Act, or listed as sensitive by the State or Regional Forester. Habitats are suitable and distributed as described in Recovery Plans, Conservation Strategies and Agreements, recommendations, and best available scientific knowledge. No additional species demonstrate declining population trends because of forest practices.

Habitats*Terrestrial*

Terrestrial wildlife habitats are diverse with native plant communities dominating the landscape. These communities are a mosaic that vary in age, structure, patch size, and

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contain components considered important to sustaining wildlife populations (e.g. snags, mast, down logs, understory vegetation) (see Vegetation Desired Conditions).

Un-fragmented habitat patches of varying sizes are connected and allow movement of species between these patches, unless to provide barriers to spread of exotic plants and animals. Different vegetation types within large landscape patterns are connected, especially riparian and adjacent upland vegetation. These habitats, along with non-vegetative habitats (such as lava fields) support a diversity of species. Effective corridor habitat is provided and management actions consider and mitigate impacts to corridors wherever possible.

Key or unique habitats, such as primary feeding areas, winter ranges, riparian habitat, breeding areas, birthing areas, rearing areas, migration corridors, animal concentration areas, wooded draws, and riparian areas provide habitat characteristics to function in their respective roles. Areas of varying sizes provide refuge and security for a variety of wildlife species. Unique habitat types, such as riparian areas, natural springs, wetlands¹, organic bogs, seeps, meadows, bristlecone pine, and tall forb communities provide suitable habitat for wildlife species that use these habitats.

Riparian habitats have a variety of vegetative vertical structure and patch sizes commensurate with site capabilities. These characteristics are determined by stream gradient, channel and floodplain width, elevation, and soil (see Watershed Desired Conditions).

Wildlife are generally not disturbed during vital time periods such as nesting, brooding, and wintering when the disturbance could cause reproductive failure, or inordinate stress.

Vertebrate and invertebrate interactions (such as pollination, parasitism, and symbiosis) occur within appropriate vegetation and aquatic habitats.

Aquatic and Semi-Aquatic

Water bodies, riparian vegetation, and adjacent uplands provide habitats for self-sustaining native and desired non-native aquatic communities, including fish, amphibians, invertebrates, plants, and other semi-aquatic species. Aquatic habitats are diverse, with channel characteristics and water quality reflective of the climate, geology, and natural vegetation of the area (see Watershed Desired Conditions). Habitat loss does not occur from human activities.

Stream connectivity provides for processes such as re-colonization and/or gene flow, and for life history function (e.g. movement from summer holding to fall spawning areas). Stream barriers provide protection to species that are vulnerable to competition from other species, particularly from non-native fish.

¹ For regulatory purposes under the Clean Water Act, the term wetlands means "those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas."

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Species of Interest

Game Species

The roles of big game management and conservation are important biologically and socio-economically. Big game summer, winter, and transition ranges are a desired mix of forage, cover, water, and security areas. Hiding cover within Geographic Areas ranges from 30% to 60%, depending on the plant community, open roads, and motorized trails. This hiding cover is well distributed and in varying patch sizes over the Geographic Area (rock and water, which cannot provide either forage or cover, are not included in calculating percent cover areas). Densities of open roads and motorized trails are generally low, and/or distances between open roads and motorized trails are greater in forested habitats that have low amounts of hiding cover and security areas (Rowland et al. 2004). These habitats contribute, within the capabilities of the systems, toward meeting population objectives approved by the Utah Wildlife Board.

Mule deer winter ranges contain cover and high quality forage, including a mix of seral stages and age classes of sagebrush, oak, and other winter forage species (see Vegetation Desired Conditions). On critical mule deer winter range², at least two shrub species occur in shrub plant communities capable of growing two or more shrub species. From 30 to 50 percent of these shrubs are mature, and at least 10 percent are in young age classes.

Access for hunting and fishing consists of a variety of difficulty and convenience opportunities, ranging from easy access by motor vehicle to opportunities where horse or foot travel is necessary.

Migratory Birds

Terrestrial and aquatic vegetative conditions provide suitable nesting, migration and wintering habitats for migratory and resident birds. Habitats for migratory birds represent guidelines established for or through the [Migratory Bird Treaty Act of 1918](#), Executive Order 13186 (2001), and [Utah Partners in Flight Conservation Strategy](#), and [North American Landbird Conservation Plan](#) (2004).

Wildlife Viewing and Education

Unique ecosystems and restored habitats, particularly for listed and sensitive species, are interpreted with signing and through other education media.

² As defined by Utah Division of Wildlife Resources and verified by field biologists.

RECREATION – DESIRED CONDITION

Guiding Vision for Recreation Conditions

- Maintain areas of sufficient size and configuration to avoid conflicts between non-motorized and motorized users.
- Appropriately locate and maintain trail network.
- Continuing active involvement of outside agencies and the public in providing “all-season” recreation opportunities; and subsequently educating users concerning responsibilities.
- Develop a balance of safe, efficient, and environmentally responsible experiences for people of all abilities.
- Allow opportunities to be available for a wide variety of users as appropriate to other resource concerns.

The Dixie and Fishlake National Forests’ diverse landscapes offer a variety of settings for a broad range of activities. These landscapes include primitive settings where there are opportunities for solitude, risk and challenge, to more modified settings where there are opportunities for social interaction, comfort, and less risk. Local communities, partnerships and volunteers are actively involved and benefit from their roles in providing recreational opportunities. Recreationists understand the potential for impacts to resources and other users and actively assist in caring for the land and resolving conflicts.

The relatively open and remote landscapes of the forests offer unparalleled recreation opportunities that provide both challenge and solitude. These opportunities span four seasons and include (but not limited to): camping, hunting, backpacking, OHV use, and fishing. Quality recreation developments are strategically located at key destinations to accommodate concentrations of use and provide staging areas into the more remote parts of the forest.

The forests’ location near state parks, national parks, and national monuments suitably compliments and appropriately contrasts these internationally popular attractions. Key travel corridors link to these parks or monuments and associated outlying communities. Quality developed recreation opportunities are located along these corridors to highlight unique natural and cultural features. Emphasis exists on successfully accommodating the number and diversity of tourists visiting the area.

The great mix of summer and winter recreation opportunity is consistent with more specific Geographic Area direction.

Developed Recreation

The forests offer a balance of safe, efficient and environmentally responsible developed recreation experiences and opportunities. Developed recreation facilities are continually upgraded as funds are available to meet established national standards. Recreation

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facilities are designed to provide the most current information/ interpretation for people of all abilities providing amenities to meet their needs.

Dispersed Camping

Dispersed camping opportunities are available for a wide variety of users. However, dispersed camping is limited in some areas due to resource and wildlife concerns, activity conflicts, or overuse.

The Forest Service works in concert with groups and other agencies to educate campers about potential resource impacts, user responsibilities, and camping ethics. Teach dispersed campers to be respectful of other resources and other forest uses. Educate forest users to respect each other and minimize impacts by removing trash and camping debris from site. They inform the public of the harmful effects of leaving human and animal waste and reducing the evidence of these substances on the forest.

Dispersed camp sites are on native material in designated areas. New sites are discouraged to preserve vegetation and soil. People use existing fire rings and refrain from establishing new ones. Camp sites are clear of debris and do not grow over time. They are not located in riparian areas where flooding can wash loose soils and debris into streams.

Non-motorized Recreation

Non-motorized areas have sufficient size and configuration to minimize disturbance from other uses. The non-motorized trail network is appropriately maintained and accesses locations of interest for a variety of users. Collaboration and education with other agencies and user groups results in associated ethical behavior most effectively reinforced by peers. Motorized users do not use non-motorized trails.

Motorized Recreation

Motorized recreation is a suitable use of the National Forest. However, this use is restricted in some areas primarily due to resource concerns, activity conflicts, or overuse. Varying degrees of challenge, user comfort and social interaction characterize motorized recreation opportunities. Snow machines are allowed in areas with adequate snow cover.

Local communities, partnerships and volunteers are actively involved and benefit from their roles in providing motorized recreation opportunities. The Forest Service works with other agencies and groups to comprehensively educate recreationists about potential resource impacts and user responsibilities or ethics. Accordingly, recreationists actively assist in caring for the land and in resolving associated concerns.

A suitable designated route network exists for a variety of appropriate winter and summer uses. These routes are well marked to encourage proper use and support meaningful law enforcement. User-created trails are monitored and subsequent action is determined as appropriate. Maps that clearly display the summer and winter routes are readily available. The routes also access surrounding communities where amenities (lodging,

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gas and food) are available. The motorized recreation network complements trails available to non-motorized users.

WATERSHED – DESIRED CONDITION

Guiding Vision for Watershed Conditions

- Watersheds exhibit high geomorphic, hydrologic and biotic integrity relative to their natural potential condition³.
- Management activities have no negative effects on overall stream channel stability, soil productivity, soil-hydrologic function, or native aquatic species sustainability.
- All ground and surface waters meet State water quality standards and are maintained as high quality waters.
- Favorable conditions of water flow⁴ occur in watersheds, streams, lakes, springs, wetlands and aquifers to fully support State designated beneficial uses⁵, existing biological resources and effective discharges⁶.

General

Watersheds, stream channels, riparian areas and wetlands have a level of stability that can absorb and reduce the impacts from floods and other disturbances without producing rapid erosional changes in the system. Physical, chemical and biologic conditions indicate that soil, riparian and wetland systems function as a sponge and filter to absorb, clean, store and release water. Watershed processes operate within their perceived natural range of variability and respond to disturbances with a trend toward the watershed's "norm" over time.

Riparian and Wetland Areas

Riparian and wetland plant communities found in conjunction with perennial, ephemeral and intermittent waters are properly functioning for their natural potential condition. Plant communities are healthy and self-perpetuating, with a diverse mix of desired species and age classes. These communities are resistant and resilient to rapid change from large disturbances such as floods and are capable of maintaining themselves during dry periods. Exotic vegetative species and noxious weeds are rare or absent.

Riparian areas and wetlands store and release enough water to maintain favorable conditions of water flow. Natural patterns of recharge and discharge provide ground-water levels and flows that are critical for wetland integrity. Vegetative cover on channel banks, wetland areas, and shorelines is sufficient to catch sediment, prevent erosion, stabilize stream banks, and promote floodplain development. Riparian vegetation is also

³ Source: FSM 2521.1.

⁴ Source: Guiding Principles for Water Resource Management, principle #2 and Boise Adjudication team edits.

⁵ Beneficial uses, both consumptive and non-consumptive could be defined in the glossary.

⁶ Effective discharge could be defined in a glossary. Some key concepts with effective discharge are: channel maintenance, sediment transport, aquifer recharge, maintain natural channel shape

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present for wildlife habitats, stream shading, in-channel woody material, aesthetic values and other ecosystem functions (see also Vegetation Desired Condition).

Stream Channels and Floodplains

Stream channels are linked to their floodplains. Seasonal water elevations include channel maintaining flows that access the floodplain regularly. These seasonal flows recharge riparian aquifers, alleviate spring flood effects and provide late season stream flows and cool water temperatures necessary to fully support State water quality beneficial uses⁷. Sediment deposits from over-bank floods allow floodplain development and the propagation of flood dependent species such as cottonwood. Channel width-to-depth ratios, entrenchment ratios, slope and sinuosity are commensurate with the appropriate channel type, vegetation and capability of the stream.

Stream channels and floodplains are in proper functioning condition consistent with the in-situ climate, basin morphology, geology, soil, water and vegetation. Although stream channels and floodplains are ever changing, they are resistant and resilient to accelerated changes from management activities or other disturbances. The water balance between each stream and its watershed allows for a natural frequency and magnitude of base flows and flood flows.

Soils

Soils have protective ground cover, organic matter and coarse woody material commensurate with the soil type. Vegetative cover and litter are sufficient to prevent soil movement and maintain soil productivity. Soils have adequate physical properties for vegetative growth, nutrient cycling and soil-hydrologic function. Physical, chemical and biological processes in most soils function similarly to soils that have not been detrimentally disturbed. Soil-hydrologic function and productivity in riparian areas and wetlands provides a filter for water quality and a sponge which stores and releases water.

Microbiotic crusts are present, protected, or encouraged to re-establish where appropriate. Microbiotic crusts (also known as cryptogamic, cryptobiotic, or microphytic crusts) are formed by living organisms and their by-products, creating a crust of soil particles bound together by organic materials that limit erosion and contribute to soil nutrients. Microbiotic crusts are composed of combinations of cyanobacteria (photosynthetic bacteria), green and brown algae, mosses, lichens, liverworts, fungi, and bacteria (see also Vegetation Desired Condition).

Aquatic Biota

Soils, riparian areas, aquifers and stream channels support habitats for a variety of aquatic and semi-aquatic species, including desired fish, amphibian, macro-invertebrate and periphyton communities. Physical habitat characteristics, such as bank stability, pool/riffle ratio, pool depths, water temperature, and substrate composition, support and sustain all life stages of desired aquatic species. Ground-water levels and flow to ground-

⁷ Source: Regional Forest Plan Consistency in Livestock Grazing Administration (Winward and Heffner)

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water dependent ecosystems are maintained through natural patterns of recharge and discharge.

Aquatic habitats and watershed conditions support the long-term sustainability of native aquatic species, such as Bonneville cutthroat trout and Colorado River cutthroat trout. Watersheds that contain native cutthroat trout populations, or other important aquatic communities (e.g. state sensitive species, trophy fisheries, unique aquatic community structure), support the long-term sustainability of these unique aquatic resources. Metapopulations are well connected. Cold water fisheries habitat sustains desired fish species. Aquatic habitats promote native species composition, and aquatic nuisance species are rare or absent.

Municipal Watersheds

All municipal water sources provide high quality water for the designated communities and beneficial uses. Multiple uses within these watersheds are compatible with desired water quality. Water diversion and conveyance facilities have appropriate access and do not impair watershed, channel or biological processes. Surface water resources are not altered or adversely affected by withdrawals from water supply wells.

Monitoring Measures

- Proper Functioning Condition assessments for key watersheds, riparian and wetland areas.
- State water quality monitoring, in cooperation with the Utah Department of Water Quality.
- Population monitoring of native aquatic species.

SOCIAL AND ECONOMIC – DESIRED CONDITION

Guiding Vision for Social and Economic Conditions

- The Forests provide a wide variety of predictable and sustainable opportunities that contribute to social and economic conditions.
- The predictions and sustainability of these opportunities are periodically monitored and updated.
- Forest planning and implementation of the plan continue to be collaborative

In southern Utah, the social conditions and economic conditions are intertwined to an extent that it is difficult to discuss them separately. Some economic factors can be tied to production revenues and other quantifiable economic values. Most social and cultural values are not easily quantifiable; however, they often have an even greater impact on people's lives. The forests can directly and indirectly impact local economies, individuals, and businesses. For those reasons, the following section considers social and economic desired conditions as a single unit.

The Dixie and Fishlake National Forests contribute to the sustainability of the social and economic systems in southern Utah⁸. The National Forests do not independently sustain a social and economic system, but are critical contributors to the system. Forest managers recognize the numerous ways people are linked to the forests. These links are balanced within the managers' decision space. Forest managers understand how their decisions may affect current and future social and economic conditions. Responsible officials reach objective decisions considering science, balanced multiple uses, sustainability, and desired conditions with the good of the land over time.

Forest users participate in appropriate activities. Forest users also understand how their actions may affect others. This understanding is supported by cooperative education programs. Forest users are good stewards of the land: they exhibit responsible behavior, encourage others to do the same, and contribute to society's responsibility for the long-term sustainability of the forests.

Social and Economic Opportunities

The forests provide a wide variety of opportunities that contribute to social and economic sustainability. Prehistoric, historic, current residents, and communities near the forests have strong ties to the land. Economic linkages include but are not limited to wood for homes and fuel, water, forage for livestock, and food sources. Social linkages include recreation, traditional activities, family events, and an intangible feeling of interest. These and other traditional linkages and their associated activities are given consideration

⁸ For social and economic analysis, the primary area of analysis is southwest Utah. However, the two Forests are also a smaller part of the social and economic fabric of the southwest United States and of the entire Nation.

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in the decision-making process. The forest has a high capacity for sustainability and is managed with a multiple use philosophy. The following bullet statements describe the desired conditions of the more significant contributions (the list does not include all contributions):

- **Timber** – The forests provide a sustainable and predictable level of timber and wood products. These products are made available to the local and regional economies. The resulting timber industry, in southwest Utah, is a reliable, capable, and appropriate tool for forest management. In turn, the timber industry provides stable employment opportunities for the community.
- **Livestock Grazing** – Livestock grazing continues to be an appropriate land use and is well managed. The livestock grazing program is sustainable and does not degrade the long-term productivity of the forage and water resources. The livestock grazing opportunity is supported by a combination of open land on federal and private range. Thus, landscape fragmentation is minimal and there is low risk of fragmentation caused by future development. Grazing operators continue to be an important thread to communities' social fabric. The Forest Service and permittees recognize their mutual legal obligations under the permitting system.
- **Recreation** – A wide variety of opportunities are available for both private and commercial recreation. The opportunities continue to be widely available to local, regional, and national visitors. These opportunities are in harmony with long-term resource sustainability. Incompatible uses are zoned to appropriate locations.
- **Minerals** – The exploration, development and production of mineral and energy resources occur in response to and to assist in meeting, local, state, and national demand. Although some areas are not available, most of the forest remains open to mineral activities. Leases, exploration plans and mining plans include mitigation measures, stipulations and monitoring items to assure compliance with applicable laws, regulations and forest plan requirements, to protect other resources. Energy exploration and development is compatible with ecosystem capabilities and other resource values. Facilities and landscape modifications may be visible but are reasonably mitigated to blend and harmonize with natural features. Surface disturbance from mineral and energy development are restored through effective reclamation techniques. Upon cessation of mineral and energy activities, disturbed sites are returned to a condition consistent with management emphasis and objectives. The development and production of mineral materials (saleable minerals, for example, gravel and cinders) emphasizes Forest Service and other government agency use over commercial and personal uses.

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- **Culture** – Historic and cultural values are respected and integrated into decisions and actions. These values reflect the prehistoric and historic occupants of the area and are sustained for current future generations’ enjoyment and education.
- **Quality of Life** – The forests continue to be part of the context for life in southwest Utah. They are a source of clean air and water. The forests provide visually pleasing landscapes and their existence increases the quality of rural life.
- **Water** – Many communities exist within close proximity of the forests and are dependent upon water resources developed within or impacted by National Forest management. Water rights are recognized. Existing water sources are appropriately managed. Communities future water needs are considered.
- **Tribal** - Self-perpetuating populations of culturally important plants continue to be available for collection under Tribal rights.

Air Quality and Smoke Management

Air quality is affected by both natural and human caused events. Natural events include smoke from wildland fires and wildland fire use; human caused events include smoke from prescribed burning, recreational campfires and fugitive dust from unpaved roadways and other activities. Areas affected by smoke from prescribed fires and other management activities will meet the federal air quality standards to protect public health. (see Disturbance Processes Desired Conditions)

The National Ambient Air Quality Standards (NAAQS) will not be violated by prescribed fires or wildland fire use. All ignitions must be cleared through the State’s smoke manager. All wildland fire use and prescribed fires will be cleared through the State of Utah Division of Air Quality’s Smoke Manager before being utilized. Impacts to air quality do not exceed standards allowed under law. Prescribed fires will meet Clean Air Act standard (Public Law 95-95).

Planning

National Forest planning is collaborative. It builds trust, reaches substantial agreement, and encourages a sense of stewardship to achieve the stated desired conditions. Governments (state and local), groups, and individuals are welcomed partners in the planning process. Local cooperating agencies maintain their status after plan revision. Tribal governments participate through their government-to-government relationship with the federal government. Forest Service officials retain their delegated decision-making authority. However, their decisions result from an open, established, and accepted process. Knowledge and learning are shared among all partners.

Implementation

Forest plan implementation is coordinated with other federal, state, and local agencies or governments. Effective communication channels are maintained. Partnerships and

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agreements cooperatively implement strategies described in the plan. The Forest Service and neighboring communities cooperatively share resources, planning goals, and expertise to achieve desired conditions across the landscape. The Forest Service fosters a relationship of mutual respect with forest users and their various links to the forests.

Monitoring measures

Comparison of predicted and actual outcomes for:

- Timber – Level of wood products offered
- Livestock Grazing – Number of range permittees and number of permitted Head Months (HMS)
- Recreation – Number and types of visitors, number and types of commercial recreation guides
- Minerals – Number and type of bonded mineral operations
- Water – Number and quality of municipal water sources
- Planning – Number of governments, groups, and individuals actively involved with Forest Planning and Implementation.

HERITAGE RESOURCES– DESIRED CONDITIONS

Guiding Vision for Heritage Resources

- No disturbance of heritage sites.
- The forest archeologists complete forest-wide surveys of heritage resources.

The desired condition for heritage resources on both forests is that the sites continue to exist in an undisturbed condition. Erosion and weathering, natural and human caused, poses the greatest threat to these resources. Development projects proposed by the agency will be surveyed prior to the implementation of the project to avoid or mitigate those potential effects to these sites as part of the project.

The public will continue to be afforded access to sites which have been stabilized and are maintained for interpretation of the cultural history of the area. Vandalism of sites will be prevented by continued law enforcement presence and public awareness of the problem. Prosecution of vandals will be a priority of the agency.

American Indians will continue to be allowed access to those sites of a sacred nature to their communities and people. Working in partnership, the governments of the Tribes and the Forest Service will see that this continued access is maintained.

TRANSPORTATION – DESIRED CONDITIONS

Guiding Vision for Transportation Conditions

- The transportation system provides safe and efficient access for the public and for the agency to National Forest System Lands.
- The transportation system is designed and maintained for a low level of environmental impacts. Unavoidable impacts are minimized and mitigated.

The transportation system provides safe and efficient public and agency access to National Forest System Lands. It is economically viable, environmentally compatible, responsive to public needs and desires, and efficiently managed. The system provides a balanced mix of road and trail access for recreation, special uses, management, and fire protection activities while supporting forest-management objectives. User experience, safety, and resource protection are emphasized in the transportation system planning, design, and operation.

Management of the transportation system is commensurate with expected levels of use and environmental sensitivity, and is prioritized within available funds, emphasizing safety, resource protection, economic viability, and user experience. As supported by science-based analysis and prioritized to meet forest-management objectives, unnecessary roads and trails are removed from the system and decommissioned. Over the planning period, the total mileage of classified and unclassified roads and trails is reduced, impacts from retained roads and trails are reduced, and the development and proliferation of unauthorized roads and trails is minimized.

The transportation system is efficiently interconnected to state, county, local public and other Federal roads and trails through collaborative access and travel management planning. Rights-of-way to access National Forest System Lands respond to public access needs, facilitates, and planned resource activities.

The transportation system provides access needed to maintain facilities and infrastructure such as: buildings, recreation facilities, municipal water systems, dams, reservoirs, range improvements, electronic and communication sites, and gas and water lines.

Monitoring measures

Total miles of road and trail by management category

Part Two – Strategy

INTRODUCTION

This is the second of the three parts of the Dixie National Forest land management plan. It describes the strategic direction that will be employed over the next 3 to 5 years to move toward realizing the desired conditions described in Part 1-Vision of the land management plan. Part 2 is intended to supplement Part 1 of the plan.

Part 2 includes:

- National Goals:** A discussion of strategic goals that apply to the National Forest System
- Prospectus:** A description of past program performance history and anticipated performance over the next 3 to 5 years. The prospectus includes strategies and priorities, objectives, performance monitoring items to track and adapt predictions of outputs and performance, and risks to performance.
- Suitable uses:** A description of land use zones and descriptions of allowable uses and opportunities.
- Special areas:** A description of special areas that are specifically designated because of their unique or special characteristics.
- Geographic Area Based Direction:** More specific desired condition description and objectives organized by place-based geographic areas.

NATIONAL STRATEGIC GOALS

Strategic Plan 2004-2008

The Strategic Plan embodies the Forest Service’s many areas of responsibility, as captured in the agency’s mission statement:

“The mission of the USDA Forest Service is to sustain the health, diversity, and productivity of the Nation’s forests and grasslands to meet the needs of present and future generations.”

Summary of Goals

1. **Reduce the risk from catastrophic wildland fire:** Restore the health of the Nation’s forests and grasslands to increase resilience to the effects of wildland fire.
2. **Reduce the impacts from invasive species:** Restore the health of the Nation’s forests and grasslands to be resilient to the effects of invasive insects, pathogens, plants, and pests.
3. **Provide outdoor recreation opportunities:** Provide high-quality outdoor recreational opportunities on forests and grasslands, while sustaining natural resources, to meet the Nation’s recreation demands.
4. **Help meet energy resource needs:** Contribute to meeting the Nation’s need for energy.
5. **Improve watershed condition:** Increase the number of forest and grassland watersheds that are in fully functional hydrologic condition.
6. **Mission related work in addition to that which supports the agency goals:** Conduct research and other mission-related work to fulfill statutory stewardship and assistance requirements.

Additional details about these goals and associated objectives can be found in the USDA Forest Service Strategic Plan for 2004-2008.

STRATEGY

The National Strategic Plan goals of the Forest Service in effect during plan implementation will guide the priorities of all National Forest units. The accomplishments of Dixie National Forest will contribute to the National Strategic Goals, consistent with the direction in the Forest Plan.

Prospectus

The Prospectus describes the program areas of the Dixie NF Plan. Within each of those program areas are the following headings:

- **Introduction** – The scope and program of work for the program area.
- **Trends Affecting Program Management** – The trends that impact how the strategies and objectives are defined and how the plan will be implemented by the program area.
- **Strategy (and Priorities)** – Management activities which are necessary for achieving the desired conditions. However, strategies do not measure progress toward desired conditions. For example, following best management practices may improve the operations of the program area but is not measurable or time-specific. Priorities are areas that will be emphasized by the program area but may be promoted or demoted in importance due to changes in conditions.
- **Objectives** – A list of concise projections of intended outcomes of projects and activities to contribute to maintenance or achievement of desired conditions. Objectives are measurable and time-specific, but are not commitments, obligations or final decisions approving projects and activities.
- **Performance Monitoring Items** – Performance measures that will be used to evaluate progress towards desired conditions based on the program area objectives.
- **Risks to Performance** – Factors which may impede implementation of the plan and prevent the program area from achieving its objectives.

PROGRAM AREAS

Program Area	Page
Road Management	
Recreation	
Minerals and Geology	
Livestock Grazing Management	
Timber and Forest Products	
Watershed and Riparian Management	
Fish	
Wildlife	
Fire and Fuel Management	
Heritage	

STRATEGY

ROAD MANAGEMENT

Introduction

Road Management includes activities associated with the construction, reconstruction, and maintenance of roads that are in the Forest Service road system. Forest Service roads are maintained according to five maintenance levels.

The following table displays the miles of road by maintenance level for the Dixie National Forest. This list does not include Federal highway, state, county, and private roads.

Table 1 – Miles of Road by Objective Maintenance Classification – Levels 3, 4, and 5 are suitable for use by passenger cars. Level 2 is suited for high clearance vehicles like pickup trucks and sport utility vehicles. Level 1 roads are closed but retained for future management uses.

Objective Maintenance Level	Miles of road (2004)
5	16
4	94
3	596
2	2385
1	377

The Dixie National Forest also has about 1,960 miles of routes that are not part of the classified road system. These routes include motorized trails, temporary roads, old timber sale roads, routes that have been removed from the classified system, and user-created routes.

Trends Affecting Program Management

The following trends have an impact on the road management program:

- Some level 2 and unclassified routes present environmental concerns.
- Creation of new unclassified routes continues to be a problem forest wide.
- The historical funding provided for road management has not been sufficient to meet all road management objectives. We do not foresee a significant increase in funding, and have experienced decreases in funding in recent years.
- Over time the number of roads are expected to go down as non-essential roads are identified through the RAP/NEPA process and are scheduled for decommissioning.
- Public expectations for road conditions and comfort are expected to increase.
- Amounts and types of motorized uses are changing. Impacts may be expected to increase from these changes.

Strategy

Emphasis will be given to “deferred maintenance” items associated with level 3, 4, and 5 roads.

Maintenance level 3 thru 5 road surfaces will be hardened (crushed aggregate and/or asphalt surfacing) commensurate with their identified “objective maintenance levels”, and as funding becomes available. Proper drainage will be emphasized at the same time.

STRATEGY

Non-essential routes (classified and unclassified) identified thru the environmental analysis process will be decommissioned.

System roads currently traversing environmentally sensitive areas which are not identified for decommissioning, will be relocated/reconstructed as funds become available, and as approved thru the environmental analysis process.

Certain high use routes have been identified as potential “Public Forest Service Roads”. When funding becomes available thru federal gas-tax legislation, these roads would be upgraded per PFSR standards, and as approved thru the environmental analysis process.

Road related targets and goals will be accomplished thru a mix of “contracting” and “force account” activities.

All of the roads suited for passenger car travel (maintenance levels 3-5) should be inspected annually and receive maintenance as needed. The remaining resources should be divided relatively evenly across the Forest to maintain a portion of maintenance level 2 (high clearance vehicle) roads. Route decommissioning or rehabilitation is prioritized for non-system roads, and unneeded level 1 and 2 roads that may be causing environmental damage.

Standard maintenance, construction, and reconstruction strategies for arterial and collector roads can be found in the [7709.58 - Transportation System Maintenance Handbook](#).

