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US Forest Service

Brainard Lake Recreation Area Management Plan

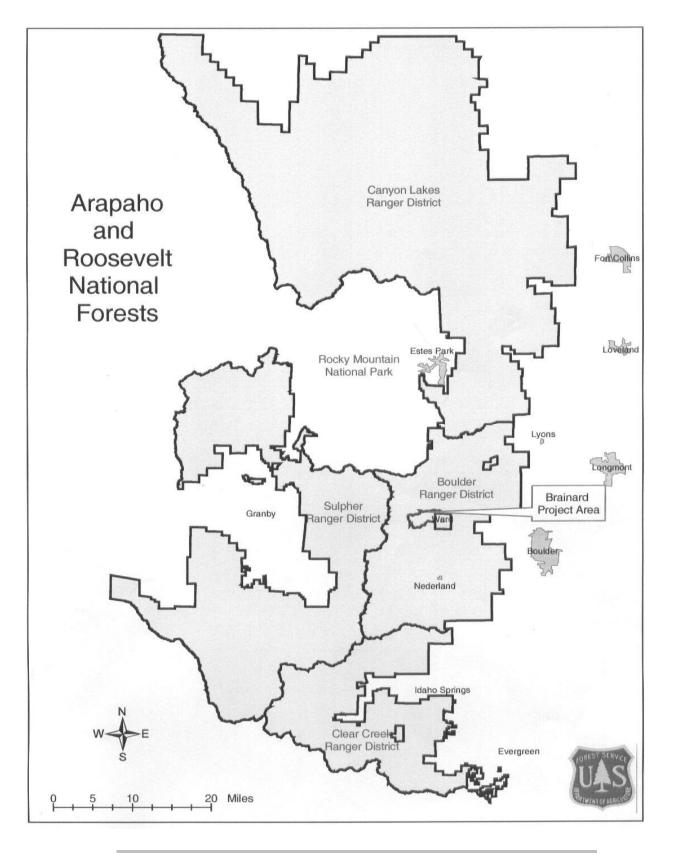
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Boulder Ranger District Rocky Mountain Region Roosevelt National Forest Boulder County, Colorado

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1.0	1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8	uction: What is the Brainard Lake Recreation Area (BLRA) Plan? Introduction Local Recreation in a National Context – The National Recreation Agenda Statewide Comprehensive Outdoor Recreation Plan (SCORP) Context Colorado National Forests Recreation Strategy Recreation Strategy for the Arapaho-Roosevelt NF's and Pawnee NG Forest Plan Direction for Recreation Forest Plan Goals for the Brainard Lake Geographic Area Forest Plan Management Strategies & Planning Considerations for the BLRA	5 5 6 7 8 9 10 12 13			
~ ~		1.9 Forest Plan Standards and Guidelines for the BLRA				
2.0		Context for a Recreation Management Plan	15			
	2.1	Existing Recreation Sites and Opportunities	15			
	2.2	Special Features in the BLRA	20			
	2.3	BLRA's Relationship to the Indian Peaks Wilderness	21 22			
	2.4 2.5	Assessment of Existing Recreation Sites and Opportunities				
3.0		Public Outreach for the Planning Process Core Recreation Management Plan	28 30			
3.0	3.1	Vision for the BLRA	30			
	3.1 3.2	Management Plan Goals and Objectives	30 30			
	3.2 3.3	Guiding Principles	30			
	3.3 3.4	Desired Future Condition for the BLRA	31			
	3. 4 3.5	ROS AS A Planning Tool	32			
	3.6	Theoretical Capacity for the BLRA	33			
4.0		Components to the BLRA Management Plan	35			
	4.1	Visitor Access Strategy	35			
	4.2	Visitor Safety and Conflict Management Strategy	37			
	4.3	Visitor Orientation, Education and Interpretation	39			
	4.4	Resource Protection and Restoration Strategy	40			
	4.5	Strategy to Protect Indian Peaks Wilderness Values	41			
	4.6	Agency Presence and Management and Capability Strategy	43			
	4.7	Financial Capability and Use Fee Strategy	44			
	4.8	Visitor Use Monitoring Strategy				
	4.9	Infrastructure Development Recommendations	45 46			
TABL	ES					
Table	1.1	Travel Management Strategy for the Brainard Geographic Area	13			
Table	2.1	National Forest System Trails in the BLRA and adjacent IPW	19			
Table	4.1	Recommended Infrastructure Development Schedule	47			
APPE	NDICES	8				
Apper	ndix A: L	ist of Individuals involved in the planning process	49			
MAPS	;					
BLRA BLRA BLRA	Recom Recrea	n g Conditions mended Actions tion Opportunity Spectrum - Existing tion Opportunity Spectrum - Recommended	4 50 51 52 53			



Map 1-1 Location of the Brainard Lake Recreation Area

1.0 INTRODUCTION: WHAT IS THE BRAINARD LAKE RECREATION AREA MANAGEMENT PLAN?

1.1 Introduction

The Brainard Lake Recreation Area (BLRA) is located west of the City of Boulder within Boulder County on the Boulder Ranger District of the Arapaho Roosevelt National Forest. It is located west of the town of Ward and adjacent to the Indian Peaks Wilderness. The planning area is shown on Figure 1-1. The planning area includes Township (T) 2 North (N), Range (R) 73 West (W), Sections 33, 34, 35, and 36 and T1N, R73W, Sections 2, 3, 4, 5, 8, 9, 10, and 11. The planning area contains approximately 3,531 acres, of which approximately 3,143 acres are administered by the National Forest, 40 acres are owned by the State, and the remaining 348 acres are privately owned.

The Brainard Lake Recreation Area is an important recreation resource in Colorado. It is one of the most popular National Forest areas for outdoor recreation opportunities along the Front Range of Colorado. It is located within a one to two hour drive from much of the Boulder-Denver metropolitan area and northern Front Range cities like Longmont, Loveland, Greeley and Fort Collins. The BLRA receives over 100,000 visitors annually, many of who visit during the summer and fall, but a significant amount of use also occurs in the winter, as it is an extremely popular backcountry skiing and snowshoeing area. In addition, the BLRA provides two significant access trailheads into the Indian Peaks Wilderness Area, which also is extremely popular and receives substantial use.

This BLRA management plan provides a context, vision, goals, objectives and a core plan for management of the BLRA. It also contains separate strategies and component plans, identifies needs for more information, makes recommendations for impending and future decisionmaking and provides a framework for monitoring use and providing for adaptive management measures.

1.2 Local Recreation In A National Context – The National Recreation Agenda

In December of 2000, the Forest Service published its National Recreation Agenda to "guide Forest Service recreation programs into the 21st century." The national vision for recreation is "to meet the Nation's present and future needs for outdoor recreation in a manner that protects the health, diversity, and productivity of the land." Listed in the agenda were 5 key areas of necessary concentration that help guide BLRA recreation management goals:

- 1. Improve the settings for outdoor recreation.
- 2. Improve visitor satisfaction with provided facilities and services.
- 3. Improve educational opportunities for the public about the values of conservation, land stewardship and responsible recreation.
- 4. Strengthen Forest Service relationships with private entities and volunteer-based and nonprofit organizations.

5. Establish professionally managed partnerships and intergovernmental cooperative efforts.

1.3 Statewide Comprehensive Outdoor Recreation Plan (SCORP) – A State Of Colorado Context

On February 4, 2004, the Colorado State Parks released the Statewide Comprehensive Outdoor Recreation Plan (SCORP) entitled *Colorado's Outdoor Recreation Future – Strategies for Colorado's Outdoors Heritage*. Funded by federal grants from the Land and Water Conservation Fund, the SCORP report focuses on the major challenges facing Colorado's outdoor future. Six strategic issues were outlined and actions were recommended to meet those challenges. The study also stresses how closely tied the tourism industry is to Colorado's unique outdoors in a key theme of the document entitled *The Nexus of Tourism and Outdoor Recreation in Colorado.*

The vision for Colorado's outdoor recreation future is established in the SCORP. "As Coloradans, our heritage is centered on our connections to the spectacular landscapes that define our state. Yet today, Colorado faces an enormous challenge of satisfying the outdoor recreation demands of a rapidly expanding population, while meeting the responsibility to conserve the special outdoors resources for which Colorado is renowned. Through strategic partnerships, Colorado's diverse resource of public land agencies, business interests and non-profit groups will pursue innovative approaches that will sustain our special outdoors-based quality of life."

Some of the key findings regarding location of recreation destinations, demographic trends of population growth and future growth trends in recreation include the following:

- Traditional use areas and wildland recreation landscapes are now "just out the back door" for many historically rural, but now urban communities.
- Counties with large tracts of public lands appeal to people seeking recreation access, open space and wildlands. Often, population growth in these counties is linked to their appeal as retirement and recreation destinations.
- The National Survey on Recreation and the Environment (NSRE) 2000, reports an ongoing growth in outdoor recreation that outstrips population growth rates.
- By 2025, the State Demographer projects Colorado's population to grow by 47% from its current 4.52 million to 6.65 million.
- Outdoor recreation is a significant aspect of public health. By implementing programs that increase recreation opportunities, communities are becoming healthier. Recent studies demonstrate that residents are more physically active with lower incidences of obesity in communities with accessible public land.
- Over 94% of Coloradans participate in outdoor recreation and over 90% of Coloradans are trail users.
- Out-of-state skiers are seeking other forms of winter recreation to supplement their Colorado ski vacation, such as cross-country skiing, snowmobiling and snowshoeing.
- Of the eight states within the U.S. Fish and Wildlife Service Mountain Region, Colorado attracts the most anglers and hunters. In addition, wildlife watching is an important factor in quality of life for Coloradans and a fast growing form of outdoor recreation.

The SCORP further stratifies statewide recreation into regions and sub-regions of Colorado. The six main regions of Colorado are the Front Range, Northeast, Northwest, South Central, Southeast, and Southwest regions. The Front Range region is divided into the Northern and Denver Metro sub-regions. The Brainard Lake Recreation Area is in the Denver Metro subregion. Some of the key descriptions regarding this region include the following:

- The most populated region within Colorado, the Front Range continues to experience rapid growth across the 7.5 million acres in the region.
- The three largest cities, Denver, Boulder, and Ft. Collins, have maintained their western heritage while evolving into outdoor lifestyle epicenters.
- Boulder is a haven for outdoor recreation and home to many professional cyclists, runners, and climbers who choose to train at the high altitude.
- Some of the major recreation attractions and destinations listed that encompass or are adjacent to the BLRA include the Roosevelt National Forest, Long's Peak, Eldora Mountain Resort and the Peak-to-Peak Scenic Byway.
- The Denver Metro sub-region (Boulder, Gilpin, Clear Creek Counties) leads the state in tourism activities. At 5% of total area employment, tourism runs ahead of agribusiness, manufacturing, and government in job contributions.
- Boulder and Clear Creek Counties have cost-of-living indexes that are 6% above the Colorado average.
- Arapaho and Boulder Counties rely upon travel and tourism for the greatest share of their total tax revenues 22% and 18% respectively.
- The top three "First Choice Outdoor Recreation Destinations" for Front Range visitors (SCORP Table 34, p. 80) included:
 - 1. Wilderness areas with little or no development 28%
 - 2. Large parks with a wide range of camping, trails, boating and fishing 28%
 - 3. Forests and lakes with limited trails, camping, boating and fishing 19%.
- The top 6 "Outdoor Recreation Activities Participated in During The Last 2 Years" for Front Range visitors (SCORP Table 35, p. 81) included:
 - 1. Picnicking 82%
 - 2. Trail Recreation 75%
 - 3. Water Recreation (swimming, non-motorized boating) 64%
 - 4. Visiting Historical Sites 63%
 - 5. Tent Camping 59%
 - 6. Fishing -47%

1.4 Colorado National Forests Recreation Strategy

The Rocky Mountain Region of the U.S. Forest Service released the Colorado National Forests and Grasslands Recreation Strategy in May of 2004. The vision states "Colorado's National Forests and Grasslands provide world-class recreation opportunities connecting people to their public lands. More than anywhere in the country, prople move to Colorado to be near their mountain, forest and grassland recreation areas. Coloradoan's strong connection to public lands must lead to a sense of responsibility for sustaining the state's inherent natural attraction."

The goal states that "Colorado's world class recreation focuses on local strengths and builds on public land and visitors' deep attachment to place by concentrating on the following

(paraphrased): Settings; Visitor Satisfaction; Enhanced Educational and Stewardship Opportunities; Relationships with All Partners; Interconnected Networks of Recreation Opportunities; and Strategic Actions."

