

I-70 Mountain Corridor PEIS Recreation Resources Technical Report
August 2010

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Section 1. Introduction and Background

This *I-70 Mountain Corridor PEIS Recreation Resources Technical Report* (CDOT, August 2010) supports the information contained in **Chapter 3, Sections 3.12 and 3.14** of the *I-70 Mountain Corridor PEIS* (CDOT, 2010). It identifies

- Methods used to identify recreation resources and determine potential impacts of alternatives
- Coordination with local, state, and federal agencies
- Description of the recreation resources in the Corridor
- Consequences of the Action Alternatives evaluated in the *I-70 Mountain Corridor PEIS*
- Considerations for Tier 2 processes
- Proposed mitigation for recreation resources

1.1 Regulatory Overview

In addition to the National Environmental Policy Act (NEPA), other laws and regulations applicable to recreation resources include Section 6(f) of the Land and Water Conservation Fund Act (36 Code of Federal Regulations [CFR] 59) and Section 4(f) of the U.S. Department of Transportation Act of 1966 (23 CFR 774 and 49 USC 303). Section 6(f) protects recreational lands planned, acquired, or developed with Land and Water Conservation Funds. Section 4(f) protects significant publicly-owned public parks, recreation areas, and wildlife and waterfowl refuge; see **Section 3.14**, Section 4(f) Discussion, of the *I-70 Mountain Corridor PEIS* (CDOT, 2010), for the analysis of effects under Section 4(f).

1.2 Background/Major Issues

Recreation and Tourism and the Corridor Economy.

Tourism is the second largest industry in Colorado in terms of jobs. In 2007, 28 million visitors to Colorado spent \$9.8 billion in tourism-related expenditures (*Colorado Travel Year 2007*, Longwoods International). Tourism jobs within counties along the Corridor account for a higher percentage of total jobs than anywhere else in the state.

Recreational Travel. Recreational travel is the most predominant contributor to peak I-70 traffic, especially during summer and winter weekends. Existing traffic during the ski season is characterized by congestion that noticeably affects local Corridor travel, suppresses the number of skier visits, and affects the tourism economy. As a result, Action Alternatives would have the potential to affect recreation use in the Corridor. Such effects might include suppressed, relief of suppressed, or induced recreation visitation depending on the associated alternative travel characteristics.

Recreation Issues

- Recreation sites within the Corridor are important destination areas for the state of Colorado and the nation.
- Several areas of national significance (Aspen, Vail, Eagles Nest and Ptarmigan Wilderness Areas, Continental Divide National Scenic Trail) are accessed by the Corridor.
- Fifteen major ski areas and resorts are accessed from the Corridor (out of 26 ski resorts statewide).
- White River National Forest and Arapaho and Roosevelt National Forests are among the top 10 most highly visited forests in the nation.
- Direct access to the Corridor area from Denver International and Eagle County airports contributes to the Corridor-area recreation sites being major destinations of travelers around the US and abroad.

Management of Recreational Use. Many concerns were expressed in public and agency meetings regarding the potential for improved or increased mobility on I-70 to cause a higher number of visitors on public lands resulting in a deterioration of resources and visitor experiences. These possible impacts are of particular concern to public land managers (such as Bureau of Land Management, Arapahoe and Roosevelt National Forests, and White River National Forest).

1.3 Methodology and Data Sources

Recreation resource information was collected for all federally managed lands and from all counties and municipalities within the Corridor through letters, phone calls, and meetings with local planners. Planning organizations included the Glenwood Springs District of the Bureau of Land Management, the White River National Forest, and the Arapahoe and Roosevelt National Forests; Garfield, Eagle, Summit, Clear Creek, and Jefferson counties; and municipalities directly adjacent to I-70. Data collected included:

- Federal lands management plans
- Open space and recreation plans
- Geographic Information System (GIS) databases

Agency coordination was initiated during the early scoping process and continued through the Project Leadership Team early in 2009 to update the inventory of recreation resources. This was followed by initial letters to 33 agencies in February and follow-up letters to 24 agencies in May. In addition to this formal communication, ongoing email and phone communication and meetings have occurred with individual jurisdictions resulting in a final inventory of recreation resources for the update.

See the *I-70 Mountain Corridor PEIS Section 4(f) Technical Report* (CDOT, August 2010) for copies of all correspondence.

The plans and data received were then reviewed to help define recreation resources within the Corridor. While an inventory of recreation resources was conducted within a 6-mile-wide zone (3 miles on either side) centered on I-70, a more detailed account of site amenity and function was completed for those sites in close proximity to alternatives. Additional coordination occurred with US Forest Service (USFS), county, and municipal planners to further describe the amenities and function of specific sites. USFS recreation planners from both the White River National Forest and Arapahoe and Roosevelt National Forests provided forest visitation projections and were involved in the development of methodology for analyzing the indirect effects on recreation resources for potential suppression or inducement of recreation use associated with Action Alternatives.

Specific issues related to recreation resources include the potential for encroachment on or disruption of parks, recreation areas, trails, and ski areas. Action Alternatives would also offer recreational benefits in the form of improved access to recreational activities. That is, by reducing congestion on I-70, more people may take advantage of recreation opportunities in the Corridor, and current recreation participants may engage in these activities more often. Improvements to transportation capacity on I-70 might accommodate any suppressed or latent trips, and, perhaps, induce new recreational trips.

The Colorado Department of Transportation coordinated with staff at Corridor counties and municipalities, the Bureau of Land Management, the United States Forest Service, and the Colorado Division of Wildlife to discuss management priorities and concerns about impacts to recreation resources in the Corridor. The United States Forest Service expressed particular concern about indirect impacts of increased access and induced growth on the White River National Forest and Arapaho and Roosevelt National Forests due to capacity improvements to the I-70 highway. Many United States Forest Service facilities already experience visitor use levels at or near practical capacity on summer weekends, and the forests lack adequate resources to maintain existing facilities or add new ones. The United States Forest Service stated that the White River National Forest and Arapaho and Roosevelt National Forests cannot accommodate additional visitation likely to result from capacity improvements on the I-70 highway, but that visitation via transit trips could be better managed than dispersed highway trips. Appendix B contains a letter from the United States Forest Service expressing their opinion that visitation of recreational areas by transit could be better managed than dispersed highway trips. The Environmental Protection Agency also voiced concern that additional visitation and growth affect the sustainability of recreation resources.

Methodology for Collecting and Updating Data

Data were originally collected to characterize Corridor recreational resources during the time period 1999 to 2003. During this time frame, the United States Forest Service recreation planners were contacted to provide future year projections of recreation use. Contact was made again in 2009 and the previously prepared projections were determined to be still valid. All jurisdictions were contacted in 2009 also and **Table 4** includes an updated inventory of recreational resources and properties.

United States Forest Service planners provided forest visitation projections, including ski area visitation, for year 2020 for the White River National Forest and year 2010 for the Arapaho and Roosevelt National Forests. The Colorado Department of Transportation extrapolated these projections to 2025, the original planning horizon for this study. Although the planning horizon has been extended to 2035, year 2035 recreation visitor days were not estimated. The United States Forest Service has not updated their visitor projections since year 2000, and extrapolation to year 2035 would not yield significantly different trends or change the results of the analysis. Therefore, the indirect effects analysis estimates recreation impacts that occur in the year 2025.

Direct Impacts Assessment

The Colorado Department of Transportation analyzed direct impacts to recreation sites and Section 6(f) resources using GIS overlays of the alternative footprints on recreation sites. Forest land visitation estimates were used as an indicator of overall indirect impacts on recreation resources accessed by the I-70 highway.

The project footprint used to assess direct impacts includes the physical footprint of the alternatives, plus an additional 30 feet on each side. The 30 feet includes a 15-foot construction disturbance zone and an additional 15-foot sensitivity zone. Alternative designs at Tier 1 are conceptual. While the Action Alternatives provide detail appropriate for a first tier assessment, these techniques compare Action Alternatives and relative project impacts using consistent assumptions. This level of detail is too general to reflect final resource-related impacts for specific alternatives, but uses this broad scale of design impacts and environmental resource descriptions to show a relative comparison of impacts rather than actual numbers of impacts.

Indirect Impacts Methodology

The potential for Action Alternatives to result in an increase or a decrease in visitation to forest lands is presented using the methodology described in **Appendix A**, Indirect Effects Methodology. Although many additional factors ultimately affect recreational patterns (such as forest service management, the national economy, technology, and user preference), this methodology focuses on transportation (specifically I-70) impacts. The following factors have been taken into consideration:

- Both developed and dispersed recreation uses on White River National Forests and Arapahoe and Roosevelt National Forests lands
- Winter and summer division of major recreation activities and forest destinations
- Forest service projections for increased recreational visitation, independent of Action Alternatives
- Skier visits and winter and summer Recreation Visitor Days (extrapolated based on USFS projections)
- Residential (in-Corridor) and nonresidential (out-of-Corridor) use levels
- Qualitative effects on general recreation activities from Action Alternatives (based on discussions with USFS planners)
- USFS goals and objectives related to management of recreation resources (desire to increase recreation use and ability to maintain and manage)

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Indirect impacts on recreation resources are evaluated based on predicted increased/decreased national forest destination trips (in relation to USFS projections) to White River National Forest and Arapahoe and Roosevelt National Forests by project alternative. The detailed methodology is presented in **Appendix A**. The evaluation is generally based on the following analysis components in relation to projected 2025 forest visitation:

- Increase/decrease in nonresident (out-of-Corridor) visitation: based on possible induced/suppressed forest destination trips (travel demand model) by project alternative.
- Increase in resident (in-Corridor) forest destination trips: based on possible induced growth (see **Section 3.9**, Social and Economic Values) by project alternative.

Impacts on winter and summer visitation (winter and summer RVDs and skier visits) are described in terms of changes in winter and summer forest destination trips. As previously discussed, the term “RVD” is a forest service indicator that describes the type of activity and time period of use. Downhill skiing is the predominant winter forest use activity. Skier visitation is generally reported as “skier visits” (based on ticket sales), not RVDs. Winter and summer RVDs (2000 and 2025) were estimated based on summarized major recreation category data from Arapahoe and Roosevelt National Forests and White River National Forest and assumptions provided in **Appendix A**.

1.4 Study Area

The study area comprised recreation resources within three miles on either side of the I-70 highway. The indirect impacts analysis included I-70 Mountain Corridor districts of the White River National Forest and Arapaho and Roosevelt National Forests. The lead agencies collected recreation resource information from Corridor counties and municipalities, the U.S. Bureau of Land Management, and the United States Forest Service. Data gathered include federal land management plans, open space and recreation plans, and geographic information system (GIS) databases. National Park Service and Colorado State Parks supplied information for the inventory of Section 6(f) resources and the U.S. Department of the Interior, Office of Environmental Compliance provided supplemental information.

Section 2. Affected Environment

2.1 Historical Influences

The earliest recreation uses of the Corridor can be traced to the early nineteenth century, before the Gold Rush of 1859. During this initial period, European and eastern travelers and sportsmen came to the Rocky Mountains to hunt, fish, and observe the Rocky Mountain landscape, beginning a pattern that has continued to the present. By the early twentieth century, as Denver outdoor recreation in the Corridor evolved into day trips or weekend outings. New recreation entities, such as the “Denver Mountain Parks,” included facilities like Lookout Mountain Park. Eventually, the City and County of Denver acquired more than 13,000 acres in 22 mountain parks. This trend was later reinforced when Jefferson County and other local governments began to acquire open space lands, many along the Corridor, especially in the Corridor’s eastern reaches.

As early as the 1910s and 1920s, Denverites were driving to ski slopes on the outskirts of town, such as ones along the Corridor near Mount Vernon Canyon. World War II had a profound effect on the emerging ski industry. Camp Hale, outside Minturn, was used as a training camp for the 10th Mountain Division. After the end of World War II, veterans of the 10th Mountain Division became ski coaches, ski instructors, and recreation directors at many Colorado resorts. Others went on to develop Vail and Aspen as nationally recognized ski destinations. During the late 1950s and into the 1960s and beyond, more and more US residents sought the backcountry for all types of recreation, such as hiking, camping, and other activities. The presence of better air and highway access, especially in the Corridor, helped this rapid growth of skiing and other winter and summer sports (see **Section 3.9**, Social and Economic Values, of the *I-70 Mountain Corridor PEIS*, (CDOT, 2010) for a discussion of Corridor growth in relation to the construction of I-70). As described in the following discussions of recreation on forest and county lands, the importance of recreation throughout the Corridor has continued to intensify along with increases in local and regional population. In the year 2000, Colorado was ranked as number one (16.9 percent of the national total) in the nation for overnight ski trips (Longwoods International, 2001).

2.2 Trends in Recreational Activities and Management

Effects of the Recession on Colorado Recreation

The economy of Colorado, like that of the nation, has experienced rising unemployment and falling Gross Domestic Product (GDP) and personal incomes since 2008.

The University of Colorado (UC) Leeds School of Business projects that economic declines in Colorado will last anywhere from the last half of 2009 to the end of the first quarter of 2010 (UC 2009). The economic forecasts project a zero percent growth rate through at least the end of 2009, and perhaps through 2010, but indications are that following the flat growth, the economy will again begin to grow (UC 2009).

The tourism industry plays a vital role in the Corridor, providing more jobs and personal income than any other industry. But after four years of strong economic activity and employment growth, the outlook for this sector in 2010 is uncertain. Tourism, leisure, and hospitality are especially vulnerable to economic uncertainty because the sector involves discretionary spending.

The industry has been hit hard by the economic slowdown. While travel, leisure, and hospitality activity will not stop, past economic crises have shown that travel behaviors differ in uncertain economic times compared to more stable periods. Travelers spend less even when they do take a trip.

Colorado’s aggressive advertising and marketing program will partially mitigate this projected decline in the state’s leisure tourism activity, as it will continue to stimulate additional consumer interest in visiting Colorado. Also, tourism as an industry is quite resilient, and while it shrinks a little in difficult times, it is

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historically one of the first areas of the economy to bounce back and resume growth when times improve (UC, 2009).

Colorado Ski Country USA reported that skier and snowboarder visits during the 2008–2009 season were down 5.5 percent from the 2007 to 2008 season and that percentage matched declines in many business sectors during the current economic downturn. However, the state’s ski resorts had a 2.5 percent increase in visits by Front Range residents, and sales for season passes for the 2009–2010 ski season are up (Colorado Ski Country USA, 2009).

The long-term outlook for tourism in Colorado is bright. Trends in the Colorado economy through to 2035, while possibly dampened by the severity of the current downturn, will tend to be in line with those projected in this Technical Report (US, 2009).

Trends Identified by Longwoods International Travel Year 2008 Final Report (August 2009)

Longwoods International made the following observations on Colorado travel in 2008:

- *Overnight travel to Colorado softened in 2008, declining 2% from a record level in 2007.*
- *A total of 23.4 million domestic U.S. vacationers visited Colorado on overnight trips in 2008, 2% fewer than the year before.*
- *This was due mainly to a decline in people on marketable leisure trips, which fell by 4% from 13.5 million to 12.9 million during 2008. The 2008 number is still the second highest number of marketable visitors the state has attracted, after the record setting 2007 total.*
- *In contrast, visits to friends and relatives in Colorado remained stable at 10.5 million trips.*
- *Despite the huge national drop-off in business travel, Colorado was fortunate enough to remain flat, attracting as many business travelers in 2008 as in 2007, at 4 million visitors.*
- *Compensating for the decline in overnight trips, day trips to and within Colorado totaled climbed by 8% from 21.5 million in 2007 to 23.2 million in 2008.*

Table 1 indicates the growth in most of the key recreation segments experienced between 2003 and 2008. Also shown is the decrease in recreation visitation to Colorado between 2007 and 2008, generally reflecting national trends and resulting from the economic downturn.

Table 1. Number of Visitors to Colorado in Core Overnight Travel Segments

	2003*	2007	2008	% Change 2003 to 2008	% Change 2007 to 2008
Touring trips	2,575,000	2,910,000	2,740,000	6%	-6%
Outdoor trips	2,560,000	2,670,000	2,540,000	-1%	-5%
Special event trips	1,650,000	2,100,000	1,990,000	21%	-5%
Ski trips	1,480,000	1,800,000	1,700,000	15%	-6%
Combined business-pleasure trips	910,000	1,510,000	1,430,000	57%	-5%
City trips	540,000	1,030,000	1,190,000	120%	16%
Casino	485,000	730,000	660,000	36%	-10%
Country resort trips	325,000	460,000	460,000	42%	0%

**Longwoods Colorado Visitors Study 2003*

Longwoods International made the following observations on longer term trends in the Colorado recreation industry:

- *The ski market has been relatively flat in terms of growth until 2008, which saw substantial snow in the eastern markets in the early part of the year. Some states like New York, California, and Utah siphoned off some of Colorado’s commanding lead in market share in 2008.*
- *Colorado barely retained its lead as the nation’s top ski destination in 2008, as rivals California, New York, and Utah gained market share at Colorado’s expense. Colorado still retained an 18.3% market share, slightly better than nearest competitor California.*
- *The touring vacation market has been softening as gas prices rise. The return to more normal fuel prices should help this segment in the coming year.*
- *Likely because of the fuel prices, city trips have shown strong growth over the past few years, and Colorado’s main city Denver seems to be riding this crest.*
- *The softness in other trip segments for Colorado generally parallels the national trends, including outdoor, special event, casino, resort, and combined business-pleasure.*

The National Survey on Recreation and the Environment (NSRE) 2000, published by USFS, indicates that the continuing growth in outdoor recreation outstrips population growth rates. To effectively evaluate outdoor recreation trends, the NSRE examined activities within each state. The 2008 Statewide Comprehensive Outdoor Recreation Plan (SCORP) includes summaries of NRSE information, as well as data from Colorado State Parks and US Fish and Wildlife Service (USFWS) surveys. Highlights of Colorado recreational activity trends according to the SCORP are described in **Table 2**.

Table 2. Statewide Comprehensive Outdoor Recreation Plan Data

2008 SCORP Update
94% of all Coloradans engage in outdoor recreation (BLM: A Recreation and Visitor Services Strategy). More than 75 percent of state residents participate in outdoor recreation activities on a weekly basis. People most often participate in walking for pleasure, family gatherings, visiting nature centers, and attending outdoor sports events.
Recreationists in Colorado generally favor land-based activities over water resource-based and snow and ice-based activities. Participants in land-based activities also increased the most (53%) between 1995 and 2006.
The most popular water-based activities in Colorado are freshwater fishing and swimming in an outdoor pool, with 37% of residents participating. The state’s third most popular water-based activity is swimming in lakes and streams and soaking in hot springs (36%) followed closely by boating (34%).
The most popular snow or ice-based activity is downhill skiing, followed by sledding, snowboarding, and snowmobiling.
Walking for pleasure, family gatherings, viewing/photographing natural scenery, gardening or landscaping, visiting nature centers, picnicking, outdoor sports events, driving for pleasure, and wildlife viewing engage the highest percentage of the population.
Ascents of “fourteeners” have roughly tripled since the early 1990s. At least 500,000 people ascend these mountains across the state every year.
Since 1991, when Colorado State Parks first began managing the OHV Registration Program, registrations have increased 154% to 131,000.
Recreation participation rates are increasing faster than the rate of population growth.
Of the 8 states within the USFWS Mountain—Prairie Region, Colorado attracts the most anglers and hunters.
Coloradans enjoy an active lifestyle and often pursue more than one outdoor activity. Trail-related activities are the most popular outdoor pursuits among Coloradans, and more than 1/3 of residents bicycle and watch wildlife.
More than 75% of Coloradans participate in outdoor recreation activities on a weekly basis. On average, residents use trails, parks and open spaces approximately 1.5 times per week.
Wildlife festivals are gaining popularity in Colorado, with thousands of participants enjoying the Monte Vista Crane Festival, High Plains Snow Goose Festival, and many other events throughout the state.

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Recreation use is becoming more popular and diverse due to changes in technology (USDA 2004). This is supported by the fact that in 1970, mountain bikes, all-terrain vehicles (ATVs), snowmobile mountain recreation, fourteenner climbing, and paragliding did not exist to any significant degree. In addition, while sports like snowshoeing, rock climbing, and kayaking were relatively uncommon in 1970, they are now common recreation activities. According to a Longwoods International Travel Study (2001), Colorado is ranked first in the nation for overnight ski trips, at 16.9 percent of total trips to US ski areas.

2.3 Recreation Resources Jurisdictions and Level of Visitation

This section documents the level of recreation visitation on federally managed lands, key differences among these jurisdictions, and associated land management challenges. This section also addresses recreation resources on county and municipal lands and the role of recreation and tourism within each county. Publicly owned public parks, recreation areas, and wildlife and waterfowl refuges of national, state, or local significance are protected under Federal Highway Administration's Section 4(f) as amended and codified in the US Department of Transportation Act of 1966, 49 USC 303 (c). **Section 3.14**, Section 4(f) Discussion of the *I-70 Mountain Corridor PEIS* (CDOT, 2010), examines the recreation properties eligible for protection under 4(f).

Bureau of Land Management

While BLM lands constitute a major component of the land area throughout the Corridor, USFS lands (White River National Forest and Arapahoe and Roosevelt National Forests) receive most of the recreation use in the region, especially by nonlocal visitors. Recreation activities that generate the most use on BLM lands within the Corridor include hunting, fishing, and off-road vehicle driving. The BLM also manages whitewater rafting recreation areas along the Upper Colorado River. Designated recreation sites located on BLM lands within the inventory area are illustrated on **Map 1** through **Map 4**, provided in Section 6, Resource Maps, of this Technical Report. More than 300,000 people visited the Glenwood Springs District of the BLM in 2002.

Nearly 5.8 million visitors were recorded at 17 Bureau of Land Management field offices in Colorado in 2006, a 14 percent increase from 2002. The Glenwood Springs Field Office received almost 1.4 million visitors in 2006, making it the most popular field office statewide (SCORP 2008).

White River National Forest

The White River National Forest was established in 1891 and includes 750,000 acres of wilderness (including the nation's largest elk herd), more than 2,400 miles of system roads, and more than 2,100 miles of system trails. White River National Forest lands within the Corridor contain high elevation and rugged lands; they house the Beaver Creek, Copper Mountain, and Vail resorts, as well as nine other ski areas and the Eagles Nest and Ptarmigan Peak Wilderness Areas. White River National Forest lands include many easily accessible trails, forest roads, recreation sites, picnic areas, and campgrounds.

Recreational Use

In September 2008, the White River National Forest published its Supplemental Draft Environmental Impact Statement: White River National Forest Travel Management Plan for Eagle, Garfield, Gunnison, Mesa, Moffat, Pitkin, Rio Blanco, Routt, and Summit Counties, Colorado:

http://www.fs.fed.us/r2/whiteriver/projects/travel_management/index.shtml. The purpose of the Travel Management Plan is to identify the transportation system with the goal of balancing the physical, biological, and social values of the forest.

In 2007, estimated National Forest Visits to the White River National Forest are 9.1 million (National Visitor Use Monitoring Results now updated to financial year 2007 for the White River National Forest).

The White River National Forest receives a high level of both summer and winter recreational use: more than 8.9 million people visited the White River National Forest in 1997. Projected increases in regional and local population are anticipated to continue to increase demand on White River National Forest recreation resources (White River National Forest FEIS, 2002). Communities neighboring or near the White River National Forest include New Castle, Rifle, Meeker, Silt, Glenwood Springs, Gypsum, Eagle, Basalt, Edwards, Avon, Snowmass Village, Vail, Minturn, Aspen, Carbondale, Breckenridge, Dillon, Frisco, and Silverthorne. Population increases of these local communities have resulted in a shift in visitor profile from one dominated by regional visitation to one of heavy and increasing local visitation. This trend is expected to continue until local communities reach buildout or community planning or infrastructure constraints begin to restrict population growth.

Predominant recreation activities on the White River National Forest include downhill and cross-country skiing, snowshoeing, camping, auto travel, walking and hiking, big game hunting, fishing, sightseeing, mountain biking, and snowmobiling. Winter activities in the area of Vail Pass, especially increasing snowmobile recreation, have created White River National Forest management concerns.

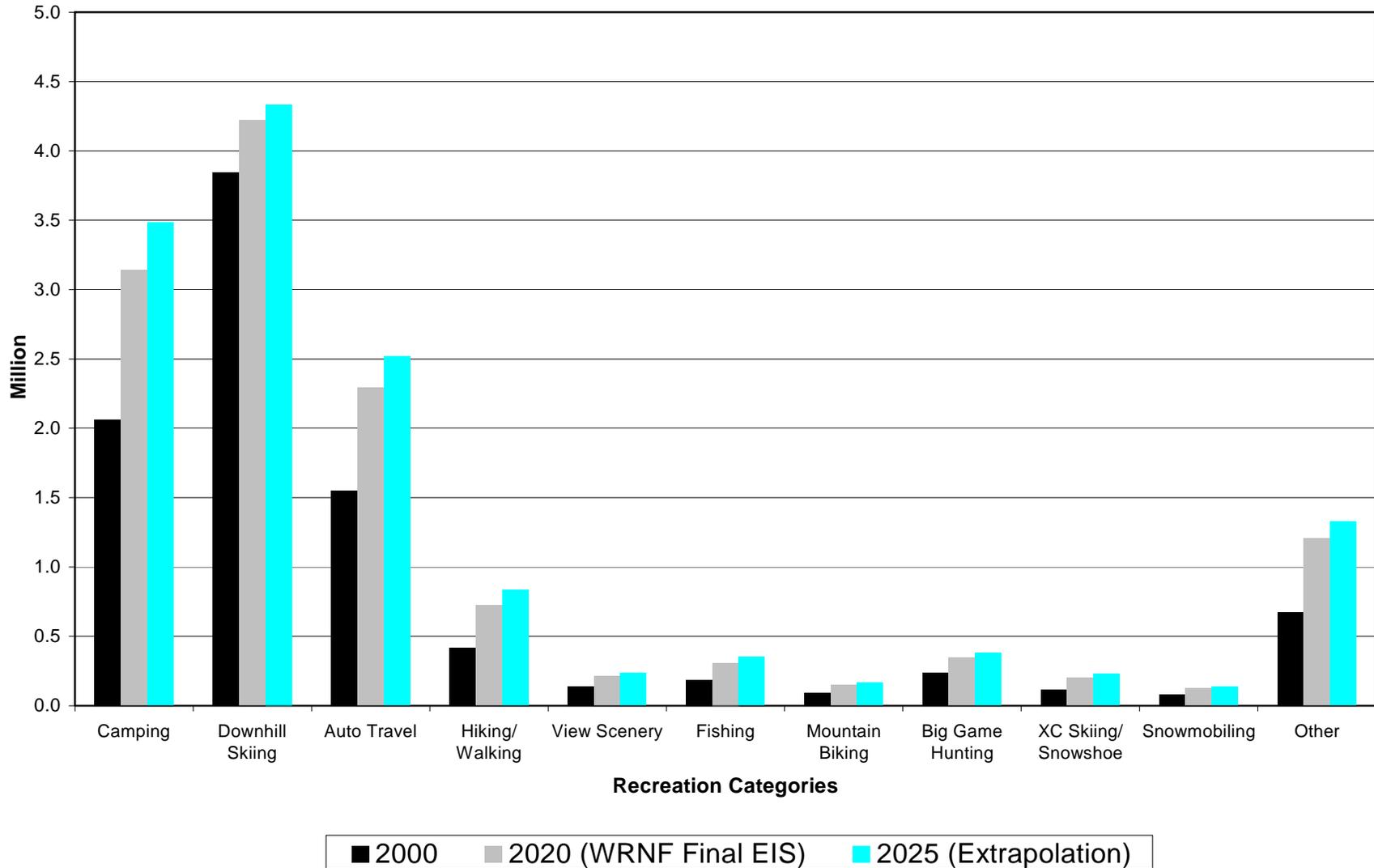
The White River National Forest estimates recreation use in “Recreation Visitor Days” (RVDs), a term that takes the type of activity and time period of use into consideration. Recreation Visitory Days are intended to provide an accounting of visitor use in terms of time spent at specific recreational activities. One RVD is equivalent to 12 hours of continuous use, whereas one visit is any time spent on the forest. Specific activities are allotted standard times in hours to determine RVDs. For example, a visitor who picnics is allotted 0.2 RVDs. Recreation Visitory Days are generally lower in number than a simple accounting of visitors, excepting for certain time-intensive activities such as wilderness camping that might extend over numerous days. **Chart 1** illustrates 2000, 2020, and 2025 RVDs by the predominant recreation activities on the White River National Forest (total forest). A more recent visitation survey, National Visitor Use Monitoring Results (NVUM 2003), was performed for the White River National Forest during the 2001/2002 seasons. The NVUM data indicate White River National Forest annual forest visits (not RVDs) were 9.7 million during the survey period.

The White River National Forest receives 7.6 million skier visits annually, approximately 13 percent of the nation’s total downhill skier visits. Skier visits are generally represented by ticket sales, not RVDs. The combined daily capacity of the 12 ski areas on the White River National Forest is currently approximately 95,169 skier visits. **Table 3** provides a breakdown of skier visitation by county. While the predominant recreation activity on the White River National Forest by far is downhill skiing, the future projected growth rate for skiing is relatively low (White River National Forest FEIS, 2002). Skiing within Colorado is projected to increase at a higher rate than that of the nation as a whole over the next 10 years (White River National Forest FEIS, 2002) but is still expected to have a decreased growth rate based on previous growth. The expansion of existing resorts within Colorado is anticipated to accommodate the modest growth rates projected.

Table 3. White River National Forest Skier Visitation

County	Annual Visitation (2001)	Percent of Total Skier Visits on the WRNF
Summit	3,800,000	56
Eagle	1,600,000	24
Pitkin	1,300,000	19
Garfield	84,000	1

Chart 1. White River National Forest Recreation Visitor Days by Activity



Forest Management

The White River National Forest *Land and Resource Management Plan* was first issued in September 1984. The 2002 Forest Plan revision is accompanied by a Final Environmental Impact Statement (FEIS) that describes the analysis used in the Plan's development and formulation. The recreation-related goals and objectives of the White River National Forest *Land and Resource Management Plan* include multiple uses and sustainability of national forests and grasslands in an environmentally acceptable manner; and provide for scenic quality and a range of recreational opportunities. Strategies to meet these goals include study and analysis of resources; and construction and rehabilitation of developed recreation facilities, trailheads, and dispersed recreation sites. The White River National Forest *Land and Resource Management Plan* also contains standards and guidelines for recreation management and the travel system infrastructure that provides access to recreation facilities and experiences.

The White River National Forest manages for both developed and dispersed recreation use in accordance with Recreation Opportunity Spectrum class. Developed recreation sites located in the inventory area are illustrated on **Map 1** through **Map 11**, provided in the Resource Maps section of this report. Developed recreation activities are associated with campgrounds, picnic areas, downhill skiing, and other built sites. White River National Forest developed recreation sites include 12 ski areas, 70 developed campgrounds, 15 picnic grounds, 11 interpretive sites, and 209 trailheads. According to White River National Forest use projections, which assume little transportation improvement along the Corridor, it is anticipated that in 2020 all developed recreation facilities on the White River National Forest will be at 36 percent of theoretical capacity and at 90 percent of current practical capacity (White River National Forest FEIS). The White River National Forest projections indicate that by 2020, camping will exceed existing capacities of developed sites.

Dispersed recreation occurs where no developed facilities are present. The White River National Forest estimates that approximately 50 percent of all recreation use is dispersed in nature. Dispersed recreation use on the White River National Forest has increased dramatically in the last decade and is anticipated to increase an additional 200 percent by 2020 for backpacking, day hiking, visiting prehistoric sites, running and jogging, rafting/tubing, sailing, and cross-country skiing in the Rocky Mountains. The diversity of these activities continues to grow, and such growth has contributed to increased conflicts among different types of recreationists. In addition, as the "developed site" visitor experiences changes due to heavy use within developed recreation facilities, it is anticipated that visitors will seek more remote recreation experiences in dispersed backcountry locations.

USFS lands immediately adjacent to I-70 are designated as a Utility Corridor from Vail to Copper Mountain and from the Continental Divide to Silverthorne. These areas are managed as existing and potential right-of-way corridors (such as highways, pipelines, and electric transmission systems). Lands adjacent to utility corridors are managed for developed recreation complexes, backcountry recreation (nonmotorized), elk habitat, dispersed recreation, ski-based resorts, pristine wilderness, primitive wilderness, and river recreation. The Glenwood Canyon Trail (Glenwood Canyon) and the Tenmile-Vail Pass National Recreation Trail (Vail to Silverthorne) parallel I-70 for approximately 34 miles.