Objectives

The objectives for road management are to

- Perform maintenance activities on 75% of low clearance (level 3-5) roads each year.
- Perform maintenance activities on 10% of high clearance roads (level 2) each year.
- Reconstruct, relocate, or decommission roads currently located in environmentally sensitive areas.
- Reconstruct and upgrade roads currently identified as potential Public Forest Service Roads.

Performance Monitoring Items

The Forest Service will monitor the following items to measure progress toward desired conditions:

- Miles of road receiving maintenance (both high and low clearance).
- Miles of road at RMO (Road Maintenance Objective).
- Miles of road reconstructed.
- Miles of road decommissioned.

Risks to Performance

- Budget levels are uncertain.
- NEPA analysis to authorize decommissioning of non-essential roads may not be completed in a timely manner.
- Changes in fixed costs (overhead, salary, and equipment) may reduce available budget for performance activities.
- Abnormal weather events and associated flooding with resultant road damage.

STRATEGY

- Increased usage of roads during late fall and early spring associated with hunting seasons and recreational (i.e. - antler collection) activities.

STRATEGY

RECREATION

Introduction

The Recreation program of work includes:

- Management and operation of developed recreation sites,
- Interpretive services,
- Scenery management,
- Recreation special use permits,
- Management of statutorily designated areas such as Wild and Scenic Rivers, Wilderness, and National Trails,
- Collection and recreational resource revenues,
- Management of dispersed recreation such as dispersed camping and OHV use, and
- Activities associated with the construction and maintenance of trails in the Forest Service trail system and facilities associated with the trail system.

Source: FSH 6509.11g - Service-Wide Appropriation Use

The Dixie National Forest manages 31 campgrounds and picnic areas, about 1,500 inventoried dispersed camp sites, over 20 motorized trails totaling over 500 miles (most of this system is a mixed-use portion of the classified road system), and over 1,000 miles of non-motorized trails. In addition to the motorized and non-motorized trail system, the Dixie NF has an extensive Wilderness trail system including 21 trails and 143 miles of trail.

Trends Affecting Program Management

One trend we anticipate to continue is a steady increase in visitors from neighboring states (Arizona, Nevada, and California) and from the Wasatch Front, Utah. We expect to see an increase in general summer use, hunting, and motorized winter recreation use. Accompanying this use we are seeing an increase in private property ownership in areas adjacent to the Forest.

Off-Highway Vehicle (OHV) use has seen an increase in recent years. There is a noticeable increase in encroachment by this use into primitive areas of the Forest.

Mechanized uses such as mountain biking are very popular. The forest expects a rapid increase as some areas on the Dixie (Cedar Mountain, Brian Head, and Red Canyon) are becoming internationally renowned for this use.

In some places, unmanaged dispersed recreation (dispersed camping and off-trail OHV use) threatens resources and other forest uses. There is a need to limit and mitigate these impacts.

Many of the motorized and mechanized trail users seem to be seeking something other than a primitive experience, however, they still want space to roam and be alone on the Forest. Much of this use is clustering and can be expected to continue to cluster around water resources.

For Pine Valley Wilderness, there may be challenge keeping motorized use off of the non-motorized trails.

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Strategy

Recreation strategies on the Dixie NF are guided by the Regional Recreation Strategy and Niche document (2002).

The Dixie Trail Initiative project will place greater emphasis on maintenance of trails and signing protocol. The Forest will also prepare a Trail Master Plan and produce a trail map to facilitate access management. The plan will assist in prioritizing projects and to address the backlogged work including trail maintenance, trail signing and wilderness signing.

Another priority will be the Wilderness planning. The Dixie plans to engage in an effort to write wilderness plans for the Ashdown Gorge, Box-Death Hollow, and Pine Valley Wilderness Areas. These plans will cover the Chief of the Forest Service's goals from his 10-Year Wilderness Plan.

In addition to trails and wilderness, the Dixie will place greater emphasis on dispersed camping planning.

Since "driving for pleasure" and "viewing scenery/wildlife" are top visitor activities on the Dixie, we expect a greater need and emphasis on scenery management. The Dixie NF will improve their current visual management system by converting to a more comprehensive scenery management system.

The strategy over the next several years with regard to OHV use of trails revolves around the Forest policy of use on designated trails only. The management tools to be used include education, enforcement, and monitoring.

In order to prevent impacts from recreation facilities on water resources, the Dixie NF will complete Pine Valley Recreation Area reconstruction to move campground away from an adjacent stream. Another recreation facility that will be updated is old style toilets which will be replaced with more modern designs to meet current standards.

Objectives

The objectives for recreation management are

- Generally, decisions on future management actions or activities should be consistent with the assigned ROS classification as displayed on the final ROS map in the Revised Forest Plan.
- Decisions on future management actions, activities or projects should be consistent with the adopted or final Scenic Integrity Objectives (SIO's) formally mapped in the Revised Forest Plan using the new Scenery Management System.

Performance Monitoring Items

The Forest Service will monitor the following items to measure progress toward desired conditions:

- Miles of Trails maintained
- Number of motorized visitors as measured by annual trail counts
- Volunteer hours and dollars resulting from partnerships [put in Fishlake]
- Accomplishment of backlogged work (trails maintenance, trailhead signing, wilderness signing).
- Infra trails monitoring

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Risks to Performance

The forest's ability to accomplish its objectives and desired conditions for this management program is limited by the following conditions and trends:

- Available budget may not support increases in staffing or needed trail work
- Increased visitor use may change priorities for different types of recreation use.
- Litigation of changes to access management may slow implementation of projects.
- Changes in population and demographics may change projected use levels
- Advances in motorized technology may produce unanticipated uses.
- Pattern of visitor use may change in response to facility changes. For instance, improving the Salt Gulch Road would make trails into Box-Death Hollow Wilderness much more accessible.
- Law enforcement is inadequate to enforce recreation restrictions.

MINERALS AND GEOLOGY

Introduction

The Minerals and Geology program covers the administration of:

- Leaseable minerals such as oil, gas geothermal, and coal;
- Locatable (hard rock) minerals such as gold, silver and lead;
- Saleable, common variety minerals such as cinders, gravel and rocks; and
- A geology program, including abandoned mine cleanup and management of special geologic areas.

Numerous and diverse laws, regulations, and policies apply to each of these four mineral classifications and program areas.

Trends Affecting Program Management

The number of active locatable mining operations on the forest has been relatively small in the recent past and there are no indicators suggesting that this will change in the foreseeable future. The forest typically has no more than three to four new bonded locatable exploration or production operations every five years. A lack of mineralization, low demand, and other economic factors affecting exploration and production of precious metals limit mineral activities on the Forest.

Demand for permits for disposal of common variety minerals, mainly sand, gravel and cinders is expected to increase over the next five years, particularly for use by neighboring communities and state and county road agencies. Interest in developing existing and new sources of sand and gravel will likely grow, possibly requiring extensive NEPA for some proposals.

Oil and gas leasing has been suspended on the Forest since passage of the Federal Onshore Oil and Gas Leasing Reform Act of 1987. Most of the leases issued prior to that time have expired. Implementing regulations of the Reform Act require that an environmental analysis be completed before leasing can resume. The Forest is expected to begin a forest-wide oil and gas leasing analysis (EIS) within the next two to three years. There have been numerous expressions of interest from the oil and gas industry to lease areas on the Forest over the past several years and, once leases are again offered, it is expected that processing of leasing and exploration proposals could create a significant workload on the Forest. It is also expected that the Forest will receive notices of intent for geophysical exploration, which does not require an oil and gas lease, in the next five years.

There are currently no coal leases on the Forest, but there may be future interest for leasing areas underlain by the Alton and Kaiparowits coal fields on the Escalante and Powell Ranger Districts. It is uncertain whether this interest may come within the next five years. If so, processing of leasing, exploration and development projects would create a significant impact on the Forest mineral program.

Strategy

The Dixie is planning to conduct a forest-wide oil and gas leasing analysis (EIS) by 2007. The leasing analysis will require a significant amount of Forest resource specialists' time for coordination and review, plus the time of a project manager to oversee the project. As currently planned, the shared Manti-La Sal geologist would serve as project manager.

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Given that there will be continued and growing demand for material from existing gravel and cinder pits, the Forest will need to focus on updating operating and reclamation plans for those areas.

Objectives

The objectives for minerals and geology are to

- Process all geophysical exploration Notices of Intent. Expected number for the next five years: 3.
- Process all plans of operation for locatable minerals exploration. Expected in the next five years: 3
- Administer all bonded mineral operations to standard. Expected: 4 per year

Performance Monitoring Items

The Forest Service will monitor the following items to measure progress toward desired conditions:

- Bonded minerals operations processed per year⁹
- Administration of bonded minerals operations to standard

Risks to Performance

The forest's ability to accomplish its objectives and desired conditions for this management program is limited by the following conditions and trends:

- Forest mineral activity is dependent upon industry-initiated proposals, which are based on dynamic market forces that are cyclic and difficult to predict.
- No growth assumptions have been made for the locatable minerals programs. A significant discovery or proposal could require a one-time program change, including earmarked funding and additional minerals specialist assistance.
- For leaseable energy minerals, interest and activity is expected to grow over the next few years. The growing workload will need to be matched by increased allocations of minerals funding; if not, processing of proposals would require consideration and may have an extended processing period.
- Accomplishment of the workload associated with leaseable minerals may be hindered by a lack of leaseable minerals administrators on the Forest.

⁹ This would be the number of significant minerals proposals processed completely including NEPA and authorization of a plan of operations.

LIVESTOCK GRAZING MANAGEMENT

Introduction and Context

Livestock Grazing Management is generally considered to have two components: Rangeland Vegetation Management and Grazing Management.

Rangeland Vegetation Management which includes monitoring effectiveness, inventories, and analysis, is considered the key to maintaining and restoring healthy rangeland ecosystems that are characterized by productive soils and high water quality. These ecosystems, in turn, provide forage for livestock and wildlife. This activity includes 1) establishing and maintaining desired vegetation to achieve healthy, sustainable conditions and monitoring to ensure conditions are maintained, 2) planning and implementing non-structural rangeland improvements that contribute to ecological objectives, provide sustainable forage for livestock and wildlife, improve soil stability and water quality, and protect watersheds, and 3) managing infestations of noxious weeds and preventing further infestations through implementation of Forest Service and USDA noxious weed strategies.

Grazing Management accommodates a legitimate use of public lands by allowing permitted livestock grazing in balance with other resource needs, including wildlife habitat and recreation. This occurs through the authorization and administration of grazing permits and the application of sound management practices on grazing allotments. The livestock grazing administration program includes 1) Authorizing, administering, and monitoring livestock grazing, 2) Planning and constructing structural rangeland improvements that contribute to ecological objectives which provide sustainable forage for livestock and wildlife, improve soil stability and water quality, and protect watersheds, and 3) analysis and plans.

Trends Affecting Program Management

Emphasis in monitoring and improving rangeland vegetation has shifted in recent years as priority has been placed on accomplishment of range permit administration. This shift has resulted in incomplete, inconsistent, and out-of-date rangeland monitoring. There is a lack of spatial and tabular electronic data, which is needed to support all aspects of rangeland management.

Many areas on the Dixie NF have been chained, Dixie harrowed, chemically sprayed, and/or reseeded. These treatments have been successful and have provided beneficial forage for livestock and big game. The emphasis on accomplishment and maintenance of nonstructural improvements includes the use of prescribed fire, mechanical, and chemical treatments.

A gap exists between the desired level of rangeland management and the level that can be achieved with current funding and staffing. Inflation, static range budgets, increasing environmental documentation requirements, and increased support and overhead costs challenges our ability to provide efficient and effective administration of livestock grazing and rangeland resources on the National Forests. Over the last twenty years, society's needs and values have placed more emphasis on managing for sustainable rangeland ecosystems, healthy wildlife habitat, improved water quality, and threatened and endangered species. This emphasis on vegetation and other resources adds a level of complexity to the range management program.

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Three trends are recognized: 1) livestock grazing will continue to be permitted at, or near, current levels, and 2) for the foreseeable future, range budgets will not significantly increase sufficiently to fully implement a complete range program, and 3) increased data collection and reporting requirements will significantly reduce on the ground administration of allotments.

Strategy and Priorities

The overall strategy is to permit livestock grazing on a sustainable basis while ensuring the ecological health and diversity of rangeland ecosystems. The strategies for the range program are:

- Permit administration - Administration of livestock grazing to ensure compliance with decisions made and implementation of mitigation measures. Take immediate, appropriate action on all known permit non-compliance. Prepare annual allotment operating instructions for every allotment.
- Inventory and monitoring - Range vegetation is inventoried and monitored.
- Structural improvement – Plan, construct, and maintain structural improvements (fences, cattleguards, water developments, handling facilities, etc.).
- Non-structural improvements – Plan and coordinate with other program areas to implement, and maintain non-structural improvements (vegetation treatments) on range allotments.
- Records and reporting - Keep accurate performance records and comply with annual agency reporting requirements.
- Analysis and plans – Complete the analysis and planning that is needed to meet agency business requirements to continue vegetation management and grazing management activities. Assess the effectiveness of management and trends toward sustainable ecosystems. Complete NEPA documents. Prepare, update, and adjust Allotment Management Plans.

The priorities are

- Controlling and eradicating noxious weeds and invasive species. Reduce and/or eliminate impacts from noxious weeds and invasive plants.
 - Cooperation with focus on establishment of Cooperative Weed Management Areas and alternate funding sources.
 - Early detection, rapid response, 100% treatment of new and small infestations of noxious weeds.
- Complete long-term vegetation trend monitoring.
- Encourage permittee stewardship, including monitoring responsibilities. Develop permittee monitoring procedures, with standardized protocols, to meet the requirements found in the term grazing permit.
- Complete NEPA documents on allotments.
- Maintain Wild Horse and Burro populations within the Appropriate Management Level for North Hills HMU [priority for one GA (Enterprise)]
- Keep the integrated vegetation 5 year action plan current.

Objectives

The objectives for livestock grazing management are to

- Administer 75% of all allotments to the agency standard of 2-3 visits per year.
- Process 100% of permit applications, waivers, and Bills for Collection.
- Accomplish short-term monitoring on 50% of allotments within 10 years.

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- Accomplish long-term vegetation trend monitoring at 5-10 year intervals.
- Re-inventory 20% of structural range improvements each year.
- Maintain current non-structural improvements at least 70% of optimum forage production.
- Permit approximately 120,000 head months of livestock grazing per year through the planning period.
- Improve approximately 500 acres of vegetation per year through the planning period.
- Manage Wild Horse and Burro within 40 to 60 AML

Performance Monitoring Items

The Forest Service will monitor the following items to measure progress toward desired conditions:

- Number of acres administered to standard
- Permitted head months of grazing,
- Acres of rangeland vegetation improved,
- Units of structural range improvements (fences, water development, corrals, cattle guards, etc.),
- Number of NEPA decisions signed
- Acres of noxious weeds inventoried
- Acres of rangeland meeting or moving toward desired condition.

Risks to Performance

The forests ability to accomplish its objectives and desired conditions for this management program is limited by the following conditions and trends:

- The consequences of static range funding must be understood and managed. If funding remains static or continues to be reduced, the integrity of the overall range program will be insufficient to meet desired conditions.
- Lack of staff with adequate scientific expertise, training, and experience to manage vegetative conditions, resource issues, and technological advancements decreases productivity.
- Lack of cooperation and integration of range vegetation management with other programs (e.g. watershed, timber, wildlife, fire and fuels, recreation) can lead to unexpected management conflicts.
- Conflicts between competing uses can eliminate flexibility in program.
- Vegetation communities. operate near the edge of sustainability or become non-sustainable.
- Other program and agency priorities and initiatives that conflict with available time and funding can leave the program short on resources to complete projects planned within a particular fiscal year.
- Increasing workload associated with FOIA; NEPA, and data management, reduces the amount of time that can be spent on projects in the field.
- Litigation could prevent or delay implementation of projects.
- T&E species consultation or potential new listings could cause unexpected impacts on individual projects or program objectives.
- Disturbance processes and other vectors that allow rapid expansion of noxious weeds and invasive plants can reduce available forage.

TIMBER AND OTHER FOREST PRODUCTS

Introduction

The timber and forest products program includes:

- Inventory, develop, prepare, and update commercial timber resource information for timber analysis and monitoring at the project level,
- Reporting of accomplishments and program management,
- Prepare National Forest System timber for sale, and administer those sales.
- Providing other of forest products such as posts, poles, Christmas trees, seed gathering, post and poles, or firewood.
- Timber stand improvement, data collection and monitoring to maintain healthy, productive forests.

Trends Affecting Program Management

The Dixie is coming to the end of an extended period of silviculture projects designed to respond to insect and disease problems. Silvicultural projects will continue with the emphasis on ecosystem management in addition to supporting fire and fuels. Salvage and sanitation efforts are expected to decline in the long-term. We expect the forest products program will transition into a period of providing support to fire and fuel treatment projects, with a priority in the Wildland-Urban Interface (WUI) areas.

Management direction is to use new authorities in stewardship contracting that emphasizes on-the-ground results aimed at improved health.

With anticipated budget reductions, retaining skills specific to timber related activities such as: prescription preparation, sale preparation, cruising, appraisals, contract administration, or reforestation, will be increasingly difficult.

Traditional funding sources for timber production activities are anticipated to decline while funding related to ecosystem management and restoration goals are expected to increase. As these funding sources change there will be an increased need for more detailed planning and coordination of budgets and workforce with other resource areas. Instead of being a primary product tree cutting will become one of many tools to achieve desired conditions.

Strategy

The primary program strategy is to continue to address the trend of beetle infestation. This takes two forms, the first is salvage harvest in response to beetle attacks; the second is green harvest to reduce overall stand susceptibility. This usually takes the form of a thinning to reduce stand density. Priority stands include dense spruce-fir and ponderosa pine stands that are in areas readily available for treatment. Priority ecosystems include the spruce-fir type (especially on the Escalante RD) and the mixed conifer type.

Another strategy is to use mechanical harvest to reduce fuel loadings. This treatment is used in areas where there is commercial timber value that can be recovered and in areas prescribed fire may not be

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appropriate. In cases where commercial value can be recovered, the funds are used to offset the cost of reducing fuels.

A third strategy is to restore the abundance of aspen ecosystems where losses have occurred because of changed disturbance regimes and increased ungulate pressure. Priority stands include aspen that is being overtopped by spruce or fir and yet can still respond to treatment.

Priority areas for the next few years for all forms of stand treatments include: Mount Dutton and the East Fork of the Sevier.

Objectives

The objectives for facilities management are to

- Implement 3 stewardship contracts per year.
- Treat 500 acres of aspen ecosystems each year.
- Treat 5,000 acres of fuels mechanically or with prescribed burning each year.
- Treat 1,000 acres of spruce-fir ecosystems each year.
- Inventory 6000 acres of forested areas for stand data necessary to prescribe treatments.

Performance Monitoring Items

The Forest Service will monitor the following items to measure progress toward desired conditions:

- Acres of aspen ecosystems treated
- Acres of spruce or fir ecosystems treated
- Acres of ponderosa pine ecosystems treated.
- Acres of mixed conifer ecosystems treated.
- Acres entered into stand database
- Number of stewardship contracts issued.

Risks to Performance

The forests ability to accomplish its objectives and desired conditions for this management program is limited by the following conditions and trends:

- Reduced budgets could hamper ability to complete projects.
- Timely completion of NEPA analysis may be difficult.
- There is a lack of local industry to bid on and accomplish treatments.
- Increases of bark beetle or defoliating insect populations to epidemic levels (especially in the pine type) may change priorities.
- Litigation of treatment proposals may delay implementation.

WATERSHED, SOIL AND RIPARIAN MANAGEMENT

Introduction

The watershed and riparian program supports activities associated with the maintenance, protection, restoration, inventory, monitoring and evaluation of soil and water related resources. Protection and prevention of management related impacts are the priority in properly functioning watersheds. In watersheds where degraded conditions occur, restoration of soil and water resources is the focus. The inventory, monitoring and evaluation of watershed conditions including soil resources, water quality and quantity, riparian areas, wetlands and stream channels are also important components of this program. Additionally, the program supports the administration and analysis of water rights uses and issues, to support both consumptive and non-consumptive beneficial uses.

Trends Affecting Program Management

Given the numerous and increasing demands for consumptive water use both on and off the forest, it is difficult to retain sufficient water in streams, lakes, springs, wetlands and aquifers within the National Forest to fully support non-consumptive uses, such as existing biological resources and effective discharges that maintain natural channel patterns and vegetative composition.

The riparian and wetland areas of the forest provide important ecological, social and economic values. The multiple uses that occur in these areas often compete for the same resources, creating issues that are difficult to resolve. Increased recreation use concentrated in riparian corridors, along with existing uses such as wildlife and livestock are issues that need to be addressed.

Tamarisk and other aquatic invasive species have spread to parts of the forest. These non-native species can alter native riparian vegetation composition, increase the salinity of the surrounding soils and potentially change the flow regime of springs and streams by lowering surface water tables. The altered flow regimes and water tables have the potential to dry up springs and convert perennial streams to intermittent, or intermittent streams to ephemeral (particularly in small stream systems).

Strategy

Since the watershed, soil and riparian program is very diverse and includes various disciplines, the strategies have been separated into the following topic areas: general, riparian and wetland areas, stream channels and floodplains, groundwater and springs, water quality and soils. The following strategies are a major component of this program in maintaining, protecting and restoring soil and water resources.

General

The general watershed strategies are to

- Protect watersheds that are in properly functioning condition.
- Expand from the protection of watershed resources to restoration, where appropriate. Highest restoration priorities are placed on watersheds that are functioning at-risk or contain native cutthroat trout populations. The next level of restoration priorities are placed on watersheds not in properly functioning condition. Watershed restoration should focus on system processes, rather than repairing individual sites. Priorities for restoration will be based on analysis of beneficial uses that are at risk.

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- Restore degraded watershed conditions through a range of actions, including but not limited to stabilizing soil, maintaining long-term soil productivity, controlling surface runoff and erosion, reducing induced flood potential, and stabilizing the drainage network.
- Minimize the effects of management activities on overall stream channel stability and hydrologic function.
- Monitor effectiveness and maintenance needs of watershed improvements.
- Implement road and trail obliteration associated with the OHV route designation project.
- Implement and monitor BMP (best management practices) or SWCP (soil and water conservation practices) at the project level.
- Support the objectives of the four focus areas found in the Upper Sevier Watershed Management Plan. (**Suggestion** to include figure 6.1, page 6.2 of the Sevier Watershed Mgt Plan here).

Riparian and Wetland Areas

The riparian and wetland area strategies are to

- Redesign and/or relocate selected road segments that are causing riparian impacts or are contributing and depositing sediment off-site.
- Reduce or mitigate the net impacts to riparian and wetland values from other forest uses including but not limited to wildlife and livestock grazing, dispersed recreation, motorized recreation and dispersed camping. This could include an educational component.
- Reduce the presence and extent of exotic, invasive and noxious vegetative species where appropriate.
- Maintain or enhance the amount of wetlands on National Forest System lands.
- Increase the diversity and extent of riparian vegetation, including more late seral age classes, where appropriate.

Stream Channels and Floodplains

The stream channel and floodplain strategies are to

- Limit management related disturbances so they do not negatively alter stream channel conditions, such as channel substrate (including fine sediments), channel dimensions within the bank full elevation, overall stability of the stream channel, and the native riparian plant community.
- Maintain or restore where appropriate, stream channel connectivity to floodplains.
- Remeasure all stream cross-sections to survey cross-section profile, pebble counts, slope and sinuosity over a 10-year period and compare these results to the past and existing channel geometry.
- Maintain or enhance stream channel integrity.

Aquatic Biota

See the fish/aquatic strategy section of the prospectus.

Groundwater and Springs

The groundwater and spring strategies are to

- Prevent or minimize adverse impacts to surface water resources (e.g. springs, riparian areas and wetlands) and groundwater dependent ecosystems from ground-water pumping.

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- Maintain the natural patterns of recharge and discharge and minimize disruption to groundwater levels that are critical for riparian and wetland integrity.
- Manage springs and their riparian areas as a unit.
- Protect ecological processes and biodiversity of ground-water-dependent ecosystems.

Water Quality

The water quality strategies are to

- Public waters are improved or restored where water quality does not support State designated beneficial uses (as identified on State of Utah 303d lists). Otherwise, water quality is maintained or improved.
- Work with the State, Tribes and other agencies and organizations to prioritize restoration needs and to bring 303d listed water bodies into compliance with State water quality standards in a reasonable time frame.
- Visit each of the municipal watersheds or municipal points of diversion within the next 10 years to determine if past, present or future actions are impairing the water quality or quantity for designated uses.
- Reduce or eliminate the input of pollutants from national forest system lands, that could affect the attainment of Colorado River salinity control requirements.

Soils

The soils strategies are to

- Restore or improve soil productivity and function where detrimentally disturbed and contributing to an overall decline in watershed condition.
- Restore and prevent soil compaction, particularly in riparian areas.
- Prevent degradation of soil quality and loss of soil productivity.
- Protect microbiotic (microphytic and cryptogamic) soil crusts from management disturbances.
- Ensure that enough litter remains within the Pine/Fir areas to form litter debris dams that hold the soil in place during runoff events.
- Monitor upland areas adjacent to riparian management areas.
- Monitor compaction and detrimental soil disturbances related to management activities.
- Conduct project level monitoring of mitigation requirements related to soil resources. At least one project per year per ranger district.
- Perform soil survey activities.
- Maintain soil and water resource improvement needs inventory in NRIS.

Objectives

Since the watershed, soil and riparian program is very diverse and includes various disciplines, the objectives have been separated into the following topic areas: general, riparian and wetland areas, stream channels and floodplains, water quality and soils. These objectives represent more specific and measurable actions intended to help achieve desired conditions.

General

The general watershed objectives are to

- Restore 100 - 200 acres of watershed each year
- Improve drainage and surfacing or relocate 5-15 miles of road in the next 10 years.

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- Decommission, recontour and revegetate 50-90 miles of road in the next 5 years.

Riparian and Wetland Areas

The riparian and wetland objectives are to

- Enhance and restore 5-20 acres of wet meadows across the forest in the next 10 years.
- Improve or restore 35-70 acres of riparian habitat and across the forest over the next 10 years.
- No loss, or a net gain of wetlands across the forest.
- Net decline in invasive tamarisk populations across the forest.
- Develop an inventory of tamarisk extent and drainage presence-absence on the forest within 10 years, to track changes in populations over time.
- No net loss, or a net gain in cottonwood gallery extent and age class diversity.
- No net increase or a net reduction of road and trail mileage within riparian and wetland influence zones. The completion of the Forest plan marks the baseline measurement for road and trail mileage.

Stream Channels and Floodplains

The stream channel and floodplain objectives are to

- Decommission or relocate 3-5 miles of road that are negatively impacting the stream system and riparian habitat over the next 5 years.
- Inventory all cottonwood galleries along stream channels on the forest within 5-10 years.

Water Quality

The water quality objectives are to

- Measure 1-4 streams annually for compliance with State water quality standards, in cooperation with the Utah Department of Water Quality
- Maintain or increase the number of surface waters on the forest that meet the State water quality standards for assigned beneficial uses over the next 10 years.

Soils

The soils objectives are to

- Measure long-term soil productivity in 2-4 projects a year.

Performance Monitoring Items

Since the watershed, soil and riparian program is very diverse and includes various disciplines, the performance and monitoring items have been separated into the following topic areas: general, riparian and wetland areas, stream channels and floodplains, water quality and soils. The following items will be used to measure progress toward desired conditions:

General

- Watershed acres improved through restoration projects, including but not limited to, fencing, road drainage improvement, road reconstruction, road and trail decommission, willow and cottonwood planting, and upland habitat improvement.
- Acres of watershed in proper functioning condition
- Acres of watershed in functioning at risk condition
- Acres of watershed not in proper functioning condition

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- Number of projects monitored for BMP (best management practices) or SWCP (soil and water conservation practices) effectiveness

Riparian and Wetland Areas

- Riparian or wetland acres improved through restoration projects
- Acres of wetland in stable or improving condition
- Acres of wetland lost or in declining condition

Stream Channels and Floodplains

- Acres of cottonwood galleries in stable or improving condition
- Miles of motorized routes within 300 feet of stream channels, lakes, reservoirs and wetlands

Water Quality

- Number of water bodies in compliance with State water quality standards

Soils

- Number of projects monitored for BMP (best management practices) or SWCP (soil and water conservation practices) effectiveness.

Risks to Performance

The forests ability to accomplish its objectives and desired conditions for this management program is limited by the following conditions and trends:

- Budget levels are uncertain.
- Time and costs associated with NEPA analysis can be unpredictable.
- Endangered species listing is possible for cutthroat trout or amphibians.
- Watershed objectives and priorities have potential conflicts with terrestrial restoration program objectives (primarily fire use and fuels treatments)
- The spread of whirling disease or aquatic “nuisance” species.
- New priorities such as oil and gas development are forthcoming.
- Mitigation of impacts to riparian areas from livestock and wildlife grazing and browsing is dependent on cooperation between Forest Service, the permittee, and the State wildlife agency.
- Climactic factors (e.g. drought and flood) can impact implementation of program priorities and objectives.
- Sewage treatment on private lands adjacent to Forest (e.g. septic systems of Duck Creek area) can threaten water resources.
- Private property within and adjacent to NFS lands have the potential to affect water quality and watershed condition.