Four specific strategies were identified to meet the vision and goal of the overall statewide strategy:

- To provide visitors a focused, high quality outdoor recreation program based on prioritized needs within the capability of existing human and financial resources. Coordinate with outdoor recreation provider agencies to identify respective roles and niches.
- 2. To develop interpretive and educational visitor information that is delivered timely, accurately and in a user-friendly manner.
- 3. To collaboratively provide a spectrum of outdoor recreation opportunity settings and programs based on sustainable ecological, social and financial capacities.
- 4. To develop an organization with the mix of skills needed to deliver the current and future recreation program.

In Appendix B of the Colorado Recreation Strategy, titled *Emphasis of Place in Recreation Management*, are different categories of place related to recreational niche. The Brainard Lake Recreation Area falls into several place-based niches. These niches include: *Destination Areas; High Use Recreation Areas; Urban Interface Areas; and Important Scenic Corridors.* In addition, the BLRA's unique proximity to the Indian Peaks Wilderness also provides the link to another recreational niche: *Wilderness Areas.*

1.5 Recreation Strategy: Arapaho/Roosevelt National Forests and Pawnee National Grassland (ARP)

The Arapaho/Roosevelt National Forests and Pawnee National Grassland (ARP) unit is one of three "**Urban National Forest**" management units in the State of Colorado. Our proximity to over 2.8 million people living on the Front Range of the Rocky Mountains means that we host millions of National Forest and Grasslands visitors annually. In fact, the ARP is currently the second-most visited National Forest and Grassland unit in the country, with 6.2 million visits recorded in 2000, the date of the last National Visitor Use Monitoring survey. The BLRA is one of the most accessible recreation areas from this urban front-range and receives over 100,000 visitors each year.

In 2003, the Arapaho/Roosevelt National Forests and Pawnee National Grassland (ARP) unit created its own specific Recreation Strategy. The vision for this unit states "The ARP provides, and will continue to increase as well as balance, national quality recreation and heritage opportunities within the sustainable capability of the forest and grassland ecosystems. We value our natural and formally designated recreation and heritage resource attributes. We emphasize natural settings as the backdrop for a wide variety of quality recreation and heritage experiences and strive to address the diverse interests of all Americans, the owners of this land."

Some of the key guiding principles in the ARP Recreation Strategy pertinent to the BLRA include:

- ARP will provide for quality recreation experience opportunities as well as abundant ones. We recognize that in some places this means limits on the number of participants at any one time, but an enhanced quality experience of great value.
- ARP understands that not all issues encountered in our management of the forests and grasslands are within our complete ability to solve. We will look to our partners, neighbors (state, county, municipalities) and institutions of learning for assistance.
- ARP will strive to listen to our customers and recognize our unique characteristics and niche in the larger tourism picture of Colorado. We will complement our associates' services and facilities to best provide for our recreating customers.
- ARP will strive to plan in as large as context as necessary to provide for decisions that make sense, rather than just serve conditions of expediency and emergency.
- ARP recognizes our optimum client base is not always the most demanding and will work to serve the recreating public in the largest sense possible without catering solely to the "squeaky wheel."

Some of the key underlying recreation philosophies pertinent to the BLRA include:

- Outdoor recreation on National Forest System lands cannot be all things to all people. Some recreation experience opportunities are more appropriate for and better provided by the private sector and other agency recreation providers.
- There are physical, social, and managerial limits to the amount of recreation use that can occur in distinct areas within our National Forests and Grassland. In order to provide quality experience opportunities and protect soil, water, wildlife, vegetation and landscape resources, we must manage use across a spectrum of opportunity types and within area-specific capacities, based on professional assessment of need.
- Quality of each person's outdoor recreation experience (and the memories they take) is more important than the quantity of recreation events they undertake.
- Fees should be implemented in areas where facilities and services need to be enhanced to meet a high use, high demand and high quality recreation experience expectation; or to protect and intensively manage areas of high sensitivity in the face of high demand. However, fees will not replace the need for appropriated funds to cover the wide spectrum of work necessary for the public.
- While fees are important in specified areas, there should always remain opportunities for free access and use within our National Forests and Grassland.

1.6 ARP Forest Plan Direction For Recreation

In 1997, the ARP published its Revision of the Land and Resource Management Plan, commonly known as the Forest Plan. This 10 -15 year plan guides overall management of the over 1.5 million acre National Forest and Grassland.

Two major goals in the Forest Plan for human use on the ARP are:

- 1. Provide quality developed, dispersed and wilderness recreational opportunities within the resource capacity of the area.
- 2. Provide an integrated travel system that considers various modes of motorized and nonmotorized use consistent with the resource capacity of the area.

Some of the key Forest Plan goals, standards and guidelines pertinent to the BLRA include:

- Ensure that all management activities are consistent with the adopted Recreation Opportunity Spectrum (ROS) class as shown on *ROS Decision Map* enclosed.
- Manage vegetation in high-use recreational areas to provide for public safety and to improve forest health, as needed to maintain or improve the desired recreational settings.
- Close, rehabilitate or otherwise mitigate dispersed sites when there are social use conflicts or unacceptable environmental damage is occurring.
- Make facilities provided at trailheads consistent with the recreational setting and provide for parking, trail information, and appropriate sanitation facilities.
- For trail system analysis and decisions, include consideration of universal design for all new construction or rehabilitation proposals.
- At all new or reconstructed developed recreational sites, provide a range of universally-accessible opportunities within the limits of the site characteristics.
- If use exceeds the area's capacity for a given ROS class, employ the following management actions, in order of priority, to address the impacts or effects on the recreational setting:
 - 1. Inform the public and restore or rehabilitate the site.
 - 2. Regulate use.
 - 3. Restrict the number of users.
 - 4. Close the site.

1.7 ARP Forest Plan Goals For The Brainard Lake Geographic Area

The ARP 1997 Forest Plan also provides management direction by specific geographic area. The BLRA falls entirely within the Brainard Geographic Area and shares the same boundary. The **Setting, Goals and Desired Conditions, Management Strategies, Planning Considerations, and Standards and Guidelines** for the BLRA are paraphrased as follows (Forest Plan, pp. 58-61):

Setting

The area is located west of the town of Ward and immediately east of the Indian Peaks Wilderness along the Brainard Lake access road. It contains a mix of subalpine plant communities consisting of Engelmann spruce, sub-alpine fir, lodgepole pine, limber pine, aspen, meadows, tundra, willow carrs, wet areas and rock outcrops. Elevations range from 9,700 to 11,200 feet. Brainard and Redrock Lakes, Lefthand Reservoir, South St. Vrain Creek, the Long and Mitchell Lake trailheads, and the numerous developed recreation sites in the area are the key geographic features.

This geographic area is one of the most popular recreational complexes along Colorado's Front Range. Over 100,000 people per year visit the area, with about 40 percent using the area to access the adjacent Indian Peaks Wilderness. Brainard Lake is a popular area for concentrated recreational use. Most visitation occurs between late June and mid October, although the area is a popular four-season destination. A parking fee is collected during the summer and fall seasons.

The current transportation system consists of the Brainard Lake and Lefthand Reservoir access roads (Boulder County Road 102 and National Forest System Road 232, respectively) and a major network of trails. About half of the trails are currently suitable for winter use only.

Goals and Desired Conditions (numbered and reorganized)

- 1. Emphasize opportunities to participate in a wide variety of recreational pursuits that include camping in developed campgrounds, picnicking, outdoor education, fishing, viewing scenery, and four-season non-motorized trail use.
- 2. Emphasize motorized access to the area in the summer and fall via the Brainard Lake and Lefthand Reservoir Roads.
- 3. Emphasize nonmotorized recreational opportunities in the winter and spring by closing the area to all motorized vehicles, including snowmobiles.
- 4. Maintain the undeveloped character of that portion of the area away from roads and trails.
- 5. Manage all trails for non-motorized use to meet management area direction.
- 6. Provide opportunities to enjoy the high peaks, alpine lakes, and outstanding scenery by enhancing the area's recreational setting and providing for year-round recreational use while also taking actions to protect and enhance the values of the adjacent Indian Peaks Wilderness.
- 7. Continue to provide opportunities for overnight camping at developed campgrounds in the area.
- 8. Provide an increased number of fee campsites to address the demand for this kind of recreational opportunity along the Peak-to-Peak Highway. (This might involve expanding Pawnee Campground at Brainard Lake or developing a new, full-service facility between Brainard Lake and the winter closure gate.)
- 9. Improve winter recreational opportunities by:
 - Considering a parking area in the vicinity of the winter closure gate to facilitate access to the four-season trail network.
 - Considering including amenities such as an information kiosk, restrooms, and appropriate signing.
- 10. Improve nonmotorized recreational opportunities by:
 - Considering connecting and loop trails for four-season multiple use that direct users away from Brainard Lake and the Indian Peaks Wilderness.
 - Pursuing rights-of-way for the South St. Vrain and Baptiste Trails where they cross private property.

- 11. Manage recreational uses and road and trail networks to reduce erosion, prevent deterioration of riparian areas and watershed conditions, minimize loss of trailside vegetation, and prevent the creation of multiple trails.
- 12. Pursue land acquisition to consolidate landownership on an opportunity basis.
- 13. Limit vegetation treatments in the area to those necessary to address critical matters of visitor safety, forest health, or aesthetic protection. Emphasize retention of existing old-growth sites. Limited timber harvest may take place, but none is scheduled.

Management Strategies

The overall management strategy for accomplishing this *i.e. protecting and enhancing the values of the BLRA and adjacent Indian Peaks Wilderness* will be:

- To restructure and perhaps relocate some of the facilities around Brainard Lake so that vehicles don't dominate the landscape.
- To disperse existing recreational use into areas east of Brainard and away from the Indian Peaks Wilderness.
- To use an adaptive-management process to monitor the physical, biological, and social impacts of recreational use. This could lead to adjustments of management practices in the area and to identifying changes in facilities needed to maintain the values of the area as a popular regional attraction while protecting the values of the adjacent wilderness (*).

Other actions that may be considered to help manage use in the area are to:

- Expand the area covered by the current parking fee to include Lefthand Reservoir.
- Limit parking to designated lots and areas along the main access road and at Brainard Lake.
- Designate dispersed day-use sites along the Lefthand Reservoir Road.
- Limit special-use permits to available capacity.

(*An example of a facilities change that **could** be considered might be to construct a parking lot to the north and east of Brainard Lake and eliminate motorized access to the Long and Mitchell Lake trailheads. An action of this nature **might** be considered if other ideas implemented to address identified impacts have not been successful.)

Planning Considerations

The location, size, and design of any new, reconstructed, or expanded facilities in the Brainard area, including those mentioned above, would be determined during project planning for the site or sites being considered. Any facilities work that is proposed will emphasize the development of opportunities for universally accessible camping, picnicking, fishing, and trail use.

Standards and Guidelines

1. **(ST)** Prohibit horses on all trails in the area except the Sourdough trail.

2. **(ST)** Prohibit dispersed camping along the Brainard Lake and Lefthand Reservoir roads.

Management Area 1.3 – Backcountry Recreation (ROS Semi-Primitive Non-Motorized)

1. (ST) Prohibit dispersed camping within 100 feet of lakeshores, streams, and trails.

The Travel Management Strategy Table for the Brainard Geographic Area outlines the existing transportation system and the extent of proposed changes expected to occur during implementation of the Forest Plan. Site-specific environmental analysis will incorporate forestwide standards and guidelines, which along with this travel management strategy table, will help to develop overall travel management plans. Decisions regarding which roads and trails to keep open or to close will be made under formal travel management planning processes.

Table 1.1 Traver Management Strategy, Brainard Geographic Area						
Management Area	Mode	Existing System	Convert Ways	New Rds/Trls	Extent of Additions	Extent of Obliterations
Backcountry	4WD	Ν	Ν	Ν	Ν	Ν
Recreation	MTR	Ν	Ν	Ν	Ν	Ν
1.3	WMT	Ν	Ν	Ν	Ν	Ν
	WNM	Y	Y	Y	L	Ν
	NMT	Y	Y	Y	L	Ν
Developed	4WD	R	Ν	Ν	Ν	L
Rec.						
Complexes	MTR	N	N	N	N	N
8.21	WMT	Ν	Ν	Ν	Ν	Ν
	WNM	Y	Y	Y	М	Ν
	NMT	Y	Y	Y	М	Ν

 Table 1.1
 Travel Management Strategy, Brainard Geographic Area

Index for Mode of Travel: 4WD: Four-wheel-drive MTR: Motorized Trails WMT: Winter Motorized Trails and/or Areas WNM: Winter Non-motorized Trails and/or Areas NMT: Non-motorized Trails

Index for Existing System:

- Y: Yes, the existing transportation system is adequate for identified uses and will be mostly retained in the future. Some "swaps" may occur.
- N: No, the existing transportation system is not adequate or is nonexistent.