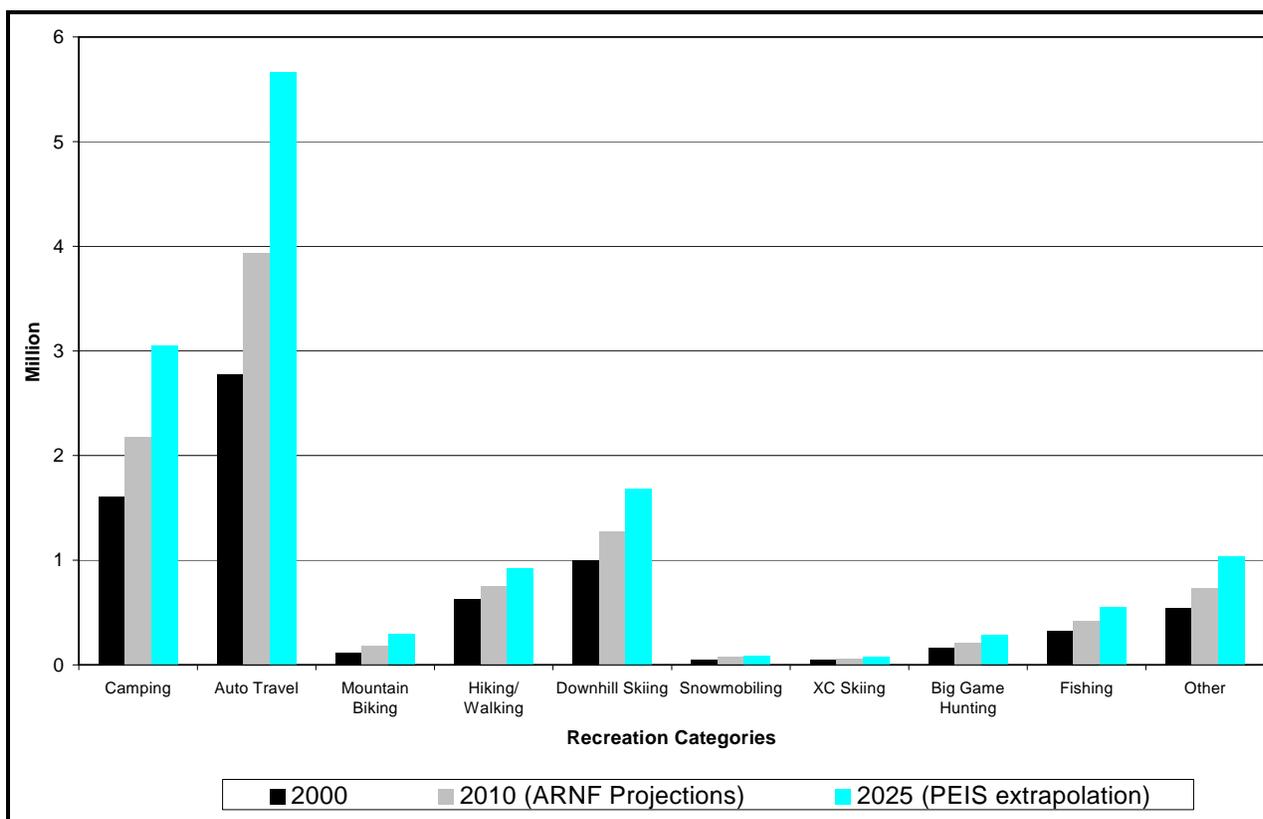
Arapaho and Roosevelt National Forests

The Arapahoe and Roosevelt National Forests was established in 1908 and includes 1.3 million acres of public land in the Rocky Mountains and foothills of north central Colorado. Arapahoe and Roosevelt National Forests lands within the Corridor contain high elevation and rugged lands. They house the Loveland Ski Area, Guanella Pass National Scenic Byway, and Mount Evans Scenic Byway, and contain many easily accessible trails and forest roads. The Continental Divide National Scenic Trail crosses I-70, following along the Herman Gulch Trail, just east of the Eisenhower Tunnel. Recreational use on the Arapahoe and Roosevelt National Forests is heavily influenced by its close proximity to large urban areas of the Front Range, and the area receives a high level of both summer and winter recreational use. More

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than 6.2 million people visited the Arapahoe and Roosevelt National Forests in 2000 (*National Visitor Use Monitoring Results*, August 2001).

Predominant developed recreation activities on the Arapahoe and Roosevelt National Forests include developed skiing, camping, picnicking, and interpretive and educational sites and facilities. Chart 2 illustrates 2000/2010/2025 RVDs by predominant recreation types. Although the Clear Creek District is the only Ranger area directly accessible from I-70, the adjoining Sulphur District is also considered within the area of Corridor influence. Recreation Visitor Days for the major recreation categories shown in Chart 2 are expected to increase from 2.6 (2000) to 3.4 (2010 projections, Arapahoe and Roosevelt National Forests Forest Plan), to 5.3 (2025 PEIS extrapolation) million (Clear Creek and Sulphur districts). The NVUM survey for the Arapahoe and Roosevelt National Forests (NVUM 2001) was performed during the 2000 recreation seasons. Chart 2. Arapaho and Roosevelt National Forests Recreation Visitor Days by Use.



The Arapahoe and Roosevelt National Forests currently has three downhill ski areas operating under special use permits—Eldora, Loveland, and Winter Park—which cumulatively receive an average of 1.3 million skier visits annually. Berthoud Pass has not operated as a downhill ski area since the 2000–2001 season. Projections for ski visitation in Colorado indicate that the rapid growth rate for this sport that occurred in the 1970s and 1980s will not continue in the following decade. Expansion of existing areas within Colorado is expected to accommodate the modest growth rates projected for downhill skiing. Skier visits are expected to grow from 1.8 million (2000), to 2.2 million (2010 projections, Arapahoe and Roosevelt National Forests Forest Plan), to 2.7 million (2025, PEIS extrapolation) (Clear Creek and Sulphur districts).

Forest Management for Recreation

Arapahoe and Roosevelt National Forests lands are managed using Recreation Opportunity Spectrum classifications, and recreation areas are categorized for developed and dispersed recreation use. The Arapahoe and Roosevelt National Forests *National Visitor Monitoring Results* (2001) reports that developed recreation use has increased 31.4 percent and dispersed recreation use by 42.2 percent. Developed recreation sites on the Arapahoe and Roosevelt National Forests within the inventory area are illustrated on **Map 11** through **Map 14**, provided in **Section 6**, Resource Maps, of this Technical Report. Existing use of Arapahoe and Roosevelt National Forests developed recreation facilities is at capacity on many weekends from Memorial Day to Labor Day. Due to a lack of resources, the maintenance of existing sites and construction of newly developed recreation facilities have been limited and have not kept pace with increased use.

The predominant dispersed recreation activities on the Arapahoe and Roosevelt National Forests included dispersed camping, trail use (hiking/walking, snowmobiling, hunting, and cross-country skiing), and coldwater fishing. The greatest increase in dispersed recreation use is expected for mountain biking, dispersed camping, canoeing and rafting, winter-oriented activities, and coldwater fishing. The Arapahoe and Roosevelt National Forests *National Visitor Monitoring Results* (2001) states the following in regard to Arapahoe and Roosevelt National Forests dispersed use:

“Generally, a large surplus of land is available with the potential to support additional dispersed recreation activity opportunities well into the future. However, the key limitation to participating in dispersed recreation activities is access to dispersed areas, parking availability, limited dispersed campsites, and the availability of information on dispersed opportunities.”

To support the demand for dispersed recreation, construction of supporting facilities (parking areas, trailheads, designated dispersed campsites) would be required.

Lands directly adjacent to I-70 are managed for dispersed recreation and ski-based resorts, while more remote areas of the forest, approximately 0.5 mile from I-70, are managed for backcountry recreation. Arapahoe and Roosevelt National Forests goals for land within the Corridor include providing various recreational opportunities, and adding and improving trailheads and nonmotorized trails at key areas such as the Continental Divide, high peaks, and alpine peaks.

Garfield County

The rural character of Garfield County offers numerous recreational opportunities for residents and travelers. The county includes large areas of publicly owned and federally managed lands as addressed above in the BLM and the White River National Forest descriptions. Most recreation sites in the inventory area are under the jurisdiction of the city of Glenwood Springs. These sites include several community parks (Vogelaar, Veltus, Two Rivers A.E. Axtell, and Centennial parks) and the western terminus of the Glenwood Canyon Trail. The Glenwood Hot Springs, which are privately held, are a primary attraction to the area. **Map 1**, provided in **Section 6**, Resource Maps, of this Technical Report, illustrates the parks, recreation sites, and trails within the portion of Garfield County in the Corridor. Several trails (Boy Scout, Bear Creek, and Transfer Trail) and one campground (Rock Gardens Campground) are present within the Corridor in the eastern portion of unincorporated Garfield County.

Eagle County

Eagle County is one of the fastest growing counties in Colorado. Demand for recreation opportunities has grown along with the population over the past 25 years. During this timeframe, the economic trend in Eagle County has continuously shifted away from agriculture, resource production, and manufacture toward what has clearly become the county's economic base: tourism and recreation. The county includes large areas of publicly owned and federally managed lands as described above in the BLM and the White

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River National Forest descriptions. Recreation opportunities provided in county and municipal areas include playgrounds, picnic areas, ballfields, and community parks within unincorporated Eagle County and Gypsum and incorporated towns of Eagle, Avon, and Vail. Vail is a primary recreation destination with amenities such as the Vail Ski Area, the Vail Trail, tourist shopping areas, scheduled events (recreational and cultural), and a multitude of community parks.

Developed recreation sites in Eagle County located within the inventory area are illustrated on **Map 2** through **Map 6**, provided in **Section 6**, Resource Maps of this Technical Report. Summer recreational opportunities in Eagle County outnumber winter activities and include hiking trails, mountain biking trails, paved public bike paths, golf courses, tennis courts, a Gold Medal fishery (trout stream), kayaking, and whitewater rafting. Public access to the Eagle River is located in Eagle on the north side of the river from the county fairgrounds, with additional access adjacent to the Gypsum ponds and on BLM lands near Red Point and Red Canyon as noted in the *Eagle Area Community Plan 1996*. Eagle County has initiated an Eagle County Regional Trails (ECO Trails) system, which was formed in 1996. The intent is to create a scenic regional trail system that connects local communities through the Eagle River Valley from east Vail to Tennessee Pass and Glenwood Canyon.

The following excerpt is from the *Eagle County Comprehensive Plan 2006*: 3.5.3 Emergency and Community Services, Recreational Facilities (page 87):

Recreation is the single most important reason for choosing to live or buy real estate in Eagle County for both residents and second homeowners. Sixty-eight percent of residents surveyed in the Northwest Colorado Council of Governments 2003 Second Home Study Survey rated recreation as the most important reason for living in Eagle County. Eighty-four percent of the second home owners surveyed said recreation was the most important reason for buying property in Eagle County. According to the survey, the types of recreation used most include downhill skiing, golfing, hiking, walking or jogging, and mountain biking.

Snow sports such as alpine skiing, snowboarding, Nordic skiing, and snowshoeing are not only important to residents and visitors, they are the foundation of the County's two major economic drivers—tourism and second homes. According to “Job Generation in the Colorado Mountain Resort Economy” (Lloyd Levy Consulting and Hammer, Siler, George Associates, conducted in association with the Northwest Colorado Council of Government's Second Home Study) winter visitors are responsible for 22 percent of the basic spending and 20 percent of the total jobs in Eagle County. This is second only to the spending and jobs created by second homeowners, who purchased land here partly to enjoy snow sports. Many residents in the El Jebel and Basalt areas hold ski resort or second home related jobs in neighboring Pitkin County.

Summit County

Developed recreation sites in Summit County are illustrated on **Map 7** through **Map 11**, provided in **Section 6**, Resource Maps, of this Technical Report. Summit County is bordered by the Gore, Tenmile, and Williams Fork mountain ranges, which provide recreation activities such as skiing, snowboarding, snowshoeing, hiking, bicycling, fishing, rafting, and boating. Four major ski areas are located in the county: Arapahoe Basin, Breckenridge, Copper Mountain, and Keystone. Unincorporated Summit County, Silverthorne, Dillon, and Frisco each encompass community parks, opens space, and trails. However, the primary recreation destinations within Summit County are on White River National Forest lands, which contain numerous backcountry trails. The Tenmile-Vail Pass National Recreation Trail is one of the few trails in Summit County that runs parallel and adjacent to I-70, rather than perpendicular and away from I-70. Hotels, restaurants, and shops (such as galleries and sporting goods) are patronized by the same people who use the vast recreational activities available in Summit County (*Tourism Jobs Gain Ground in Colorado*, CBEF 2001).

The 2008 Summit County Leadership Forum identified the following issues with respect to recreation in the County.

Summit County Skier Visits

- Current “development” movement is tailored to bring in the “destination” skier, rather than depend on the day skier or “brown-bagger.”
- Skier visits in the County have been steadily increasing over the last decade (new record set by Breckenridge for 2006/2007 ski season).
- A Peak Day in March (“Peak Population”) experiences approximately 125,000 visitors.
- Front Range skiers (“Day-Trippers”) have difficulty getting here on weekends (that is, I-70 congestion and gridlock); nevertheless, there has been a steady increase in Front Range skiers.

Summit County Ski Resort Expansion and Employment

- Expansions at all four ski resorts in the County were granted and approved in the 2000s.
- International workforce now fills positions that used to go to traditional American ski resort workers.
- Colorado ranked second in 2004 in the U.S. in the number of temporary work visas, many of them for work in the ski resorts.
- There has been increased automation of basic jobs.
- Skiing has become marginalized by other activities; as these additional activities happen, skiing will continue to be more marginalized.
- Summer visitations have increased, and shoulder/mud (visitations in fall and spring) seasons are less pronounced.

Trails, Trailheads, and Trail Access (County and United States Forest Service)

- Land managers are struggling to maintain existing trails due to increasing use levels and declining maintenance budgets. At the same time, land managers are being asked by user groups to develop more new trails.
- The need for funding to plan, develop, and maintain trails and trailhead facilities will continue as the County’s population grows and trail use and demand for new trails increase.
- There is increased use of backcountry trails and roads not originally designed for intensive uses.
- There is reliance on outside help, such as volunteers and grants, to complete trail projects (for example, Friends of the Dillon Ranger District).
- Trails and other recreation uses are somewhat of a low funding priority.
- It has been difficult to establish seamless management between different jurisdictions (such as signage).

Clear Creek County

Developed recreation sites in Clear Creek County located within the inventory area are illustrated on **Map 11** through **Map 14**, provided in the **Section 6**, Resource Maps of this Technical Report. Clear Creek County offers a diverse range of recreation opportunities on forest, county, and municipal lands, including rafting, hiking, biking, riding the historic narrow gauge railroad, and touring historic mines. Recreation sites within the Corridor in Clear Creek County include the Loveland Ski Area and the Scott Lancaster Memorial Bike Path/Colorado Bikeway Route, which runs parallel to I-70 from Idaho Springs to US 40, the Charlie Tayler Water Wheel Park, as well as numerous other recreation areas within the municipalities of Georgetown and Silver Plume. Georgetown is a gateway to the Guanella Pass Scenic and Historic Byway. In addition, a number of private rafting firms provide rafting in Clear Creek along I-70. The town of Idaho Springs supports this industry by providing and maintaining creek access at numerous locations.

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Recreation opportunities on Arapahoe and Roosevelt National Forests land within Clear Creek County are addressed above in the Arapahoe and Roosevelt National Forests description.

According to the *Clear Creek County Greenway Plan* (Clear Creek County, 2005), some of the proposed trail and access points to Clear Creek for kayaking, rafting, fishing, and general use have been acquired and/or developed.

The Greenway Plan is a focal point of the Clear Creek County Open Space Plan, the goal of which is to develop the greenway as a major recreational corridor to provide recreation opportunities and enhance economic development opportunities within the County and its municipalities. The greenway is envisioned to serve as a backbone of the County and will ultimately connect to trail systems within Jefferson and Summit counties.

Many of the recreation sites (both existing and proposed) within Clear Creek County are elements of the Greenway Plan. These are illustrated on **Map 11** through **Map 14**.

Jefferson County

Unlike other communities along the Corridor, there are no federally managed lands in the vicinity of I-70 within Jefferson County. While there are portions of three national forests present within Jefferson County, none are located within 3 miles north or south of I-70. There are, however, many Jefferson County open space lands, Denver mountain parks, and regional trails located in close vicinity to I-70 throughout the county. Close proximity to the Denver metropolitan area and easy access from I-70 has resulted in heavy recreational use within Jefferson County. I-70 in this area is bordered on both sides by the largest of Denver's mountain parks (Genesee Park at 2,340 acres) in which bison and elk herds can be viewed. Matthews/Winters Park also borders I-70 on two sides within Jefferson County. Trails within Matthews/Winters Park include Dakota Ridge Trail, Village Walk Trail, Red Rocks Trail, and Morrison Slide, all located south of I-70 near C-470. These trails are heavily used for both hiking and mountain biking. Apex Park is located approximately 1 mile north of I-70 and is also heavily used for both hiking and mountain biking.

The Lookout Mountain Nature Center and Preserve located 2 miles north of I-70 encompasses more than 110 acres and 1.4 miles of trail. Activities on the preserve include picnic areas and trail links to parks and to Buffalo Bill's Museum and Grave.

I-70 cuts through the Dakota Hogback, located at the eastern portion of the Corridor. The world's first Stegosaurus and Apatosaurus fossils were discovered on the west side of the hogback in 1877, 1.5 miles from I-70, and many bones can be viewed in the sandstone layers of the Morrison Formation today. This site, Dinosaur Ridge, is one of 11 sites in Colorado with National Natural Landmark status. Developed recreation sites in Jefferson County located within the inventory area are illustrated on **Map 14**, provided in the **Section 6**, Resource Maps, of this Technical Report.

Grand County

I-70 provides access to recreation areas in Grand County including the SolVista and Winter Park resorts. In addition, Grand County hosts the world-renowned Rocky Mountain National Park and the tourist destination of Estes Park. However, Grand County is not directly adjacent to I-70 and does not contain recreational sites within the inventory area.

Pitkin County

Pitkin County hosts many important recreational destinations including the Aspen Ski Area and Maroon Bells Wilderness Area. These areas are primarily accessed via I-70 arterials. There are no Pitkin County recreation sites within the inventory area.

Routt County

Routt County hosts many important recreational destinations including the Steamboat Resort, and other popular recreation activities including snowmobiling, golf, tennis, and hot air ballooning. These areas may be accessed via I-70 arterials. There are no Routt County recreation sites within the inventory area.

2.4 Effect of the Mountain Pine Beetle on Recreation

The I-70 Mountain Corridor has been affected by the infestation of mountain pine beetles, which is spreading at unprecedented levels in forests in Colorado, Wyoming, and South Dakota. The mountain pine beetle infestation has resulted in degraded scenery, hazardous conditions (fire hazard and falling trees), and environmental concerns (spraying and water quality). Due to the risk of falling trees, United States Forest Service cautions visitors to use extra care when hiking and skiing in areas with extensive beetle kill. In the summer of 2008, dead and damaged trees were cleared from 31 Colorado campgrounds. In the summer of 2010, some campgrounds were closed.

Mountain communities in Eagle, Grand, Jackson, Routt, and Summit counties were among the first and hardest hit by the mountain pine beetle infestation in north central Colorado. **Figure 1** and **Figure 2** illustrate the progression of mountain pine beetle infestation within the White River National Forest and Arapaho and Roosevelt National Forests over the past decade. Corridor communities rely heavily on recreation and visitation for their economic vitality.

While the mountain pine beetle has clearly had an effect on forested environments in the Corridor, the extent of the effect is not yet known. United States Forest Service has not incorporated mountain pine beetle effects into its current forest planning for the White River National Forest or Arapaho and Roosevelt National Forests. United States Forest Service has confirmed that the PEIS should note that the beetle infestation is changing conditions on the ground, that the changes are ongoing but the extent and breadth of change are not necessarily predictable, and that the most appropriate time to address those changing conditions is at the Tier 2 site-specific project level.

Figure 1. Forest Insect and Disease Aerial Survey (1997)

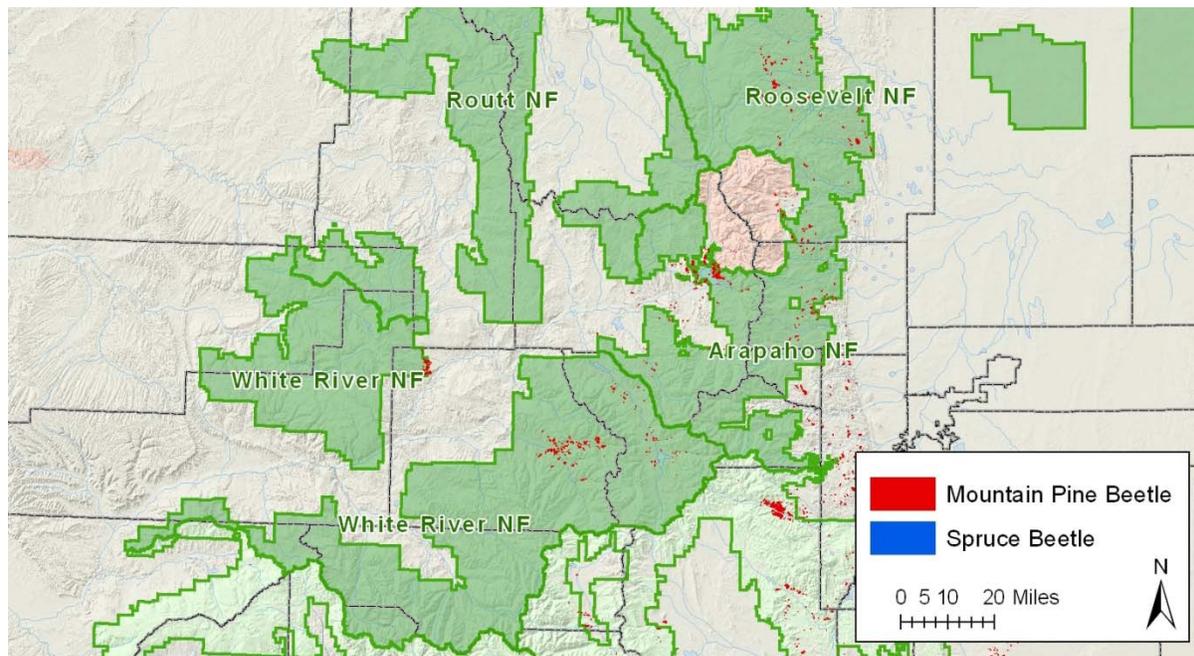
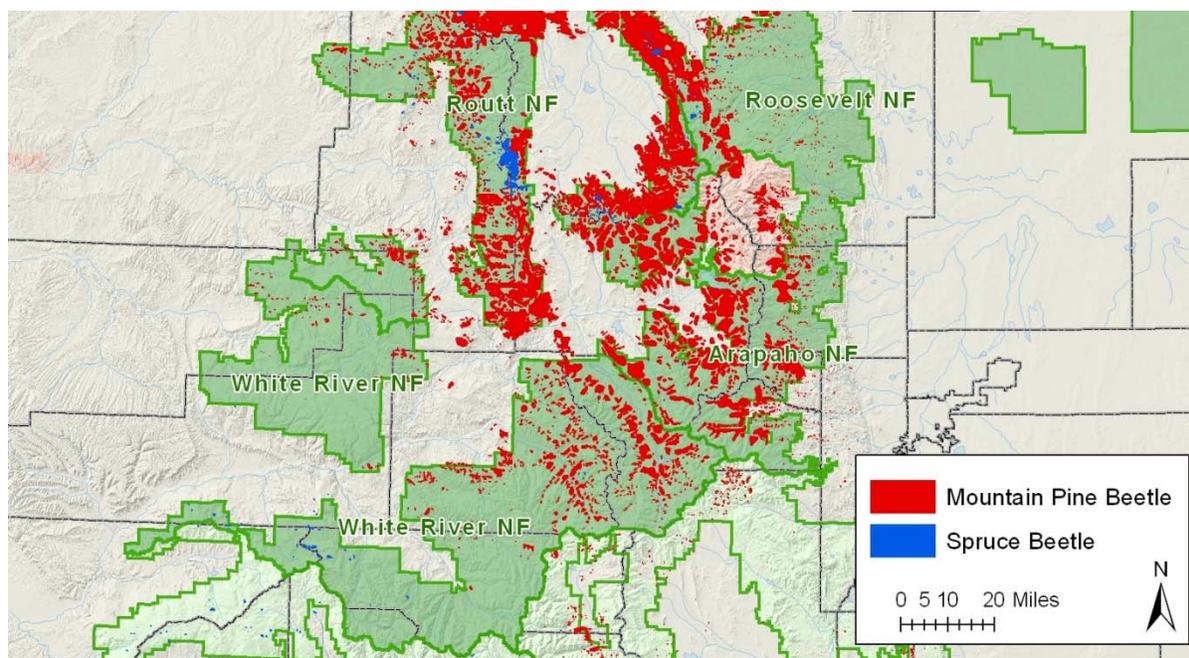


Figure 2. Forest Insect and Disease Aerial Survey (2007)



2.5 Summary of Corridor-Wide Recreation Resources

There are 746 recreation sites within a six-mile buffer zone surrounding the Corridor length. Site locations are shown on **Map 1** through **Map 14** in **Section 6**, Resource Maps, of this Technical Report. **Table 4** includes all 746 of these sites.

I-70 currently provides access to rivers and creeks that offer recreational opportunities such as fishing, rafting, and other water-related activities. These recreation resources could be affected by Action Alternatives. Twelve creeks and rivers flow along I-70 in the Corridor, as shown on **Figure 3**.

- | | |
|-----------------------|------------------------|
| 1. Colorado River | 7. Blue River |
| 2. Eagle River | 8. Straight Creek |
| 3. Gore Creek | 9. Bard Creek |
| 4. Black Gore Creek | 10. Clear Creek |
| 5. West Tenmile Creek | 11. Shingle Creek |
| 6. Tenmile Creek | 12. Mount Vernon Creek |

The Colorado Wildlife Commission has designated the lower 4 miles of Gore Creek (from Red Sandstone Creek downstream to the Eagle River) and a portion of the Blue River (through Silverthorne) as Gold Medal fisheries. Designation as a Gold Medal fishery is based primarily on the high recreational value of the brown trout community in these stream segments (USGS 2001). The Colorado River (through Glenwood Canyon), Eagle River, and Clear Creek also provide quality conditions for whitewater rafting. This industry plays an important role in local communities bordering these rivers, as well as in the Corridor. In 2003 the industry brought in \$116 million (463,421 total rafters during the year) to Colorado, doubling the 1991 income. In 2003 Colorado River rafters contributed \$14 million, Eagle River rafters contributed \$0.6 million, and Clear Creek rafters contributed \$6 million (*Executive Summary Commercial River Use in Colorado 2003*).

Many recreation sites and resort areas are located outside the immediate vicinity of I-70 but are primarily accessed via I-70. There could be indirect or secondary impacts on these recreation areas. Although these

areas are not directly affected by project alternative footprints, indirect impacts on forest recreation are considered in **Section 1.1**. These sites include ski areas and recreation areas in Pitkin, Garfield, Routt, Grand, Summit, and Gilpin counties as listed below; some of which are illustrated on **Figure 3**.

- Ski Sunlight North and South via I-70 and SH 82, located 10 miles south of Glenwood Springs in Garfield County
- Snowmass Ski Area via I-70 and SH 82, located in Pitkin County
- Aspen Mountain Ski Area via I-70 and SH 82, located in Pitkin County
- Aspen Highlands Ski Area via I-70 and SH 82, located in Pitkin County
- Buttermilk Mountain via I-70 and SH 82, located in Pitkin County
- Steamboat Springs Resort via I-70, SH 9, and SH 131, Routt County
- Breckenridge Ski Area via I-70 and SH 9, Summit County
- Keystone Resort via I-70 and US 6, Summit County
- Arapahoe Basin Ski Area via I-70 and US 6, Summit County
- Winter Park/Mary Jane Resort via I-70 and US 40, Grand County
- SolVista Resort via I-70 and US 40, Grand County
- Grand Lake via I-70, US 40 and US 34, Grand County
- Limited Stakes Gaming Area via I-70, US 6, and SH 119, Gilpin County

Forest Management

The National Forest Management Act (NFMA) requires that United States Forest Service lands be managed for various uses on a sustained basis to ensure in perpetuity a continued supply of goods and services to the American people. NFMA regulations state that each national forest's land and resource management plan be revised on a 10-year cycle or at least every 15 years. NFMA regulations also establish extensive analytical and procedural requirements for the development, revision, and significant amendment of forest plans. Forest management plans were reviewed in light of recreation resources issues for both the White River National Forest and Arapahoe-Roosevelt National Forests.

Forest recreation management focuses on "desired recreation experiences." Some people prefer to recreate in more developed areas where there are more facilities, better access, and opportunities to interact with other recreationists. Others prefer more primitive settings where there is little evidence of other people, more difficult access, and opportunities for self-reliance. The range of possible recreation opportunities is based on activity types, settings, and quality of experience. This range is further described and quantified in terms of Recreation Opportunity Spectrum (ROS) classes. The assigned desired ROS condition class is the maximum level of use, impact, development, and management that an area should experience over the life of the forest plan. The ROS serves as a tool for land managers to identify and mitigate change. Recreational capacity is a consequence of adopting specific ROS classes for which a landscape will be managed. White River National Forest has eight ROS classes: pristine, primitive, semi-primitive nonmotorized, semi-primitive motorized, roaded natural, roaded modified, rural, and urban. Arapahoe-Roosevelt National Forests has six ROS classes: primitive, semi-primitive nonmotorized, semi-primitive motorized, roaded natural, roaded modified, and rural.

The ROS is used in the determination of capacities for both developed and dispersed recreation activities. Capacities generally indicate the level of use an area is able to accommodate. Capacity is further defined in terms of "theoretical capacity," which is based on a site's level of development, and "practical capacity," which is based on a 40 percent utilization rate. Use levels that are consistently above 40 percent of the theoretical capacity indicate long-term resource damage.

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Figure 3. Recreation Sites Adjacent to and Accessed by the Corridor

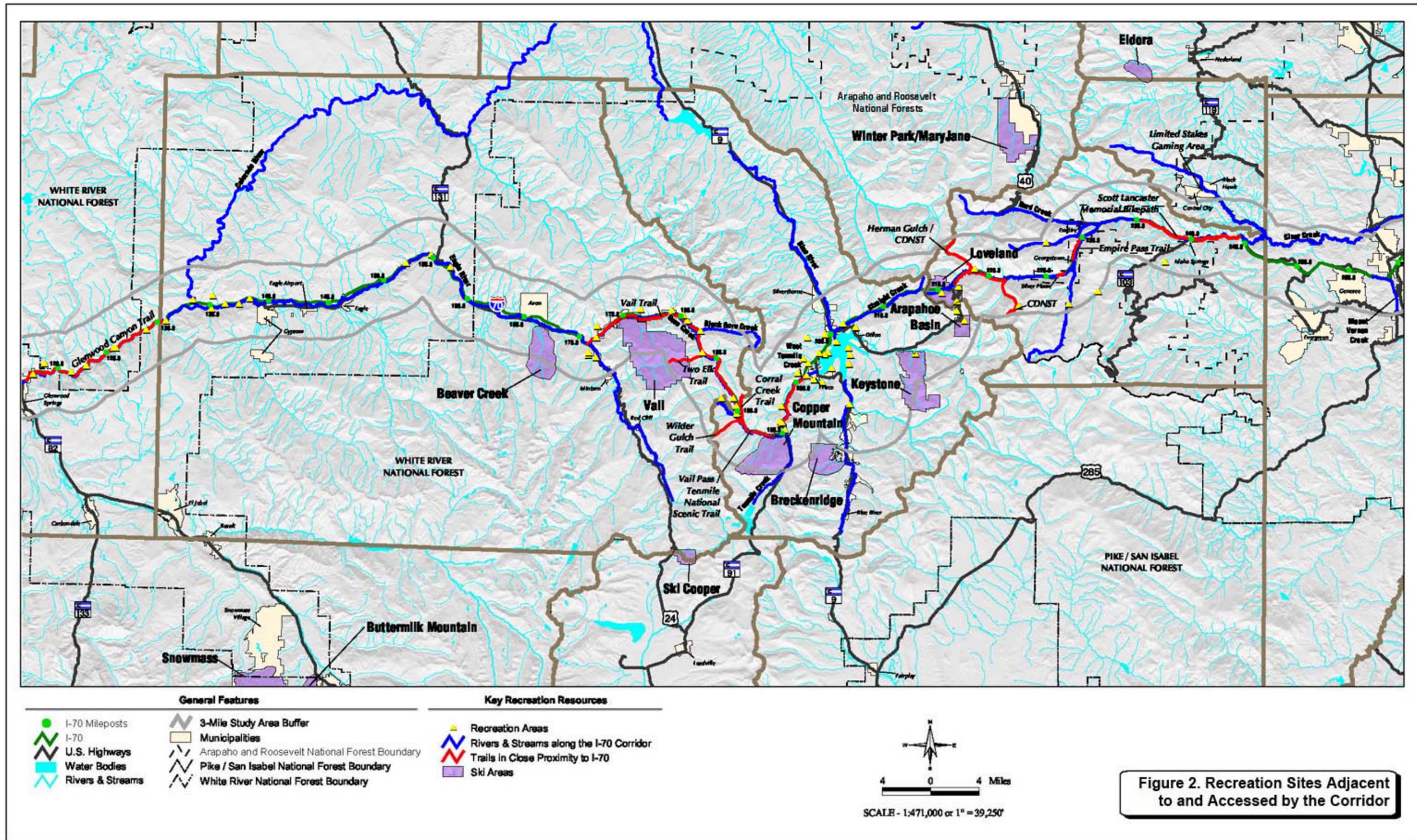


Figure 2. Recreation Sites Adjacent to and Accessed by the Corridor

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National Forest projects that developed recreation facilities in the forest will be at 90 percent of current practical capacity by 2020, while use of Arapaho and Roosevelt National Forests developed recreation facilities in 2000 was already at capacity on many summer weekends.