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FISH

Introduction

The Dixie National Forest Fisheries program surveys, inventories, provides project support, and designs and implements habitat restoration actions. This work is designed and implemented to protect, restore, and enhance habitat and populations of inland fish and associated aquatic biota. The Dixie National Forest has about 370 miles of perennial fish bearing streams. The Forest contains headwater watersheds within the Great Basin and Colorado River Basin.

Trends Affecting Program Management

Fragmented habitat affects the habitat capability and effectiveness of many fish bearing streams on the Forest. Both natural and man-made migration barriers are common across the Forest. This condition reduces the potential for genetic exchange, colonization of new habitat, access to areas that provide refuge for fish species in case of disturbances such as fire, and natural refounding of populations following disturbance. However, this condition can also provide beneficial protection from invasion of undesirable fish species and aquatic nuisance species that may be present in downstream waters.

Most of the watersheds on the forest have been stocked with non-native fish species, particularly salmon and trout species. This has resulted in decreases in native species occupied habitat and populations. Additionally, some watersheds contain whirling disease and most are at risk for this condition and other aquatic nuisance species (e.g. New Zealand mud snail, Eurasian milfoil).

Vegetation conditions within some watersheds have been appreciably altered from its natural state. This is the past land management actions, including: fire suppression, livestock grazing, development and urbanization, and timber harvest. The risk of wildfire and the associated effects within many watersheds is substantial. This condition presents an appreciable threat to isolated fish population viability.

Decreasing budgets continue to affect the Forest's ability to fund the fisheries program. Current funding supports a permanent staff of one, with annual variability in project and seasonal work force funding.

Strategy

The program strategy for the next two years is to focus on completing the initial phase of post-fire habitat monitoring (Sanford and Sequoia Fires), support the UDWR in completion of rotenone treatment projects on the Boulder Mountain, and to improve fisheries habitat conditions annually. Out year (3-5 years) strategy is to refound Bonneville cutthroat trout populations that were extirpated by the Sanford and Sequoia Fires, improve overall habitat conditions, and to identify options for future native cutthroat trout enhancement and population expansion.

Long term goals of the program include: increasing the quantity and quality of watersheds that support native cutthroat trout (Bonneville and Colorado River cutthroat trout) populations, increasing the quality of sensitive amphibian habitat, maintaining and enhancing quality sport-fishing habitat, and working to prevent the spread of whirling disease and other aquatic nuisance species.

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Objectives

The objectives for fisheries management are to:

- Complete annual population, habitat, and macroinvertebrate monitoring in support of Forest project planning and implementation.
- Cooperatively complete the implementation of the sport-fishing enhancement and native cutthroat trout expansion project on the Boulder Mountain, in conjunction with the Utah Division of Wildlife Resources.
- Work with the Utah Division of Wildlife Resources to refound Bonneville cutthroat trout populations that were extirpated by recent wildfire and drought effects.

Performance Monitoring Items

The Forest Service will monitor the following items to measure progress toward desired conditions:

- Acres of lake habitat restoration and/or enhancement work completed.
- Miles of stream habitat restoration and/or enhancement work completed.
- Amount of habitat that supports self sustaining populations of native cutthroat trout (Bonneville and Colorado River CT).
- Amount of habitat impacted by whirling disease and aquatic nuisance species.

Risks to Performance

The Forest's ability to accomplish its objectives and desired conditions for this management program is limited by the following conditions and trends:

- Available budget, current flat trend with increasing costs.
- Amount of time required to support other program's project work (NFMA, NEPA, monitoring)
- Amount of time required to respond to potential litigation and FOIA requests

STRATEGY

WILDLIFE

Introduction

More than 350 species of wildlife inhabit the Dixie National Forest for all or a portion of their life cycle. Game and non-game wildlife habitat and uses are both important parts of the wildlife program on the Forest.

The wildlife program includes studies, surveys, inventories, provides project support, population trend monitoring, baseline monitoring, distribution surveys, designs vegetation management projects to maintain or enhance wildlife habitat, including threatened, endangered and sensitive species.

(source: [FSH 6509.11g - Service-Wide Appropriation Use](#))

Trends Affecting Program Management

Competing demands for resources and habitats limit our ability to maintain and improve habitat. For example, maintaining snags in the ponderosa pine plant communities may conflict with efforts to reduce insect outbreaks and spread or the effects of unregulated firewood cutting. Another example is recovering riparian shrub and tree habitat with current grazing levels. Maintaining wildlife habitat within wildland urban interface areas can be challenging. These issues must be balanced at the site level with an eye toward the forest-wide desired conditions. Increase uses of the National Forest will also present potential conflicts in uses, particularly with motorized uses.

Lack of funding in other resources and priorities for available resources can impact our ability to maintain or restore riparian and upland habitats. Over the planning period, large portions of localized Englemann spruce and subalpine fir stands may be regenerated to early seral stages and to more dominant aspen plant communities. This could produce a net reduction of late seral habitat that could persist for many years.

Strategy

The emphasis on monitoring threatened, endangered, and sensitive species will continue. Incorporating habitat needs with fuels reduction projects will be a priority for the next three to five years. Identifying common vegetation management needs cooperatively with fire, timber, and range will be a priority as well.

Gathering more data on two sensitive species (pygmy rabbit and sage grouse) recently added to the R-4 list is needed to learn proper techniques and designs to maintain habitat in sagebrush ecosystems.

Vegetation management of habitat is an important aspect of the wildlife program. Planning the rate and juxtaposition of aspen treatments will be important over the landscape in order to maintain connectivity and patch sizes. Maintenance and restoration of riparian communities is important for many species of wildlife for all or part of their life cycle. These communities have been lost from a variety of impacts and restoring those that remain is critical. Shrub management for species composition and seral stage diversity at the landscape level will be needed.

Continuing to seek partnerships and outside funding opportunities to conduct survey and inventories as well as maintain and enhance wildlife habitats for a variety of species will be an important part of the strategy.

STRATEGY

Objectives

The objectives for wildlife management are to

- Prevent the listing (endangered, threatened, sensitive or candidate) of any new species as a result of the management activity on the forest.
- Complete *** population distribution and trend surveys per year.
- Complete about *** acres of habitat restoration and enhancement for sage grouse, pygmy rabbit, and other endangered, threatened, sensitive or candidate species over the next five years.
- Implement *** conservation strategies and agreements, and recovery plans

Performance Monitoring Items

The Forest Service will monitor the following items to measure progress toward desired conditions:

- Number of population distribution and trend surveys completed per year
- Acres of sagegrouse habitat restored and enhanced.
- Number of conservation strategies and agreements implemented.

Risks to Performance

The forests ability to accomplish its objectives and desired conditions for this management program is limited by the following conditions and trends:

- Available budget may not be sufficient to complete objectives. Rules regarding partnerships sometimes decrease our ability to obtain outside funding.
- Availability of seasonal employees with wildlife expertise could reduce capacity to conduct monitoring and inventory.
- Amount of resources requested for project support may divert resources from objectives.
- Amount of resources required responding to unforeseen court challenges.
- Amount of time and dollars to fulfill appropriate NEPA requirements.
- Appropriate scales of restoration or rehabilitation to ensure dynamic habitat diversity and genetic variability may not be achievable due to social regulations (such as smoke restrictions) or funding limitations.

STRATEGY

FIRE AND FUELS

Introduction

The fire and fuels program consists of two major divisions 1) Fuels and prescribed fire management and 2) Wildland fire management.

The fuels and prescribed fire management program treats hazardous fuels across the forest in multiple vegetation and fuel types. This program uses a combination of prescribed fire and various mechanical treatments to reduce fuels across the forest. Fuels are considered hazardous when they present a threat to values or ecosystems (consider definition from 10-yr strategy report here).

The wildland fire management program is for wildland fire preparedness activities in advance of wildland fire occurrence and the suppression of unwanted wildfires. The Dixie NF is part of an interagency fire center that covers around 14 million acres. The information presented here relates only to the Dixie National Forest portions. The program is also used for emergency rehabilitation of National Forest System lands damaged by wildland fire.

Trends Affecting Program Management

Across the Nation, the trend over the last few years has been an increase in wildfire acres. Decades of fire exclusion have prevented fire from fulfilling its role in maintaining many central Utah vegetative communities. Some of the consequences of this human interference include decadent aspen forests that are no longer producing new growth (because sprouting demands on fire or other disturbance), and sagebrush/grasslands that are lost to pinyon and juniper invasion. Excluding fire has caused fuels (such as dead trees on the ground, and dense undergrowth) to build to the point that unwanted wildland fires can become infernos, threatening human safety, property, and ecosystem values.

Traditional funding sources will be changing with an emphasis towards ecosystem management requiring more detailed planning and coordination of budgets and workforce.

Most wildland-urban interface areas will have initial treatments completed resulting in a shift in fuels treatments to other priorities.

Strategy

The Dixie NF expects to increase the acres of hazardous fuels treated over the next five years. This increase will primarily come from areas outside of the wildland-urban-interface (WUI). The objectives will be dominated by sagebrush and grass community restoration and aspen restoration. The primary method of treatment will be prescribed fire. Increase in acres treated will be managed both in and outside of WUI areas.

Priorities for treatment are guided by:

- Healthy Forest Initiative and Healthy Forest Restoration Act
- Completion of broad scale assessments (like watershed or geographic area analysis)
- Fire Regime Condition Class Assessments
- Proper functioning condition analysis

STRATEGY

- The identified priority WUI areas on the forest from the Color Country Fuels Committee Near-term priorities include

The projected increase in wildland fire activity is cause to rededicate that our number one priority is safety. Safety is directly related to training, protective equipment, readiness, and leadership. Measures used to ensure that safety is the number one priority include risk assessments and complexity analyses as part of all wildland fire management decision making.

The Dixie NF is part of an interagency fire center that covers around 14 million acres of Forest Service, Bureau of Land Management, National Park Service, state, county and private lands. This interagency strategy provides economies of scale with regards to overhead, equipment, and personnel. The strategy allows for increased cooperation between agencies making more crews and equipment available across the area for all agency fires. In addition, the National Fire Plan has provided additional funds to equip and train volunteer fire departments. This has improved readiness and responsiveness.

An accurate vegetation database with sufficient detail for project planning is critical to program management. Collection and maintenance of vegetation data is needed to support analysis of hazardous fuel treatment.

The wildland-urban interface areas are treated to reduce fuel loads. These treatments should be scheduled for maintenance at appropriate intervals to ensure that their effectiveness is maintained over time.

Objectives

The objectives for fire and fuels management in the next 5 years are to

- Treat hazardous fuels with prescribed fire and mechanical means on over 10,000 acres per year
- Ramp up, over the next three to five years, to 5,000 acres of fuels treatment per year per district (20,000 acres across the Forest)
- Insert a reasonable and measurable safety objective here
- To contain 98% of unwanted wildfires during initial attack if wildland fire use is not appropriate.
- Mange wildland fire use ignitions where fire effects are expected to benefit resources

Performance Monitoring Items

The Forest Service will monitor the following items to measure progress toward desired conditions:

- Acres of hazardous fuels treated per year by vegetation type
- Acres of wildland fire use per year by vegetation type
- Percent of unwanted wildland fires contained within the first burning period
- Safety monitoring

Risks to Performance

- Timely completion of National Environmental Policy Act (NEPA) documentation can be threatened by lack of availability of specialists to complete data collection and analysis.
- Regional and national changes in priorities may affect program performance, such as, high levels of wildfire activity in other locations.

STRATEGY

- Availability of burning windows (suitable conditions) for both prescribed fire and wildland fire use can change rapidly.
- Weather can be unpredictable.
- Readiness and responsiveness can be challenged by a active national-level fire season.
- The timing of any particular wildland fire ignition can make meeting the containment objective difficult.
- There is an inherent level of risk associated with the ignition of prescribed fires that could affect successful outcomes.
- Unforeseen events such as imposed limitations on ignition of fires or allowing fires to burn may limit the forest's ability to use fire as a tool.

 STRATEGY

HERITAGE RESOURCES

Introduction

The following list briefly identifies some of the activities undertaken by the program:

- Managing and keeping of files and maps on the entire Archaeological and Historic Site Resources of the Forest.
- Keeping and managing the Forest's Historic documents and photos and the clearinghouse for paleontology reports and documents conducted under SUP's.
- Preserving and stabilizing frequently visited sites.
- Providing volunteer opportunities for the public to get involved with the Archaeology of the Forests such as Passport in Time Projects, Archaeology Camps, Natural Resource Camps, Sierra Club service Projects.
- Provide interpretive talks to other agencies, private organizations, and schools.
- Consultation with American Indian tribes on cultural resource issues, NAGPRA, ARPA, and Traditional Cultural Properties.
- Consultation with State Historic Preservation Officers, Advisory Council of Historic Preservation and other State and Federal Agencies
- Document, evaluate and nominate sites to the National Register of Historic Places.
- Conduct damage assessment studies for ARPA violations and testify in Federal Court.
- INFRA steward for Heritage data.

Strategies and Priorities

The Heritage Program is trying to provide opportunities as guided in the National Strategy for The Heritage Program "It's About Time" The strategy outlines the program of work the Forests should be providing the agency and the Public.

The public is continuing to request opportunities to work with the Heritage Program and these will need to be provided at an increased rate. The opportunities could be increased but due to budget and time restraints they will remain at the same level of output for the next 5 years. Priorities for the Forest will be to stabilize those sites that are being visited and impacted by the public and provided some opportunities for the public to continue to be involved in assisting.

In its mission to protect cultural and historic resources from adverse impacts and deterioration, the heritage program will complete the following planning and monitoring activities:

- In order for the desired condition for Heritage sites to be met the public, livestock, wildlife, and resource projects and such would be removed from the Forest. As that will never happen avoidance of sites involved in resource project activities are outlined in the project. Recommendations in the project report will indicate if monitoring of project activities before, during or after the implementation is needed.
- Sites heavily used or visited by the public are examined each year to identify use and prevent damage. Preservation and stabilization methods are applied to necessary sites.
- Administrative building identified for future restoration and maintenance are visited on a yearly basis and the outlined repair needs are reexamined.
- Completion of compliance reports tied to NEPA projects are done in a timely manner. If we can't get them done an evaluation and prioritization should be conducted by staff and Rangers.

STRATEGY

The Heritage Program's priorities are two fold. **One priority** is conducting cultural resource surveys and evaluations as part of all ground disturbing projects proposed on the Forest as mandated by law. The **second priority** is to manage those Archaeological and Historic sites on the Forest. This may include restoration and or stabilization of resources.

Objectives

The objectives for facilities management are to

- Prepare a Forest Interpretive Plan for Heritage Program
- Providing public outreach programs
- Provide Rustic Cabin Rental Cabins
- Stabilize high-risk sites in high use areas.
- Continued public outreach to prevent vandalism
- Prepare an updated Forest History book
- Continue providing services to District projects
- Assist with ARPA cases
- Provide assistance to the Forest Staff in Tribal Consultation matters

Performance Monitoring

The Forest Service will monitor the following items to measure progress toward desired conditions:

- Number of sites managed to Standard
- Number of Programs offered to the Public
- Meeting our goals as outlined in the Agreement with the Paiute Tribe of Utah (see Reference)

Risks to Performance

The forests ability to accomplish its objectives and desired conditions for this management program is limited by the following conditions and trends:

- Budget trends will continue to decrease funds available for Heritage Programs
- Increased visitors to the backcountry of the Forest will increase vandalism opportunities.
- Increased activities in areas of significant cultural resources increase potential for damage to sites
- Lack of Law Enforcement personnel on the Forest deal with ARPA violations
- Increased costs to repair and restore administrative buildings (the older they get the more it costs).
- Pressure to meet target deadlines from other resource projects with a limited Heritage staff.
- Increase for compliance requests from Forest Projects and not enough time given to complete before project implementation.
- Increased fuel loading in significant Cultural Resource areas.
- Erosion caused by activities impacts sites.

A lot of these risks are present at this time and they will only increase as the visitor use increases on the Forest.

Suitable and Unsuitable Land Uses

National Forest System lands within this plan area are generally suitable for a variety of multiple uses unless identified as unsuitable for one or more uses. Projects implemented under this plan direction will have appropriate level of site-specific analysis including site-level verification of suitability.

TIMBER

The timber suitability map (figure xx) displays areas that are considered suitable for timber management on the Forest. The following factors are considered in determining timber suitability: (Section § 219.12, p. 1059 Proposed Planning Rules of January 5, 2005)

1. Statute, Executive order, or regulation does not prohibit timber production on the land; or
2. The Secretary of Agriculture or the Chief of the Forest Service has not withdrawn the land from timber production; or
3. The land is forest land (land at least 10 percent occupied by forest trees of any size or formerly having had such tree cover and not currently developed for nonforest uses); or
4. Timber production is compatible with the achievement of desired conditions and objectives established by the plan for those lands.

The Forest has about 500,000 acres that are considered suited for timber management. That represents about 27% of the Dixie National Forest. The biological aspects of timber suitability should be reviewed at a smaller, site-specific scale. This will provide a more accurate determination that should be more useful for project planning.

LIVESTOCK GRAZING

The range suitability map (figure xx) displays areas that are considered suitable for livestock management on the Forest. Areas have been removed from suitability because of conflicts with administrative sites, resource damage, and accessibility. The forest has about 770,000 acres that are considered suited for livestock management. That represents about 41% of the Dixie National Forest.

MOTORIZED RECREATION

Motorized recreation (excluding winter snow travel) is limited to designated routes and areas. Motorized use outside of those routes and areas is not a suitable use. The designation of routes and areas is a site specific decision. Refer to the Dixie National Forest Travel Map for additional details.

UTILITY CORRIDORS

The Utility Corridor Map (figure xx) displays the designated utility corridors for the Dixie National Forest.

The following areas are generally not suited for placement of utility corridors:

1. Developed recreation sites and developed winter sports sites.
2. Areas emphasizing semi-primitive recreation.
3. Riparian areas.
4. Municipal water supply and municipal watersheds.

STRATEGY

TRANSPORTATION MANAGEMENT

The following areas are generally not suited for new permanent or temporary road construction:

Big Game Winter Range

Exceptions must meet the following criteria:

1. No feasible location exists for the road outside the area. The road is essential to achieve goals and objectives of contiguous management areas, or to provide access to land administered by other government agencies or contiguous private land.
2. The Utah Division of Wildlife Resources is fully involved in the road location, planning and alternative evaluation.
3. Planned management of road use during winter will prevent or minimize disturbance of wintering big game animals, or will allow hunting and other management activities needed to meet wildlife management objectives.
4. Roads are constructed to the minimum standards necessary to provide safety for the road use purpose.
5. Roads cross the winter range in the minimum distance feasible to facilitate the necessary use.

Riparian Areas

Exceptions must meet the following criteria:

1. Alternative routes have been reviewed and rejected as being more environmentally damaging.
2. Road location avoids parallel stream construction.
3. Road location crosses streams at right angles.
4. Crossings are at points of low bank slope and on firm surfaces.

Threatened, Endangered, Sensitive, or Candidate Species Locations

Exceptions must meet the following criteria:

- 1) In the case of listed species the Federal Fish and Wildlife Service must approve the action.
- 2) In the case of non-listed species the Biological Evaluation must stipulate no effect or list required mitigation measures.

Archaeological, Cultural Resources or Historical Sites

Exceptions must meet the following criteria:

- 1) All cultural resource surveys and reports must be completed and the Utah State Historical Preservation Office must concur.

COMMUNICATION AND ELECTRONIC SITES

Existing communication and electronic sites are depicted on the Electronic sites Map (see figure xx).

Special Areas

Special areas are areas within the NFS designated for their unique or special characteristics. These areas include wilderness, wild and scenic river corridors, research natural areas, and other areas. Some of these areas are statutorily designated. Other areas may be designated through plan development, amendment, revision, or through a separate administrative process with an appropriate NEPA analysis (36 CFR 219). Appropriate plan components are provided for existing designations and recommended areas. This may include desired conditions, management objectives, and guidelines. The following section outlines the desired conditions, name of areas, size of areas, and description of the areas.

STATUTORILY DESIGNATED AREAS

Designated Wilderness

Wilderness Area	Acerage
Ashdown Gorge	7,043
Box-Death Hollow	25,751
Pine Valley Mountains	50,232

Desired Condition of Designated Wilderness Areas

Designated wilderness is managed and protected, for the plants and animals that live there and their habitat, the preservation of large, intact ecosystems, clean air and water, and primitive recreation opportunities. Natural ecological processes are dominant. Ecosystems are influenced by natural process with little or no human disturbance. Native fish and wildlife species are featured and the habitat needs of species-at-risk receive protective measures where needed.

Designated wilderness areas are managed and their values protected according to the 1964 Wilderness Act. Wilderness is managed as a scarce resource, where wilderness-dependent activities are favored when managing wilderness use. Wilderness management work emphasizes practices that have the least discernible impact on the land. These are verified through the minimum tool criteria at the Regional Office. People visiting wilderness within the National Forest find opportunities for exploration, solitude, risk, and challenge. Human use of the wilderness is provided while preserving wilderness character. The adverse impacts of human use are controlled and reduced through education and minimum regulation.

Solitude and a low level of encounters with other users or evidence of past use is an essential part of the social setting. Human travel, though not restricted to, is principally on system trails. Popular campsites show evidence of repeated but acceptable levels of use. Minimum impact camping techniques will be encouraged.

Past resource management activities have been managed in such a way that current human use has left only limited site-specific evidence of their passing. Areas with evidence of unacceptable levels of past use will be rehabilitated and the affected areas restored. Range allotments with authorized permanent structures may be present within the area. Scientific and other authorized practices utilizing non-motorized equipment, but requiring up to season long occupancy are compatible.

STRATEGY

Management of designated wilderness is guided by individual wilderness plans prepared subsequent to Congressional designation.

Recommended Wilderness

Areas recommended to Congress for wilderness consideration are managed to maintain existing wilderness character. Activities in recommended wilderness do not compromise the wilderness character or reduce the area's potential for wilderness designation. Generally, all current activities will continue until Congressional action on the recommendation.

Name of Area	Size in Acres	Area Type
Ashdown NW	1,600	Addition to Ashdown Wilderness
Cottonwood	7,000	Wilderness
Pine Valley North	17,500	Addition to Pine Valley Wilderness
Sand Creek	700	Addition to Box Death Hollow Wilderness

Eligible Wild and Scenic Rivers

River segments and their corridors that are eligible as Wild and Scenic Rivers are managed to retain their free-flowing character and outstandingly remarkable values.

Eligible Segment	Length of Segment (miles)
North Fork Virgin River	1.5
East Fork Boulder Creek	<i>From 1998 Interagency analysis</i>
Slickrock Canyon	<i>From 1998 Interagency analysis</i>
Cottonwood Canyon	<i>From 1998 Interagency analysis</i>
The Gulch	<i>From 1998 Interagency analysis</i>
Steep Creek	<i>From 1998 Interagency analysis</i>
Pine Creek	<i>From 1998 Interagency analysis</i>
Mamie Creek	<i>From 1998 Interagency analysis</i>
Death Hollow Creek	<i>From 1998 Interagency analysis</i>

Length of segments from analysis done by other agencies is available by contacting the appropriate agency

ADMINISTRATIVELY DESIGNATED AREAS

Backcountry Areas

Name of Area	Acres	Area Type
Deep Creek	42,000	SPNM Back Country
Fishhook	11,400	SPNM Back Country
Little Creek	14,300	SPNM Back Country
Longneck	33,100	SPNM Back Country
Oak Creek	18,500	SPNM Back Country
Henderson W	11,300	SPNM Back Country

Backcountry areas are identified as special areas to highlight the non-motorized recreation opportunities. Although these are not the only areas of the forest that provide non-motorized opportunities, these are areas that offer unique opportunities, characteristics, destination attractions,

STRATEGY

or have otherwise developed a “sense of place. The backcountry areas will also be used to help prioritize future investment for enhancement of non-motorized recreation.

Desired Conditions

Backcountry areas are managed to meet the physical, managerial, and social settings consistent with the Recreation Opportunity Spectrum descriptions for semi-primitive non-motorized (SPNM) recreation. They provide a wide variety of dispersed recreation opportunities and settings. Natural processes are the primary agents for vegetative change, with vegetation management used only to protect the resource or complement the recreational value. Remote habitat for native or naturalized species of game and non-game wildlife is provided consistent with the natural vegetation. Existing openings and grasslands are managed to enhance SPNM recreational opportunities, including wildlife viewing. Generally, the non-motorized setting does not apply to winter recreation uses such as snowmobiles.

Non-motorized recreation opportunities are featured. Trails and closed roads provide abundant opportunities for semi-primitive non-motorized recreation, including hiking, mountain biking, horseback riding, hunting, fishing, and wildlife viewing. High scenic integrity is maintained along visually sensitive viewpoints and travel ways. Moderate Scenic Integrity Objectives are allowed to maintain recreation values, provide for public safety, or to restore ecological communities or natural habitat structure.

The areas are characterized by a predominantly natural-appearing environment where there is a moderate to high probability of solitude. Recreation opportunities generally require a high degree of self-reliance, and pose a moderate to high degree of risk. Although there may be some evidence of other land uses, there is a high probability of experiencing isolation from the sounds and sights of man. Structures are rare, but may include rustic shelters, bridges and signs, and primitive sanitary facilities.

Deep Creek

The Deep Creek Backcountry area is a large (42,000 acres) non-motorized area on the Powell RD. The area contains the watersheds for Deep Creek, Cottonwood Creek, and Deer Creek. Cottonwood Peak and Mount Dutton are near the western edge of this area. The area contains several popular trails including the Widow Rock trail, Cottonwood Creek trail, and the Mountain Springs trail. These trails are most often used by horse riders.

Fishhook

The Fishhook Backcountry area forms the southeastern boundaries of Bryce Canyon National Park. The area is shaped a little like a fish hook, hence its name. The area features portions of the Grande View trail and helps to support some of the Parks’ management goals.

Little Creek

The Little Creek Backcountry area is on the northern edge of the Cedar City RD. The area features Sandy Peak, Blue Meadows, and Little Creek Peak. Access to the area is provided by a number of low-standard 4WD roads. The area is popular for its semi-primitive hunting opportunities.

Longneck

STRATEGY

The Longneck Backcountry area is non-motorized area on the eastern edge of the forest, east of Highway 12 and adjacent to the Grand Staircase Escalante National Monument. The area is rugged and steep with deep dissected canyons. The area contains portions of the Slickrock Trail.

Oak Creek

The Oak Creek Backcountry area is non-motorized area on the eastern edge of the forest, east of Highway 12 and adjacent to Capital Reef National Park. The area is rugged and steep with deep dissected canyons. The area contains portions of the Slickrock Trail and the Oak Creek trail that drops into the Park. The area also helps to compliment the Park Service management goals in the southern portions of Capital Reef National Park.

Henderson W

Henderson Backcountry area is a rugged area just northeast of Bryce Canyon National Park. This area features some of the same geologic formations as the park. The area features Henderson point, the Henderson Canyon trail, and Burro Canyon trail.

Municipal Water Sources

Figure xx displays the known water sources for culinary and municipal water supplies. Those sources are to be protected according to the provisions within the Utah State Source Protection Plans. *Include url reference here.*

Botanical and Geologic Areas

Name of Area	Acres	Area Type
Lavabeds 1	3,200	Geologic
Red Canyon North	15,100	Botanical
Red Canyon South	5,600	Botanical

Desired conditions for geologic areas emphasize protection of the geologic resources for which the area is valued. Desired conditions for botanical areas emphasize protection of the botanical resources for which the area is valued. Secondary emphasis for these areas is allowed for public appreciation of the botanical resources and the geologic conditions or for research of these features.

Lavabeds 1

The Lavabeds geologic area is large area of relatively young lava on the Cedar City RD. Within the area is Timbered Cone RNA.

Red Canyon North

The Red Canyon North Botanical area is on the west side of the Powell RD just north of Highway 12. The area includes unique geologic and botanical features. A number of locally endemic plant species live in this area. The area also features the Butch Cassidy trail.

Red Canyon South

The Red Canyon South Botanical area is on the west side of the Powell RD just south of Highway 12. The area includes unique geologic and botanical features. A number of locally endemic plant species live in this area. The area also features the Thunder Mountain trail, CastleBridgetrail, and the Golden Wall trail.

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Potential Additions to Botanical or Geologic Areas

In 1984 the Leeds Canyon area on the Pine Valley Ranger District was proposed as a potential RNA. The Leeds Canyon area, approximately 1,100 acres in size, is the only known location of evergreen broad-sclerophyll (hard leaf) chaparral in the state of Utah. An updated evaluation is needed to determine if the Leeds Canyon area still retains the natural character for designation as an RNA considering part of the area was burned in 1986 and seeded with non-native grasses. Initially the area may be designated as a botanical area with potential for future designation as an RNA after further evaluation and consideration.

Other Study AreasSide Hollow Ponderosa Pine Provenance Study, Escalante Ranger District

An area set up as a garden study for ponderosa pine. Garden studies gather plants from various geographic locations and grow them at a common location to compare growth features, flowering periods, and other factors to help establish or refine seed transfer guidelines. There are ?? families of ponderosa pine from southern Utah, and ?? at this location.