R: Reduce, due to resource concerns identified at thie forest level of planning. The existing transportation system may be closed to specific modes or obliterated.

Index for Convert Ways:

Y: Yes, conversion of ways to the system are likely.

N: No, existing ways will most likely be obliterated.

Infec for New Roads/Trails:

Y: Yes, new roads/trails will most likely be constructed. N: No, new roads/trails will not likely be constructed.

Index for Extent of Additions/Obliterations:

L: Low, fewer than 5 miles.

M: Medium, 5 to 10 miles.

H: High, more than 10 miles.

N: None, no additions or obliterations will be carried out.

2.0 BLRA CONTEXT FOR A RECREATION MANAGEMENT PLAN

2.1 Existing Recreation Sites and Opportunities

The recreation opportunities within the BLRA fall into two broad categories referred to as "Management Prescriptions" which tier to the Arapaho & Roosevelt Forest Plan updated in 1997. They are "8.21 Developed Recreation Complexes and 1.3 Backcountry Recreation." Popular activities in the BLRA include viewing scenery, hiking, picnicking, camping, fishing, environmental interpretation and education, mountain biking, skiing, snowshoeing, and communing with nature. The following provides a general description of the existing recreation sites and opportunities by management prescription.

Developed Recreation Complexes - 8.21

The developed recreation facilities in the BLRA exist as nodes and corridors of development along the Brainard Lake Road that include trailheads, a campground, picnic sites, parking lots, a scenic pullout, and boat launch. These sites include some amenities such as potable water, trash receptacles, information kiosks, restroom facilities, and hardened sites that accommodate user needs and protect resources. Some of these sites meet the standards for the Americans with Disabilities Act (ADA). The following are the key developed sites within the BLRA.

<u>Red Rock/Sourdough Trailhead</u> located just east of the BLRA entrance station provides access to the Sourdough Trail. The trailhead includes a 3 - panel information kiosk and directional signs. Parking is available for 25 vehicles during summer, and approximately 45 vehicles during winter, which includes roadside parking located between the trailhead and the winter closure gate on Brainard Road. The number of vehicles at the trailhead and along the Brainard road during the winter sometimes reaches 150 and at times has exceeded 250 on busy weekends.

<u>Brainard Entrance Fee Station</u> consists of a small portable structure accommodating 2 staff personnel, located within the road alignment just west of the Red Rock/Sourdough Trailhead. No water or power is available. Roadside parking is available for approximately 5 vehicles, 2 of which accommodate station personnel. There is a 3 - panel information kiosk.

<u>Red Rock Lake</u> is located 0.3 mile west of Brainard entrance station. Fishing is a popular activity and some picnicking, but currently no picnic tables or amenities exist. Some casual hiking around the lake also occurs. The upper paved parking along the road accommodates 12 vehicles and the lower gravel parking area accommodates 8 vehicles. This site has a vault toilet and trash receptacle. Potable water is not available.

<u>Brainard Lake</u> located 2.1 miles west of Brainard entrance station, is the most popular site in the area, offering a spectacular panoramic view of the lake, surrounding forest and high peaks along the Continental Divide. A large interpretive sign is located on the east side of the lake at the scenic pullout, potable water, a solar powered emergency phone, and parking for four vehicles. A paved boat launch area is located adjacent to the bridge/dam on the

south side, for non-motorized boating and parking for 11 vehicles. The bridge/dam at the outlet of the lake provides both vehicle and pedestrian access and is a popular fishing spot.

<u>Brainard Lake Cutoff Trailhead</u> is located 2.3 miles west of the entrance station just north of the bridge/dam. It has a natural surfaced parking area for 6 vehicles, a two-panel information kiosk, directional signage, and a trash receptacle. This trailhead provides access to the Brainard Lake Cutoff Trail, and connects to the Snowshoe and South St. Vrain Trails.

<u>Pawnee Campground</u> is located 2.2 miles west of the entrance station just east of Brainard Lake. There are 55 campsites that can accommodate tents, campers, trailers, and RVs up to 45 ft. in length. Amenities include individual camping spurs, picnic tables, grills, potable water, and trash receptacles. Power is not available.

<u>Pawnee Picnic Area</u> located 2.2 miles west of the entrance station adjacent to the Pawnee Campground. There are a total of 12 picnic sites with tables, pedestal grills, metal fire rings, potable water, trash receptacle, 1-panel information kiosk, primitive amphitheater, vault toilet, and paved parking lot for 40 vehicles.

<u>Arickaree Picnic Area</u> is located 2.5 miles west of the entrance station on the north side of Brainard Lake. It has 5 picnic sites with tables, pedestal grills, metal fire rings, vault toilet, trash receptacle, an information kiosk and parking for 19 vehicles. Water is not available on site.

<u>Mitchell Creek Picnic Area</u> is located 2.6 miles west of the entrance station on the northwest side of Brainard Lake. It has 1 picnic site with tables, pedestal grill, metal fire ring, information kiosk, vault toilet, trash receptacle, and parking for 6 vehicles. Water is not available.

<u>Niwot Picnic Area</u> is located on the west side of Brainard Lake. This site has 4 sites with tables, pedestal grills, metal fire rings, vault toilet, trash receptacles, information board, and parking for 15 vehicles. Water is not available.

<u>Niwot Trailhead</u> is located on the west side of Brainard Lake directly across from the Niwot Picnic Area. It has a 3 panel information kiosk and directional signs. The trail accesses the Indian Peaks Wilderness approx ½ mile from the trailhead. Roadside parking is available along the Brainard Road and in the Niwot Picnic parking lot.

Long Lake Trailhead is located 3.1 miles west of the entrance station, which is approx. ½ mile west of Brainard Lake and provides access to the most heavily used trail in the IPW and on the Boulder District. It has paved parking for 29 vehicles, 2 vault toilets, a picnic table, one trash receptacle, a 3-panel information kiosk, trail directional signs, and a small cabin staffed on weekends during the summer to provide visitor information. No potable water is available.

<u>Mitchell Lake Trailhead</u> is located 3.1 miles west of the entrance station, which is approx. ¹/₂ mile west of Brainard Lake and provides access to both the Mitchell Lake and Beaver Creek Trails. There is a paved parking lot for 60 vehicles, 1 vault toilet, a trash receptacle, 8 picnic tables, 2 information kiosks, trail directional signs, and a small cabin staffed on the weekends during the summer to provide visitors information. No potable water is available.

Backcountry Recreation - 1.3

Backcountry Recreation areas are managed to provide non-motorized opportunities in a natural appearing landscape. The popular activities in the BLRA include hiking, fishing, camping, viewing scenery, environmental education, skiing and snowshoeing. The following is a brief description of the recreation opportunities and their locations.

<u>Hiking</u> is a popular activity in the BLRA, with opportunities to experience the sub-alpine forest. Many people are drawn to the higher elevation trails in the adjacent IPW which lead to backcountry lakes with spectacular views. There are about 20 miles of designated forest trails within the BLRA, of which approximately 13 miles are prime hiking trails. The adjacent Wilderness has 7 trails that are easily accessed from the BLRA. (*See the Table 2.1 for specific information on the BLRA and IPW Trails*).

<u>Fishing</u> opportunities include Brainard Lake, Red Rock Lake, Left Hand Park Reservoir, South St. Vrain Creek, and Left Hand Creek. Most fishing occurs at Brainard and Red Rock lakes during the summer months, although some ice fishing occurs at Red Rock Lake during winter. Fishing is allowed on the privately owned Left Hand Park Reservoir, but access to the reservoir is limited to with 4-wheel drive high clearance vehicles, or by foot.

<u>Viewing Scenery</u> is one of the main reasons people visit the BLRA. The panoramic view from Brainard Lake looking west towards the high peaks along the Continental Divide is among the best along Colorado's Front Range. Red Rock Lake and Left Hand Park Reservoir provide spectacular views of the Indian Peaks and Rocky Mountain National Park to the north. The IPW provides outstanding scenery which is one of the reasons it is so popular for hiking.

<u>Backcountry Camping</u> is allowed during the winter months in the BLRA (*Dec 1 - April 30*), including the portion of the IPW adjacent BLRA. The Sourdough and South St. Vrain Trails located just outside the boundary of the BLRA, provide access to some of the better backcountry camping spots during the summer and fall.

<u>Wildlife Viewing</u> opportunities are abundant in the BLRA and include many species associated with a variety of habitats. Visitors can see mammals such as American marten, snowshoe hare, chipmunks, squirrels, elk, deer and moose. Birding in the BLRA is popular with individuals and organized groups. Local conservation groups conduct bird trips and counts in the area, observing an assortment of bird species including woodpeckers, sparrow, thrushes, and warblers.

<u>Environmental Education</u> opportunities in the BLRA and the Wilderness are plentiful with many educational groups visiting the area. The Brainard Lake Road provides easy access to trailheads leading to the sub-alpine forest and alpine ecosystems. The dramatic change in elevation from the foothills of the Front Range to the alpine tundra a few miles to the west offer unique opportunities to study the ecology, geology, and other natural features in the BLRA. Presently there is only one interpretive sign in the BLRA located on the east side of Brainard Lake.

<u>Mountain Biking</u> opportunities are concentrated mainly on the Sourdough Trail which runs north and south and is located just east of the BLRA boundary.

<u>Cross-Country Skiing and Snowshoeing</u> are very popular activities in the BLRA during the winter months. Many people recognize BLRA as the best nearby location for skiing and

snowshoeing along Colorado's Front Range. There are approximately 20 miles of trails, and 3.5 miles of roads that offer excellent skiing and snowshoeing.

Equestrian opportunities are provided for on the Sourdough Trail.

Table 2.1 National Forest System TrailsBrainard Lake Recreation Area / Indian Peaks Wilderness

National Forest System Trail Number	Trail Name	Comments
835	Sourdough Trail	Non-motorized/Multiple Use – trail is accessed from the Red Rock/Sourdough Trailhead and heads north to Camp Dick or south to Rainbow Lakes Road.
814.2	CMC Ski Trail	X-Country Ski Trail – trail begins at junction of Brainard Lake Road and Left Hand Park Reservoir Road and heads west to Little Raven Trail. Recommended winter use only. (Historic Ditch exists along portion of CMC Trail).
N/A	Brainard Lake Snowshoe Trail	Snowshoe – trail begins at junction of Brainard Lake Road and Left Hand Park Reservoir Road, heads west crossing Brainard Road at approx. 1.5 miles and continues west to CMC Cabin Trail. Recommended winter use only.
802	Little Raven Trail	X-Country Ski Trail/Hiking – trail connects between Left Hand Park Reservoir Road and heads west to CMC Ski Trail junction near Brainard Lake.
802.1	Little Raven Extension Trail	X-Country Ski/Hiking – trail connects Left Hand Park Reservoir Road heading east to the Sourdough trail.
814.1	Waldrop Trail	Hiking/x-country skiing/snowshoe – trail begins at Brainard Lake Road just east of Red Rock Lake and heads west to South St. Vrain Trail.
909	Brainard Cutoff Trail	Non-motorized Multiple Use – trail connects South St. Vrain Trail to Brainard Lake and is also a short segment of the Snowshoe Trail.
907.2	Niwot Cutoff Trail	Hiking/x-country skiing/snowshoe – trail provides access to the IPW near Long Lake from westside of Brainard Lake.
907	Pawnee Pass Trail	Hiking/x-country skiing/snowshoe – trail is accessed from the Long Lake Trailhead and goes into the Wilderness continuing west over the Continental Divide.
907.1A	Jean Lunning Trail	Hiking – trail is in the Indian Peaks Wilderness on south side of Long Lake providing loop hike around the lake connecting to the Pawnee Pass Trail.
906	Niwot Ridge Trail	Hiking – trail extends from Jean Lunning Trail heading south to National Forest System Road 506 passing through a portion of the Niwot Ridge Biosphere Reserve/Mountain Research Area.

