

Berthoud Pass Assessment

Arapaho and Roosevelt National Forests
Clear Creek and Grand Counties, Colorado

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Forest Service
Arapaho and Roosevelt National Forest

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Chapter I – Characterization

The purpose of this assessment is to:

- facilitate future management of the Berthoud Pass area by providing recommendations that define a desired management direction for the area.
- identify facilities and services appropriate for the Berthoud Pass area based on the recommended management direction.

This assessment is not a decision making document, but develops a management concept from which additional planning and analysis can evolve.

Location

The Berthoud Pass assessment area is located in north central Colorado, within northern Clear Creek County and southern Grand County (see Appendix C, Vicinity Map). It lies about 60 miles west of Denver, Colorado and about 25 miles south of Granby, Colorado. The assessment area lies on the Continental Divide and is bisected by U.S. Highway 40 and the Continental Divide National Scenic Trail (CDNST). The James Peak Wilderness lies due east from the assessment area, and the Vasquez Wilderness lies due west (T.35 N., R. 75 W., Sec. 9, 10, 16, 15, 6th Principle Meridian).

The Berthoud Pass assessment area was designated under the 1997 Revised Land and Resource Management Plan for the Arapaho-Roosevelt National Forests and Pawnee National Grassland (Forest Plan) as a developed ski area. The assessment area is approximately 730 acres and is completely on public lands administered by the USDA Forest Service. The assessment area drains into two watersheds: the headwaters of the Fraser River, tributary to the Colorado River; and Hoop Creek, tributary to Clear Creek in the South Platte basin.

Background Information

SolVista Inc. most recently operated the Berthoud Pass Ski Area and owns most of the permitted facilities at Berthoud Pass, including the ski lodge. The Forest Service administers the public land the ski area occupied and authorized the ski area operation through a special use permit that expired on October 22, 2003. The permit was an agreement between the Forest Service and SolVista that outlined terms and conditions of operating a commercial activity on National Forest System lands. One of the conditions in the permit required that SolVista remove all infrastructures related to the ski area operation at the termination of the permit. SolVista removed the lift towers in April 2003 and is currently developing a removal plan for the lodge and other improvements associated with the ski area.

Current Forest Plan management direction for the Berthoud Pass area is for a ski based resort. The Forest Service has completed a draft *Berthoud Pass Ski Area Needs Assessment* (see Appendix A) of the special use permit to determine if the area should continue to be managed as a ski area. SolVista is the fourth group who failed to run a profitable ski operation at Berthoud Pass since 1987. This assessment recommends a change in the management direction for the area (from a ski based resort to other management direction), which will require a Forest Plan amendment.

Major Characteristics

The Berthoud Pass ski area is rich in history and was one of the first ski areas in Colorado. Berthoud Pass was the first ski area to offer a ski lift (tow rope) in Colorado and was the first ski area in North America to have a double chairlift. Despite its history, Berthoud Pass ski area may no longer be a viable operation as evidenced by the failure of the past four operators. In addition to a failed ski business, additional factors that preclude the continued designation of Berthoud Pass as a developed ski area are:

- limited space at the base for parking and additional facilities;
- cost of maintaining and operating the lodge, which was constructed in 1949; and
- competition from larger ski areas during a national and state trend of decreasing skier visits.

Currently, the area receives high use (average of 40 people weekdays and 150 people weekends) during the winter months and serves as an access point for a variety of non-motorized backcountry activities including snowshoeing and skiing. The slopes adjacent to the lodge and parking area are being used daily for snowplay. This use adjacent to the lodge and parking area, predominantly sledding and tubing, is a major safety concern. The slopes were not designed for this type of activity and injuries associated with snowplay frequently occur.

The area also receives year-round use from motorists traveling along Highway 40. The Berthoud Pass parking area is an easy location to stop, so motorists often pull over for a rest break or to enjoy the scenic overview. The CDNST can also be accessed from this location. The recreational use of this area creates ongoing safety and sanitation concerns. Highway 40 is a major travel way for tourists going to Rocky Mountain National Park, the Arapaho National Recreation Area, and Winter Park. In addition, residents utilize this route to travel between the Front Range urban corridor and the Granby area. Historically, Highway 40 was the main east-west route across the state until the construction of Interstate 70.

The Berthoud Pass assessment area also has a high value for wildlife and sensitive plants. Berthoud Pass has been identified as a lynx linkage zone in the Canada Lynx Conservation Assessment and Strategy (Ruediger, Bill et al, 2000). The Berthoud Pass linkage zone is one of a few linkage zones in the state of Colorado for Canada lynx.

Chapter II – Public Involvement & Issues

Public Meetings

The Forest Service held three public meetings on October 9th 2003, December 16th 2003 and March 25th 2004, to solicit input on issues pertinent to the Berthoud Pass assessment area. The following is a general summary of each public meeting:

October 9, 2003 Meeting – This meeting was held in the afternoon at the Sheraton Hotel in Lakewood, Colorado. Approximately 75 people attended the meeting. The Forest Service provided opening statements and a period of questions and answers. The attendants were broken into four groups and asked to identify Berthoud Pass uses and prioritize their importance for future management of the area. The group also identified short-term needs for management of the area given the permit was expiring.

The following uses were identified as having the highest priority for future management:

- Travel services – visitor center, rest area, restroom and phone, additional parking
- Wilderness hiking – accessible demonstration area (coordinated through Partners for Access to the Woods (PAW)), and trailhead for CDNST
- Extreme skiing and boarding – tree/backcountry skiing
- Training/classroom/education/research- snow/avalanche, camps, research/environmental monitoring, search & rescue training
- Recreation opportunity for everyone – recreational skiing, four season recreation, sledding
- Lodging/gift shop
- Emergency medical services – first aid, search & rescue
- Interpretation
- Food & beverage service
- Mountain biking
- Scenic overlook
- Community resource for local youth, low income
- Hostel

Other mentioned issues that were not noted as priority include:

- Special events – skiing/snowboarding contests, conferences
- Wildlife corridor
- Current partnership base (PAW)
- Watershed
- High altitude habitat
- Ideal for multiple uses
- Safety management
- Education opportunities

December 16, 2003 Meeting – This meeting was attended by over 40 individuals and was held in the evening at Empire, Colorado. The Forest Service staff presented information on the current condition of the lodge and Forest Service criteria for future uses of the lodge. The overview and conceptual

schedule for the Berthoud Pass assessment process was also presented. Issues noted at the meeting include:

- Clear Creek County Development has water rights to lodge
- Colorado Department of Transportation (CDOT) has 400' right-of-way and is key to future decisions
- The city of Northglenn has 100' ditch right-of-way at the pass
- Concerns were expressed over plans for restrooms for the public
- Questions were raised concerning the historic nature of the lodge
- Both Grand and Clear Creek County expressed interest in maintaining facilities for public use at the pass
- Clear Creek County Economic Development staff noted the following:
 - Need for public and private sector participation in a year-round facilities for recreation, tourism, education and historical activities
 - Area can be economic engine and model for region
 - Resources are available to develop and sustain area
 - Whatever permanent facility succeeds, it will be an anchor for site
 - Form does follow function
 - Need to develop a business plan with four season model for diversity of area
 - State Parks could be partner in the future plans for area
 - Several comments noted the need to build future partnerships for developing and managing area including the business community

The Berthoud Pass assessment was mailed to interested and involved members of the public and organizations on March 18, 2004. An invitation to comment on the assessment was distributed to local newspapers, television stations, and radio stations. The Forest Service asked that comments be submitted by April 9th 2004.

March 25, 2004 Open House –The Forest Service held an open house in the late afternoon and evening at the Easter Seal Camp. Nineteen people attended the open house. The draft Berthoud Pass assessment had been made available the week before the open house for public comment. Limited comments were received at the meeting and the majority focused on:

- Future of the lodge – some support removal and other seek it to remain
- Pending removal of the lodge – decision process by the Forest Service
- Need for facilities at the pass – use of the lodge or development of new facilities
- Assessment process used by the Forest Service – did not including ideas and comments from earlier meetings and perceived to be driven to justify removal of lodge
- Loss of an opportunity for business to meet public needs
- Loss of a part of the history in area
- Forest Service lacks capability to manage the area

Summary of Major Public Comments

For a full review of all public comments on the draft assessment and Forest Service response, please see Appendix B.

Forest Service Recommendations and Vision for Berthoud Pass

A number of the comments were directed at the Forest Service future vision (or the perceived lack of) for Berthoud Pass. Principle comment areas included:

- A number of comments agreed with the draft vision in the assessment.
- Questions about the assessment and the relationship to possible future forest plan ‘zoning’.
- Some felt the vision was very limited in scope given the wide array of suggestions and potential partnerships available.
- The relationship of the existing lodge and future plans for the area was confusing and questioned by numerous parties.

Response: The details of the Forest Service vision have not been fully developed. This assessment only provides a programmatic vision. The details of how it will be accomplished and to what extent will need to be resolved in future project level planning. The planning process is outlined in further detail in Chapter V.

Role of Forest Service and Possible Future Private Enterprises

Comments questioned the role of private enterprise to achieve the vision for Berthoud Pass. Areas of concern include:

- Perceived ability of a private entity to make a viable profit given the vision outlined in the draft.
- Concerns were noted that the document did not discuss a broad enough range of possible options – was the agency thinking outside the box?
- Questions were also raised about the timing and Forest Service requirements for a formal proposal from private entities to possibility manage the area in the future.
- The role and ability of future partners was not adequately discussed as a tool to meet demands.

Response: How the visitor and management needs should be met was not addressed in the assessment. These details will be determined in a future project level analysis. If the Forest Service’s management needs are met through a private business entity, then the Forest Service would accept some level of commercial activity to assure economic viability of the private business entity. The economics impact of a specific business to the local economy and communities was considered to be a project level issue that will be considered when a specific proposal is analyzed.

The Lodge and its Ability to Met Future Demands for Area

Concerns were expressed that the lodge’s ability to meet future needs was not adequately analyzed in light of a wide array of options that may exist. Areas of concern include:

- Could the current facility be remodeled to meet future needs and the Forest Service standards?
- The assessment vision and recommendations did not provide sufficient detail to determine facility needs.
- The Forest Service had already determined that the lodge needed to be removed so the possible use of the lodge was not included.

- The removal of the lodge would not lead to better facilities but a series of temporary facilities barely meeting the needs of the users.
- The economic, health and safety benefits to the public from the lodge were underestimated in the assessment.
- Time constraints in developing the partnerships needed to design, acquire funds and construct a future facility and its impact on the users.

Response: The existing structure was designed as a ski area lodge and the area no longer serves as a developed ski area, therefore a ski lodge is not necessary. The Forest Service does not believe it is in the best interest of the public to take liability of the structure because of high maintenance costs, needed upgrades, and the fact the structure does not meet current design standards. The Forest Service is not interested in retrofitting the structure to serve another function due to the uncertainties and complexities of transferring ownership while maintaining financial responsibility of its removal with the current owners.

Issue Identification Process

Key issues are defined as major concerns that are relevant to the purposes of this assessment (identified in Chapter I). Key issues can be biophysical, social, or managerial in nature. The key issues were identified through the public involvement process and by a Forest Service interdisciplinary team (IDT). The IDT identified the following key issues based on professional judgment, resource knowledge, and site-specific knowledge of the Berthoud Pass area at two meetings held on February 6, 2004 and February 10, 2004.

Key Issues

Wildlife – The Berthoud Pass area is an important wildlife corridor and is identified as a statewide lynx linkage area under the Lynx Conservation Assessment and Strategy (see Appendix C, Lynx Habitat map). Alpine wildlife species such as mountain goat and bighorn sheep utilize the area as a key east-west corridor. Forested wildlife species such as lynx, elk, deer, bear, and marten utilize the area as a key north-south corridor. Some uses, such as motorized recreation or night use, could degrade the quality of this wildlife corridor.

Recreation – Current unmanaged recreational uses and lack of trailhead and information facilities at Berthoud Pass are causing safety and sanitation problems. Future management of the area should accommodate year-round recreation.

Scenery – Users of Highway 40 and the CDNST have a high expectation for scenic quality in the Berthoud Pass area; yet scenic quality has been degraded by past activities and uses. There are opportunities to improve the visual condition through revegetation efforts and removal of obsolete facilities and structures. Facility design should be consistent with the high concern for scenic quality along Highway 40 and the CNDST.

Land Uses – Current land use authorizations in the Berthoud Pass assessment area include State Highway 40, Hoop Creek Ditch, Mines Peak electronic site, snow pack telemetry site (SNOTEL), Colorado Avalanche Information Center (CAIC) meteorological site, and a Continental Divide historic marker. Changes in future management standards and guidelines of the area should be consistent with the existing land uses.

Facilities – The lodge and other ski related facilities at Berthoud Pass are scheduled to be removed in 2004. The Counties and local communities believe the lodge, or other facilities developed in its place, could enhance local economies. Any future facility at Berthoud Pass would need to meet the Forest Service basic recreation management objectives for the area. The Forest Service believes the existing facility would need to be downsized and extensively refurbished to meet accessibility and fire standards as well as the Forest Service Built Environment Image Guidelines. It may be more economical to replace the structure with new facilities that meet current user needs. The Forest Service is also concerned with the agency’s limited financial ability to maintain facilities to provide basic public services in a sustainable manner.

Partnerships – Management of the area has had important contributions from several key partners. They include: Continental Divide Trail Alliance (CDTA), Friends of Berthoud Pass, Clear Creek and Grand Counties, Colorado Department of Transportation (CDOT), and the Berthoud Pass Volunteer Ski Patrol. These groups have made important contributions to the management of the area and are also expected to be key future players in the final management design of the area.

Chapter III – Existing & Reference Conditions

This chapter outlines the current range, distribution and condition of relevant ecosystem elements. In addition, this chapter describes reference conditions (i.e. historical conditions), which can be used for comparison with current conditions.

Biological and Physical Environments

Setting – The assessment area consists of high elevation, montane lands. Elevations range of 10,600 feet to 12,500 feet. Annual precipitation is approximately 35 inches per year. Most precipitation falls as snow. Approximately half of the area is alpine, and Engelmann spruce and sub-alpine fir forests occupy the lower half of the assessment area.

Vegetation – Alpine vegetation is predominantly grass and other herbaceous vegetation (forbs). Other important habitats in the alpine include fell fields, boulder fields, and solifluction terraces and krummholtz.

Fell fields are windswept areas characterized by rocky ground and low-growing cushion plants at high elevation. Soils are rudimentary and gravelly, and snow is scoured off through much of the winter. Dominant species include club mosses, alpine grasses, forbs, and low growing shrubs. Trees are not present above approximately 11,400 feet.

Boulder fields contain plants that are not commonly found in other alpine habitats. Plants establish in small pockets where windblown soil has been deposited and where rocks offer protection from wind. Dwarf columbine (*Aquilegia saximontana*) is a Colorado National Heritage Program (CNHP) species of concern that is often found in this habitat. Occurrence of this species has been recorded less than one mile west of the assessment area.

Solifluction terraces are small soil terraces formed by the downhill creep of soil particles. The terraces often are wet and support plant communities adapted to high soil moisture. Kotzebue's grass of Parnassus (*Parnassia kotzebuei*), a Forest Service sensitive species, may occur on these sites.

Krummholz are tree islands that occur at the interface of the alpine and forested ecosystems. The predominant tree species in krummholz within the assessment area are Engelmann spruce and subalpine fir. Scattered bristlecone pine krummholz occur in rocky soils.

The dominant vegetation types in the forested subalpine area are Engelmann spruce and subalpine fir, with minor components of lodgepole and bristlecone pine. This area also contains riparian areas along stream corridors and fens. Fens are peat-forming wetlands. Because of their hydrology and chemistry, fens contain unique vegetation communities. At least one fen is known to occur within the assessment area and it contains rare orchids.

Natural disturbance events occur less frequently in subalpine and alpine ecosystems than in lower elevation ecosystems. Fire, insects, and diseases are rare in an alpine/sub-alpine ecosystem. Avalanches occasionally cause disturbance, but this phenomenon probably has remained more or less constant.

Current risks to vegetation include insects, sedimentation and human impacts. Insect activity that causes tree mortality occurs less frequently in the subalpine than in lower elevation ecosystems. However, spruce budworms are at epidemic proportion on the Routt National Forest to the north and may eventually reach Berthoud Pass. Along portions of Highway 40, sediment deposited below the road from sanding operations is increasing tree mortality. Because of the sand deposition, regeneration of trees is suppressed. Some areas adjacent to roads, trails, and parking lots have less than desirable amounts of vegetation due to human use and trampling.