Forest Service Scenic Byway

- Panguitch scenic byway (Forest Road 36)
- Markagunt scenic byway (Highway 14)
- Brian Head scenic byway (Highway 143)

National Scenic Byway

- Highway 12 scenic byway – All American Highway

Research Natural Areas (RNAs) of the Dixie NF

<i>Browse RNA</i>	Pine Valley District
	Established: November 20, 1998
<i>Timbered Cone RNA</i>	Cedar City District
	Established: December 18, 1990
<i>Red Canyon RNA</i>	Powell District
	Established: May 5, 1987
<i>Upper Sand Creek RNA</i>	Escalante District
	Established: November 20, 1998
<i>Table Cliff RNA</i>	Escalante District
	Established: July 24, 1991

Desired Conditions for RNAs

Research natural areas (RNA's) are part of a national network of ecological areas designated in perpetuity for research and education and/or to maintain biological diversity on National Forest System lands. Research natural areas are for non-manipulative research, observation, and study. They also may assist in implementing provisions of special acts, such as the Endangered Species Act and the monitoring provisions of the National Forest Management Act.

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Research natural areas are "a physical or biological unit in which current natural conditions are maintained insofar as possible. These conditions are ordinarily achieved by allowing natural physical and biological processes to prevail without human intervention. However, under unusual circumstances, deliberate manipulation may be utilized to maintain the unique feature that the Research Natural Area was established to protect." (Federal Committee on Ecological Reserves, 1977.)

Objectives and Management Guidelines

Management direction for RNA's is outlined in the Forest Service Manual at FSM 4063. This direction includes objectives and guidelines for management.

National Recreation Trails

The Dixie NF has one designated national recreation trails and one proposed.

- Cascade Falls National Recreation Trail
- Great Western Trail (Recommended)

STRATEGY

Geographic Area Based Emphasis

INTRODUCTION

Generally speaking, Forest-wide direction applies to the entire Forest. This section of the plan provides guidance at the smaller geographic-area level. The Geographic area emphasis does not replace the Forest-wide direction. However, it does provide an opportunity to clarify, be more specific, or describe how the Forest-wide direction may need to be modified in each area.

Geographic Area Name	Ranger District	Size in Acres
Enterprise	Pine Valley	219,234
Pine Valley Mountains	Pine Valley	194,932
Pinto	Pine Valley	67,046
Bear Valley	Cedar City	71,108
Cedar Breaks	Cedar City	50,140
Navajo-Duck Creek	Cedar City	126,691
Panguitch-Mammoth	Cedar City	162,455
Mount Dutton	Powell	233,136
Paunsaugunt	Powell	126,883
Red Canyon	Powell	28,566
Antimony	Escalante	113,794
Barney Top	Escalante	3,568
Boulder Creek	Escalante	8,6578
Canaan Mountain	Escalante	24,138
Griffin Top	Escalante	87,893
Main Canyon	Escalante	42,542
North Creek/Pine Creek	Escalante	69,352
Aquarius Plateau	Fremont River	68,231
Boulder Top	Fremont River	47,710
East Slope/Slick Rock	Fremont River / Escalante	82,207
North Slope	Fremont River	36,482

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ENTERPRISE

Acres 219,234	Dominant Vegetation Types Pinyon pine and juniper, sagebrush, mountain shrub	
Location West of Enterprise, UT	District Pine Valley	Ecoregion Great Basin
Landmarks Enterprise Reservoir, Flat Top, Water Canyon Peak, Ox Valley Peak		

Setting of Geographic Area

The Enterprise geographic area is on the western edge of the Dixie NF and the Pine Valley RD. The area abuts the state of Nevada on the west. The area includes Enterprise reservoir. (see figure xx)

The vegetation of the area is dominated by pinyon pine and juniper and sagebrush. The area is valued for its mix of semi-primitive motorized and non-motorized recreation opportunities. The area has a long history of livestock grazing. Private land inholdings have two patented mining claims. Wild horses and mule deer share habitat for winter range resources. Moody Wash is an important riparian habitat and vegetation community that supports a unique fish community of native non-game species. Blue Spring is an important water source for wildlife. Holt Canyon and Spring Creek provides habitat for a diversity of wildlife species including sensitive fish species. Volcanic tuff is present in the GA.

Management Challenges

The Forest-wide desired conditions capture most of the desired condition for the Geographic Area (GA). Desired conditions more specific to this GA are detailed below.

- In this area, elk, mule deer, wild horses, and livestock compete for winter and summer range habitat.
- Impacts from the 2004 floods, grazing, tamarisk, and the nature of braided channels may impede riparian recovery.
- Pine Park Campground (may become dispersed camping area) and adjacent motorized use may conflict with riparian recovery in Arizona toad habitat.
- Impacts from the Hawkins fire (2004) pose management challenges for a variety of program areas.

Integrated Desired Conditions

The Forest-wide desired conditions capture most of the desired condition for the Geographic Area (GA). Desired conditions more specific to this GA are detailed below.

The Enterprise GA offers primitive and semi-primitive recreation opportunities. Pine Park remains as a semi-primitive recreation experience. The Honeycomb Campground accommodates ATV occupancy and use. Along these riparian corridors, tamarisk occurrence is not expanding and declining in some areas. Sagebrush age classes are diverse, supporting effective pygmy rabbit habitat. Ponderosa pine trees serve as bald eagle roost trees, generally clumps of larger open top trees, around Enterprise Reservoir. The riparian habitat and vegetation community in Moody Wash supports a unique fish community of native non-game species. The breeding population of Arizona toads in the Pine Park area is healthy and stable.

STRATEGY

Strategy and Priorities

Implement the Motorized Travel Plan, including an emphasize on law enforcement to control travel management and maintenance of existing roads to forest standard for safe travel. Evaluate the need for equestrian facilities at trailheads. Coordinate with cooperative partners and private landowners to improve trail access from Mountain Meadows to National Forest. Manage to reduce livestock and motorized recreation conflicts. Creation of a larger ATV loading area near Honeycomb could reduce impacts in association with the High Desert Trail

Vegetation priorities include: maintaining forage treatment areas in a young structural stages (grass/forb/shrubs), and maintaining defensible space around the Enterprise wildland-urban interface.

New and existing water troughs should be located away from riparian areas to reduce livestock impacts to riparian areas. Maintain and protect microbiotic crusts.

Wildlife and fishery priorities include: maintaining the trout habitat in Pine Creek, Converting pinyon and juniper areas to shrub-grass communities for mule deer winter forage benefit, and creating diverse sagebrush age classes to benefit Pygmy rabbit habitat. Maintain or enhance the sport fishery in Upper and Lower Enterprise Reservoirs should be maintained in the current conditions. Projects should consider the Arizona Toad breeding population in the Pine Park area.

The Utah Division of Wildlife Resources identifies a number of vital and critical habitats within this geographic area. These vital and critical habitats should be considered when vegetation manipulations are planned within this geographic area:

- Winter and summer mule deer habitat (Upper Magotsu Creek, Blue Springs area)
- Mule deer fawning habitat
- Yearlong wild turkey habitat

Wet meadows and riparian areas need enhancement and protection at Calf Spring.

STRATEGY

PINE VALLEY MOUNTAIN

Acres 194,932	Dominant Vegetation Types Pinyon pine and juniper, ponderosa pine, aspen, Englemann spruce and subalpine fir, mountain shrub communities	
Location North of St. George, UT	District Pine Valley	Ecoregion Great Basin
Landmarks Pine Valley Recreation Area, Pine Valley Mountains		

Setting of Geographic Area

The Pine Valley Geographic Area is the southeastern part of the Pine Valley RD. It is due north of St. George and west of I-15. It contains the Pine Valley Mountain Wilderness Area, Browse Research Natural Area and Mojave tortoise habitat. There are numerous private in-holding within this area. (see figure xx)

The vegetation of the area is dominated by pinyon pine and juniper. Unique chaparral vegetation is also found in the area. The area provides a wide array of recreation challenges and the primitive recreation opportunities. The riparian areas are especially favored by recreationists. This area contains the Pine Valley Recreation Area and the Oak Grove Campground. This area has a long history of livestock grazing.

Grass Valley and Grassy Flat supports critical deer and wild turkey summer range and deer fawning habitat. Riparian areas support a diversity of wildlife.

Santa Clara River, Moody and Magotsu Creeks riparian zones provides critical habitat for a high diversity of wildlife including the Southwestern willow flycatcher. These areas provide migration corridors for neotropical migratory songbirds, big game and other species. In addition, these areas provide habitat for wild turkeys, roosting bald eagles, sensitive fish species, amphibians, and trout in the upper reaches.

This geographic area contains the only known location of evergreen broad-sclerophyll (hard leaf) chaparral in the state of Utah

Management Challenges

The unique features of this geographic area which may raise special management concerns include:

- Some ATV and mountain bikes use encroaches on the wilderness.
- Population growth in California, Nevada, and Washington County, UT will continue to increase pressure on this GA for all uses.
- There are several Wildland Urban Interface areas of concern in this GA.
- Perpetual maintenance of existing fuel breaks may be required to maintain effectiveness, New Harmony in particular
- Microbiotic crust restoration may be hindered by off road vehicle use.
- Springs have been developed and water has been drained into pipelines for domestic use resulting in dewatered streams, lost water sources and habitat changes for wildlife. Water troughs are often turned off, or not working. The restoration of natural conditions should be a top priority if water rights becomes available.

STRATEGY

Integrated Desired Conditions

The Forest-wide desired conditions capture most of the desired condition for the Geographic Area (GA). Desired conditions more specific to this GA are detailed below.

The Pine Valley Mountain GA generally offers more developed recreation opportunities. Camping opportunities are mostly found in developed campgrounds. Trail use around the Pine Valley Recreation Area is non-motorized, with the Pine Valley Mountain Wilderness offering primitive recreation opportunities. The east side of this GA has mostly non-motorized recreation opportunities. Elk herd numbers are low in favor of mule deer emphasis. Pygmy rabbit habitat within sagebrush areas has both decadent stands for denning and other age classes for foraging. Riparian areas have cottonwood trees, which serve as bald eagle roosts. Throughout this GA, Pine Valley goldenbush and milkvetch populations are thriving and stable. Fuel breaks exist around Pine Valley, Central and New Harmony - open, park-like condition. Bonneville cutthroat trout habitat is stable and increasing in Reservoir Canyon, Mill, Harmon and South Ash Creek, and Leeds Creek.

Strategy and Priorities

Maintain and protect microbiotic crusts.

The Pine Valley Wilderness may need a party-size permit system established as part of the wilderness management plan. The current number of camping units in the Pine Valley Recreation Area should be maintained, however, the conditions of the units can be improved. Relocation of camping units away from the stream in Pine Valley should help to protect the stream and riparian areas.

Maintain or enhance the fishery and habitat in Santa Clara Creek, Pine Valley Reservoir and the creeks on the east side of this GA.

Vegetation priorities include: reduction of fuels in the wilderness to reduce threats to Pine Valley - structures and improve scenery of the area, implementation of the Santa Clara vegetation treatment project, and creation of a fuel break around Central to an open, park-like condition.

The Utah Division of Wildlife Resources identifies a number of vital and critical habitats within this geographic area. These vital and critical habitats should be considered when vegetation manipulations are planned within this geographic area:

- Yearlong mule deer habitat
- Mule deer fawning habitat
- Yearlong blue grouse habitat
- Summer band-tailed pigeon habitat

There is a need for a long-term protection plan for important stream and riparian corridors (Santa Clara River, Moody and Magotsu Creeks).

Maintain or enhance Bonneville Cutthroat trout populations in Water Canyon, Reservoir Canyon, Mill Creek, Harmon Creek, Horse Creek, Spirit Creek and Pig Creek.

STRATEGY

The Leeds Canyon area, near Ash Grove Spring, contains a hard-leaved evergreen chaparral type that is unique to Utah (Wells, 1960). Initially designate the area for its botanical uniqueness followed by additional study and documentation for potential designation as a Research Natural Area.

STRATEGY

PINTO

Acres 67,046	Dominant Vegetation Types Pinyon pine and juniper, sagebrush, mountain shrub	
Location East of Enterprise, UT	District Pine Valley	Ecoregion Great Basin
Landmarks Old Irontown, Cove Mountain, Stoddard Mountain, Page Ranch Historical Site		

Setting of Geographic Area

The Pinto geographic area is in the northeastern corner of the Pine Valley RD. The area is east of Highway 18 and south of Highway 56. The area contains numerous private land in-holdings. (see figure xx)

The vegetation of this area is dominated by pinyon pine and juniper and sagebrush. The area provides a mix of motorized and non-motorized recreation opportunities. The area also provides forage for livestock and mule deer. The area is popular for dispersed camping and hunting.

Pinto Creek supports a population of wild rainbow trout.

Management Challenges

The unique features of this geographic area which may raise special management concerns include:

- Pinyon penstemon protection can supercede pinyon and juniper treatments which may impair the ability to restore sagebrush communities.
- Microbiotic crust restoration may be hindered by livestock grazing and off road vehicle use.

Integrated Desired Conditions

The Forest-wide desired conditions capture most of the desired condition for the Geographic Area (GA). Desired conditions more specific to this GA are detailed below.

The Pinto GA has designated dispersed recreation opportunities. Elk herd numbers are low or non-existent in favor of mule deer emphasis. Pygmy rabbit habitat within sagebrush areas has both decadent stands for denning and other age classes for foraging. Pinto Creek has stable or increasing cottonwood tree community, which serve as bald eagle roosts. Other creeks have stable or increasing willows, where capable. Along these riparian corridors, tamarisk occurrence is not expanding and is declining in some areas. Where conditions are appropriate, pinyon penstemon populations are thriving and stable.

Strategy and Priorities

Dispersed camping should be managed through designation of selected sites. Protection of Pinto Springs may be needed due to dispersed camping uses. Microbiotic crusts should be maintained and protected.

Wildlife priorities for this area include maintenance of mule deer habitat and maintaining turkey habitat near Pinto and Little Pinto Creeks. The Pinto Canyon road should be relocated to reduce road-related impacts to fish habitat.

STRATEGY

Vegetation priorities include: reduction of tamarisk, maintenance of Pinyon penstemon to prevent population loss, large cottonwood recruitment for bald eagle winter roosts, and maintenance of fuel levels in WUI areas around Pinto, Irontown and Far West.

The Utah Division of Wildlife Resources identifies a number of vital and critical habitats within this geographic area. These vital and critical habitats should be considered when vegetation manipulations are planned within this geographic area:

- Winter mule deer habitat
- Mule deer fawning habitat
- Yearlong wild turkey habitat
- Yearlong blue grouse habitat

Riparian restoration in Pinto Creek for continued support of wild rainbow trout

STRATEGY

BEAR VALLEY

Acres 71,108	Dominant Vegetation Types Pinyon pine and juniper, sagebrush, ponderosa pine	
Location Northeast of Cedar City, UT	District Cedar City	Ecoregion High Utah Plateau
Landmarks Cottonwood Mountain, Sandy Peak, Twin Peaks		

Setting of Geographic Area

The Bear Valley geographic area is the northern part of the Cedar City RD. The dominate feature is Bear Valley that runs diagonally from southwest to northeast through the area. There are a number of private land in-holdings in Bear Valley. (see figure xx)

The vegetation is dominated by pinyon and juniper and sage brush in the lower elevations with mixed conifer and mountain brush in the higher portions. The area has a semi-primitive character and provides a mix of motorized and non-motorized trails. The area contributes to the culinary water of several municipalities. The area has a long history of livestock grazing. Road densities are relatively low. There are numerous opportunities to use various tools to enhance vegetation conditions. The area is relatively undeveloped and has a relatively low fire occurrence.

Wet meadows, riparian zones, and sagebrush habitats in Bear Valley support a diversity of wildlife including sage grouse, Utah Prairie dogs, mule deer, and elk. Lower Bear Creek is an important non-game fishery.

Management Challenges

The unique features of this geographic area which may raise special management concerns include:

- Cheat grass infestation often increases following management activities
- The parent soil and geological conditions in this area increase likelihood of erosion along Three Mile Creek and its tributaries.

Integrated Desired Conditions

The Forest-wide desired conditions capture most of the desired condition for the Geographic Area (GA). Desired conditions more specific to this GA are detailed below.

This geographic area is characterized by a semi-primitive recreation experience for both non-motorized and motorized recreation activities. Sandy Peak and Little Creek Peak offer a non-motorized semi-primitive experience. The floodplain and wetlands adjacent to Bear Valley Guard Station are not compacted by activities. Hence, a functional sponge filter is available for the valley. Surface flows in this riparian area are not inhibited by the Forest Road #088 crossing. Sandy Creek and Three Mile Creek have diverse vegetation with multiple age and height classes. The stream banks show minimal compaction. They are also covered with a thick stand of self-perpetuating wetland vegetation. However, whitetop populations in Sandy Creek are not present or only occur in very small patches. Mineral Canyon's stream channels are undisturbed, indicating no human use or occupancy. Natural levels of sediment and bedload move through these channels uninhibited. The Bear Valley Utah prairie dog colony has habitat and security for a self-sustaining population.

STRATEGY

Strategy

This area is a priority for natural fire use to restore historical regimes. Treatment of PJ and oak brush to improve the age-class diversity of the area is a priority to help maintain wildlife winter range and ecological sustainability. Aggressive treatment of whitetop to contain, or eliminate, the population at Sandy Creek and Bear Valley should be used. Maintenance of forage areas should include prevention of encroaching pinyon and juniper, less than 25 years old, to improve critical big game habitat. Management ignited and fire use fires are utilized to the maximum extent to restore ecosystems to the appropriate Fire Regime Condition Class; all methods of fuel treatment are acceptable in this area.

Implementation of travel management should maintain semi-primitive opportunities and limit vehicle effects on big game and prairie dog habitats. Maintenance or enhancement of the habitat in Three Mile Creek, DeLong Creek, and Indian Hollow is a priority for Bonneville cutthroat trout populations. Old log structures in Three Mile Creek should be removed and replaced, where appropriate, with properly designed structures to enhance trout habitat. Protection of the Red Creek watershed should help to retain the spawning habitat as a self-sustaining fishery. Maintaining an early seral condition in the vicinity of the Bear Valley Prairie dog colony should increase or enhance prairie dog habitat. Coordinate with the USFWS, local landowners, permittees to evaluate use of area for prairie dog translocations. Providing a variety of structural stages within the grass-sage communities should maintain or improve selected sage grouse habitats and pygmy rabbit habitat.

Protection of the culinary watersheds for Panguitch, Parawon and Paragonah provided by State source Protection Plan should be reviewed for adequacy. Road #1595 crossing at Upper Bear Valley should be moved to a location that does not impact the wetland found in the bottom of the valley.

The Utah Division of Wildlife Resources identifies a number of vital and critical habitats within this geographic area. These vital and critical habitats should be considered when vegetation manipulations are planned within this geographic area:

- Winter mule deer range
- Winter elk range
- Sage grouse brooding areas (Buckskin, Dog Valley area)
- Yearlong blue grouse habitat
- Yearlong wild turkey habitat

Maintain or enhance the Bonneville Cutthroat trout populations in Little Creek and 3-Mile Creek.

Restore or rehabilitate pinyon and juniper encroachment into sagebrush and grasslands northwest of Cottonwood Mountain area. Critical browse species are disappearing from the landscape as a consequence of this encroachment.

STRATEGY

CEDAR BREAKS

Acres 50,140	Dominant Vegetation Types Englemann spruce and subalpine fir, aspen, ponderosa pine	
Location East of Cedar City, UT	District Cedar City	Ecoregion Utah High Plateau
Landmarks Cedar Breaks National Monument, Brian Head Winter Resort Area, Blowhard Mountain, Cedar Canyon		

Setting of Geographic Area

The Cedar Breaks geographic area lies on the western edge of the Cedar City RD and borders the Cedar Breaks National Monument on three sides. Highways 14 and 143 pass through this area. The area contains the Ashdown-Gorge Wilderness. (see figure xx)

The vegetation of this area is dominated by Englemann spruce and subalpine fir and aspen with some pinyon and juniper in lower elevations. This area provides developed, dispersed, and trail recreation opportunities. The area provides culinary water for the community of Parowan. Ten years of epidemic levels of spruce beetle activity has resulted in high mortality in the Englemann spruce and subalpine fir belt. This has led to a renewal of forest succession in this cover type. A popular attraction is the grove of bristlecone in the Twisted Forest area. High recreation values exist in this GA including the Ashdown Gorge Wilderness, the Cedar Breaks National Monument, the all-season activities at Brian Head, and the dispersed and developed camping in the Bowery Creek/Yankee Meadow area.

Management Challenges

The unique features of this geographic area which may raise special management concerns include:

- The riparian areas of Bowery and Center Creeks are being impacted by both dispersed recreation pressure and by grazing.
- There are wildland urban interface/communities at risk along with other improvements in the Cedar Breaks and Brian Head areas.

Integrated Desired Conditions

The Forest-wide desired conditions capture most of the desired condition for the Geographic Area (GA). Desired conditions more specific to this GA are detailed below.

This geographic area provides many opportunities for winter sport enjoyment. In particular, the Brian Head Ski Resort is the cornerstone for these opportunities. Snowmobile trails and the areas used for cross-country skiing are maintained. Future resort developments dovetail with natural resource considerations. The Yankee Meadows area has quality scenic and recreation opportunities. The Bear Flat area is a managed recreation area. Highways 14 and 148 possess highly desired scenic qualities, especially along the visual corridor. High-elevation tall forb communities near Cedar Breaks National Monument are present and thriving to the extent possible. Quality sport fishing opportunities are available at Yankee Meadow.

These areas have lower fuel loading, low fire behavior potential around developed parcels. Standing dead trees, while present, do not dominate the landscape. The Parowan Creek watershed continues

STRATEGY

to supply water for the Parowan community. The overall resource character is consistent with the values of Cedar Breaks National Monument.

Strategy

Dispersed camping may be limited to restricted and designated sites. Areas should be designated for motorized and non-motorized winter uses including appropriate parking for winter uses. The Rattlesnake trail is in need of reconstruction. The Crystal Spring Rd. trailhead should be reconstructed to accommodate uses in Ashdown Gorge Wilderness. The Brian Head area will be managed in compliance with the Brian Head Recreation Plan. An evaluation of appropriate trail construction and maintenance of trails inside the Ashdown Gorge Wilderness should be completed to guide trail work in this area. Maintain the restriction on dispersed camping along Forest Rd #049 extending from Yankee Meadows Campground to one mile south of Yankee Meadows Reservoir. Dispersed sites that are causing unacceptable impacts should be closed and rehabilitated. Place “natural” barriers where needed, such as logs or rock, to prevent campsite expansion, maintain buffers, and discourage off-road driving. Projects using these types of barriers, in combination with potentially hardened sites, could also improve accessible fishing opportunities

Aspen management opportunities should be emphasized in the Webster Flat area.

Initiate cultural treatments on sites with highest potential for successful tall forb restoration

Maintain or enhance condition of the spawning channel at Yankee Meadows reservoir, in the Bowery Creek headwaters.

The Utah Division of Wildlife Resources identifies a number of vital and critical habitats within this geographic area. These vital and critical habitats should be considered when vegetation manipulations are planned within this geographic area:

- Summer mule deer range
- Summer elk range
- Summer wild turkey habitat

STRATEGY

NAVAJO-DUCK CREEK

Acres 126, 691	Dominant Vegetation Types Ponderosa pine, pinyon pine and juniper, Englemann spruce and subalpine fir	
Location Southeast of Cedar City, UT	District Cedar City	Ecoregion Utah High Plateau
Landmarks Navajo Lake, Duck Creek, Lava beds, Strawberry Creek		

Setting of Geographic Area

The Navajo-Duck Creek geographic area is the southern portions of the Cedar City RD. Highway 14 passes through this area. This area contains private land with significant subdivision development and a number of very popular developed recreation sites. (see figure xx)

The vegetation of this area features ponderosa pine, pinyon and juniper, and Engelmann spruce-subalpine fir with mountain brush in the lower elevations of the southern portion of the GA. This area provides a wide variety of more developed recreation opportunities. It is also popular for fishing, hunting, and for wildlife viewing. This area has a long history of livestock grazing and timber harvest. The visual corridor along highway 14 is an important feature in this area.

This geographic area supports critical summer range and fawning grounds for the Paunsaugunt deer herd. High numbers of deer and elk migrate through the area. Asay and Mammoth Creeks support important riparian and aquatic values including trout fisheries.

Management Challenge

The unique features of this geographic area which may raise special management concerns include:

- There is high, concentrated recreation use due to the number of private developments in the area, which is expected to increase. Duck Creek Area is about 55% developed. There is potential to increase occupancy to nearly double the current level.
- The number of private developments with wells and septic systems may be impacting groundwater quality and lowering water tables.
- Soil conditions in tall forb areas may not allow for attainment short-term restoration objectives.
- High road densities, private inholdings, and preponderance of early and mid-successional vegetation structure makes maintaining secure wildlife habitat and travel corridors difficult when planning vegetation treatments and access management.
- Habitat is limiting for species that are dependent on late successional habitat structure such as, large diameter trees, snags, and down wood.
- This is a very high fire occurrence area and a high visitor use area. The high density of wildland urban interface communities are at risk along with other improvements.
- Reinvigorating spruce stands damaged by beetle epidemic is challenged by conflicting management goals, public perceptions, and high density of WUI and high-use recreation.
- Recreation impacts (e.g. litter, human waste, unauthorized OHV travel) near Duck Creek, Duck Lake, Aspen Mirror Lake, and Navajo Lake threaten fish habitat.

STRATEGY

Integrated Desired Conditions

The Forest-wide desired conditions capture most of the desired condition for the Geographic Area (GA). Desired conditions more specific to this GA are detailed below.

The Navajo Lake area continues to provide non-motorized recreation opportunities. The Virgin Rim and Marathon Trails offer non-motorized recreation opportunities. Motorized recreation vehicles are not present. The Navajo Lake Road is paved to facilitate recreation travel. Fishing opportunities at Navajo Lake and Aspen Mirror Lake are highly desirable. Dairy Canyon also provides non-motorized recreation opportunities. Snowmobile trails and the areas used for cross-country skiing are maintained. Dispersed sites throughout this GA are maintain at current levels. Within riparian areas, Arizona willow populations are self-perpetuating with multiple age and height classes present. The greater watershed water quality conditions are secure. Well and septic system development on private land are coordinated with Kane County. Designated utility corridors are available for efficient service to private lands. Elk and deer hiding cover and travel corridors in summer range, south and west of Duck Creek private land development, are present and stable. Important bat hibernacula(s) are undisturbed from wintertime recreation activities. Young Englemann spruce and aspen stands are thriving. Dairy Canyon maintains a non-motorized setting.

Strategy

Dispersed camping may be limited to restricted and designated sites. Areas should be designated for motorized and non-motorized winter uses including appropriate parking for winter uses.

Appropriate facilities for equestrian use should be developed to access the Virgin Rim Trail. The Cascade Falls trail and observation deck should be reconstructed by 2010. Travel corridor designation and management (Hwy 14, etc.) should support scenic values. Dispersed camping in riparian areas should be limited to designated sites. Non-motorized winter use areas should be establish based on site-specific analysis.

Remove standing dead spruce and replant where appropriate. Treat mixed conifer and spruce stands for ecological health across several 1000 acres over next five years. Maintain and improve ecological condition of the Arizona willow communities with adjustment of recreation impacts and livestock management as necessary. Increase aspen representation to historical levels. Cultural treatments for tall forb restoration should be initiated on sites with highest potential.

Placement of utility corridors and infrastructure should emphasize underground placement of utilities and design to minimally impact visual and ecological impacts. Recreation-related special uses should use existing infrastructure such as trails and roads.

Provide protection of Mammoth and Bower Caves bat hibernacula, this could include a seasonal or permanent closure of Bower's caves via installation of gates or removal of access ladder and public education on bat hibernacula. Redesign and reconstruct the Swains Creek riparian exclosure to enhance riparian and stream habitat conditions. Reduce and maintain road and motorized trail densities to maintain effectiveness over time to protect big game hiding cover and travel corridors.

The Utah Division of Wildlife Resources identifies a number of vital and critical habitats within this geographic area. These vital and critical habitats should be considered when vegetation manipulations are planned within this geographic area:

- Mule deer fawning habitat

STRATEGY

- Summer mule deer range
- Summer elk range
- Yearlong blue grouse habitat
- Summer wild turkey habitat

STRATEGY

PANGUITCH-MAMMOTH

Acres 162,455	Dominant Vegetation Types Sagebrush, ponderosa pine, Englemann spruce and subalpine fir	
Location Southwest of Panguitch, UT	District Cedar City	Ecoregion Utah High Plateau
Landmarks Panguitch Lake, Hancock Peak, Mammoth Springs		

Setting of Geographic Area

The Panguitch-Mammoth geographic area lies in the center of the Cedar City RD. Highway 36 passes through this area. Panguitch Lake is a notable feature. Private subdivisions and inholdings are plentiful and high summer/fall recreation use exists. (see figure xx)

The vegetation of this area is dominated by sagebrush with ponderosa pine, Englemann spruce and subalpine fir, and aspen in the higher elevations. This area has a long history of livestock grazing. The area provides a mix of motorized and non-motorized recreation opportunities. This is a popular recreation area. This area is considered high quality summer and fawning habitat for mule deer. This GA contains a high proportion of suitable nesting and foraging habitat for the Northern Goshawk on the District.

Panguitch Creek and Panguitch Lake riparian areas supports a high diversity of wildlife including: neotropical migratory songbirds; sage grouse and several leks, Utah Prairie dogs; bald eagles; and wild turkeys. Panguitch Creek supports an excellent trout fishery.