Table 4 contains a detailed list of all 746 recreation sites within a six-mile buffer of the Corridor. **Table 5** contains all Section 6(f) properties. The Map ID number on these tables corresponds to a site number on the maps located in Section 6. The maps are arranged geographically, from west to east.

Table 4. Recreation Resources Identified within a Six-Mile Buffer

Map ID	Site Name	Facility Type	Jurisdiction	Impacted
1	Trailhead Closer to Eisenhower Tunnel	Trailhead	ARNF	No
2	Trailhead East of Eisenhower Tunnel	Trailhead	ARNF	No
3	Rest Area	Rest Area	ARNF	No
4	Pedestrian/Bicycle Bridge of Creak Creek at Herman Gulch/Watrous Gulch Interchange	Bridge	ARNF	No
5	Rest Area South of I-70 at Herman Gulch/Watrous Gulch Interchange	Rest Area	ARNF	No
6	Bakerville at Reibel Bridge Fishing Access	River Access	Clear Creek County	No
7	Rest Area	Rest Area	Clear Creek County	No
8	Rest Area	Rest Area	Clear Creek County	No
9	Primitive Camping Areas West of Bakerville Interchange	Campground	Clear Creek County	No
10	Trailhead at Bakerville interchange	Trailhead	Clear Creek County	No
11	Bike Depot at Bakerville Interchange	Bike Depot	Clear Creek County	No
12	Bakerville Fishing Access	River Access	Clear Creek County	Yes
13	East of Bakerville Fishing Access	River Access	Clear Creek County	Yes
14	Parking Lot	Parking Lot	Clear Creek County	No
15	Campground Near Bakerville Exit	Campground	Clear Creek County	No
16	Reservoir	Recreation Area	Clear Creek County	No
17	Silver Plume Mountain Park	Park	Town of Silver Plume	No
18	Pedestrian/Bicycle Bridge	Bridge	Clear Creek County	Yes
19	Pedestrian/Bicycle Bridge	Bridge	Town of Silver Plume	No
20	Rest Area West of Dinger Park	Rest Area	Town of Silver Plume	No
21	Dinger Park	Park	Town of Silver Plume	No
22	Pedestrian/Bicycle Bridge	Bridge	Town of Silver Plume	No
23	Rest Area East of Dinger Park	Rest Area	Clear Creek County	No
24	Silver Plume Plaza Near Proposed Silver Plume Interchange.	Park	Town of Silver Plume	Yes
25	Loop Railroad Yards	Railroad Yard	Town of Silver Plume	No
26	Trailhead and HDPLC Connections	Trailhead	Town of Silver Plume	No
27	Rest Area at Loop RR Station	Rest Area	Clear Creek County	No

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Table 4. Recreation Resources Identified within a Six-Mile Buffer

Map ID	Site Name	Facility Type	Jurisdiction	Impacted
28	West of Georgetown Fishing Access	River Access	Clear Creek County	No
29	Trailhead at Loop RR Parking Lot	Trailhead	Clear Creek County	No
30	Georgetown to Silver Plume Trail	Trail	Clear Creek County	No
31	Pedestrian/Bicycle Bridge	Bridge	Clear Creek County	No
32	Pedestrian/Bicycle Bridge	Bridge	City of Georgetown	No
33	Pedestrian/Bicycle Bridge	Bridge	City of Georgetown	No
34	Pedestrian/Bicycle Bridge	Bridge	City of Georgetown	No
35	New Georgetown Visitor's Center and Gateway	Visitor Center	City of Georgetown	No
36	Pedestrian/Bicycle Bridge	Bridge	City of Georgetown	No
37	Inlet to Georgetown Lake Fishing Access	River Access	City of Georgetown	No
38	Pedestrian/Bicycle Bridge	Bridge	City of Georgetown	No
39	Restroom at Georgetown Lake	Restroom	City of Georgetown	No
40	Trailhead and Bighorn Sheep Viewing Area	Trailhead	City of Georgetown	Yes
41	Georgetown Reservoir Spillway Fishing Access	River Access	City of Georgetown	No
42	Pedestrian/Bicycle Bridge	Bridge	Unknown	No
43	Silver Creek Trail Access	Trail	Clear Creek County	No
44	Potential Open Space	Open Space	Clear Creek County	Yes
45	Pedestrian/Bicycle Bridge	Bridge	Clear Creek County	No
46	Potential Open Space	Open Space	Clear Creek County	Yes
47	Shadow Ranch Fishing Access	River Access	Clear Creek County	No
48	Proposed Creekside Trail along Alvarado Road	Trail	Clear Creek County	Yes
49	East of Shadow Ranch Fishing Access	River Access	Clear Creek County	No
50	Potential Open Space Between US 40 Junction and Georgetown	Open Space	Clear Creek County	Yes
51	Cemetery Boating Access	River Access	Clear Creek County	Yes
52	Pedestrian/Bicycle Underpass (under I-70) and Overpass (over Clear Creek)	Bridge	Clear Creek County	Yes
53	Trailhead West of I-70 and US 40 Junction	Trailhead	Clear Creek County	No
54	Pedestrian/Bicycle Bridge at I-70 and US 40 Junction	Bridge	Clear Creek County	No
55	Pedestrian/Bicycle Bridge	Bridge	Clear Creek County	Yes
56	Pedestrian/Bicycle Underpass or Bridge at Gateway Bridge	Bridge	Clear Creek County	Yes
57	Empire Junction Spaghetti Ranch Fishing Access	River Access	CCMRD	No

Table 4. Recreation Resources Identified within a Six-Mile Buffer

Map ID	Site Name	Facility Type	Jurisdiction	Impacted
58	White Water Kayak Park & Fishing and Boating Access	River Access	Clear Creek County	Yes
59	Whitewater Park Bike Depot	Bike Depot	Clear Creek County	No
60	Water Front Park Camping Area and Restrooms at Lawson Exit	Campground	Clear Creek County	No
61	Proposed Pedestrian/Bicycle Bridge at Water Front Park	Bridge	Clear Creek County	No
62	Trail to Empire	Trail	Clear Creek County	No
64	Proposed Pedestrian/Bicycle Bridge	Bridge	Clear Creek County	Yes
65	Tubes Boating Access	River Access	Clear Creek County	Yes
66	Proposed Pedestrian/Bicycle Bridge in Downieville	Bridge	Clear Creek County	No
67	Ball Placer	Park	Clear Creek County	No
68	Empire Trailhead	Trailhead	Clear Creek County	No
69	Weigh Station Boating Access	River Access	Clear Creek County	Yes
70	Blue Hill Open Space	Open Space	Clear Creek County	No
71	Downieville Truck Stop Fishing Access	River Access	Clear Creek County	No
72	Upper Dumont Boating Access	River Access	CDOT ROW	Yes
73	Dumont Bridge (Upper Dumont) Fishing Access	River Access	CDOT ROW	No
74	Proposed Creek Side Trail Alternative (East of Dumont Interchange)	Trail	Clear Creek County	No
75	Fairgrounds (Hiawatha) Boating Access	River Access	Clear Creek County	Yes
76	Sheep Keep Property	Open Space	Clear Creek County	Yes
77	Restroom at Clear Creek Rodeo Club	Restroom	Clear Creek County	No
78	Spring Gulch Boating Access	River Access	Clear Creek County	Yes
79	Potential Open Space, West End of Philadelphia Mill Site	Open Space	Clear Creek County	No
80	Trailhead, Parking, and Campground East of Dumont (Philadelphia Mill Site)	Trailhead	Clear Creek County	Yes
81	Potential Open Space and Pedestrian/Bicycle Bridges	Open Space	Clear Creek County	Yes
82	Potential Open Space and Pedestrian/Bicycle Bridges	Open Space	Clear Creek County	Yes
83	Pedestrian/Bicycle Bridge for Connection to Fall River Road	Bridge	Clear Creek County	Yes
84	Outer Limits Boating Access	River Access	Clear Creek County	Yes
85	Scenic Overlook and Rest Area	Rest Area	Clear Creek County	Yes
86	Stanley Bridge Pedestrian/Bicycle Bridge at Scenic Overlook, West End of Idaho Springs	Bridge	Clear Creek County	Yes

Recreation Resources Technical Report

Table 4. Recreation Resources Identified within a Six-Mile Buffer

Map ID	Site Name	Facility Type	Jurisdiction	Impacted
87	Trailhead and Parking Area, West End of Idaho Springs	Trailhead	Clear Creek County	Yes
88	Stanley Bridge Fishing Access	River Access	Clear Creek County	No
89	Ruth Mill/Wm. V.K Macy Park	Park	City of Idaho Springs	No
90	Idaho Springs High School Football Fields	School/ Community Recreation Center	City of Idaho Springs	Yes
91	Middle School	School/ Community Recreation Center	City of Idaho Springs	No
92	Prospector Trail	Trail	ARNF	Yes
92	USFS Visitor Center	Visitor Center	ARNF	Yes
93	Potential Park Next to USFS Visitors Center	Park	ARNF	Yes
94	Pedestrian/bicycle bridge near USFS Visitor Center on Chicago Creek Road	Bridge	City of Idaho Springs	Yes
95	Carlson School	School/ Community Recreation Center	City of Idaho Springs	No
96	Chicago Creek Boating Access	River Access	City of Idaho Springs	No
97	Business Loop Alternative	Trail	City of Idaho Springs	Yes
97	Business Loop Alternative	Trail	City of Idaho Springs	Yes
98	Charlie Tayler Water Wheel Fishing Access	River Access	City of Idaho Springs	Yes
99	Restroom (Citizen's Park - not accessible by path)	Restroom	City of Idaho Springs	No
100	Pedestrian/Bicycle Bridge (near Idaho Springs Town Hall)	Bridge	City of Idaho Springs	Yes
101	Proposed Trailhead Next to Idaho Springs Town Hall	Trailhead	City of Idaho Springs	No
102	Trailhead Near Existing Visitor Center, West of Idaho Springs Creekside Park	Trailhead	City of Idaho Springs	No
103	Idaho Springs Creekside Park	Park	City of Idaho Springs	No
103	Idaho Springs Creekside Park	Park	City of Idaho Springs	No
104	Visitor Center	Visitor Center	City of Idaho Springs	No
105	Proposed Creek Side Trail Alternative	Trail	City of Idaho Springs	Yes
106	Riley Cooper Park Boating Access	River Access	City of Idaho Springs	No
107	Riley Park Fishing Access	River Access	City of Idaho Springs	No
108	Potential Park at Old Sewage Treatment Plant Site	Park	City of Idaho Springs	No
109	Under Bridge	River Access	Clear Creek County	No
110	Scott Lancaster Bridge	Bridge	City of Idaho Springs	Yes
111	Clear Creek Rafting Boating and Fishing Access	River Access	City of Idaho Springs	Yes

Table 4. Recreation Resources Identified within a Six-Mile Buffer

Map ID	Site Name	Facility Type	Jurisdiction	Impacted
112	Proposed Trailhead, Parking, Restroom and Park at Twin Tunnels (old Game Check Area)	Trailhead	Clear Creek County	Yes
113	Twin Tunnels Wildlife Land Bridge	Nature Preserve	Clear Creek County	Yes
114	Below Box Boating Access	River Access	Clear Creek County	Yes
115	Hidden Valley Fishing Access	River Access	Clear Creek County	Yes
116	Hidden Valley Boating Access	River Access	Clear Creek County	No
117	Trail at Hidden Valley Interchange	Trail	Clear Creek County	Yes
118	Rock Wall	Rock Wall	Clear Creek County	No
119	Proposed Rest Area Between Kermit's and Hidden Valley	Rest Area	Clear Creek County	No
121	Li'l Easy Boating Access	River Access	Clear Creek County	Yes
122	Kermit's Fishing Access	River Access	Clear Creek County	Yes
123	Kermit's Boating access	River Access	Clear Creek County	No
124	Proposed Alternative Trailhead and Parking at Kermit's	Trailhead	Clear Creek County	No
124	Proposed Alternative Trailhead and Parking at Kermit's	Trailhead	Clear Creek County	No
124	Proposed Alternative Trailhead and Parking at Kermit's	Trailhead	Clear Creek County	Yes
125	Frei Quarry Boating Access	River Access	Clear Creek County	Yes
126	Junction of Hwy 40 and 6 Easement - Proposed Trailhead	Trailhead	Clear Creek County	No
127	Trail to FH Open Space	Trail	Clear Creek County	No
129	Floyd Hill Park	Park	Clear Creek County	No
130	Trail Through Clear Creek County	Trail	Various	Yes
130	Trail Through Clear Creek County	Trail	Unknown	Yes
131	Georgetown State Wildlife Area	State Wildlife Area	Clear Creek County Managed by CDOW	No
132	Vail Deer Underpass	Open Space	Eagle County Managed by CDOW	Yes
133	Whisky Creek	Open Space	Managed by CDOW	Yes
134	Eagle River State Wildlife Area	State Wildlife Area	Eagle County Managed by CDOW	No
135	Eagle River Preserve	Nature Preserve	Eagle County	No
136	Blair Ranch Conversation Easement	Open Space	Unknown	No
137	Fall River Road Trail	Trail	Clear Creek County	Yes
138	Pedestrian/Bicycle Bridge Between USFS Center and Scenic Overlook	Bridge	Unknown	No

Recreation Resources Technical Report

Table 4. Recreation Resources Identified within a Six-Mile Buffer

Map ID	Site Name	Facility Type	Jurisdiction	Impacted
140	Beaver Brook WS Open Space	Open Space	Clear Creek County	No
141	Blackwood Open Space	Open Space	Clear Creek County	No
142	Bunker Hill Open Space	Open Space	Clear Creek County	No
143	Faurot Open Space	Open Space	Clear Creek County	No
144	Humboldt Open Space	Open Space	Clear Creek County	No
145	Lawson Hole Open Space	Open Space	Clear Creek County	No
146	Maggie Open Space	Open Space	Clear Creek County	No
147	Morning Star Open Space	Open Space	Clear Creek County	No
148	Philadelphia MS Open Space	Open Space	Clear Creek County	No
149	Saxton Mountain Open Space	Open Space	Clear Creek County	No
150	Snyder Mountain Open Space	Open Space	Clear Creek County	No
151	Idaho Springs Open Space	Open Space	City of Idaho Springs	No
152	Genesee- El Rancho Bike Trail	Trail	Jefferson County	Yes
153	Alps Mtn Open Space	Open Space	Clear Creek County	No
154	Eagle Valley Regional Trails Plan Network - Complete	Trail	Eagle County	Yes
155	Eagle Valley Regional Trails Plan Network - Proposed	Trail	Eagle County	Yes
156	Silverthorne Rec Path	Trail	Town of Silverthorne	No
157	Swan Mountain Rec Path	Trail	Summit County	No
158	Blue River Trail	Trail	Town of Silverthorne	Yes
158	Blue River Trail	Trail	Town of Silverthorne	No
159	Arrastra Open Space	Open Space	Clear Creek County	No
160	Eagle River/Squaw Creek Confluence Fishing Access	River Access	Unknown	No
161	Donovan Park Fishing Access	River Access	Town of Vail	No
162	Ford Park Fishing Access	River Access	Town of Vail	No
163	Vail Golf Course Fishing Access	River Access	Town of Vail	No
164	Katsos Ranch Fishing Access	River Access	Town of Vail	No
166	Black Gore Creek Fishing Access	River Access	CDOT/USFS	No
167	Ute Creek BLM Site Fishing and Boating Access	River Access	Unknown	No
168	Bellyache BLM Site Fishing and Boating Access	River Access	BLM	No
169	Gore Creek Fishing and Boating Access	River Access	Town of Vail	No
170	Theobald Park	Park	Town of Empire	No
171	Empire Alternative High School	School/Community	Town of Empire	No

Table 4. Recreation Resources Identified within a Six-Mile Buffer

Map ID	Site Name	Facility Type	Jurisdiction	Impacted
		Recreation Center		
174	Terminator Boating Access	River Access	Unknown	No
175	Tunnel 4 Boating Access	River Access	Unknown	No
176	Terminator Boating Access	River Access	Unknown	No
177	Tunnel 4 Boating Access	River Access	Unknown	No
200	City Hall Park	Park	City of Idaho Springs	Yes
201	Apex Park	Park	Jefferson County	No
202	Arapahoe Basin Ski Area	Ski Area	Unknown	No
203	Arctic Placer Park	Park	Town of Silverthorne	No
204	Arrowhead Ski Area (Non-FS)	Ski Area	Unknown	No
204	Arrowhead Ski Area	Ski Area	Unknown	No
206	Avon Parks / Open Space	Open Space	Unknown	No
207	Axtell Park	Park	City of Glenwood Springs	No
208	Ball Fields	Park	Unknown	No
209	Bear Creek Canyon Park	Park	Unknown	No
210	Beaver Creek Ski Area	Ski Area	WRNF	No
211	Beaver Nordic Area	Ski Area	Unknown	No
212	Bergen Park	Park	Jefferson County	No
213	Berry Creek / Miller Ranch	Park	WRNF	Yes
214	Bighorn Park	Park	Town of Vail	No
215	BLM Dotsero Crater Geologic / Scenic Site	Scenic Site	Unknown	No
216	BLM Ute Trailhead	Trailhead	BLM	No
217	Blue River Regional Park, Silverthorne	Park	Summit County	No
219	Booth Falls Tot Lot / Tennis Courts	Park	Town of Vail	No
221	Buffehr Creek Park	Park	Town of Vail	No
221	Buffehr Creek Park	Park	Unknown	No
223	Centennial Park	Park	City of Glenwood Springs	No
224	Central Park	Park	Town of Eagle	No
225	Charlie Tayler Waterwheel Park	Park	City of Idaho Springs	Yes
226	Citizens Park	Park	City of Idaho Springs	No
227	City Park - Idaho Springs	Park	City of Idaho Springs	No
228	Clear Creek Metropolitan District Rec Center	School/Community Recreation Center	Clear Creek County	No
230	Cooper Park (Old City Park), Idaho Springs	Park	City of Idaho Springs	No

Recreation Resources Technical Report

Table 4. Recreation Resources Identified within a Six-Mile Buffer

Map ID	Site Name	Facility Type	Jurisdiction	Impacted
231	Copper Mountain Ski Area	Ski Area	WRNF	Yes
232	Corwina Park	Park	Jefferson County	No
233	Cottonwood Park	Park	Town of Silverthorne	No
234	Courtney Ryley Cooper Park	Park	City of Idaho Springs	No
235	Crown Hill Park	Park	Unknown	No
237	Denver Mountain Park	Park	Jefferson County	No
238	Denver Water Board Lands	Open Space	City and County of Denver	No
239	Dillon Dam Recreation Trail / Frisco Lakefront Trail	Trail	Town of Frisco	No
240	Dillon Nature Preserve	Nature Preserve	WRNF	No
241	Dillon Open Space	Open Space	Unknown	No
242	Dillon Park	Park	Town of Dillon	No
243	Dillon Reservoir Recreation Management Area	Recreation Area	Unknown	No
244	Donovan Park Cemetery	Park	Town of Vail	No
245	Donovan Park	Park	Town of Vail	No
246	Eagle-Vail Golf Course	Golf Course	Eagle-Vail Metro District	No
247	Eagle County Fairgrounds (Also Fishing Access and Boat Launch - Take Out)	Park	Eagle County	No
248	Eagle County Fairgrounds Ball Fields	Park	Eagle County	No
249	Eagle Park	Park	Eagle County	No
250	Eagle Park (aka City Park)	Park	Town of Eagle	No
251	Eagle River Estates Park	Park	Town of Gypsum	No
252	Eagle River Park / Chambers Park (Also Fishing Access and Boating Access)	Park / River Access	Eagle County	No
253	East End Ball Fields	Park	City of Idaho Springs	No
254	Elk Meadows Park	Park	Jefferson County	No
256	Empire Alternative High School	School/Community Recreation Center	Unknown	No
257	Estes Lane Park	Park	Town of Gypsum	No
258	Expanded Rainbow Community Park	Park	Town of Silverthorne	No
260	Fairgrounds	Park	Unknown	No
261	Fillius Park	Park	Jefferson County	No
262	Ford Park / Recreation Area	Park	Town of Vail	No
264	Frisco Nordic Center	Ski Area	Unknown	No
265	Frisco Park	Park	Unknown	No

Table 4. Recreation Resources Identified within a Six-Mile Buffer

Map ID	Site Name	Facility Type	Jurisdiction	Impacted
266	Frisco Peninsula Park	Park	Unknown	No
267	Gem Park	Park	Unknown	No
268	Genesee Park	Park	Jefferson County	Yes
269	Georgetown Ball Fields	Park	Town of Georgetown	No
270	Georgetown City Park	Park	Unknown	No
271	Georgetown Lake Recreation Area	Recreation Area	Unknown	No
272	Georgetown Recreation Area	Recreation Area	Unknown	No
273	Georgetown Recreation Facility - Tennis Courts	Park	Unknown	No
274	Glenwood Hot Springs	Park	City of Glenwood Springs	Yes
275	Green Mountain Park	Park	Unknown	No
276	Greenbelt Park / Marina Park	Park	Unknown	No
278	Gypsum Ponds State Wildlife Area	State Wildlife Area	Eagle County Managed by CDOW	Yes
278	Gypsum Ponds State Wildlife Area	State Wildlife Area	Eagle County	No
279	Gypsum Meadows Park	Park	Town of Gypsum	No
280	Gypsum Open Space / Eagle River Estates Fishing Easement	Open Space	Unknown	No
281	Gypsum Park	Park	Town of Gypsum	No
282	Gypsum Park / Recreation Site	Park	BLM	No
283	Gypsum Platted Open Space	Open Space	Town of Gypsum	No
284	Heritage Park	Park	City of Idaho Springs	No
285	Hillside Park	Park	City of Idaho Springs	No
286	Historic Park at Granite Street	Park	Jefferson County	No
287	Hogback Park	Park	Jefferson County	Yes
289	Horseshoe Bend Picnic Area	Picnic Area	BLM	No
292	Intermountain Pocket Park	Park	Unknown	No
294	Jeffco Government Center Open Space	Open Space	Jefferson County	No
295	Jeffco Open Space Park	Open Space	Jefferson County	No
296	Jeffco Open Space Property	Open Space	Jefferson County	No
297	Katsos Ranch Open Space	Open Space	Town of Vail	No
298	Keystone Ski Area	Ski Area	Unknown	No
300	Lair o the Bear	Park	Unknown	No
301	Little Park	Park	Jefferson County	No
303	Lookout Mountain Nature Center	Nature Preserve	Jefferson County	No
304	Loveland Ski Area	Ski Area	ARNF	Yes

Recreation Resources Technical Report

Table 4. Recreation Resources Identified within a Six-Mile Buffer

Map ID	Site Name	Facility Type	Jurisdiction	Impacted
305	Lower Town Hall Park	Park	Town of Gypsum	No
307	Marina Park	Park	Town of Frisco	No
308	Martin Creek Park	Park	Unknown	No
309	Matthews / Winters Park	Park	Jefferson County	No
310	Meadow Creek Park / Wetlands	Park	Town of Frisco	No
311	Meadow Creek Park	Park	Town of Frisco	No
312	Memorial Park	Park	Town of Frisco	No
313	Minturn Recreation Area	Recreation Area	Unknown	No
314	Montgomery Park	Park	City of Idaho Springs	No
315	Mountain Glen Park	Park	Unknown	No
316	North Hyland Park	Park	Unknown	No
317	Nottingham Lake / Park	Park	Unknown	No
318	Old Town Park	Park	Town of Gypsum	No
329	Park & Play Court	Park	Unknown	No
330	Park & Tennis Courts	Park	Unknown	No
331	Park at 1st Ave	Park	Unknown	No
332	Pioneer Park & Tennis Courts	Park	Unknown	No
333	Pocket Park	Park	Town of Frisco	No
334	Quail Run Park	Park	Unknown	No
335	Rainbow Park	Park	Town of Silverthorne	No
336	Red Rocks Park	Park	Jefferson County	No
337	Roger Staub Park	Park	Town of Vail	No
338	Sandstone Park / Tot Lot, Vail	Park	Town of Vail	No
339	Siloam Springs Trailhead	Trailhead	BLM	No
340	Silver Mountain Park	Park	Summit County	No
341	Silver Plume Park	Park	Clear Creek County	No
342	Silverthorne Open Space	Open Space	Town of Silverthorne	Yes
343	Skateboard Park	Park	City of Idaho Springs	Yes
345	Stephens Park and Fishing Access	Park / River Access	Town of Vail	No
347	Summit Recreation Tourism Bike Trails	Trail	Unknown	No
349	Theobald Park	Park	Unknown	No
350	Toddler Playground	Park	Unknown	No
351	Town Park	Park	Town of Eagle	No
352	Trent Park	Park	Town of Silverthorne	No
353	Triangle Park	Park	Town of Frisco	No

Table 4. Recreation Resources Identified within a Six-Mile Buffer

Map ID	Site Name	Facility Type	Jurisdiction	Impacted
354	Two Rivers Park	Park	City of Glenwood Springs Parks Department	Yes
355	Upper Town Hall Park	Park	Town of Gypsum	No
356	Vail Ski Area	Ski Area	WRNF	No
358	Vail Designated Parks	Park	Unknown	No
359	Vail Golf Course	Golf Course	Unknown	No
360	Vail Open Space	Open Space	Town of Vail	No
361	Vail Outdoor Recreation	Recreation Area	Town of Vail	No
362	Veltus Park	Park	City of Glenwood Springs	No
363	Vogelaar Park	Park	City of Glenwood Springs	No
364	W. Walter Byron Memorial Park	Park	Town of Frisco	No
366	Willow Park	Park	Unknown	No
367	Willow Preserve Open Space	Open Space	Unknown	No
368	Windy Saddle Park	Park	Jefferson County	No
369	Vail Trail	Trail	Town of Vail	Yes
370	Vail Pass - Tenmile Trail	Trail	WRNF	Yes
371	Gore Range Trail Parking Area and Scenic Pullout	Trailhead	WRNF	No
372	Gore Range Trail	Trail	WRNF	Yes
373	Two Elk Trail	Trail	WRNF	Yes
374	Corral Creek Trail	Trail	WRNF	Yes
375	Georgetown to Silver Plume Bike Trail	Trail	Town of Silver Plume	Yes
376	Scott Lancaster Memorial Trail	Trail	Clear Creek County City of Idaho Springs	Yes
376	Proposed Scott Lancaster Memorial Trail	Trail	City of Idaho Springs	Yes
380	Proposed Silver Plume Business Loop Trail	Trail	Town of Silver Plume	No
381	Continental Divide National Scenic Trail	Trail	ARNF	Yes
382	Apex Trail	Trail	Jefferson County	No
384	Bard Creek Trail	Trail	ARNF	No
386	Beaver Brook Trail	Trail	Jefferson County	No
387	Bighorn Trail	Trail	WRNF	No
388	BLM000000TG	Trail	BLM	No
389	BLM008146T	Trail	BLM	No
390	BLM008148TX	Trail	BLM	No

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Table 4. Recreation Resources Identified within a Six-Mile Buffer

Map ID	Site Name	Facility Type	Jurisdiction	Impacted
391	BLM008150T	Trail	BLM	No
392	BLM008254T	Trail	BLM	No
393	Doc Hollidays Trail	Trail	City of Glenwood Springs	No
394	Boy Scout Trail	Trail	City of Glenwood Springs	No
395	BLM008282T	Trail	BLM	No
396	BLM008368T	Trail	BLM	No
397	BLM008385RX	Trail	BLM	No
398	BLM008440T	Trail	BLM	No
399	BLM008446R	Trail	BLM	No
400	BLM008446T	Trail	BLM	No
401	BLM008460TG	Trail	BLM	No
402	BLM008461TG	Trail	BLM	No
403	BLM008462TX	Trail	BLM	No
404	BLM008480T	Trail	BLM	Yes
405	BLM008482TX	Trail	BLM	No
406	BLM008494T	Trail	BLM	No
407	BLM008496TX	Trail	BLM	No
408	BLM008497T	Trail	BLM	No
409	BLM008501TG	Trail	BLM	No
410	BLM008502TG	Trail	BLM	No
411	BLM008503TG	Trail	BLM	No
412	BLM008506T	Trail	BLM	No
413	BLM008507TX	Trail	BLM	No
414	BLM008508T	Trail	BLM	No
415	BLM08149BT	Trail	BLM	No
416	BLM08149ET	Trail	BLM	No
417	Transfer Trail	Trail	Unknown	No
418	BLM08150AT	Trail	BLM	No
419	BLM08150BT	Trail	BLM	No
420	BLM08282AT	Trail	BLM	No
421	BLM08363AT	Trail	BLM	No
422	BLM08369DT	Trail	BLM	No
423	BLM08380BT	Trail	BLM	No
424	BLM08384BRG	Trail	BLM	No

Table 4. Recreation Resources Identified within a Six-Mile Buffer

Map ID	Site Name	Facility Type	Jurisdiction	Impacted
425	BLM08385ERX	Trail	BLM	No
426	BLM08410ERX	Trail	BLM	No
427	BLM08412CR	Trail	BLM	No
428	BLM08412CRX	Trail	BLM	No
429	BLM08460ATG	Trail	BLM	No
430	BLM08480ATX	Trail	BLM	No
431	BLM08480BTX	Trail	BLM	No
432	BLM08480CT	Trail	BLM	Yes
433	BLM08481ATX	Trail	BLM	No
434	BLM08481BTX	Trail	BLM	No
435	BLM08494AT	Trail	BLM	No
436	BLM08494ATX	Trail	BLM	No
437	BLM08494BTX	Trail	BLM	No
438	BLM08495BTX	Trail	BLM	No
439	BLM08495CTX	Trail	BLM	No
440	BLM08495DTX	Trail	BLM	No
441	BLM08495ETX	Trail	BLM	No
442	BLM08496AT	Trail	BLM	No
443	BLM08496BTX	Trail	BLM	No
444	BLM08496CT	Trail	BLM	No
445	BLM08496DT	Trail	BLM	No
446	BLM08497BTX	Trail	BLM	No
447	BLM08501ATG	Trail	BLM	No
448	BLM08501BTG	Trail	BLM	No
449	BLM08501CTG	Trail	BLM	No
450	BLM08502ATG	Trail	BLM	No
451	BLM08502BTG	Trail	BLM	No
452	BLM08502CTG	Trail	BLM	No
453	BLM8149BAT	Trail	BLM	No
454	BLM8149BBT	Trail	BLM	No
455	BLM8149BCT	Trail	BLM	No
456	BLM8149BDT	Trail	BLM	No
457	BLM8384BARG	Trail	BLM	No
458	BLM8460BBTG	Trail	BLM	No
459	BLM8494AAT	Trail	BLM	No

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Table 4. Recreation Resources Identified within a Six-Mile Buffer