Federally listed and sensitive plants that may occur within the assessment area include Altai cotton-grass, bristle-stalked sedge, clawless draba, Front Range cinquefoil, Gray's Peak whitlowgrass, Hall's fescue, hoary willow, Kotzebue's grass of Parnassus, livid sedge, narrow-leaved moonwort, prairie moonwort, roundleaf sundew, sea pink, simple kobresia, slender cotton-grass, ice cold buttercup, Weber's monkey flower, and Weber's scarlet-gilia. Colorado National Heritage Program (CNHP) maps show occurrences of Gray's Peak whitlowgrass, Alpine aster, and clawless draba within the assessment area (the current status of these plant occurrences is unknown). Human uses may cause impacts to these plants by trampling or altering hydrology through soil or snow compaction.

Wildlife – The primary wildlife issue in the assessment area is the function of the wildlife corridors. Two corridors intersect at Berthoud Pass. A corridor for forest species (such as American marten and Canada Lynx) runs north-south parallel to Highway 40, and a corridor used by open space and/or alpine species (such as mountain goat and bighorn sheep) runs east-west parallel to the Continental Divide. Human activities occur year-round in both corridors and traffic is often high on Highway 40, especially on weekends. CDOT has been conducting a multi-phase reconstruction of Highway 40. Construction has occurred for several summers and will continue into the future. Hikers use the CDNST during the summer. Some off-trail use may occur in the vicinity of the ski area. During winter, skiers and snowboarders use both sides of the pass. Some backcountry winter use occurs as far north as Parsenn Peak and James Peak and as far southwest as Stanley Mountain. Several outfitters provide avalanche training from Hoop Creek to Pumphouse Draw and into Current Creek.

Based on historical aerial photos, it is probable that the area at the pass used to contain a larger number of spruce and fir trees that were cut down to make room for the parking lot and ski facilities. Presently, the upper end of a former ski lift on the east side of Highway 40 is surrounded by spruce-fir krummholz and a few larger trees between the two densely forested sides of the pass. This sparsely treed site may be used by wildlife as cover to travel across the pass

Presently, the two corridors appear to provide the minimum habitat required for species using the corridors. Except for travel along Highway 40, there is currently little nighttime human activity and no motorized public use beyond the parking lot. Bighorn sheep and elk mainly avoid the pass and the highway corridor during the day, preferring to move along the ridges and through the forest below. Mountain goats prefer to stay on the west side of the assessment area above timberline. Encounters with mountain goats and bighorn sheep are rare near the road and at the pass. Lynx also tend to move and hunt at night, staying within forested corridors, and are most likely to cross the pass east of Highway 40 close to forested cover. While waiting for darkness, lynx may use blocks of diurnal spruce-fir security habitat located on both sides below the summit.

The Berthoud Pass assessment area provides suitable habitat for the Canada lynx. The assessment area contains portions of two Lynx Analysis Units (LAU; an analysis area which approximates the size of a single adult lynx home range): the Fraser LAU (north of Berthoud Pass and 'west' of the continental

divide) and the Clear Creek LAU (south of the Berthoud Pass and 'east' of the continental divide). The Berthoud Pass area of the Clear Creek LAU contains ample foraging habitat but denning habitat is limited to small isolated patches. The Berthoud Pass area of the Fraser LAU contains ample denning and foraging habitat (see Appendix B, Lynx Habitat map).

Berthoud Pass is a lynx linkage zone as defined in the Canada Lynx Conservation Assessment and Strategy (LCAS). It is one of the few linkage zones in Colorado. There are three other linkage zones (Herman Gulch, Loveland Pass, and Guanella Pass) on the Clear Creek Ranger District and one other linkage zone, Fraser Valley, on the Sulphur Ranger District. Reports from Colorado Division of Wildlife (CDOW) indicate lynx use this linkage zone. This linkage zone is also used by many other forest wildlife species such as black bear, American marten, mule deer, bobcat, and red fox. Restoring forested cover across the pass would encourage more wildlife species to move across the pass. This is important for genetic interchange between wildlife populations and for recovering species to suitable, but unoccupied habitat.

A snow compaction map was created to indicate potential compromised lynx habitat since compacted snow invites competition with, and potential direct mortality from, other predators such as bobcat and coyotes. The entire Berthoud Pass assessment area is mapped as compacted as a result of concentrated human use. Therefore, lynx habitat quality within the assessment area is reduced from its potential. Reducing the extent of snow compaction may increase the quality of foraging habitat and decrease the risk of mortality.

Presences of boreal toads have been documented below the assessment area on the Clear Creek side and it is possible this species may move into the assessment area for hibernation. Sediment from the highway and parking lot may degrade downstream breeding habitat by filling ponds, decreasing water quality, and inundating egg masses with sediment.

Pika (*Ochotona princeps*) and yellow-bellied marmot (*Marmota flaviventris*) have been observed in the assessment area and soil casts from snow tunnels give evidence of pocket gophers (*Thomomys talpoides*). The Continental Divide is a main corridor for bighorn sheep (*Ovis canadensis*) and mountain goats (*Oreamnos americanus*). According to the CDOW National Diversity Information Source (NDIS) database, the entire assessment area south of the Continental Divide provides bighorn sheep summer and overall ranges. An overall range encompasses all known seasonal activity areas within the observed range of a population. Mountain goat overall range is west of Highway 40 on both sides of the Continental Divide. Their summer range is limited to area south of the Continental Divide and west of Highway 40 above timberline within and beyond the assessment area. Elk (*Cervus elaphus*) are seen using the alpine tundra for foraging during summers. The entire assessment area and beyond is summer and overall ranges for elk and mule deer (*Odocoileus hemionus*). Moose overall range is north of the Continental Divide within and beyond the assessment area. The assessment area north and south of the Continental Divide is also overall range for black bear (*Ursus americanus*) and mountain lion (*Felis concolor*). The area may also be used by red fox (*Vulpes vulpes*) and coyote (*Canis latrans*).

Bird species within the assessment area include white-crowned sparrow (*Zonotrichia leucocephalus*), and Townsend's solitaire (*Myadestes townsendi*), which use the krummholz habitat. American pipets (*Antus rubescens*) may utilize ridgetop and slopes for courtship from May to July. White-tailed ptarmigans (*Lagopus leucurus*), a Forest Service sensitive species, may utilize willow areas at or above timberline. The area west of Highway 40 on the south side of the Divide is an overall range for ptarmigans. Ptarmigan scat had been found near Stanley Mountain, which is less than a mile west of

Berthoud Pass assessment area. A small section of assessment area near Colorado Mines Peak is also within the overall range for ptarmigan.

The assessment area has adequate habitat to support the following federally listed and Forest Service sensitive wildlife species that may reside in the area: boreal toad, northern leopard frog, white-tailed ptarmigan, American marten, pygmy shrew, North American wolverine, Canada lynx, boreal owl, northern goshawk, northern harrier, olive-sided flycatcher, and American three-toed woodpecker. CNHP map shows that *Polixenes arctic (Oeneis polixenes)*, a CNHP species of concern insect, was found just south of the Berthoud Pass parking lot.

Water and Fisheries Resources – Aquatic habitats within the assessment area include fens, streams, ponds, and alpine lakes. Perennial streams within the assessment area include the Fraser River, Hoop Creek and Current Creek. These streams originate in high elevations and are characterized by steep gradients and coarse bed material.

The Hoop Creek Ditch (also known as the Berthoud Pass Ditch), owned by the City of Northglenn, diverts water from the Fraser River watershed. Water transported into the ditch empties into Hoop Creek past Berthoud Pass. Continued use of the ditch, including motorized access along the ditch for maintenance, is anticipated for the foreseeable future.

Historically, the highway has been the primary source of sedimentation in the area. Sediment has been contributed from both eroding cut and fill slopes and from road sanding. Sand loading is evident in stream channels on both sides of the divide. The Colorado Department of Transportation has been working on both sides of the pass to reduce erosion from highway embankments and to trap road sand before it reaches the streams. Even if efforts to reduce sediment sources are successful, large amounts of material have eroded in the past and have moved downslope from the road. This material will continue to travel downslope and some of it will eventually be delivered to Hoop Creek and the Fraser River. Other bare and compacted areas within the assessment area, such as the parking lot at the top of the pass also contribute to erosion and sedimentation, but their effects are minor when compared to the highway.

As previously noted, Hoop Creek is the receiving stream for water transported from the headwaters of the Fraser River through the Berthoud Pass Ditch. Augmented flow in Hoop Creek has caused the stream to enlarge and incise. The incision is most dramatic just below the top of the pass, where the stream has down cut 10-15 feet. Reaches of incision and deposition are evident downstream to the confluence with West Fork Clear Creek. The Forest has been working with the city of Northglenn to plan stabilization of Hoop Creek. It is anticipated that stabilization work will begin in the summer of 2004.

There are no known populations of fish within the assessment area because the high gradient streams do not provide suitable habitat. Fish are present downstream from the assessment area, in both the West Fork of Clear Creek and the Fraser River. Recent sampling efforts by the CDOW found the West Fork of Clear Creek contained primarily brook trout, with fewer numbers of brown trout and possibly some rainbow/cutthroat hybrids (CDOW 2000). However, during a sampling effort in 1994, limited numbers (five fish) of the greenback cutthroat were captured in the West Fork of Clear Creek just above the confluence with Woods Creek (CDOW 1994). Greenbacks are listed as threatened species under the Endangered Species Act. It is unknown whether the fish captured were genetically pure greenback cutthroat trout or hybridized fish. The Fraser River contains limited numbers of Colorado River cutthroat trout, a Forest Service sensitive species. Brook, rainbow, and brown trout are

also present in the Fraser River, which have been designated as management indicator species for the forest (CDOW 2000). In order to facilitate the survival of downstream fish populations, as well as allow for their possible expansion upstream, current sedimentation problems need to be addressed. The amount of sediment entering the headwater areas from winter road maintenance (salt/sand) needs to be reduced. If the sedimentation levels are reduced, there may be some additional fisheries habitat available for colonization that is currently fishless. However, the headwater streams located within the assessment area are likely to remain fishless because of the high stream gradients.

Cultural History

Prehistoric Human Use – Human occupation of north-central Colorado started nearly 13,000 years ago. The earliest evidence of human activity in this area comes from the Paleoindian period, which lasted from approximately 13,000 to 8,000 years ago. A number of Archaic sites (8,000 to 1500 years ago) have been reported within the assessment area, suggesting that during this period of climatic change of high temperatures and drought, human occupation of the forest shifted from lower to higher elevations where drought conditions were less severe. During the Late Prehistoric period, the Ute occupied the Arapaho National Forest for at least 300 to 400 years. The Arapaho, Shoshone, Cheyenne, and possibly Kiowa utilized the mountains of this area to a lesser extent until the 1700s. After 1810, the Ute and Arapaho competed over hunting territory. In 1880 the White River and Uncomphagre bands of Utes were forcibly removed from their traditional lands and relocated to the Uintah/Ouray Reservation in Utah.

Evidence of prehistoric human use of the Berthoud Pass area is found in lithic scatters (the remains of stone tool production and use), campsites, hunting sites, and food preparation and storage locations. Excavations at the Berthoud-Bridger site indicate that Native American use of the area was common in both the Archaic and Late Prehistoric periods.

Historic Human Use – In the mountains of north-central Colorado, the historic period begins in the early to mid-1800s, when Euro-American explorers first began to venture into the area. Most of the earliest Euro-Americans in the area were explorers and trappers, and left little trace of their visits. The most visible historic activities in the Berthoud Pass assessment area relate to the transportation, early mining and early developed recreation.

Native American Historic Period – Information from various sources indicates that areas of the Arapaho and Roosevelt National Forests were occupied or visited by several historic tribes including the Ute, Arapaho, Cheyenne, Shoshone, Lakota, and Crow. The latter two groups apparently visited the area less frequently, and then only in the company of the Arapaho and Cheyenne (Jackson and Spence 1970).

The majority of central and western Colorado was considered to be traditional Ute territory. While other tribes came and went during the historic period, the Utes remained until they were forcibly removed to Utah in 1880.

The tribes who occupied this area in the historic contact period were hunter and gatherers. All of the tribes had access to the horse and lived a nomadic lifestyle following the large herds of bison on seasonal migration patterns. The cultural resource sites that remain resulted from this land utilization pattern and consist of campsites located near water, lithic scatters, stone circles and stone alignments. Some campsites have evidence of teepees, while others are classified as camps because they contain only the remains of fire hearths. The vast majority of sites consist of lithic scatters. Other sites are less

obvious and include sites with sacred values like vision quest sites, or sites where natural resources were collected such as quarries and peeled pine trees.

Mining – The discovery of gold at the confluence of the South Platte River and Cherry Creek during the spring and summer of 1858 brought large numbers of immigrants to Colorado. Eventually prospectors located mineral deposits of various types and sizes throughout what is now the Arapaho and Roosevelt National Forests. Sites associated with mining include roads, mines, prospecting pits, adits, mills, and mining camps. Many of these site types have been located within the Berthoud Pass assessment area.

Roads and Transportation - The first trappers and explorers established trails, some of which followed previously established Native American routes. In 1861, Captain E.L. Berthoud in the company of Jim Bridger discovered the pass while looking for a mail route from the gold camps. An improved wagon road over Berthoud Pass was completed in 1874. Scheduled stage runs and improved access encouraged settlers and visitors to enter Middle Park in the 1870s and 1880s. Construction and reconstruction continued on the old wagon road until 1921 when the stone bridge was constructed. This newly improved wagon road allowed for easier fording of Hoop Creek. On July 4, 1938, a celebration marked the paving of U.S. 40 over Berthoud Pass.

Cultural resource sites associated with roads and transportation include segments of the historic wagon road, the improved “1921 Model T” road with the stone bridge at Hoop Creek, and the remains of structures that served as stage stops.

Ski Area History – The Berthoud Pass Ski Area opened February 7, 1937. There is disagreement as to whether Berthoud Pass was the first or second ski resort to open in Colorado. It was the first resort with a lift (tow rope powered by a Ford V-8 engine) at a base elevation of 11,314 feet, the highest in Colorado. Berthoud Pass was operated by The Winter Sports Council associated with the city of Denver. The original Inn at the Pass (circa 1920’s) burned down in 1939. This Lodge was replaced with three smaller buildings the same year. Fire destroyed another building in 1940.

In 1945 Sam Huntington, the Grants, the Shaforths and the Tolls bought the ski area facilities. Berthoud Pass installed the first double chairlift in North America in 1947. A new lodge opened in December of 1949.

Irma Hill purchased the ski area in 1973, and subsequently sold it to Clarence Garst in 1977. Use for the 1980-1981 winter sports season was 19,574 skiers. Peter Crowley bought the area in 1987 and renamed it Timberline Ski Area. Major renovation was done to the lodge and shuttles were run on both sides of the pass on Highway 40 to ferry skiers back to the lifts at the summit. A lift accident closed the double chairlift in 1988. The same year Timberline filed for Chapter 11 bankruptcy protection and the ski area closed.

Gary Schulz, maker of Borvig lifts, bought the resort for \$350,000 in 1988. On March 21, 1989 a special use permit was issued to the Berthoud Pass Ski Corporation, Gary Schulz President. On December 1, 1989 a winter operating Plan is approved for the 1989-1990 season. The resort filed Chapter 11 bankruptcy and closed again in 1991. A bankruptcy-court judge allows creditors owning the lifts at Berthoud Pass to secure permits to dismantle and repossess them. Jim Pearsall and Paul Weibal (Berthoud Pass Recreation Corporation) purchased the ski area from bankruptcy court for an undisclosed price. In March of 1995, a Forest Plan revision document was prepared to remove

Berthoud Pass from Ski Area designation but it was never adopted. Berthoud Pass Ski Area did not operate from 1992-1997.

On December 18, 1997 a special use permit was issued to operate the ski area, and it reopened January 29, 1998. On April 23, 1999 Silver Creek Holding CO., owners of Silver Creek Ski Resort, were issued a special use permit to operate the ski area. Silver Creek Holding Co. hoped that the terrain at Berthoud Pass would attract expert skiers seeking powder, a customer base that the Silver Creek Ski Area lacked. On September 17, 2001 the corporate name of Silver Creek Holding Co. was changed to SolVista, Inc. In December 2001, SolVista requested non-use for the season. Berthoud Pass did not operate as a ski area in 2001 or 2002. The Ski Area Term Special Use Permit for the Berthoud Pass Ski Area expired October 22, 2003. SolVista, Inc. removed the lift towers in April/May of 2003. Currently, SolVista is addressing a removal plan for the lodge and other improvements associated with the ski area.

Social Environment

Native American Use And Treaty Rights – Berthoud Pass is a natural pass that has allowed Native Americans to travel from the plains into Middle Park and North Park. The top of the pass likely has spiritual value to various tribes and is a location where religious events may have taken place.