Panguitch Lake is a bald eagle winter feeding and roosting concentration area (up to 40 birds).

Management Challenges

The unique features of this geographic area which may raise special management concerns include:

- Panguitch Lake is impaired due to total phosphorus and dissolved oxygen; Mammoth Ck is impaired due to total phosphorus.
- Soil conditions in tall forb areas may not allow for attainment short-term restoration objectives.
- This GA falls within the Panguitch Lake Limited Entry Elk Herd Unit and provides quality winter, transition (including calving) and summer elk habitat. High road densities occur (> 4.0 miles per square mile across the GA) reducing overall habitat effectiveness.

Integrated Desired Conditions

The Forest-wide desired conditions capture most of the desired condition for the Geographic Area (GA). Desired conditions more specific to this GA are detailed below.

Arizona willow communities have multiple age and height classes. They are an extensive percentage of meadow vegetation. The Mammoth Springs areas offers group camping opportunities. Vegetation around the spring provides shade and adequate ground cover for these camping experiences. Dalmatian toadflax is not present around Panguitch Lake, or is only in small patches. Cinder pits and other rock quarries are present to provide rock materials for public use. Organized special events opportunities are available and controlled by permits. Historic tanning trees, Lowder

 STRATEGY

Pond Dairy Site, and Upper Mammoth Creek Logging Bridge (Old Sorrel Trail) are preserved for public interest. Defendable Fire Suppression areas have lower fuel loading, low fire behavior potential around developed parcels. The sponge filter system in the flood plain and wetlands associated with Blue Spring Creek, Haycock Creek, and Ipson Creek watersheds has enough vegetation both woody and other to retain water on site longer and develop and maintain streambank stability. Vegetation around Mammoth Springs and along the stream is stable and in quantities to provide shade and adequate ground cover.

Within the primary winter bald eagle roost and feeding area around Panguitch Lake clumps of larger (>18 inch diameter), open top ponderosa pine are perpetuated.

Strategy

Protect and enhance Arizona Willow populations. Remove standing dead spruce and replant where appropriate. Treat mixed conifer and spruce stands for ecological health across several 1000 acres over next five years. Increase aspen representation to historical levels. Initiate cultural treatments on sites with highest potential for successful tall forb restoration. Aggressively treat Dalmatian toadflax infestations. Remove excess levels of dead (bug killed) trees from Panguitch Lake to Cedar Breaks throughout area

Travel corridor management along State Hwy 143 should support scenic values. Designate camping sites at appropriate locations away from Mammoth Creek. Provide group camping and toilet facilities to support the carrying capacity of the Mammoth Springs area.

Adjust management of livestock as necessary to improve Arizona willow communities.

Manage Blue Spring Creek, Haycock Creek and Ipson Creek watersheds to help meet the Total Maximum Daily Load (TMDL) for Panguitch Lake and adjust livestock management to encourage riparian vegetation development. Reconstruct Blue Springs Road and Bunker Creek road to reduce erosion and sediment contributions to the watershed. Remove the spruce encroaching on the Upper Lower Creek meadow downstream of the peat bog.

The Utah Division of Wildlife Resources identifies a number of vital and critical habitats within this geographic area. These vital and critical habitats should be considered when vegetation manipulations are planned within this geographic area:

- Mule deer fawning habitat
- Elk calving habitat
- Three active sage grouse leks
- Sage grouse brooding areas
- Summer pronghorn range
- Summer elk range
- Yearlong wild turkey habitat
- Yearlong blue grouse habitat

Vegetation

Develop patches of secure (i.e. greater than 250 forested cover type acres greater than ¼ mile from roads) late summer/fall elk habitat in the northern and western portion of the GA. Improve habitat suitability of mule deer/elk winter range in the Haycock Peak and Asay Bench portions of the GA.

STRATEGY

Implementation of travel management should limit vehicle effects on big game habitat. Maintain or improve selected sage grouse brood and wintering habitat and pygmy rabbit habitat
Maintain or enhance sport fishing opportunities on Mammoth Creek and Panguitch Lake and tributaries.

Maintain cinder pits and other quarries to provide rock materials in demand.

STRATEGY

MOUNT DUTTON

Acres 233,136	Dominant Vegetation Types Sagebrush, pinyon pine and juniper, ponderosa pine, mixed conifer	
Location Northeast of Panguitch, UT	District Powell	Ecoregion Utah High Plateau
Landmarks Mount Dutton, Adams Head, Jones Corral, Blind Spring Mountain, Table Mountain		

Setting of Geographic Area

The Mount Dutton geographic area is the northern portion of the Powell RD. The area largely encompasses the Sevier Plateau including Mount Dutton, Table Mountain, and Adams Head. The area contributes to both the Sevier River and the East Fork of the Sevier River. (see figure xx)

The vegetation of the area is dominated by grassland/sagebrush and pinyon and juniper. Aspen and mixed conifer can be found in the higher elevations. The area provides a mix of motorized, non-motorized, and hunting recreation opportunities. The area has an extensive system of trails with a variety of opportunities.

Management Challenges

The unique features of this geographic area which may raise special management concerns include:

- In 2002, the Sanford fire burned a significant portion of the GA. This presents a number of challenges for resource recovery. Included are riparian areas recovery, impacts from creek crossings, and need to maintain and stabilize roads.

Integrated Desired Conditions

The Forest-wide desired conditions capture most of the desired condition for the Geographic Area (GA). Desired conditions more specific to this GA are detailed below.

This area offers a remote recreation setting. Non-motorized recreation opportunities (horseback riding, hiking, hunting) are abundant. Motorized recreation opportunities are also present, but limited. Within riparian areas, cottonwood trees are a substantial presence. Bonneville cutthroat trout populations are restored to burned tributaries. Outfitter and guide operators use the area for the primitive setting, but are controlled by permit. The grassland/sagebrush community is dominant in lower elevations, providing effective habitat for pronghorn antelope, sage grouse, and Utah prairie dog. Critical winter range habitat has available forage and low levels of harassment.

Strategy

Maintain and provide early seral forage areas with mechanical and prescribed fire treatments at a rate of about 1,000 to 2,000 acres per year. Reduce and manage fuel loads in pinyon pine and juniper, conifer and aspen areas on Table Mtn and Mt Dutton. Planning and implementation of the Mt. Dutton timber sale is a vegetation priority.

Maintain and protect non-motorized areas to provide a primitive setting. Identify and reestablish selected portions of the trail system. Connect Mud Springs to Rocky Ford to create a loop in motorized trail system over the next five years. Include Jones' Corral as part of a recreation facility rental program. Continue to feature dispersed hunting opportunities in this area.

STRATEGY

Implementation of the travel plan should help to reduce route impacts to streams. Increase willows and stream bank vegetation diversity in Left Fork Sanford Creek/Deep Creek. Provide for cottonwood and willow rehabilitation and stream bank vegetation diversity in Hunt Creek through modification of livestock management. Reconstruct Road 126 to Jones Corral to reduce watershed impacts.

Restore grassland/sagebrush mosaic in pinyon and juniper areas for wildlife habitat diversity. Protect remnant trout populations to maintain genetic stock. Remove non-native fish and transplant native fish into Deep Creek, Left Fork-Sanford Creek, Deer Creek, and Cottonwood Creek. Reintroduction of BCT into streams impacted by the Sanford Fire is a priority as conditions allow.

STRATEGY

PAUNSAUGUNT

Acres 126,883	Dominant Vegetation Types Ponderosa pine, Englemann spruce and subalpine fir, aspen, mixed conifer	
Location Southeast of Panguitch, UT	District Powell	Ecoregion Utah High Plateau
Landmarks East Fork Sevier River, Podunk Guard Station, Pink Cliffs?		

Setting of Geographic Area

The Paunsagunt geographic area is the southern portions of the Powell RD. It primarily consists of the Paunsagunt plateau and the Sunset Cliffs. The area lies south of Highway 12 and surrounds Bruce Canyon National Park on three sides. (see figure xx)

Vegetation conditions are unique to the plateau, a diverse mixture of mountain shrub, manzanita, aspen, and ponderosa pine, arranged in mosaic of openings and dense vegetation. This area offers a wide variety of recreation and trail opportunities. The area has a long history of timber and livestock use. The area provides a variety of wildlife habitats including big game habitats. The red rocks and cliffs of this area are a scenic background as seen from US highway 89. The East Fork of Sevier River fishery features a mix of fish species and is also an important sport fishery (East Fork Sevier River and tributaries, and Tropic Reservoir).

This GA provides important summer range and fawning grounds for the Pausaugunt deer herd.

The wildland-urban interface areas within this GA include:

- Ruby's Inn
- Bryce Canyon National Park
- Deer Spring Ranch
- Sunset Cliff's
- Alton Bench

Management Challenges

The unique features of this geographic area which may raise special management concerns include:

- The proposed paving of FS road 087 may increase the use of King Creek campground.
- Adjacency to private land and Bryce Canyon NP creates WUI concerns,
- Restoration of aspen ecosystems is complicated by the natural distribution (scattered) and previous management strategies.

Integrated Desired Conditions

The Forest-wide desired conditions capture most of the desired condition for the Geographic Area (GA). Desired conditions more specific to this GA are detailed below.

Maintain habitat to support the Paunsaugunt mule deer herd, nationally known for its production of trophy game. East Creek remains an important fishery . Biotic diversity is high. Habitat is available for a unique mix of species, including Utah prairie dog, Arizona willow, boreal toads, goshawks, wild turkey, peregrine falcon, and osprey.

 STRATEGY

Strategy

Coordinate with Bryce Canyon National Park for water use, recreation users, fire management and visuals. Manage designated dispersed camping areas through the completion and implementation of the East Fork Dispersed Camping Plan. Manage Podunk guard station as a rental site. Expand King Creek Campground group area to accommodate multiple groups at once. Improve safety through extension of Red Canyon Bike Trail to Bryce Canyon and elimination need to cross highway. Chip seal or pave East Fork Road to Tropic Reservoir.

Study damage to the riparian area below the Tropic Reservoir to look for opportunities to stabilize riparian area. Continue to improve riparian areas along East Fork.

Implement aspen restoration treatments on approximately 3,000 acres. Reduce and manage fuel loads in ponderosa pine, mixed conifer and aspen areas on about 500 acres annually. Reduce hazardous fuel loads in the following WUI areas: Ruby's Inn, Bryce Canyon National Park boundary, Deer Spring Ranch, Sunset Cliffs, and Alton Bench.

Reduce road density from past timber harvest areas to lower disturbance on mule deer herd. Coordinate management actions with Utah prairie dog studies. Designate prairie dog habitat areas as unsuitable for dispersed camping. Maintain or enhance boreal toad habitat through livestock management practices.

The Utah Division of Wildlife Resources identifies a number of vital and critical habitats within this geographic area. These vital and critical habitats should be considered when vegetation manipulations are planned within this geographic area:

- Mule deer fawning habitat
- Elk calving habitat
- Summer mule deer range
- Summer elk range
- Some sage grouse brooding habitat for Parker Mountain/John's Valley leks
- Yearlong blue grouse habitat
- Summer wild turkey habitat

-

Maintain or enhance the Bonneville Cutthroat trout population in Upper Big Hollow Lake

STRATEGY

RED CANYON

Acres 28,566	Dominant Vegetation Types ponderosa pine, pinyon pine and juniper	
Location Southeast of Panguitch, UT	District Powell	Ecoregion Utah High Plateau
Landmarks Red Canyon, Wilson Peak, Casto Canyon		

Setting of Geographic Area

The Red Canyon geographic area lies on the western side of the Powell RD. It is largely defined by the geologic formations of Red Canyon and Casto Canyon. Highway 12, the first All-American highway in Utah, passes through the middle of it. The area contains the very popular Red Canyon campground and visitor's center, the Red Canyon Bike Trail and the Red Canyon Botanical Area. (see figure xx)

The dominant features of this area are sand stone, red rocks, hoodoos, and cliffs. The vegetation of this area is dominated ponderosa pine and pinyon and juniper. The area provides unique developed and dispersed recreation opportunities. The area is also known for its habitat for endemic plants and bristlecone pine.

The following wildland urban interface areas exist in this area:

- Red Canyon Campground
- Red Canyon Visitor Center
- Wilsons Peak Communication Center

Management Challenges

The unique features of this geographic area which may raise special management concerns include:

- The historic stock driveway through Casto Canyon may conflict with recreation opportunities.
- The Claron soil formation is very sensitive to erosion and may limit management options.

Integrated Desired Conditions

The Forest-wide desired conditions capture most of the desired condition for the Geographic Area (GA). Desired conditions more specific to this GA are detailed below.

This geographic area offers semi-primitive recreation opportunities. Much of the area displays minimal evidence of land management activities, emphasizing the outstanding scenic characteristics. As such, the Highway 12 corridor has interpretation sites for public education. The Red Canyon Visitor Center complements these education opportunities. Conflicts between forest users and livestock in Casto Canyon are minimized. Sagebrush communities are healthy and support diverse wildlife populations. Specifically, pinyon and juniper densities are low while sagebrush conditions have thick pockets of vegetation. Bristlecone pine populations are stable with minimal loss in numbers. Utility lines pass through the canyon through a designated utility corridor. The Thunder Mountain Trail is managed as a non-motorized mechanized trail in this GA

STRATEGY

Strategy

Institute a Green Tree replacement program along the Highway 12 corridor. Use native species as design elements for healthy vegetation along Highway 12 corridor. Reduce hazardous fuel load in the following WUI areas: Red Canyon Campground and Visitor Center, and Wilson Peak Communications Site. Maintain or enhance limited populations of bristlecone pine by taking out competing trees and ensuring bird-tree relationship.

Develop a reliable water source for the Red Canyon campground and visitor's center. Provide interpretation/education of natural history at the visitor's center and botanical area.

Consider upgrade of utility transmission corridor within the canyon, or move of current power line to another corridor.

Reduce expansion of pinyon and juniper and create a diversity of sagebrush vegetation to support sagebrush dependant wildlife species.

The Utah Division of Wildlife Resources identifies a number of vital and critical habitats within this geographic area. These vital and critical habitats should be considered when vegetation manipulations are planned within this geographic area:

- Winter mule deer habitat
- Yearlong wild turkey habitat

STRATEGY

ANTIMONY

Acres 113, 794	Dominant Vegetation Ponderosa pine, pinyon pine and juniper, and sagebrush	
Location East side of John's Valley	District Escalante	Ecoregion Utah High Plateau
Landmarks Pine Lake		

Setting of Geographic Area

The Antimony geographic area is on the western side of the Escalante RD, east of Highway 22. Most of the area drains in the East Fork of the Sevier River. There is the Table Cliff Research Natural Area. (see figure xx)

The vegetation of this geographic area is dominated by Ponderosa pine and pinyon and juniper with mountain bush in the mid-elevations and aspen mixed conifer in the upper elevations. The area provides diverse wildlife habitat especially the habitat for big game. The area is popular for dispersed recreation, livestock grazing, and timber harvest opportunities. Portions of the area contribute to municipal water supplies.

The following wildland urban interface areas exist in this area:

- Antimony
- Widstoe Junction
- Tres Amegos
- Pine Lake
- Henderson Electronic Site

Management Challenges

In the Dry Wash area the lack of disturbance along with over utilization of forage and browse over time has resulted in the invasion of pinyon and juniper along and the decline of sagebrush, grass and forb communities within important wildlife areas. Rehabilitation or restoration of these systems will require investments.

Integrated Desired Conditions

The Forest-wide desired conditions capture most of the desired condition for the Geographic Area (GA). Desired conditions more specific to this GA are detailed below.

Ranch Creek and Center Creek have stable and effective native Bonneville Cutthroat trout habitat. A Protected Activity Center exists for Mexican Spotted Owl. Semi-primitive non-motorized recreation opportunities are available from Henderson Canyon to Stump Springs to the Grand Staircase Escalante National Monument. A designated power line corridor is available for utility transmission. The desired recreation setting is primarily semi-primitive motorized. The secluded quality of mule deer and elk fawning/calving areas in Antimony Creek/Pine Lake is maintained. Barker's is maintained as a non-motorized recreation area.

 STRATEGY

Within important wildlife habitat areas (Poison Creek Bench) there is a diverse dynamic of structural and successional stages with higher levels of sagebrush, grass and forb communities while levels of pinyon and juniper have declined.

Strategy

Separate non-motorized and motorized uses on the Great Western trail; this could include rerouting the Great Western Trail to Burrow Canyon and Henderson Canyon to provide semi-primitive non-motorized experience in Henderson Canyon and change existing Great Western Trail from Pine Lake to Cameron Wash from hiking to OHVs to offer motorized recreation opportunity. Provide parking and trail access to the Great Western Trail.

Create defensible space for WUI areas including Antimony, Widtsoe Junction, Tres Amigos, and Pine Lake. Maintain forage areas (Varney/Griffin, Skull Springs) for range improvement.

Increase road surfacing pits and maintain existing gravel pits. A priority for this area is maintenance of existing irrigation supplies and public water supplies.

Maintenance of Bonneville cutthroat habitat is a priority in Ranch Creek and Center Creek. Maintenance of Barker Lake Complex (blue, yellow, jolay, round willow bottom, long willow bottom, upper barker, lower barker, flat, dougherty basin, tall four lakes and reservoirs) as a quality fishery is a priority for Colorado cutthroat habitat.

The Utah Division of Wildlife Resources identifies a number of vital and critical habitats within this geographic area. These vital and critical habitats should be considered when vegetation manipulations are planned within this geographic area:

- Yearlong wild turkey habitat
- Winter and summer mule deer habitat
- Winter elk range
- Sage grouse brooding habitat for Parker Mountain/John's Valley leks
- Yearlong blue grouse habitat
- Mule deer fawning habitat
- Elk calving habitat

Restore or rehabilitate sagebrush, grass, forb communities that have been invaded by pinyon and juniper in the Poison Creek Bench area for important wildlife habitat.

Maintain or enhance the Bonneville Cutthroat trout population in Ranch Creek, Horse Creek and Birch Creek.

STRATEGY

BARNEY TOP

Acres 3,568	Dominant Vegetation Aspen, mixed conifer, Englemann spruce and subalpine fir	
Location Southwest of Escalante, UT	District Escalante	Ecoregion Utah High Plateau
Landmarks Powell Point		

Setting and Management Challenges of Geographic Area

The Barney Top geographic area is a narrow ridge in the vicinity of Barney Top and Table Cliff Mountains on the Escalante RD. (see figure xx)

The vegetation of this area is dominated by aspen and mixed conifer. The area provides some unique alpine mountain and cliff habitat. It is also the location of an electronic site that provides an important link for telecommunications in southern Utah.

Management Challenges

No management challenges have been identified for this area.

Integrated Desired Conditions

The Forest-wide desired conditions capture most of the desired condition for the Geographic Area (GA). Desired conditions more specific to this GA are detailed below.

This geographic area has a designated communication site. With Powell Point nearby, educational interpretation is available. The southern part of this area offers non-motorized recreation opportunities. Bristlecone pine populations are stable with minimal loss in numbers. The communication site continues to be a valued location for telecommunication needs. A utility corridor window offers future opportunities for transmission lines over the Escalante Mountains.

Strategy

Develop an interpretation plan for Powell Point.

The Utah Division of Wildlife Resources identifies a number of vital and critical habitats within this geographic area. These vital and critical habitats should be considered when vegetation manipulations are planned within this geographic area:

- Summer wild turkey habitat
- Summer mule deer habitat
- Summer elk habitat
- Yearlong blue grouse habitat

STRATEGY

BOULDER CREEK

Acres 86,578	Dominant Vegetation Types Pinyon pine and juniper, aspen, ponderosa pine	
Location Northeast of Escalante, UT	District Escalante	Ecoregion Utah High Plateau
Landmarks Deer Mountain, Boulder Creek		

Setting of Geographic Area

The Boulder Creek geographic area extends from the southern slopes of Boulder Mountain to the southern edge of the Escalante RD. The area includes the eastern portions of the Box Death Hollow Wilderness, and the Sand Creek Research Natural Area. Highway 12 passes through portions of this area. The Boulder Creek area drains through the Escalante River into the Colorado River. (see figure xx)

The vegetation of this area is dominated by pinyon and juniper with aspen and pine in the higher elevations. The area provides municipal water supply and big game habitat. The area has an extensive history of timber harvest and livestock grazing. The Great Western Trail passes through this area. Recreation use in this GA is predominantly fishing with some elk hunting.

The wildland urban interface areas of concern within this GA are:

- Boulder
- Salt Gulch

Management Challenges

The unique features of this geographic area which may raise special management concerns include:

- Numerous mixed conifer stands are about the same age and structural stage.

Integrated Desired Conditions

The Forest-wide desired conditions capture most of the desired condition for the Geographic Area (GA). Desired conditions more specific to this GA are detailed below.

Much of this geographic area offers non-motorized recreation opportunities. “Rough road” travel experiences are common. The Boulder Creek Canyon has semi-primitive, non-motorized opportunities as well as the Deer Creek Lake area (East Boulder Creek). In addition, the slick rock portions of this geographic area offer semi-primitive non-motorized recreation. In contrast, Highway 12 is an All-American Road, offering many interest opportunities for travelers. Riparian areas have minimal conifer occurrence and exhibit appropriate riparian vegetation. Meadows in particular have minimal tree occurrence (conifers and aspen) and exhibit grass/forbs vegetation. The ponderosa pine/oak vegetation community is a unique occurrence. Divide Lake has water developments available to assist with livestock distribution. Carbon dioxide leases on Sand Creek exist and continue as commercially productive. Carbon dioxide leases are closed once production ceases or leases are not renewed. Boulder Creek is a municipal watershed for the town of Boulder. Hydropower (Boulder Creek, Lake Creek) is developed within this area as a local power source opportunity. The irrigation source in Pine Creek has authorized motorized access for maintenance purposes.

STRATEGY

Within important wildlife habitat areas (King Bench/Salt Gulch/Pretty Tree Bench, Long Neck Mesa, Rock Bench, West Dry Bench Fingers) there is a diverse dynamic of structural and successional stages with higher levels of sagebrush, grass and forb communities while levels of pinyon and juniper have declined.

Strategy

Restoration of instream flows in Boulder Creek is a priority. The communities of Boulder and Salt Gulch are WUI priorities in this area. Additional treatment should be designed to reduce the risk of intense fire leaving RNA and Wilderness area. Livestock grazing could be improved with a new water source around Divide Lake. The carbon dioxide lease production should be continued as long as the lease remains productive.

The Utah Division of Wildlife Resources identifies a number of vital and critical habitats within this geographic area. These vital and critical habitats should be considered when vegetation manipulations are planned within this geographic area:

- Yearlong wild turkey habitat
- Winter and summer mule deer habitat
- Winter and summer elk habitat
- Yearlong blue grouse habitat
- Mule deer fawning habitat
- Elk calving habitat

Restore or rehabilitate sagebrush, grass, forb communities that have been invaded by pinyon and juniper (King Bench/Salt Gulch/Pretty Tree Bench, Long Neck Mesa, Rock Bench, West Dry Bench Fingers) for important wildlife habitat.

Maintain or enhance Colorado River Cutthroat trout population in West Boulder Creek.

STRATEGY

CANAAN MOUNTAIN

Acres 24,138	Dominant Vegetation Types Pinyon pine and juniper, ponderosa pine	
Location Southwest of Escalante, UT	District Escalante	Ecoregion Utah High Plateau
Landmarks Canaan Peak, Cottam Peak		

Setting of Geographic Area

The Canaan Mountain geographic area lies south of Highway 12 and is the southern most part of the Escalante RD. This area is nearly surrounded by the Grand Staircase Escalante National Monument. (see figure xx)

The vegetation of this area is dominated by pinyon pine and juniper with some pine and fir in the higher, wetter elevations. The area provides oil and gas development opportunities and big game habitat. With the prevalence of white fir, this area is popular with local users for white fir Christmas trees.

Management Challenges

No management challenges have been identified for this area.

Integrated Desired Conditions

The Forest-wide desired conditions capture most of the desired condition for the Geographic Area (GA). Desired conditions more specific to this GA are detailed below.

This geographic area has diverse sagebrush conditions. It is an important big game winter range area. The oil field is stable with a number of operating wells. Future oil development opportunities are available. Power lines to operating wells exist underground within a designated utility corridor.

Strategy

Range forage conditions can be improved through additional water development. Continue fencing portions of Willow Creek to allow for willow growth and regeneration. Habitat diversity could be increase with treatments that encourage a greater presence of Douglas-fir. Fencing of portions of Willow Creek can increase growth of willow. The Maintenance Level 3 road surfaces require additional road maintenance in this area. Wildlife priorities include improving elk winter range forage conditions and hiding areas to prevent elk from venturing into the Highway 12 corridor

The Utah Division of Wildlife Resources identifies a number of vital and critical habitats within this geographic area. These vital and critical habitats should be considered when vegetation manipulations are planned within this geographic area:

- Summer wild turkey habitat
- Yearlong mule deer habitat
- Summer elk habitat

STRATEGY

GRIFFIN TOP

Acres 87,893	Dominant Vegetation Types Aspen, mixed conifer, sagebrush, Englemann spruce and subalpine fir	
Location Northwest of Escalante, UT	District Escalante	Ecoregion Utah High Plateau
Landmarks Pollywog Lake, Cyclone Lake, Jacobs Reservoir		
Special attribute(s): High elevation setting		

Setting of Geographic Area

The Griffin Top geographic area is largely the plateau portions of the north central part of the Escalante RD. (see figure xx)

Much of the area is high elevation plateau with numerous lakes and stands dominated by aspen and mixed conifer. The area provides a combination of motorized and non-motorized recreation opportunities. The area has a long history of livestock grazing and timber harvest.

Management Challenges

No management challenges have been identified for this area.

Integrated Desired Conditions

The Forest-wide desired conditions capture most of the desired condition for the Geographic Area (GA). Desired conditions more specific to this GA are detailed below.

This geographic area has the primary habitat for the Aquarius paintbrush. Utah prairie dog habitat is ample for a self-sustaining colony. Healthy sagebrush communities around Polliwog Lake support sage grouse populations. Willows are present in riparian systems.

Strategy

Wildlife priorities include improving habitat for sage grouse around Polliwog Lake and protecting elk calving areas from disturbance. Recreation priorities are providing parking lots at Clayton Guard Station, the Gap, & Willow Bottoms. A riparian priority is to restore the willow component in flat meandering riparian systems.

The Utah Division of Wildlife Resources identifies a number of vital and critical habitats within this geographic area. These vital and critical habitats should be considered when vegetation manipulations are planned within this geographic area:

- Summer pronghorn habitat
- Summer wild turkey habitat
- Summer mule deer range
- Summer elk range
- Some sage grouse brooding habitat for Parker Mountain/John's Valley leks
- Yearlong blue grouse habitat
- Mule deer fawning habitat
- Elk calving habitat

STRATEGY

MAIN CANYON

Acres 42,542	Dominant Vegetation Type Ponderosa pine, pinyon pine and juniper	
Location West of Escalante, UT	District Escalante	Ecoregion Utah High Plateau
Landmarks Upper Valley, Birch Creek		

Setting of Geographic Area

The Main Canyon geographic area includes the drainage of Birch Creek on the Escalante RD. This drainage is a tributary to the Escalante River. The area lies just north of Highway 12 near Escalante, Utah. (see figure xx)

The vegetation of this area is dominated by Ponderosa Pine with Pinyon pine and juniper in the lower elevations. This area provides a diversity of wildlife habitats. Most notable is the big game habitat and the riparian habitat along the perennial creeks. There area is also used for timber harvest and livestock grazing.

Riparian and wetlands within Main Canyon provides habitat for a diversity of wildlife. The springs and meadow areas in Upper Valley are important areas for use by elk in the spring.

This area contains limited areas of late successional white fir communities with large trees and higher levels of down debris.

Management Challenges

Lack of consolidation of USFS lands within this GA may lead to fragmentation of wildlife habitats.

Integrated Desired Conditions

The Forest-wide desired conditions capture most of the desired condition for the Geographic Area (GA). Desired conditions more specific to this GA are detailed below.

This geographic area has prominent cottonwood galleries along Main Canyon Road. Roads in this geographic area have all-weather road surfaces. Within Water Canyon, native Colorado Cutthroat habitat is stable and productive. This area has a number of gravel pits for administrative use: Corn Creek and Upper Valley gravel pits. An old, non-patented coal mine is closed to forest users.

Strategy

Increasing defensible space in the Upper Valley WUI is a vegetation priority. Maintaining a closure around the old coal mine is important for forest users safety. The road to the Under The Point trailhead is in need of all-weather road surfacing.

The Utah Division of Wildlife Resources identifies a number of vital and critical habitats within this geographic area. These vital and critical habitats should be considered when vegetation manipulations are planned within this geographic area:

- Yearlong wild turkey habitat
- Winter and summer mule deer habitat

STRATEGY

- Winter and summer elk habitat
- Yearlong blue grouse habitat

Maintain or enhance Colorado River Cutthroat trout population in Water Canyon

STRATEGY

NORTH CREEK/PINE CREEK

Acres 69,352	Dominant Vegetation Types Pinyon pine and juniper, ponderosa pine, aspen	
Location Northwest of Escalante, UT	District Escalante	Ecoregion High Utah Plateau
Landmarks North Creek, Pine Creek, Posey Lake		

Setting of the Geographic Area

The North Creek/Pine Creek geographic area includes the drainages of North Creek and Pine Creek on the Escalante RD. The area is northwest of Escalante, Utah and includes the western portions of the Box Death Hollow wilderness area. (see figure xx)

The vegetation of this area is dominated by pinyon-juniper with pine and aspen in the higher elevations. The area provides a diverse mix of motorized, non-motorized, and primitive recreation opportunities and important big game habitat. The area has been used for livestock grazing and timber harvesting. The area contributes to municipal water supplies.