Map ID	Site Name	Facility Type	Jurisdiction	Impacted
460	BLM8494ABTX	Trail	BLM	No
461	BLM8495EATX	Trail	BLM	No
462	BLM8495EBT	Trail	BLM	No
463	BLM8496CATX	Trail	BLM	No
464	Bonanza Trail	Trail	Unknown	No
465	Booth Lake Trail	Trail	Unknown	No
466	Bowman's Shortcut Trail	Trail	Unknown	No
467	Buffalo Cabin Trail	Trail	Unknown	No
468	Buffehr Creek Trail	Trail	Unknown	No
469	Buffehr Mountain Trail	Trail	Unknown	No
470	C-470 Trail West of Green Mountain Trail	Trail	Unknown	No
471	CDOW/Vail Underpass Trail	Trail	Town of Vail	Yes
472	Chimney Creek Trail	Trail	Unknown	No
474	Community Plan Trail	Trail	Unknown	No
475	Dakota Ridge Trail	Trail	Unknown	No
476	Dead Horse Trail	Trail	Unknown	No
477	Defiance Trail	Trail	Unknown	No
478	Deluge Lake Trail	Trail	Unknown	No
479	Dotsero Crater Trail	Trail	Unknown	No
480	Eagle Trails	Trail	Town of Eagle	Yes
481	East Fork Trail	Trail	Unknown	No
482	Elk Meadow Park Loop Trail	Trail	Unknown	No
483	Empire Pass Trail	Trail	Unknown	No
484	Evergreen to Bergen Park Trail	Trail	Unknown	No
485	FOR000000T	Trail	Unknown	No
486	FOR001845T	Trail	Unknown	No
487	Frisco - Keystone BP Trail	Trail	Unknown	No
488	Frisco to Breckenridge Trail	Trail	Unknown	No
489	Game Creek Trail	Trail	Unknown	No
500	Gold Hill Trail	Trail	Unknown	No
501	Gore Creek Trail	Trail	Unknown	No
502	Grays Peak Trail	Trail	Unknown	No
503	Grizzly Creek Trail	Trail	Unknown	No
504	Grouse Lake Trail	Trail	Unknown	No
505	Grubstake Loop Trail	Trail	Unknown	No

Table 4. Recreation Resources Identified within a Six-Mile Buffer

Map ID	Site Name	Facility Type	Jurisdiction	Impacted
506	Gypsum to Eagle Trail	Trail	Unknown	No
507	Gypsum Trails	Trail	Unknown	No
508	Hanging Lake Trail	Trail	Unknown	No
509	Hassell Lake Trail	Trail	Unknown	No
510	Hells Pocket Trail	Trail	BLM Eagle County	Yes
511	Herman Gulch Trail	Trail	Unknown	No
512	Hubbard Cave Trail	Trail	Unknown	No
513	Kearney Gulch Trail	Trail	Unknown	No
514	Kinney Run Trail	Trail	Unknown	No
515	Lily Pad Trail	Trail	Unknown	No
516	Lookout Mountain Trail	Trail	Unknown	No
517	Loveland Pass Trail	Trail	Unknown	No
518	Martin Creek Trail	Trail	Unknown	No
519	Meadow Creek Trail	Trail	Unknown	No
520	Meadow Mt. Tie Thru Trail	Trail	Unknown	No
521	Mesa Cortina Trail	Trail	Unknown	No
522	Middle Creek Trail	Trail	Unknown	No
523	Miner's Creek Trail	Trail	Unknown	No
524	Miners Creek Trail	Trail	Unknown	No
525	Mitchell Creek Trail	Trail	Unknown	No
526	Name Unknown- Eagle County Cooley Mesa Rd	Trail	Unknown	No
527	Name Unknown- Eagle County Grand Ave	Trail	Unknown	No
528	Name Unknown- Eagle County Sylvan Lake Rd	Trail	Unknown	No
529	Name Unknown- Eagle County Valley Road	Trail	Unknown	No
534	No Name Trail	Trail	Unknown	No
535	North Tenmile Trail	Trail	Unknown	No
536	North Trail	Trail	Unknown	No
537	North Vail Trail	Trail	Unknown	No
538	Old Dillon Reservoir Trail	Trail	Unknown	No
539	Painters Pause Trail	Trail	Unknown	No
540	Paulie's Plunge / Stove Creek Trail	Trail	Unknown	No
541	Paulie's Sister Trail	Trail	Unknown	No
542	Peaks Trail	Trail	Unknown	No

Recreation Resources Technical Report

Table 4. Recreation Resources Identified within a Six-Mile Buffer

Map ID	Site Name	Facility Type	Jurisdiction	Impacted
543	Pick N' Sledge Trail	Trail	Unknown	No
544	Piney Connector Trail	Trail	Unknown	No
545	Pitkin Trail	Trail	Unknown	No
546	Ptarmigan Trail	Trail	Unknown	No
547	Ptarmigan Pass Trail	Trail	Unknown	No
548	Range Trail	Trail	Unknown	No
549	Red Canyon Stock Driveway	Trail	Unknown	No
550	Red Elephant Hill Trail	Trail	Unknown	No
551	Red Elephant Hill Trail (On Private Land)	Trail	Unknown	No
552	Red Rocks Trail	Trail	Unknown	No
553	Ruby Creek Trail	Trail	Unknown	No
554	Sapphire Point Loop Trail	Trail	Unknown	No
555	Siloam Springs Trail	Trail	Unknown	No
556	Silver Plume Mountain Trail	Trail	Unknown	No
557	Sluicebox Trail	Trail	Unknown	No
558	Son of Middle Creek Trail	Trail	Unknown	No
559	South Grizzly Loop Trail	Trail	Unknown	No
560	Spraddle Creek Trail	Trail	Unknown	No
561	Spur Trails at Avon & Edwards	Trail	Town of Avon	Yes
562	Stafford Gulch Trail	Trail	Unknown	No
563	State Hwy 9 Bike Path	Trail	Unknown	No
564	Tenderfoot Trail	Trail	Unknown	No
565	Tie Gulch Trail	Trail	Unknown	No
566	Turquoise Lake Summit Trail	Trail	Unknown	No
568	UNK000000TG	Trail	Unknown	No
569	Village Walk Trail	Trail	Unknown	No
570	Warren Gulch Trail	Trail	Unknown	No
571	Watrous Gulch Trail	Trail	Unknown	No
572	West Edwards to Avon Trail	Trail	Eagle County	Yes
573	West Grouse Creek Trail	Trail	Unknown	No
575	Wheeler nat. Rec. Trail	Trail	Unknown	No
576	Whiskey Creek Trail	Trail	Unknown	No
577	Wilder Gulch Trail	Trail	Unknown	No
578	Windy Point Loop Trail	Trail	Unknown	No
579	Peninsula Recreation Area Trail Network	Trail	Unknown	No

Table 4. Recreation Resources Identified within a Six-Mile Buffer

Map ID	Site Name	Facility Type	Jurisdiction	Impacted
580	Copper Mountain Trail Network	Trail	Unknown	No
581	Name Unknown - Summit County	Trail	Unknown	No
582	Name Unknown - Summit County	Trail	Unknown	No
583	Name Unknown - Summit County	Trail	Unknown	No
584	Name Unknown - Summit County	Trail	Unknown	No
585	Name Unknown - Summit County	Trail	Unknown	No
586	Name Unknown - Summit County	Trail	Unknown	No
587	Name Unknown - Summit County	Trail	Unknown	No
588	Name Unknown - Summit County	Trail	Unknown	No
589	Name Unknown - Summit County	Trail	Unknown	No
590	Name Unknown - Summit County	Trail	Town of Frisco	Yes
591	Name Unknown - Summit County	Trail	Unknown	No
592	Name Unknown - Lakewood & Golden	Trail	Unknown	No
593	Name Unknown - Lakewood & Golden	Trail	Unknown	No
594	Name Unknown - Lakewood & Golden	Trail	Unknown	No
595	Name Unknown - Lakewood & Golden	Trail	Unknown	No
596	Green Mountain Trail Network	Trail	Unknown	No
597	Name Unknown - Lakewood & Golden	Trail	Unknown	No
598	Name Unknown - Lakewood & Golden	Trail	Unknown	No
599	Name Unknown - Lakewood & Golden	Trail	Unknown	No
600	Name Unknown - Lakewood & Golden	Trail	Unknown	No
601	Name Unknown - Lakewood & Golden	Trail	Unknown	No
602	Name Unknown - Lakewood & Golden	Trail	Unknown	No
603	Name Unknown - Lakewood & Golden	Trail	Unknown	No
604	Name Unknown - Lakewood & Golden	Trail	Unknown	No
605	Name Unknown - Lakewood & Golden	Trail	Unknown	No
606	Name Unknown - Lakewood & Golden	Trail	Unknown	No
607	Name Unknown - Lakewood & Golden	Trail	Unknown	No
608	Name Unknown - BLM	Trail	BLM	No
609	Name Unknown - BLM	Trail	BLM	No
610	Name Unknown - BLM	Trail	BLM	No
611	Name Unknown - BLM	Trail	BLM	No
612	Name Unknown - BLM	Trail	BLM	No
613	Name Unknown - BLM	Trail	BLM	No
614	Name Unknown - BLM	Trail	BLM	No

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Table 4. Recreation Resources Identified within a Six-Mile Buffer

Map ID	Site Name	Facility Type	Jurisdiction	Impacted
615	Name Unknown - BLM	Trail	BLM	No
616	Name Unknown - BLM	Trail	BLM	No
617	Name Unknown - BLM	Trail	BLM	No
618	Name Unknown - BLM	Trail	BLM	No
619	Name Unknown - BLM	Trail	BLM	No
620	Name Unknown - BLM	Trail	BLM	No
621	Name Unknown - BLM	Trail	BLM	No
622	Name Unknown - BLM	Trail	BLM	No
623	Name Unknown - BLM	Trail	BLM	No
624	Name Unknown - BLM	Trail	BLM	No
625	Name Unknown - BLM	Trail	BLM	No
626	Name Unknown - BLM	Trail	BLM	No
627	Name Unknown - BLM	Trail	BLM	No
628	Name Unknown - BLM	Trail	BLM	No
629	Name Unknown - BLM	Trail	BLM	No
630	Name Unknown - BLM	Trail	BLM	No
631	Name Unknown - BLM	Trail	BLM	No
632	Name Unknown - BLM	Trail	BLM	No
633	Name Unknown - BLM	Trail	BLM	No
634	Name Unknown - BLM	Trail	BLM	No
635	Name Unknown - BLM	Trail	BLM	No
636	Name Unknown - BLM	Trail	BLM	No
637	Name Unknown - BLM	Trail	BLM	No
638	Name Unknown - BLM	Trail	BLM	No
639	Name Unknown - BLM	Trail	BLM	No
640	Name Unknown - BLM	Trail	BLM	No
641	Name Unknown - BLM	Trail	BLM	No
642	Name Unknown - BLM	Trail	BLM	No
643	Name Unknown - BLM	Trail	BLM	No
644	Name Unknown - BLM	Trail	BLM	No
645	Name Unknown - BLM	Trail	BLM	No
646	Name Unknown - BLM	Trail	BLM	No
647	Name Unknown - BLM	Trail	BLM	No
648	Name Unknown - BLM	Trail	BLM	No
649	Name Unknown - BLM	Trail	BLM	No

Table 4. Recreation Resources Identified within a Six-Mile Buffer

Map ID	Site Name	Facility Type	Jurisdiction	Impacted
650	Name Unknown - BLM	Trail	BLM	No
651	Name Unknown - BLM	Trail	BLM	No
652	Name Unknown - BLM	Trail	BLM	No
653	Name Unknown - BLM	Trail	BLM	No
654	Name Unknown - BLM	Trail	BLM	No
655	Name Unknown - BLM	Trail	BLM	No
656	Name Unknown - BLM	Trail	BLM	No
657	Name Unknown - BLM	Trail	BLM	No
658	Name Unknown - BLM	Trail	BLM	No
659	Name Unknown - BLM	Trail	BLM	No
660	Name Unknown - BLM	Trail	BLM	No
661	Name Unknown - BLM	Trail	BLM	No
662	Name Unknown - BLM	Trail	BLM	No
663	Name Unknown - BLM	Trail	BLM	No
664	Name Unknown - BLM	Trail	BLM	No
665	Name Unknown - BLM	Trail	BLM	No
666	Name Unknown - BLM	Trail	BLM	No
667	Name Unknown - BLM	Trail	BLM	No
668	Name Unknown - BLM	Trail	BLM	No
669	Name Unknown - BLM	Trail	BLM	No
670	Name Unknown - BLM	Trail	BLM	No
671	Name Unknown - BLM	Trail	BLM	No
672	Name Unknown - BLM	Trail	BLM	No
673	Name Unknown - BLM	Trail	BLM	No
674	Name Unknown - BLM	Trail	BLM	No
675	Name Unknown - BLM	Trail	BLM	No
676	Name Unknown - BLM	Trail	BLM	No
677	Name Unknown - BLM	Trail	BLM	No
678	Name Unknown - BLM	Trail	BLM	No
679	Name Unknown - BLM	Trail	BLM	No
680	Name Unknown - BLM	Trail	BLM	No
681	Name Unknown - BLM	Trail	BLM	No
682	Name Unknown - BLM	Trail	BLM	No
683	Name Unknown - BLM	Trail	BLM	No
684	Name Unknown - BLM	Trail	BLM	No

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Table 4. Recreation Resources Identified within a Six-Mile Buffer

Map ID	Site Name	Facility Type	Jurisdiction	Impacted
685	Name Unknown - BLM	Trail	BLM	No
686	Name Unknown - BLM	Trail	BLM	No
687	Name Unknown - BLM	Trail	BLM	No
688	Name Unknown - BLM	Trail	BLM	No
689	Name Unknown - BLM	Trail	BLM	No
690	Name Unknown - BLM	Trail	BLM	No
691	Name Unknown - BLM	Trail	BLM	No
692	Name Unknown - BLM	Trail	BLM	No
693	Name Unknown - BLM	Trail	BLM	No
694	Name Unknown - BLM	Trail	BLM	No
695	Name Unknown - BLM	Trail	BLM	No
696	Name Unknown - BLM	Trail	BLM	No
697	Name Unknown - BLM	Trail	BLM	No
698	Name Unknown - BLM	Trail	BLM	No
699	Name Unknown - BLM	Trail	BLM	No
700	Name Unknown - BLM	Trail	BLM	No
701	Name Unknown - BLM	Trail	BLM	No
702	Name Unknown - BLM	Trail	BLM	No
703	Name Unknown - BLM	Trail	BLM	No
704	Name Unknown - BLM	Trail	BLM	No
705	Name Unknown - BLM	Trail	BLM	No
706	Name Unknown - BLM	Trail	BLM	No
707	Name Unknown - BLM	Trail	BLM	No
708	Name Unknown - BLM	Trail	BLM	No
709	Name Unknown - BLM	Trail	BLM	No
710	Name Unknown - BLM	Trail	BLM	No
711	Name Unknown - BLM	Trail	BLM	No
712	Name Unknown - BLM	Trail	BLM	No
713	Name Unknown - BLM	Trail	BLM	No
714	Name Unknown - BLM	Trail	BLM	No
715	Name Unknown - BLM	Trail	BLM	No
716	Name Unknown - BLM	Trail	BLM	No
717	Name Unknown - BLM	Trail	BLM	No
718	Name Unknown - BLM	Trail	BLM	No
719	Name Unknown - BLM	Trail	BLM	No

Table 4. Recreation Resources Identified within a Six-Mile Buffer

Map ID	Site Name	Facility Type	Jurisdiction	Impacted
720	Name Unknown - BLM	Trail	BLM	No
721	Name Unknown - BLM	Trail	BLM	No
722	Name Unknown - BLM	Trail	BLM	No
723	Name Unknown - BLM	Trail	BLM	No
724	Name Unknown - BLM	Trail	BLM	No
725	Name Unknown - BLM	Trail	BLM	No
726	Commando Run Trail	Trail	Unknown	No
727	Officers Gulch Trail	Trail	Unknown	No
728	Shrine Pass Trail	Trail	Unknown	No
729	Silver Creek Wagon Road	Trail	Unknown	No
730	Notch Trail	Trail	Unknown	No
731	7:30 Trail	Trail	ARNF	Yes
732	Georgetown Railroad Loop	Trail	Unknown	No
733	Red Mountain and Jeanne Goley Trail	Trail	Unknown	No
734	Rio Grande Trail	Trail	Unknown	No
735	Glenwood Canyon Trail	Trail	Unknown	No
736	Sister Lucy Downey Park	Park	Unknown	No
737	Glenwood Springs Golf Club	Golf Course	Unknown	No
738	Glenwood Springs Whitewater Park	Park	Unknown	No
739	Gypsum BLM Campground and Fishing Access	Campground	Unknown	No
740	Rooney Road Sports Complex	Park	Unknown	No
741	Herman Gulch Trailhead	Trailhead	ARNF	Yes
742	Rock Gardens Campground	Campground	Unknown	No
743	Grizzly Creek Trailhead & Picnic Area	Trailhead	Unknown	No
744	Grizzly Creek Boat Launch	River Access	Unknown	No
745	Shoshone Power Plant Boat Launch	River Access	Unknown	No
746	Shoshone Reservoir	Recreation Area	Unknown	No
747	Hanging Lake Trailhead	Trailhead	Unknown	No
748	Hanging Lake Picnic Area	Picnic Area	Unknown	No
749	DAVOS TRAIL	Trail	Unknown	No
750	North Vail Trailhead	Trailhead	Unknown	No
751	Blair Ranch Rest Area	Rest Area	Unknown	No
752	West Dillon Overlook	Rest Area	Unknown	No
753	Eagle River Kayak Launch	River Access	Unknown	No

Recreation Resources Technical Report

Table 4. Recreation Resources Identified within a Six-Mile Buffer

Map ID	Site Name	Facility Type	Jurisdiction	Impacted
754	Game Creek Trailhead	Trailhead	Unknown	No
755	Giberson Bay Picnic Area	Picnic Area	Unknown	No
756	Gore Creek Campground	Campground	Unknown	No
757	Vail Pass - Tenmile Trailhead	Trailhead	Unknown	No
758	Grouse Creek Trailhead	Trailhead	Unknown	No
759	No Name Trailhead	Trailhead	Unknown	No
760	Colorado River Access Site at Dotsero Fishing and Boating Access	River Access	Unknown	No
761	Lava Flow Recreation Site	Recreation Area	Unknown	No
762	BLM Horse Pasture Site	Recreation Area	Unknown	No
763	Community BLM Site & Fishing Access	River Access	Unknown	No
764	Eagle Villas Apartments Fishing Access Easement	River Access	Unknown	No
765	Eagle River CDOW Fishing Lease	River Access	Unknown	No
766	Hells Pocket Trailhead	Trailhead	Unknown	No
767	Wolcott Recreation Site	Recreation Area	Unknown	No
768	Wilmore Lake Fishing Access	River Access	Unknown	No
769	Squaw Creek Fishing and Boating Access	River Access	Unknown	No
770	Old Edwards Estates Fishing Access	River Access	Unknown	No
771	CDOT Edwards Rest Area Fishing Access	Rest Area	Unknown	No
772	Avon's Bob the Bridge Fishing Access	River Access	Unknown	No
773	Mount Meadow Trailhead	Trailhead	WRNF	Yes
774	Booth Lake Trailhead	Trailhead	Unknown	No
775	Gore Creek Fishing Access	River Access	Unknown	No
776	Pitkin Trailhead	Trailhead	Unknown	No
777	Bighorn Trailhead	Park	Unknown	No
778	Two Elk Trailhead	Trailhead	Unknown	No
779	Shrine Mountain Inn & Tenth Mountain Hut	Recreation Area	Unknown	No
780	Black Lake Recreation Area & Fishing Access	Recreation Area	Unknown	No
780	Black Lake Recreation Area & Fishing Access	Recreation Area	Unknown	No
781	Vail Pass Winter and Summer Recreation Area & Shrine Pass Trailhead	Recreation Area	Unknown	No
782	Wheeler Flats Trailhead	Trailhead	Unknown	No
783	Officers Gulch Trailhead	Trailhead	Unknown	No
784	Lilypad Trailhead	Trailhead	Unknown	No

Table 4. Recreation Resources Identified within a Six-Mile Buffer

Map ID	Site Name	Facility Type	Jurisdiction	Impacted
785	Meadow Creek Trailhead	Trailhead	Unknown	No
786	Frisco To Breckenridge Trailhead	Trailhead	Unknown	No
787	Peaks Trailhead	Trailhead	Unknown	No
787	Pine Cove Campground	Campground	Unknown	No
788	North Tenmile Trailhead	Trailhead	Unknown	No
789	Spaddle Creek Trailhead	Trailhead	Unknown	No
790	Buffehr Creek Trailhead	Trailhead	Unknown	No
791	Eagle River and Gore Creek Confluence Fishing Access	River Access	Unknown	No
792	Sapphire Point Overlook and Picnic Area	Picnic Area	Unknown	No
793	Miners Creek Trailhead	Trailhead	Unknown	No
794	Prospector Campground	Campground	Unknown	No
795	Windypoint Campground	Campground	Unknown	No
796	East Dillon Overlook	Rest Area	Unknown	No
797	Heaton Bay Campground	Campground	Unknown	No
798	Buffalo Cabin Trailhead	Trailhead	Unknown	No
799	Mesa Cortina Trailhead	Trailhead	Unknown	No
800	Ptarmigan Trailhead	Trailhead	Unknown	No
801	Tenderfoot Trailhead	Trailhead	Unknown	No
802	Loveland Pass	Trailhead	Unknown	No
803	Pass Lake Day Use Area	Recreation Area	Unknown	No
804	Gray's Peak Trailhead	Trailhead	Unknown	No
805	Bard Creek Trailhead	Trailhead	Unknown	No
806	Clear Creek Picnic Area	Picnic Area	Unknown	No
807	Hells Hole Trailhead	Trailhead	Unknown	No
808	Barbour Fork Picnic Area	Picnic Area	Unknown	No
809	Wheeler Lake Trail	Trail	Unknown	No
810	Bakerville - Loveland Access Trail	Trail	ARNF	Yes
810	Bakerville - Loveland Access Trail	Trail	ARNF	No
811	Avon Trail	Trail	Unknown	No
812	BLM008481T	Trail	BLM	No
813	Silver Dale Non-Motorized Recreation Area	Recreation Area	Clear Creek County	No
814	Elmgreen Homestead Open Space	Open Space	Clear Creek County	No
815	Georgetown Lake Recreation Area Access Road (Alvarado Road)	Access Road	Clear Creek County	Yes

Recreation Resources Technical Report

Table 5. Potential Section 6(f) Recreation Resources Identified Within a Six-Mile Buffer

Map ID	Site Name	Facility Type	Jurisdiction	LWCF Grant #	Impacted
268	Genesee Park	Park	Jefferson County	08-00105	Yes
				08-00213	
				08-00379	
227	City Park—Idaho Springs	Park	City of Idaho Springs	08-00470	No
270	Georgetown City Park	Park	City of Georgetown	08-00601	No
271	Georgetown Lake Recreation Area	Recreation Area	City of Georgetown	08-00965	Yes— access road
242	Dillon Park	Park	Town of Dillon	08-00614	No
276	Greenbelt Park/Marina Park	Park	City of Dillon	08-00615	No
347	Summit Recreation Tourism Bike Trails	Trail	Summit County	08-00759	No
364	W. Walter Byron Memorial Park	Park	Town of Frisco	08-00808	No
258	Expanded Rainbow Community Park	Park	Town of Silverthorne	08-00833	No
158	Blue River Trail	Trail	Town of Silverthorne	08-00891	Yes
252	Eagle River Park / Chambers Park (Also Fishing Access and Boating Access)	Park / River Access	Eagle County	08-00827	No
369	Vail Trail (portion)	Trail	Town of Vail	08-01039	Yes
154	Eagle Valley Regional Trails Plan Network—Complete (portion Avon to Dowd Junction)	Trail	Eagle County	08-01074	Yes
362	Veltus Park (formerly riverside park) and Roaring Fork River Access within Veltus Park	Park	City of Glenwood Springs	08-00012	No

Section 3. Environmental Consequences

3.1 Direct Impacts

The Action Alternatives physically impact recreation resources adjacent to the I-70 highway, and indirectly affect resources farther afield, due to access and capacity changes. In general, the Combination alternatives impact recreation resources the most because they have both the largest footprint and the biggest increase in capacity (and thus recreation use). Increased visitation benefits commercial recreation providers and strains the sustainability of forest land resources. The Transit-only alternatives have fewer direct impacts than the Highway-only alternatives but result in higher increases in visitation. The Highway-only alternatives have more direct impacts than the Transit-only alternatives but result in only modest visitation increases because they have less capacity than transit alternatives and therefore induce fewer recreation-oriented trips. The Preferred Alternative initially results in impacts similar to the Transit-only alternatives, resulting from the Minimum Program of improvements. Direct impacts are lower, but visitation increases are high. Later phases of improvements under the Maximum Program, if implemented, have similar impacts to the Combination alternatives, with more direct impacts and a higher increase in recreation visitation.

Over 90 existing and proposed recreation resources fall within the Action Alternative footprints, which include the limits of proposed improvements, 15-foot construction zones to each side of the improvement limits, and 15-foot sensitivity zones beyond the construction zone. All Action Alternatives, except the Minimal Action Alternative, include a third tunnel bore at the Eisenhower-Johnson Memorial Tunnels that directly affects the Loveland Ski Area. The third bore conflicts with “The Face” ski run and the access tunnel under the I-70 highway that returns to the base area from the north side of the I-70 highway. Loveland Ski Area management has indicated they can adapt to these impacts. All Action Alternatives, except the Minimal Action Alternative, impact many of the Clear Creek County Greenway recreation resources and trails west of Vail Pass. The Colorado Department of Transportation will coordinate with Clear Creek County to identify the locations of these impacts and discuss creative design solutions during Tier 2 processes.

Table 4 illustrates the number of existing and proposed recreation resources that may be temporarily or permanently directly affected by the project. In general, the Transit-only alternatives directly impact fewer recreation sites than the Highway-only alternatives, and the Combination alternatives impact the most. The Preferred Alternative initially directly impacts fewer recreation sites under the Minimum Program, similar to the Transit-only alternatives. If the Maximum Program is implemented, later phases of improvements may directly impact high numbers of recreation sites, similar to the Combination alternatives. The No Action Alternative does not directly affect any recreation resources.

Table 5 also shows anticipated direct impact to the following Section 6(f) properties:

- Genesee Park
- Blue River Trail
- Vail Trail
- Eagle Valley Regional Trails Network—complete (portion Avon to Dowd Junction)
- Georgetown Lake Recreation Area access road (likely to be a temporary impact)

Table 6. Recreation Properties within the Impacted Area

Map ID	Site Name	Min	Transit			Highway			Combination			Preferred Alternative			
			Rail	AGS	Bus	55 mph	65 mph	Rever-sible	Rai I	AGS	Bus	Minimum Program		Maximum Program	
													55 mph	65 mph	55 mph
12	Bakerville Fishing Access	N	N	N	N	Y	Y	Y	Y	Y	Y	N	N	Y	Y
13	East of Bakerville Fishing Access	N	N	N	N	N	N	Y	Y	Y	Y	N	N	Y	Y
18	Pedestrian/Bicycle Bridge	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	Y	Y
24	Silver Plume Plaza Near Proposed Silver Plume Interchange.	N	Y	N	Y	Y	Y	Y	Y	Y	Y	N	N	Y	Y
40	Trailhead and Bighorn Sheep Viewing Area	N	N	N	N	N	N	N	Y	Y	Y	N	N	Y	Y
44	Potential Open Space	N	N	N	N	Y	Y	Y	Y	Y	Y	N	N	Y	Y
46	Potential Open Space	N	N	N	N	Y	Y	Y	Y	Y	Y	N	N	Y	Y
48	Proposed Creekside Trail along Alvarado Road	N	N	N	N	Y	Y	Y	Y	Y	Y	N	N	Y	Y
50	Potential Open Space Between US 40 Junction and Georgetown	N	N	N	N	Y	Y	Y	Y	Y	Y	N	N	Y	Y
51	Cemetery Boating Access	N	N	N	N	Y	Y	Y	Y	Y	Y	N	N	Y	Y
52	Pedestrian/Bicycle Underpass (under I-70) and Overpass (over Clear Creek)	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
55	Pedestrian/Bicycle Bridge	N	Y	N	N	N	N	N	N	N	Y	N	N	N	N
56	Pedestrian/Bicycle Underpass or Bridge at Gateway Bridge	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
58	White Water Kayak Park & Fishing and Boating Access	Y	N	N	N	Y	Y	Y	Y	Y	Y	N	N	Y	Y

Table 6. Recreation Properties within the Impacted Area

Map ID	Site Name	Min	Transit			Highway			Combination			Preferred Alternative			
			Rail	AGS	Bus	55 mph	65 mph	Rever-sible	Rai I	AGS	Bus	Minimum Program		Maximum Program	
													55 mph	65 mph	55 mph
64	Proposed Pedestrian/Bicycle Bridge	N	N	N	Y	N	Y	Y	Y	Y	Y	N	N	Y	Y
65	Tubes Boating Access	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
69	Weigh Station Boating Access	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
72	Upper Dumont Boating Access	N	N	N	Y	Y	Y	Y	Y	Y	Y	N	N	Y	Y
75	Fairgrounds (Hiawatha) Boating Access	N	N	N	N	Y	Y	Y	Y	Y	Y	N	N	Y	Y
76	Sheep Keep Property	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	Y	Y
78	Spring Gulch Boating Access	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
80	Trailhead, Parking, and Campground East of Dumont (Philadelphia Mill Site)	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
81	Potential Open Space and Pedestrian/ Bicycle Bridges	N	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y
82	Potential Open Space and Pedestrian/ Bicycle Bridges	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
83	Pedestrian/Bicycle Bridge for Connection to Fall River Road	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
84	Outer Limits Boating Access	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
85	Scenic Overlook and Rest Area	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Table 6. Recreation Properties within the Impacted Area

Map ID	Site Name	Min	Transit			Highway			Combination			Preferred Alternative			
			Rail	AGS	Bus	55 mph	65 mph	Rever- sible	Rai l	AGS	Bus	Minimum Program		Maximum Program	
												55 mph	65 mph	55 mph	65 mph
86	Stanley Bridge Pedestrian/Bicycle Bridge at Scenic Overlook, West End of Idaho Springs	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
87	Trailhead and Parking Area, West End of Idaho Springs	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
90	Idaho Springs High School Football Fields	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	Y	Y
92	Prospector Trail	N	Y	N	N	N	N	N	N	N	N	N	N	N	N
92	USFS Visitor Center	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
93	Potential Park Next to USFS Visitors Center	N	Y	Y	N	N	N	N	N	N	N	Y	Y	N	N
94	Pedestrian/bicycle bridge near USFS Visitor Center on Chicago Creek Road	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
97	Business Loop Alternative	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
97	Business Loop Alternative	N	N	N	Y	N	N	N	Y	Y	Y	N	N	Y	Y
98	Charlie Taylor Water Wheel Fishing Access	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
100	Pedestrian/Bicycle Bridge (near Idaho Springs Town Hall)	N	N	N	Y	Y	Y	Y	Y	Y	Y	N	N	Y	Y
105	Proposed Creekside Trail Alternative	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
110	Scott Lancaster Bridge	N	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
111	Clear Creek Rafting Boating and Fishing Access	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Table 6. Recreation Properties within the Impacted Area

Map ID	Site Name	Min	Transit			Highway			Combination			Preferred Alternative			
			Rail	AGS	Bus	55 mph	65 mph	Rever-sible	Rai I	AGS	Bus	Minimum Program		Maximum Program	
												55 mph	65 mph	55 mph	65 mph
112	Proposed Trailhead, Parking, Restroom and Park at Twin Tunnels (old Game Check Area)	N	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
113	Twin Tunnels Wildlife Land Bridge	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
114	Below Box Boating Access	N	Y	Y	N	N	N	Y	Y	Y	Y	Y	N	Y	N
115	Hidden Valley Fishing Access	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
117	Trail at Hidden Valley Interchange	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
121	Li'l Easy Boating Access	N	N	N	N	N	N	N	N	N	N	N	Y	N	Y
122	Kermits Fishing Access	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
124	Proposed Alternative Trailhead and Parking at Kermits	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
125	Frei Quarry Boating Access	N	N	N	N	N	N	N	N	N	N	N	Y	N	Y
130	Trail through Clear Creek County	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
130	Trail through Clear Creek County	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
132	Vail Deer Underpass	N	Y	Y	N	N	Y	N	Y	N	N	N	Y	N	Y
133	Whisky Creek	Y	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
137	Fall River Road Trail	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
152	Genesee – El Rancho Bike Trail	N	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y

Table 6. Recreation Properties within the Impacted Area

Map ID	Site Name	Min	Transit			Highway			Combination			Preferred Alternative			
			Rail	AGS	Bus	55 mph	65 mph	Rever-sible	Rai l	AGS	Bus	Minimum Program		Maximum Program	
													55 mph	65 mph	55 mph
154	Eagle Valley Regional Trails Plan Network - Complete	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
155	Eagle Valley Regional Trails Plan Network – Proposed	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
158	Blue River Trail	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
200	City Hall Park	N	N	N	Y	Y	Y	Y	Y	Y	Y	N	N	Y	Y
213	Berry Creek / Miller Ranch	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
225	Charlie Tayler Waterwheel Park	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
231	Copper Mountain Ski Area	N	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y
268	Genesee Park	N	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y
274	Glenwood Hot Springs	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
278	Gypsum Ponds State Wildlife Area	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
287	Hogback Park	N	N	N	N	N	N	N	Y	N	N	N	N	N	N
304	Loveland Ski Area	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
342	Silverthorne Open Space	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
343	Skateboard Park	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	Y	Y
354	Two Rivers Park	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
369	Vail Trail	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Table 6. Recreation Properties within the Impacted Area

Map ID	Site Name	Min	Transit			Highway			Combination			Preferred Alternative			
			Rail	AGS	Bus	55 mph	65 mph	Rever-sible	Rai I	AGS	Bus	Minimum Program		Maximum Program	
												55 mph	65 mph	55 mph	65 mph
370	Vail Pass – Tenmile Trail	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
372	Gore Range Trail	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
373	Two Elk Trail	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
374	Corral Creek Trail	N	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y
375	Georgetown to Silver Plume Bike Trail	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
376	Scott Lancaster Memorial Trail	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
376	Proposed Scott Lancaster Memorial Trail	N	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
381	Continental Divide National Scenic Trail	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
404	BLM008480T	N	N	Y	Y	N	N	N	N	Y	Y	Y	Y	Y	Y
432	BLM08480CT	N	N	Y	Y	N	N	N	N	Y	Y	Y	Y	Y	Y
471	CDOW/Vail Underpass Trail	Y	N	N	Y	Y	N	Y	Y	Y	Y	Y	N	Y	N
480	Eagle Trails	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
510	Hells Pocket Trail	N	N	N	Y	N	N	N	N	N	Y	N	N	N	N
561	Spur Trails at Avon & Edwards	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
572	West Edwards to Avon Trail	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
590	Name Unknown – Summit County	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Table 6. Recreation Properties within the Impacted Area

Map ID	Site Name	Min	Transit			Highway			Combination			Preferred Alternative			
			Rail	AGS	Bus	55 mph	65 mph	Rever-sible	Rai I	AGS	Bus	Minimum Program		Maximum Program	
													55 mph	65 mph	55 mph
731	7:30 Trail	N	Y	N	N	Y	Y	Y	Y	Y	Y	N	N	Y	Y
741	Herman Gulch Trailhead	N	Y	N	N	N	N	N	N	N	N	N	N	N	N
773	Mount Meadow Trailhead	Y	N	N	Y	Y	N	Y	Y	Y	Y	Y	N	Y	N
810	Bakerville – Loveland Access Trail	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
815	Georgetown Lake Recreation Area Access Road (Alvarado Road)	N	N	N	N	Y	Y	Y	Y	Y	Y	N	N	Y	Y

3.2 Indirect Impacts

The analysis of indirect impacts focuses on the potential for forest land visitation increases or decreases resulting from the alternatives. The United States Forest Service visitation data allows CDOT to quantify possible changes in recreation use, which is not possible with other Corridor resources that lack visitation data. Although the analysis focuses on forest land visitation, the lead agencies consider it representative of overall impacts on recreation resources accessed by the I-70 highway, including those outside of forest lands.