The United States Government has signed several treaties with the tribes that inhabited Colorado from the plains to the Continental Divide. Various treaties acknowledged that the Berthoud Pass area was part of the territory of several tribes. Subsequent treaties relinquished Native American claims to the land.

Partnerships - Current management of the area has had important contributions from several key partners over the past years. They include:

- Continental Divide Trail Alliance who have provided resources to help with maintenance and construction of the CDNST, and contributions for signs, etc.
- Clear Creek and Grand Counties have been of assistance in the overall management issues including assistance with roads and visitation management.
- Colorado Department of Transportation is responsible for plowing the pass and posting signage warning of avalanche control hazards. CDOT also has partially plowed the parking area providing visitors access to portable toilets and parking in times when the area has not had an operator.
- Friends of Berthoud Pass provide a valuable resource to day-to-day management with visitors, including on-site assistance, and resource management through their partnerships with the various ski operators.
- Colorado State Historical Society has provide historical information and markers for public interpretation.
- Berthoud Pass Volunteer Ski Patrol who have worked in conjunction with the ski area operators to provide first aid, search and rescue, and education.

Partnership for Access to the Woods has plans to make contributions to Berthoud Pass area and are also expected to be key future players in the final management design of the area.

The Forest Service also entered into a memorandum of understanding (MOU) for the Berthoud Pass Research Corridor for Universal Design on April 17, 2000 with the following partners: PAW, the Town of Empire, the Easter Seals of Colorado, Berthoud pass Ski area/SolVista, CDOT, Clear Creek County, the Colorado School of Mines, Henderson Mines, the National Sports Center for the Disabled, and Sanborn LTD.

Recreation – Recreation use in the Berthoud Pass assessment area has changed in the previous two years, especially within the ski area boundary. This is due primarily to changes in the Berthoud Pass Ski Area operations and finally to a complete cessation of operations. Developed resort skiing opportunities are no longer available. The portions of the assessment area outside the ski area boundaries that were primarily used for backcountry recreation have not seen substantial change in use patterns or opportunities, although some changes in access have occurred. Recreational use from late spring to fall has remained stable.

Winter Use – Ski Area – The termination in 2003 of the permit issued to SolVista for the operation of the Berthoud Pass Ski Area has led to major changes in recreational opportunities and use patterns within the ski area boundaries. Although some of the facilities have been removed, e.g. the chair lifts, some facilities remain. Still on site is the Berthoud Pass Lodge and associated structures. The lodge is closed to the public and not occupied. Under the terms of the permit, SolVista is obligated and has committed to removing all permitted improvements and to restoring the site to natural conditions. The Forest Service has put SolVista on notice that, barring any unforeseen circumstances, the lodge removal and all other permit obligations will be satisfied in 2004.

When the ski area was operational and the area was under management by SolVista, access and use by the public was monitored and regulated by on-site ski area personnel. There was a high level of control of activities of visitors as is typical at a downhill ski area. The permit holder addressed safety, security, and sanitation needs. The type of use and access to the facilities were strictly controlled.

Currently, there is a lack of management in this area, which was once provided by the ski area operator. There are virtually no restrictions on access to and use of the area. Although locked, the lodge has no on-site security. Visitors have been seen on the roof of the lodge, presumably using it as a platform for recreational jumping or sliding. The area is used as an access point for backcountry snowshoeing and cross-country skiing. These users park their vehicles in the parking lot that is regularly plowed by CDOT. This plowing is being done not for the convenience of recreationists, but to safeguard motorists by getting parked cars off the side of the highway. Without plowing the parking lot, recreationists would park along the highway, creating a hazard.

The slopes adjacent to the lodge are being used almost daily for sledding and tubing. On weekends, it appears the majority of users are engaged in some kind of sledding activity. As many as fifty or more cars have been observed (letter from Friends of Berthoud Pass dated 1/30/04) in the parking lot on weekends. The slopes where most of the sledding is occurring are not designed, managed, or maintained for that type of activity. There are no signs or advertisements promoting the area for sledding, yet it occurs regularly and in high numbers.

The Clear Creek Ranger District provides portable toilets at the parking lot. This is a new program for the District because the ski area operator, as required under the permit, previously provided those services. With the termination of the permit the District Ranger decided to provide minimal services to

protect the environment. This service is a financial burden for the Ranger District and only meets minimum standards for basic sanitation and resource protection. No other on-site services have been provided directly by the Forest Service.

Winter Use – Outside the Ski Area – The public land around Berthoud Pass and between the pass and the resort of Winter Park has been used for many years by recreationists for a variety of non-motorized backcountry activities including skiing and snowshoeing. Snowmobile use is prohibited in these areas. The attraction is due to outstanding terrain, good snow conditions conducive to these types of activities, and relative ease of access along U.S. Highway 40. The area is within an hour's drive of a major metropolitan area and so receives a high level of visitation. Many residents of Grand and Clear Creek Counties have taken up back-country recreation as a way to supplement or replace more traditional developed recreation that has become expensive, crowded, or otherwise undesirable. Improved recreational equipment and clothing has enabled more people to successfully handle the challenges of backcountry travel and to better tolerate adverse conditions. Avalanche beacons, cell phones, and other electronic devices aid in reducing the perceived risk of back-county travel. County search and rescue organizations respond to emergencies whenever they occur.

The condition of backcountry recreation in the Berthoud Pass area has remained more or less the same in recent years even in light of the technological advancements described above. Access to the backcountry has changed somewhat since the cessation of downhill skiing at the Berthoud Pass. The backcountry must now be accessed directly from the pass without benefit of a chair lift, but also without having to contend with downhill skiers. Back-country recreationists will continue to need a place to park and will occasionally seek a restroom or trash can, but these services are less important as these outdoor enthusiasts spend little time near the parking lot.

Summer Use – As with winter, the summer recreational conditions have changed with the termination of the permit, although probably not to the extent of the winter changes. Previous permit holders have offered various services to the public ranging from food, retail, lodging, and chair lift rides. Some of these services were not always available or consistent, but the permit holder provided some basic management and presence to the public for most of the year. At a minimum, motorists were usually able to stop and avail themselves of restroom facilities, trash receptacles, and conveniences such as snacks, beverages, and a few retail items sold in the lodge. Currently none of these services are available.

In addition to a convenience stop for motorists heading for another destination, Berthoud Pass is itself a destination for many visitors. There are few opportunities close to the Denver metropolitan area for people to easily access alpine meadows. Rocky Mountain National Park and Mount Evans are notable exceptions, but a fee must be paid to access these areas. Berthoud Pass is easy to get to and has ample free parking. The Continental Divide National Scenic Trail is also an attraction for visitors.

Berthoud Pass is and has been a major access site to the CDNST. However, currently there is interpretation or information provided regarding the trail at this access point.

Scenery – The Forest Service Scenery Management System (SMS) ranks this landscape as 'distinctive'. "Distinctive" is an SMS term that refers to "Areas where landform, vegetation patterns, water characteristics, and cultural features combine to provide unusual, unique, or outstanding scenic quality. These landscapes have the strong positive attributes of variety, unity, vividness, mystery, intactness, order, harmony, uniqueness, pattern, and balance" (USDA Forest Service, 1995).

Under the SMS inventory system Scenic Classes are used as a measure of the value of scenery in the national forest. The Berthoud Pass area rates as a Scenic Class 1 due to its 'distinctive' landscape, high viewer concern and high visibility. Scenic Class 1 landscapes are landscapes of high public value.

Landscape elements viewed in the Berthoud Pass area are typical for Rocky Mountain landscape, which includes dramatic mountain vistas with areas of dense forest, rock scree slopes with grassy moraines in higher elevations, and rocky spires and sheer faces in many locations. Close range, detailed natural landscape elements include waterfalls, snowfields, rock moraines, groups of conifers, krummholtz, wildflower displays, etc.

Over the last century, motorized and non-motorized travel corridors over Berthoud Pass have gained regional and national importance. The proximity of Highway 40, the CDNST, and thousands of travelers, makes this area highly "viewed" with extraordinary opportunities for scenic and interpretive viewpoints.

Despite its high public value, the current scenic condition of the Berthoud Pass area is substantially degraded as a result of past developments including the road, ski area, and electronic site development, which are all visible from Berthoud Pass, Highway 40 and locations along the CDNST. Existing scenic integrity of the immediate vicinity of the Pass is rated as very low, with an overall rating of the entire assessment area of low to moderate. The SMS defines very low scenic integrity as, "landscapes where the valued landscape character 'appears heavily altered.'" Opportunities exist to restore degraded scenery in the Berthoud Pass area. Restoration should focus on removal of obsolete ski area structures and unneeded utilities, soil and vegetation restoration, and improved site planning and facility design for recreation parking, visitor services and access.

Land Uses – There is limited history of minerals exploration in the assessment area and there are no patented or unpatented mining claims. There are a number of non-recreation special uses in the assessment area. These uses are under current authorizations and are critical to the infrastructure needs of the transcontinental divide. The authorized uses include Highway 40, Hoop Creek Ditch, Mines Peak Electronic Site, and Continental Divide Historic Marker. Other existing land uses that occur at Berthoud Pass include the Natural Resources Conservation Service, National Water and Climate Center (SNOTEL) and the Colorado Avalanche Information Center (CAIC).

Highway 40 – The route over Berthoud Pass was first paved in 1938 to bring commerce and tourists to the west side of the pass. It is managed by the Colorado Department of Transportation, which holds an easement for Highway 40. The easement extends 200 feet from the centerline of the highway. This highway serves as the major motorized transportation corridor between the east slope and the communities of Winter Park, Granby, Grand Lake and others. A 1995 survey determined the average daily traffic (ADT) was 5,060 vehicles per day. It was estimated to rise to 6,005 by 2002, and up to 8,165 by 2020. CDOT completed an environmental assessment in 1997 for reconstruction of the highway from Berthoud Falls to Berthoud Pass. The purposes of the reconstruction are to improve safety, mobility and environmental conditions. The reconstruction project was broken into 4 phases. Phases I and II are complete. Phase III will begin the summer of 2004, and will take approximately 2 years to complete. Phase IV does not yet have funding or a start date. Phase IV is the portion of the reconstruction project that will take place in the Berthoud Pass assessment area. The expected reconstruction consists of highway widening (to 3 lanes, 2 uphill, 1 downhill), addition of snow storage/bike lane, addition of sediment ponds, and addition of retaining walls. From the plans, it appears the highway will shift to the west as a result of the reconstruction. The construction of a transportation route over Berthoud Pass changed the condition of the area by bisecting the habitat and

by bringing people into the area. It opened up the area for recreation, water development, travel and other human uses. Without the existence of the highway, this area would have little human influence.

Hoop Creek Ditch – The City of Northglenn owns and operates (along with the City of Golden) the Hoop Creek Ditch and the associated water conveyance system. The system starts with the Hoop Creek Ditch, which is located on the west side of the divide and is denoted on maps as the ‘Berthoud Pass Ditch or Aquaduct. The ditch was constructed in the early 1900’s and pre-dates the reservation of the National Forest. Because of its status the U.S. Forest Service has limited authority to manage and regulate this use. The ditch collects water from the west slope through an open ditch and carries it to the Berthoud Pass parking lot. Typical flow rates vary from 5-30 cubic feet per second (cfs). At the parking lot the water is conveyed underground through a pipe that daylight on the east side of the divide. The east side portion of the system has no improvements. The water is discharged into the natural stream channel of Hoop Creek. The addition of 5-30 cfs into this system over the past 100 years has severely degraded the condition of Hoop Creek.

Occasionally the ditch portion of the system has failed, which has led to erosion and slumping on the west side. It is imperative the ditch be maintained to prevent these occurrences. The pipeline portion of the ditch was partially replaced in 2000 because of a collapse in the system. The City of Northglenn has requested that the remainder of the pipeline be replaced in 2004. The City has also agreed to install stabilization structures in Hoop Creek to decrease the erosion of the stream bank and to attempt to revegetate areas of disturbance. This should improve the condition of the adjoining lands. The proposed start of the stabilization project is the summer of 2004, continuing into the summer of 2005. Due to the limited authority the Forest Service has over the use and operation of the Hoop Creek Ditch, it can be assumed this use will continue.

Mines Peak Electronic Site – The Mines Peak Electronic site is a designated electronic site in the Forest Plan. The site has been used for transcontinental communication since 1959. The site currently has 6 buildings that accommodate 1-3 users per building. The most prominent building at the site is the AT&T building that was built in the 1970’s. This building is the most visually obtrusive building at the site, and is used exclusively by Qwest. The other buildings at the site are smaller profile, pre-fabricated or cinder block buildings. Each building has a tower or multiple towers depending on the number of tenants in the facility. The site plan for the area directs the Forest Service to require multiple use facilities, and to maximize use of the site (before designating other alternative sites). Access to the site is via the Mines Peak road, which starts at the far east side of the Berthoud Pass parking lot. The access road is gated and locked in the summer, and left open in the winter (to accommodate access by lessees via snowmobile or snowcat). The Forest Service maintains the road. The Forest Service has communication equipment on Mines Peak, and is a co-locater in the Tri-State building and tower. This is a major communication site for the Forest Service. Power to the site is via overhead power lines that are supplied by Xcel Energy.

The existing users of the site have leases that extend through the year 2032. It is anticipated the need for use of the site will continue into the foreseeable future. The biggest impact of this use on the Berthoud Pass assessment area is the visual impact of the road, the buildings and the towers. Prior to the construction of communication facilities on Mines Peak, the area had a natural appearance with no man-made improvements.

SNOTEL – The Natural Resources Conservation Service, National Water and Climate Center, operates an automated network of sensors across the Western United States to collect snowpack and related climatic data called SNOTEL for SNOpack TELemetry. SNOTEL uses meteor burst communications

technology to collect and communicate data in near-real-time. The Berthoud Summit SNOTEL site has historical data starting in October 1978. The site consists of a small shed to house equipment, an approximately 20 foot tall antennae tower, a set of pressure sensing snow pillows, and assorted weather gauges. The site began as a part of the snow course data network in 1950. Snow courses are specific locations where snowpack is measured manually at regular intervals. In 1976, the site was used as one of the first sites to relay some snowpack information via radio. Then, in 1978, the site became part of the SNOTEL network. The data from these sites are used primarily to forecast water supply, however, the data offers important opportunities to researchers, water managers, and emergency managers.

Colorado Avalanche Information Center (CAIC) – The CAIC is a program of the Colorado Geological Survey, under the directorship of the State Geologist. It began as the Colorado Avalanche Warning Center, a program of the US Forest Service in 1973. In 1983 the program moved to the Colorado Department of Natural Resources, and in 1987 the CAIC was placed into the administration of the Colorado Geological Survey. The CAIC promotes safety by reducing the impact of avalanches on recreation, industry, and transportation in the State through a program of forecasting and education. The CAIC maintains weather equipment on an old Forest Service weather tower at Berthoud Pass on the mountain west of Highway 40. Weather equipment has been in use at this site since the beginning of the program in the early 1970's. This equipment sends data via radio to equipment housed in a small Forest Service building located near the lodge. From there, the data is sent through a phone line connection to the CAIC. The CAIC uses this data to provide avalanche forecasts to the Colorado Department of Transportation for avalanche control and to the public for safety through hotlines, email, and their website.

Continental Divide Historic Marker – The Colorado State Historical Society has a granite monument and bronze plaque located at Berthoud Pass. This marker has been in place since 1929 and is currently under a special use permit with a term expiring 2007. This marker is a popular photo opportunity for travelers over the pass. Due to its historic presence, it is anticipated this marker will continue to occupy this site. It may be possible to move the marker to accommodate changes in the parking lot at the summit, however this would have to be negotiated with the permittee and the State Historic Preservation Office.

Facilities – The historic tow rope and double chair lift no longer remain, but the 1949 lodge complex still exists. The Berthoud Pass Lodge (5GA2135) was first recorded as a historic site in 1996 by the Colorado Department of Transportation. That same year, the Colorado State Historic Preservation Office determined that the lodge was not eligible for inclusion on the National Register of Historic Places.

The Forest Service performed condition surveys of the lodge and has identified the following major deficiencies:

- Defective roof needing repair and reconstruction
- Defective electrical system
- Defective septic system
- Fails to meet current fire codes
- Fails to meet accessibility requirements
- Needs improvement of the water system capacity
- Architectural/interior condition

The estimated cost of repairing the roof, interior condition, electrical, and water/wastewater systems is about \$200,000. This estimate does not include the cost of upgrades necessary to meet fire and accessibility requirements, water system capacity, or improvements to parking areas, landscaping, or signage. Annual operation and maintenance of the building is estimated to be \$90,000 – \$100,000 based on SolVista's recent experience.