This area contains limited areas of late successional white fir communities with large trees and higher levels of down debris.

Management Challenges

No management challenges have been identified for this area.

Integrated Desired Conditions

The Forest-wide desired conditions capture most of the desired condition for the Geographic Area (GA). Desired conditions more specific to this GA are detailed below.

The Great Western Trail offers a number of non-motorized recreation opportunities for users. The Barker Lake Complex is non-motorized recreation area. It is also a quality fishery particularly for Colorado Cutthroat trout, but also for desired recreational fish species. The Antone Bench portion within the Box Death Wilderness Area is available for carbon dioxide leasing until they become unproductive. Once these gas leases expire, the Antone Bench area provides similar experiences as the surrounding wilderness area. Eventually, the Antone Bench area is added to the Wilderness area. The headwaters of North Creek and Pine Creek are critical fawning and calving areas for big game.

Strategy

The vegetation priority for this area is developing and maintaining a diverse mix of vegetation cover types and varying stages of succession.

Recreation priorities include designation and harden parking areas to access Hog Ranch (GWT), above Cow Puncher (GWT), Upper and Lower Box (access to Box Death Hollow).

Both campgrounds in this GA will require improvements (tables, fire rings, etc). Jubilee and Cowpuncher Guard Stations are good candidates for the recreation rental program.

STRATEGY

The Utah Division of Wildlife Resources identifies a number of vital and critical habitats within this geographic area. These vital and critical habitats should be considered when vegetation manipulations are planned within this geographic area:

- Yearlong wild turkey habitat
- Winter and summer mule deer habitat
- Winter and summer elk habitat
- Yearlong blue grouse habitat
- Mule deer fawning habitat
- Elk calving habitat

Maintain or enhance the Colorado River Cutthroat Trout population in West Fork Pine Creek.

STRATEGY

AQUARIUS PLATEAU

Acres 68,231	Dominant Vegetation Types Sagebrush, Englemann spruce and subalpine fir, aspen, mixed conifer	
Location South of Teasdale, UT	District Fremont River	Ecoregion Utah High Plateau
Landmarks Aquarius Plateau, Hay Lakes, Pine Creek		

Setting of Geographic Area

The Aquarius Plateau geographic area is part of the Fremont River RD. It is south of State Highway 24 on the western slopes of Boulder Mountain. This area includes the portions of the Aquarius plateau that drain north into the Fremont River. (see figure xx)

The vegetation of this area is dominated by sagebrush with some spruce and aspen in the higher elevations. The area provides a diverse mix of motorized and non-motorized recreation opportunities. The area is also popular for big game habitat, livestock, and timbering opportunities. The area provides some water to municipalities. Baker Spring is the only confirmed breeding site of Boreal toads on Boulder Mountain. The lakes and reservoirs of this GA provide important sport fishing opportunities.

Management Challenges

The unique features of this geographic area which may raise special management concerns include:

- Changes in vegetation are causing a loss of biological diversity.
- Increased fuel load levels have increased fire risk.
- Natural fire cycles and patterns have been disrupted.
- **The northern boundary of the GA has very decadent sagebrush which will require sustained effort to restore or rehabilitate. The process may require changing the grazing scheme to a rotational system.**

Integrated Desired Conditions

The Forest-wide desired conditions capture most of the desired condition for the Geographic Area (GA). Desired conditions more specific to this GA are detailed below.

The Aquarius Guard Station, a historic structure, provides available public information to forest users. Some areas provide a non-motorized recreation experience. Black sage and silver sage communities have a diversity of age classes along with abundant openings. These communities are available habitat for stable populations of sage grouse, pygmy rabbit, and Utah prairie dog. Other forage areas (grass/forbs) are highly productive, supporting livestock, deer, elk, and antelope. Throughout this GA, Aquarius paintbrush, penstemon parvis, and *Botrychium pardoxum* populations are thriving and stable. Pine Lake is an important raptor area, especially for northern goshawk and bald eagles (winter roost sites). Three-toed woodpeckers thrive in this area in association with spruce bark beetle activity in Engelmann spruce stands. The Dark Valley continues as an important waterfowl area. Boreal toads thrive in both upland and riparian areas. Within riparian areas, Arizona willow populations are self-perpetuating with multiple age and height classes present. Pine Creek and Pine Creek Reservoir provide quality Colorado River cutthroat trout habitat. The Baker Spring boreal toad breeding population is healthy and stable.

STRATEGY

Within important wildlife habitat areas (north boundary of GA) there is a diverse dynamic of structural and successional stages with higher levels of sagebrush, grass and forb communities while levels of pinyon and juniper have declined.

Strategy

A vegetation priority is creation of meadows below Government Point.

Wildlife priorities include, improving water availability for sage grouse and fencing existing ponds for sage grouse use. Maintenance of wildlife exclosures at Big Lake, Purple Lake, Pine Creek, Antelope Springs, Dog Lake, and Station Creek are important to protect riparian and waterfowl habitat. Continue to protect the riparian areas that have been fenced off.

Improve signing on the Great Western Trail to help keep separate foot/horse and ATV sections separated. Maintain trails for horseback riding opportunities.

Continue the Aspen Achievement Academy use of this area. Maintain gravel pits as a borrow source.

Sport fishing opportunities in lakes and reservoirs are maintained or enhanced in cooperation with Utah DWR.

The Utah Division of Wildlife Resources identifies a number of vital and critical habitats within this geographic area. These vital and critical habitats should be considered when vegetation manipulations are planned within this geographic area:

- Summer pronghorn habitat
- Yearlong wild turkey habitat
- Summer mule deer habitat
- Summer elk habitat
- Substantial sage grouse brooding habitat for Parker Mountain/John's Valley leks
- Yearlong blue grouse habitat
- Mule deer fawning habitat
- Elk calving habitat

Restore or rehabilitate sagebrush, grass, forb communities that have been invaded by pinyon and juniper (northern slopes of GA) for important wildlife habitat. Reduce the levels of pinyon and juniper that have invaded old chaining areas and reintroduce native sagebrush, grass and forb communities.

STRATEGY

BOULDER TOP

Acres 47,710	Dominant Vegetation Types Englemann spruce and subalpine fir, high meadow	
Location South of Torrey, UT	District Fremont River	Ecoregion Utah High Plateau
Landmarks Boulder Mountain Plateau		

Setting of Geographic Area

The Boulder Top Geographic area is part of the Fremont River RD. It is south of State Highway 24 and contains most of the Boulder Mountain plateau. (see figure xx)

The vegetation of this area is dominated by conifers and meadow complexes. There are a large number of small remote lakes. The area provides a variety of semi-primitive recreation opportunities. There are numerous trails and closed roads to explore. Motorized access is relatively limited, however, some unauthorized access does occur. The area also provides fishing opportunities and livestock grazing. The area has a history of timber harvest. The area offers fantastic views of surrounding areas including Capitol Reef National Park. Boulder Mountain is a water source for many downstream users.

Management Challenges

The unique features of this geographic area which may raise special management concerns include:

- There are numerous old roads, however, road closures have been difficult to enforce.
- The ecosystem of the area has been altered by historic sheep use. At one time, there were 100,000 sheep on the flats of Boulder Top. It may not be possible to restore the ecosystem to conditions that existed 150 years ago.

Integrated Desired Conditions

The Forest-wide desired conditions capture most of the desired condition for the Geographic Area (GA). Desired conditions more specific to this GA are detailed below.

This area emphasizes semi-primitive recreation with motorized and non-motorized opportunities. The Boulder Top is a destination point for non-motorized recreation uses (particularly hiking and horseback riding). The motorized opportunities are available through a designated route system on the plateau. Foot and horse trails around the rim offer outstanding viewpoints and experiences for non-motorized users. Throughout this GA, angel potentilla, Aquarius paintbrush, and little penstemon populations are thriving and stable.

Strategy

Increase structural diversity of forested stands to reduce likelihood of unnaturally large bug epidemics. Protect sensitive plants like the Aquarius paintbrush through livestock management. Maintain and improve two large meadows (Boulder meadows, Pleasant Creek) to emphasize a grass/forbs condition rather than conifers. Continue to implement the watershed recommendations from the Boulder Top EA (1997) to maintain and enhance riparian areas.

STRATEGY

Work in conjunction with the Utah Division of Wildlife Resources to help maintain fisheries and implement habitat improvement projects. Continue to support Aspen Achievement Academy use of the Boulder top, along with various smaller outfitter and guides.

The Utah Division of Wildlife Resources identifies a number of vital and critical habitats within this geographic area. These vital and critical habitats should be considered when vegetation manipulations are planned within this geographic area:

- Summer pronghorn habitat
- Summer wild turkey habitat
- Summer mule deer habitat
- Summer elk habitat
- Yearlong blue grouse habitat

STRATEGY

EAST SLOPE/SLICK ROCK

Acres 82,207	Dominant Vegetation Types Pinyon pine and juniper, aspen	
Location East of Highway 12	District Fremont River	Ecoregion Utah High Plateau
Landmarks Lower Bowns Reservoir, Pleasant Creek, Oak Creek		

Setting of Geographic Area

The East Slope/Slick Rock geographic area is located on the eastern edge of the Dixie National Forest. It is part of both the Fremont River RD and the Escalante RD on the eastern slopes of Boulder Mountain. Highway 12 passes through the western portions of this geographic area. (see figure xx)

The vegetation is dominated by pinyon and juniper with aspen in the higher elevations. Significant portions of this area are dominated by rock. The area provides remoteness, opportunities for primitive trail use, and potential access to Capitol Reef National Park. To a lesser extent, this area provides opportunities for livestock grazing and timber harvest. A portion of the area has been recognized as critical spotted owl habitat by the Fish and Wildlife Service. This area has the largest concentration of northern goshawks on the district due to the existing high quality habitat. Lower Bowns and Oak Creek reservoirs are excellent fisheries.

Management Challenges

The unique features of this geographic area which may raise special management concerns include:

- OHVs are entering Park from USFS lands.
- There has been vandalism of archaeology sites.
- Extensive grazing program in this unit, have seen an increase in woody species that cause problems for grazing use
- The Larb Hollow, Wildcat and Durfey Reseeds, Dry Bench, and West Dry Bench Fingers have had substantial pinyon and juniper invasion displacing sagebrush and grass forb communities which will require sustained effort to restore or rehabilitate.

Integrated Desired Conditions

The Forest-wide desired conditions capture most of the desired condition for the Geographic Area (GA). Desired conditions more specific to this GA are detailed below.

Passing through this geographic area, Highway 12 is an All-American Road, offering many interesting opportunities for travelers. West of Highway 12, ponderosa pine exists in an open setting with minimal understory. Endemic plant populations are stable and thriving. Arizona willow is largely present in riparian areas. Mexican Spotted Owl habitat is stable and productive. This area has the largest concentration of northern goshawks on the district due to the existing high quality habitat. Lower Bowns Reservoir and Oak Creek offer popular fishing opportunities. The Slick Rock Trail from Happy Valley to Pleasant Creek offers non-motorized recreation opportunities.

STRATEGY

Within important wildlife habitat areas (Larb Hollow, Wildcat and Durfey Reseeds, Dry Bench, and West Dry Bench) there is a diverse dynamic of structural and successional stages with higher levels of sagebrush, grass and forb communities while levels of pinyon and juniper have declined.

Strategy

Coordinate ATV management with the National Park to manage appropriate travel routes. This could include better signs to indicate where Park begins and what restrictions exist. Coordinate with Grand Staircase-Escalante National Monument on horse/foot trail system. Increased trail maintenance (signing, etc) especially along the Slick Rock Trail, is a recreation priority. Additional turnouts on Highway 12 could improve the user experience. Scenery along Highway 12 could be improved through protection and enhancement of aspen stands. The Wildcat Guard Station could be an interpretive site and could function as a site rental.

Vegetation priorities include, maintenance of ponderosa pine stands to create an open setting, continue underburning for forested stands, treatment of pinyon juniper and oak brush to control encroachment below Highway 12, and treatment of forage areas to maintain early seral conditions. The Happy Valley area is a priority for WUI fuels treatments. Mechanical treatment can connect natural fuel breaks. Protect Arizona willow through fencing and livestock management. Continue cooperative relationship with Capital Reef NP to allow livestock trailing from NPS land to NFS land

The Utah Division of Wildlife Resources identifies a number of vital and critical habitats within this geographic area. These vital and critical habitats should be considered when vegetation manipulations are planned within this geographic area:

- Yearlong wild turkey habitat
- Winter and summer mule deer habitat
- Winter elk habitat
- Yearlong blue grouse habitat
- Deer fawning habitat
- Elk calving habitat

Restore or rehabilitate sagebrush, grass, forb communities that have been invaded by pinyon and juniper (Larb Hollow, Wildcat and Durfey Reseeds, Dry Bench, and West Dry Bench) for important wildlife habitat. Reduce the levels of pinyon and juniper that have invaded old chaining areas and reintroduce native sagebrush, grass and forb communities.

STRATEGY

NORTH SLOPE

Acres 36,482	Dominant Vegetation Types Englemann spruce and subalpine fir, pinyon pine and juniper	
Location South of Teasdale, UT	District Fremont River	Ecoregion Utah High Plateau
Landmarks Bullberry Lakes, Bob's Hole, Hickman Pasture		

Setting of Geographic Area

The North Slope geographic area is south of State Highway 24 on the Fremont River RD. The area is on the northern slopes of Boulder Mountain. (see figure xx)

The geographic area is dominated by spruce and fir with pinyon and juniper in the lower elevations. This area provides a mix of motorized and non-motorized recreation opportunities. It is a popular place for dispersed camping and fishing. The area also provides some timber harvest opportunities and big game habitat.

Management Challenges

The unique features of this geographic area which may raise special management concerns include:

- Density of woody species has increased fire risk and reduced extent of historic meadows.
- In some places, group camping has caused resource damage.
- A number of the roads seem to have poor construction and contribute to erosion.
- The northern boundary of the GA has very decadent sagebrush which will require sustained effort to restore or rehabilitate.

Integrated Desired Conditions

The Forest-wide desired conditions capture most of the desired condition for the Geographic Area (GA). Desired conditions more specific to this GA are detailed below.

Recreation opportunities are predominantly dispersed in nature. The Aspen Academy's dispersed camping use is generally not in areas not used by general recreationists. Reservoirs, especially Donkey Reservoir, also have dispersed recreation character. "Pack in/pack out" policies are enforced at all dispersed camping sites. Heavily used dispersed camping areas have developed restroom facilities.

Cottonwood galleries in riparian areas are in population. Reservoir shoreline vegetation is plentiful. Much of the lower elevations are critical winter habitat for deer and elk. This area has an abundance of northern goshawks due to high quality habitat.

Within important wildlife habitat areas (north boundary of GA) there is a diverse dynamic of structural and successional stages with higher levels of sagebrush, grass and forb communities while levels of pinyon and juniper have declined.

STRATEGY

Strategy

Maintenance and improvement of cottonwood galleries and WUI fuel conditions are vegetation priorities for this area. Improvement of reservoir shoreline vegetation could improve scenery and wildlife habitat.

Reconstruct an old reservoir that was breached in conjunction with Utah Division of Wildlife Resources. Increase diversity of habitat conditions. Improve and maintain Boreal toad habitat in the Donkey Creek drainage.

Recreation priorities include improving the Fish Creek Trailhead with restrooms and a redeveloped parking area. Selected areas may need limitations on group size, use of permits, limited numbers of groups, and designated camping sites. Non-motorized trails should be maintained to “horse friendly” conditions. The road into Donkey Reservoir is very popular and receives a high level of use; it is a high priority for a capital improvement project (CIP).

The Utah Division of Wildlife Resources identifies a number of vital and critical habitats within this geographic area. These vital and critical habitats should be considered when vegetation manipulations are planned within this geographic area:

- Yearlong wild turkey habitat
- Winter and summer mule deer habitat
- Winter and summer elk habitat
- Yearlong blue grouse habitat
- Mule deer fawning habitat.

Restore or rehabilitate sagebrush, grass, forb communities that have been invaded by pinyon and juniper (northern slopes of GA) for important wildlife habitat. Reduce the levels of pinyon and juniper that have invaded old chaining areas and reintroduce native sagebrush, grass and forb communities.

Part Three - Design Criteria

Part 3 is the design criteria. The design criteria includes guidelines and a reference to other applicable guidance that the Forest Service uses during project planning and implementation. The other guidance includes applicable Federal laws and regulations, executive orders, Forest Service directives (manuals and handbooks), and local laws and regulations from the state. This version of the draft does not include guidelines. A draft of the guidelines will be made available, in this location, as soon as possible.

STATUTES, REGULATIONS, POLICIES AND AGREEMENTS

This document contains a listing of relevant statutes, regulations, policies and agreements applicable to the Forest Service. This section has been updated to include brief summaries of the statutes, regulations and Executive Orders. Web site locations where the text of the documents can be obtained are also provided where available. Most of the links work, although they change enough that it is difficult to keep up with them. If you cannot get one to work, try deleting off the tail end of the url to get to the main website.

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Federal Statutes

Abandoned Shipwreck Act of 1987

<http://www4.law.cornell.edu/uscode/43/ch39.html>

Provides for appropriate and consistent policies to protect natural resources and habitat areas around shipwrecks, to guarantee recreational exploration of shipwreck sites, and to allow for appropriate public and private sector recovery of shipwrecks consistent with the protection of historical values and the environmental integrity of the shipwrecks and the sites.

Agricultural Research Act, also known as the Bankhead-Jones Act of June 29, 1935
Ch. 338, 49 Stat. 436 (7 U.S.C. 427–427j)

Alaska National Interest Lands Conservation Act of December 2, 1980

<http://www.r7.fws.gov/asm/nilca/toc.html>

Established Conservation System Units in Alaska in order to preserve the scenic and geological values associated with natural landscapes; to provide for the maintenance of sound populations of, and habitat for, wildlife species, including those species dependent on vast relatively undeveloped areas; to preserve in their natural state extensive unaltered arctic tundra, boreal forest, and coastal rainforest ecosystems; to protect the resources related to subsistence needs; to protect and preserve historic and archeological sites, rivers, and lands; to preserve wilderness resource values and related recreational opportunities within large arctic and subarctic wildlands and on freeflowing rivers; and, to maintain opportunities for scientific research in undisturbed ecosystems. This Act also provides direction for the management of Conservation System Units and other public lands in Alaska.

Alaska Native Claims Settlement Act of December 18, 1971, as amended

<http://www4.law.cornell.edu/uscode/43/ch33.html>

Provided for the immediate settlement of all Alaska Native claims against the United States, the State of Alaska, and other persons, that were based on aboriginal right, title, use or occupancy of land or water areas in Alaska.

American Indian Religious Freedom Act of August 11, 1978

http://caselaw.lp.findlaw.com/scripts/ts_search.pl?title=42&sec=1996

Protects and preserves for American Indians their inherent right of freedom to believe, express, and exercise the traditional religions of the American Indian, Eskimo, Aleut, and Native Hawaiians, including but not limited to access to sites, use and possession of sacred objects and the freedom to worship through ceremonial and traditional rites.

Americans with Disabilities Act of 1990

<http://www.usdoj.gov/crt/ada/statute.html>

Provides a clear and comprehensive national mandate for the elimination of discrimination against individuals with disabilities; for clear, strong, consistent, enforceable standards addressing discrimination against individuals with disabilities; to ensure that the federal government plays a central role in enforcing the standards

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established in this Act on behalf of individuals with disabilities; and to invoke the sweep of congressional authority, including the power to enforce the fourteenth amendment and to regulate commerce, in order to address the major areas of discrimination faced by people with disabilities.

Anderson-Mansfield Reforestation and Revegetation Act of October 11, 1949

http://caselaw.lp.findlaw.com/scripts/ts_search.pl?title=16&sec=581j

Provides for the reforestation and revegetation of National Forest lands and other lands under the administration or control of the Forest Service.

Antiquities Act of June 8, 1906

<http://www.cr.nps.gov/local-law/anti1906.htm>

Prevents the appropriation, excavation, injury, or destruction of any historic or prehistoric ruin or monument, or any object of antiquity, situated on lands owned or controlled by the United States without the permission of the Secretary of the Interior having jurisdiction over the lands on which said antiquities are situated; and authorizes the President to declare by public proclamation historic landmarks, historic and prehistoric structures, and other objects of historic or scientific interest that are situated upon lands owned or controlled by the United States to be national monuments, and to reserve as a part thereof parcels of land needed for the proper care and management of the objects to be protected.

Archaeological Resources Protection Act of October 31, 1979, as amended 1988

<http://www2.cr.nps.gov/laws/archprotect.htm>

Enacted to secure the protection of archaeological resources and sites on public and Indian lands and to foster increased cooperation and exchange of information between governmental authorities, the professional archaeological community and private individuals having access to and information related to these resources.

Architectural Barriers Act of 1968

<http://www4.law.cornell.edu/uscode/42/4151.html>

Ensures that standards for the design, construction, and alteration of buildings owned, leased, or funded by the United States are prescribed to insure, wherever possible, that physically handicapped people have ready access to and use of such buildings.

Bankhead-Jones Farm Tenant Act of July 22, 1937

<http://laws.fws.gov/lawsdigest/bankjon.html>

Directed the Secretary of Agriculture to develop a program of land conservation and utilization in order to correct maladjustments in land use and thus assist in such things as control of soil erosion, reforestation, preservation of natural resources, and protection of fish and wildlife.

Cabin User Fee Fairness Act of 2000

http://assembler.law.cornell.edu/usc-cgi/get_external.cgi?type=pubL&target=106-291

Clarke-McNary Act of June 7, 1924

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<http://www.senate.gov/~agriculture/Legislation/Agricultural Law/Forests/cma.pdf>

Authorizes and directs the Secretary of Agriculture, in cooperation with land grant colleges and universities or with other suitable state agencies, to aid farmers through advice, education, demonstrations, or other similar means in establishing, renewing, protecting, and managing wood lots, shelter belts, windbreakers, and other valuable forest growth, and in harvesting, utilizing, and marketing the products thereof. The Act also authorizes the Secretary to accept, on behalf of the United States, title to any land donated by private land owners to assure future timber supplies or for other national forest purposes.

Clean Air Act of August 7, 1977, as amended (1977 and 1990)

<http://www4.law.cornell.edu/uscode/unframed/42/ch85.html>

Enacted to protect and enhance the quality of the Nation's air resources; to initiate and accelerate a national research and development program to achieve the prevention and control of air pollution; to provide technical and financial assistance to state and local governments in connection with the development and execution of their air pollution prevention and control programs; and, to encourage and assist the development and operation of regional air pollution prevention and control programs.

Color of Title Act of December 22, 1928

<http://www4.law.cornell.edu/uscode/43/ch25A.html>

Granted the Secretary of the Interior the authority to issue patents up to 160 acres to claimants that had held a tract of public land in good faith and in peaceful, adverse possession and had made valuable improvements on the land or reduced it to cultivation. The Act reserved the rights to coal and all other minerals contained therein to the United States.

Common Varieties of Mineral Materials Act of July 31, 1947

<http://www4.law.cornell.edu/uscode/30/601.html>

Authorizes the Secretaries of the Interior and Agriculture, under such rules and regulations as they may prescribe, to dispose of mineral materials (including but not limited to common varieties sand, stone, gravel, pumice, pumicite, cinders, and clay) and vegetative materials (including but not limited to yucca, manzanita, mesquite, cactus, and timber or other forest products) on public lands of the United States, if the disposal of such materials is not otherwise expressly authorized by law, is not expressly prohibited by laws of the United States, and would not be detrimental to the public interest.

Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)

http://assembler.law.cornell.edu/uscode/html/uscode42/usc_sec_42_00009601----000-notes.html

Cooperative Forestry Assistance Act of July 1, 1978

<http://www4.law.cornell.edu/uscode/16/2101.html>

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Authorizes the Secretary of Agriculture to assist in the establishment of a coordinated and cooperative federal, state, and local forest stewardship program for the management of non-federal forest lands and forest lands in foreign countries.

Disaster Relief Act of May 22, 1974

<http://www4.law.cornell.edu/uscode/42/ch68.html>

Provides an orderly and continuing means of assistance by the federal government to state and local governments in developing, coordinating, and carrying out their disaster relief programs, and provides federal assistance programs for both public and private losses sustained in disasters.

Eastern Wilderness Act of January 3, 1975

http://caselaw.lp.findlaw.com/scripts/ts_search.pl?title=16&sec=1132

Established Wilderness areas in the eastern United States, proposed several more for Wilderness Study, and authorized the Secretary of Agriculture to acquire, through purchase, by gift, exchange, condemnation, or otherwise such lands, waters, or interests therein as determined necessary or desirable for the purposes of the Act.

Economy Act of June 30, 1932

<http://www4.law.cornell.edu/uscode/31/1535.html>

Authorizes the head of a federal agency or major organizational unit within an agency to obtain goods or services from a major organizational unit within the same agency or another agency if amounts are available; if it is determined to be in the best interest of the United States government; the agency or unit is able to provide or get by contract the ordered goods or services; and the head of the agency decides ordered goods or services cannot be provided as conveniently or cheaply by a commercial enterprise.

Electronic Freedom of Information Act Amendments of 1996

http://assembler.law.cornell.edu/usc-cgi/get_external.cgi?type=pubL&target=104-231

Emergency Flood Prevention (Agricultural Credit Act) Act of August 4, 1978

<http://www4.law.cornell.edu/uscode/16/2201.html>

Authorizes the Secretary of Agriculture to undertake emergency measures for runoff retardation and soil-erosion prevention, in cooperation with land owners and users, as the Secretary deems necessary to safeguard lives and property from floods, drought, and the products of erosion on any watershed whenever fire, flood, or other natural occurrence is causing or has caused a sudden impairment of that watershed.

Emergency Planning and Community Right-To-Know Act of 1986

http://assembler.law.cornell.edu/uscode/html/uscode42/usc_sec_42_00011001----000-notes.html

Endangered Species Act of December 28, 1973

<http://laws.fws.gov/lawsdigest/esact.html>

<http://www4.law.cornell.edu/uscode/16/ch35.html>

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Authorizes the determination and listing of species as endangered and threatened; prohibits unauthorized taking, possession, sale, and transport of endangered species; provides authority to acquire land for the conservation of listed species, using Land and Water Conservation Funds; authorizes establishment of cooperative agreements and grants-in-aid to states that establish and maintain programs for endangered and threatened wildlife and plants; authorizes the assessment of civil and criminal penalties for violating the Act or regulations; and, authorizes the payment of rewards to anyone furnishing information leading to arrest and conviction for any violation of the Act or any regulation issued there under. Section 7 of the Act requires federal agencies to insure that any action authorized, funded or carried out by them is not likely to jeopardize the continued existence of listed species or modify their critical habitat.

Energy Security Act of June 30, 1980

<http://thomas.loc.gov/cgi-bin/bdquery/z?d096:SN00932:@@L|TOM:/bss/d096query.html>

Authorizes the Secretary of Agriculture to make available timber resources of the National Forest System, in accordance with appropriate timber appraisal and sale procedures, for use by biomass energy projects.

Federal Advisory Committee Act of October 6, 1972

http://www.archives.gov/federal_register/public_laws/federal_advisory_committee_act/01.html

Sets standards and uniform procedures to govern the establishment, operation, administration, and duration of advisory committees.

Federal Cave Resources Protection Act of November 18, 1988

<http://laws.fws.gov/lawsdigest/caveres.html>

Established requirements for the management and protection of caves and their resources on federal lands, including allowing land managing agencies to withhold the location of caves from the public, and requiring permits for any removal or collecting activities in caves on federal lands.

Federal Coal Leasing Amendments Act of August 4, 1976

<http://thomas.loc.gov/cgi-bin/bdquery/z?d094:SN00391:@@L|TOM:/bss/d094query.html>

Authorizes the Secretary of the Interior to divide lands, subject to the Mineral Lands Leasing Act, which have been classified for coal leasing into tracts of such size as he finds appropriate and in the public interest and which can be economically extracted, and, in his discretion, upon the request of any qualified applicant or on his own motion, from time to time offer such lands for leasing by competitive bid.

Federal Insecticide, Rodenticide, and Fungicide Act of October 21, 1972

<http://www4.law.cornell.edu/uscode/unframed/7/ch6.html>

Requires the Administrator of the Environmental Protection Agency to prescribe standards for the certification of individuals authorized to use or supervise the use of any

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pesticide that is classified for restricted use; regulates the sale of restricted use pesticides; and provides penalties for the unauthorized use or sale of restricted use pesticides.

Federal Land Policy and Management Act of October 21, 1976

<http://www4.law.cornell.edu/uscode/unframed/43/ch35.html>

Requires that public lands be managed in a manner that will protect the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource, and archeological values; that, where appropriate, will preserve and protect certain public lands in their natural condition; that will provide food and habitat for fish and wildlife and domestic animals; and that will provide for outdoor recreation and human occupancy and use. Also states that the United States shall receive fair market value of the use of the public lands and their resources unless otherwise provided for by law.

