

## Part One: Vision Setting

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## Part One: Vision Setting

### 1. Introduction

This section of the Dixie and Fishlake National Forests' Proposed Land Management Plan provides a brief description of the Forests, including descriptions of features, weather, wildlife, recreation opportunities, and historic sites. The descriptions are not intended to be comprehensive. Additional information can be found in the *Draft Comprehensive Evaluation Report Summary: Highlights of Key Conditions and Trends* (USDA 2006c).

This section of the plan also includes a discussion of the distinctive roles of the Forests and the contributions the Forests make to the local area, state, region, and Nation. This section highlights what is unique, special, and outstanding about the Forests. Finally, this section describes some of the major management challenges that will confront Forest managers over the next planning period. In most cases, the Forest Service will have little or no control over these major challenges; however, the challenges will influence future management. The entire Setting section is intended to outline the context in which future management will occur.

### 2. Setting

The Dixie National Forest is the largest of the six national forests in Utah, covering almost two million acres and stretching for over 200 miles. The Forest is located in Garfield, Iron, Kane, Piute, Wayne, and Washington counties. There are four ranger districts on the Forest: Cedar City, headquartered in Cedar City; Escalante, headquartered in Escalante; Pine Valley, headquartered in St. George; and Powell, headquartered in Panguitch. The Supervisor's Office is collocated with the Cedar City Ranger District in Cedar City.

Interstate 15 (I-15) runs along the western edge of most of the Dixie National Forest, with only the Pine Valley Ranger District located west of I-15. State Highway 89 runs north and south through the middle of the Forest. State Highway 12, designated as an All-American Road for its outstanding scenery, runs through much of the Forest's eastern portion. The Forest is adjacent to Zion, Bryce Canyon, and Capitol Reef national parks, and Cedar Breaks National Monument, all administered by the National Park Service. The Forest is also adjacent to Grand Staircase-Escalante National Monument, administered by the Bureau of Land Management (BLM). Many Utah State Parks are located near the Forest, as are other lands managed by the BLM.

In March 2006 the Teasdale Ranger District on the Dixie National Forest and the Loa Ranger District on the Fishlake National Forest were consolidated into the Fremont River Ranger District. This new ranger district is administered by the Fishlake National Forest though the area that was the Teasdale Ranger District remains part of the Dixie National Forest. Throughout the remainder of this document, all lands administered as part of the new Fremont River Ranger District are included under discussions of the Fishlake National Forest and are counted as Fishlake acreage as the Fishlake is now responsible for their management.

The Fishlake National Forest is located in southcentral Utah. The Forest encompasses 1.5 million acres in Beaver, Garfield, Iron, Juab, Millard, Piute, Sanpete, Sevier, and Wayne counties. There are four ranger districts on the Forest: Beaver, headquartered in Beaver; Fremont River, headquartered in Loa; Fillmore, headquartered in Fillmore; and Richfield, headquartered in Richfield. The Supervisor's Office is collocated with the Richfield Ranger District in Richfield.

Interstate 70 (I-70) runs through the middle of the Fishlake National Forest and I-15 runs along its west side. State Highway 89 also runs north and south through the middle of the Forest. The Fishlake National Forest shares boundaries with public lands managed by the BLM and is bordered on the east by Capitol Reef National Park.

Both Forests are shown on the *Dixie and Fishlake National Forests – Vicinity Map* located on page 1a-11.

## **2.1. Vegetative, Hydrological, and Geological Features**

The variety of vegetation on the Dixie and Fishlake National Forests is reflective of the Forests' soils, climatic patterns, disturbance histories, and elevations. The lower and drier slopes are dominated by pinyon and juniper mixed with sagebrush and interspersed with an occasional meadow or riparian zone. On the Dixie, ponderosa pine appears at the mid elevations as moisture increases; on the Fishlake, Douglas-fir and white fir appear at mid elevations. Higher elevation areas are dominated by aspen mixed with Engelmann spruce and subalpine fir. In the fall, gold and red leaves can be seen as thousands of acres of aspen and mountain brush 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 their species composition. Bristlecone pine, one of the oldest living organisms on the planet, is endemic to the Dixie. On the Fishlake, bristlecone pine is only known to exist on Thousand Lake Mountain.