Other concerns are that the lodge is too large for the anticipated future management need, is inefficient to operate, and lacks proper accessibility and architectural compatibility with the site. There is also currently a lien on the lodge by the Clear Creek County Economic Development Corporation.

Chapter IV – Recommendations & Integrated Desired Conditions

This chapter documents the interdisciplinary team’s recommendations derived from their analysis of the issues. The recommendations are not necessarily the only solution or address all the management issues and opportunities in the assessment area. The recommendations only define the starting point for future project level analyses and may not reflect the final outcome of those projects selected by management to be implemented.

When developing the future desired conditions the IDT took into consideration Forest Service policy and regulations that define the types of activities that should be provided on national forest system (NFS) lands. The proposed use must conform to the Forest Plan for the area and an environmental analysis of the proposed use must be completed. There must be a demonstrated need for the use on NFS lands that cannot be reasonable accommodated on non-NFS lands, and analysis must be performed to determine the appropriateness of the use (USDA Forest Service Manuals 2703.1 & 2703.2).

This chapter is organized with the recommended desired condition followed by a brief discussion of the rationale for the recommendation.

Integrated Desired Condition

The integrated desired conditions outlined below, define the overall recommendations for the assessment area. Subsequent sections are resource specific recommendations, which are consistent with the general desired condition.

The Berthoud Pass parking area would be a primary Colorado trailhead for the CDNST with interpretation and orientation information. The area would also serve as a year-round stopping point for travelers of Highway 40 and the CDNST with services such as restrooms and refuse collection. Food services and retail gear/supplies could also be provided to a level needed to support the identified resource based recreation activities. The site would be managed to accommodate various types of recreation and public services within constraints that ensure scenic quality and habitat effectiveness.

During the winter, the area would be a snow play area managed under a special use permit. Motorized access over snow would only occur through a special use permit and would be consistent with public needs and resource protection, especially related to lynx habitat. During spring, summer and fall, non-motorized wheeled travel would be restricted to designated trails to protect sensitive plants in the area. To enhance wildlife use of the corridor, the Forest Service would discourage permitted nighttime activities beyond the highway.

The Berthoud Pass assessment area would provide for the following recreational activities:

- Hiking and backpacking along the CDNST
- Auto-touring to view scenery
- Backcountry skiing/snowshoeing/snowboarding
- Snow play under a managed permit
- High quality interpretation and education about the pass’s history and the Continental Divide.
- Access for hunting
- Road cycling on the highway

The role and importance of future management partnerships on Berthoud Pass will be critical to the successful implementation of these desired conditions. Past partnerships will need to be enhanced and expanded and new partnerships developed in order to achieve the vision outlined in the desired conditions. Partnership opportunities should be viewed as a critical element to the long-term implementation success of the management vision for Berthoud Pass.

Wildlife and Plant Desired Conditions

Recommended Desired Conditions – The Berthoud Pass assessment area would not be a barrier to wildlife movement. Lynx could easily get across Berthoud Pass because there would be large areas of uncompacted snow to reduce access to lynx predators and competitors, there would be no managed nighttime human activity in the area, diurnal habitats would be secure, and there would be continuous forested cover across the pass. Hoop Creek underpass would provide safe passage of wildlife from the Berthoud Pass area to the Empire area. Noxious weeds in the area would be eliminated creating sustainable habitat for known rare plants.

Rationale – The entire Berthoud Pass assessment area is of high value for wildlife and is an identified lynx linkage area. The Berthoud Pass linkage zone is one of a few linkage zones in Colorado for Canada lynx, and there is an opportunity to improve the function of the linkage area. Compacted snow increases competition between lynx and other predators, and introduces the potential for direct predation on lynx. Reducing snow compaction in the assessment area could increase the quality of lynx habitat. Changing use from a developed ski area to a snow play area has the potential to greatly reduce snow compaction due to the elimination widespread and frequent snow grooming. Compaction associated with cross country skiing and sledding considerably less than with snow grooming and this reduction would benefit lynx.

Decreasing human activities within diurnal security habitats and/or eliminating nighttime uses would increase the quality of lynx habitat. The east side of the pass has potential for restoring forested cover which would improve the function of the corridor for lynx and other forest species.

There are many other animals that use Berthoud Pass as a travel corridor. Alpine species move east to west along the divide; forest species move north to south through the pass. Therefore, the integrity of the Floral Park wildlife underpass should be maintained to facilitate wildlife movement from the Empire area to Berthoud Pass.

Recreation Desired Conditions

Recommended Desired Conditions – The Berthoud Pass assessment area would be a major focus and access point to the CDNST. Ample off-highway parking would be provided, as well as a safe highway crossing (i.e. tunnel or pedestrian undercrossing). All evidence of the ski area would be gone and the area would become a managed snow play area. Human created hazards, such as gates, structures, and snow berms would be eliminated at the snow play area. Interpretation and education of the history and use of the area, and information on backcountry hazards such as avalanches would be provided. No sewage or litter would be found in the area. Bear proof sanitation would also be provided.

Motorized use would be limited to Highway 40 or authorized as permitted use in certain areas. The Mines Peak road would have permitted motorized use for access to the Mines Peak electronic site. The CDNST would no longer be located on the Mines Peak road. The remainder of the area would be non-

motorized except by permit in winter only. Permitted motorized winter use would only be to facilitate the non-motorized use of the area. On site controls would be intensive near the highway and parking area, and would be subtle elsewhere.

Rationale – The traditional use of the Berthoud Pass Ski Area (i.e., alpine skiing) has been replaced by a variety of other snow-based activities described in Chapter III. This use has already been established and it will likely continue to increase. Berthoud Pass is one of very few locations along U.S. Highway 40 where visitors can stop and readily access terrain that appears conducive to various activities. There has been a history of avalanche control in the area that no longer occurs except in association with the highway. The Forest Service is concerned this may give users a false sense of security. Other sites between Berthoud Pass and Winter Park provide access to backcountry skiing, but not sledding. Snowplay is a growing use and the greatest concern as far as risk management for the Forest Service. Areas of concentrated public use such as Berthoud Pass present a management dilemma to the Forest Service.

The negative consequences of the termination of the permit are less severe for summer use than for winter. This is probably because fewer services were traditionally provided in the summer and visitors are less dependent on services in the summer to satisfy their needs for safe and enjoyable recreation. However, there are some consequences that need to be addressed. Basic sanitation and refuse service for Berthoud Pass visitors will continue to be in demand. The recent improvements on Highway 40 by CDOT have reduced the drive time from Empire to Winter Park. Most of the incidental needs of through-motorists would be met in either of these two locations

Berthoud Pass has been identified as a “Level I” trailhead to the CDNST within Colorado (USDA Forest Service, 2004). Level I trailhead and interpretive areas are found on major mountain passes where CDNST intersects with significant highway crossings. A fully developed trailhead, which would include constructed parking, interpretive and orientation signage, bathrooms, and garbage control would be desirable. Indoor lodging for users of the CDNST can be found at Winter Park, which is about 12 miles north of the pass, and at Empire approximately the same distance to the south. There are also developed campgrounds that are located approximately 5 miles south and 4 miles north of the pass.

The traditional historic use in the area has been established as non-motorized use. Introducing motorized use within the area would create conflicts between user groups and potential safety issues. In addition, the assessment area is adjacent to the Vasquez Wilderness and the James Peak Wilderness (both non-motorized). For these reasons, motorized use of the backcountry is not desired. The use of wheeled vehicles (mountain bikes, etc) should only be allowed on designated routes for the protection of sensitive plants.

The current economic realities of the ski industry includes challenges that make it difficult or impossible for Berthoud Pass to overcome. There are several limiting factors that make viability unlikely, which are further outlined in the *Berthoud Pass Ski Area Needs Assessment* (see Appendix A).

A number of social, demographic, and economic factors have caused conditions to change at Berthoud Pass. Since I-70 was constructed it diverted a large volume of traffic away from Highway 40 and diminished the visibility of the Berthoud Pass Ski Area. We have seen how the full-service ski resort concept has surpassed the small, family-oriented day-use ski area. Better highways and better-equipped personal vehicles have enabled the recreationist to travel farther and faster to participate in

mini-vacations. There is increasing demand for more convenience, better service, and more variety in the typical ski vacation. At the same time, there is a relatively small, but devoted population looking for an alternative to the big resort experience, but still want to have fun in the snow. Berthoud Pass provides a point of access for this group to participate in some of these alternative activities.

There is a demonstrated demand for year-round outdoor recreation opportunities in an undeveloped but easily accessed location where currently no fee is charged. Berthoud Pass attracts a broad-spectrum of visitors from the motorist stopping to admire the view to the backcountry extreme skier. Exposure and risk are high, especially in winter as visitors participate in often dangerous activities. Safety, security, and sanitation are minimal but expensive, and the prospect of recovering the cost of providing these services either by the agency or by a concessionaire is slim.

Scenery Desired Conditions

Recommended Desired Conditions – The Berthoud Pass assessment area would be a natural appearing landscape of High Scenic Integrity as viewed from Highway 40 and the CDNST, with the exception of the designated Mines Peak electronic site. Obsolete facilities and utilities would be removed and disturbed soils revegetated. Scenic viewpoints, parking, sanitation, and interpretive facilities would be esthetically pleasing and properly designed to meet the needs of current and anticipated future use. Facilities would be consistent with Forest Service Built Environment Image Guidelines.

Rationale – Currently the scenic quality for the area is degraded due to powerlines and associated access roads, Mines Peak road and electronic site, and obsolete ski area structures and facilities. The optimum resource condition for this area is to achieve and maintain a scenic integrity of “high” as viewed from roads and trails. This scenic integrity level would be consistent with the inventoried scenic attractiveness distinctive. A “high” scenic integrity would also be consistent with the high inventoried concern level of visitors who travel on Highway 40 and the CDNST. The Scenery Management System defines high scenic integrity as “landscapes where the valued landscape character ‘appears’ intact. Deviations may be present but must repeat the form, line, color, texture, and pattern common to the landscape character so completely and at such scale that they are not evident” (USDA Forest Service, 1995). Careful future development and restoration of existing detracting elements is needed to restore scenic integrity. This could include restoration of road cuts, removal of unneeded ski area elements and structures, and design and installation of facilities consistent with National Forest Built Environment Image Guidelines. In addition, parking and access along Highway 40 at Berthoud Pass should be improved to be more esthetically pleasing, and to provide safe and effective scenic viewpoints.

Land Uses Desired Conditions

Recommended Desired Conditions – Use of the Mines Peak electronic site would continue, but facilities would be consolidated. The Hoop Creek Ditch would be stabilized and maintained so that it does not fail and cause resource damage. The receiving side channel would be stable. Environmental impacts from Highway 40 would be minimized through installation of sediment traps, control of noxious weeds, etc. A pedestrian under-crossing would be installed at the summit.

The future objective concerning these uses is to focus on active and proper administration of the permits and leases. The Forest Service should encourage, and require where possible, the uses to be as compatible and least impacting on the environment as possible.

- Highway 40 – With the recent completion of the Environmental Analysis for reconstruction of this highway, future use should focus on continuing to cooperate and partner with CDOT on the reconstruction and funding efforts to complete Phase IV (at the summit). With the reconstruction of this portion of the highway, new erosion control measures will be instituted, snow storage will be provided (as opposed to throwing snow and road sand over the guardrails into the forest), sediment basins will be constructed (to collect road sand so that it can be removed from the site), bike lanes will be constructed, retention walls will be built (to eliminate sloughing of material from the cut slopes, and maintain material on the fill slopes), and animal under crossings will possibly be constructed. It is also possible that a pedestrian under crossing will be constructed at the summit.
- Mines Peak Electronic Site – Future use should require users to consolidate facilities, remove obsolete facilities, and continue to use this site to its full potential. In addition, scenic assessments and effective design can minimize visual impacts of future development of the site and improve the overall scenic quality of the area.
- Hoop Creek Ditch – Encourage, and if necessary require, the City of Northglenn to maintain and reinforce the integrity of the ditch on the west side to decrease the chance of accidental failures. Access to the ditch needs to be maintained. Continue to work with the City to process their applications to replace the old pipeline under the parking lot, and to stabilize Hoop Creek. Their willingness to stabilize the creek bed is a critical step in the improvement of this watershed.
- SNOTEL –The Berthoud Summit SNOTEL site is an existing use that is expected to continue into the future.
- Colorado Avalanche Information Center (CAIC) –The CAIC maintains weather equipment on an old Forest Service weather tower at Berthoud Pass on the mountain west of Highway 40 and the Forest Service plans to continue to accommodate their transmitting equipment in the future.
- Continental Divide Historic Marker – Because of the historical context of this monument, the landmark that it interprets, and the fact that the public desires this information, it is in the public's interest to maintain this use within the Berthoud Pass Assessment area. Consider moving the marker to another location at the summit necessary to comply with long-range plans for the area.

Rationale – It is anticipated that all current permitted or leased uses will continue to occupy the site for the long term. The highway and the electronic site are critical links between the east and west slopes of the Continental Divide. To relocate these uses would be to move the impacts to another, currently undisturbed, location. This alternative is not desirable, or in the best interest of the public or the environment. It is anticipated that the amount of use of these two improvements to continue to increase over time. With the population always increasing, the need for transportation from the east to the west side of the divide will continue to exist and to grow. As communication continues to evolve and the demand continues to increase, the need for a communication site on Mines Peak will most likely remain into the foreseeable future.

The need for the water conveyance system can also be anticipated to remain. Like the highway and electronic site, it would not make sense to relocate this use to another site. Additionally, due to the fact this use pre-dates the National Forest, there is limited ability to have this use relocated. The last permitted use, the monument, has little impact on the environment and condition of the area. Whether the monument stays on site is an issue of the public's desire for the monument, rather than any environmental need.

Facilities Desired Conditions

Recommended Desired Conditions – While most physical evidence of the ski area facilities would be gone, its history would be told through interpretive signing at the pass. New facilities would be consistent with Forest Service Built Environment Image Guidelines and provide for year-round management of the area. Facilities would not have night lighting. The parking area would be redesigned to support a fully developed CDNST trailhead. Restroom facilities refuse collection, interpretation & education, and management of the CDNST and snowplay area would be provided. Depending on level of development, food services and retail gear/supplies would also be provided.

Facilities at Berthoud Pass would be managed through a partnership or commercial venture, and the partner/operator would maintain the facilities as well as provide for the recreation management needs for the area. The partnership/venture would be financially self-sustaining, and agency funds would not be needed to manage the area other than for permit administration.

The parking area would provide long and short-term parking, and would be able to accommodate large vehicle parking such as RVs. The parking area would be separated from Highway 40 through traffic and allow safe pedestrian passage to either side of the highway. Barriers would protect adjacent areas from motorized intrusions. The parking area would be redesigned to limit erosion. The parking area would also be used for emergency response vehicles as well as a helispot for Flight for Life helicopters.

Rationale - The existing lodge was designed as a support service for the developed ski area. The ski area no longer exists and it is not anticipated that it will be used as a ski area in the future. Consequently the lodge is no longer serving as a ski area support facility. The terms and conditions of the SolVista ski area permit should be fully implemented, including removal of the lodge.

The scale of the lodge is inconsistent with current prevalent use of the area, which is to access the backcountry, view scenery, and appreciate the significance of the Continental Divide. The parking area is unattractive and pedestrian unfriendly and lacks organized and properly marked traffic circulation. Small scale, efficient and properly arranged facilities and parking are needed to meet current recreation and visitor needs at this location. Any future facility development should be consistent with the guidelines for National Forest accessibility and meet the standards established in the Forest Service Built Environment Image Guide.

The current visitor and management needs for the immediate vicinity of Berthoud Pass include provision of restroom facilities, refuse collection, interpretation and education, and management of the CDNST and snowplay activities. The area is a portal for backcountry recreationists and users utilizing the CDNST, and the area has historically been a stopping point for users of Highway 40 to rest and view the natural scenery. People also stop to appreciate the Continental Divide, a significant natural feature. Interpretive signs and the Continental Divide Marker should be part of the permanent facility development of the pass.

There is a range of facility development that would be consistent with the recommended integrated desired future condition. Development at Berthoud Pass could be limited and include only the minimum of facilities such as interpretive/educational materials, viewing deck, restrooms and trash receptacles. There could be moderate development of facilities that would include the items under limited development with the addition of a warming shelter and light food services. Or there could be

a higher level of development, which would include the amenities listed for moderate development with the addition of a restaurant and/or other retail components.

The level of development will be largely determined by the method of operation of the site. The Forest Service will be exploring both public and private partnerships to maintain operations of facilities at Berthoud Pass. Economic viability is an essential component of any future partnership and will clearly influence the level of development.