Table 7, Chart 3, and Chart 4 summarize impact analysis results for the I-70 White River National Forest districts by alternative. The No Action and Minimal Action alternatives are predicted to suppress forest destination trips and affect winter and summer Recreation Visitory Days and skier visits. The Highway alternatives are predicted to slightly increase White River National Forest (I-70 districts) nonresident forest destination trips, while the Transit Alternatives are predicted to induce forest destination trips and affect skier visits and winter and summer RVDs by 0.57 million winter trips and 0.46 million summer trips, while the Combination Alternatives are predicted to induce trips by 1.04 million in the winter and 0.84 million in the summer. Possible induced growth associated with the Combination alternatives is predicted to increase annual resident forest use by 0.3 million winter trips and 0.2 million summer trips in 2025.

Anticipated growth (including the increase in second homes and the transient population) in Corridor counties is already a concern for White River National Forest planners due to an associated growth in recreational activity and national forest visitation. Possible induced growth associated with the Transit, Combination, and Preferred alternatives would only increase such pressures on recreational resources.

Table 7. Indirect Impacts, White River National Forest

Alternative	2025 Winter Impacts			2025 Summer Impacts		
	Annual Change in Nonresident (out-of-Corridor) Winter Destination Trips (millions)	Annual Change in Resident (Corridor) Winter Destination Trips (millions)	Baseline 2025 Skier Visit/ Winter RVD ^b Projections	Annual Change in Nonresident (out-of-Corridor) Summer Destination Trips (millions)	Annual Change in Resident (Corridor) Summer Destination Trips (millions)	Baseline 2025 Summer RVD ^b Projections
No Action	-0.94	0	8.67 million skier visits 5.13 million winter Recreation Visitory Days	-0.76	0	7.10 million summer Recreation Visitory Days
Minimal Action	-0.71	0		-0.57	0	
Transit	0.57	0.09		0.46	0.07	
Highway	0.09	0.06		0.08	0.04	
Combination	1.04	0.28		0.84	0.20	
Preferred Alternative*	0.57 to 1.04	0.09 to 0.28		0.46 to 0.84	0.07 to 0.20	

^a Includes Sopris, Aspen, Eagle, Holy Cross, and Dillon districts.

^b These are 2025 USFS projections (extrapolated) for comparison with predicted “changes” for each alternative. These projections represent the “Baseline” condition for 2025 national forest visitation.

*The Maximum Program presents the range of impacts that occurs with the Preferred Alternative.

Chart 3. White River National Forest—Possible Change in 2025 Winter Forest Destination Trips by Alternative

2025 projected skier visits = 8.67 million; 2025 projected winter RVDs = 5.13 million (I-70 Districts)

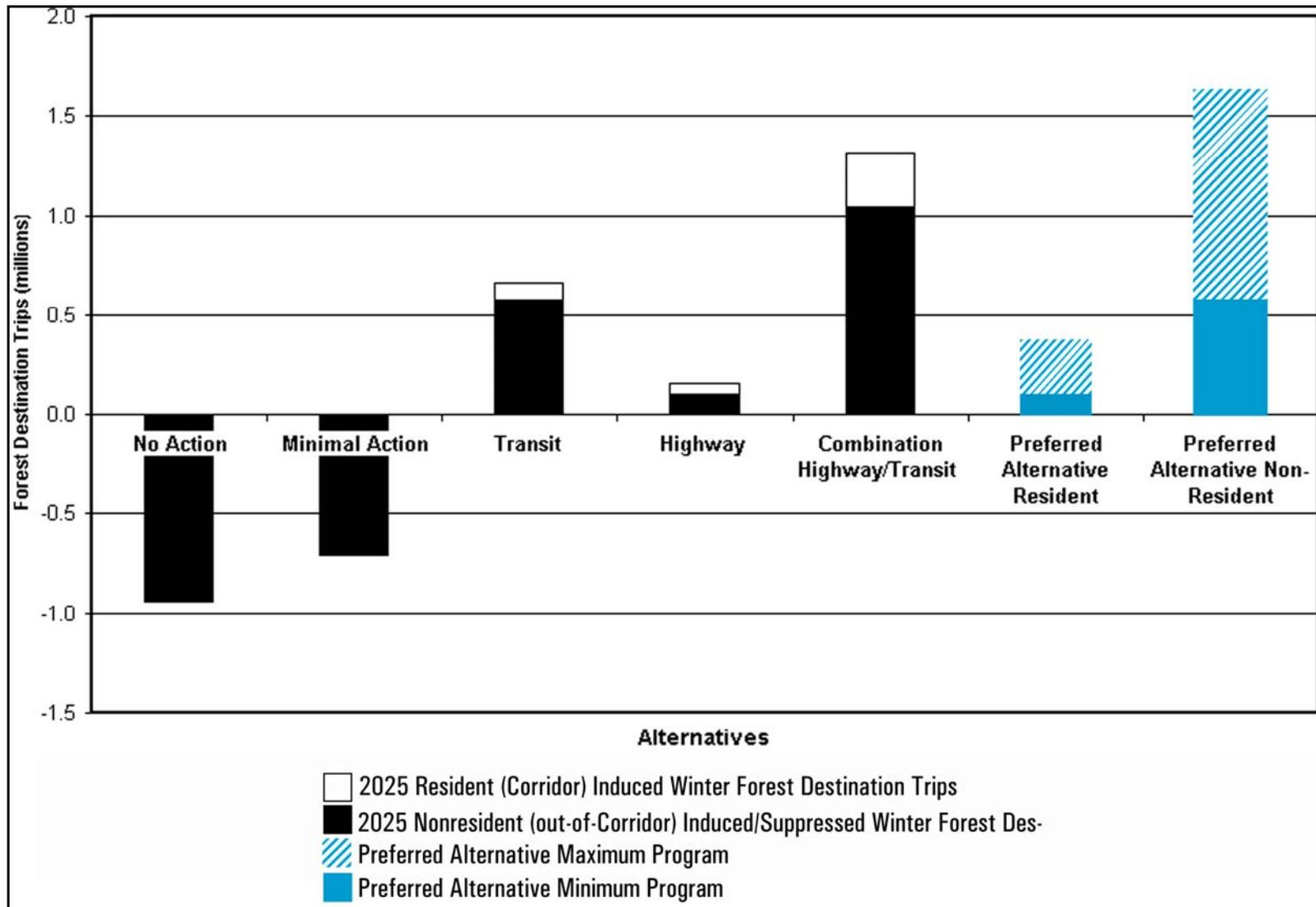
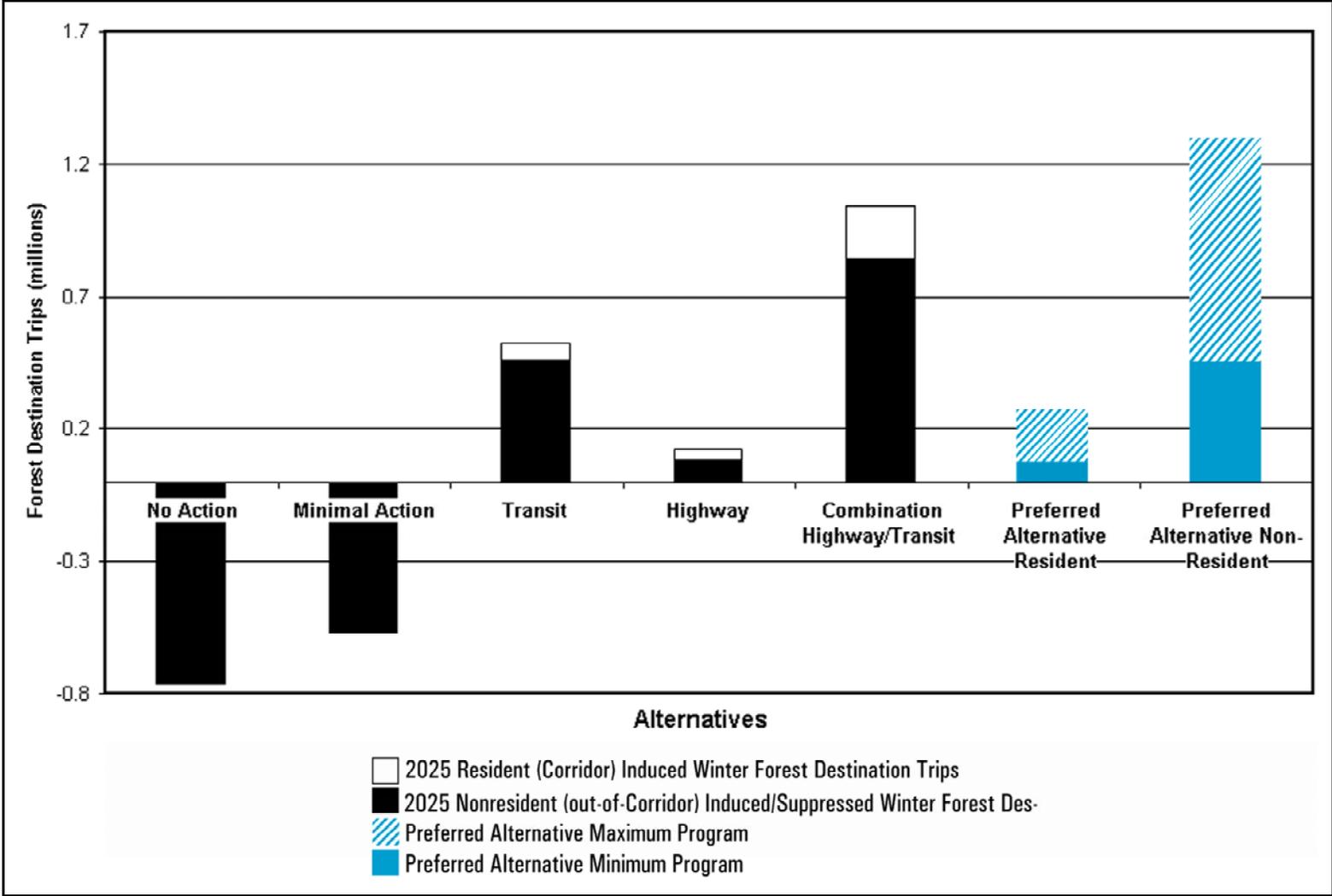


Chart 4. White River National Forest—Possible Change in Summer 2025 Forest Destination Trips by Alternative
 2025 projected summer RVDs = 7.10 million (I-70 Districts)



Recreation Resources Technical Report

Arapaho and Roosevelt National Forests

Results of the indirect impact analysis for the Arapahoe and Roosevelt National Forests are shown in **Table 8**, **Chart 5**, and **Chart 6**. The No Action and Minimal Action alternatives are predicted to suppress RVDs and skier visits. The Highway alternatives are predicted to slightly increase Arapahoe and Roosevelt National Forests visitation, while the Transit, Combination, and Preferred alternatives are predicted to induce forest destination trips and affect skier visits and winter and summer RVDs by 0.21/0.23 million winter/summer trips and 0.39/0.43 million winter/summer trips, respectively. Possible induced growth is not indicated for any of the Action Alternatives in the area of the Arapahoe and Roosevelt National Forests (Corridor counties of Clear Creek and Gilpin) and induced resident trips are not expected. This is because the geographic area is constrained and because past development in these counties has not been related to traffic growth, so the county planners felt that future development would follow this same trend.

Table 8. Indirect Impacts, Arapaho and Roosevelt National Forests

Alternative	2025 Winter Impacts			2025 Summer Impacts		
	Annual Change in Nonresident (out-of-Corridor) Winter Destination Trips (millions)	Annual Change in Resident (Corridor) Winter Destination Trips (millions)	Baseline 2025 Skier Visit / Winter RVD Projections ^b	Annual Change in Nonresident (out-of-Corridor) Summer Destination Trips (millions)	Annual Change in Resident (Corridor) Summer Destination Trips (millions)	Baseline 2025 Summer RVD Projections ^b
No Action	-0.35	No change. Induced growth is not predicted for the ARNF area of the Corridor.	2.37 million skier visits 2.05 million winter Recreation Visitory Days	-0.39	No change. Induced growth is not predicted for the ARNF area of the Corridor.	4.32 million summer Recreation Visitory Days
Minimal Action	-0.26			-0.29		
Transit	0.21			0.23		
Highway	0.04			0.04		
Combination	0.39			0.43		
Preferred Alternative	0.21 to 0.39			0.23 to 0.43		

^a Includes Clear Creek and Sulphur districts.

^b These are 2025 USFS projections (extrapolated) for comparison with predicted "changes" for each alternative. These projections represent the "Baseline" condition for 2025 national forest visitation.

These estimates of changes to visitation are theoretical and general, and are provided as an indication of possible pressure for recreation use associated with the alternatives. As explained in the previous section, access to ski areas is considered to be the limiting factor on skier visits, and future ski resort expansion is anticipated to accommodate future growth. Ski areas benefit greatly from the additional visitation induced by most of the Action Alternatives. Forest lands, on the other hand, already experience visitor use levels at or near their practical capacity, and the forests lack adequate resources to maintain existing facilities or add new ones. Additional visitation strains forest resources under current management practices and resources. Forest management activities are the most important factor in responding to these visitation pressures. The United States Forest Service feels that, although visitation pressure is greater under the Transit-only alternatives, they could better manage visitation via transit trips than dispersed highway trips. (See letter from the United States Forest Service in Appendix B.)

The health of water-based recreation resources such as streams and fisheries is affected by winter maintenance activities, including applications of liquid deicers and traction sand during snowy conditions. Traction sand increases sediment loads in streams, and liquid deicers often increase chloride

Chart 5. Arapaho and Roosevelt National Forests—Possible Change in 2025 Winter Forest Destination Trips by Alternative

2025 projected skier visits = 2.37 million; 2025 projected winter RVDs = 2.05 million (I-70 Districts)

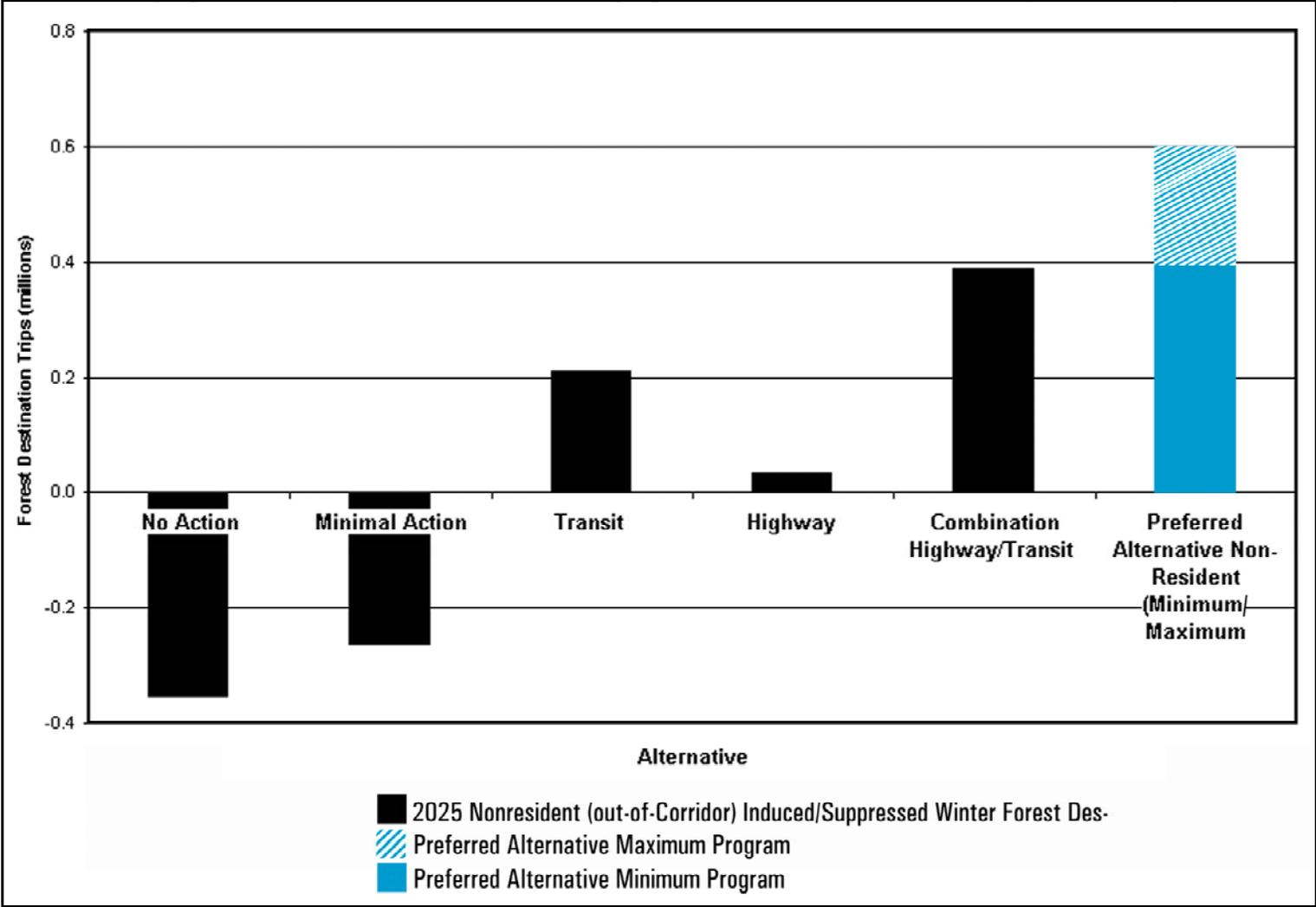
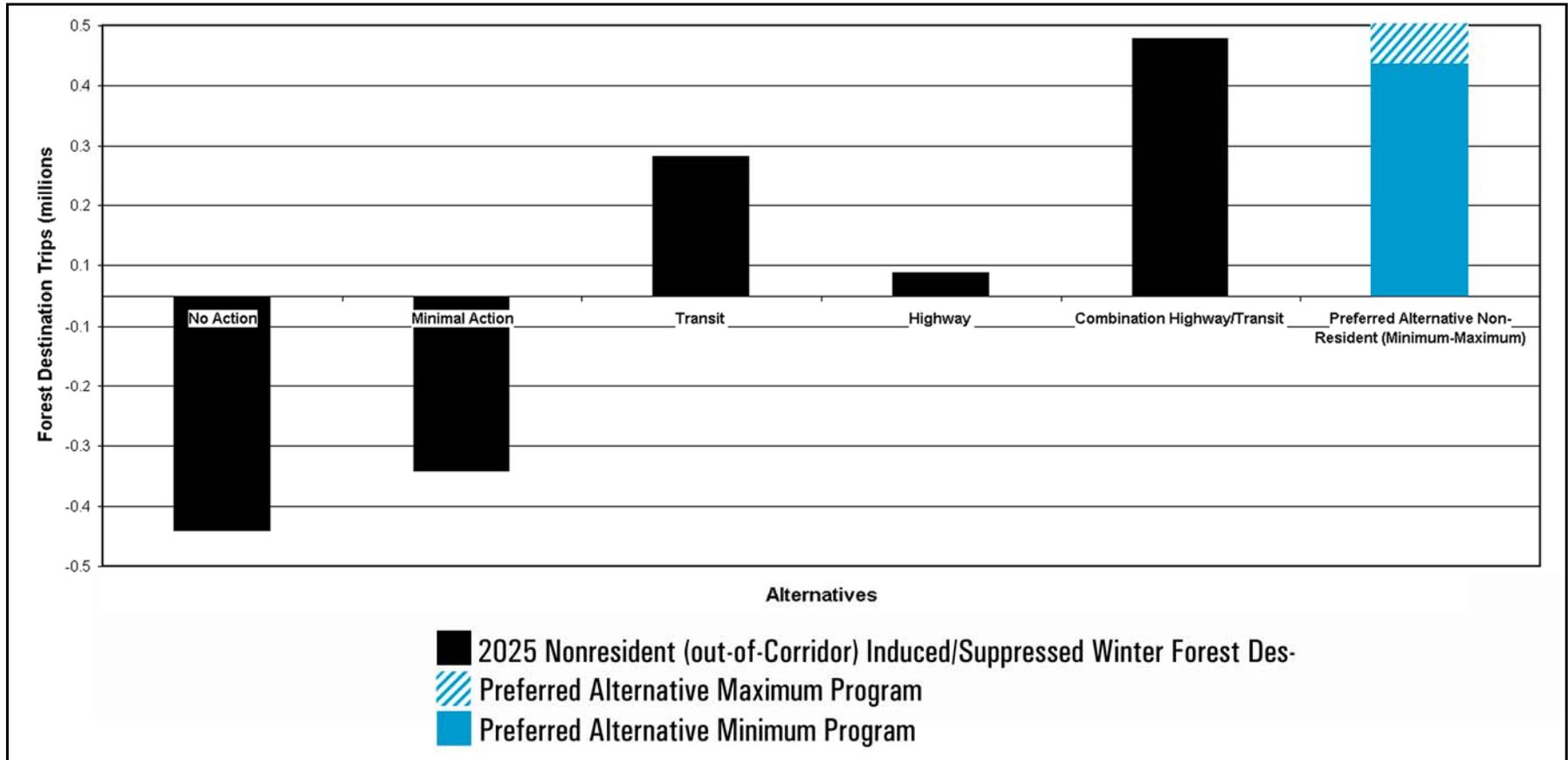


Chart 6. Arapaho and Roosevelt National Forests—Possible Change in 2025 Summer Forest Destination Trips by Alternative
 2025 projected summer RVDs = 4.32 million (I-70 Districts)



concentrations in exceedance of standards for aquatic life. See **Section 3.2, Biological Resources**, and **Section 3.4, Water Resources**, of the *I-70 Mountain Corridor* PEIS (CDOT, 2010) for more information.

3.3 Construction Impacts

Project construction temporarily impacts access and use of some recreation sites. The direct impacts analysis already includes these sites because the Tier 1 alternative footprints include the 15-foot construction zone to each side of the limits of proposed improvements. The number of recreation-oriented trips on the I-70 highway could decrease during construction if visitors choose to avoid construction areas due to actual or perceived congestion and delay. The bulk of construction activity occurs during the traditional spring, summer, and fall construction seasons, and affects winter recreation trips less than summer ones.

3.4 2050 Impacts

The project's effects on recreation resources in 2050 likely continue the trends discussed above for year 2035. Increased capacity improves access to recreation destinations, and population increases continue to increase travel demand between 2035 and 2050. Additional access from the I-70 highway continues to benefit ski areas, while additional visitation further strains forest land resources. The United States Forest Service is likely to implement additional management actions by 2050 to balance visitor access with the health of recreation resources; these management activities likely play a larger role in the sustainability of those resources than the access provided by the Corridor in 2050.

3.5 Tier 2 Analysis

The lead agencies will conduct further analysis of direct and indirect impacts on recreation resources during future project-specific Tier 2 processes. Additional analysis of direct impacts on recreation resources during Tier 2 processes will determine the degree and extent of impact. The lead agencies will continue to coordinate with all jurisdictions regarding direct and indirect impacts to recreation resources, and specifically with Eagle County, Summit County, Clear Creek County, Jefferson County, and the United States Forest Service regarding ECO Trails, the *Clear Creek County Greenway Plan* (2005), and United States Forest Service management activities. The mountain pine beetle infestation continues to change conditions surrounding recreation resources, and the United States Forest Service confirmed that these conditions are most appropriately addressed during Tier 2 processes.

Corridor communities strongly advocate maintaining and improving trail connectivity along the I-70 highway. The Colorado Department of Transportation will consider during Tier 2 processes the following approaches to incorporate and maintain future bike routes in the I-70 highway right-of-way and improve bike and other non-motorized path connectivity, in a manner compatible with CDOT and FHWA guidance:

- Refer to principles applied to the Glenwood Canyon bike path and river access.
- Consider policies to help identify state and federal transportation funding for pedestrian enhancement and connectivity.
- Consider whether moving trails elsewhere is a more economical option to modifying the design of proposed transportation components.

The Colorado Department of Transportation will develop specific and more detailed mitigation strategies and measures, and develop best management practices specific to each project, during Tier 2 processes. The Colorado Department of Transportation will also adhere to any new laws and regulations that may be in place when Tier 2 processes are underway.

Section 4. Mitigation

The phased approach of the Preferred Alternative allows for ongoing opportunities to avoid and minimize impacts to recreation resources, establish effective mitigation, and employ I-70 Mountain Corridor Context Sensitive Solutions. Primary mitigation strategies to avoid or reduce direct effects to recreation resources include replacement or enhancement of functions of parklands or trails; design efforts to minimize the area of impact; and realignment of affected trails. The Colorado Department of Transportation will consider principles applied to the Glenwood Canyon recreation resources—including the bike path, hiking amenities, and river access—during development of mitigation for impacted recreation resources elsewhere in the Corridor. The Colorado Department of Transportation must mitigate any impacts to Section 6(f) resources with replacement lands of equal value, location, and usefulness as impacted lands.

Other strategies to mitigate direct impacts may include the following: facilitate efficient access to recreation sites from transportation networks; include outdoor recreation and tourism in the CDOT regional planning processes; consider intermodal transportation networks and transportation hub development; consider off-peak use incentives; consider river access “hot spots” mitigation actions; increase the capability to access recreation sites on mountain passes from road networks.

Mitigation of indirect impacts include strategies outlined in the *Statewide Comprehensive Outdoor Recreation Plan* (Colorado State Parks, 2008). The U.S. Forest Service can address indirect impacts to forest resources through their forest management plans and the continuing and evolving use of forest management techniques. The availability of resources and funding for implementation of recreation and forest management techniques is a major factor in the accommodation of increased visitation and protection of recreation resources. The *Statewide Comprehensive Outdoor Recreation Plan* suggests these goals can potentially be achieved by establishing funding partnerships through regional collaborative forums and through state/federal cost-share agreements to renovate federal properties.

Mitigation of construction impacts on bike paths, trail heads, and other recreational amenities include maintaining pedestrian and bicycle access during construction. Maintaining access during construction to accommodate special event traffic is also recommended. Mitigation strategies to accommodate the demand for recreation-oriented trips on the I-70 highway during construction include minimizing lane closures or reductions during peak travel weekends. Roadway and work zone conditions will be communicated to travelers using websites, pre-recorded messages, and other similar mechanisms.

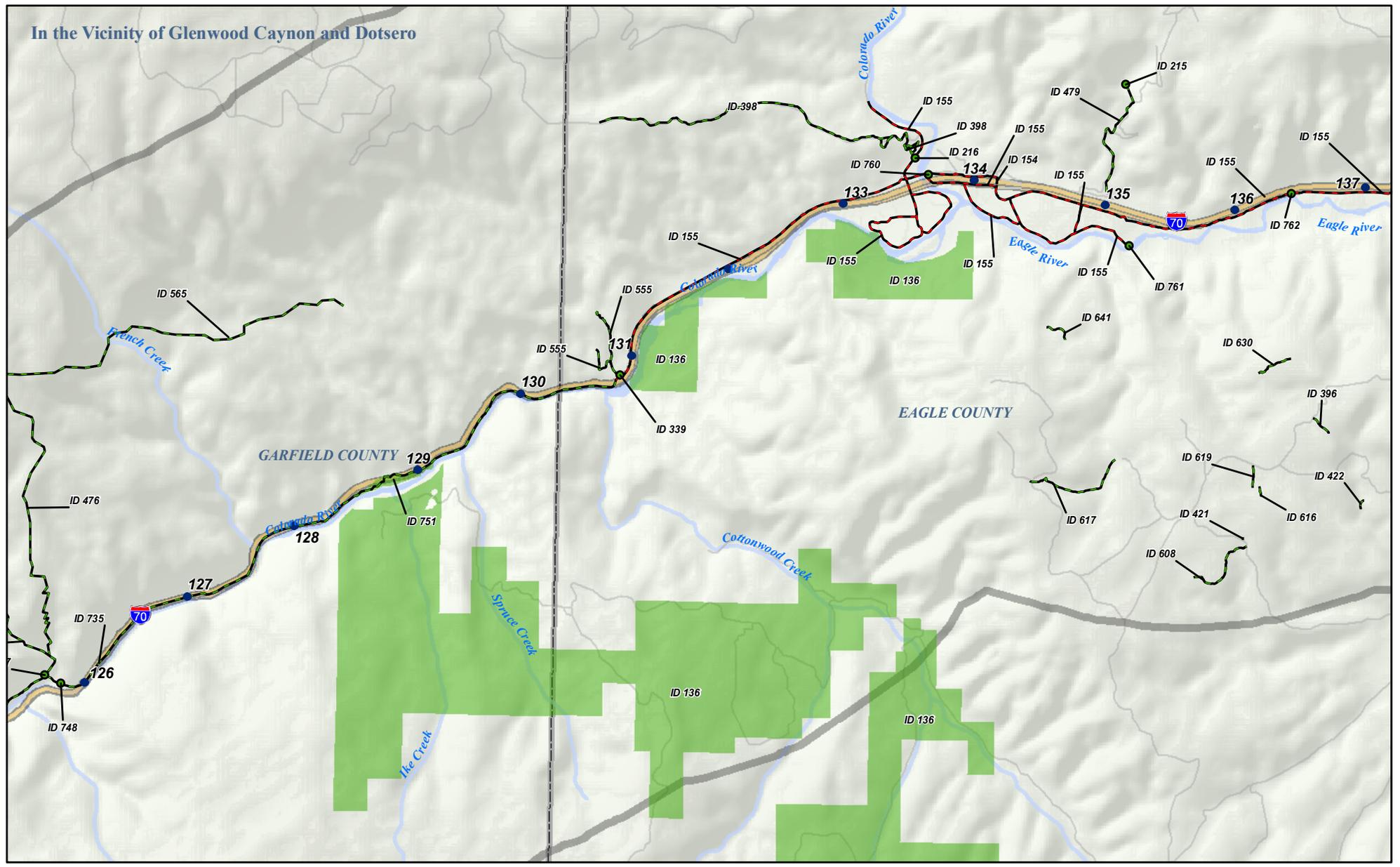
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Section 6. Resource Maps

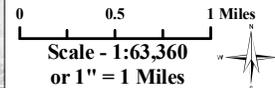
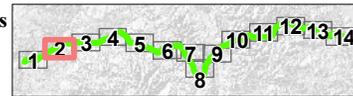
The following 14 maps illustrate the location of the recreation resources along the corridor.