909	South St. Vrain Trail	Non-motorized Multiple Use – trail runs east/west between the Beaver Reservoir Road near the Peak-to-Peak Highway and the Brainard Lake Road just below Mitchell Lake Trailhead approximately 0.5 miles to the trail enters IPW where bikes are prohibited.
912	Mitchell Lake Trail	Hiking/x-country skiing/snowshoe – trail is accessed from Mitchell Lake Trailhead and heads into the Indian Peaks Wilderness.
911	Beaver Creek Trail	Hiking/ x-country skiing/snowshoe – trail is accessed from the Mitchell Lake Trailhead and connects to the Mount Audubon trail and/or continues north to Coney Flats.
913	Mount Audubon Trail	Hiking/ x-country skiing/snowshoe – trail is accessed approx. one mile from the Beaver Creek Trailhead.

2.2 Special Features in the BLRA

In addition to the recreation opportunities, BLRA has some other interesting and special features. One of these is the Biosphere Reserve located along Niwot Ridge, which is the southern boundary of the BLRA. The Niwot Ridge Biosphere Reserve is part of an international program called UNESCO's (United Nations Educational, Scientific and Cultural Organization) Man and the Biosphere (MAB), which encourages interdisciplinary research, demonstration and training in natural resource management. Biosphere Reserves are ecosystems promoting solutions to reconcile the conservation of biodiversity with its sustainable use. They are internationally recognized and nominated by national governments that remain under sovereign jurisdiction of the states where they are located. Biosphere reserves serve in some ways as "living laboratories" for testing out and demonstrating integrated management of land, water and biodiversity. The Niwot Ridge Biosphere Reserve is administered between the U.S. Forest Service and the University of Colorado for experimental and long-term studies of alpine tundra.

Left Hand Park Reservoir is another special feature in the BLRA, which is privately owned and operated by the Left Hand Ditch Group to provide water for nearby municipal and agricultural purposes. Although the reservoir is privately owned, it is surrounded by National Forest and the public is allowed access to the area for fishing. A spectacular panorama of high peaks looking north into Rocky Mountain National Park and west into the Indian Peaks Wilderness can be viewed from the Reservoir.

The historic Left Hand Ditch is another point of interest, constructed in 1860's by the Left Hand Ditch Company, it begins near the South St. Vrain Creek and runs along the north side of Pawnee Campground, turns south, eventually crosses the Brainard Lake Road, and then turns east to follow near the CMC Ski trail. This ditch was constructed to divert water from the South St. Vrain Creek into Left Hand Creek. The individuals downstream along the South St. Vrain Creek contested this water diversion in 1879, and the resulting court decision (*Coffin* *vs. Left Hand Ditch Co.)* became the basis for all water rights in Colorado and many western states (*Ochs 1996*).

Red Rock Lake is another interesting feature. This picturesque natural spring fed lake is relatively undeveloped and provides spectacular views of the Indian Peaks along the Continental Divide from the east side of the lake. Studies conducted in the past (1963, 1972), suggest that this lake may provide important information about postglacial climates as research techniques improve and new ones are developed.

The picturesque setting at Brainard Lake is the main attraction for many visitors, but it also has some interesting history. The dam and bridge at the lake were built in 1934 by the Civilian Conservation Corps (CCC), and are still intact, and provide a great example of the type of work the CCC accomplished during the 1930's. The CCC was a popular program championed by President Franklin Delano Roosevelt, which undertook many conservation projects such as planting trees, protecting the natural habitats of wildlife, stream improvement, restocking of fish and building small dams for water conservation, and development of recreational facilities in national, state, county and metropolitan parks throughout the country. Today the bridge is a popular spot to fish from, stroll across, or just take in the spectacular scenery.

Long Lake Fen located just east of Long Lake and the IPW boundary is another special feature. This shallow depression carved out long ago by glaciers is now a meadow about five acres in size, that is kept moist by the seepage of groundwater fed by the abundant snowmelt. Fens are a type of wet meadow which contain a high level of nutrients, low acidity, and capable of supporting a diverse plant community. A narrow band of flat-leaved willow, growing in standing water forms the Fen's tangled border. Within the Fen, spongy, mound-like hummocks of assorted flowering plants overlie a gradually built-up foundation of sphagnum moss. Shallow rivulets of cold water separate the hummocks into tiny islets. The Fen's interior contains an astounding collection of grasses, sedges, and rushes, many of them rare, all of them adapted to a cold wet habitat and a short growing season of no more than three and a half months.

2.3 BLRA's Relationship to the Indian Peaks Wilderness (IPW)

One of the special attractions of the BLRA is its close proximity to the Indian Peaks Wilderness (IPW). The spectacular view of the Indian Peaks seen from Brainard Lake, along with the outstanding hiking, camping, picnicking, fishing, and skiing are among the reasons so many people visit the area. The majority of people visiting the BLRA also hike the Wilderness Trails, and many visitors enter the area just to access the Wilderness. Each year approximately 56,000 people enter the IPW through the BLRA.

The IPW became part of the National Wilderness Preservation System in 1978, with the goal of "protecting wilderness values and establishing a wilderness area in close proximity to a major population center that would provide a nearby high quality wilderness experience for many urban residents." (Congressional Report No. 95-1460 for Public Law 95-450 Oct. 11, 1978)

The Indian Peaks has been a popular destination for camping and hiking for many years, even before it's official Wilderness designation in 1978. Severe resource impacts from

campfires, cutting trees, social trails, and general overuse was common, especially in the portion of the Wilderness adjacent the BLRA. Today this area continues to be the most heavily used portion of the Wilderness, with over half of all visitors *(east side of the Continental Divide)* accessing the area through the BLRA. This portion of the Wilderness is now managed for day use only, and those wising to camp must do so in less popular areas of the Wilderness and obtain a camping permit.

Managing the IPW to protect it's Wilderness values while providing a high quality Wilderness experience for many visitors is a difficult balancing act. Improving recreation opportunities within the BLRA outside the Wilderness would provide visitors an alternative to the Wilderness and help protect the area from overuse.

2.4 Assessment of Existing Recreation Sites and Opportunities

Entrance to BLRA and Red Rock Trailhead

The entrance area during the summer and early fall season consists of a 4x6 ft. portable booth for on-site staff to collect fees and provide visitor information. In addition, a 3 panel information kiosk and portable restroom is provided *(for entrance station staff only),* and roadside parking for approximately 5 vehicles, 2 of which are usually occupied by entrance station staff.

Red Rock/Sourdough Trailhead is located just east of the entrance station, with a gravel parking area for approximately 25 vehicles during the summer, a 3-panel information kiosk and directional signs. During the winter months these 25 parking spaces are reduced to approximately 15 due to snow accumulation and plowing efforts. Most of the winter parking occurs along the shoulder of the road to the east and west of the Red Rock Trailhead to the winter closure gate. On busy winter weekends, vehicle counts have exceeded 250 and traffic congestion is a problem. Emergency vehicles sometimes have difficulty accessing the area which delays their response, and the presence of skiers, snowshoers, and hikers sharing the road with vehicles, creates safety issues. Restroom facilities are not provided for the public at this trailhead.

There is approximately .5 mile of undesignated spur roads and .2 mile of social trails located just east of the Red Rock Trailhead on the north side of the Brainard Road. This area is popular for dispersed camping during the summer, with considerable impacts from campfire rings, illegal cutting of trees for firewood, trash, evidence of human waste, loss of ground vegetation, and general degradation associated with unmanaged and overused campsites.

Left Hand Park Reservoir Vicinity

Left Hand Park Reservoir Road is a four-wheel drive (4WD) high clearance vehicle road which provides access to the Reservoir, located approximately 1.5 miles south of the Brainard Lake Road. Hikers, mountain bikes, and horses are also allowed on the road during snow-free season. The road is closed during winter to provide for non-motorized recreation (skiing and snowshoeing). There are a few gravel pullouts and short spurs along the road that provide parking and sometimes used for dispersed camping during the summer and fall, which is evident from the impacts of campfire rings, illegal cutting of trees for

firewood, trash, signs of human waste, loss of ground vegetation, and the general degradation associated with unmanaged and overused campsites.

Target shooting has become more common along the road, occurring mostly in the vicinity of the large borrow pit area approximately .3 mile below the dam. The sound of shooting can be heard for long distances and conflicts with the desired condition for the BLRA, i.e. providing visitors an environment where the sights and sounds of nature largely pre-dominate.

The recreation during the summer/fall at Left Hand Park Reservoir is mostly day use (fishing, viewing scenery, hiking), although some overnight camping occurs. There is a gravel parking area for approximately 58 vehicles. Resource impacts from camping are similar to that along the road, but with the added problem of damage to Krummholz trees (German word meaning crooked wood, wind deformed trees) from campers cutting branches for campfires.

Visitors frequently hike around the reservoir, which has resulted in numerous social trails through wet areas on the southwest side. Currently there is no designated trail and therefore visitors make their way around creating multiple social trails. There is an estimated 1.8 mile of social trails along Left Hand Park Reservoir Road and at the Reservoir.

No restroom facilities are available at the reservoir, although evidence suggests one is needed, and there is a concern about potential impacts to the water quality.

Red Rock Lake Vicinity

Red Rock Lake is popular during the summer and fall for fishing, viewing scenery, and casual strolls around the lake. Some picnicking occurs, but limited, as there are no picnic facilities (tables/grilles). There is a paved parking area for 8 vehicles adjacent the Brainard Lake Road on the north side of the lake and a gravel parking area on the northwest side of the lake for approximately 12 vehicles, including restroom facilities. Numerous fishing access trails and social trails circle the lake. On the eastside of the lake a knoll provides outstanding views of the Indian Peaks to the west. Anglers commonly use belly-boats on the lake and occasionally small non-motorized boats are seen. During the winter months some backcountry camping occurs near the lake (tents and snow-caves), and a limited amount of ice fishing. Skiers and snowshoers also stop to view of the snow covered lake and peaks to the west.

Pawnee Campground and Picnic Area

The campground and picnic area are located just east of Brainard Lake offering visitors a short easy walk to the lake. The picnic area has14 tables, potable water, vault toilets, trash receptacle, and a paved parking lot for 40 vehicles. The campground has three separate loops with 55 campsites for tents, campers, trailers, and RVs up to 45 feet in length. Amenities include individual camping spurs, picnic tables, grilles, potable water, and trash receptacles.

Brainard Lake Vicinity

Brainard Lake is a popular attraction and destination, offering a variety of recreation opportunities such as fishing, picnicking, non-motorized boating, wading/swimming, spectacular scenery, casual hiking, and a starting point for hikes to the Wilderness. Currently, there are numerous undesignated social trails around the lake, frequent close encounters between vehicles and pedestrians sharing the road on the north side of the lake, and parked vehicles circle the lake on busy days.

On the east side of the Brainard Lake, there is a gravel parking area for 4 vehicles, along with an interpretive sign, potable water, and a solar powered emergency telephone. The location of this site does not blend in well with the natural setting, and the presence of vehicles parked does not support the desired condition, i.e. *"managing vehicles so they do not dominate the landscape"*.

The next developed site is the boat launch and parking area (11 spaces) on the south side of the bridge/dam. The area is used mostly for day use parking, but occasionally visitors launch small non-motorized boats. As viewed from across the lake, this sight is another example of a concentration of parked vehicles, which detracts from the natural setting. Relocating the vehicle parking away from the lake would enhance to the scenic qualities and natural setting.

The bridge/dam was built in the 1930's by the Civilian Conservation Corp, and is located at the lakes outlet providing one-way vehicle access and a boardwalk for pedestrians. It's also a popular spot for fishing, but unfortunately it becomes a congested bottleneck with vehicles, pedestrians, and anglers all using this site, which creates some obvious safety concerns. The bridge is in need of major structural repairs to continue to provide safe access for vehicles.

Immediately beyond the bridge is the Brainard Lake Cutoff Trailhead, with a two-panel information kiosk, directional signs, trash receptacle, and a gravel surface parking area for approximately 11 vehicles. This trailhead provides access to the Branard Lake Cutoff trail, which connects to the Snowshoe and South St. Vrain trails. The current signs are in poor condition, and they do not meet Forest Service design standards. The parking current parking arrangement prevents clear visibility and easy access to the information kiosk and the trail.

Beyond the trailhead the road continues west with parallel paved parking on the inside (lakeside) shoulder of the road which circles the entire lake. An administrative site is located on the north side of the lake during the summer months by the current concessionaire staff. The site is approximately ½ acre, gravel surface, with room for 8 large RVs, tow vehicles, and a small storage unit. Water is available at the site. This site also detracts from the natural setting, and does not support our desired condition of ensuring the sights and sounds of nature largely dominate. There are also concerns about the waste water from the RV's located this close to the lake.