Forest Plan Amendment Recommendation

Currently the Berthoud Pass assessment area is identified as a developed ski area in the Forest Plan. In order to accommodate other uses and implement the management recommendations defined in the integrated desired conditions, an amendment to the Forest Plan will be required. Therefore, the IDT has also made recommendations related to the Forest Plan amendment.

The IDT recommends amending the Forest Plan to change the management direction for the Berthoud Pass assessment area from a 'Developed Ski Area' to the following management allocations (see Appendix C - Forest Plan amendment map):

- 'Dispersed recreation non-motorized' on the west side Highway 40
- 'Scenery' management corridor parallel to Highway 40
- 'Corridors connecting core areas' on the east side of Highway 40

These changes would facilitate connecting similar management allocations surrounding the Berthoud Pass area in the Forest Plan while meeting the objectives of the desired future conditions. These management allocations would not preclude any of the recreational activities currently occurring in the Berthoud Pass area. To review a detailed description of the management area direction for 'dispersed recreation non-motorized', 'scenery' and 'corridors connecting core areas' see Appendix C.

The IDT would also like to recommend that the Forest Plan amendment include changes to the recreation opportunity spectrum (ROS). The area is currently defined as 'roaded-natural' and 'rural to roaded-natural' and the recommendation is to change these designations to 'semi-primitive motorized', and 'semi-primitive non-motorized' respectively. It is also recommended that the amendment incorporate the entire Berthoud Pass assessment area into the Berthoud Pass Geographic Area. This change was recommended because the Berthoud Pass area currently is within two different geographic areas (Berthoud Pass and Winter Park Geographical Areas). The Forest Service often uses geographic areas as analysis areas and it would facilitate future analyses if the area were viewed as a single analysis area.

Chapter V – Implementation Process

After the Berthoud Pass assessment is completed the Forest Service will move forward with conducting a Forest Plan amendment. Additional public involvement will be included as part of the environmental assessment (EA). Once the Forest Plan has been amended the Forest Service will begin a site specific EA to analyze a range of uses to move management of the Berthoud Pass area in the direction of the desired future condition.

The Forest Service will develop a proposed action that is consistent with the desired future condition and that defines a minimum level of required management (i.e. CDNST trailhead, snowplay, restrooms and refuse disposal) and includes a range of optional activities (i.e. snowcat operations, food services, associated retail services, etc.). The EA will explore the potential for non-commercial partnerships and provide a range of commercial alternatives. Each alternative will include analysis of the appropriate associated facility development. Once an alternative has been selected and a Decision Notice has been signed, the Forest Service can move forward with developing public or private partnerships to operate facilities at Berthoud Pass.

The Forest Service has also recently partnered with the CDTA on submittal of a proposal for the Great Outdoors Colorado Large Scale Grant (see Appendix C) opportunity, with the support of Colorado State Parks. CDTA is requesting funding to move towards completion of the Continental Divide Trail in Colorado, and the Forest Service requested funding to develop a visitor welcome center at Berthoud Pass.

The Forest Service has a vision for Berthoud Pass that responds, in a sustainable manner, to the strong attributes of the place, the resource based recreation uses that occur there, and the demanding environmental constraints of the high mountain pass. It includes a potential for various partnerships involving public and private entities. The Forest Service has been very successful in developing programs to support an areas attributes and opportunities in a quality manner that doesn't detract, but rather amplifies the experience of the place and the great resources it offers. (To see examples go to the Arapaho and Roosevelt National Forests and Pawnee National Grassland's website at www.fs.fed.us/r2/arnf/ and see the *Mt. Goliath Interpretive Master Plan* and the *Guanella Pass Scenic and History Byway Corridor Management Strategy*)

The following timeline outlines the next steps in the process to develop the Berthoud Pass area to serve as a major trailhead to the CDNST and portal for backcountry recreation. This timeline assumes the Forest Service is able to utilize public funds to construct the necessary facilities. If public funds are not available, the projected timeline would remain the same but partnership development would need to be accelerated.

Needs Assessment	Completed May 2004
Forest Plan Amendment	Oct 2004 – Dec 2004
Conduct Environmental Assessment	Jan 2005 – Dec 2005
Consider Public/Private Partnerships to Operate Facilities	Sept 2005 – July 2007
Site Planning & Master Interpretation Plan	June 2005 – Dec 2005

Infrastructure and Architecture/Engineering Final Design

Jan 2006 – Oct 2006

Construct Facilities/Recreation Portals

Oct 2006 – Aug 2007

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- 2000 Continental Divide National Scenic Trail, Trailhead Design Guidelines.
- 04/2004 Forest Service Manual 2700 – Special Uses Management
- 07/2002 Forest Service Manual 2300 – Recreation, Wilderness, and Related Resource Management

Appendix A - BERTHOUD PASS SKI AREA NEEDS ASSESSMENT

➤ I. PURPOSE OF NEEDS ASSESSMENT

It is Forest Service Policy to prepare a *Needs Assessment* before, or at the time of, expiration of a recreation special use permit, or in conjunction with the sale of a permitted recreation special use enterprise. The purpose of this assessment is to consider if the activities, uses, and developments should be continued, modified, expanded, or otherwise changed in order to best serve the public interest (USDA Forest Service Manual 2341.23).

The Ski Area Term Special Use Permit for the Berthoud Pass Ski Area expired October 22, 2003. In December of 2001 SolVista, Inc., holder of the permit requested non-use for the season. In October of 2001 SolVista applied for an Outfitter-Guide permit for snowcat ski tours at Berthoud Pass. A temporary special use permit was issued to Berthoud Pass Powder Guides December 7, 2001 with an expiration date of May 31, 2002. SolVista also requested non-use for Berthoud Pass Ski area for the 2002 - 2003 season and applied for another special use permit for Berthoud Powder Guides, which was issued December 6, 2002 with an expiration date of May 31, 2003. The ski lifts were removed during the spring and summer of 2003. Later this same summer, Berthoud Pass Powder Guides announced it would cease operating. Based on this situation, it is timely to prepare a *Needs Assessment* to aid in determining future agency actions with regard to this special use permit.

A key point to be considered in a *Needs Assessment* is agency policy to authorize concession developments only where there is a demonstrated public need for natural resource based recreation opportunities, and not solely for the purpose of establishing a profit-making commercial enterprise (USDA Forest Service Manual 2343.03). There are several elements of agency policy, as well as terms and conditions of the special use permit, that relate to the concept of public need. For new concession sites, the needs assessment must determine the likelihood of a sufficient return on investment (USDA Forest Service Manual 2341.21.) For existing concession sites, policy directs periodic reviews to determine if the services being provided are still necessary. Limited patronage, as evidenced by use records, low sales revenue and low fee payments, indicates a lack of need for the services provided and a justification for changing these services or terminating the permit (USDA Forest Service Manual 2343.23 10). Finally, the Ski Area Term Special Use Permit requires that enterprises under permit be continually operated in accordance with all the provision of the permit to qualify for renewal (USDA Forest Service Form FS-2700-5b, IX. A.). Based on the above, the economic viability of a concession enterprise is a key indicator of the public need for the services provided.

While the lack of economic viability is an indicator of the lack of demonstrated public need, it also results in an administrative burden to the Forest Service. This burden is manifest in the periodic, short interval needs for the agency to engage in permit actions due to the failure to perform in accordance with the provision of the permit, poor public service, or frequent sales requiring analysis of the financial and technical qualifications of prospective permittees as well as permit preparation. With an enterprise that lacks economic viability, these actions consume agency resources but do not result in sustainable recreation benefits to the public.

➤ **II. NATIONAL SKI INDUSTRY HISTORY AND TRENDS**

The ski industry in the United States may be characterized as mature. The average age of ski areas in this country is 40 years. Over the past 20 years, annual skier visits have been uneven, but essentially level, exhibiting no sustained growth and averaging about 53.4 million skier visits a year. (1)

The 2002/03-ski season recorded 57.3 million skier visits, an all time high. Most areas of the country, with the exception of the Northwest, had strong performances with the Southeast enjoying its second best recorded season, the Midwest and Northeast each recording their third best seasons, and the Rocky Mountains had its fourth best season on record. An important factor in the 2002/03-ski season was the strong performance of small and mid-sized resorts that are located near large population centers in the Northeast, Southeast and Midwest. (1)

Based on the strong performance by the ski industry over the last three years, some industry analysts suggest that the industry may have elevated its performance range to a higher level. Over this three-year period, starting with the 2000/01 ski season, skier/snowboarder visits have shown an uptick, averaging 56.4 million, a 5.6 percent increase over the long-term average. (1&2)

In the last 20 years, the number of ski areas operating in the country declined 33 percent, from 735 areas in the 1983/84 ski season to 490 areas in the 2002/03 ski season. As a result of this, the average annual skier/snowboarder visits per operating ski area has increased by 84 percent, from an average of 63.7 thousand skier/snowboarder visits per operating ski area in the 1983/84-ski season to an average of 117.5 thousand skier/snowboarder visits per operating ski area in the 2002/03 ski season. This is a result of surviving ski areas expanding their market shares to accommodate skiers and snowboarders who had previously patronized ski areas that ceased operating. (1)

The acreage developed for skiing and snowboarding has been growing by about 2.3 percent over the 1999/2003 period. The acreage within ski areas that is covered by snowmaking has increased by 4.1 percent over this same period. From survey information, total expenditures on ski area capital improvements, including new and upgraded lifts and other on-mountain facilities and support, decreased from \$198 million in 2001/02 to \$154 million in 2002/03. This trend is expected to reverse in 2003/04 with projected expenditures of about \$160 million. (1)

While only 25 percent of the ski areas operating in the U.S. are on National Forest System lands, these ski areas account for approximately 56 percent of the nation's skier/snowboarder visits. Approximately 185,000 acres of National Forest System lands are under permit to ski areas. While this represents only .09 percent of the 191 million acres in the National Forest System, the skier/snowboarder visits they accommodate represents 16 percent of the total annual recreation visits to National Forests. (3)

While total annual skier/snowboarder visits have remained essentially flat, snowboarding has shown sustained growth since the early 1990s and now represents 29.5 percent of the nation's annual skier/snowboarder visits. While snowboarding participation continues to grow, its rate of growth is decreasing, from rates as high as 20 percent annually in the 1995/96 ski season to 5.1 percent in the 2003/03 ski season. (1 & 4)

Nationally, in the 2002/03-ski season, day visitors represent about 49.7 percent of total skier/snowboarder visits, with the remaining 53.3 percent being overnight visitors. International

visitors have decreased over the past three years from 4.4 percent of national skier/snowboarder visits in 2000/01 to 3.8 percent in 2002/03. (1)

Over the past several years, there has been a trend in certain parts of the country of ski areas offering heavily discounted season passes, as compared to prices previously charged. Most often, these discounted passes are offered in larger day-skier markets. Nationally, the average number of season passes sold per ski area has increased by 59 percent since the 1999/00 ski season, with the greatest growth occurring at larger resorts. In the 2002/03 ski season, season passes accounted for 27.5 percent of skier/snowboarder visits. (1) This increasing trend in season pass sales translates into increased skier/snowboarder visits since pass holders tend to ski/snowboard more frequently than non-pass holders. Season-pass holders were expected to ski/snowboard more than twice as many days as the skier/snowboarder population as a whole - 25 days as compared to 10 days. Additionally, season pass holders expected to do 83 percent of their skiing/snowboarding at the ski area for which they held passes. (5)

As stated earlier, notwithstanding the performance of the last three years, the growth in national annual skier/snowboarder visits has been relatively stagnant for two decades while, during this same period, the U.S. population increased by 20 percent. (6) A consideration of national demographic projections and the demographic profile of the skiing public raise questions about the industry's ability to maintain historic levels of skier visits, let alone grow participation in the sport.

The median age of U.S. skiers and snowboarders increased from age 30 in the 1996/97 ski season to age 34 in the 2002/03 ski season. This aging of the skiing population is also manifested by the steady increase in the proportion of annual skier/snowboarder visits attributable to skiers aged 45 and older. Between the 1996/97 and 2002/03 ski seasons, the proportion of visits attributable to this age group increased by 7 percent. During this same period, the proportion of annual skier visits attributable to skiers under 35 years of age decreased by 8 percent. The median age of skiers was 40 in the 2002/03 ski season compared to the median age of 22 for snowboarders. (5)

Over the past several ski seasons, members of ethnic and/or racial minorities groups have been responsible for about 13 percent of annual skier/snowboard visits. Since people who are members of ethnic and/or racial minority groups comprised 32 percent of the nation's 2002 population, it is evident that they are underrepresented in the skier and snowboarder community. (5)

Over the next two decades, the nation's White non-Hispanic population is projected to remain flat and grow older. As this occurs, the traditional core market segment for skiing will decrease, with many current skiers attaining the age when they are unable, or less likely, to participate in the sport, with no corresponding increase from younger age segments. All of the population increases in the age groups currently most likely to ski will be by ethnic and/or racial minorities who have historically represented a disproportionately small proportion of the participants in the sport. (10)

Like demographic trends, the warming trend of the earth's climate does not bode well for the growth of skiing and snowboarding. Climate change is evidenced by the fact that the year 2003 was the third warmest year on record worldwide. The three warmest years on record have all been in the last 6 years and the ten warmest years on record have all occurred since 1990. (7) These warm years are a manifestation of the .07 to 1.4 degree F increase in surface temperatures over the 20th century. In the Northern Hemisphere, this increase is likely the largest of any century in the past 1,000 years, and the 1990s were likewise the warmest decade during this period. (8) This warming trend has been most pronounced in winter over land in mid to high latitudes in the northern hemisphere. Additionally,

snow cover in the northern hemisphere has been decreasing for the past 100 years. (8) The Intergovernmental Panel on Climate Change (IPCC) estimates a temperature increase of 2.5 to 10.4 degree F over the next 100 years. They predict this change will continue the trend of being stronger in the winter on the land surface in the northern hemisphere. Climate research indicates that there will be an increase in the number of winters with little snow in traditional winter tourism regions. (9) Taken together, these phenomena work to shorten ski seasons, select against the continuation of low elevation ski areas and hold down skier visits.

Finally, the percentage of the population that is overweight is growing in all age groups. This trend does not bode well for participation in skiing, a sport that demands a certain level of physical fitness. (10)

In the year 2000, the National Ski Areas Association, in recognition that these trends will act to depress future skier visits, proposed an industry-wide course of action designed to counter their effects. The basis of the industry's initiative is the fact that 85 percent of the people who try skiing drop out of the sport; in other words, only 15 percent of people who try the sport are eventually converted from beginners to core skiers. The industry proposal involves two actions: increasing number of people who try skiing, and increasing the percentage of the people who try skiing and go on to become part of their core market. (10)

Industry analysts have developed a model and a hypothetical benchmark to simulate and quantify the effects of market interventions. The benchmark incorporates the effects of the demographic projections and weather trends, and projects that absent intervention, national skier visits will decline by about 12 percent by year 2010. The model indicates that by increasing the number of people who are introduced to the sport and increasing the percent of these people who convert from beginners to core skiers, this decline is preventable. The model indicates that increasing the beginner conversion rate by 2 percent a year (to 17 percent) would maintain current skier visit levels. The model predicts that a 6 percent annual increase in people trying the sport, combined with a 1 percent increase in the beginner conversion rate, will result in sustained growth producing 59.8 million skier visits by year 2010. (10)

Ski and snowboard lessons are a key tool for ski areas to increase the beginner conversion rate. Overall, the proportion of skier/snowboarder visits that included a lesson has decreased from 10.2 percent in the 1999/2000 ski season to 9.6 percent in the 2002/03 ski season, while the proportion of lessons taken by children has remained relatively stable. (5)

An indicator of success, with regard to first time visitors and beginner conversion rates, would be an increase in the proportion of annual skier and snowboard visits from participants in the lower ability levels. However, over the past five ski seasons, the proportion of visits from first timers has decreased by 1 percent, the proportion of visits from beginners has decreased by 3 percent and the proportion of visits by intermediates has decreased by 6 percent. (1) Taken with the above data on lessons, the ski industry has not shown clear-cut progress in increasing the number of first time visitors or the beginner conversion rate.

Analysis:

While recent increases in national skier/snowboarder visits provide an indication that the ski industry may have elevated its performance range to a new higher level, underlying demographic and climatic trends are working against this. In order to grow, the industry must attract sufficient new entrants to

replace aging Baby Boomers as they inevitably begin to drop out of the sport. As the discussion above points out, the skier/snowboarder population continues to age. Ethnic minority groups are underrepresented in the sport but will represent virtually all the population increases in age groups most likely to ski/snowboard in the future. Over the past several years, there has been no increase in minority participation in the sport. Additionally, the ski industry's efforts to increase trial and conversion have yet to demonstrate success. Coupled with unfavorable effects of climate change, these underlying demographic trends do not bode well for the ski industry's ability to sustain growth.