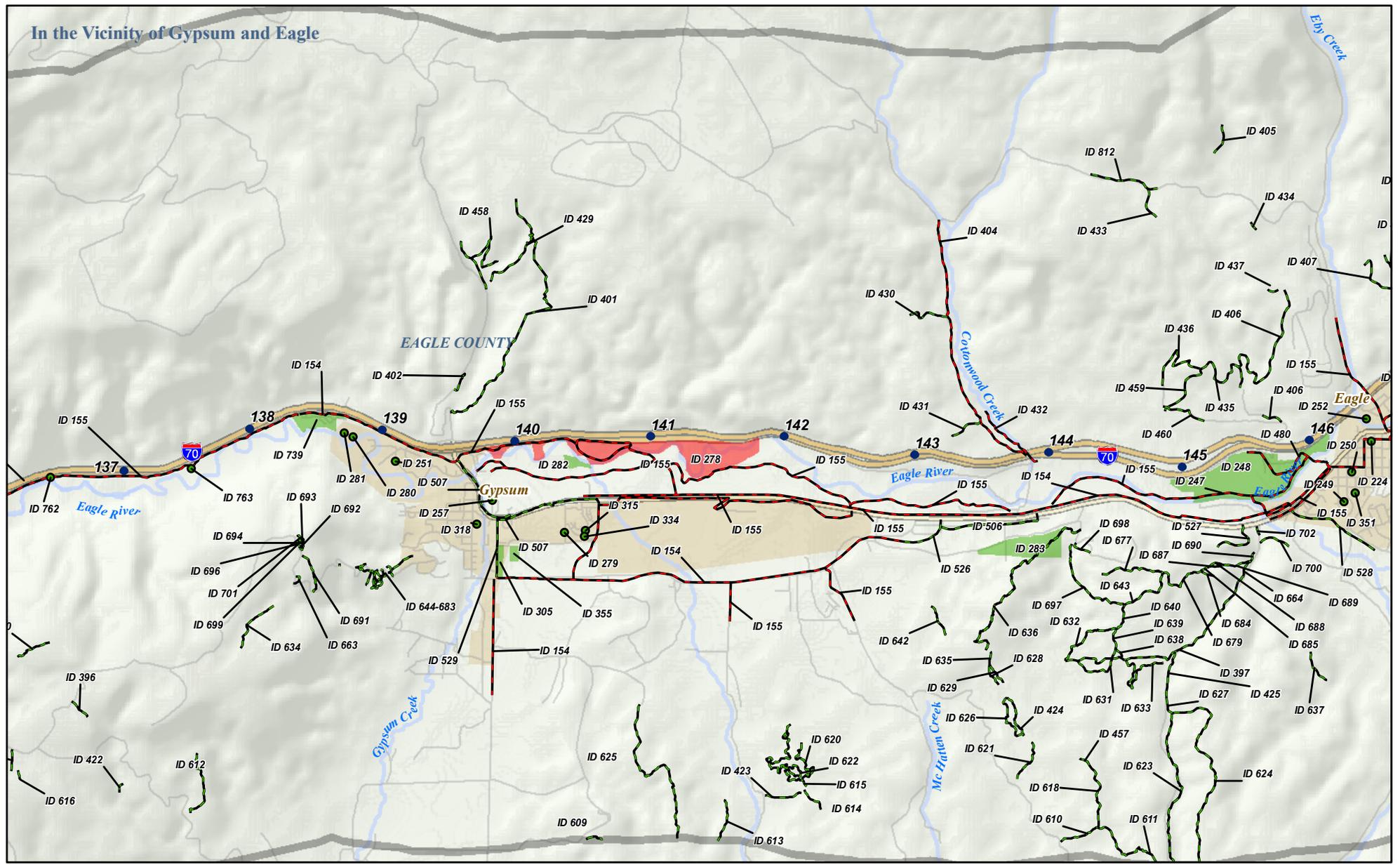
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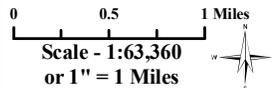
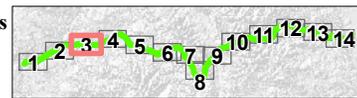
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- ▭ Recreation Properties Over 5 Acres
- ▭ Limited Access Highways
- ▭ Urban Areas
- ▭ Impacted Recreation Properties Under 5 Acres
- ▭ Recreation Properties Under 5 Acres
- ▭ Major Highways
- ▭ 3 Mile Study Area of I-70
- ▭ Impacted Recreation Properties Trails
- ▭ Recreation Properties Trails
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- ▭ Lakes

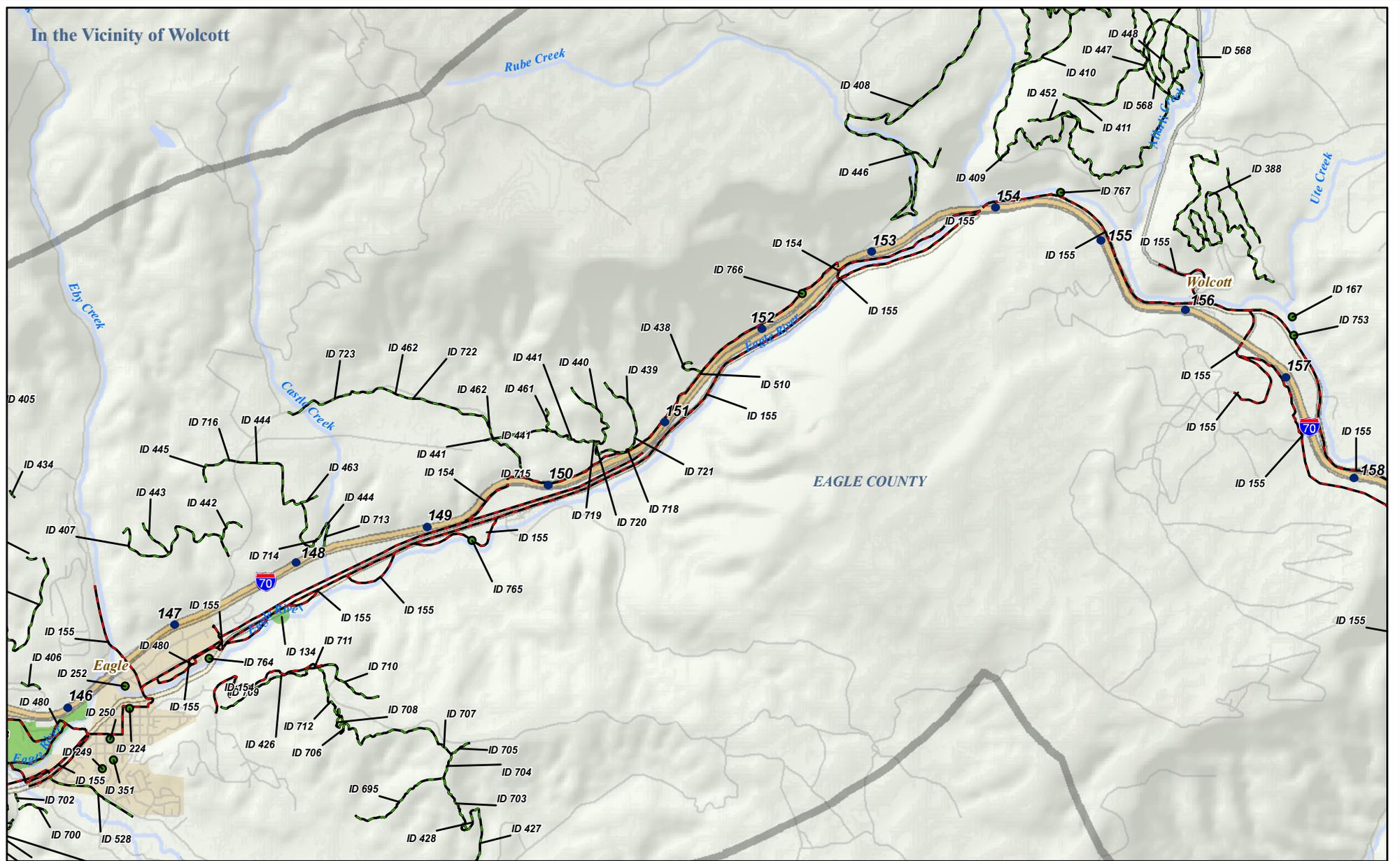




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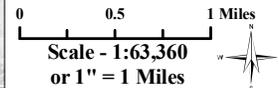
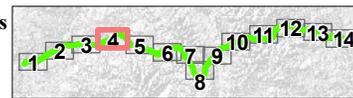
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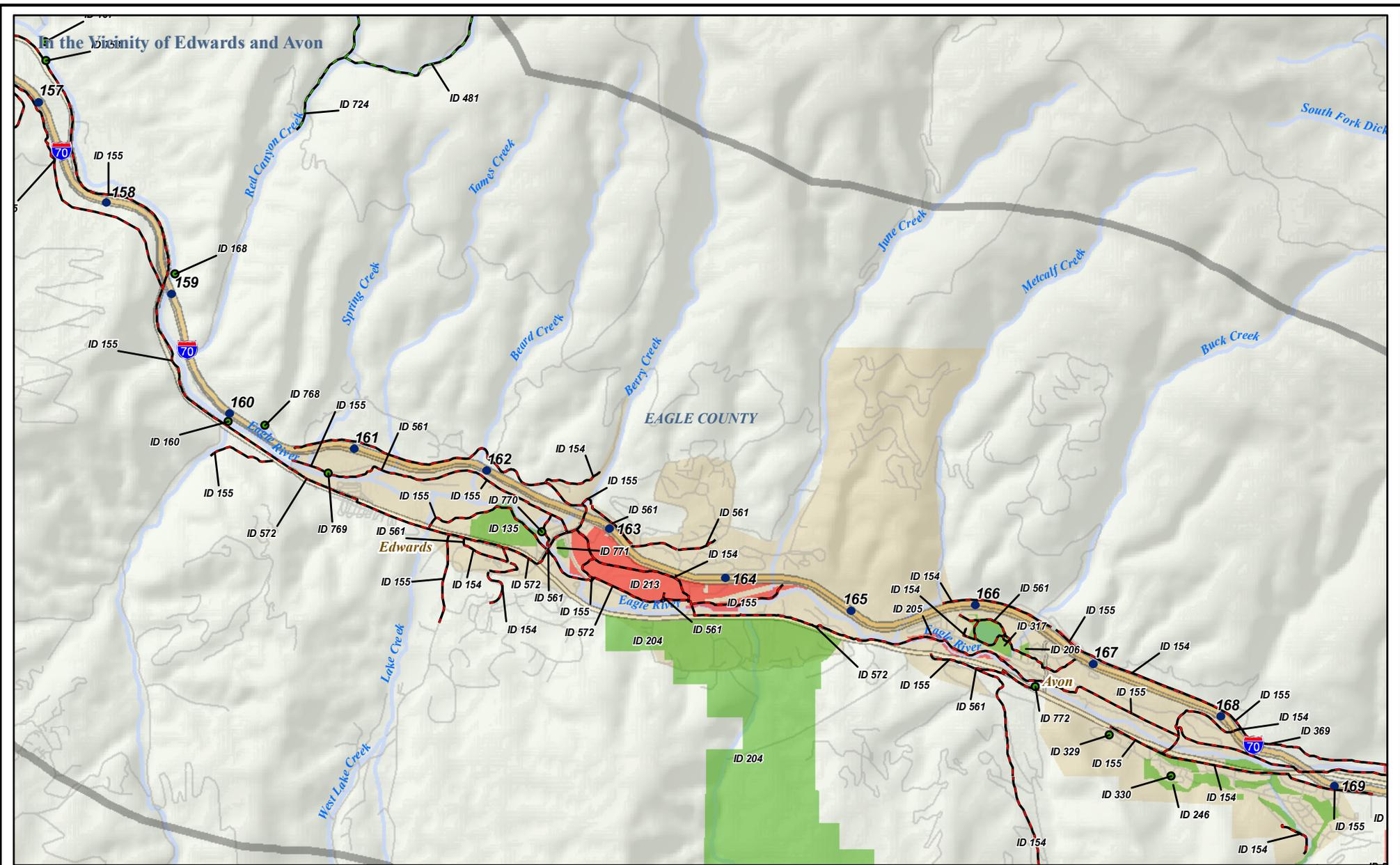




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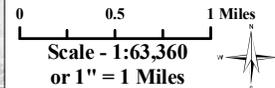
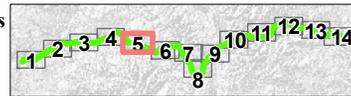
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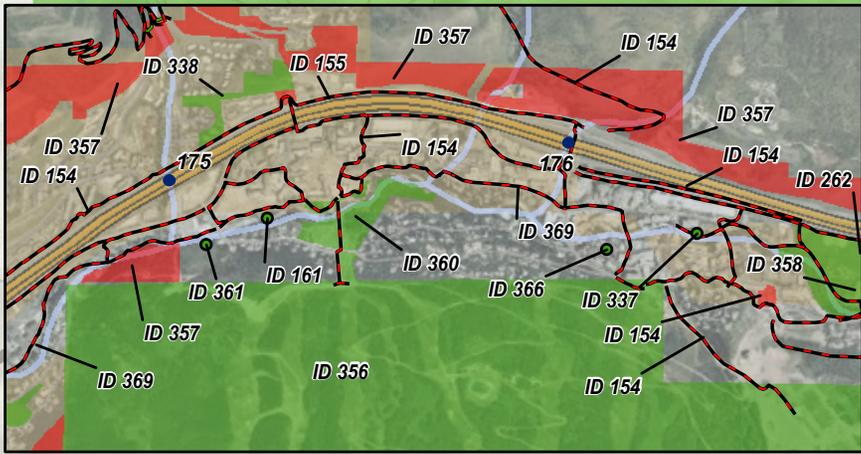
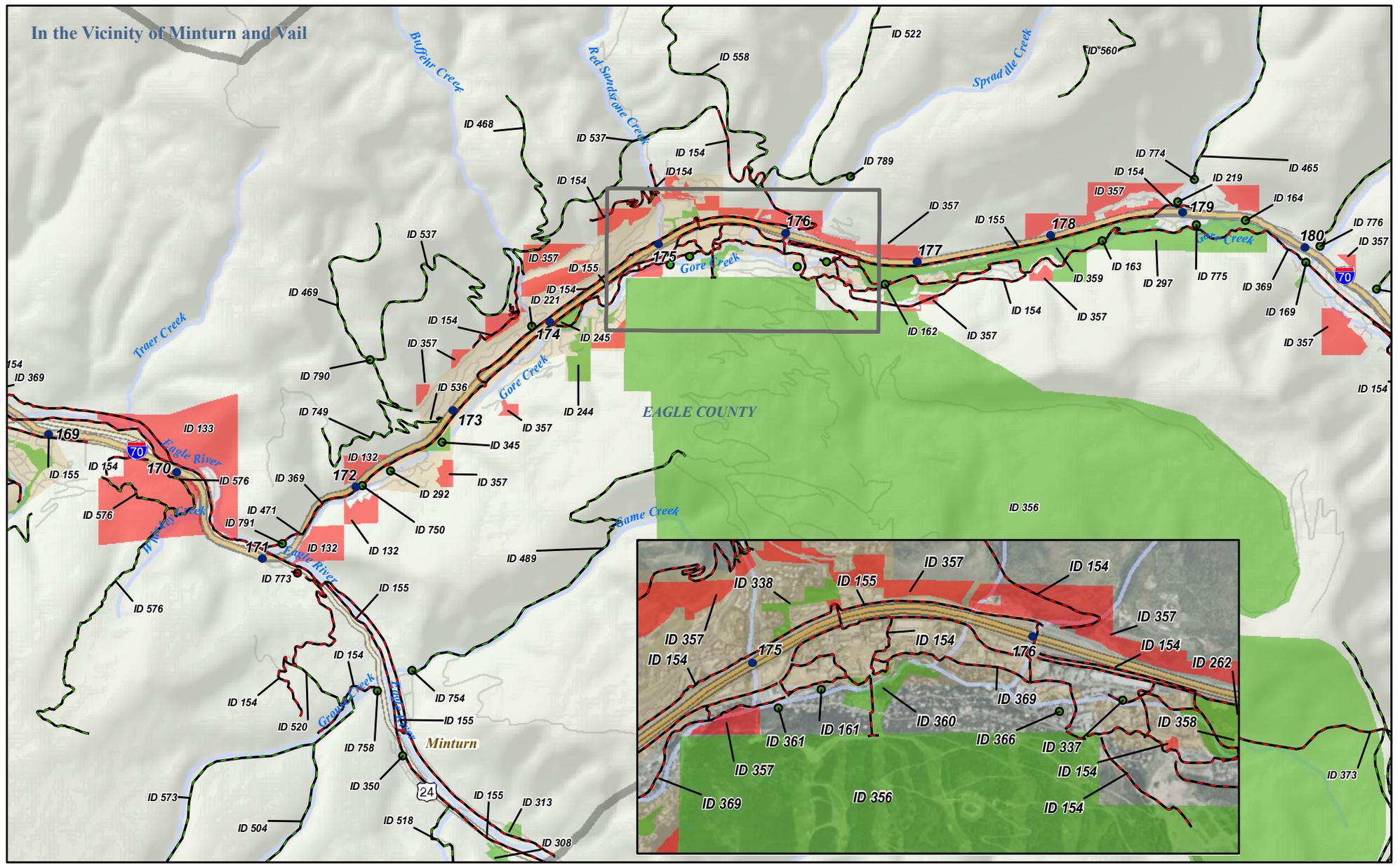


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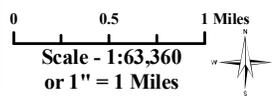
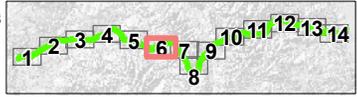


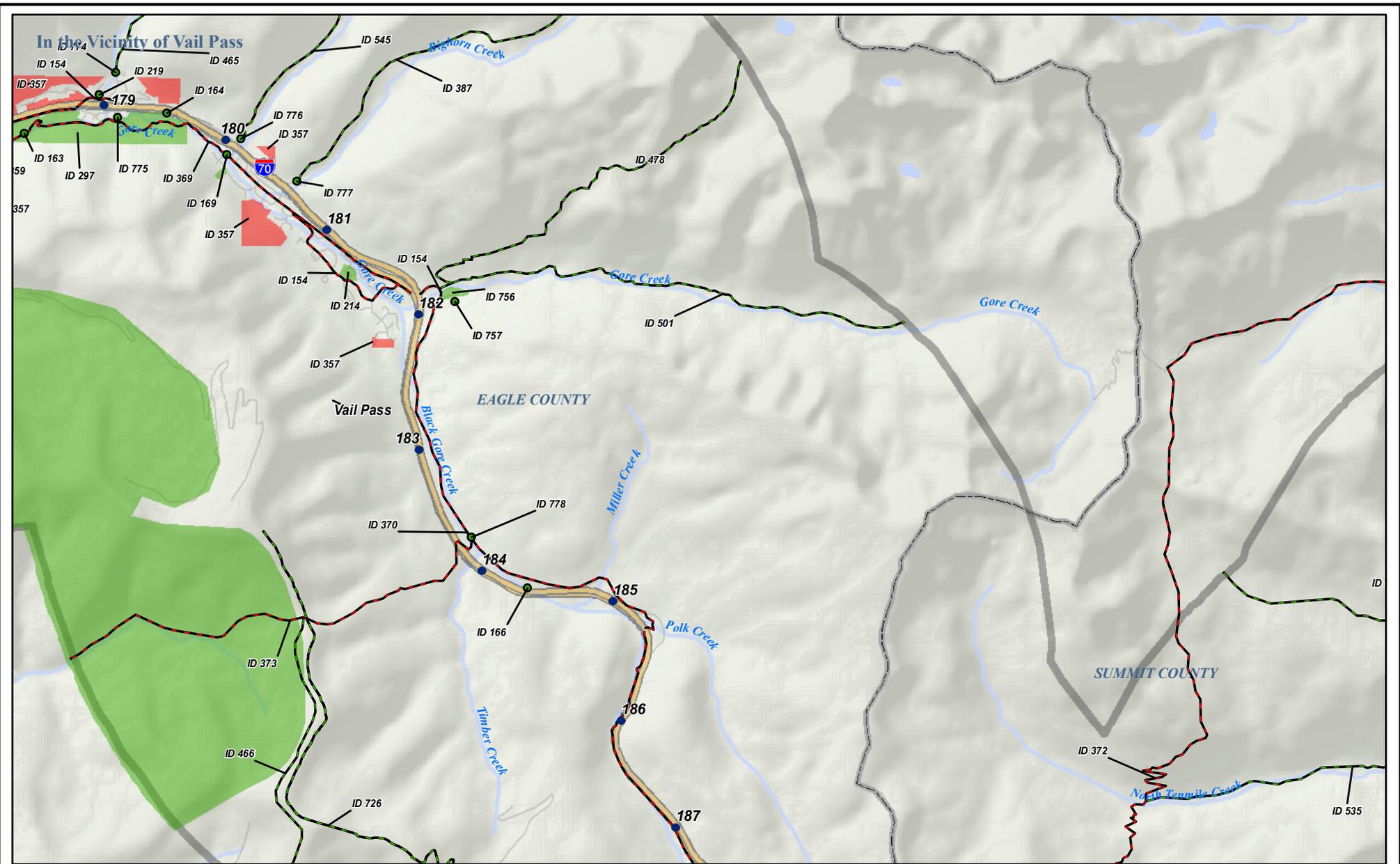
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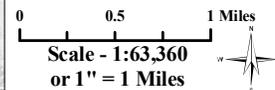
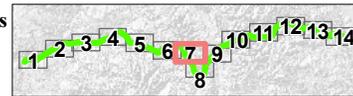
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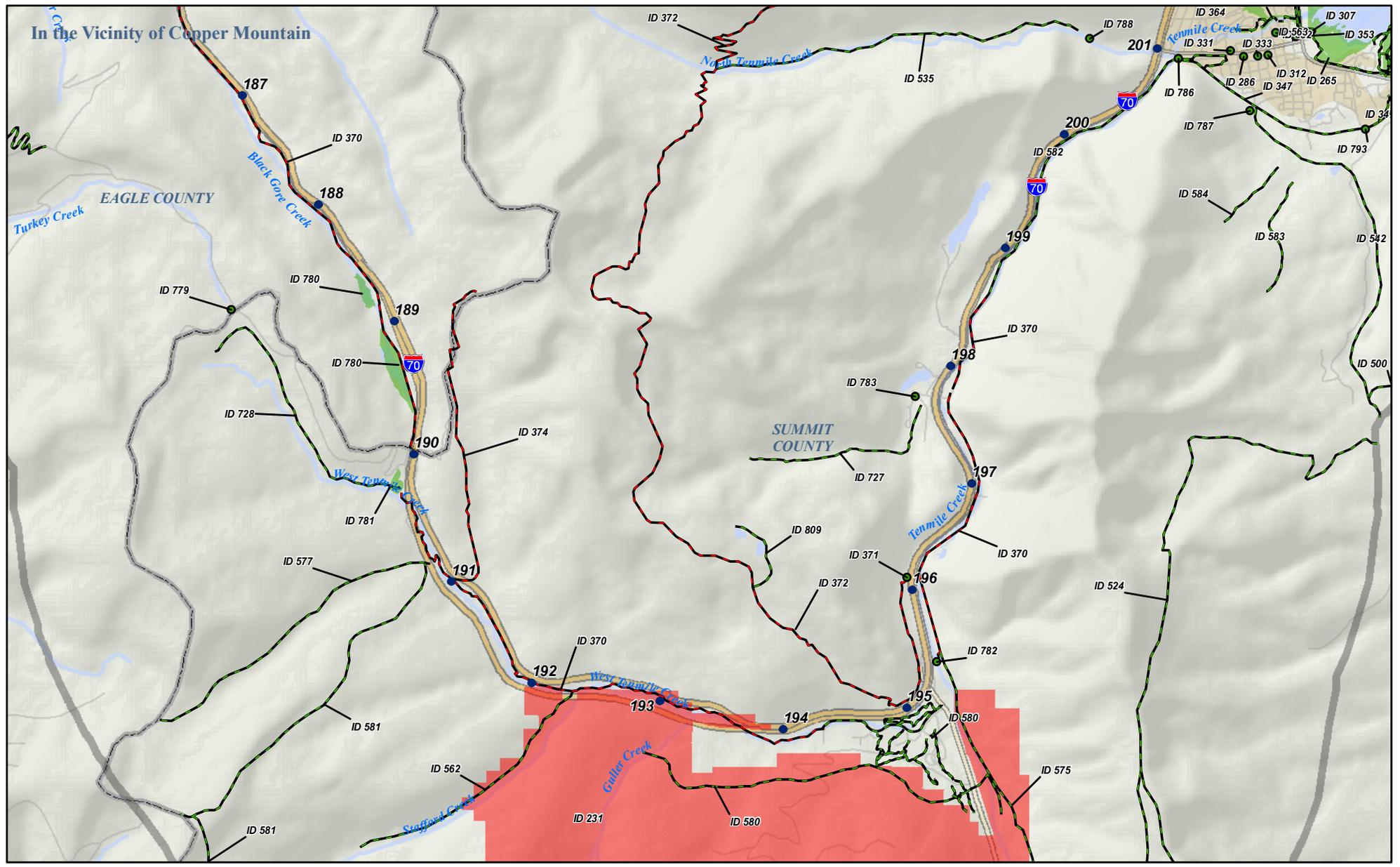


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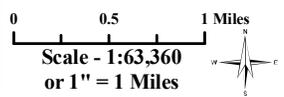
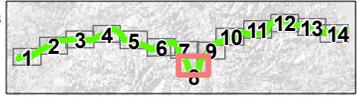


In the Vicinity of Copper Mountain

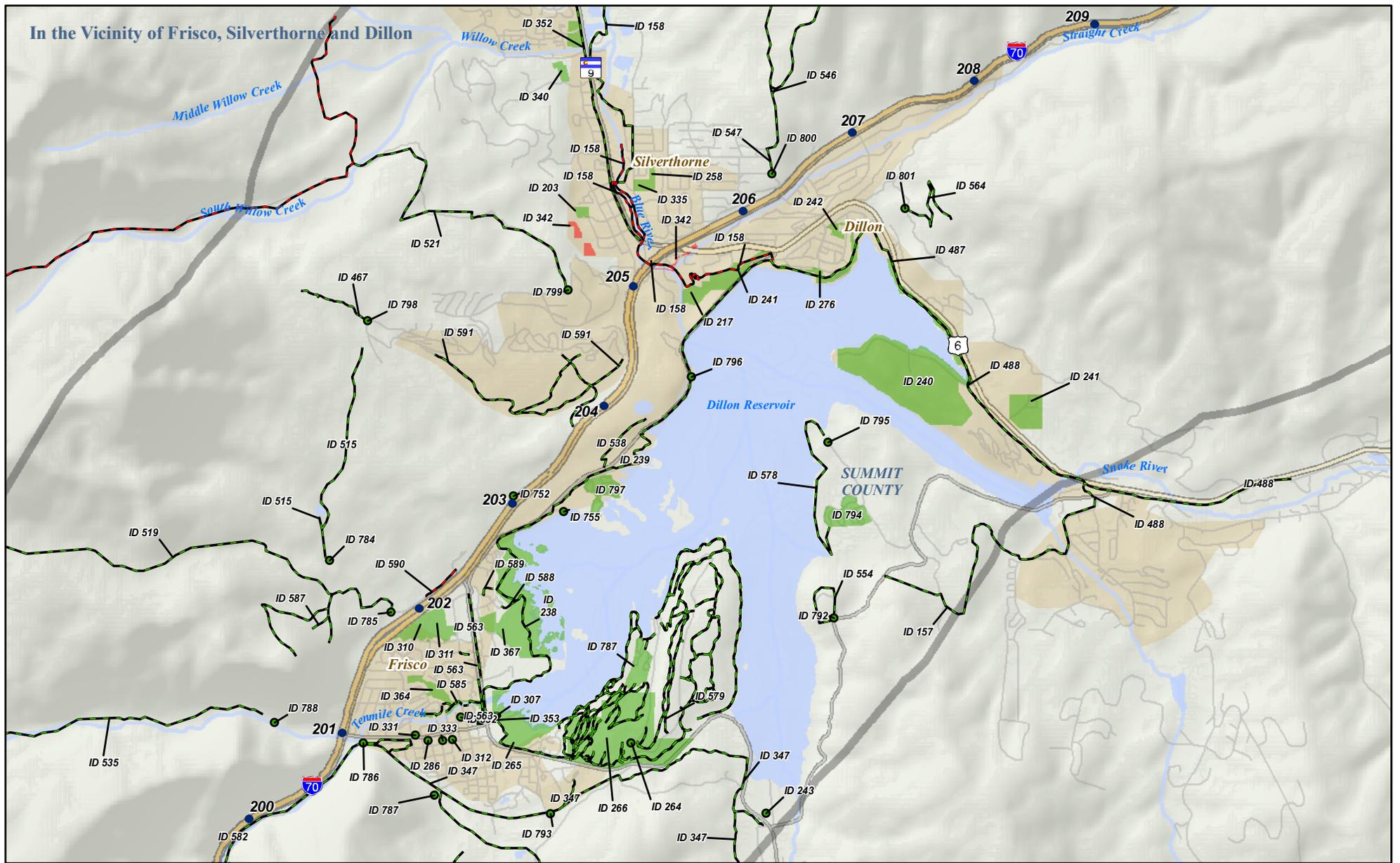


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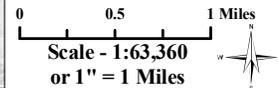
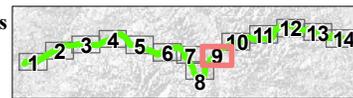