The Arickaree Picnic Area is located about midway along the north side of Brainard Lake, with paved parking for 19 vehicles, 7 picnic sites with tables, pedestal grilles, metal fire rings, vault toilet, trash receptacle, and a single panel information kiosk. Water is not available at this site. The picnic sites are located fairly close to the road, and therefore passing vehicles may diminish the visitor's picnic experience.

Mitchell Creek Picnic Area is located on the northwest side of Brainard Lake near the junction leading to the Long and Mitchell Lake Trailheads. It has 1 picnic site with two tables, pedestal

grill, metal fire ring, an information board kiosk, vault toilet, trash container and parking for 6 vehicles. Water is not available at the site.

Continuing on the west side of the lake is the Niwot Picnic Area, which has 8 picnic tables, pedestal grills, a vault toilet, and parking for 15 vehicles, which is often used by visitors accessing the Niwot Trailhead on the opposite side of the road.

Leaving the Niwot Picnic area, the road continues around the south side of the lake returning to the junction of the road where it becomes two-way traffic again, at which point the visitor may exit or drive around the lake once again.

West of Brainard Lake

The Brainard Lake road continues west for approximately ¼ mile to the Long Lake and Mitchell Lake Trailheads. On busy weekends/holidays people drive up to the trailheads and often find the parking lots full. Vehicles circle the parking lots hoping for a space to open up and then drive to the other trailhead doing the same. Some park illegally, but most drive back to Brainard Lake and park, then walk back to the trailheads on the road. Approximately 8 spaces are available along the shoulder of the road between Brainard Lake and Mitchell Trailhead. Traffic congestion at trailheads, along with pedestrians and vehicles sharing the road between Brainard Lake and the trailheads is a safety concern.

The Long Lake Trailhead has a 1-panel information kiosk, directional signs, two vault toilets, one picnic table, and a small information cabin staffed by trailhead hosts during the summer. There is parking for 29 vehicles. Current signs do not meet Forest Service design standards.

Mitchell Lake Trailhead and the adjacent Beaver have two 1-panel information kiosk, a vault toilet, three picnic tables, a small information cabin staffed by trailhead hosts during the summer months, and parking for 55 vehicles. Current signs do not meet Forest Service design standards.

BLRA / IPW Trail System

There are 10 designated forest trails in the BLRA, which total approximately 20 miles. In addition, there are 7 designated forest trails in the adjacent IPW, which total approximately 14 miles (see Table 2.1 for specific information on trails).

The trails in the BLRA provide non-motorized recreation opportunities year round (*hiking, skiing, snowshoeing, mountain biking, and some equestrian use*). The Wilderness trails are managed for hiking, skiing, and snowshoeing, *mechanical devices such as mountain bikes are prohibited in Wilderness Areas.* Horses are prohibited in the portion of the IPW adjacent the BLRA due to the high concentration of visitors and potential conflicts.

Visitor use is disproportionately high on the Wilderness trails during the summer months compared to trails in the BLRA east of Brainard Lake. Parking at the Wilderness trailheads often exceeds capacity, resulting in vehicle congestion, illegal parking, and safety issues between vehicles and pedestrians. During the winter months the Brainard Lake Road is closed near the Red Rock Trailhead and the opposite occurs. The trails that begin near the

winter closure gate receive heavy use by skiers and snowshoers, and relatively little use occurs in the Wilderness. Inadequate parking, vehicle congestion, and safety issues between vehicles and pedestrians are a problem in the vicinity of the winter closure gate.

BLRA Trails:

The Sourdough Trail #835 is accessed at the Red Rock/Sourdough Trailhead and is the most heavily used trail in the BLRA outside of the Wilderness during the summer. It is a popular mountain bike trail, but hikers, runners, backpackers, and a limited amount of horse use occurs too. The trail runs in a north south direction, and can be accessed by other trailheads to the north and south (*Beaver Bog TH, Beaver Reservoir TH, Camp Dick CG, and the Rainbow Lakes Rd TH*). The trail connects to the South St. Vrain trail approximately 1 mile north of the Red Rock/Sourdough Trailhead, which provides an opportunity to travel west into the BLRA, but lacks a good trail loop opportunity connecting back to the Sourdough Trail.

The Waldrop # 814 is a popular ski trail during the winter for those looking for a more challenging trail, as it is rated most difficult. Access to the trail is from the Brainard Lake road approximately ¼ mile west of the entrance gate, or from the South St. Vrain trail northwest of the Brainard Lake Road. Currently there is no parking at the trail junction where it intersects the Brainard Lake road, which is one of the reasons it receives very little use during the summer. It also lacks a connection to the Sourdough trail, which prevents easy access from the Red Rock/Sourdough Trailhead. A small section of this trail may need to be rerouted to avoid breaching the IPW boundary, which would provide mountain bikers a trail loop opportunity by connecting to the South St. Vrain and Sourdough trails. Sections of this trail need to be reconstructed and/or rerouted to be user friendly, protect resources, and reduce widening and the development of new social trails.

South St. Vrain Trail #909 runs east/west within the BLRA from the Sourdough Trail to the Brainard Lake road just below Mitchell Lake trailhead. It is the main trail connection that runs east and west within the BLRA. It also connects to the Waldrop, Brainard Lake Cutoff, and CMC Cabin trails. A small section of this trail enters the IPW, which prevents mountain bike trail loop opportunities. The trail currently receives low use. Sections of this trail are steep, rocky, and need to be reconstructed and/or rerouted to be more user friendly, sustainable, and protect resources.

Little Raven Trail #802 runs east/west between Left Hand Park Reservoir Road and the west end of the CMC Ski Trail. It is a popular ski trail during the winter, providing an excellent east west loop. Access to the trail during the winter requires skiing 1.5 miles up Left Hand Reservoir road to its junction. During the summer this road requires a 4-wheel drive high clearance vehicle, or hiking up the road. The trail receives low use during the summer. Sections of the trail need to be reconstructed and/or rerouted to be user friendly for mountain bikes, protect resources, and reduce widening and/or the development of new social trails.

Little Raven Ext. Trail # 802 runs east/west between Left Hand Park Reservoir Road and the Sourdough Trail. Portions of this mile long trail are steep and rocky. It receives a moderate level of use during the winter from experienced skiers looking for a fast, steep run, and therefore it has a difficult rating. It receives low use during the summer months, and it currently needs of some reconstruction work, and possibly relocation of certain sections to be sustainable over time, and user-friendly for hikers and bikers.

The CMC Ski Trail #814 is currently managed for winter use only, with some incidental use occurring during the summer. The trail is accessed at the junction of the Brainard Lake and Left Hand Reservoir Roads and connects to the Little Raven Trail to the west end near Brainard Lake. It is the most popular ski trail in the BLRA, and is part of the main east/west loop. Although the trail is excellent for skiing, it is not a good trail for summer use. Much of the trail is located in wet, soggy areas, which do not dry out until late summer, and alternative routes are not available. A portion of the trail runs adjacent to the historic Left Hand Creek irrigation ditch.

The Brainard Lake Snowshoe Trail begins at the junction of Brainard Lake and Left Hand Reservoir Roads and heads west for approximately 1½ miles to the CMC Cutoff Trail, and then heads north to the Brainard road. The trail then continues west on the north side of the road to Brainard Lake, at which point there is a short break in the trail to cross the bridge/dam and then the trail follows the Brainard Lake Cutoff Trail immediately past the bridge/dam, which connects them to the Snowshoe trail once again heading west to the CMC Cabin Trail. The portion of the trail on the south side of Brainard Lake road west of Red Rock Lake is suitable for winter use only. The Snowshoe trail is a very popular alternative to the CMC and Little Raven ski trails, reducing conflicts between skiers and snowshoers by providing separate trails.

The Brainard Lake Cutoff Trail #909 is located on the north side of the bridge/dam at Brainard Lake and heads north connecting to the Snowshoe and South St. Vrain Trails. This is a popular trail during the summer, with easy access from the Pawnee Campground and Brainard Lake. It receives moderate use during the winter from skiers and snowshoers. It provides a key trail segment for trail loop opportunities near Brainard Lake, with connections to the Snowshoe Trail, South St. Vrain Trail, and the Brainard Lake Road.

The CMC Cabin Cutoff Trail #909.2 is mainly a winter trail that connects between the South St. Vrain Trail and the historic CMC Cabin. It also provides a connection between the Brainard Lake Snowshoe trail to the South St. Vrain trail.

Niwot Cutoff Trail #907 is located on the west side of Brainard Lake and provides access to the IPW. It has become a popular alternative to reach Long Lake, when the Long Lake Trailhead parking lot is full. It receives high use during the summer months, and low use during winter. Sections of this trail should be reconstructed and possibly relocated to a more sustainable grade.

Wilderness Trails:

Pawnee Pass Trail #907 is accessed from the Long Lake Trailhead, and the Niwot Cutoff Trailhead on the west side of Brainard Lake. This trail has the distinction of being the most popular and heavily used trail in the Wilderness and on the Boulder District. As a result, sections of this trail are very wide, with numerous social trails and fishing access trails that access the South St. Vrain Creek, and Long Lake. This trail receives high use even during early summer when the snow pack is melting out, and conditions are wet and muddy, which has contributed to the creation of social trails and widening trail conditions.

Mitchell Lake Trail #912 is accessed from the Mitchell Lake Trailhead and is the second most popular trail in the Wilderness and in the BLRA. Mitchell and Blue Lakes are popular destinations for many visitors. Numerous social trails exist and many sections of the trail are

extremely wide with multiple parallel trails. This problem is concentrated mostly between Mitchell and Blue Lakes, where the snow pack tends to melt out later and visitors leave the trail to avoid snow, water, and mud, which results in trampling vegetation and creating new trails.

Beaver Creek Trail #911 is also accessed from the Mitchell Lake Trailhead on the north end of the parking lot. The trail is in good condition but does require annual routine maintenance.

Mt. Audubon Trail #913 is accessed from the Beaver Creek Trail approximately 1½ mile from the Mitchell Lake Trailhead. This is a popular trail for those wishing to hike to the top of Mt Audubon 13,223 ft. There are numerous social trails, excessive widening of the trail, and a confusing network of trails near the peak, which make it difficult for users to stay on the designated trail. Sections of this trail need to be rerouted and/or reconstructed.

Jean Lunning Trail #907.1 is accessed from the Long Lake Trailhead and/or Niwot Cutoff Trailhead. This is a popular trail for visitors wanting a casual hike around Long Lake. Sections of this trail are in need of reconstruction.

Niwot Ridge Trail #906 is accessed from the Jean Lunning Trail and provides access to Niwot Ridge, and the Biosphere Reserve. This trail is managed for minimal use to protect the field research projects within the Biosphere Reserve, and therefore is not signed at the junction.

2.5 Public Outreach for the Planning Process

Scoping for the Brainard Lake Recreation Area Development/Management Plan and EA project was conducted during November and December 2003. The public meetings were advertised in a press release dated November 2, 2003 that was sent to the *Daily Camera*, *Nederland Mountain Ear*, *Denver Post*, *Associated Press*, *United Press*, *Colorado Daily*, and *Longmont Times*.

A scoping letter and Opportunities for the Future document describing the Brainard Lake Recreation Area planning project was mailed to a list of interested and affected parties on November 13, 2003. The scoping letter contained the following information: 1) introduction, background, and location of the proposed project; 2) the purpose and need for the proposed project; 3) potential planning components; 4) comment form; and 5) public involvement opportunities.

Three open houses were held to explain the project and solicit comments from the public. The meetings took place on November 13 and December 11, 2003 at the Boulder Ranger District office and on November 19, 2003 at Nederland High School. Comments were requested on the proposed project for a 30-day period ending January 8, 2004; however, comments are accepted at any point during the analysis process until a decision is made.

In addition, on October 9, 2004 the Forest Service hosted a site visit to the Brainard Area to share information and answer questions from the public about the project. Approximately 30 people attended the field visit. In the summer of 2005 flyers soliciting were placed in the BLRA to contact people using the area.

On October 29, 2004, an Environmental Assessment, titled Brainard Lake Recreation Area Development/Management Plan, was mailed to a mailing list of 105. In addition to direct mailing, the EA was available on the internet, at the Boulder Ranger District office, and at local public libraries. Sixty-four comment letters were received from individuals, groups, private companies, Boulder County, and the town of Ward. Because there was confusion concerning the closure of the official comment period and because new concerns were raised, it was determined to rework the EA sent out in October. A modified proposed action was developed. The reworked proposed action was substantially different from the October EA's proposed action (Alternative B) and the two other action alternatives (C and D). This substantive difference from what the public had seen before necessitated that the public have an opportunity for review of this modified proposed action with a 30-day official comment period.