Federal Noxious Weed Act of January 3, 1975

<http://laws.fws.gov/lawsdigest/fednox.html>

Authorizes the Secretary of Agriculture to designate plants as noxious weeds by regulation; to prohibit the movement of all such weeds in interstate or foreign commerce except under permit; to inspect, seize and destroy products, and to quarantine areas, if necessary to prevent the spread of such weeds; and to cooperate with other federal, state and local agencies, farmers associations, and private individuals in measures to control, eradicate, prevent, or retard the spread of such weeds.

Federal Power Act of June 10, 1920

<http://laws.fws.gov/lawsdigest/fedpowr.html>

Provides for cooperation between the Federal Energy Regulatory Commission and other federal agencies, including resource agencies, in licensing and relicensing power projects.

Federal-State Cooperation for Soil Conservation Act of December 22, 1944

<http://www4.law.cornell.edu/uscode/33/701-1.html>

Authorized the adoption of eleven watershed improvement programs in various states for the improvement of water runoff, water flow retardation, and soil erosion prevention.

Federal Water Pollution Control Act and Amendments of 1972 (Clean Water Act)

http://caselaw.lp.findlaw.com/scripts/ts_search.pl?title=33&sec=1251

Enacted to restore and maintain the chemical, physical, and ecological integrity of the Nation's waters. Provides for measures to prevent, reduce, and eliminate water pollution; recognizes, preserves, and protects the responsibilities and rights of states to prevent, reduce, and eliminate pollution, and to plan the development and use (including restoration, preservation, and enhancement) of land and water resources; and provides for federal support and aid of research relating to the prevention, reduction, and elimination of pollution, and federal technical services and financial aid to state and interstate agencies and municipalities for the prevention, reduction, and elimination of pollution. Established goals for the elimination of water pollution; required all municipal and industrial wastewater to be treated before being discharged into waterways; increased federal assistance for municipal treatment plant construction; strengthened and

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streamlined enforcement policies; and expanded the federal role while retaining the responsibility of states for day-to-day implementation of the law.

Federal Water Project Recreation Act of July 9, 1965

<http://www4.law.cornell.edu/uscode/unframed/16/4601-12.html>

Requires that recreation and fish and wildlife enhancement opportunities be considered in the planning and development of federal water development.

Fish and Wildlife Conservation Act of September 15, 1960

<http://www4.law.cornell.edu/uscode/unframed/16/670a.html>

Requires the Secretaries of the Interior and Agriculture, in cooperation with state agencies, to plan, develop, maintain, and coordinate programs for the conservation and rehabilitation of wildlife, fish, and game on public lands under their jurisdiction.

Fish and Wildlife Coordination Act of March 10, 1934

<http://laws.fws.gov/lawsdigest/fwcoord.html>

Authorizes the Secretaries of Agriculture and Commerce to provide assistance to and cooperate with other federal and state agencies to protect, rear, stock, and increase the supply of game and fur-bearing animals, as well as to study the effects of domestic sewage, trade wastes, and other polluting substances on wildlife. The Act also authorizes the preparation of plans to protect wildlife resources, the completion of wildlife surveys on public lands, and the acceptance by federal agencies of funds or lands for related purposes provided that land donations receive the consent of the state in which they are located.

Forest Highways Act of August 27, 1958

<http://www4.law.cornell.edu/uscode/unframed/23/205.html>

Requires that funds available for forest development roads and trails be used by the Secretary of Agriculture to pay for the costs of construction and maintenance thereof, including roads and trails on experimental and other areas under Forest Service administration, or for adjacent vehicular parking areas and sanitary, water, and fire control facilities. Authorizes the Secretary of Agriculture to enter into contracts with a state or civil subdivision thereof, and issue such regulations as he deems desirable.

Forest Products Act

May 22, 1928, ch. 678, 45 Stat. 699 (16 U.S.C. 581 et seq.)

Forest and Rangeland Renewable Resources Planning Act of August 17, 1974

<http://www4.law.cornell.edu/uscode/16/ch36.html>

Directs the Secretary of Agriculture to prepare a Renewable Resource Assessment every ten years; to transmit a recommended Renewable Resources Program to the President every five years; to develop, maintain, and, as appropriate, revise land and resource management plans for units of the National Forest System; and to ensure that the development and administration of the resources of the National Forest System are in full accord with the concepts of multiple use and sustained yield.

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Forest Reserve Act (California) of Oct. 1, 1890
ch. 1263, 26 Stat. 650

Forest Reserve Homestead Act of June 11, 1906
ch. 3074, 34 Stat. 233

Freedom of Information Act of November 21, 1974
<http://www4.law.cornell.edu/uscode/5/552.html>
Governs which government records are released to the public either automatically or upon request.

Geothermal Steam Act of December 24, 1970
<http://www4.law.cornell.edu/uscode/30/1001.html>
Authorizes the Secretary of the Interior to issue leases for the development and utilization of geothermal steam and associated geothermal resources in any lands administered by him or by the Department of Agriculture, and to prescribe such rules and regulations, as he deems appropriate to carry out the provisions of the Act.

Government Performance and Results Act (GPRA) of 1993
<http://www4.law.cornell.edu/uscode/5/306.html>
Provides for the development of long-term strategic plans, annual performance plans, and annual performance reports. The Forest Service Strategic Plan provides the national strategic framework for all Forest Service operations and activities.

Granger-Thye Act of April 24, 1950
<http://www4.law.cornell.edu/uscode/16/581i-1.html>
Authorizes the Forest Service to spend appropriated funds on buildings, lookout towers, and other structures on lands owned by states, counties, municipalities, or other political subdivisions, corporations, or individuals; to procure and operate aerial facilities and services for the protection of National Forests; to cooperate with and assist public and private agencies, organizations, institutions, and individuals in performing work on non-Forest land for the administration, protection, improvement, reforestation, and other kinds of work as the Forest Service is authorized to do on Forest land; to deposit sums from timber purchases to cover the costs of disposing of brush and debris; to permit the use of structures under its control; to sell nursery stock; and other purposes.

Healthy Forest Restoration Act of December 3, 2003
<http://www.fs.fed.us/emc/applit/includes/hfr2003.pdf>

Historic Sites Act of 1935
<http://www4.law.cornell.edu/uscode/16/461.html>
Establishes a policy to preserve for public use historic sites, buildings, and objects of national significance for the benefit of the people.

Historic Preservation Act of October 15, 1966
<http://www.cr.nps.gov/local-law/nhpa1966.htm>

DESIGN CRITERIA

Establishes a program for the preservation of additional historic properties throughout the nation, and for other purposes.

Joint Surveys of Watershed Areas Act of September 5, 1962

<http://www4.law.cornell.edu/uscode/16/1009.html>

Authorizes and directs the Secretaries of the Army and Agriculture to make joint investigations and surveys of watershed areas in the United States, Puerto Rico, and the Virgin Islands, and to prepare joint reports setting forth their recommendations for improvements needed for flood prevention, for the conservation, development, utilization, and disposal of water, and for flood control.

Knutson-Vandenberg Act of June 9, 1930

<http://www4.law.cornell.edu/uscode/16/576.html>

Authorizes the Secretary of Agriculture to establish forest tree nurseries; to deposit monies from timber sale purchasers to cover the costs of planting young trees, sowing seed, removing undesirable trees or other growth, and protecting and improving the future productivity of the land; and to furnish seedlings and/or young trees for the replanting of burned-over areas in any National Park.

Land Acquisition Act of March 3, 1925

<http://www.wildrockies.org/appeals/68-575.htm>

<http://www4.law.cornell.edu/uscode/16/ch3.html>

Authorizes the Secretary of Agriculture to purchase land for National Forest headquarters, Ranger Stations, dwellings, or other sites required for the effective performance of the authorized activities of the Forest Service.

Land Acquisition-Declaration of Taking Act of February 26, 1931

http://caselaw.lp.findlaw.com/scripts/ts_search.pl?title=40&sec=258a

Provides for the immediate transfer of land to the United States and for just compensation for such lands.

Land Acquisition – Title Adjustment Act of July 8, 1943

http://caselaw.lp.findlaw.com/scripts/ts_search.pl?title=7&sec=2253

Authorizes the Secretary of Agriculture to execute and deliver title adjustments if, after the acquisition of the land, the title thereto is legally insufficient for the purposes for which the land was acquired or if the land was acquired through mistake, misunderstanding, error, or inadvertence.

Land and Water Conservation Fund Act of September 3, 1964

<http://www4.law.cornell.edu/uscode/16/4601-4.html>

<http://classweb.gmu.edu/jkozlows/lwcfregs.htm>

Authorizes the appropriation of funds for federal assistance to states in planning, acquisition, and development of needed land and water areas and facilities and for the federal acquisition and development of certain lands and other areas for the purposes of preserving, developing, and assuring accessibility to outdoor recreation resources.

DESIGN CRITERIA

Law Enforcement Authority Act of March 3, 1905

http://caselaw.lp.findlaw.com/cascode/uscodes/16/chapters/3/subchapters/i/sections/section_559.html

Authorizes all Forest Service employees to make arrests for the violation of the laws and regulations relating to the national forests.

Leases Around Reservoirs Act of March 3, 1962

<http://www4.law.cornell.edu/uscode/16/460d-2.html>

Authorizes the Secretary of Agriculture to amend any lease with respect to lands under the jurisdiction of the Forest Service providing for the construction, maintenance, and operation of commercial recreational facilities at a federal reservoir project so as to provide for the adjustment of the amount of rental or other consideration payable to the United States under such lease.

Migratory Bird Treaty Act of July 3, 1918

ch. 128, 40 Stat. 755 (16 U.S.C. 703 et seq.)

Migratory Bird Treaty Reform Act of 1998

http://assembler.law.cornell.edu/usc-cgi/get_external.cgi?type=pubL&target=105-312

Mineral Leasing Act of February 25, 1920

<http://ipl.unm.edu/cwl/fedbook/minerall.html>

Provides that the deposits of certain minerals on land owned by the United States shall be subject to lease to citizens of the United States, provided royalties on such deposits are paid to the United States.

Mineral Leasing Act for Acquired Lands Act of August 7, 1947

http://caselaw.lp.findlaw.com/scripts/ts_search.pl?title=30&sec=351

Extended the provisions of the “mineral leasing laws” to those lands previously acquired by the United States for which they had not been extended, and lands thereafter acquired by the United States.

Mineral Resources on Weeks Law Lands Act of March 4, 1917

http://caselaw.lp.findlaw.com/scripts/ts_search.pl?title=16&sec=520

Authorizes the Secretary of Agriculture to permit the prospecting, development, and utilization of the mineral resources of the lands acquired under the Weeks Law.

Mineral Springs Leasing Act of February 28, 1899

http://caselaw.lp.findlaw.com/scripts/ts_search.pl?title=16&sec=495

Authorizes the Secretary of Agriculture to rent or lease to responsible persons suitable spaces and portions of ground near, or adjacent to, mineral, medicinal, or other springs within any National Forest where the public is accustomed to or desires to frequent for health or pleasure.

Mining Claims Rights Restoration Act of August 11, 1955

<http://www4.law.cornell.edu/uscode/30/621.html>

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States that all public lands belonging to the United States which have been withdrawn or reserved for power development or power sites shall be open to entry for location and patent of mining claims and mineral development, subject to certain conditions.

Mining and Minerals Policy Act of December 31, 1970

<http://www4.law.cornell.edu/uscode/30/21a.html>

States that it is the policy of the federal government to foster and encourage the development of economically sound and stable domestic mining, minerals, metal, and mineral reclamation industries; the orderly and economic development of domestic mineral resources, reserves, and reclamation of metals and minerals to help assure satisfaction of industrial, security, and environmental needs; mining, mineral, and metallurgical research to promote the wise and efficient use of our natural and reclaimable mineral resources; and the study and development of methods for the disposal, control, and reclamation of mineral waste products and the reclamation of mined land.

Multiple-Use Sustained-Yield Act of June 12, 1960

<http://ipl.unm.edu/cwl/fedbook/multiu.html>

http://assembler.law.cornell.edu/uscode/html/uscode16/usc_sec_16_00000528----000-notes.html

States that it is the policy of Congress that the national forests are established and shall be administered for outdoor recreation, range, timber, watershed, and wildlife and fish purposes, and authorizes and directs the Secretary of Agriculture to develop and administer the renewable surface resources of the national forests for the multiple use and sustained yield of the products and services obtained therefrom.

National Environmental Education Act of November 16, 1990

<http://ipl.unm.edu/cwl/fedbook/natened.html>

http://assembler.law.cornell.edu/usc-cgi/get_external.cgi?type=pubL&target=101-619

Enacted to establish and support a program of environmental education for students and personnel working with students in schools, institutions of higher education, and related educational facilities, and to encourage postsecondary students to pursue careers related to the environment.

National Environmental Policy Act of January 1, 1970

<http://ceq.eh.doe.gov/nepa/regs/nepa/nepaeqia.htm>

Directs all federal agencies to consider and report the potential environmental impacts of proposed federal actions, and established the Council on Environmental Quality.

National 1990 Farm Bill (title XII – Forest Stewardship Act) Act of November 28, 1990

http://caselaw.lp.findlaw.com/scripts/ts_search.pl?title=16&sec=582a

Directs the Secretary of Agriculture to establish a competitive forestry, natural resources, and environmental grants program, and provides for other research programs.

National Forest-Dependent Rural Communities Economic Diversification Act of 1990

[7 U.S.C. 6601 note](#)

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National Forest Management Act of October 22, 1976

<http://ipl.unm.edu/cwl/fedbook/nfma.html>

http://assembler.law.cornell.edu/uscode/html/uscode16/usc_sec_16_00001600---000-notes.html

The National Forest Management Act reorganized, expanded and otherwise amended the Forest and Rangeland Renewable Resources Planning Act of 1974, which called for the management of renewable resources on National Forest lands. The National Forest Management Act requires the Secretary of Agriculture to assess forest lands, develop a management program based on multiple-use, sustained-yield principles, and implement a resource management plan for each unit of the National Forest System. It is the primary statute governing the administration of National Forests.

National Forest Roads and Trails Act of October 13, 1964

http://www.house.gov/resources/105cong/reports/105_a/roads_.pdf

Authorizes the Secretary of Agriculture to provide for the acquisition, construction, and maintenance of forest development roads within and near the National Forests through the use of appropriated funds, deposits from timber sale purchasers, cooperative financing with other public agencies, or a combination of these methods. The Act also authorizes the Secretary to grant rights-of-way and easements over national forest lands.

National Historic Preservation Act of December 12, 1980 as amended (1980 and 1992)

<http://www4.law.cornell.edu/uscode/16/470.html>

Authorized the federal government to accelerate its historic preservation programs and activities; to give maximum encouragement to agencies and individuals undertaking preservation by private means; and to assist state and local governments and the National Trust for Historic Preservation in the United States to expand and accelerate their historic preservation programs and activities.

National Trails System Act of October 2, 1968

<http://ipl.unm.edu/cwl/fedbook/nattrail.html>

Established a national system of recreation, scenic, and historic trails by designating the initial components of the system and prescribing the methods and standards through which additional components may be added.

National Trails System Act Amendments of 1983

http://assembler.law.cornell.edu/uscode/html/uscode16/usc_sec_16_00001241----000-notes.html

Native American Graves Protection and Repatriation Act of November 16, 1990

<http://www4.law.cornell.edu/uscode/25/3001.html>

Directs that the ownership and control of Native American human remains and objects shall be given to the ancestors of the Native American or to the appropriate Native American tribe.

Occupancy Permits Act of March 4, 1915

[http://www.wy.blm.gov/Information/fai/wynf.0001\(99\).pdf](http://www.wy.blm.gov/Information/fai/wynf.0001(99).pdf)

<http://www.wildrockies.org/appeals/63-293.htm>

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Authorizes the Secretary of Agriculture to permit, under such regulations as he may prescribe, the use and occupancy of suitable areas of land within the National Forests for the purpose of constructing or maintaining hotels, resorts, or other structures necessary or desirable for recreation, public convenience, or safety; to permit the use and occupancy of suitable land for the purpose of constructing or maintaining summer homes; to permit the use and occupancy of suitable land for the purpose of constructing or maintaining buildings, structures, and facilities for industrial or commercial purposes when such use is consistent with other uses of the National Forest; and to permit any state or political subdivision thereof to use or occupy suitable land for the purpose of constructing or maintaining buildings, structures, or facilities necessary or desirable for education or for any other public use or in connection with any other public activity.

Oil and Gas Leasing Reform Act of 1987

<http://thomas.loc.gov/cgi-bin/bdquery/z?d100:HR03545:@@D|TOM:/bss/d100query.html>

Amended the Mineral Lands Leasing Act of 1920 regarding competitive leasing of oil and gas for onshore federal lands. Sets forth guidelines for the promulgation of regulations regarding lease sales, and prohibits the issuance of oil or gas leases upon certain lands allocated or designated as Wilderness areas.

Organic Administration Act of June 4, 1897

http://caselaw.lp.findlaw.com/scripts/ts_search.pl?title=16&sec=473
<http://ipl.unm.edu/cwl/fedbook/fsact.html>

Authorizes the President to modify or revoke any instrument creating a National Forest; states that no National Forest may be established except to improve and protect the forest within its boundaries, for the purpose of securing favorable conditions of water flows, and to furnish a continuous supply of timber for the use and necessities of citizens of the United States. Authorizes the Secretary of Agriculture to promulgate rules and regulations to regulate the use and occupancy of the National Forests.

Petrified Wood Act of September 28, 1962

<http://frwebgate3.access.gpo.gov/cgi-bin/waisgate.cgi?WAISdocID=36872922698+0+0+0&WAISaction=retrieve>

Authorizes the Secretary of Agriculture to promulgate regulations under which limited quantities of petrified wood may be removed from the National Forests.

Pipelines Act of February 25, 1920

<http://www4.law.cornell.edu/uscode/30/185.html>

Authorizes the Secretary of the Interior or appropriate agency head to grant rights-of-way through any federal lands for pipeline purposes for the transportation of oil, natural gas, synthetic liquid or gaseous fuels, or any refined product produced there from to any applicant possessing the qualifications provided in the Act. .

Preservation of Historical and Archaeological Data Act of May 24, 1974

<http://www2.cr.nps.gov/laws/archpreserv.htm>

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Authorizes the Secretary of the Interior to undertake the recovery, protection, and preservation of significant scientific, prehistorical, historical, or archeological data whenever any federal agency finds or is notified that activities in connection with any federal construction project or federally licensed project, activity, or program may cause irreparable loss or destruction of such data.

Public Buildings Cooperative Use Act of 1976

http://caselaw.lp.findlaw.com/casecode/uscodes/40/chapters/12/sections/section_601a.html

Authorizes the federal government to acquire and utilize space in suitable buildings of historic, architectural, or cultural significance, unless use of such space would not prove feasible and prudent compared with available alternatives; to encourage the location of commercial, cultural, educational, and recreational facilities and activities within public buildings; to provide and maintain space, facilities, and activities, to the extent practicable, which encourages public access to and stimulates public pedestrian traffic around, into, and through public buildings, permitting cooperative improvements to and uses of the area between the building and the street, so that such activities complement and supplement commercial, cultural, educational, and recreational resources in the neighborhood of public buildings; and to encourage the public use of public buildings for cultural, educational, and recreational activities.

Public Land Surveys Act of March 3, 1899

<http://www4.law.cornell.edu/uscode/16/488.html>

http://www.lib.duke.edu/forest/usfscoll/publications/1905_Use_Book/092-097.htm

Provides that all standard, meander, township, and section lines of the public land surveys shall be established under the direction and supervision of the Commissioner of the General Land Office, whether the lands to be surveyed are within or without reservations, except that where the exterior boundaries of public forest reservations are required to be coincident with standard, township, or section lines, such boundaries may, if not previously established in the ordinary course of the public land surveys, be established and marked under the supervision of the Director of the United States Geological survey. This act made the surveying of forest-reserve lands identical, in all but the establishment of boundaries, with that of the public domain.

Public Rangelands Improvement Act of October 25, 1978

http://caselaw.lp.findlaw.com/casecode/uscodes/43/chapters/37/sections/section_1901.html

Establishes and reaffirms the national policy and commitment to inventory and identify current public rangeland conditions and trends; manage, maintain and improve the condition of public rangelands so that they become as productive as feasible for all rangeland values in accordance with management objectives and the land use planning process; charge a fee for public grazing use which is equitable; continue the policy of protecting wild free-roaming horses and burros from capture, branding, harassment, or death, while at the same time facilitating the removal and disposal of excess wild free-roaming horses and burros which pose a threat to themselves and their habitat and to other rangeland values.

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Regulatory Flexibility Act of Sept. 19, 1980
5 U.S.C. 601

Rehabilitation Act of 1973, as amended
http://caselaw.lp.findlaw.com/casecode/uscodes/29/chapters/16/miscs/0/sections/section_701.html

States that it is national policy that the federal government plays a leadership role in promoting the employment of individuals with disabilities, and in assisting states and providers of services in fulfilling the aspirations of such individuals with disabilities for meaningful and gainful employment and independent living.

Renewable Resources Extension Act of June 30, 1978
http://caselaw.lp.findlaw.com/casecode/uscodes/16/chapters/36/subchapters/iii/sections/section_1671.html

Authorizes and directs the Secretary of Agriculture, in cooperation with the state Directors of the Cooperative Extension Service programs, to provide educational programs relating to forest and rangeland renewable resources.

Reorganization Plan Numbered 3 of 1946
http://www.access.gpo.gov/uscode/title5a/5a_4_8_.html

Creates the Environmental Protection Agency (EPA), abolishes the Federal Water Quality Administration under the Department of the Interior, and transfers those functions to the EPA.

Research Grants Act of September 6, 1958
<http://laws.fws.gov/lawsdigest/researc.html>

Authorizes the Secretary of the Interior to enter into contracts with educational institutions, public or private agencies or organizations, or persons to conduct scientific or technological research.

Right of Eminent Domain Act of August 1, 1888
<http://www4.law.cornell.edu/uscode/40/258a.html>
<http://www4.law.cornell.edu/uscode/40/257.html>

Grants the Secretary of the Treasury or any other officer of the government who has been authorized to procure real estate for the erection of a building or for other public uses the authority to acquire such real estate by condemnation, provided such acquisition is otherwise authorized by statute.

Rural Development Act of August 30, 1972
<http://www.reeusda.gov/1700/legis/ruraldev.htm>

Enacted to provide multi-state regional agencies, states, counties, cities, multicounty planning and development districts, businesses, industries, Indian tribes on federal and state reservations or other federally recognized Indian tribal groups and others involved with public services and investments in rural areas or that provide or may provide employment in these areas the best available scientific, technical, economic,

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organizational, environmental, and management information and knowledge useful to them, and to assist and encourage them in the interpretation and application of this information to practical problems and needs in rural development.

Safe Drinking Water Amendments of November 18, 1977

<http://thomas.loc.gov/cgi-bin/bdquery/z?d095:SN01528:/TOM:/bss/d095query.html>

Amended the Safe Drinking Water Act to authorize appropriations for research conducted by the Environmental Protection Agency relating to safe drinking water; federal grants to states for public water system supervision programs and underground water source protection programs; and grants to assist special studies relating to the provision of a safe supply of drinking water.

Secure Rural Schools and Community Self-Determination Act of 2000

<http://thomas.loc.gov/cgi-bin/query/D?c106:6:./temp/~c106gaHNvd:>

Through this law the Forest Service gives rural communities the means to build and improve schools, provide road maintenance, emergency services, and conservation programs for their citizens. Thus, communities are no longer dependent on federal timber sales from national forests to improve local schools and roads.

Sikes Act of October 18, 1974

<http://laws.fws.gov/lawsdigest/sikes.html>

<http://www4.law.cornell.edu/uscode/16/670a.html>

Provides for cooperation between the Secretary of Defense and the Secretary of the Interior to provide for conservation and rehabilitation of natural resources on military installations.

Small Tracts Act of January 22, 1983

<http://www4.law.cornell.edu/uscode/16/521e.html>

Authorizes the Secretary of Agriculture to sell, exchange, or interchange by quitclaim deed all right, title and interest, including the mineral estate, of the United States in and to certain lands within the National Forest when the secretary determines it to be in the public interest.

Smokey Bear Act of May 23, 1952

http://caselaw.lp.findlaw.com/casecode/uscodes/18/parts/i/chapters/33/sections/section_711.html

Prohibits the unauthorized use of the “Smokey Bear” character or name.

Soil and Water Resources Conservation Act of November 18, 1977

<http://ipl.unm.edu/cwl/fedbook/soilwate.html>

Provides for a continuing appraisal of the United State’s soil, water and related resources, including fish and wildlife habitats, and a soil and water conservation program to assist landowners and land users in furthering soil and water conservation.

Solid Waste Disposal (Resource Conservation & Recovery Act) Act of October 21, 1976

<http://www4.law.cornell.edu/uscode/42/6901.html>

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Promotes the protection of health and the environment and the conservation of valuable material and energy resources by providing technical and financial assistance to state and local governments and interstate agencies for the improvement of solid waste management techniques.

Stock-Raising Homestead Act of Dec. 29, 1916
ch. 9, 39 Stat. 862 (43 U.S.C. 291 et seq.)

Supplemental National Forest Reforestation Fund Act of September 18, 1972

<http://www4.law.cornell.edu/uscode/16/576c.html>

Directs the Secretary of Agriculture to establish a supplemental national reforestation fund, and states that money transferred to this fund shall be available to the Secretary for the purpose of supplementing programs of tree planting and seeding on National Forest lands determined by the Secretary to be in need of reforestation.

Surface Mining Control and Reclamation Act of August 3, 1977

http://caselaw.lp.findlaw.com/casecode/uscodes/30/chapters/25/subchapters/i/sections/section_1201.html

Authorizes the Secretary of Agriculture to enter into agreements with landowners, providing for land stabilization, erosion, and sediment control, and reclamation through conservation treatment, including measures for the conservation and development of soil, water, woodland, wildlife, and recreation resources, and agricultural productivity of such lands.

Sustained Yield Forest Management Act of March 29, 1944

http://caselaw.lp.findlaw.com/scripts/ts_search.pl?title=16&sec=583

Authorizes the Secretaries of Agriculture and the Interior to establish by formal declaration cooperative sustained-yield units which shall consist of federally owned or administered forest land under their jurisdiction and, in addition thereto land which reasonably may be expected to be made the subject of one or more of the cooperative agreements with private landowners authorized by section 2 of the Act in order to promote the stability of forest industries, of employment, of communities, and of taxable forest wealth through continuous supplies of timber and forest products; and in order to secure the benefits of forests in the maintenance of water supply, regulation of stream flow, prevention of soil erosion, amelioration of climate, and preservation of wildlife.

Telecommunications Act of 1996

http://assembler.law.cornell.edu/usc-cgi/get_external.cgi?type=pubL&target=104-104

Timber Export Act of March 4, 1917

Permits the Secretary of Agriculture to allow timber or other forest products to be cut or removed from a national forest and exported from the state or territory in which that national forest is situated.

Timber Exportation Act of April 12, 1926

<http://www4.law.cornell.edu/uscode/16/617.html>

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Authorizes the exportation of lawfully cut timber from the state or territory where grown if the supply of timber for local use will not be endangered, and authorizes the Secretary to issue rules and regulations to carry out the provisions of the Act.

Title Adjustment Act of April 28, 1930

http://caselaw.lp.findlaw.com/scripts/ts_search.pl?title=43&sec=872

Authorizes the Secretaries of the Interior and Agriculture to execute a quitclaim deed where an application for a conveyance of land has been withdrawn or rejected.

Toxic Substances Control Act of October 11, 1976

http://caselaw.lp.findlaw.com/cascode/uscodes/15/chapters/53/subchapters/i/sections/section_2601.html

Grants the Administrator of the Environmental Protection Agency the authority to regulate chemical substances and mixtures, which present an unreasonable risk of injury to the public health or the environment, and to take action with respect to chemical substances and mixtures, which are imminent hazards.

Transfer Act of February 1, 1905

http://caselaw.lp.findlaw.com/scripts/ts_search.pl?title=16&sec=472

Transferred the management and control of the Forest Reserves from the General Land Office (GLO) in the Department of the Interior to the Bureau of Forestry in the Department of Agriculture.

Twenty-Five Percent Fund Act of May 23, 1908

<http://www.wildrockies.org/appeals/60-136.htm>

Provides that twenty-five percent of all monies received from the sale of timber or other forest products shall be paid to the state in which such forest is located to be expended as the state may prescribe for the benefit of public schools and roads.

Uniform Federal Accessibility Standards U.S. Criminal Code (Title 18 USC Chapter 91 – Public Lands) Act of June 25, 1948

<http://www.wildrockies.org/appeals/80-772.htm>

<http://caselaw.lp.findlaw.com/cascode/uscodes/18/parts/i/chapters/91/toc.html>

Defines the crimes and criminal procedure for crimes committed against public lands.

U.S. Mining Laws (Public Domain Lands) Act of May 10, 1872

<http://www4.law.cornell.edu/uscode/30/22.html>

Provides that all valuable mineral deposits in lands belonging to the United States, both surveyed and unsurveyed, are free and open to exploration and purchase, and the lands in which they are found to occupation and purchase by citizens of the United States and those who have declared their intention to become such, under regulations prescribed by law, and according to the local customs or rules of miners, so far as the same are applicable and not inconsistent with the laws of the United States. There are a number of Acts which modify the mining laws as applied to local areas by prohibiting entry altogether or by limiting or restricting the use which may be made of the surface and the right, title, or interest which may pass through patent.