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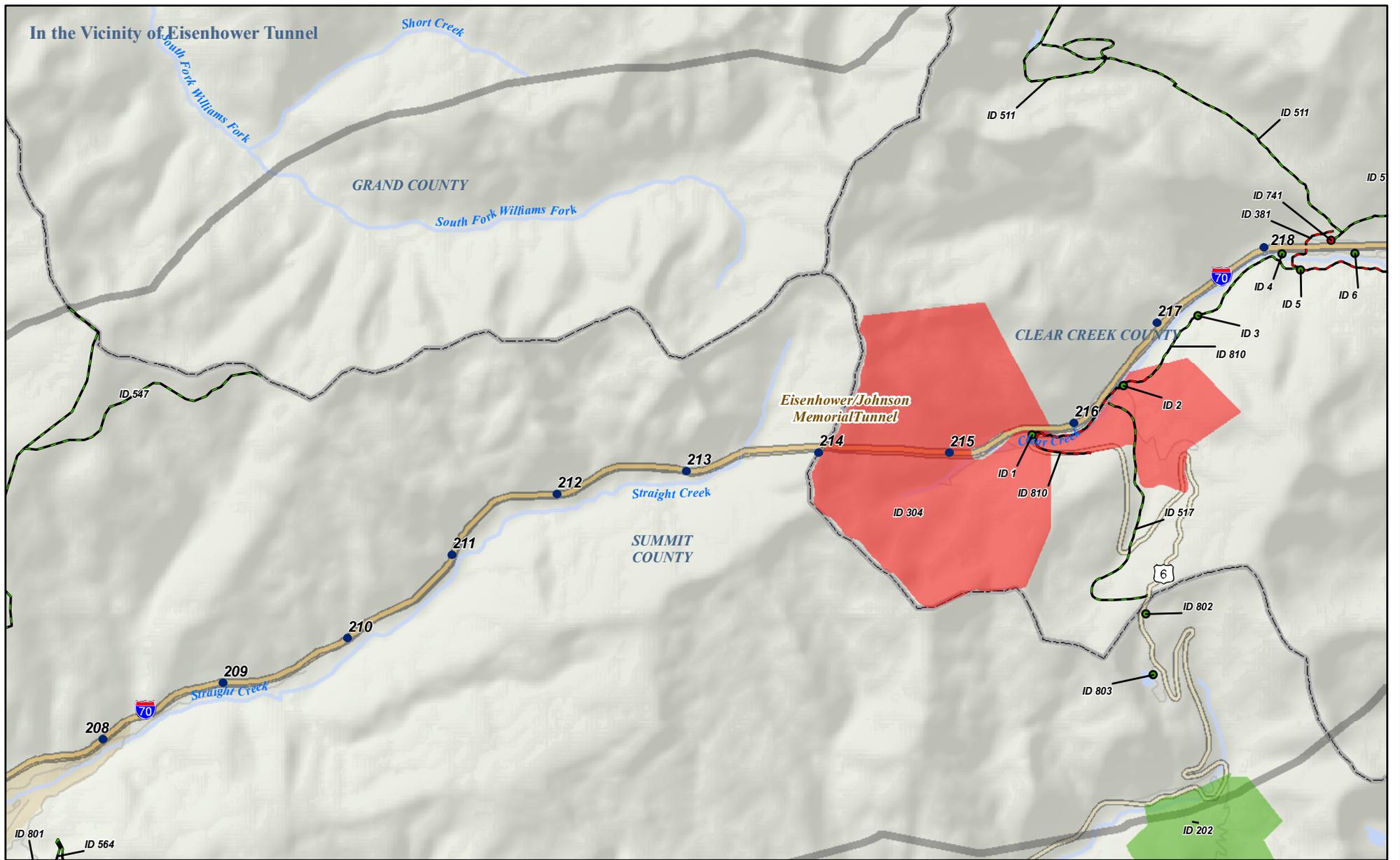


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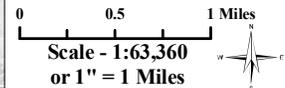
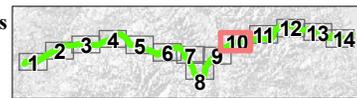


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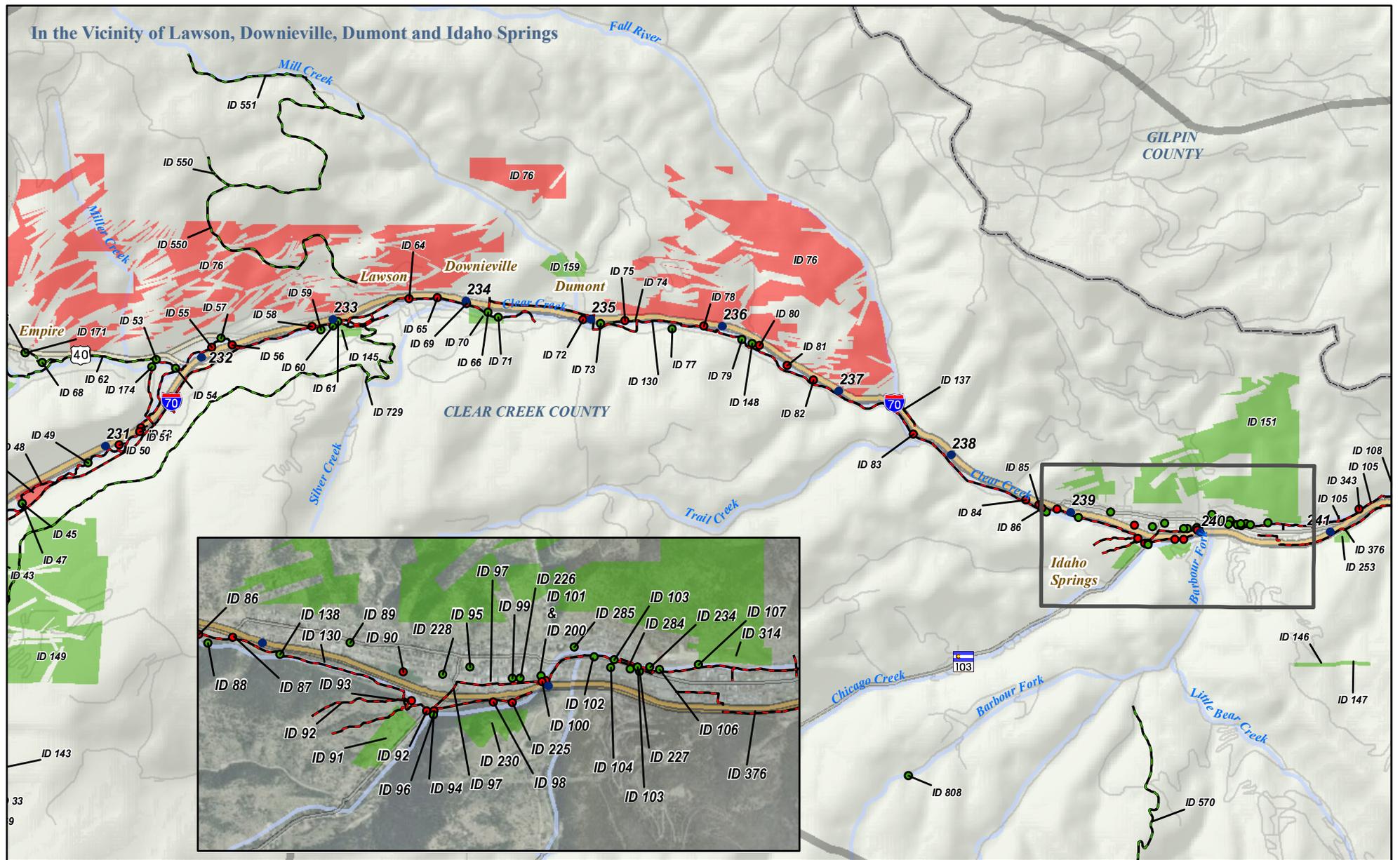


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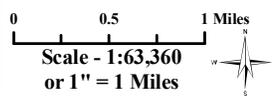
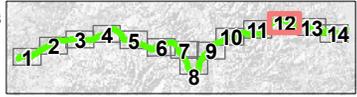


In the Vicinity of Lawson, Downieville, Dumont and Idaho Springs

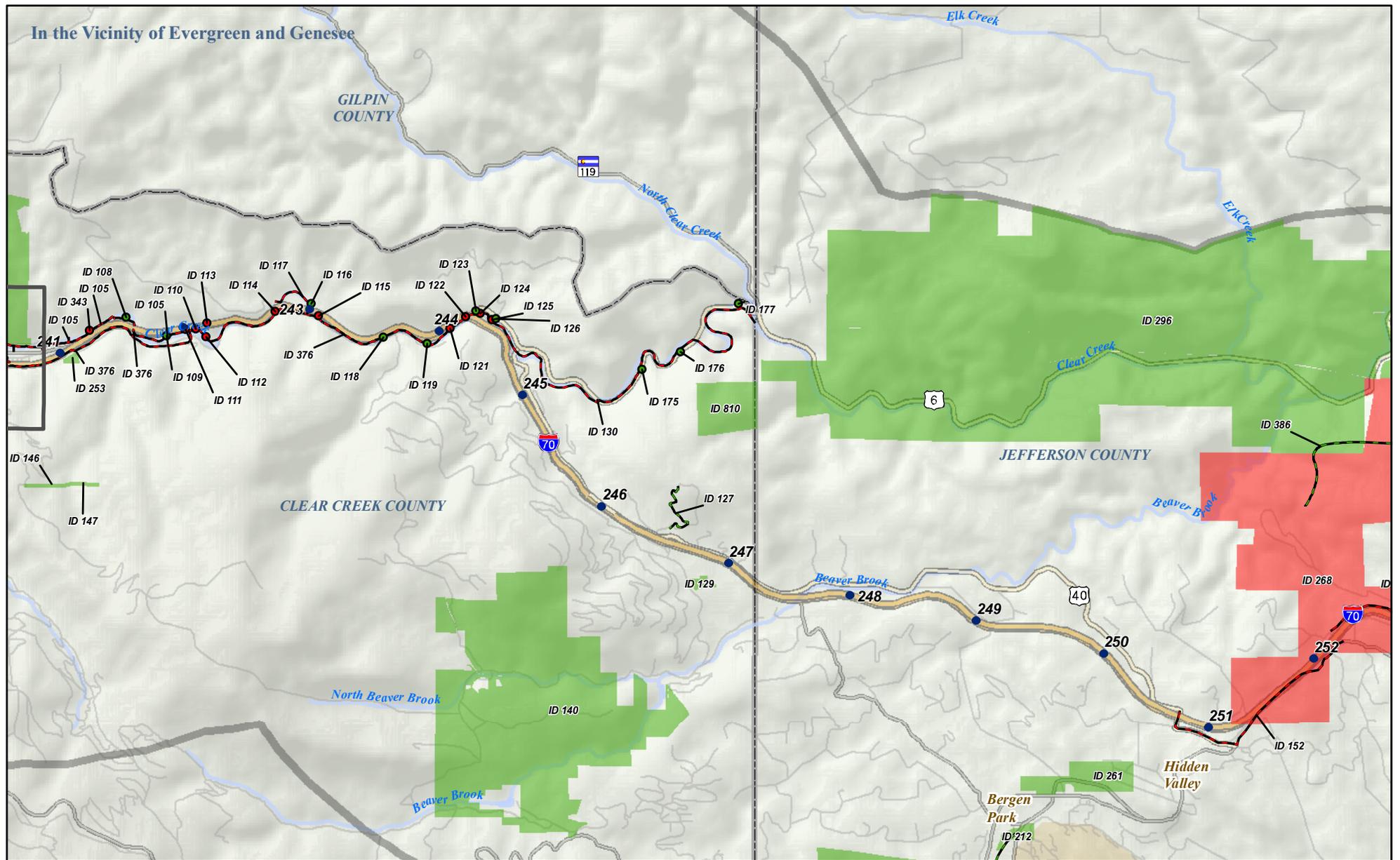


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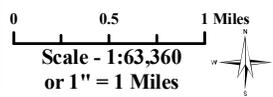
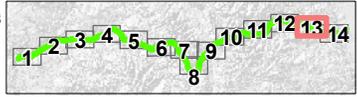


In the Vicinity of Evergreen and Genesee



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- ▭ Recreation Properties Trails
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Appendix A. Indirect Effects Methodology

This appendix contains a description of the methodology used to predict the indirect effects of the Action Alternatives on recreation resources.

This information was utilized to support the analysis conducted for the I-70 Mountain Corridor PEIS Recreation Resources impact assessment.

This information was developed in 2003. The United States Forest Service was contacted in 2009 to determine if these projections needed to be updated. The United States Forest Service planners felt that these results remain valid to the year 2035. No update of these calculations is necessary.

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A.1 Indirect Effects on National Forest Recreation—Methodology

Two inducement factors are used to evaluate indirect impacts:

1. The change in national forest destination trips from nonresidents (out of the Corridor, primarily from the Front Range) by alternative using trip data from the travel demand model
2. The change in national forest visitation by residents (in the Corridor) resulting from predicted induced population growth and resident trips by alternative.

The methodology defines “resident” visitation as those visits by local Corridor residents (White River National Forest and Arapaho and Roosevelt National Forests counties as defined more specifically in the methodology). “Nonresident” visitation comprises all visitors from outside the Corridor area including visitors from the Front Range, from other areas of Colorado, and from out of state.

Changes in national forest visitation due to nonresident or resident use are compared to a Baseline Condition (national forest projection—extrapolated to 2025). Note that national forest data for both forests were available in Recreation Visitor Days (RVDs). One RVD is equivalent to 12 hours of continuous use, whereas one visit is any time spent on the forest. RVDs do not directly correlate with forest destination trips, which are more comparable to forest visits and skier visits. However, a sense of the magnitude of impacts can be discerned by comparing forest destination trips with RVDs (as is done in this methodology)].

This methodology provides the basic assumptions, conceptual methodology, and calculation techniques used to produce the indirect impacts results for national forest visitation. **Section A.1.1** provides information and assumptions used in the methodology including national forest visitation data and projections for districts in the I-70 Corridor, Corridor population information, and four sources of information to support the “splits” in winter and summer visitation between the Arapaho and Roosevelt National Forests and White River National Forest. The spreadsheet data provided by White River National Forest and ARNF and trip data from the travel demand model have been summarized. Finally, **Section A.1.1** provides the forest destination trips (Arapaho and Roosevelt National Forests and White River National Forest; both winter and summer) used to calculate indirect impacts. The Arapaho and Roosevelt National Forests/White River National Forest splits for winter and summer visitation (averaged) are used to calibrate destination trips for the two forests.

Section A.1.2 provides the methodology calculations used to estimate indirect impacts to forest visitation in terms of resident (in-Corridor) and nonresident (out-of-Corridor) forest destination trips. **Section A.1.3** summarizes the quantitative results.

A.1.1 Information and Assumptions

Forest Areas

2025 Baseline Condition Corridor “resident” populations (Department of Local Affairs) are separated into national forest areas for the nine-county Corridor area. Arapaho and Roosevelt National Forest includes Grand, Gilpin, and Clear Creek counties (population of 49,833). White River National Forest includes Eagle, Garfield, Pitkin, Summit, Lake, and Park counties (population of 297,798).

Forest Visitation

White River National Forest (2020) and Arapaho and Roosevelt National Forests (2010) visitation projections were made independently of I-70 considerations. 2025 forest visitation projections were extrapolated from 2020 (White River National Forest) and 2010 (Arapaho and Roosevelt National Forests) projections to be consistent with the Baseline 2025 trip projections from the travel demand model

Appendix A. Recreation Resources Indirect Effects Methodology

1 projections. Projected 2025 estimates are quantified for both forests in 2025 skier visits (in “occasions”),
 2 2025 winter RVDs, and 2025 summer RVDs.

3 Based on Forest Plans/Environmental Impact Statements (EISs), forest visitation for the two forests has
 4 been estimated for summer and winter 2000 and 2025 (**Table A-1**). Summer and winter visitation is based
 5 on the major activity breakdown shown in **Table A-2**. These numbers provide a comparative 2025
 6 visitation baseline for evaluation of impacts from induced/suppressed forest visits.

7 **Table A-1. Winter and Summer Percentages (Major Recreation Categories)**

Category	Winter %	Summer %
Downhill skiing	100	0
Camping	0	100
Auto travel	15	85
Walking/hiking	0	100
Hunting big game	0	100
Fishing	5	95
Cross-country skiing/snowshoeing	100	0
Viewing scenery	5	95
Mountain biking	0	100
Snowmobiling	100	0
Other	10	90

8 **Table A-2. National Forest 2025 Baseline Visitation (millions)**

	2025 Skier Visits	2025 Winter RVDs	2025 Summer RVDs
ARNF (I-70 Districts)			
Baseline Data	2.37	2.05	4.32
WRNF (I-70 Districts)			
Baseline Data	8.67	5.13	7.10

9 **Summer and Winter Visitation “Split,” Arapaho and Roosevelt National Forests** 10 **and White River National Forest**

11 The following information documents four sources of information that were used to estimate proportions
 12 of winter and summer I-70 destinations to the Arapaho and Roosevelt National Forests and the White
 13 River National Forest. The purpose of the study is to assign proportions to the two forests for possible
 14 indirect impacts to forest destination trips from project alternatives.

15 **I-70 User Survey**

16 A user survey was conducted July 17 and 18, 1999 (Saturday/Sunday)/February 12 and 13, 2000
 17 (Saturday/Sunday) during the following travel times: 9:00 AM to 3:00 PM (Saturday) and 3:00 PM to

Appendix A. Recreation Resources Indirect Effects Methodology

1 7:00 PM (Sunday). The survey photographed license plates on I-70 (see list of locations below) and then
 2 later contacted a representative portion of travelers in regard to their trip.

3 I-70 user survey locations were as follows:

- 4 ■ East Idaho Springs (milepost 241)—highway and ramp
- 5 ■ Frisco Main Street (milepost 201) summer only—highway and ramp
- 6 ■ West Vail (west entrance)—highway and ramp
- 7 ■ Hogback—park-and-ride
- 8 ■ Paradise Hills—park-and-ride
- 9 ■ Genesee Park—park-and-ride
- 10 ■ Evergreen/El Rancho—park-and-ride
- 11 ■ Milepost 248 (Beaver Brook)—park-and-ride
- 12 ■ Frisco—park-and-ride
- 13 ■ Wolcott—park-and-ride

14 **Table A-3** shows the survey totals for summer and winter trips.

15 **Table A-3. I-70 User Survey—Summer and Winter Trips**

Total Responses	3,679
Summer Responses	1,842
Winter Responses	1,837

16 J.F. Sato and Associates (July 2004) reviewed the information to determine trips to/from Arapaho and
 17 Roosevelt National Forest and White River National Forest. **Table A-4** shows the percentages of
 18 responses for the forests.

19 **Table A-4. I-70 User Survey ARNF/White River National Forest Respondents**

	Origins		Destinations	
	ARNF	WRNF	ARNF	WRNF
Percent of Responses involving Forests	3.0%	9.3%	8.2%	18.9%
Summer Percent involving Forests	2.0%	8.0%	4.1%	13.4%
Winter Percent involving Forests	4.1%	10.6%	12.4%	24.4%

20 Based on the I-70 user survey, respondents favored White River National Forest destinations both in
 21 summer and winter. The Arapaho and Roosevelt National Forests/White River National Forest split for
 22 summer was 23 percent/77 percent and the Arapaho and Roosevelt National Forests/White River National
 23 Forest split for winter was 34 percent/66 percent (see **Table A-5**).

Appendix A. Recreation Resources Indirect Effects Methodology

Table A-5. I-70 User Survey Forest Arapaho and Roosevelt National Forests/White River National Forest Originations/Destinations

	Origins		Destinations	
	ARNF	WRNF	ARNF	WRNF
Totals	112	343	303	696
Total Summer	38	148	75	247
Total Winter	75	196	228	449
Splits - ARNF vs. WRNF	25%	75%	30%	70%
Splits in Summer	20%	80%	23%	77%
Splits in Winter	28%	72%	34%	66%

Travel Demand Model—Calibration to 2000 Traffic Counts

The travel demand model used for the I-70 PEIS was calibrated based on year 2000 I-70 traffic counts. A review of year 2000 recreation trips in the calibrated travel demand model yields the following split (Table A-6) between the forests.

Table A-6. Travel Demand Model Trip Data—Arapaho and Roosevelt National Forests/White River National Forest Splits

Trip Type	ARNF	WRNF	Total	ARNF %	WRNF %
Winter Saturday Front Range Day Recreation Trip Ends	18,102	49,107	67,209	27%	73%
Winter Saturday Out-of-State Air to Resort Trip Ends	2,785	16,114	18,899	15%	85%
Winter Saturday Corridor Recreation Trip Ends	580	115,535	116,115	0%	100%
Winter Saturday Out-of-State Air to Resort Trips	2,477	11,288	13,765	18%	82%
Winter Saturday Stay at 2nd Home Trips	6,340	2,522	8,862	72%	28%
Winter Saturday Stay at Resort Trips	1,377	2,287	3,664	38%	62%
Winter Saturday Stay Visiting Friends/Relatives Trips	4,198	2,823	7,021	60%	40%
Winter Total	35,859	199,676	235,535	15%	85%
Summer Saturday Front Range Day Recreation Trip Ends	31,900	24,332	56,232	57%	43%
Summer Saturday Front Range Camping Trip Ends	5,677	725	6,402	89%	11%
Summer Saturday Out-of-State Air to Resort Trip Ends	5,567	13,125	18,692	30%	70%
Summer Saturday Corridor Recreation Trip Ends	1,981	49,868	51,849	4%	96%
Summer Saturday Out-of-State Air to Resort Trips	5,396	9,675	15,071	36%	64%
Summer Saturday Stay at 2nd Home Trips	2,900	6,564	9,464	31%	69%
Summer Saturday Stay at Resort Trips	6,464	2,583	9,047	71%	29%
Summer Saturday Stay Visiting Friends/Relatives Trips	6,986	4,928	11,914	59%	41%
Summer Total	66,871	111,800	178,671	37%	63%

Appendix A. Recreation Resources Indirect Effects Methodology

1 The Arapaho and Roosevelt National Forests/White River National Forest splits according to the travel
 2 demand model are 15 percent/85 percent for winter and 37 percent/63 percent for summer.

3 **Ridership Survey**

4 The ridership survey is based on interviews conducted by Mark Bradley Research & Consulting during
 5 winter and summer 2001. Approximately 1,300 winter (March 9 to April 6) interviews (19 locations in
 6 the Denver metropolitan area, and Corridor resorts, airports, and commercial venues) and 1,500 summer
 7 (June 30 to August 21) interviews (24 locations in the Denver metropolitan area, and Corridor resorts,
 8 airports, campgrounds, I-70 interchanges, and commercial venues) were performed at selected Corridor
 9 sites. In addition, there were 800 winter respondents to a web-based survey. **Table A-7** shows the survey
 10 results that were reviewed by J.F. Sato and Associates and attributed to Arapaho and Roosevelt National
 11 Forests and White River National Forest destinations.

12 **Table A-7. Ridership Survey—Arapaho and Roosevelt National Forests/White River National**
 13 **Forest Splits**

Trip Type	ARNF	WRNF	Total	ARNF %	WRNF %
Winter Ridership Survey Day Recreation Respondents	50	103	153	33%	67%
Winter Ridership Survey Stay at 2nd Home Respondents	7	49	56	13%	88%
Winter Ridership Survey Stay at Resort Respondents	3	20	23	13%	87%
Winter Ridership Survey Local Recreation Respondents	12	41	53	23%	77%
Winter Ridership Survey Stay Visiting Friends/Relatives Respondents	2	16	18	11%	89%
Winter Total	74	229	303	24%	76%
Summer Ridership Survey Day Recreation Respondents	2	20	22	9%	91%
Summer Ridership Survey Stay at 2nd Home Respondents	5	97	102	5%	95%
Summer Ridership Survey Stay at Resort Respondents	2	51	53	4%	96%
Summer Ridership Survey Local Recreation Respondents	7	89	96	7%	93%
Summer Ridership Survey Stay Visiting Friends/Relatives Respondents	6	49	55	11%	89%
Summer Total	22	306	328	7%	93%

14 The Arapaho and Roosevelt National Forests/White River National Forest split according to the ridership
 15 survey is 24 percent/76 percent in winter and 7 percent/93 percent in summer.

16 **Forest Service EIS, Forest Plan, and Recent National Use Monitoring Results**

17 The U.S. Forest Service (USFS) provided Arapaho and Roosevelt National Forests and White River
 18 National Forest recreation data and projections to the Colorado Department of Transportation (and J.F.
 19 Sato and Associates) for use in the I-70 PEIS. Although RVD and “occasion” data were provided for
 20 White River National Forest, only RVD data were provided for Arapaho and Roosevelt National Forests.
 21 Therefore, RVD data (selected districts relevant to I-70 travel) were used for the “split” calculations. A
 22 “simple” summer/winter breakout of this data reveals the Arapaho and Roosevelt National Forests/White
 23 River National Forest splits shown in **Table A-8** and **Table A-9** (2000 and 2025 data).

Appendix A. Recreation Resources Indirect Effects Methodology

1

Table A-8. 2000 Summer and Winter RVDs

	ARNF	WRNF	ARNF %	WRNF %
Total 2000 RVDs (selected districts)	3,150,700	8,342,639	27%	73%
Winter RVDs (downhill skiing, cross-country skiing, snowshoeing, snowmobiling)	943,500	3,993,103	19%	81%
Summer RVDs (all else)	2,207,200	4,349,536	34%	66%

2

Table 9. 2025 Summer and Winter RVDs

	ARNF	WRNF	ARNF %	WRNF %
Total 2025 RVDs (selected districts)	6,372,600	11,326,965	36%	64%
Winter RVDs (downhill skiing, cross-country skiing, snowshoeing, snowmobiling)	1,471,100	4,482,402	25%	75%
Summer RVDs (all else)	4,901,500	6,844,562	42%	58%

3 **Table A-10** and **Table A-11** show 2000 and 2025 Arapaho and Roosevelt National Forests/White River
 4 National Forest splits on more complex summer/winter breakouts (which assigned portions of winter use
 5 to the auto travel, fishing, view scenery, and “other” recreation categories):

6

Table A-10. 2000 Summer and Winter RVDs

	ARNF		WRNF	
	Summer 2000	Winter 2000	Summer 2000	Winter 2000
Camping	365,900	-	1,554,463	-
Downhill Skiing	-	890,800	-	3,842,638
Auto Travel	1,179,800	208,200	1,272,713	224,596
Hiking/Walking	227,000	-	265,798	-
View Scenery			101,095	5,131
Fishing	44,840	2,360	112,915	6,109
Mountain Biking	27,400	-	77,973	-
Hunting Big Game	19,200	-	127,779	-
Cross-Country Skiing/Snowshoeing	-	15,100	-	109,692
Snowmobiling	-	37,600	-	40,772
Other	119,250	13,250	497,123	55,236
Total RVDs	1,983,390	1,167,310	4,009,859	4,284,176
Forest Split	33%	21%	66%	79%

Appendix A. Recreation Resources Indirect Effects Methodology

1

Table A-11. 2025 Summer and Winter RVDs

	ARNF		WRNF	
	Summer 2025	Winter 2025	Summer 2025	Winter 2025
Camping	461,543	-	2,648,644	-
Downhill Skiing	-	1,379,443	-	4,335,691
Auto Travel	3,106,483	548,203	2,069,316	365,173
Hiking/Walking	339,000	-	538,102	-
View Scenery	NA	NA	174,161	8,840
Fishing	70,069	3,688	216,570	11,716
Mountain Biking	72,543	-	142,680	-
Hunting Big Game	26,700	-	208,584	-
Cross-Country Skiing/Snowshoeing	-	17,600	-	227,628
Snowmobiling	-	74,100	-	70,334
Other	245,931	27,326	1,002,882	111,431
Total RVDs	4,322,269	2,050,359	7,000,940	5,130,813
Forest Split	38%	28%	62%	72%

2 National Visitor Use Monitoring (NVUM) results are available for Arapaho and Roosevelt National
 3 Forests (August 2001) and White River National Forest (August 2003). The NVUM survey reports on
 4 visitor demographics, zip code origination, forest-wide visitation estimates, visitor expenditures, visitor
 5 satisfaction, and activity participation and primary activity. Visitation estimates are shown in **Table A-12**.

6

Table A-12. Forest-Wide Visitation Estimates - NVUM

ARNF			WRNF		
National Forest Visits 2000 (millions)	Site Visits 2000 (millions)	Wilderness Visits 2000 (millions)	National Forest Visits 2001/2002 (millions)	Site Visits 2001/2002 (millions)	Wilderness Visits 2001/2002 (millions)
6.2	7.8	0.4	9.7	10.7	0.3
Winter Visitation Estimate (downhill skiing, snowmobiling, cross-country skiing, snowshoeing)					
1.2	1.6	0.1	7.3	8.0	0.2
Summer Visitation Estimate (all other)					
5.0	6.2	0.3	2.4	2.7	0.1

7 **Table A-12** also shows breakdowns for forest-wide seasonal use based on “percent who said it was their
 8 primary activity” (NVUM). The Arapaho and Roosevelt National Forests and White River National
 9 Forest data are not immediately comparable because the data were collected during different years and
 10 time periods (White River National Forest: October 2001 through September 2002; Arapaho and
 11 Roosevelt National Forests: January through December 2000). Also, the White River National Forest

Appendix A. Recreation Resources Indirect Effects Methodology

1 survey occurred after the September 11 attack and during a season of heavy wildfires and extensive fire
 2 restrictions. Furthermore, the NVUM report section “Constraints on Uses of the Results” states the
 3 following: “The information presented here is valid and applicable at the forest level. It is not designed to
 4 be accurate at the district or site level.” J.F. Sato and Associates was not able to determine defensible
 5 Arapaho and Roosevelt National Forests/White River National Forest seasonal splits for the selected I-70
 6 districts using the NVUM data.

7 A.1.2 Summary and Conclusions

8 Winter and summer splits for Arapaho and Roosevelt National Forests/White River National Forest were
 9 determined for use in the indirect impacts to forest destination methodology based on averaging the splits
 10 calculated for the four data sources. The percentage splits determined for each data source were averaged
 11 as shown in **Table A-13**. Note that the summer split for the ridership survey source was deleted from the
 12 average due to the extreme divergence from the other data sources. The Arapaho and Roosevelt National
 13 Forests/White River National Forest split according to the average of the four data sources is
 14 24 percent/76 percent in winter and 31 percent/69 percent in summer (see **Table A-13**).

15 **Table A-13. Arapaho and Roosevelt National Forests/White River National Forest**
 16 **Splits for Summer and Winter - Summary**

Source of Data	ARNF %	WRNF %
I-70 User Survey		
Winter	34%	66%
Summer	23%	77%
Travel Demand Model		
Winter	15%	85%
Summer	37%	63%
Ridership Survey		
Winter	24%	76%
Summer	7%	93%
2000 Forest Service EIS and Forest Plan— Complex Breakout		
Winter	21%	79%
Summer	33%	67%
Average Splits		
Winter	24%	76%
Summer (not including Ridership Survey)	31%	69%

17 Trips—National Forest Visitation

18 National forest visitation by residents/nonresidents is derived (per project alternatives) from total person
 19 trips data in the travel demand model. **Table A-14** shows estimations of national forest destination trips
 20 by trip types during winter/summer season weekend travel. The figures represent the total number of trips
 21 predicted to occur annually (two weekend days and 20 weekends) during winter and summer seasons.
 22 These are periods known to have peak demand on I-70. National forest destination trips (see last column
 23 in table) are used in the calculation of possible induced “resident/nonresident national forest use” by
 24 alternative as further described in the following section. National forest destination trips (see last column

Appendix A. Recreation Resources Indirect Effects Methodology

1 in table) are used in the calculation of suppressed “nonresident national forest use” by alternative as
 2 further described in the following methodology (note that resident visitation suppression is not expected).
 3 The table indicates national forest destination trips calibrated to be consistent with winter and summer
 4 Arapaho and Roosevelt National Forests/White River National Forest splits provided in **Table A-13**.

5 **Table 14. Travel Demand Model—National Forest Destination Trips, Winter and Summer Seasons**

Person Trips			Percentage Split Between the Forests	
Winter Season Weekends (2 nights, 20 weekends)				
Purpose	2000	2025 Baseline*	2000	2025 Baseline*
ARNF Local Corridor Resident Recreation	36,533	45,915	Not applicable	Not applicable
WRNF Local Corridor Resident Recreation	465,376	793,601	Not applicable	Not applicable
ARNF Nonresident (from out-of-Corridor) Recreation	967,514	1,758,596	26% (day trips only = 35%)	27% (day trips only = 35%)
WRNF Nonresident (from out-of-Corridor) Recreation	2,698,952	4,718,433	74% (day trips only = 65%)	73% (day trips only = 65%)
Total ARNF Destination Trips	1,004,047	1,804,511	24%	25%
Total WRNF Destination Trips	3,164,327	5,512,034	76%	75%
Summer Season Weekends (2 nights, 20 weekends)				
Purpose	2000	2025 Baseline*	2000	2025 Baseline*
ARNF Local Corridor Resident Recreation	42,458	100,211	Not applicable	Not applicable
WRNF Local Corridor Resident Recreation	500,541	738,362	Not applicable	Not applicable
ARNF Nonresident (from out-of-Corridor) Recreation	1,686,755	1,947,287	34% (day trips only = 55%)	34% (day trips only = 55%)
WRNF Nonresident (from out-of-Corridor) Recreation	3,277,710	3,811,499	66% (day trips only = 45%)	66% (day trips only = 45%)
Total ARNF Destination Trips	1,729,213	2,047,498	31%	31%
Total WRNF Destination Trips	3,778,252	4,549,861	69%	69%

Local Corridor resident trips include a portion of the total local non-work trips (includes local trips for shopping and services).