The current distribution of vegetation on the Forests is constantly changing. Natural disturbances including fire and insects have affected vegetation composition. Today many of these natural disturbance processes are not functioning as they have in the past. For example, spruce and subalpine fir is encroaching on, and in some cases replacing, aspen stands; pinyon and juniper have invaded grass, forb, and sagebrush areas; and sagebrush areas have reduced grass and forb components.

Water is especially important in the semi-arid climate of the region. The mountains and plateaus of the Forests are important for capturing, storing, and releasing water to the surrounding valleys. Ecological resources such as riparian and wetland areas, streams, aquatic species, wildlife, and vegetation are all dependent on these critical water resources. In addition, many local communities obtain culinary and agricultural water from sources located and developed within the Forests' boundaries.

Average annual precipitation ranges from 8 inches in the lower elevations to over 36 inches in the higher mountain ranges. The majority of this precipitation occurs in the winter and spring months primarily as snow. During this time, moisture is associated with frontal systems from the Pacific Ocean. In the mid to late summer months monsoonal air masses from the Gulf of California and the Gulf of Mexico can cause intense summer thunderstorms. These monsoonal storms can create hazardous flash floods in narrow canyons, and can have significant impacts to various resources. Peak stream flows generally occur in the spring or early summer as a result of melting snowpacks, but high flows can also be produced by localized summer thunderstorms.

Geographically, the Dixie and Fishlake National Forests straddle the divide between the Great Basin and the Colorado Plateau. This transition zone is comprised of a mix of high mountain ranges and plateau lands, sometimes referred to as the Utah High Plateaus. The Sevier River watershed trends south to north, cutting a wide swath through the heart of both Forests. Several broad, north-south trending valleys separate the Markagunt Plateau on the west and the Sevier Plateau on the east. Elevations vary from 2,800 feet near St. George on the Dixie to 12,169 at Delano Peak on the Fishlake. Boulder Mountain is one of the largest timbered high elevation plateaus in the U.S.

## **2.2. Wildlife**

The Dixie and Fishlake National Forests support a variety of terrestrial and aquatic wildlife species that contribute to ecosystem function in a wide array of habitats and settings. The Forests provide habitat for numerous game species and provide ample opportunities for wildlife viewing. The many lakes, reservoirs, and streams support an active sport fishery.

The Forests contribute toward meeting recovery goals for several threatened and endangered species. These species are listed in the *Draft Comprehensive Evaluation Report Summary: Highlights of Key Conditions and Trends* (USDA 2006c).

## **2.3. Recreation**

Both Forests provide a variety of developed and dispersed recreation opportunities. There are many areas that accommodate hiking, horseback riding, off-highway vehicle (OHV) use, camping, picnicking, biking, over-snow vehicle use, cross-country and downhill skiing, fishing, hunting, and viewing scenery. Mountain bikers, hikers, OHV enthusiasts, and horseback riders will all find trails to suit their interests.

On the Dixie National Forest, there are two trails designated as National Recreation Trails: the Cascade Falls Trail in the Virgin River headwaters and the Whipple Trail in the Pine Valley Wilderness Area. The Dixie has about 1,300 miles of hiking trails. The Pine Valley Mountain, Box-Death Hollow, and Ashdown Gorge wilderness areas comprise approximately 83,000 acres, and contain 143 miles of trail.

On the Fishlake National Forest, there are also two trails designated as National Recreation Trails: the Skyline Trail in the Tushar Mountains and the Lakeshore Trail along Fish Lake. The Paiute ATV Trail is comprised of approximately 850 miles of designated routes that wind over three mountain ranges, and includes side trails to local communities. The trail system is a combination of roads open to use by OHVs and trails wide enough for all-terrain vehicles (ATVs). Full-size four-wheel drive vehicles can use the road portions of this designated travel route. The Fishlake also provides nearly 1,000 miles of non-motorized trails that offer a variety of hiking, backpacking, and horseback opportunities.