On November 10, 2004 another open house meeting for the public was held at the Boulder District office to provide additional information and answer questions about the proposed project and EA.

In addition, a flyer announcing the Brainard Lake EA and planning process and describing how to become involved was posted at the main Brainard Lake Area Winter Trailhead in February, 2005. In July 2005 handouts were provided to the public at the BLRA Entrance station announcing this planning process and soliciting comments.

Previous comment periods (public meetings, field trips, scoping letters) and the 30-day comment period starting in October 2004 are considered to be comments for scoping. The only official 30-day comment period to give standing for appeal of the decision based on this EA will begin the day after publication of legal notice in the Boulder Daily Camera in August, 2005

3.0 BLRA CORE RECREATION MANAGEMENT PLAN

3.1 Vision for the BLRA

The BLRA will fulfill its unique juxtaposition as a developed recreation complex and backcountry recreation area adjacent to the Indian Peaks Wilderness, by providing a variety of quality recreation opportunities within the capacity of the area, while protecting natural resources and managing the BLRA to minimize impacts to the Wilderness resource.

3.2 BLRA Management Goals And Objectives

Four principal goals guide the BLRA Recreation Management Plan based on Forest Plan *(Brainard Geographic Area Direction Chapter 2, pages 59-61)* direction and needs of the area:

- **Goal 1:** Maintain or enhance access to the BLRA and the quality and variety of recreational experience opportunities available within the BLRA.
- **Goal 2:** Specify where developed areas and concentrated use should occur and improve the quality of those developed areas; and identify areas with undeveloped character and maintain or enhance (through limited access, facility removal, rehabilitation and restoration) those undeveloped areas.
- **Goal 3:** Ensure that recreational use of the BLRA is compatible with long-term protection of natural and cultural resources and the adjacent Indian Peaks Wilderness Area.
- **Goal 4:** Work with partners and explore all options to ensure that the BLRA is adequately funded to ensure quality recreation management of the area is sustained into the future.

Five objectives guide the BLRA Recreation Management Plan based on Forest Plan direction and needs of the area:

- **Objective 1:** Improve winter and non-motorized recreational opportunities in the BLRA.
- **Objective 2:** Identify, maintain and improve a specified road and trail system in the BLRA and work to rehabilitate and restore all non-system routes according to prioritized need.
- **Objective 3:** Take actions to reduce impacts to the adjacent Indian Peaks Wilderness Area.
- **Objective 4:** Reduce conflicts among visitors, enhance visitor safety and take actions to identify and restrict inappropriate uses in the BLRA.
- **Objective 5:** Provide quality information and opportunities for interpretive experiences while also engendering stewardship ideals and opportunities for the public to participate in stewardship projects in the BLRA.

3.3 Guiding Principles

The following guiding principals were established to set a tone for public service in the BLRA:

- Sense of Welcome. The BLRA should be a place that the public has a strong desire to visit and return to visit, based on positive outdoor recreation experiences and contacts with Forest Service personnel, concession providers and other people. They should feel welcomed, adequately provided for in facility offerings, appreciative of the outdoor setting and understanding of necessary management controls for adequate protection of people and the environment.
- **Priority to Protect the Indian Peaks Wilderness.** The visitors should understand that many designs and management controls within the BLRA are established to protect and enhance the resources of and visitor experience within the adjacent Indian Peaks Wilderness Area as well as within the BLRA.
- "Good Neighbor" Policy. The Forest Service shall seek to be a good neighbor to the landowners adjacent to the BLRA by making sure they are informed of happenings and changes within the BLRA, have opportunity to comment, and will seek to prevent or mitigate adverse impacts on neighboring landowners from management actions and visitor use.
- **Monitoring.** The Forest Service, its concessionaires and partners shall seek to monitor the visitor experience, visitor infrastructure and resource conditions to assess the effects of management actions and visitor use in the BLRA.
- Adaptive Management. Based on monitoring results, changes in conditions and new information, the Forest Service shall implement an adaptive management approach that assesses the effectiveness of existing management actions and visitor use patterns and revises them appropriately under current planning and public notification guidelines.

3.4 Desired Future Conditions For The BLRA

The following desired conditions (DC) for the BLRA were established based on Forest Plan direction and needs of the area:

- **DC 1:** The values of the BLRA and the adjacent Indian Peaks Wilderness (IPW) will be protected and enhanced above the levels that currently exist.
- **DC 2:** Visitors to the BLRA will experience an environment where the sights and sounds of nature predominate at levels greater than currently exist.
- **DC 3:** Visitor safety and satisfaction are provided for at levels greater than the existing condition.
- **DC 4:** Developed recreation facilities will meet visitor needs, provide for accessibility, and meet built-environment image standards to a much higher level than they currently do.
- **DC 5:** Natural resources (soil, water, wildlife, vegetation, etc.) will be protected and enhanced to conditions better than currently exist.

3.5 ROS As A Planning Tool

The Recreation Opportunity Spectrum (ROS) is a Forest Service developed recreational planning guide that provides a framework for stratifying and defining classes of outdoor recreation environments, activities, and experience opportunities. Recognizing that recreation on our National Forests is more than just camping, fishing and hiking, research has shown that people choose a specific setting for each of their outdoor recreation activities in order to realize a desired set of experiences.

Forest Service recreation managers use ROS to help describe the levels of development, social interaction and management controls that are appropriate for different areas of the forest, or in this case, the BLRA. This concept acknowledges that visitors participate in different recreational activities in different settings in order to realize certain experiences. For example, some visitors backpack into the wilderness to experience solitude, challenge and self-reliance. Other visitors camp in campgrounds to have more comfort, security and social interaction.

The physical, social and managerial settings, activities, and opportunities for obtaining quality outdoor recreation experiences have been classified and arranged along a continuum or spectrum, divided into six classes from least developed to most. They are:

Primitive (P) Semi-primitive non-motorized (SPNM) Semi-primitive motorized (SPM) Roaded Natural (RN) Rural (R) Urban (U)

Maintaining a broad spectrum of these classes and their different opportunities across a National Forest or Grassland unit is very important to provide people with choices. ROS is also flexible, in that it can be further subdivided into subclasses as the need arises. "ROS is a macro not a micro system" (1986 ROS Book, USDA Forest Service, p. II-1).

The 1997 Forest Plan used a broad-brush method to allocate land areas across the Forest unit into ROS classes. At the programmatic Forest Plan level, this is appropriate. However, when site-specific recreation planning occurs in a specified area, it is also appropriate to review the assigned ROS classes and modify them as necessary, according to site-specific information available at that time.

The Forest Plan process allocated two ROS designations in the BLRA: Rural (R) and Semi-Primitive Non Motorized (SPNM). Because the predominant management area allocation in the BLRA was allocated to Developed Recreation Complexes (2,318 acres) the matching ROS designation for that management area was allocated to Rural. The remaining area in the BLRA northern and southwestern periphery was allocated to Backcountry Recreation (824 acres) with a corresponding ROS designation of SPNM.

The BLRA Recreation Management Planning Team reviewed the existing Forest Plan ROS designations and developed a more site-specific ROS recommendation for amending the Forest Plan to better match the existing physical, social and managerial settings. The

following ROS designations were identified along with their corresponding acres (see BLRA Site-Specific ROS Map):

•	Rural	53 acres
•	Roaded Natural	384 acres
•	Semi-primitive motorized	78 acres

• Semi-primitive non-motorized 2628 acres

In general, the highly developed areas in the BLRA (Entrance Station, Pawnee Campground and Pawnee Picnic/Day Use area) are still recognized as **Rural** in ROS terms, as are the Sourdough Trailhead and Winter Day-Use Parking Area, and possible campground which are being planned for development in the future. The road (and corresponding corridor) to Left Hand Park Reservoir has a setting that is more consistent with **SPM**. The main BLRA access road (and corresponding corridor) has a setting that is more consistent with a **RN** setting. Finally, the remainder of the land area is very characteristic of **SPNM** settings, even if standard distance factors are compressed from neighboring areas of development and travel.

3.6 Theoretical Use Capacity For The BLRA

The BLRA is an interesting and challenging area in regards to managing people seeking quality outdoor recreation experiences while minimizing impacts to natural resources, physical and social settings, and adjacent land areas including primarily the Indian Peaks Wilderness (IPW). The fact that there exists such a highly developed recreation complex area, adjacent to a Wilderness Area, with each area managed to provide very different types of recreation experiences, is a management challenge. How does the Forest Service provide for high-density use of campgrounds, picnic areas, trails, lakeshore and other sites in such close proximity to the IPW, while minimizing and reducing impacts to the Wilderness?

In reviewing the ARP Forest Plan goals from section 1.6 previously above, we find a common need:

- Provide quality developed, dispersed and wilderness recreational opportunities within the resource capacity of the area.
- Provide an integrated travel system that considers various modes of motorized and non-motorized use consistent with the resource capacity of the area.

The need is to determine approximately how much use an area can sustain without damaging the natural surroundings, and ensuring that social interactions are within acceptable levels and the infrastructure is not degraded. The need is coupled with the Desired Conditions for the BLRA, as identified in section 3.4, above.

The Boulder Ranger District in conjunction with Greystone Environmental Consultants Inc. completed a comprehensive report, titled the *Assessment of Capacity: Brainard Lake Recreation Area (pub. March 9, 2004)*. This document contains key information regarding past visitation in the BLRA and adjacent IPW based on season of use and comprehensive developed/dispersed parking capacity information. Not provided, however, were total use figures by sub-area and user distribution patterns across the BLRA. This data is extremely difficult to obtain and requires planning, extensive sample design and intense sampling over at least one complete season of use to provide useful indicator information. Having such data

also may provide a false impression that the Forest Service would then be able to manage human use and distribution across sub-areas within the BLRA. The likelihood of that happening would be extremely improbable under current agency capability.

Given the direction of the Forest Plan, the Assessment of Existing Recreation Sites and Opportunities (section 2.4 in this document), and the specific information provided in the Assessment of Capacity document for BLRA, the following recommendations for user capacity and distribution are proposed to meet the objectives:

- Assess and manage capacity according to location, distribution, season, and daily use patterns of available parking spaces.
- Restrict all parking to designated parking spaces in the entire BLRA.
- Develop a winter day-use parking area near the entrance area by Sourdough/Red Rock Trailhead. Utilize portions of this parking in the summer to provide an alternative the heavily used IPW trailheads and the Brainard Lake vicinity.
- Develop a summer day-use parking area on the east side of Brainard Lake, by the Pawnee Picnic Area, and relocate some of the existing parking spaces from the north, west and south sides of Brainard Lake to this new day-use parking area and possibly to the Sourdough/Red Rock parking area as well.
- Change the circular travel pattern around Brainard Lake to a two-directional travel pattern on one side only, most likely the south side access road. Restrict vehicles from accessing the closed (north) road.
- Retain the north side of Brainard Lake picnic areas as walk-in picnic opportunities.
- Consider a commuter trail from the Sourdough/Red Rock Trailhead Parking area to the Brainard Lake area.
- Monitor conditions within the BLRA to ensure impacts to the natural resources do not exceed acceptable levels, and implement management actions when necessary to prevent exceeding these levels.

4.0 OTHER COMPONENTS TO THE BLRA MANAGEMENT PLAN

4.1 Visitor Access Strategy

Managing vehicle and pedestrian access into and within the BLRA is an important part of improving visitor safety, protecting natural resources, and providing visitors high quality recreation opportunities in an environment where the sights and sounds of nature predominate.

Currently the number of vehicles accessing popular trailheads and parking areas often exceeds parking capacity resulting in vehicle congestion, parking in undesignated areas, safety issues with pedestrians, delayed response time for emergency vehicles, and vehicles dominating the landscape which detracts from the natural setting and the visitor's experience.

In addition, many undesignated trails, or *"social trails,"* exist and continue to expand resulting in a network of confusing trails, trampling and loss of vegetation, soil compaction, and damage to sensitive riparian areas.

Strategy:

- Vehicle access within the BLRA would be managed based on available designated parking spaces. When parking lots fill up, management actions would be taken to restrict and/or re-direct vehicles to alternative parking sites within the area or to the parking area east of the Entrance Station.
- Whenever possible, separate roads and trails would be provided for vehicles and pedestrians, respectively. Roads and trails would be safe, efficient, and to the minimum necessary to serve the needs of visitors and protect natural resource values.
- Reduce unnecessary traffic up to and throughout the BLRA whenever possible.
- Monitoring vehicle access into and within the BLRA is important to determine user access patterns and adaptive management actions would be taken when necessary to meet the desired conditions for the BLRA.
- Non-designated roads and trails would be closed allowing natural restoration to occur and/or active restoration projects to be implemented.
- Seasonal trail closures would be implemented in the BLRA and the adjacent IPW when necessary to prevent damage to the trails and surrounding vegetation.