Nonresident (from out-of-Corridor) overnight trips include trips to second homes, to visit friends and relatives, and to stay at resorts/accommodations.

Nonresident (from out-of-Corridor) day recreation trips are primarily from the Front Range.

WRNF local Corridor resident trips include trips at three locations (one in Summit County and two in Eagle County).

ARNF local Corridor resident trips include trips at one location: Twin Tunnels.

Nonresident trips include one location intended to provide an approximation of all nonresident trips: Twin Tunnels.

6 **Methodology Calculations**

7 **Induced Trips—Nonresident National Forest Visitation**

8 Possible induced/suppressed visitation is based on percentage inducement/suppression of forest
 9 destination trips by the major (generalized) project alternatives as shown in **Table A-15**. The table uses
 10 total 2025 nonresident trips from each forest from **Table A-14** and the percentage induced/suppressed
 11 trips shown to calculate induced/suppressed trips (or forest visits). Note that the degree of alternative

Appendix A. Recreation Resources Indirect Effects Methodology

1 inducement/suppression shown in the table reflects forest destination trips only, not overall
 2 inducement/suppression that takes into account all trips. Inducement associated with forest destination
 3 trips would be higher because these trips are expected to be more sensitive to peak demand. Suppression
 4 associated with tourism trips would be more pronounced because tourism-oriented trips are expected to be
 5 more sensitive to the causes of suppression (such as congestion that causes tourists to stay home or go
 6 somewhere else). This degree of inducement/suppression does not directly correspond with inducement as
 7 presented in **Chapter 2** of the *I-70 Mountain Corridor PEIS* (CDOT, 2010) (which includes all trip
 8 types). Furthermore, the degree of inducement shown in the table reflects a generalized average
 9 inducement over the Corridor area based on these trips. This was necessary because the degree of
 10 inducement actually would vary by alternative and location throughout the Corridor.

11 **Table A-15. Induced/Unmet Nonresident Trips/Forest Visits**

	No Action	Minimal Action	Transit Alternatives	Highway Alternatives	Combination Alternatives	Preferred Alternative - Minimum Program	Preferred Alternative - Maximum Program
Induced / Unmet Percentage for Trips	-25%	-21%	4%	1%	18%	6%	20%
Winter							
Possible Induced / Unmet Nonresident Trips / Forest Visits - ARNF	-492,000	-412,000	71,700	17,300	366,000	119,000	410,000
Possible Induced / Unmet Nonresident Trips / Forest Visits - WRNF	-1,390,000	-1,170,000	203,000	49,000	1,030,000	337,000	1,160,000
Summer							
Possible Induced / Unmet Nonresident Trips / Forest Visits - ARNF	-545,000	-457,000	79,400	19,200	405,000	132,000	455,000
Possible Induced / Unmet Nonresident Trips / Forest Visits - WRNF	-1,160,000	-969,000	168,000	40,700	859,000	280,000	964,000

13 Induced Trips—Resident National Forest Visitation

14 Induced population growth “predictions” by alternative are based on the methodology presented in
 15 **Appendix J**, Social and Economic Values, of the *I-70 Mountain Corridor PEIS* (CDOT, 2010). Induced
 16 population growth values have been assigned for the major (generalized) project alternatives and by forest
 17 according to this methodology in **Table A-16**. Note that induced Corridor growth is only predicted for
 18 Eagle and Summit counties (White River National Forest area). Induced Corridor growth is not indicated
 19 in the area of Arapaho and Roosevelt National Forests. Therefore, induced resident visitation is not
 20 expected for Arapaho and Roosevelt National Forests. Also, note that suppressed resident visitation is not
 21 expected to occur based on existing growth and buildout indicators in the Corridor area. **Table A-17**
 22 provides the calculations for induced resident trips (White River National Forest only).

23 **Table A-16. Trip Factors for Induced Local Resident Trips**

Change in Population from 2000 to 2025 (Summit and Eagle counties)	53,435
Change in Winter Resident Trips from 2000 to 2025 (3 locations in Summit and Eagle counties—see Table A-14)	328,226
Change in Summer Resident Trips from 2000 to 2025 (WRNF area—see Table A-14)	237,820
Induced Trip Factor for Winter (Change in Trips/Change in Population)	6.14
Induced Trip Factor for Summer (Change in Trips/Change in Population)	4.45

Appendix A. Recreation Resources Indirect Effects Methodology

1 **Table A-17. Induced Resident Trips/Forest Visits (White River National Forest only)**

	No Action	Minimal Action	Transit Alternatives	Highway Alternatives	Combination Alternatives	Preferred Alternative
Possible Induced Population in Area of WRNF	0	0	15,000	10,000	45,000	15,000 to 45,000
Winter						
Possible Induced Resident Trips/Forest Visits (Induced Population x Induced Trip Factor—shown above)	0	0	92,138	61,425	276,414	92,138 to 276,414
Summer						
Possible Induced Resident Trips/Forest Visits (Induced Population x Induced Trip Factor—shown above)	0	0	66,760	44,506	200,279	66,760 to 200,279

2 **A.1.3 Summary of Results**

3 **Arapaho and Roosevelt National Forests**

4 **Table A-18, Chart A-1, and Chart A-2** summarize indirect impacts to forest visitation results for
 5 Arapaho and Roosevelt National Forests.

6 **Table A-18. Indirect Impacts—Arapaho Roosevelt National Forest (I-70 Districts)**

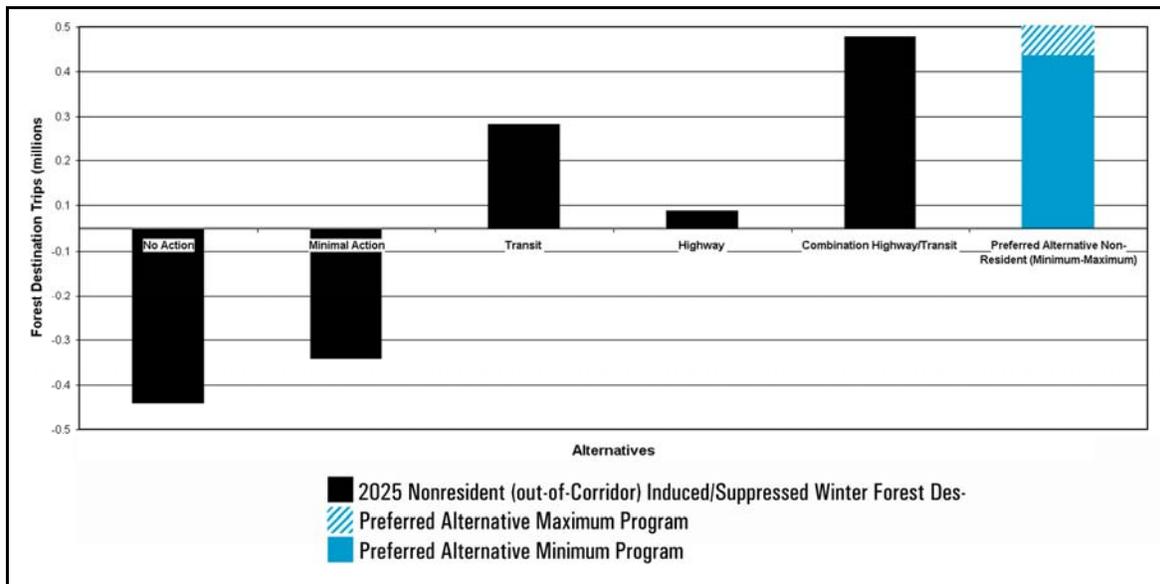
Alternative	2025 Winter			2025 Summer		
	Change in Resident (Corridor) Winter Forest Visit Trips	Change in Nonresident Winter Forest Visit Trips	2025 Baseline Winter Skier Visit and RVD Projections (millions)	*Change in Resident (Corridor) Summer Visitation	Change in Nonresident Summer Visitation	2025 Baseline Summer RVD Projections* (millions)
No Action	0	-351,719	2.37 skier visits (change of 0.58 from 2000); 2.05 winter RVDs (change of 0.88 from 2000)	0	-389,457	4.32 (change of 2.57 from 2000)
Minimal Action	0	-263,789		0	-292,093	
Transit	0	211,032		0	233,674	
Highway	0	35,172		0	38,946	
Combination	0	386,891		0	428,403	
Preferred Alternative		211,032 to 386,891			233,674 to 428,403	

* Note that induced growth is not indicated in the ARNF area

Appendix A. Recreation Resources Indirect Effects Methodology

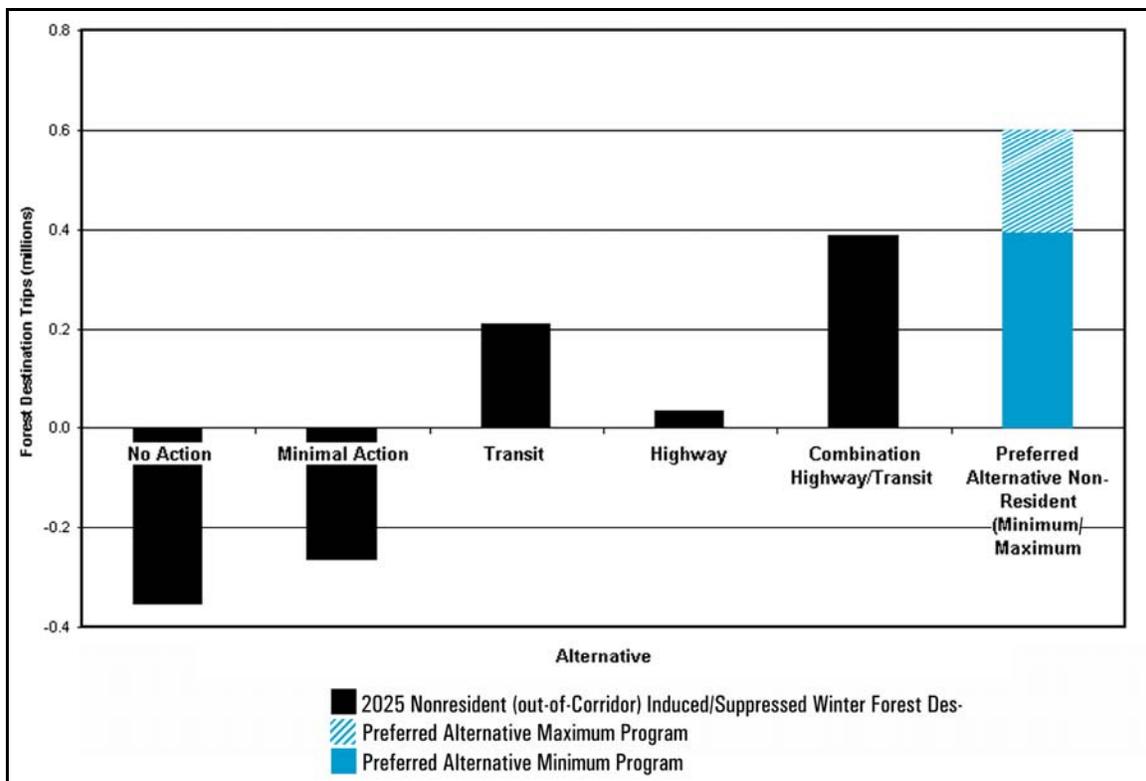
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Chart A-1. Arapaho and Roosevelt National Forests—Possible Change in 2025 Forest Destination Trips by Alternative
2025 projected summer RVDs = 4.32 million (I-70 Districts)



4
5
6
7

Chart A-2. Arapaho and Roosevelt National Forests—Possible Change in 2025 Forest Destination Trips by Alternative
2025 projected skier visits = 2.37 million; 2025 projected winter RVDs = 2.05 million (I-70 Districts)



8

Appendix A. Recreation Resources Indirect Effects Methodology

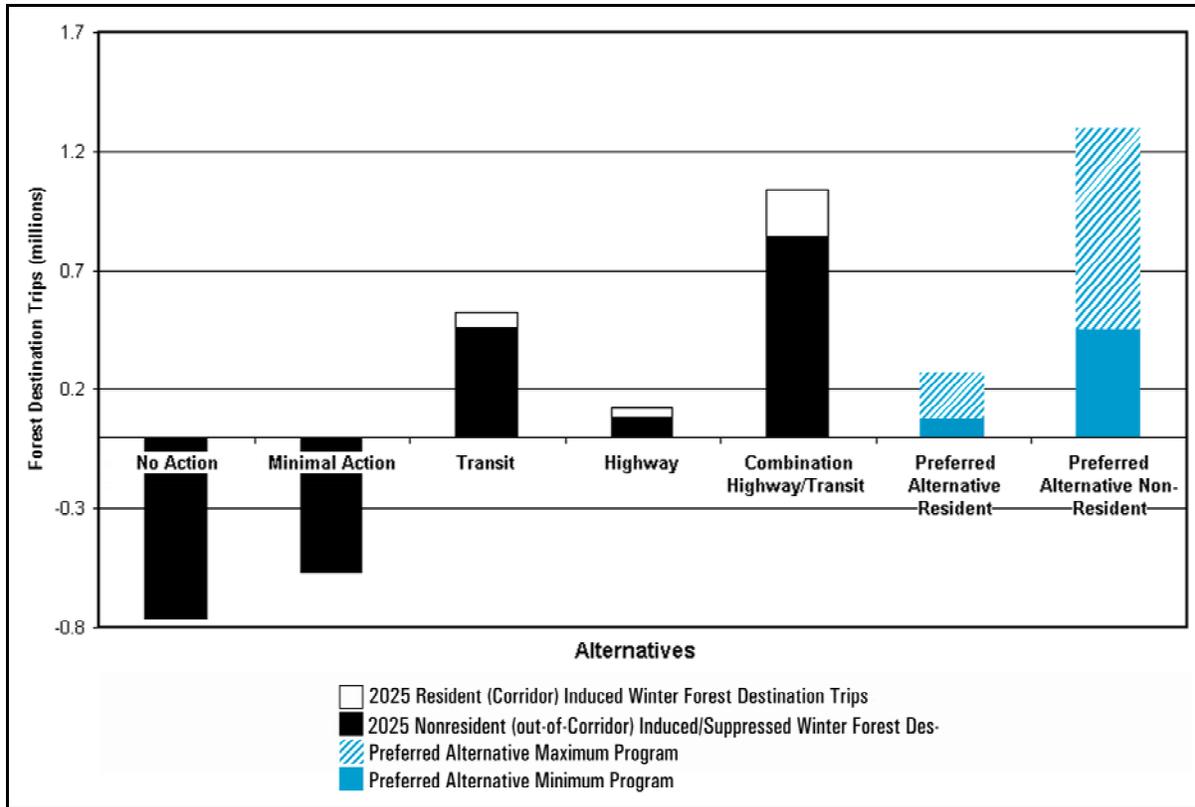
1 **Table A-19, Chart A-3, and Chart A-4** summarize indirect impacts to forest visitation results for White
 2 River National Forest.

3 **Table A-19. Indirect Impacts—White River National Forest**

Alternative	2025 Winter			2025 Summer		
	Change in Resident (Corridor) Winter Forest Visit Trips	Change in Nonresident Winter Forest Visit Trips	2025 Baseline Winter Skier Visit and RVD Projections* (millions)	Change in Resident (Corridor) Summer Visitation	Change in Nonresident Summer Visitation	2025 Baseline Summer RVD Projections* (millions)
No Action	0	-943,687	8.67 skier visits (change of 0.99 from 2000) 5.13 winter RVDs (change of 0.85 from 2000)	0	-762,300	7.10 (change of 3.04 from 2000)
Minimal Action	0	-707,765		0	-571,725	
Transit	92,138	566,212		66,760	457,380	
Highway	61,425	94,369		44,506	76,230	
Combination	276,414	1,038,055		200,279	838,530	
Preferred Alternative	92,138 to 276,414			66,760 to 200,279		

4 **Chart A-3. White River National Forest—Possible Change in 2025 Forest**
 5 **Destination Trips by Alternative**

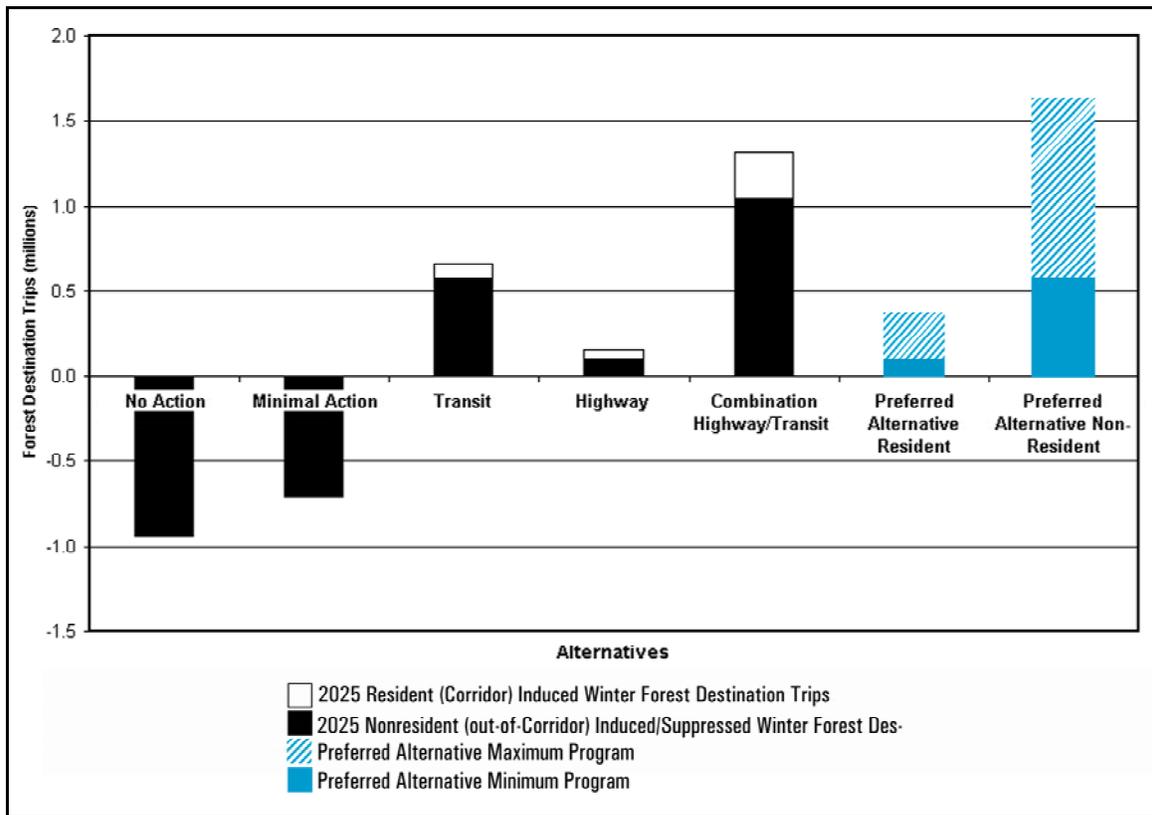
6 **2025 projected summer RVDs = 7.10 million (I-70 Districts)**



Appendix A. Recreation Resources Indirect Effects Methodology

Chart A-4. White River National Forest—Possible Change in 2025 Forest Destination Trips by Alternative

2025 projected skier visits = 8.67 million; 2025 projected winter RVDs = 5.13 million (I-70 Districts)



Major Recreation Categories

It is acknowledged that specific alternatives would affect major recreation usage in different proportions. However, quantitative methods to base such changes according to alternative are not available. Because the purpose of this methodology (in Appendix M) is to estimate quantitative indirect impacts, qualitative discussion of possible effects to major recreation category usage is provided in the discussion of Environmental Consequences in **Section 3.12, Recreation Resources**, of the *I-70 Mountain Corridor PEIS* (CDOT, 2010).

Appendix B. June 17, 2004, Letter from the United States Forest Service

This appendix contains a letter from the United States Forest Service dated June 17, 2004. The final two paragraphs on page 5 of this letter state the opinion of the United States Forest Service that transit must be an integral component of the Preferred Alternative.

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United States
Department of
Agriculture

Forest
Service

Arapaho and Roosevelt
National Forests and
Pawnee National Grassland

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File Code: 2100/1950-1

Date: 17 JUN 2004

Mr. William Jones
Division Director
Federal Highway Administration
555 Zang Street
Lakewood, CO 80228

Dear Mr. Jones:

On behalf of the U. S. Forest Service, I would like to thank you for the opportunity to review the Draft Interstate 70 (I-70) Programmatic Environmental Impact Statement (PEIS). The cooperative spirit demonstrated throughout this project during the last four years has enhanced interagency environmental streamlining. The following comments constitute the cooperating agency review conducted by Forest Service resource specialists and program managers from the White River National Forest, Arapaho and Roosevelt National Forests and Pawnee National Grassland, and Region Two Regional Office. Please ensure that these comments are incorporated into the Administrative Record for the I-70 PEIS.

Forest Plan Standards and Guidelines

The Draft PEIS does not identify and differentiate between applicable Forest Plan standards and guidelines. Since the I-70 project spans both the White River and Arapaho National Forests, the standards and guidelines specific to each of the Forest Plans must be applied to the I-70 PEIS analysis. Please incorporate the following definitions to differentiate between forest-wide and management area standards and guidelines:

- **Standard-** A standard is a course of action that must be followed, or a level of attainment that must be reached, to achieve Forest goals. Adherence to standards is mandatory. Standards are used to ensure that individual projects are in compliance with the forest plan. Deviations from standards must be analyzed and formally documented in a forest plan amendment.
- **Guideline-** A guideline is a preferred or advisable course of action or level of attainment. Guidelines are designed to achieve desired conditions (goals). Deviations from a guideline, and the reasons for doing so, are recorded in a project- level National Environmental Policy Act (NEPA) document; a forest plan amendment is not required.

Forest Service specialists will continue to assist your staff to identify applicable standards and guidelines for the I-70 PEIS. It is critical to identify the applicable standards and guidelines at the Tier 1 (programmatic) stage for this project in order to evaluate possible constraints that the standards and guidelines could have on the transportation alternatives prior to selection of a preferred alternative. Furthermore, identifying applicable standards and guidelines during Tier 1 will facilitate design of the transportation infrastructure during Tier 2. At the Tier 2 level, the Forest Service will assist in the re-evaluation of the standards and guidelines identified at this programmatic level to determine their applicability relative to project-specific designs.



Need for Additional Easement

The Draft PEIS should evaluate and identify areas through National Forest System lands where additional easements may be required to accommodate I-70 transportation alternatives. Furthermore, the analysis should disclose potential impacts to adjacent Forest Service management area prescriptions. For example, given the likelihood of an additional tunnel bore at the Continental Divide, the existing United States Department of Agriculture (USDA) easement may not be sufficient to accommodate the required infrastructure. Therefore, direct and indirect impacts to management area prescriptions north of I-70 relative to construction of a third bore at the Continental Divide should be analyzed and disclosed. If analysis of the transportation alternatives indicates that requests for additional easements are expected, then the Draft PEIS should simply indicate such. The Forest Service recognizes and applauds the rigorous effort expended on this project to utilize the existing USDA easement to minimize future impacts to National Forest System lands and permitted uses, particularly in the vicinity of Loveland Ski Area.

Please change the incorrect identification of the Forest Service Special Use Permitting process as the mechanism to acquire additional easements to support I-70 transportation improvements. The Federal Highway Administration would request a Letter of Consent from the Forest Service, not a Special Use Permit, to acquire additional easements through National Forest System lands. Special Use Permits will be required to support temporary occupancy of USDA lands during construction activities through National Forest System lands during Tier 2 projects.

Impacts to Existing Special Uses

The Draft PEIS did not address potential impacts to permitted Special Uses (i.e. communication sites, recreation residences, etc.) within and adjacent to existing I-70 easements. The Forest Service retains authorities to permit uses within and adjacent to the I-70 easements as long as those permitted uses do not interfere with the operation of the transportation facility. The Forest Service has provided your consultants a list of permitted uses within and adjacent to the I-70 easements on both the Arapaho and White River National Forests. Please ensure that the Draft PEIS discloses any projected impacts to permitted special uses and identifies general mitigation strategies.

Minerals Material Management

The PEIS discusses the potential for on-site use, storage, resale, or disposal of waste rock resulting from construction of additional tunnels. This discussion should include Forest Service permit requirements relative to tunnel waste rock that could be extracted from National Forest System lands:

- **Common Minerals Permit-** Would require CDOT to purchase mineral material transported off of National Forest System lands for subsequent disposal or sale.
- **Free Use Permit-** Would enable CDOT to use mineral material transported off of National Forest System lands free of charge if the material could be utilized in another public works project.

Although the PEIS estimates tipping fees relative to future tunnel construction, the Draft PEIS did not include costs that would be incurred as a result of purchasing mineral material from the Federal government, particularly in the vicinity of the Continental Divide. An estimate of these

costs should be identified in the PEIS as a project constraint while noting that specific waste rock disposal plans and appraised values will be finalized at the Tier 2 level.

The Draft PEIS narrative discussed use of Dry Gulch as a repository for tunnel waste rock as a result of a third bore at the Continental Divide and environmental concerns that are associated with the area. The narrative fails to note the presence of greenback cutthroat trout (federally listed as threatened) in Dry Gulch.

Biological Resources

The Forest Service would like to commend the Federal Highway Administration and the Colorado Department of Transportation for supporting interagency workgroup (ALIVE) efforts throughout development of the Draft PEIS. As a result of these efforts, Linkage Interference Zones (LIZs) have been identified, and dialogue has been initiated to formulate landscape level strategies to improve permeability for terrestrial wildlife species along the I-70 corridor. While the Forest Service looks forward to continued participation on the ALIVE committee, there is concern that the Draft PEIS does not accurately represent perspectives shared by the Forest Service and ALIVE member agencies relative to the following:

- Prescribing specific types and dimensions for wildlife crossings in exact locations should not occur at the programmatic level. Wildlife crossing design specifications should be completed after a preferred alternative has been selected and project design can incorporate the most effective wildlife crossing solutions.
- Assumptions in the Draft PEIS regarding the integrity of the White River National Forest Plan relative to future and previously permitted activities on National Forest System lands are incorrect and should be deleted from the document. For example, assumptions relative to the viability of wildlife corridors in the vicinity of Laskey Gulch fail to consider the administrative tools that the Forest Service possesses under federal law to ensure that wildlife corridors are maintained in accordance with applicable Forest Plan standards and guidelines.
- The prioritization of LIZs throughout the I-70 corridor focuses primarily on lynx linkage areas as well as urban development potential and assigns significantly less weight in areas where large animal/vehicle collisions are highest throughout the corridor. The Forest Service disagrees with this prioritization. For example, locations such as Mount Vernon Canyon and I-70 from Wolcott to Avon should receive heightened consideration due to the frequency and severity of accidents between motorists and large mammals.

References in the Draft PEIS to Federally listed Threatened and Endangered (T & E) species are inaccurate and inconsistent. For example, the Draft PEIS narrative states that none of the T & E fish species analyzed in the document are present within the project corridor. However, the discussion following this statement under greenback cutthroat trout acknowledges the presence of the fish species in Dry Gulch which is within the Area of Potential Affect.

While the Draft PEIS identifies efforts by the ALIVE workgroup to improve permeability for terrestrial species, the document superficially evaluates impacts to fish and amphibians throughout the corridor. We acknowledge that additional evaluation of fisheries will be conducted at the Tier 2 level, but the Draft PEIS still needs to provide a strategy for the types of analyses and general connectivity strategies that will be conducted to evaluate impacts to fish

and amphibians along the I-70 corridor. Given the significant impacts to aquatic environments as a result of winter maintenance activities (i.e. application of de-icers and traction sand), future mitigation strategies will be critical to ensure the viability of fish and amphibians throughout the I-70 corridor.

Recreation Resources

The Draft PEIS should include a qualitative narrative to disclose which transportation alternatives could induce/suppress the specific types of recreation identified in the analysis. For example, mass transit alternatives alone would likely increase non-dispersed forms of recreation such as downhill skiing but not dispersed forms of recreation such as snowmobile/All Terrain Vehicle use, since people have to carry their equipment with them on a train or bus.

The Draft PEIS recreation analysis utilizes projections taken from data in the forest planning processes. At the time you conducted your analysis, this was the best available data to support the recreation methodology. However, since that time, both forests possess newer visitor use data generated from our National Visitor Use Monitoring (NVUM) projects. The Forest Service realizes that it is too late in the process to incorporate the NVUM data into your Draft PEIS analysis. However, for the final I-70 PEIS, the Forest Service will expect the analysis to incorporate the recent NVUM data to support accurate disclosure of current recreation uses and to effectively project future recreation demand.

Forest Service specialists are currently working with your staff to resolve discrepancies associated with the methodology used to calculate summer recreation demand on the White River and Arapaho National Forests. The assumption employed to divide summer use is not valid. Agreement on how to best determine the basis for summer use will need to be resolved before the Draft PEIS is finalized.

Air Resources

The Draft PEIS should disclose any potential air quality impacts (i.e. visibility degradation, acid deposition, etc.) to the Class I Eagles Nest Wilderness airshed adjacent to I-70. The Draft PEIS did not consider screening-level dispersion modeling to determine far field air quality impacts to nearby Class I and sensitive Class II airsheds such as designated wilderness areas along I-70. Screening level modeling would aid in addressing public concerns regarding far field visibility and deposition impacts and/or impacts due to regional haze. This type of modeling would provide a quantitative reference for comparison to established concern thresholds. Additionally, the narrative should indicate whether the Colorado Air Pollution Control Division has any visibility concerns for scenic areas within and adjacent to the I-70 corridor. The Draft PEIS should discuss air quality impacts over the life of the project since variations will occur in both the type and quantity of emissions throughout the construction and operational phases.

In addition, the economic analysis should assign appropriate value to air quality impacts since clean air and clear visibility are primary reasons that people visit National Forest System lands. The analysis should disclose the differences between the alternatives relative to future impacts to air quality whereas certain alternatives may yield a net decrease in air pollution following the construction phase. Some forms of mass transit could result in a reduction of emissions based on the technology employed and/or by their ability to remove cars from I-70.

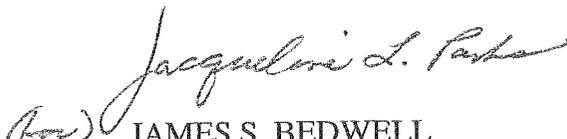
In closing, as a cooperating agency during the development of the Draft PEIS, the Forest Service would like to commend the Federal Highway Administration and Colorado Department of Transportation for their commitment to interagency partnerships and consultation over the last four years. Although the process is not complete, the Forest Service believes that the following sections of the Draft PEIS illustrate proactive consultation throughout the project planning stage:

- The visual analysis methodology supporting the PEIS was excellent and successfully incorporates essential elements from both the Visual Management System and Scenery Management System into a comprehensive corridor-wide analysis.
- The 4(f) consultation was very thorough and provides consensus between our agencies that will lead to effective mitigation strategies during Tier 2 construction activities.
- The graphics and GIS maps contained in the Appendices support the narrative well and provide an excellent illustration of projected impacts.
- Use of the J.F. Sato comments database was a very effective mechanism to consolidate specialists' comments, to reduce redundancy, and to facilitate timely tracking and resolution.

I would like to reiterate that the Forest Service remains committed to providing your agency with the required resources to complete the I-70 PEIS. This project will shape the landscape of Colorado and the Southern Rocky Mountain Ecosystem for generations. Although the Forest Service does not prefer a single transportation alternative above all others, the agency believes that mass transit must be an integral component of the preferred alternative selected for this project. Given the current levels of vehicle congestion and recreation demand throughout the corridor, mass transit alternatives would enable more recreationists to enjoy non-dispersed forms of recreation which currently comprise the majority of participation (i.e. downhill skiing, hiking, sightseeing, etc.) on the White River and Arapaho National Forests. Mass transit would centralize recreation uses in specific locations thus reducing detrimental impacts associated with dispersed recreation.

The Forest Service feels that highway alternatives alone will only add to the existing roadway congestion while increasing the detrimental environmental impacts associated with the operation and maintenance of a major interstate system through ecologically sensitive areas. Furthermore, additional highway lanes resulting in more motorists would compound existing impacts associated with dispersed recreation and motorized use on National Forest System lands adjacent to the I-70- corridor.

Sincerely,


JAMES S. BEDWELL
Forest Supervisor

cc: Bill Janowsky, Tom Norton-CDOT, Tim Tetherow-J.F. Sato & Associates