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Volunteers in the National Forests Act of May 18, 1972

<http://www4.law.cornell.edu/uscode/16/558a.html>

Authorizes the Secretary of Agriculture to recruit, train, and accept without regard to the civil service classification laws, rules, or regulations the services of individuals without compensation as volunteers for or in aid of interpretive functions, visitor services, conservation measures and development, or other activities in and related to areas administered by the Secretary through the Forest Service.

Water Quality Improvement Act of April 3, 1970

<http://laws.fws.gov/lawsdigest/fwatrpo.html>

Amends the prohibitions of oil discharges, authorizes the President to determine quantities of oil which would be harmful to the public health or welfare of the United States; to publish a National Contingency Plan to provide for coordinated action to minimize damage from oil discharges. Requires performance standards for marine sanitation device and authorizes demonstration projects to control acid or other mine pollution, and to control water pollution within the watersheds of the Great Lakes. Requires that applicants for federal permits for activities involving discharges into navigable waters provide state certification that they will not violate applicable water quality standards

Water Resources Planning Act of July 22, 1965

<http://www4.law.cornell.edu/uscode/42/1962.html>

Encourages the conservation, development, and utilization of water and related land resources of the United States on a comprehensive and coordinated basis by the federal government, states, localities, and private enterprises.

Watershed Protection and Flood Prevention Act of August 4, 1954

<http://www4.law.cornell.edu/uscode/16/1001.html>

Establishes policy that the federal government should cooperate with states and their political subdivisions, soil or water conservation districts, flood prevention or control districts, and other local public agencies for the purposes of preventing erosion, floodwater, and sediment damages in the watersheds of the rivers and streams of the United States; furthering the conservation, development, utilization, and disposal of water, and the conservation and utilization of land; and thereby preserving, protecting, and improving the Nation's land and water resources and the quality of the environment.

Weeks Act Status for Certain Lands Act of September 2, 1958

<http://www4.law.cornell.edu/uscode/16/521a.html>

Subjects all lands of the United States within the exterior boundaries of national forests which were or hereafter are acquired for or in connection with the national forests or transferred to the Forest Service for administration and protection substantially in accordance with national forest regulations, policies, and procedures, excepting (a) lands reserved from the public domain or acquired pursuant to laws authorizing the exchange of land or timber reserved from or part of the public domain, and (b) lands within the official limits of towns or cities, notwithstanding the provisions of any other Act, to the

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provisions of the Weeks Act of March 1, 1911 (36 Stat. 961), as amended, and to all laws, rules, and regulations applicable to national forest lands acquired there under.

Weeks Act of March 1, 1911

http://www.house.gov/resources/105cong/reports/105_a/weeks_.pdf

Authorizes the Secretary of Agriculture to purchase lands within the watersheds of navigable streams in order to promote regulation of the flow of navigable streams or for the production of timber, provided the legislature of the state in which the lands are located consents to the acquisition. This law is the primary land acquisition authority for the Forest Service.

Wild Horse Protection Act of September 8, 1959

<http://www4.law.cornell.edu/uscode/18/47.html>

Established the use of a motor vehicle to hunt, for the purpose of capturing or killing, any wild horse, mare, colt, or burro running at large on the public lands. Also prohibits the pollution of watering holes on public lands for the purposes of trapping, killing, wounding, or maiming any of these animals.

Wild Horses and Burros Act of December 15, 1971

<http://www4.law.cornell.edu/uscode/16/1331.html>

Protects wild free-roaming horses and burros from capture, branding, harassment, or death; and states they are to be considered in the area where presently found an integral part of the natural system of the public lands.

Wild and Scenic Rivers Act of October 2, 1968

<http://www4.law.cornell.edu/uscode/16/1271.html>

Instituted a National Wild and Scenic Rivers System by designating the initial components of that system, and by prescribing the methods by which and standards according to which additional components may be added to the system from time to time.

Wilderness Act of September 3, 1964

<http://www4.law.cornell.edu/uscode/16/1131.html>

Established a National Wilderness Preservation System to be composed of federally owned areas designated by Congress as "wilderness areas" and administered for the use and enjoyment of the American people in such manner as will leave them unimpaired for future use and enjoyment as Wilderness. Provides for the protection of these areas, the preservation of their wilderness character, and for the gathering and dissemination of information regarding their use and enjoyment as wilderness. States that no federal lands shall be designated as "wilderness areas" except as provided for in the Act or by a subsequent Act.

Wildlife Game Refuges Act of August 11, 1916

http://caselaw.lp.findlaw.com/scripts/ts_search.pl?title=16&sec=683

Authorizes the President of the United States to set aside lands for the protection of game animals, birds, or fish; and prohibits the hunting, catching, trapping, willful disturbance,

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or killing of any kind of game animal, game or non-game bird, or fish, or the taking of eggs of any such bird on any lands so set aside or in or on the waters thereof.

Wood Residue Utilization Act December 19, 1980

<http://caselaw.lp.findlaw.com/casecode/uscodes/16/chapters/36/subchapters/iv/toc.html>

Enacted to develop, demonstrate, and make available information on feasible methods that have the potential for commercial application to increase and improve utilization in residential, commercial, and industrial or power plant applications of wood residues resulting from timber harvesting and forest protection and management activities occurring on public and private forest lands, and from the manufacture of forest products, including wood pulp.

Woodsy Owl/Smokey Bear Act of June 22, 1974

http://caselaw.lp.findlaw.com/casecode/uscodes/18/parts/i/chapters/33/sections/section_711a.html

Prohibits the unauthorized manufacture, reproduction, or use of the character "Woodsy Owl," the name "Woodsy Owl," or the associated slogan "Give a Hoot, Don't Pollute." Also prohibits the unauthorized manufacture, reproduction, or use of the character "Smokey Bear" or the name "Smokey Bear", or a facsimile or simulation of such character or name.

Youth Conservation Corps Act of August 13, 1970

<http://www4.law.cornell.edu/uscode/16/1701.html>

Establishes a Youth Conservation Corps whom the Secretaries of the Interior or Agriculture may employ without regard to the civil service or classification laws, rules, or regulations for the purpose of developing, preserving, or maintaining the lands and waters of the United States.

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Regulations

33 CFR 323 Permits for Discharges of Dredged or Fill Material into Waters of the United States

<http://www4.law.cornell.edu/cfr/33p323.htm> - 33p323s

This regulation prescribes those special policies, practices and procedures to be followed by the Corps of Engineers in connection with the review of applications for permits to authorize the discharge of dredged or fill material into waters of the United States.

36 CFR 60 National Register of Historic Places

<http://www4.law.cornell.edu/cfr/36p60.htm> - start

Sets forth the procedural requirements for listing properties on the National Register.

36 CFR 63 Determinations of Eligibility for Inclusion in the National Register of Historic Places

<http://www4.law.cornell.edu/cfr/36p63.htm> - start

Developed to assist agencies in identifying and evaluating the eligibility of properties for inclusion in the National Register, and to explain how to request determinations of eligibility.

36 CFR 65 National Historic Landmarks Program

<http://www4.law.cornell.edu/cfr/36p65.htm> - start

Sets forth the criteria for establishing national significance and the procedures used by the Department of the Interior for conducting the National Historic Landmarks Program.

36 CFR 68 The Secretary of the Interior's Standards for Historic Preservation Projects

<http://www4.law.cornell.edu/cfr/36p68.htm> - start

Sets forth standards for the treatment of historic properties containing standards for preservation, rehabilitation, restoration, and reconstruction. These standards apply to all proposed grant-in-aid development projects assisted through the National Historic Preservation Fund.

36 CFR 212 Forest Development Transportation System

<http://www4.law.cornell.edu/cfr/36p212.htm> - start

Sets forth the requirements for the development and administration of the forest development transportation system.

36 CFR 213 Administration Under Bank-Jones Act

<http://www4.law.cornell.edu/cfr/36p213.htm> - start

Sets forth the requirements relating to the designation, administration, and development of National Grasslands.

36 CFR 219 Planning

<http://www4.law.cornell.edu/cfr/36p219.htm> - start

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Sets forth a process for developing, adopting, and revising land and resource management plans for the National Forest System.

36 CFR 221 Timber Management Planning

<http://www4.law.cornell.edu/cfr/36p221.htm> - start

Sets forth the requirements for management plans for National Forest timber resources.

36 CFR 222 Range Management

<http://www4.law.cornell.edu/cfr/36p222.htm> - start

Sets forth the requirements for range management on the National Forests, and for the administration of wild and free-roaming horses and burros and their environment.

36 CFR 223 Sale and Disposal of National Forest System Timber

<http://www4.law.cornell.edu/cfr/36p223.htm> - start

Sets forth the requirements relating to the sale and disposal of National Forest System timber.

36 CFR 228 Minerals

<http://www4.law.cornell.edu/cfr/36p228.htm> - start

Sets forth the rules and procedures through which use of the surface of National Forest System lands, in connection with mining and mineral operations, shall be conducted so as to minimize adverse environmental impacts on National Forest System surface resources.

36 CFR 241 Fish and Wildlife

<http://www4.law.cornell.edu/cfr/36p241.htm> - start

Sets forth the rules and procedures relating to the management, conservation, and protection of fish and wildlife resources on National Forest System lands.

36 CFR 251 Land Uses

<http://www4.law.cornell.edu/cfr/36p251.htm> - start

Sets forth the rules and procedures relating to the use and occupancy of National Forest System lands.

36 CFR 254 Landownership Adjustments

<http://www4.law.cornell.edu/cfr/36p254.htm> - start

Sets forth the rules and procedures relating to exchange and conveyance of National Forest System lands.

36 CFR 261 Prohibitions

<http://www4.law.cornell.edu/cfr/36p261.htm> - start

Sets forth the general prohibitions relating to the use and occupancy of National Forest System lands.

36 CFR 291 Occupancy and Use of Developed Sites and Areas of Concentrated Public Use

<http://www4.law.cornell.edu/cfr/36p291.htm> - start

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Provides for fees charged for the occupancy and use of developed sites and areas of concentrated public use.

36 CFR 292 National Recreation Areas

<http://www4.law.cornell.edu/cfr/36p292.htm> - start

Sets forth the requirements for the administration of National Recreation Areas.

36 CFR 293 Wilderness-Primitive Areas

<http://www4.law.cornell.edu/cfr/36p293.htm> - start

Sets forth the requirements for the administration of Wilderness and primitive areas.

36 CFR 294 Special Areas

<http://www4.law.cornell.edu/cfr/36p294.htm> - start

Sets forth the requirements for designation of special recreation areas.

36 CFR 295 Use of Motor Vehicles Off Forest Development Road

<http://www4.law.cornell.edu/cfr/36p295.htm> - start

Sets forth the rules and procedures relating to the administrative designation and location of specific areas and trails of National Forest System lands on which the use of motor vehicles traveling off of National Forest development roads is allowed.

36 CFR 296 Protection of Archaeological Resources

<http://www4.law.cornell.edu/cfr/36p296.htm> - start

Implements the provisions of the Archaeological Resources Protection Act.

36 CFR 297 Wild and Scenic Rivers

<http://www4.law.cornell.edu/cfr/36p297.htm> - start

Sets forth the rules and procedures relating to federal assistance in the construction of water resources projects affecting Wild and Scenic Rivers or study rivers on lands administered by the Secretary of Agriculture.

36 CFR 800 Protection of Historic Properties

<http://www4.law.cornell.edu/cfr/36p800.htm> - start

Sets forth the provisions for the administration of the National Historic Preservation Act.

40 CFR 121-135 Water Programs

<http://www4.law.cornell.edu/cfr/40p121.htm> - 40p121s

Sets forth the provisions for the administration of water programs including: State certification of activities requiring a federal license or permit; EPA administered permit programs; State program requirements; procedures for decision making; criteria and standards for the National Pollutant Discharge Elimination System; toxic pollutant effluent standards; water quality planning and management; water quality standards; water quality guidance for the Great Lakes System; secondary treatment regulation; and, prior notice of citizen suits. Title 40 (Protection of Environment), Chapter 1 (Environmental Protection Agency), subchapter D (Water Programs).

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40 CFR 1500 Council on Environmental Quality

<http://www4.law.cornell.edu/cfr/40p1500.htm> - start

Council on Environmental Quality regulations implementing the National Environmental Policy Act.

43 CFR 10 Native American Graves Protection and Repatriation Act
Regulations

<http://www4.law.cornell.edu/cfr/43p10.htm> - 43p10s

Implements the provisions of the Native American Graves Protection and Repatriation Act of 1990.

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Executive Orders

EO 12898 Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations

<http://www.fs.fed.us/land/envjust.html>

Addresses Environmental Justice in minority and low-income populations and is designed to focus Federal attention on the environmental and human health conditions in minority communities and low-income communities with the goal of achieving environmental justice. The order is also intended to promote nondiscrimination in Federal programs substantially affecting human health and the environment, and to provide minority communities and low-income communities access to public information on, and an opportunity for public participation in, matters relating to human health or the environment.

EO 11593 Protection and Enhancement of Cultural Environment

<http://archnet.asu.edu/archnet/topical/crm/usdocs/execord.htm>

States that the federal government shall provide leadership in preserving, restoring and maintaining the historic and cultural environment of the Nation, and that federal agencies shall administer the cultural properties under their control in a spirit of stewardship and trusteeship for future generations; initiate measures necessary to direct their policies, plans and programs in such a way that federally owned sites, structures, and objects of historical, architectural or archaeological significance are preserved, restored and maintained for the inspiration and benefit of the people; and, in consultation with the Advisory Council on Historic Preservation, institute procedures to assure that federal plans and programs contribute to the preservation and enhancement of non-federally owned sites, structures and objects of historical, architectural or archaeological significance.

EO 11990 Protection of Wetlands

<http://hydra.gsa.gov/pbs/pt/call-in/eo11990.htm>

Requires each federal agency to provide leadership and to take action to minimize the destruction, loss or degradation of wetlands, and to preserve and enhance the natural and beneficial values of wetlands in carrying out the agency's responsibilities for acquiring, managing, and disposing of federal lands and facilities; providing federally undertaken, financed, or assisted construction and improvements; and conducting federal activities and programs affecting land use, including but not limited to water and related land resources planning, regulating, and licensing activities.

EO 11644 (amended by EO 11989) Use of Off-Road Vehicles

<http://www.archives.gov/fedreg/codific/eos/e11644.html>

Establishes policies and provides for procedures that ensure that the use of offroad vehicles on public lands will be controlled and directed so as to protect the resources of those lands, to promote the safety of all users of those lands, and to minimize conflicts among the various uses of those lands.

EO 11988 Floodplain Management

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<http://hydra.gsa.gov/pbs/pt/call-in/eo11988.htm>

Requires each federal agency to provide leadership and to take action to reduce the risk of flood loss, to minimize the impact of floods on human safety, health and welfare, and to restore and preserve the natural and beneficial values served by floodplains in carrying out its responsibilities for acquiring, managing, and disposing of federal lands and facilities; providing federally undertaken, financed, or assisted construction and improvements; and conducting federal activities and programs affecting land use, including but not limited to water and related land resources planning, regulating, and licensing activities.

EO 12088 Federal Compliance with Pollution Control Standards

(Amended by E.O. 12580, January 23, 1987)

<http://hydra.gsa.gov/pbs/pt/call-in/eo12088.htm>

Delegates responsibility to the head of each executive agency for ensuring that all necessary actions are taken for the prevention, control, and abatement of environmental pollution. This order gives the Environmental Protection Agency authority to conduct reviews and inspections to monitor Federal facility compliance with pollution control standards.

EO 12372 Intergovernmental Review of Federal Programs

<http://www.nara.gov/fedreg/codific/eos/e12372.html>

Issued to foster an intergovernmental partnership and a strengthened federalism by relying on State and local government coordination and review of proposed Federal financial assistance and direct federal development. It requires federal agencies to provide opportunities for consultation by elected officials of those State and local governments that would provide the non-federal funds for, or that would be directly affected by, proposed federal financial assistance or direct federal development. It also allows states to develop their own process or refine existing processes for state and local elected officials to use in reviewing and coordinating proposed federal financial assistance and direct federal development.

EO 12862 Setting Customer Service Standards

<http://www.usbr.gov/laws/eo12862.html>

<http://govinfo.library.unt.edu/npr/library/direct/orders/2222.html>

Requires all executive departments and agencies that provide significant services directly to the public to provide those services in a manner that seeks to meet the customer service standard established in the Order, and requires agencies to identify customers, survey customers and front-line employees to determine the kind and quality of services needed and barriers to those services, benchmark customer service performance against the best in the business, make information, services, and complaint systems easily accessible, and provide a means to address customer complaints.

EO 13007 Indian Sacred Sites

<http://hydra.gsa.gov/pbs/pt/call-in/eo13007.htm>

Requires each executive branch agency with statutory or administrative responsibility for the management of federal lands, to the extent practicable, permitted by law, and not

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clearly inconsistent with essential agency functions, to accommodate access to and ceremonial use of Indian sacred sites by Indian religious practitioners and to avoid adversely affecting the physical integrity of such sacred sites. Where appropriate, agencies shall maintain the confidentiality of sacred sites.

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Forest Service Directives

<http://www.fs.fed.us/im/directives/>

The following is a partial listing of national and regional Forest Service policies relevant to this Land and Resource Management Plan. A complete listing can be found in Forest Service Manuals and Forest Service Handbooks. Together, these are known as the Forest Service Directives System. The Directives System is the primary basis for the management and control of all internal programs and serves as the primary source of administrative direction for Forest Service employees. The system sets forth legal authorities, management objectives, policies, responsibilities, delegations, standards, procedures, and other instructions.

The Forest Service Manual (FSM) contains legal authorities, goals, objectives, policies, responsibilities, instructions, and the necessary guidance to plan and execute assigned programs and activities. Forest Service Handbooks (FSH) are directives that provide instructions and guidance on how to proceed with a specialized phase of a program or activity.

Handbooks either are based on a part of the Manual or they incorporate external directives.

Here follows a listing of the Forest Service Manual system and referenced Handbooks:

Forest Service Manuals

1010 Laws, Regulations, and Orders

http://www.fs.fed.us/im/directives/dughtml/fsm_1000.html

1020 Forest Service Mission

http://www.fs.fed.us/im/directives/dughtml/fsm_1000.html

1500 External Relations

http://www.fs.fed.us/im/directives/dughtml/fsm_1000.html

1600 Information Resources

http://www.fs.fed.us/im/directives/dughtml/fsm_1000.html

1900 Planning

http://www.fs.fed.us/im/directives/dughtml/fsm_1000.html

2060 Eco-system Classification, Interpretation, and Application

http://www.fs.fed.us/im/directives/dughtml/fsm_2000.html

2070 Biological Diversity (Reserved)

http://www.fs.fed.us/im/directives/dughtml/fsm_2000.html

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2200 Range Management

http://www.fs.fed.us/im/directives/dughtml/fsm_2000.html

2300 Recreation, Wilderness, and Related Resource Management

http://www.fs.fed.us/im/directives/dughtml/fsm_2000.html

2400 Timber Management

http://www.fs.fed.us/im/directives/dughtml/fsm_2000.html

2500 Watershed and Air Management

http://www.fs.fed.us/im/directives/dughtml/fsm_2000.html

2600 Wildlife, Fish, and Sensitive Plant Habitat Management

http://www.fs.fed.us/im/directives/dughtml/fsm_2000.html

2700 Special Uses Management

http://www.fs.fed.us/im/directives/dughtml/fsm_2000.html

2800 Minerals and Geology

http://www.fs.fed.us/im/directives/dughtml/fsm_2000.html

3400 Forest Pest Management

http://www.fs.fed.us/im/directives/dughtml/fsm_3000.html

5100 Fire Management

http://www.fs.fed.us/im/directives/dughtml/fsm_5000.html

5400 Land Ownership

http://www.fs.fed.us/im/directives/dughtml/fsm_5000.html

7400 Public Health and Pollution Control Facilities

http://www.fs.fed.us/im/directives/dughtml/fsm_7000.html

7500 Water Storage and Transportation

http://www.fs.fed.us/im/directives/dughtml/fsm_7000.html

7700 Transportation System

http://www.fs.fed.us/im/directives/dughtml/fsm_7000.html

Forest Service Handbooks

1000 Code

1609.11 Publication Management Handbook

<http://fswb.wo.fs.fed.us/directives/fsh/1609.11/>

1909.12 Land and Resource Management Planning Handbook

<http://fswb.wo.fs.fed.us/directives/fsh/1909.12/>

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1909.15 Environmental Policy and Procedures Handbook

<http://fsweb.wo.fs.fed.us/directives/fsh/1909.15/>

1909.17 Economic and Social Analysis Handbook

<http://fsweb.wo.fs.fed.us/directives/fsh/1909.17/>

2000 Code

2409.13 Timber Resource Planning Handbook

<http://fsweb.wo.fs.fed.us/directives/fsh/2409.13/>

2509.13 Burned-Area Emergency Rehabilitation Handbook

<http://fsweb.wo.fs.fed.us/directives/fsh/2509.13/>

2509.16 Water Resource Inventory Handbook

<http://fsweb.wo.fs.fed.us/directives/fsh/2509.16/>

2509.18 Soil Management Handbook

<http://fsweb.wo.fs.fed.us/directives/fsh/2509.18/>

2609.13 Wildlife and Fisheries Program Management Handbook

<http://fsweb.wo.fs.fed.us/directives/fsh/2609.13/>

2709.11 - Special Uses Handbook

<http://fsweb.wo.fs.fed.us/directives/fsh/2709.11/>

2709.12 - Road Rights-of-Way Grants Handbook

<http://fsweb.wo.fs.fed.us/directives/fsh/2709.12/>

2709.15 - Hydroelectric Handbook

<http://fsweb.wo.fs.fed.us/directives/fsh/2709.15/>

5000 Code

5109.19 Fire Management Analysis and Planning Handbook

<http://fsweb.wo.fs.fed.us/directives/fsh/5109.19/>

7000 Code

7709.55 Transportation Planning Handbook

<http://fsweb.wo.fs.fed.us/directives/fsh/7709.55/>

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State and Local Laws and Regulations

Utah Code -- Title 19 -- Environmental Quality Code

<http://www.le.state.ut.us/~code/TITLE19/TITLE19.htm>

Utah Code -- Title 23 -- Wildlife Resources Code of Utah

<http://www.le.state.ut.us/~code/TITLE23/TITLE23.htm>

Utah Code -- Title 40 -- Mines and Mining

<http://www.le.state.ut.us/~code/TITLE40/TITLE40.htm>

Utah Code -- Title 69 -- Telegraphic and Telephonic Transactions

<http://www.le.state.ut.us/~code/TITLE69/TITLE69.htm>

Utah Code - Title 73 - Water and Irrigation

<http://www.le.state.ut.us/~code/TITLE73/TITLE73.htm>

Utah Division of Drinking Water - Laws, Rules and Guidance

<http://www.drinkingwater.utah.gov/rules.htm>

Appendix A - Bibliography

Specific levels of mature and old structure within Englemann spruce/subalpine fir and other conifer plant communities come from recommendations by the Northern Goshawk Scientific Committee. The Dixie and Fishlake National Forests amended forest plans in March 2000 to adopt the goshawk guidelines.

Reynolds, Richard T.; Graham, Russell T.; Reiser, M. Hildegard; and others. 1992. Management recommendations for the northern goshawk in the southwestern United States. Gen. Tech. Rep. RM-217. Ft. Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Forest and Range Experiment Station. 90p.

USDA Forest Service. 2000. Decision Notice and Environmental Assessment. Utah Northern Goshawk Project. USDA Forest Service. Intermountain Region. Signed March 14, 2000 By Jack A. Blackwell, Regional Forester.

Specific aspen structure, age, and species composition conditions are based upon research efforts conducted in the Intermountain Region and some on Monroe Mountain of the Fishlake National Forest.

Campbell, Jr., Robert B.; and Bartos, Dale L. Aspen ecosystems: objectives for sustaining biodiversity (pgs 299-307). IN: Shepperd, W.D.; Binkley, D.; Bartos, D.L.; Stohlgren, T.J.; and Eskey, Lane G., compilers. 2001. Sustaining aspen in western landscapes: symposium proceedings; 13-15 June 2000; Grand Junction, CO. Proceedings P-18. Ft. Collins, CO; U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. 460p.

Pinyon/juniper occupies some 7.5 million acres in Utah. Of these acres almost 70% are less than 150 years old. This indicates a substantial portion of pinyon/juniper expansion has occurred since Euro-American settlement.

O'Brien, Renee A. 1999. Comprehensive inventory of Utah's forest resources, 1993. Resource Bulletin RMRS-RB-1. Ogden, UT: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. 105p.

Intermountain Region

Properly Functioning Condition, January 7, 2000 Version. Rapid Assessment Process. Intermountain Region, R 4 Regional Office. Ogden, UT.

USDA, NRCS. 2004. The PLANTS Database, Version 3.5. (<http://plants.usda.gov>). National Plant Data Center, Baton Rouge, LA. 70874-4490.

USDA, Forest Service. 2004. Fire Effects Information System (FEIS). (<http://www.fs.fed.us/database/feis>)

APPENDIX A

- Pendleton, R.L.; Pendleton, B.K.; Howard, G.L.; and Warren, S.D. Effects of biological soil crusts on seedling growth and mineral content of four semiarid herbaceous plant species. IN: Hild, Ann L.; Shaw, Nancy L.; Meyer, Susan E.; Booth, D. Terrance; McArthur, E. Durant, comps. 2004. Seed and soil dynamics in shrubland ecosystems: proceedings; 2002 August 12-16; Laramie, WY. Proceedings RMRS-P-31. Ogden, UT. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. Pgs 131-133.
- Niwa, Christine G.; Peck, Robert W.; and Torgersen, Torolf R. 2001. Soil, litter, and coarse woody debris habitats for arthropods in eastern Oregon and Washington. Northwest Science, Vol. 75, Special Issue, 2001, pgs 141-148.
- Graham, Russell T.; Rodrigues, Ronald L.; Paulin, Kathleen M.; Player, Rodney L.; Heap, Arlene P.; Williams, Richard. 1999. The northern goshawk in Utah: habitat assessment and management recommendations. Gen. Tech. Rep. RMRS-GTR-22. Ogden, UT: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. 48p.
- USDA Forest Service. 2000. Decision Notice and Environmental Assessment. Utah Northern Goshawk Project. U.S. Department of Agriculture, Forest Service, Intermountain Region. Signed March 14, 2000 by Jack A. Blackwell, Regional Forester. (Utah Goshawk Amendment)
- USDA Forest Service, Region 4, 2000. Utah Fire Amendment Environmental Assessment for Ashley National Forest, Dixie National Forest, Fishlake National Forest, Manti-La Sal National Forest, Unita National Forest, and Wasatch-Cache National Forest. Responsible Officials: Bert Kulesza, Ashley National Forest; Mary Wagner, Dixie National Forest; Rob D. Mrowka, Fishlake National Forest; Elaine J. Zieroth, Manti-La Sal National Forest; Peter W. Karp, Unita National Forest; and Bernie Weingardt, Wasatch-Cache National Forest. Dated October 25, 2000. (Utah Fire Amendment)
- Wells, Philip V. 1960. Physiognomic integration of vegetation on the Pine Valley Mountains in southwestern Utah. Ecology, V. 41, No. 3 (July 1960), pgs. 553-556.

Appendix B - Glossary

GENERAL DEFINITIONS

Desired Conditions – the social, economic, and ecological attributes toward which management of the land and resources of the plan area is to be directed. Desired conditions are neither commitments nor final decisions approving projects and activities. Desired conditions may be achievable only over a period longer than the 15 years covered by the plan. [planning rule slightly modified]

Geographic Area (GA) – A geographic division of the forest within each ranger district that is subject to the forest-wide vision and strategy, which may have additional management concerns, desired conditions, and strategies.

Guideline - provide information and guidance for the design of projects and activities to help achieve objectives and desired conditions. Guidelines are not commitments or final decisions approving projects and activities. Guidelines should provide the recommended technical and scientific specifications to be used in the design of projects and activities to contribute to the achievement of desired conditions and objectives. [from planning rule]

Integrated Desired Conditions – Forest-wide desired conditions integrated with Geographic Area specific desired conditions.

Management Challenges – Trends or condition which impacts the range of management decision for achieving desired conditions

Objective – concise projections of intended outcomes of projects and activities to contribute to maintenance or achievement of desired conditions. Objectives are measurable and timespecific, but are neither commitments nor final decisions approving projects and activities. Application of objectives is the same as applied under the 1982 planning rule.

Risks – Reasons for uncertainty in performance expectations.

Setting – The current conditions on the forest which give context to management activities.

Special areas – areas within the NFS designated for their unique or special characteristics. These areas include wilderness, wild and scenic river corridors, and research natural areas. Some of these areas are statutorily designated. Other areas may be designated through plan development, amendment, revision, or through a separate administrative process with an appropriate NEPA process.

Strategy – Management practices which support achievement of the desired condition and objectives.

APPENDIX B

Suitability of Areas– Criteria or map that describes what conditions make a area suitable for a particular use. The identification of the general suitability of an area in an NFS unit for a variety of uses. Areas may be identified as generally suitable for uses that are compatible with desired conditions and objectives for that area.