➤ **III. COLORADO SKI INDUSTRY HISTORY AND TRENDS**

The Colorado ski industry, like the national ski industry, may be characterized as mature. The average age of ski areas in the state is 43 years, slightly older than the national average. The Sol Vista ski area, located on private land, and Cuchara Mountain Resort, located on the San Isabel National Forest, both opened in 1982 and are the last traditional ski areas to be developed in Colorado. The Silverton Outdoor Learning and Recreation Center installed a ski lift on private land near Silverton Colorado in 2001, and began offering guided skiing opportunities this same year. This firm is currently pursuing a permit from the BLM to provide lift served skiing on 1,300 acres of public lands.

Unlike the national skier market, up until four years ago, Colorado skier/snowboarder visits exhibited sustained growth. In the 1979/80 ski season the state experienced 7,887,181 skier/snowboarder visits and from that time, experienced steady growth until the 1997/98, ski season when a record of 11,979,719 skier/snowboarder visits was recorded. Until this point in time, the Colorado Ski Industry had enjoyed a 2 percent annual average growth rate during the previous two decades. In the five years following the record 1997/98 ski season, Colorado's skier/snowboarder visits were up and down, averaging 11,336,480. Colorado hosted 11,605,777 skier/snowboarder visits in the 2002/03 season. The state's share of the national skier/snowboarder market increased from 15 percent in the 1981/82, ski season to 22.1 percent in the 1997/98 ski season and has subsequently declined, registering a 20.3 percent share of the national skier/snowboarder market in the 2002/03 ski season.

Mirroring the national trend, in the last 20 years, the number of operating ski areas in Colorado has decreased by 22 percent from 32 ski areas in the 1981/82 season to 25 operating areas in the 2003/04 season. Additionally, the permits for three potential new ski areas (Adams Rib, Catamount and East Fork) were terminated by either the mutual consent of the permittees and the Forest Service or as a result of a failure to pursue development in a timely manner as required by ski area permits. In part, as a result of these phenomena, the number of acres of National Forest System lands in Colorado under permit to ski areas decreased by 5 percent from 85,130 acres in the 1990/01 season to 80,478 acres in the 2003/04 season. Absent the fact that the White River National Forest added 7,058 acres to ski area permit boundaries as a result of its 2002 Forest Plan revision, this decrease would be much more dramatic.

Colorado has a higher proportion of destination or out-of-state skiers/snowboarders than the national average. However, the percent of Colorado skier/snowboarder visits attributable to out-of-state or destination visitors, has been declining. In the 1993/94 season, 65 percent of the state's visits were attributed to out-of-state skiers/snowboarders. By the 2000/01 season out-of-state visitors had decreased to 60 percent of Colorado's skier/snowboarder visits.

Consistent with the trends of decreasing overnight and international visits, Colorado has experienced a steady decline in these types of visits over the past six years. Since the 1996/97 season, destination

and international visits to Colorado have declined by 1.23 million. At the same time, visits to Colorado ski areas from the state's Front Range population centers (Denver, Colorado Springs, etc.), increased by about 1 million. Additionally, Front Range skiers/snowboarders also increased their overnight visits to Colorado ski areas by 47.7 percent from the 1997/98-season. (11)

As mentioned earlier, on a national basis, members of ethnic and/or racial minority groups represent a disproportionately small proportion of skiing and snowboarding participants. These groups make up about 32 percent of the nation's population but account for only about 13 percent of skiing/snowboarding participants. This under-representation is more pronounced in the Rocky Mountain Region, including Colorado, with minority groups accounting for only 10 percent of participants in the sports. (5)

It appears that much of the increase in Front Range skier/snowboarder visits are attributable to inexpensive season passes offered by ski areas located along the I-70 corridor near the Denver metro area. These passes were priced about \$200 when first offered in the 1998/99-season. In that season, visitation from the Front Range increased 45 percent. Last season, 2002/03, Front Range visits increased to 3.1 million, a 172 percent increase in five years. An indicator that inexpensive season passes are responsible for this growth in visits is the fact that sales of discount passes by Vail Resorts, operators of the Beaver Creek, Breckenridge, Keystone and Vail ski areas, increased from \$8 million in 1998 to \$36 million in 2002. (12)

Analysis:

Several of the trends discussed earlier have a direct bearing on the future growth potential of the Colorado ski industry. As discussed earlier, national demographic trends, the demographic profile of the skier/snowboarder market, and climate change are projected to depress future national skier visits absent successful market interventions. To date the ski industry's attempts to implement these interventions have not shown progress. The industry has also not been successful in increasing the participation of ethnic and racial minority groups in the sports. Colorado lags behind the nation in minority participants in skiing/snowboarding. Colorado has been losing national market share in recent years. This has been most pronounced in the decline in the number of out-of-state and international visitors to the state's ski areas. The Colorado industry has been able to maintain roughly level skier visits in recent years by attracting more in-state skiers. Most of these additional in-state skier visits have been experienced at Front Range Destination ski areas that have offered heavily discounted season passes.

As a result of the trends discussed above, most Colorado ski areas have seen an erosion of revenue/skier visit and have taken actions to reduce expenses and trim operating cost. Several of these ski areas are experiencing severe problems. Crested Butte has experienced a continual decrease in skier visits over the past four years resulting in a 38% decrease in skier volume since the 1997/98 ski season. The City and County of Denver recently entered into a long-term agreement with Intrawest to operate Winter Park in response in an attempt to remain competitive in response to the changing market place for skiing.

On the positive side, in terms of potential increases in skier/snowboarder visits, Colorado is the third fastest growing state in the nation. The state's population is projected to increase by 800,000 over the next ten years. Colorado's participation rate for skiing/snowboarding is 1.07 skier/snowboarder visits per state resident. Given these facts, it is reasonable to forecast that the projected 800,000 population increase will translate into 855,814 additional skier/snowboarder visits.

Given the Colorado Ski Industry's past performance and resources, it is reasonable to assume that these ski areas will be able to implement measures to at least maintain current numbers of out-of-state skiers/snowboarders. Given these assumptions, it is reasonable to project that all of the growth in Colorado's skier/snowboarding visits will result for the state's projected population growth.

➤ **IV. BERTHOUD PASS SKI AREA HISTORY AND TRENDS**

The Berthoud Pass Ski Area opened February 7, 1937. There is disagreement if Berthoud Pass was the first or second ski resort to open in Colorado. It was the first resort with a lift (tow rope powered by a Ford V-8 engine) at a base elevation of 11,314 feet, the highest in Colorado. The Winter Sports Council associated with the city of Denver operated Berthoud Pass. The original Inn at the pass (circa 1920's) burned down in 1939. This Lodge was replaced with three smaller buildings the same year. Fire destroyed another building in 1940.

In 1945 Sam Huntington, Grants, Shaforths and Tolls bought the ski area facilities. Berthoud Pass installed the first double chairlift in North America in 1947. The existing lodge opened in December of 1949.

Skier visits averaged in the 30,000 plus range during the mid-1940's through the mid-1950's. In the early 1960's the ski area catered to summer tourists. Summer visitation averaged about 230,000 during this time. Skier visits totaled 9,500 for the 1963/64 ski season. The 1969/70 season recorded 12,200 skier visits. In 1972, the Forest Service conducted a viability analysis of Berthoud Pass and concluded that this area's viability was questionable. Irma Hill purchased the ski area in 1973 and sold it to Clarence Garst in 1977. During this period, Berthoud Pass averaged about 14,000 annual skier visits.

The ski area continued to host an average of 14,000 skiers visits until Peter Crowley purchased Berthoud Pass in 1987 and renamed it Timberline Ski Area. Major renovations were done to the lodge and shuttles were run on both sides of the pass on Highway 40 to ferry skiers back to the lifts at the summit. The Forest Service and the Colorado State Tramway Board had operational concerns regarding the ski areas ability to maintain and operate the ski lifts. The Forest Service also had concerns about ski patrol and avalanche control operations. A serious lift accident closed the double chairlift, Timberline filed for Chapter 11 bankruptcy protection, and the ski area closed in 1988. In its two years of operation, Timberline averaged only 5,300 skier visits.

The ski area did not operate in the 1988/89 ski season. Subsequently, Gary Schulz, owner of Borvig, an east coast ski lift manufacturer, purchased the ski area for \$350,000. On March 21, 1989 a special use permit was issued to Berthoud Pass Ski Corporation (BPSC), Gary Schulz President. Mr. Schulz installed new Borvig lifts at the area, in part, to showcase these lifts in the western states. On December 1, 1989 a winter operating Plan is approved for the upcoming ski season. After averaging about 28,400 skier visits in two operating seasons, BPSC filed for Chapter 11 bankruptcy protection, closing in 1991. The Bankruptcy court judge allowed creditors to remove some ski area property.

In 1993, James Pearsall, representing Berthoud Pass Recreation Corporation (BPRC), contacted the Arapaho and Roosevelt National Forest with a proposal to reopen the ski area at Berthoud Pass. At that time, this National Forest was in the process of revising its Forest Plan and was considering if the Berthoud Pass area was still a suitable a ski area location. Because the question of suitability had not

been made, and because Mr. Pearsall could not demonstrate ownership or effective dominion of the ski area improvements, the Forest Supervisor did not consider Mr. Pearsall's proposal.

In 1995, a draft of the Forest Plan revision, determined that this area was no longer a suitable location for a ski area and proposed removing the ski area management area designation from the Berthoud Pass area.

In October of 1996, the Forest Supervisor agreed to consider Mr. Pearsall's proposal because of unforeseen delays in completing the Forest Plan revision and because Mr. Pearsall was able to demonstrate effective dominion of the ski area improvements. On December 18, 1997 a special use permit was issued to BPRC and Berthoud Pass Ski Area was re-opened on January 29, 1998. That season, Berthoud Pass recorded 10,735 skier/snowboarder visits.

In 1999, Silver Creek Holding, CO. purchased Berthoud Pass and was issued a special use permit to operate the ski area. In September of 2001, the corporate name of Silver Creek Holding CO. was changed to SolVista, Inc. Averaging about 19,000 skier/snowboarder visits in its two years of operation, SolVista experienced significant operating losses. Following the 2000/01 ski season, SolVista announced that it was unable to compete with the discounted pricing offered by other ski areas serving the Front Range and would cease operating as a lift served ski area. The following season, SolVista introduced Berthoud Powder Guides to offer snowcat ski tours as an ancillary operation under the ski area permit, keeping the ski area closed. The lodge was used for office space and client reception for Berthoud Pass Powder Guides. In August of 2003, SolVista announced that they would cease operating Berthoud Pass Powder Guides. The Ski Area Term Special Use Permit for the Berthoud Pass Ski Area expired October 22, 2003.

SolVista, Inc. removed the lift towers in the spring of 2003. Currently SolVista is preparing a removal plan for the lodge and other improvements associated with the ski area.

➤ **V. BERTHOUD PASS SKI AREA'S COMPETITIVE POSITION IN THE COLORADO FRONT RANGE SKI MARKET**

Over its 55-year history Berthoud Pass has had its ups and downs. It is a 'natural' ski area. The location and terrain of the area lend themselves perfectly to the sport. The elevation of the area (between 10,700 and 12,200 feet) contributes to the large amount of natural snowfall, which has made snowmaking unnecessary in past operations. Also, the abundance of terrain available for backcountry, extreme skiing makes it a popular destination for even the most advanced skiers.

The same natural features that make the area so perfect for skiing also make the area undesirable as a developed ski area. First, due to the location on the pass, there is limited flat ground to expand base facilities. Sno.engineering conducted an independent study on the economic viability of Berthoud Pass as a ski area in 1994 (14). Their study suggests that the area could physically serve 8500 skiers daily and would require parking for 3000 cars or buses (approximately 20 acres). Viability of the area as developed ski area is primarily jeopardized by the fact that area available for parking is limited. Currently the parking area can hold 100 cars. The areas steep terrain, abundant snowfall and frequent high winds contribute to create significant avalanche hazards at Berthoud Pass. .

The most prominent man-made feature at the area is U.S. Highway 40. The highway provides excellent year round-access directly to the site and is used by thousands of people daily (over 6500/

day in the summer). However, the highway bisects the ski area and makes access from one side to the other dangerous as skiers must cross the highway from the day lodge and parking lot on the east side to ski terrain on the west side. The highway also restricts any possible parking expansion opportunities because of its location. CDOT has informed past operators of the need to construct acceleration and deceleration lanes at a cost of over \$200,000.00, adjacent to the highway as a safety precaution. This requirement will even further restrict any future operator's ability to provide adequate parking at the summit.

Other man-made features at Berthoud Pass are the lodge and support buildings. The tower footers from three lifts are still in place. The lodge is a three story, 12,500 square foot building, opened in 1949 and remodeled in the late 1980's, with a bar, restaurant, retail area and office space. The ski area most recently relied on a well to supply potable water. The production of this well has proved inadequate to meet the needs of the ski area. A new operator would need to secure special use rights and water rights, along with a method of getting water to the site

Berthoud Pass has not been in operation as a developed ski area for the past three years. The lodge has been closed since the fall of 2003. The lifts towers have been removed. CDOT has continued to plow the parking lot, at a minimum level, mostly so that winter sports enthusiasts don't park along the highway. Partially plowing the parking lot also allows public access to the port-a-pot toilets put at the pass by the Forest Service. Even though the ski area is not operating the area sees an abundance of use.

➤ VI. PROS AND CONS OF DEVELOPED SKI AREA DESIGNATION

Pros:

- Continuance of historic ski area for historic appreciation and nostalgia.
- Natural ski area qualities (natural snow and expert terrain).
- Will be used for skiing whether Forest Service designates or not.
- Meet demand for specific type of off piste and extreme skiing in a natural setting; snowboarding, backcountry skiing.
- Would contribute to tax revenue and employment opportunities for Grand and Clear Creek Counties.
- Operator will give area a sense of management which will alleviate some of the current use problems; trash, human waste, lack of education risks for users, controlled access across highway, etc.
- Provides a refuge to travelers in inclement weather.

Cons:

- This ski area fits the same profile as the 245 ski area that have ceased operating in the last twenty years.
- The ski area has a demonstrated history of failure and has only operated 4 of the last 11 years.
- The last operators acknowledged an inability to compete with prices of competitors.
- Limiting factors including lack of parking, intrusion of Hwy 40.
- Time requirements for reviewing applications if area continues to hold it's 8.22 designation, District will be inundated with inquires.
- Cost of bringing area up to operating standards, the last four owners could not make it work

- Even in best circumstances, the area will only be a marginal ski area financially and chances of finding an operator with the top-notch staff to meet the technical requirements and having the financial capabilities are slim.

➤ VII. CONCLUSIONS

Viability of a developed Ski Area at Berthoud Pass in today's market is improbable. The past four owners have had financial difficulties operating the area and the assessment of Colorado's ski industry future trends is not a conducive picture. There are several limiting factors that make viability unlikely:

- The two ski lifts along with the towers were removed and sold in May of 2003. Some work has taken place to break down footers of lift towers near the base.
- Parking space is limited, only 100 spaces exist. In the 1995 it was determined that 3000 spaces would need to be filled to make a financial profit operating the ski area. Shuttling to off-site parking will not likely work due to distance, cost and lack of available facilities.
- Base facilities are limited. Currently the lodge is 12,500 square feet with little room for expansion. Approximately 1,000,000 square feet would be needed to meet the needs of skiers.
- Highway 40 bisects area, making access to both sides of the area difficult and hazardous.
- The lodge would cost an estimated \$200,000.00 to meet standards, not including bringing the facilities up to Americans with Disability Act (ADA) and Built Environment standards.
- Water is an issue. The current well was re-fractured at a cost of \$25,000.00 in 2003 and water needs could not be met for the small Berthoud Pass Powder Guides operation.
- Difficult for operator to keep prices competitive with the front range discount passes, such as the buddy pass, offered by larger areas on the west slope and be able to maintain qualified, competent personnel with expertise in avalanche control. Neighboring resorts with such expertise are Winter Park and Loveland; neither has displayed any interest in operating Berthoud Pass.
- It is anticipated that any public need for additional skiing opportunities on the Front Range will be met by developing terrain within existing ski area permit boundaries at ski areas on the White River and Arapaho and Roosevelt National Forests.
- A study by Sno.engineering in the mid-1990's suggested that Berthoud Pass could not compete with the other larger ski areas in the state and would probably not be able to lure customers away from the closest small areas (Loveland and Arapaho Basin) unless it specialized in a specific niche of the ski industry (14).
- National and Colorado Ski Industry trends are unfavorable.
- Based on its demonstrated and repeated failures, the unfavorable business climate, and the established market advantages of its competitors, Berthoud Pass will be unable to attract sufficient market share needed to become a viable ski area.