The Great Western Trail crosses a portion of both Forests on its way to the Mexican border from Canada. The trail accommodates vehicle, horse, and foot traffic, and motorized travel on certain segments.

Forest campgrounds offer opportunities for family and group camping. Campgrounds on the Dixie National Forest range in size from 6 to 98 campsites, while on the Fishlake they range in size from 7 to 68 campsites. Dispersed camping is also available throughout much of both Forests.

## **2.4. Historic and Cultural Sites**

The lands now designated as the Dixie and Fishlake National Forests have been used by humans with a rich and diverse cultural history for over 10,000 years. 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, petroglyphs and pictographs, and ceremonial sites of the Paleo-Indian, Archaic, Fremont, Ancestral Puebloan (Anasazi), and Ute and Paiute cultures.

Historic sites dating from the immigration of the European cultures into the area in the 1800s to the more recent past include sawmills, mines, homesteads, ranches, corrals, recreation facilities, Forest Service administrative sites, campgrounds, Civilian Conservation Corps (CCC) camps, and numerous roads and trails throughout both Forests.

### 3. Roles and Contributions of the Forests

The Dixie and Fishlake National Forests are managed with a multiple-use philosophy, the same philosophy that governs the National Forest System as a whole. As such the Forests contribute a wide variety of opportunities and settings. However, there is no expectation, nor is it possible, to provide all opportunities on all acres. The Dixie and Fishlake National Forests have unique and special roles and contributions to the National Forest System.

As a part of the world-renowned landscapes of southern Utah, the Dixie National Forest provides a scenic backdrop and serves as a gateway to surrounding national parks and monuments. The Forest is marked by extreme landform contrast ranging from low elevation Mojave Desert scrub, to desert mountains, to red rock canyons, to high-elevation plateaus and lakes. Several highways and trails provide access through the Forest and provide ready access to unique natural highlights of the landscape.

Among the Dixie National Forest's vast natural resources, the Paunsaugunt mule deer herd is known for producing outstanding trophy deer.

Some visitors to the Dixie National Forest find a relative sense of solitude in the high plateaus and any one of the three wildernesses areas. In summer, visitors can find respite from the desert heat and the noise and stress of urban and suburban communities. In the winter, Brian Head Resort attracts recreation visitors interested in downhill and cross-country skiing, and the Duck Creek Recreation Area provides over-snow vehicle opportunities.

The Fishlake National Forest is known for its extensive aspen forests 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. Motorized recreation events on the Forest such as the Rocky Mountain ATV Jamboree attract visitors from across the Nation. These settings have also made group camping and family reunions popular activities. In addition to these opportunities, the Fishlake National Forest still offers opportunities for solitude and non-motorized experiences.

The outstanding ecological features of the Fishlake National Forest are important to humans, plants, wildlife, and aquatic species. The Tushar Mountains are the third highest mountain range in Utah and their upper elevations are characterized by a unique alpine meadow habitat. The Tushar Mountains also have the southernmost occurrence of 13 different Arctic plants (Taye 1995).

The Fishlake National Forest provides habitat to support trophy elk populations on Monroe Mountain and in the Pahvant Range.

Many of the rivers and creeks throughout both Forests provide habitat for endemic trout populations, including Bonneville and Colorado River cutthroat trout. These waterways also provide excellent, diverse sport-fishing opportunities. In addition to supporting wildlife biodiversity, these water resources provide culinary water to adjacent communities.

Many visitors drive through the Dixie and Fishlake National Forests. Some drive for pleasure while others seek to relax and view the scenery and wildlife. Interpretation of the unique natural, cultural, and historical settings occurs at facilities along the scenic highways to enhance visitors' experiences. Many visitors hike, fish, hunt, mountain bike, camp, ski, and ride OHVs. National scenic highways and byways provide access through many areas of both Forests. Other popular travelways include national recreation trails and ATV routes.

## **4. Forest-wide Management Challenges**

This section highlights the most pressing challenges in management of the Dixie and Fishlake National Forests. The health of the Forests depends on our ability to reconcile these challenges to forest and community sustainability. The challenges listed here are included within the Four Threats facing the Nation's national forests and grasslands. Forest Service Chief Dale Bosworth has identified these threats as fire and fuels, invasive species, loss of open space, and unmanaged recreation.