Recommendations:

Vehicle Access

- Vehicle access on Left Hand Park Reservoir Road to the reservoir should continue to be maintained. Road management objectives should continue to identify 4WD high-clearance vehicles as the primary vehicle use type.
- The road on the south and west side of Brainard Lake should be managed for twoway vehicle traffic for access to the Niwot Picnic Area and the Wilderness Trailheads west of Brainard Lake, to prevent vehicles from dominating the landscape around the lake and to minimize vehicle traffic over the historic Brainard Lake Dam and Bridge.
- Concurrently, vehicle access should be prohibited on the north side of Brainard Lake beginning just prior the bridge/dam and continuing west to the junction of the 2-way road. Emergency and administrative vehicle access would be maintained.
- To reduce unnecessary traffic up to and throughout the BLRA, an electronic sign to inform potential visitors of campground occupancy, IPW trailhead parking occupancy and other key information should be installed at the entry point from the Peak-to-Peak Highway.

Vehicle Parking

- Parking should be allowed in designated sites only.
- A winter day-use parking area for approximately 200 235 vehicles should be constructed near the Red Rock/Sourdough trailhead, outside (NE) of the entrance station. In the summer, this would also provide a parking area with trail opportunities outside the BLRA fee area boundary and an incentive for some people to use this area of the BLRA, rather than the heavily used Brainard Lake vicinity and adjacent IPW.
- The Pawnee Picnic Area Parking Lot and a portion of the Pawnee Campground (east of Brainard Lake) should be reconstructed for day-use parking to accommodate approximately 170 - 220 vehicles. This expanded parking area would replace the current roadside parking around Brainard Lake and along the IPW trailhead access roads.

Roads and Trails

- All trails within the BLRA should continue to be managed for non-motorized use only.
- Horses should continue to be allowed on the Sourdough Trail only.
- During the winter season snowmobiles and other motorized use should continue to be prohibited beyond the winter closure gate, except for emergency vehicles.
- Biking should be allowed only on designated roads and trails.
- The CMC and Little Raven Trails should be designated for skier-only use during the winter season.
- The following trails should have seasonal closures during the non-winter season west of Red Rock Lake to prevent resource damage: CMC, CMC Cutoff, Brainard Lake

Snowshoe (west of Red Rock Lake to the Brainard Lake Road junction). Hiking would still be allowed on the Snowshoe Trail between Left Hand Reservoir Road and Red Rock Lake.

Note: Alternative transportation strategies (such as a shuttle system) to reduce vehicle traffic up to and throughout the BLRA and to reduce human pressure on the IPW may be considered in the future but has been postponed from current consideration due to lack of information to develop a clear purpose and need, lack of information regarding demand and potential shuttle providers, lack of information about visitor's transportation needs and use patterns and lack of logistical information for analysis of potential operations. Further monitoring of vehicle traffic and recreation use patterns will help to determine the need and feasibility of this option in the future.

4.2 Visitor Safety and Conflict Management Strategy

Visitor safety is a primary goal and always a priority. Taking actions to help prevent accidents, injuries, or illnesses to the public is an important part of managing the BLRA.

While the Forest Service is committed to safety, the public has a significant responsibility for their own personal safety when visiting National Forest System Lands. The Forest Service installs signs and other information devices at various locations where site conditions warrant, however the size of the BLRA and variety of natural and human-made conditions limit placement of signs or other specific warnings, and therefore it is necessary to use more general education efforts.

The following provides a strategy for emphasizing visitor safety within the BLRA.

Strategy:

- <u>Emergency Response</u>: medical emergencies and search and rescue operations are the responsibility of the Boulder County Sheriff/Emergency Services Dept. The Forest Service works in cooperation with the Sheriff's Dept. to assist as needed. Forest Service personnel and/or on-site managers in the BLRA will respond to all emergencies such as fires, accidents requiring 1st aid, law enforcement incidents, based on their level of training and authority.
- <u>Vehicle and Pedestrian Access</u>: managing pedestrians and vehicles in a safe and efficient manner with an emphasis on separating them and reducing the close encounters at trailheads, parking lots, and along roads and trails would be a primary objective, and part of the design criteria for the infrastructure development plan. A variety of projects and/or actions listed in *Section 2.5 Needs and Recommended Actions,* would help mitigate safety issues between pedestrians and vehicles, and enhance the visitor's recreation experience.
- <u>Facilities and Infrastructure:</u> all facilities and infrastructure would be designed and maintained with an emphasis on visitor safety. Unsafe conditions would be identified and mitigated in a timely manner.

- <u>Signs and Posted Information</u>: signing in the area would include general information about safety hazards and recommended precautions.
- <u>On-Site Presence</u>: providing a daily presence with Forest Service personnel, Volunteers, and/or Private Concessionaire during the core hours. An example of core hours may be 8:00 a.m. to 4:00 p.m. throughout the peak seasons June – September.
- <u>Informational Materials</u>: various pamphlets, notices, and maps, would be available at the entrance station and some popular trailheads to assist the visitor in making responsible and safe decisions regarding their recreation activities while visiting the BLRA.

Recommended Regulations:

Regulations are established to protect the natural resources and enhance visitor safety and their experience while visiting National Forest System Lands. The following regulations are recommended to help meet these objectives in the BLRA and would be implemented through a U. S. Forest Service Closure Order (36 CFR 261.50) and enforced by Forest Service personnel.

Winter Season is defined as November 15 through April 30 Non-winter Season is defined as May 1 through November 14

- Vehicle access should be prohibited on the north side of Brainard Lake beginning at the bridge/dam and continuing west to the junction of the 2-way road. (Exceptions for emergency/administrative vehicles).
- Parking should be allowed in designated sites only.
- Left Hand Reservoir Road and Reservoir should be designated for day use only.
- The use of firearms of any kind (including paintball, pellet, and bb guns) should be prohibited, except for legal hunting during hunting season.
- Horses should be allowed on the Sourdough Trail only.
- During the winter season dogs should be prohibited on all roads and trails except the following: Brainard Lake Road, Left Hand Park Reservoir Road, and the Sourdough Trail. Dogs would still be required to be under voice control.
- During the non-winter season dogs must be on a hand held leash at all times.
- During the winter season the CMC and Little Raven Trails should be designated for skier only.
- During the winter season backcountry camping would be prohibited within ¹/₄ mile of any developed facility or trailheads.

• During the winter season snowmobiles and other motorized use would be prohibited in the BLRA beyond the winter closure gate, except for emergency vehicles.

4.3 Visitor Orientation, Education, and Interpretation

The primary objectives of visitor education, interpretation, and orientation are the following:

- To orient the visitor about the recreation sites and range of opportunities within the BLRA and adjacent IPW, and to promote safety.
- To promote responsible behavior that prevents and/or minimizes recreational impacts to the natural resources, reduces visitor conflicts, and ensures sustainable recreation opportunities in the BLRA and adjacent IPW for the long term.
- To ensure visitors are aware and understand the *"BLRA Regulations"* which are designed and enforced to protect the natural resources and the visitor's experience.
- To foster an appreciation and understanding about the plants, animals, and natural systems within the BLRA and adjacent IPW.

Strategy:

- Signs directional, educational, regulatory, interpretation, at key locations such as trailheads, trail junctions, concentrated use areas, popular destinations, and at the visitor information station.
- Visitor Contacts via the BLRA Entrance Station, On-Site Managers, Trailhead Hosts, Campground Hosts, Forest Service Personnel, Boulder District Office, Volunteers, and the Forest Service Website.
- Brochures, notices, and pamphlets.
- Maps displayed at information kiosks, bulletin boards, and as handouts upon entering the BLRA.
- Educate visitors about the *Tread Lightly and Leave No Trace Programs* that promote low impact and responsible recreation use on public lands.

Note: Interpretation plan will be developed during the initial 5-10 year implementation period for this project and will tier to the Forest-wide interpretation plan (2005).

4.4 Resource Protection and Restoration Strategy

Protecting natural resources while providing high quality recreation opportunities in an environment where the sights and sounds of nature predominate is challenging in a popular location like the BLRA. The following projects or actions are needed to help meet this goal.

Strategy:

Restoration and Re-vegetation

Implement restoration measures, including re-vegetation, as appropriate for site-specific projects such as closure and rehabilitation of roads and social trails. Involve Forest Service specialists such as soil scientists, hydrologists, and botanists in restoration planning. Follow the Arapaho and Roosevelt National Forests and Pawnee National Grassland (ARP) Re-vegetation Policy currently in effect.

Noxious Weed Management

Ongoing inventory, monitoring, and treatment will continue. This area is a high priority for weed management for the District due to its proximity to the wilderness and the relative scarcity of noxious weeds in the area. Objectives include prompt detection of new infestations and eradication of existing populations. Treatment will be done in accordance with the April 2003 Arapaho and Roosevelt National Forests and Pawnee National Grassland (ARP) Noxious Weed Management Plan, or newer plan if available, and the ARP Invasive Species Action Plan currently in effect.

Invasive Species Other Than Noxious Weeds

Include information about noxious weeds and other invasive species threatening the BLRA in education and interpretation plans for the area. If invasive species other than noxious weeds, including aquatic organisms such as New Zealand mudsnails, are found in or near the area, address visitor education, measures to prevent infestation and/or spread, and appropriate treatment.

The following are additional recommended actions to protect natural resources and restore heavily impacted areas within the BLRA and IPW.

Recommendations:

- Seasonal trail closures should be implemented in the BLRA and the adjacent IPW when necessary, to prevent damage to the trails and surrounding vegetation.
- The following trails should have a non-winter season closure west of Red Rock Lake to prevent resource damage: CMC, CMC Cutoff, Brainard Lake Snowshoe (west of Red Rock Lake to the Brainard Lake Road junction).
- Backcountry camping should be prohibited in the BLRA, except north of the South St.Vrain Creek. Campsites should be located at least 100 feet from all creeks and trails.

- Close and rehabilitate non-designated trails (social trails) and implement seasonal trail closures when necessary to prevent damage to the trails and surrounding vegetation.
- Construct a non-motorized trail around Left Hand Park Reservoir. This action would only occur after a formal agreement is established between the Forest Service and private owner of the reservoir regarding the use and management responsibility for the trail.
- Monitor visitor recreational use to ensure biological, physical, and social impacts do not exceed acceptable limits.

4.5 Strategy to Protect the Indian Peaks Wilderness Values

The IPW is a popular destination for many people, the majority of which are local residents from nearby Front Range communities (Denver, Boulder, Longmont Metro Area), but also visitors from more distant Colorado cities and towns, and some from out of state and/or other countries.

The portion of the IPW adjacent the BLRA, known as the *(Four Lakes Backcountry Zone: Long, Isabelle, Mitchell, and Blue Lakes),* is by far the most popular and heavily used part of the IPW. This is mainly due to its close proximity to the BLRA developed complex, and the easy access the Brainard Lake Road provides to the IPW Trailheads *(Long, Mitchell, Niwot Cut-off).* With over half of all the visitors to the BLRA also visiting the IPW, there is a need to take steps to prevent overuse of the IPW.

As previously stated (see section 2.3), when the Indian Peaks received official Wilderness designation in 1978, the goal was to (paraphrased)..."protect wilderness values and establish a wilderness area close to a major population center to provide a nearby high quality wilderness experience for many visitors". This goal requires a careful balance between protection and use.

The following is a strategy with recommended actions to help protect and enhance the values of the IPW (*adjacent the BLRA*) while maintaining reasonable access to the trailheads.

Strategy:

- Provide attractive alternatives to the IPW by improving the recreation opportunities and experiences at Brainard Lake and in the eastern portion of the BLRA, through a variety development and improvement projects at both the developed recreation complex sites and the backcountry recreation areas. These projects would support the BLRA management goal of providing high quality recreation experiences while preserving the natural resources of the area.
- Manage vehicle access to the IPW trailheads and within the BLRA based on available parking capacity and provide improved parking alternatives east of Brainard Lake and near the BLRA Entrance Area.