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Appendix C – Great Outdoors Colorado Grant Proposal

Executive Summary

The vision for the Continental Divide Trail (CDT) is to create a primitive and challenging backcountry trail on or near the Continental Divide to provide people with the opportunity to experience some of America's most unique and scenic qualities. For many of the same reasons National Parks are established, National Scenic Trails are created, to conserve nationally significant scenic, historic, natural and cultural qualities. In addition, National Scenic Trails are designed for recreation and the enjoyment of these very special places. The CDT wedds conservation and recreation, providing an exhilarating and healthful experience that strengthens the mind, body and spirit of those who build, enhance and maintain the Trail and of those who use it.

Recognizing the incredible value the CDT brings to Colorado, a "Partnership" consisting of Colorado State Parks, Continental Divide Trail Alliance, Arapaho-Roosevelt National Forest, Pike San Isabel National Forest, Gunnison National Forest, Rio Grande National Forest and Rocky Mountain National Park, has been formed to advance the completion of the CDT in Colorado by sharing resources and requesting a grant from GOCO. This partnership includes opportunities for the citizens and communities of Colorado to assist in this very special national treasure.

In 1995 the Continental Divide Trail Alliance (CDTA) was formed to work in partnership with the Forest Service, BLM, National Park Service and State governments was created to complete, enhance, protect and manage the CDT. The CDT provides access and opportunities to experience some of the wildest places left in the world where few have passed before.

The CDT is known as the "King of Trails" because, compared with the Appalachian and Pacific Crest trails, it is the most difficult to trek, the longest—at 3,100 miles—the highest, and, with only 70% usable, the trickiest to piece together. The Trail serves hundreds of thousands of people each year and provides a resource for many recreational activities, including hiking, horseback riding, mountain biking, cross-country skiing, snowshoeing, wildlife viewing, fishing, hunting and sightseeing.

The vision of a 3,100-mile nonmotorized route through some of the West's most scenic, rugged, diverse and historic landscapes won the approval of Congress in 1978 when it was officially designated a National Scenic Trail. It has prompted contributions from dozens of major corporations, inspired thousands of volunteers to work on the Trail and encouraged towns to link their parks and their own trails with the CDT.

The route runs through five states, one national monument, three national parks—Glacier, Yellowstone and Rocky Mountain—20 Wilderness areas, eight Bureau of Land Management resources areas, and 25 National Forests. Along the Divide, and within miles of the Trail, are ghost towns, Indian reservations, ranches and 300-year-old villages whose residents still identify with their Spanish pioneer ancestors. Tracing the crest of the Rocky Mountains for much of its length, the Continental Divide separates the headwaters of streams flowing eastward from those flowing westward—in the United States, dividing those streams leading to the Gulf of Mexico from those leading to the Gulf of California and to the Pacific Ocean.

In Colorado, the Trail travels through some of the most magnificent scenery, highest use and largest and most dedicated volunteer workforce.

More than 1,000 volunteers work each year to complete the job that was begun by the government, but which stalled by the early 1990s because of budget cuts and competing priorities. The renewed enthusiasm to finish the Trail is part of a surge of interest in outdoor recreation, conservation and



desire for things as they were in a more natural America. Besides the physical work of building the Trail where none exists, restoring the Trail or environment where it is damaged, and erecting signs, the job involves acquiring land or rights of way across private property. The CDTA Volunteer and Youth Corps Programs are key elements in constructing, maintaining and protecting this 3,100-mile national legacy.

Although Congress endorsed creation of a Continental Divide Trail in 1978, there was never enough money to build the Trail. There was only sporadic work on the project by the U.S. Forest Service (lead agency responsible for the CDT), Bureau of Land Management and National Park Service, which began linking together an extensive system of trails. The government effort fell 2,000 miles short of completing the Trail—setting the stage for the current push by the CDTA.

Completed segments of the Trail are found all along the Divide, leaving wide gaps and forcing the CDT to be temporarily located on roads or undesirable routes not up to National Scenic Trail standards. Similarly, trailhead development is widely varied, limiting identification and appreciation of the CDT as a national asset.

While trail status on the CDT in Colorado varies and is scattered, four significant segments and one major trailhead are identified as serious gaps. These include:

1. **Marshall Pass to Mt. Elbert-** This incredible corridor is a very popular multi-user recreation area. It includes many 14,000-foot peaks, spectacular views and lakes and easy access from Buena Vista, Salida, Leadville, Gunnison, Poncha Springs, and Saguache and lies in Lake, Gunnison, Chaffee, and Saguache counties. When complete, this segment of the CDT will be approximately 100 miles long. Currently the CDT is located on heavily used motorized routes and is confusing and difficult to follow due to the number of forest roads incorporated to

connect these two points. A new route will reduce user conflicts, meet National Scenic Trail standards and provide a recreational experience without equal as the Trail passes through the heart of the Collegiate Peaks.

Construction Status: The Pike San Isabel and Gunnison National Forest partnered with CDTA volunteers to scout and identify potential CDT routes in 2002. In 2003 an ID team was developed with staff from the Pike San Isabel and the Gunnison National Forests to complete the NEPA process by 2004. Construction is planned for 2005-2008 utilizing Forest Service crews, volunteers and youth corps.

Proposed Action in GOCO Legacy Grant: Complete planning and construct/reconstruct 40 miles and 4 trailheads.

2. **Marshall Pass to La Garita Wilderness-** This segment of the CDT has a long history of motorized use. The CDT travels through the Cochetopa Hills and offers sweeping views to the south and east of the San Luis Valley and the Sangre de Cristo Mountain Range. Accessed most easily from Salida, Saguache, Gunnison, and Creede, the Trail lies in Saguache, Mineral, and Hinsdale counties. When complete, this segment of the CDT will be approximately 70 miles long. Currently the CDT is located on a heavily used motorized route and coincides with the Colorado Trail (also interested in finding a non-motorized route) and the Timberline Trail. A new route will reduce user conflict, meet National Scenic Trail standards and provide a unique recreational experience for foot and horse travel.

Construction Status: In 2003, the Gunnison, Pike San Isabel, and Rio Grande National Forests have assembled a team of recreation specialists to develop non-motorized route alternatives for the CDT and CT between these two points. The summer of 2004 will see CDTA volunteers working in concert with this team to document several route alternatives on the ground. In 2005, the team will start the NEPA process to formally examine the route alternatives identified by the forests. Construction is planned for 2006 to 2008 utilizing Forest Service crews, volunteers and youth corps.

Proposed Action in GOCO Legacy Grant: None.

3. **Spring Creek to Stony Pass-** This segment of the CDT is saddled high between the beautiful Weminuche and La Garita Wilderness areas and represents the western most turn of the Continental Divide. This breathtaking alpine trek does not dip below 11,000 feet for its entirety and is accessed from Silverton, Durango, Creede, Montrose and Telluride and lies in Hinsdale and San Juan counties. When complete, this segment of the CDT will be approximately 32 miles long. Currently the CDT is located on a mish-mash of forest roads, dirt bike and ATV trails. Many of these motorized trails have developed loop or spur social trails that often mislead hikers and horseback riders into dangerous situations in the wilderness. A new route will reduce user conflict, meet National Scenic Trail standards and provide an opportunity to take in the majesty of this segment with views from five 13,000-foot peaks.

Construction status: In 2004, the CDTA is partnering with the Colorado Trail Foundation to coordinate volunteer scouts in the area. In addition, CDTA and CTF will work with the Grand Mesa, Uncompaghre and Gunnison (GMUG) National Forest to develop the most appropriate location and travel management approach for the CDT and CT through their forest plan revision. In 2005, GMUG will formally examine the route alternative developed by the forest

through the NEPA process. Construction is expected in 2006 and 2007 utilizing Forest Service crews, volunteers and youth corps.

Proposed Action in GOCO Legacy Grant: Complete planning and construct/reconstruct 22 miles.

4. **Rocky Mountain National Park to the Colorado/Wyoming border-** This segment of the CDT links a significant National Park, Rabbit Ears Range and the Mt. Zirkel Wilderness. It is accessed from Grand Lake, Granby, Gould, Kremmling, Steamboat Springs, Walden and lies in Routt, Jackson, Grand, and Larimer counties. When complete, approximately 130 miles, or the top northern (20%) of the CDT in Colorado will be finished. Currently the CDT through this area is located on many motorized trails and roads. A critical 10-mile segment east of Muddy Pass is blocked by private lands forcing trail users onto US Highway 40 and State Road 14. Several opportunities may exist to acquire private lands and to utilize State lands for a future route development. However, more research and negotiations need to be done. A new route will reduce user conflict, meet National Scenic Trail standards and provide a unique recreational experience for foot and horse travel.

Construction status: In 2004, CDTA will work with the Medicine Bow – Routt National Forest to coordinate volunteer scouts to document route alternatives throughout the forest. Planning, NEPA and construction/reconstruction will follow in 2005-2008 utilizing Forest Service and National Park Service crews, volunteers and youth corps.

Proposed Action in GOCO Legacy Grant: Plan, construct/reconstruct approximately 11 miles from Rocky Mountain National Park to Bowen Pass.

In addition to the segments listed above, a prototype “showcase” trailhead is planned for:

5. **Berthoud Pass-** Located at 11,315’ elevation between Clear Creek and Grand Counties, Berthoud Pass is perhaps the most accessible point on the Divide, as it is only 30-40 minutes from the Denver metropolitan area via Interstate 70 and US Highway 40. Breath-taking scenery on both sides of the pass provides a stunning backdrop for recreational activities at the pass and the Colorado history which occurred there and below on both sides. The pass itself has served as the link between the Front Range and the Middle Park country for eons, first for Native Americans, later traversed by a wagon road between the mining towns of Clear Creek County and the ranching and timber lands of Grand County and beyond. It was a finalist for the route of the Union Pacific Railroad which finally ended up to the north in Wyoming. In the 20th century, the pass became the site of one of Colorado’s first alpine ski areas, and now serves as a gateway for the tourism economies of the areas and counties it links.

The ski area at Berthoud Pass has not operated since the 2000-2001 season, continuing a series of failed attempts to operate an alpine ski area there. Yet the pass is a significant point along the CDT as well as US Highway 40, and attracts significant use in both winter and summer seasons. Due to its proximity to Denver, its stunning scenery, and its significant history, Berthoud Pass has great potential to serve as a prototype for a “showcase” trailhead along the CDT. This would include developed plazas highlighting the scenery and interpreting the area’s history, the Continental Divide (historic marker exists on the site), and the CDT itself. Restrooms, a renovated parking area, and a day lodge to provide food, supplies, and respite from the weather would support hiking and backpacking in summer and fall, snowshoeing,

cross-country skiing, and snowplay in winter and spring. Storage of equipment to support volunteer activities could also be included. Relocation of the CDT, with a portion interpreted and universally accessible,

would also occur on the pass. The identity and appreciation of the CDT as a national asset centered in Colorado would be enhanced with this proposal.

Construction Status: The Arapaho-Roosevelt National Forest has been conducting an assessment of future uses of Berthoud Pass since the fall of 2003. This assessment has involved the CDTA and Colorado State Parks, plus the counties and other interested parties. The assessment will be completed in May 2004, and will be followed with NEPA analysis and pre-construction planning. The Forest, CDTA, and other partners will be well suited to proceed with site planning and design in 2005, followed by construction in 2006-2007 utilizing Forest Service crews, volunteers and youth corps.

Proposed Action in GOCO Legacy Grant: Master Plan development and construction of 1 mile of CDT interpretive trail (will remove Trail off dirt road), Scenic vista, Continental Divide/CDT monument plaza, restroom, parking lot reconfiguration, and 3,000 s.f. Visitor Welcome Center.

The CDT follows the “spine” of the Rockies in Colorado--one of our state’s greatest natural treasures. It links magnificent scenery, historic treasures, cultural legacies, National Forests, Wilderness areas, Rocky Mountain National Park, many rural communities and intersecting trails and mountain passes throughout the state. The CDT is a window onto our past, a rich cultural legacy and an open door to future exploring and adventure.

The CDT is part of the congressionally designated National Trail System, and as such, is considered a priority by the land management agencies. It provides opportunities for local communities to capitalize on their proximity to this “national treasure”. In addition, the unique legislative mandate for the National Trail System provides for cooperative management, construction and maintenance of trails in the system. Due to this enabling legislation and the recruitment efforts of the CDTA, thousands of volunteers from across the state, and indeed the country have rallied to complete the Trail

Failure to complete the CDT would be a travesty for local communities, the environment and future generations of outdoor recreationists from around the world. The CDT provides a unique backdrop for some of the world’s most rewarding and challenging recreation activities including hiking, horseback riding, mountain biking, cross-country skiing, snowshoeing, wildlife viewing, fishing, hunting and sight-seeing. With its remoteness comes a much sought-after quality in today’s fast-paced world—the solitude and serenity that comes from the restorative power of nature by experiencing the great outdoors as generations before us have done.

This last chance to complete a Trail from Canada to Mexico would leave a congressional priority in perpetual limbo, lacking the prominence and support that have been established by the CDTA, the Partnership and its myriad of supporter’s over the last ten years. It is critical, with diminishing land management agency resources and increasing demand for this type of recreational amenity, that we accomplish the goal of a completed Trail before it is too late. Increasing pressures from developers and competing priorities from the land management agencies are creating challenges that will only be overcome by perseverance, creative partnerships and a substantial increase in funding.

This project will ultimately be recognized internationally for its emphases on volunteerism, private partners, adherence to the highest quality construction and maintenance standards and its unique ability to draw from all sectors of society in its completion and long term maintenance. The spectacular Rocky Mountain scenery also makes this a “world class” Trail.

The need for support is critical. Insufficient federal budgets, skeletal government work crews and increasing demands on America’s public lands are taking a toll on the CDT and other precious natural resources. The work needed to preserve and protect resources such as the CDT is growing, with no sign of reprieve. CDTA accepts the challenge to press forward, lead the way, and provide the impetus and the spark, to be the catalyst — to generate the necessary volunteer and outside financial support—to bring about the completion and enhancement of this incomparable nonmotorized Trail.

The CDTA will continue to provide information, raise awareness of and coordinate resources to build, maintain and protect the Continental Divide Trail. We will continue our analysis of relevant issues and our targeted outreach so that all constituencies will acknowledge the significance of the Trail and the reasons that the business and nonprofit sectors, along with the American public, should dedicate themselves to supporting it. The CDTA is working with many of the leading individuals and organizations with interests in conservation, preservation and American history to build support for a rational and fiscally sound action plan to provide a comprehensive and consistent approach to the completion, management and protection of the CDT and its surrounding environments. The plan includes the identification of a CDT corridor that will appropriately represent and preserve a vision for the CDT.

The CDTA’s primary partners are the thousands of volunteers who support our Trail building and maintaining efforts, USDA Forest Service, the Bureau of Land Management, National Park Service, Colorado State Parks, scores of volunteer and civic organizations, and dozens of corporate supporters and thousands of CDTA members. Primary corporate support has come from REI, JanSport, Coleman and Vasque.

The overall value of the project is \$4,700,700.

The project will be accomplished by Forest Service and National Park Service planners and crews, CDTA staff, volunteers and youth corps, including the recruitment, coordination, feeding and transporting of volunteers and youth corps. The CDTA believes strongly that the long-term sustainability of the King of Trails lies in the investment we make in the involvement of youth, through employment and volunteer opportunities in connection with the trail’s construction, maintenance and preservation.

It should also be noted that the U.S. Forest Service is considering requesting \$250,000 to \$300,000 of additional support through GOCO’s Planning Grants program this year. In addition, future requests may seek assistance with land acquisition/rights of way needs in the Muddy Pass area of northern Colorado, the only major non-public land section of the Trail in Colorado.

1. Impact

The completion of the CDT in Colorado will advance GOCO’s constitutional mandate to utilize lottery revenue for “the preservation, protection, enhancement and management of the state's wildlife, park, river, trail and open space heritage” in several ways. It will make critical linkages in the State of Colorado that provide for increased opportunities for premier backcountry experiences along the Trail.

It will provide additional emphasis on completing the Trail in Colorado by supporting the work of the volunteers and land managers at a time when other Agencies' limited funds are detracting from their ability to complete the Trail. Ultimately GOCO's support will provide citizens and visitors of Colorado access to one of the world's greatest landmarks-- the Continental Divide. When completed hundreds of thousands of hikers, cross country skiers, snowshoers, equestrians, mountain bikers and other recreationists will enjoy it's beauty and magnificence.

With the support of GOCO, the Partnership plans to make the following impact in Colorado and the CDT.