### **4.1. Changes in Ecological Conditions**

#### **4.1.1. Vegetation**

Fire suppression, livestock grazing, and vegetation treatments contribute to changing vegetation conditions over time. Compounded with other changes in the Forests' ecosystems, such as introduction of invasive species, shifts in regional land use patterns, and drought cycles, numerous challenges to vegetative health and diversity have emerged. These challenges include:

- Vegetation communities that are considered to be at a high range of departure from properly functioning condition,
- Introduction and spread of noxious weeds and other invasive plants,
- Increased risk of uncharacteristic fires,
- Increased risk of uncharacteristic insect and disease outbreaks,
- Vegetation communities that have been converted to other vegetation types,
- Replacement of native plant communities,
- Vegetation and structural changes to riparian ecosystems, and
- Competition for available forage between domestic and wild ungulates.

The distribution and health of aspen stands, willow communities, and cottonwood galleries has significantly declined due to the lack of disturbance and persistent browse

pressure. Dense pinyon and juniper stands have displaced sagebrush and now occupy a larger percentage of the landscape than they did historically. Rare and endemic plant habitats such as tall forb communities, rock garden communities, and bristlecone pine stands face threats. Some of these threats include displacement by non-native invasive species, uncharacteristic fire impacts, or introduction of non-native diseases such as white pine blister rust.

#### 4.1.2. Climate Change

Many scientists believe that increasing concentrations of atmospheric carbon are leading to long-term climate change. Climate change can influence species distributions and the duration, frequency, and intensity of forest disturbances such as fire, insects, disease, drought, and storms. Climate change could also change the ecology of species through physiological changes, reproductive biological changes, and habitat changes. Predictions of changes at the forest-level would, at best, be highly speculative; however, the possibility that historic ranges of variability may not be applicable for the future does add an additional degree of uncertainty to future management.

### 4.2. Changes in Social Conditions

#### 4.2.1. Demographics

Population growth and migration in the western U.S. have increased demands on both Forests. Increased visitor use of the Forests is putting increasing pressure on the landscapes, wildlife, and vegetation that depend on these lands. Local use of the Forests has also increased; however, much of the new use has come from growing population centers such as Las Vegas, Nevada, and the Wasatch Front in Utah. In addition to the increased use of the Forests, 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 Forests has increased concerns about wildland urban interface fire risks and encroachment on key wildlife habitats.

An increasing number of visitors (local, regional, and national) rely on the Forests for recreation opportunities and resources in ways that are not always compatible with one another. The increased popularity of motorized recreation has generated use conflicts with those seeking non-motorized opportunities.

#### 4.2.2. Economics

The Forests' resources generate a variety of economic activities (including food and fiber production, mineral production, and recreation) that contribute to the sustainability of communities. Sometimes these activities have conflicted with resource goals related to wildlife, watershed protection, and vegetation. The challenge is to adapt

management in a way that continues to provide economic opportunities and sustains the ecosystem.

#### 4.2.3. Water

The Dixie and Fishlake National Forests are located in the heart of the arid Interior West. Demographic changes will only increase the demand for more water and better quality water. Water is essential to many of the ecological resources the Forests manage, as well as the social and economic opportunities the Forests provide. It will be a continuing challenge to retain sufficient water for healthy watersheds, streams, aquatic species, wildlife, and vegetation, while also providing water for the needs of local communities and traditional rural activities.

#### 4.2.4. Technology

Technological advances have changed the way people recreate on the Forests and the day-to-day activities of visitors. These changes have altered the way people might impact the Forests. Changes in motorized technology have increased the ability of humans and machines to go to remote places. Larger and more powerful OHVs and over-snow vehicles are now available. The advent and popularity of cell phones has created additional demand for electronic sites. Technology is constantly changing. It is a challenge for the Forests to address the demands that new and unforeseen advances in technology may bring.

Dixie and Fishlake National Forests – Vicinity Map (vicinity.pdf)

- JPEG (xx KB)
- PDF (xx KB)