Recommendations:

- To improve the hiking and pedestrian experience at Brainard Lake, close the road on the north side of Brainard Lake to vehicles and manage it for pedestrian and bicycle use only starting at the bridge/dam. Replace the existing asphalt with a more natural appearing surface, and construct a fully accessible trail around the lake. This trail would connect to other trails in the vicinity including trails that access the IPW. Vehicle access west of Brainard Lake would be maintained via the road on the south side of the lake, and managed for two-way traffic.
- Provide improved parking and access to trails away from the IPW by constructing a
 parking area just east of the entrance station (*outside of the fee area*), and construct trail
 connections for hiking and biking between this parking area and Red Rock Lake. In
 addition, improve the opportunities at the Lake by providing amenities such as; picnic
 sites, scenic viewing site, and restrooms.
- Provide a variety of hiking and biking trail opportunities and improvements away from the IPW through the following actions:
 - Construct a new trail connection between the Sourdough Trail and Waldrop Trail, and reconstruct sections of the Waldrop Trail for both hiking and mountain bike use. This new section would provide easy access from the Red Rock/Sourdough Trailhead Parking lot, improve the east/west trail loop opportunities, and improve visitor safety by eliminating the need to hike on the Brainard Lake Road to access the Waldrop Trail.
 - Relocate the South St. Vrain and Waldrop Trails outside the IPW boundary to provide mountain bike opportunities (mechanized equipment is not allowed in Wilderness).
 - Reconstruct Little Raven Trail for both hiking and mountain biking to improve the east/west trail loops within the BLRA.
 - Construct Trail connections between the Entrance Parking Area and Red Rock Lake to provide trail loop opportunities.

4.6 Agency Presence and Management Capability Strategy

The Forest Service is expected to retain administrative authority for public land management within the BLRA, in perpetuity. The BLRA will continue to be managed as prescribed by the 1997 Revision of the Forest Plan. Strategic planning will continue, as will implementation of actions to achieve desired future conditions, while monitoring to ensure management effectiveness. Active enforcement of existing federal, state and local regulations are expected to help manage the area for a more safe and wholesome recreation experience, while achieving desired future conditions.

The U.S. Forest Service will utilize its available personnel to oversee general management, law enforcement, facility maintenance, facility development, visitor services, concessionaire operations and overall agency presence within the BLRA. Uniformed officers would continue to conduct routine information, education and enforcement patrols; perform maintenance of facilities; monitor use and project implementation; while ensuring agency presence results in quality recreation opportunities and experiences for those visiting the area. Volunteer groups, key partners and a number of other agencies will remain instrumental in supplementing onsite management effectiveness and agency presence.

To further supplement on-site management effectiveness and agency presence, the BLRA will remain under joint agency/concession operations, as authorized under the existing Special Use Permit. The permit extends operation and maintenance authorities within the BLRA to the concessionaire as approved by the Forest Service. The concessionaire is expected to maintain the facilities at high of standard and act as the primary agency-related mechanism for providing on-site presence and active management of visitor services throughout their operating season (mid-May to mid October, annually).

The Forest Service, and the Boulder Ranger District in particular, are very effective in extending their management capability by working with agency partners, user groups, volunteers and interested individuals. Many are local-oriented people or groups with very specific missions, regulations or other values; while some stakeholders have international research-oriented interests. A number of agreements have been formalized to ensure management consistency and in some cases facilitates opportunities for sharing costs for managing the BLRA. As the authorized agency administrator for the BLRA, the Forest Service will continue to foster positive relationships and facilitate coordination with other agencies and its partners for the greater good of all that have a stake in the BLRA.

Key Agencies and Partners

Colorado Division of Wildlife Boulder County, Colorado University of Colorado Lefthand Ditch Company U.S. Fish and Wildlife Service U.S. Geologic Service Thousand Trails Management Services, Inc Rocky Mountain Rescue Indian Peaks Fire Protection District Indian Peaks Wilderness Alliance Wildlands Restoration Volunteers Sierra Club-Indian Peaks Group Colorado Mountain Club Boulder Off-Road Alliance

4.7 Financial Capability and Use Fee Strategy

The BLRA currently has no funding mechanism dedicated to it. The Forest Service receives annual appropriations from Congress and the Arapaho-Roosevelt National Forest and Pawnee National Grassland unit distributes these appropriations to each of five Ranger Districts on the unit. These appropriations are distributed in specific fund types and according to specific district capabilities in the following categories:

- Recreation and Wilderness Operations
- Recreation Facilities
- Trails
- Roads

Each appropriation amount is generally used for overall oversight and management of the recreation program as well as specific objectives regarding recreation planning, maintenance of recreation roads, trails and facilities, visitor information services, wilderness management, heritage resource support, recreation special uses, developed and dispersed camping, and general forest area maintenance and patrol. The BLRA is managed with portions of all four funding source types but currently not in a dedicated or comprehensive way.

There is a day-use fee at BLRA, which was established by the Boulder Ranger District in 1994 to try to address parking, facility maintenance and sanitation issues that were occurring at that time. The fee, which is collected and managed by a private concessionaire under special use permit from the Forest Service, still ensures that a number of critical health/safety and maintenance needs are met. As of 2005, the day-use fee is \$7 per vehicle and the Forest Service keeps 14% of the total revenue to use for maintenance of facilities in and around the area. In addition, the revenue is used to fund the concessionaire for performing the following work activities in the BLRA:

- Site cleaning, table and grill cleaning, and trash service at the Niwot, Mitchell Creek, Pawnee and Arikaree Picnic Areas.
- Toilet cleaning, stocking, vault pumping and building maintenance at the picnic areas and at Mitchell Lake and Long Lake Trailheads.
- Operation and maintenance of the water system for all the developed sites in BLRA.
- Parking management at the picnic areas and trailheads.
- Basic trail maintenance on the first mile of Mitchell Lake and Long Lake Trails and visitor information at these locations during peak use times.
- Visitor information and fee collection at the welcome station.

Since the original day-use fee at BLRA was established in 1994 under the authority of the Land and Water Conservation Fund (LWCF) Act, no acceptance was provided for holders of the Golden Eagle passport, which is a federal fee area entrance pass. On December 8, 2004, a new federal recreation fee authority was passed by Congress. The Federal Lands Recreation Enhancement Act (FLREA or REA for short) outlines what types of fees in what types of areas may be charged. REA did not provide the Forest Service authority to charge

entrance fees but did allow the National Park Service to retain their entrance fee authority. The Forest Service has authority to charge Standard Amenity Fees for high impact recreation areas such as the BLRA. High impact recreation areas typically have distinct, well defined boundaries, clearly identified access points, places of concentrated recreation use, and provide opportunities for outdoor recreation that are directly associated with a natural or cultural feature, such as the lakes and adjacent Indian Peaks of the continental divide for the BLRA. They also provide all of the following amenities:

- Designated developed parking.
- Permanent toilet facilities.
- Permanent trash receptacles.
- An interpretive sign, exhibit or kiosk.
- Picnic tables.
- Security services.

All of these amenities are provided within the BLRA. In addition to these, Expanded Amenity Fees may be charged for use of developed campgrounds and other specialized facilities, such as for camping at Pawnee Campground. The challenge and goal for the Forest Service is to increase the level of public service, increase the level of road, trail and facility maintenance in the area, upgrade and improve facilities, reduce resource impacts and visitor conflicts, improve information and interpretive programs, and provide a higher level of presence and management of the BLRA than currently exists.

To meet these objectives, the Forest Service will continue to utilize a diversity of appropriated funding sources, alternative funding source mechanisms, and/or creative management opportunities to ensure fiscal sustainability of the Brainard Lake Recreation Area. These may include but are not limited to a wide variety of federal funds; state and local grants; multi-agency agreements; partnership agreements; and other authorities granted by Congress to charge fees for providing certain services. Since consistent funding from any source remains uncertain, the Forest Service will continue to seek out new and innovative fiscal support opportunities. Considerations for future funding needs to support use and facilities in the area may include:

- Possibility of bringing the Left Hand Reservoir road and area into the BLRA fee structure for access to funds to maintain and improve the area.
- Possibility of bringing the winter use of the Sourdough/Red Rock Trailhead into the BLRA fee structure for access to funds to maintain and improve the area.
- Possibility of negotiating with the current concessionaire to accept Golden Eagle Passports as valid for the BLRA day-use (standard amenity) fee.

4.8 Visitor Use Monitoring Strategy

As previously stated (see section 1.1), the BLRA is one of the most popular recreation areas along Colorado's Front Range, and the population is increasing along the Front Range. Providing a variety of high quality recreation opportunities in the BLRA within the capacity of the area, while protecting natural resources and minimizing impacts to the wilderness resource is a careful balance between use and protection. Monitoring visitor use is a key part

in helping to determine if the stated goals and objectives (section 3.3) are being met to achieve the desired future conditions for the BLRA (see section 3.4).

The following identifies visitor use information needed to help make better management decisions to achieve the desired future conditions for the BLRA.

- Total number of visitors and vehicles to the BLRA each year
- Number of visitors to the IPW
- Number of vehicles parked at the IPW Trailheads each year
- Number of visitors to Left Hand Reservoir
- Visitor counts to specific developed sites within the BLRA
- Number of visitors and vehicles during the winter season
- Number of visitor and vehicles during the non-winter season
- Winter parking patterns
- Summer parking patterns
- Trailhead Parking patterns (peak days, time of day lots fill up, time vacancies become available)
- Average time spent on IPW trails
- Vehicle traffic flow patterns

4.9 Infrastructure Development Recommendations

Infrastructure is a critical component of providing for the health and safety needs of visitors to the BLRA, as well as providing for resource protection, access, accessibility, recreation opportunities, user comfort, direction and orientation, information, education and interpretative needs.

Maintaining existing infrastructure is an important component of overall management responsibility. Improving and reconstructing existing facilities or constructing new facilities for modern design features and standards often requires substantial investment beyond the means of any individual Ranger District or National Forest Unit to accomplish. The Forest Service's Rocky Mountain Region maintains a pool of capital investment project (CIP) funds annually to address large recreation facility construction project needs. This pool is limited and competitive in nature. It requires large project submissions to have completed conceptual site development planning as well as accurate cost estimates and an assessment of how the project meets regional criteria for meeting deferred maintenance backlog and serving the public.

The Arapaho-Roosevelt-Pawnee unit has already identified the BLRA project area as its most important project package to submit for out-year (2007 and beyond) CIP funding. This recreation management plan coupled with specific conceptual site plans and a criteria assessment will enable it to compete strongly for those limited CIP funds.

Following is a table of the projects recommended in the previous sections of this chapter that the Arapaho-Roosevelt-Pawnee unit would propose to more effectively manage and better serve the recreation users to the BLRA. Table 4.2 identifies all recommended projects by priority and estimated initiation year for implementation.

Table 4.1 Recommended Infrastructure Development Schedule

Priority #1 Projects:	Year
Red Rock/Sourdough TH Parking Area Construction	2007
Entrance Station Construction	2007
New Administrative Site Construction	2007
Day-Use Parking Area Construction at Pawnee Picnic Area & portion of Pawnee Campground	2007
Close/Rehabilitate old parking spaces around Brainard Lake	2007

Priority #2 Projects:	Year
Pawnee Campground Reconstruction	2008
Old Administrative Site Decommissioning	2008
Designate/Manage 2-way traffic south-side of Brainard Lake and close north-side to vehicles	2008
Relocate segments of S. St. Vrain & Waldrop Trails outside IPW	2008
Construct Trail connection between Sourdough and Waldrop Trails	2008
Reconstruct Snowshoe Trail between Left Hand Park Resevoir Road and Red Rock Lake	2008

Priority #3 Projects:	Year
Reconstruct Arickaree and Mitchell Creek Picnic Areas	2009
Reconstruct Niwot Picnic Area	2009
Construct Accessible Trail around Brainard Lake with trail connections to Wilderness Trails	2009
Reconstruct Red Rock Lake Parking Lots and construct Picnic Sites	2009
Construct accessible trail at Red Rock Lake to picnic sites, restrooms, and scenic overlook	2009

Priority #4 Projects:	Year
Reconstruct Parking Area at Left Hand Reservoir, Install Toilet	2010
Reconstruct Boat Launch at Brainard Lake	2010
Designate/Reconstruct hiker/bike access trail from Entrance Area to Brainard Lake	2010
Construct new segment of trail from Snowshoe to LH Res. Road	2010
Close/Rehabilitate most heavily impacted non-system roads and trails	2010

Priority #5 Projects:	Year
Construct New Campground at Red Rock/Sourdough TH Area	2011
Reconstruct Little Raven Trail	2011
Construct New Trail around Left Hand Reservoir	2011
Close/Rehabilitate most heavily impacted non-system roads and trails	2011

APPENDIX A

Below is a list all of the people who were involved in the development of this plan.

Contributor	Title	Responsibility
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