Accomplishments planned for 2005-2007 on the Continental Divide Trail through a GOCO grant

CDT Project	# miles planning	# miles const/reconst	Trailheads	Visitor Center
Marshall Pass to Mt. Elbert	40	40	4	0
Spring Creek to Stony Pass	32	22	0	0
Rocky Mountain Nat'l Park to Bowen Pass	11	11	0	0
Berthoud Pass	1	1	1	1
Total	84	73	5	1

While our expectation is that we will complete all of the stated projects in the three-year time frame (subject to NEPA analysis) we anticipate the long-term vision of a completed and maintained Trail from Canada to Mexico will continue into the future. These segments were selected for inclusion in the GOCO grant due to level of readiness, agency ability/resources and stage in planning. In many respects we are emulating the example of the Appalachian Trail, completed and maintained by volunteers from Maine to Georgia for over 70 years.

This project will be inspirational and serve as a demonstration project and catalyst for similar projects across the state. It provides for the opportunity to increase the public's awareness of this national treasure and creates greater understanding in local communities that can benefit directly or indirectly from a completed National Scenic Trail. In addition, it will become a central component of the State's recreational infrastructure and will provide a tremendous opportunity for others to connect their trails, tourism sites, or recreational resources. Others seeking to utilize creative funding and partnerships will look to the success of the CDT as a model. As state and federal funds continue to diminish it is through the success of this project that others will recognize the value of pursuing non-traditional means of doing work on public lands.

Currently, the CDTA is bringing together key stakeholders and educating them about the needs and benefits of the CDT. Participants from grassroots organizations, corporations, Congress and other government bodies, philanthropic groups and the media are cooperating to facilitate a new CDT-sustainability partnership among them. Toward this end, the CDTA is sponsoring a series of CDT conferences and special events to continue this important dialogue and to build on the findings of the CDT 2008 Strategic Completion Plan, a comprehensive plan that outlines all of the needs and costs to complete the CDT by 2008, or the Trail's 30th Anniversary.

2. Financial Partnerships

The total project cost for this project is estimated at \$4,700,700. Colorado State Parks and other members of the Partnership respectfully request a \$3.5 million grant from GOCO to support our efforts. Due to the

status of planning on some segments of the CDT, the Partnership is able to only complete significant phases of the projects with a grant from GOCO. With that, the project can be phased into more than one award.

CDTA Matching Funds, Source and Timeframe:

U.S. Forest Service	\$400,000 Cash	2005-2007
Colorado State Parks	\$350,000 Cash	2005-2007
CDTA volunteer labor	\$260,000 in-kind	2005-2007
CDTA	\$20,000 Cash	2005-2007

Total estimated match: \$1,030,000

Since the founding of the CDTA in 1995, they have raised over \$6,000,000 in cash, almost \$3,000,000 in in kind revenues and over \$6,000,000 in federal funds for the Trail.

3. Non-financial support

Division of Wildlife would like to overlay the location of the CDT with their Watchable Wildlife program and sensitive habitat protection areas. Rich Larson is reviewing our GIS information on the Trail's location and is enthusiastic about partnering on this project.

Colorado State Parks is in the process of finalizing a Memorandum of Understanding between that agency, the USDA Forest Service, and the CDTA. The MOU is intended to raise the awareness of the Trail in Colorado, increase cooperation between the state and the Forest Service and provide a model for other CDT states to follow.

Several county commissioners along the Trail have expressed their support for our efforts in their counties. Local civic organizations, in particular Rotary Clubs, and volunteer organizations with complementary missions, for example the Colorado Fourteeners Initiative, Volunteers for Outdoor Colorado, Colorado Mountain Club, International Mountain Biking Association, the Backcountry Horsemen of America, and the American Hiking Society have all expressed support and have assisted our efforts.

4. Ability to implement.

For nearly ten years the Partnership has been working to develop the strategies and financial ability to complete the CDT. The CDT 2008 Strategic Completion Plan was initiated by the CDTA in 1998 and

adopted by the federal land managers¹. The overall goal of the current project is to work in cooperation with the federal agencies to complete and make improvements to the CDT, utilizing volunteers, trail clubs and the CDTA Youth Corps.

The partnership has demonstrated significant progress getting routes identified or rerouted to suit National Scenic Trail standards and in developing the CDTA Volunteer and Youth Corps Program. Since inception, the CDTA Volunteer Program has grown to approximately 50 projects across five states and more than 1,000 volunteers annually, representing more than \$2.4 million in volunteer labor to build and improve hundreds of miles of the CDT.

The CDT projects described in this grant proposal are outlined in the CDT 2008 Strategic Completion Plan as a priority to be completed between 2005 and 2007. Initial planning and meetings have begun or have been completed. For projects where NEPA has not been completed, the Partnership is confident in their ability to get it done.

Examples of significant accomplishments that demonstrate the Partners' ability to complete this project include:

- **Uniting Along the Divide I and II** (1997, 2001) The CDTA coordinated the first end-to-end (3,100 miles) surveys of the CDT. Over 1,000 volunteers, businesses and land managers worked together to gather critical information about the Trail. These historic projects significantly increased the public's interest and ownership in this national treasure.
- **State of the Trail Report** (1998) The Continental Divide Trail *State of the Trail Report* was developed by the CDTA to document the Trail's history, significance, issues, status and future needs and goals. Much of this information was gained through the volunteer Uniting Along the Divide I effort in 1997.
- **Advocacy and Fund Raising** (1995- 2003) The CDTA has secured nearly \$6 million in Congressional add-on earmarks into the Forest Service budget for the CDT and more than \$4.5 million in cash and in kind product and service donations from the private sector. The CDTA has also been instrumental in the creation of a House Trails Caucus and responsible for initiating legislation that would allow "willing sellers" to sell their lands for the purposes of the CDT and other National Scenic Trails.
- **MOU Signing** (1999) The CDTA was designated as the leading partner in the completion of the Continental Divide National Scenic Trail by the heads of the U.S. Forest Service, National Park Service and Bureau of Land Management during a Memorandum of Understanding (MOU) signing at the White House in Washington, D.C.
- **CDT 2008 Strategic Completion Plan** (1999) This first CDT action plan was developed by the CDTA in cooperation with the Forest Service, National Park Service and the Bureau of Land Management. The plan outlines all of the needs and costs to complete the CDT by 2008, the Trail's 30th anniversary.
- **State Summits** (1996) The CDTA coordinated four statewide meetings to raise awareness and to gain public support for the CDT. These meetings recruited the CDTA's first members. It also

¹ The U.S. Forest Service is charged with overall responsibility for the coordination, planning, location, development and management of the CDT in cooperation with the Bureau of Land Management and the National Park Service—and with volunteers.

galvanized agency support for projects and introduced land managers to grassroots organizations that wanted to help.

- **CDT Long Distance Planning Guide** (1999) To better serve CDT users, the CDTA developed a planning guide booklet to educate and inform the public about the CDT. This publication will help to ensure safe and enjoyable experiences.

5. Maps (See attached)

6. Budget

Continental Divide Trail

2005-2006	Planning- 83 miles and 4 trailheads	\$280,000
2005-2007	Construction and/or reconstruction- 73 miles and 4 trailheads	\$1,700,000
2005-2007	Volunteer labor	\$260,000
2005-2007	Project and Volunteer Management and Coordination	\$94,700
	Total Cost	\$2,334,700

Berthoud Pass Trailhead

2005	Programming & Site Planning, Engineering Analysis, Design Development for site elements, and Interpretive Master Plan	\$250,000
2006	Trail Relocation (1 mi.) & Accessible Trail with Interpretive Signing (1/4 mi.)	125,000
	Scenic Vista & Continental Divide Monument Plazas (3000 sq. ft. total, includes interpretive signing)	250,000
	Restrooms	225,000
	Parking Lot reshaping and Infrastructure installation	200,000
	Construction Contract Administration	55,000
	Volunteer Labor	70,000
	Project and Volunteer Management and Coordination	15,000
	Architectural/Engineering Design for Visitor Welcome Center	150,000
2007	Visitor Welcome Center Construction (3,000 sq. ft.)	750,000
	Parking Lot surfacing and final landscaping	200,000
	Construction Contract Administration	76,000
	Total cost	\$2,366,000

Grand Total Cost: \$4,700,700

CDTA Internal Detailed Budget (**DO NOT INCLUDE IN PROPOSAL**)

CDT Accomplishments planned for 2005-2007

Marshall Pass to Mt. Elbert

Total Project Miles: 100 miles and 8 trailheads
 GOGO Project accomplishments: 40 miles and 4 trailheads

Planning	40 miles	4 Trailheads	\$180,000
Const/reconst	40 miles	4 Trailheads	\$886,200
Volunteer projects (4 x 25 vols @ 5 days = 500 days @\$50)			\$ 25,000
Volunteer labor (4 x 25 vols x 40 hours = 4000 hrs @ \$17)			\$ 68,000
Forest Service Overhead (40%)			\$426,000
CDTA Involvement and Overhead (15% of our costs)			\$ 14,000
Total Cost			\$1,599,200

Spring Creek to Stony Pass

Total Project Miles: 32 miles
 GOGO Project accomplishments: 22 miles

Planning	32 miles		\$ 50,000
Const/reconst	22 miles		\$ 90,000
Volunteer projects (4 x 25 vols @ 5 days = 500 days @\$50)			\$ 25,000
Volunteer labor (4 x 25 vols x 40 hours = 4000 hrs @ \$17)			\$ 68,000
Forest Service Overhead (40%)			\$ 56,000
CDTA Involvement and Overhead (15% of our costs)			\$ 14,000
Total cost			\$303,000

Rocky Mountain Nat'l Park to Bowen Pass (west of Rocky)

Total Project Miles: 11 miles
 GOGO Project accomplishments: 11 miles

Planning	5 miles		\$ 50,000
Const/reconst	11 miles		\$150,000
Volunteer projects (3 x 25 vols @ 5 days = 375 days @\$50)			\$ 18,750
Volunteer labor (3 x 25 vols x 40 hours = 3000 hrs @ \$17)			\$ 51,000
Forest Service Overhead (40%)			\$ 80,000
CDTA Involvement and Overhead (15% of our costs)			\$ 10,500
Total cost			\$360,250

Berthoud Pass Trailhead

2005	Programming & Site Planning, Engineering Analysis, Design Development for site elements, and Interpretive Master Plan.	\$250,000
2006	Trail Relocation (1 mi.) & Accessible Trail with Interpretive Signing (1/4 mi.)	100,000
	Scenic Vista & Continental Divide Monument Plazas (3000 sq. ft. total, includes interpretive signing)	250,000
	Restrooms	225,000
	Parking Lot reshaping and Infrastructure installation	200,000
	Construction Contract Administration	55,000
	Architectural/Engineering Design for Visitor Welcome Center	150,000
	2007	Visitor Welcome Center Construction (3,000 sq. ft.)
	Parking Lot surfacing and final landscaping	200,000
	Construction Contract Administration	76,000
CDTA	CDTA Involvement in planning and const process	\$15,000
CDTA	Volunteer projects (4 x 25 vols @ 5 days = 500 days @\$50)	\$25,000
CDTA	Volunteer labor (4 x 25 vols x 40 hours = 4000 hrs @ \$17)	\$68,000
	Total cost	\$2,364,000

Appendix D – Forest Plan Management Area Direction

MANAGEMENT AREA DIRECTION

Each management area delineated on the map has a detailed management prescription to guide its management. The prescription specifies:

1. Management Area Theme: short description of the management emphasis for the area.
2. Management Area Desired Condition: further specifics to the forestwide goals.
3. Management Area Standards and Guidelines: standards and guidelines that apply to a particular management area in addition to, or in a more restrictive way than, the forestwide standards and guidelines. When there is a conflict, the more restrictive direction applies.

Management area direction is applied in addition to forestwide and geographic area direction. Where there is conflict, the more site-specific direction applies.

The following sections explain in detail each of the management area prescriptions.

1.3 BACKCOUNTRY RECREATION

Theme: Backcountry areas are managed to provide nonmotorized recreational opportunities in a natural appearing landscape.

Desired Condition

Physical/Biological

A variety of plant communities, structural stages, and associated wildlife occur in patterns maintained primarily through ecological processes. The variety and arrangement depends on the timing of natural disturbances (fire, insects and diseases, and storms) and prescribed fire. The amount and arrangement of successional stages varies greatly depending on the amount and timing of disturbances and how openings revegetate.

Openings vary in size and are generally the result of the natural disturbances described above. Openings may be utilized to provide scenic views and add to the diversity of the landscape. New human-caused changes to vegetation that may occur are limited in scale and are not visually evident. For short time periods in small areas, some vegetation manipulation may occur that is noticeable; however, it resembles natural patterns.

Social

Provide a variety of nonmotorized recreational opportunities. Unique nonmotorized hunting, fishing, and wildlife-viewing opportunities may exist in these areas that are away from major travelways where seclusion and cover areas exist. Other compatible activities may occur in the area.

Encounters between individuals or parties are most common on travelways. Seasonal restrictions for resource protection may occur. Fewer contacts and improved opportunities for solitude occur away from trails. Sounds from people may be common near travelways. Sounds from outside the area may be common near the area's edge. Farther away from travelways or the area's edges, sounds diminish into the background.

Use subtle on-site regulations and controls. Prohibit motorized travel, including over-snow use except as shown on the *Winter Travel Strategy Map* endorsed with this document. Limit directional, regulatory, and informational signs to those necessary to foster safe use and resource protection. Contacts with Forest Service personnel are generally initiated by visitors.

Administrative

Limit facilities to those necessary to protect resources, provide for safety, or to enhance recreational experiences. Existing improvements such as trails, bridges, fences, shelters, signs or water diversions blend into the landscape where feasible or are removed if no longer needed. Existing primitive roads will be converted to trails or obliterated. New trails may be constructed to enhance recreational experiences, prevent damage to resources or provide access. Managed trails provide for a variety of use and challenge levels. Most routes are designed for a variety of uses and will loop, run point-to-point, or seek to link with other management areas or developed sites.

Acquire inholdings or adjacent lands as opportunities arise to maintain or improve backcountry nonmotorized recreational opportunities or to prevent development that would diminish experience levels on National Forest System (NFS) lands. Retain all NFS lands in the management area. Acquire rights-of-way where needed to meet resource goals and objectives and enhance recreational opportunities. Allow compatible special uses.

Standards and Guidelines

1. (GL) Do not construct new roads.

3.55 CORRIDORS CONNECTING CORE AREAS

Theme: Areas are managed to protect migration and dispersal areas for wildlife. These areas provide safe connections between core areas.

Desired Condition

Physical/Biological

Maintain wildlife migration and dispersal areas to ensure the connection between core areas. Corridors assist with the preservation of habitat for all native species of plants and animals, especially TES species. The landscape is predominantly natural appearing. Vegetation composition and structure are largely influenced by biological processes and conditions, with minimal human influence. All existing lodgepole pine and spruce-fir old growth is retained and like amounts are provided in the future. Future lodgepole pine and spruce-fir old growth conditions are provided for. Prescribed fire is used where appropriate, to create or renew habitat and may be used to mimic natural disturbance regimes.

Activities within and adjacent to riparian areas are managed to retain their value as corridors between core areas.

Grazing of domestic livestock is allowed only where there is assurance that no reduction in wildlife capability and function will occur and where native plants flourish.

Corridors are unsuitable for timber production, but light thinning or selection cuts are allowed to reduce unnaturally high fuel loads for the purpose of reestablishing the natural fire regime.

Inventory and monitoring data on the movements of wildlife will be continually gathered in corridors.

Social

Connecting corridors offer a very high to high probability of experiencing solitude, closeness to nature and tranquility, as well as a high degree of self-reliance, challenge and risk. Facilities are rustic and exist primarily for site protection. Improvements to enhance recreational use, such as signing, may be present within the area, but are of a rustic nature. Dispersed camping may occur throughout the area. Allow motorized vehicles on open roads or designated trails only.

Administrative

Close and obliterate unneeded roads and those impairing wildlife as soon as funds become available. Consider allowing use of roads going to private inholdings by only the inholders. Construct new roads or reconstruct roads only for safety or to reduce resource damage. Prohibit off-road motorized vehicle use, except for emergencies. Acquire inholdings and adjacent parcels to maintain or increase habitat effectiveness or where imminent development would be inconsistent with management area objectives of NFS lands. Retain NFS lands if parcel is being used as winter range, if development would decrease habitat effectiveness on the remaining NFS lands or if it contains key or essential habitat or a unique or critical ecosystem. Dispose of NFS lands if the offered lands provide a net increase in habitat effectiveness in the same area and *one* of the following: (1) the parcel neither meets management area objectives nor other NFS purposes compatible with management area objectives; or (2) its development would not decrease the effectiveness of remaining habitat. Acquire rights-of-way that are needed to meet resource goals and objectives. Allow special uses that do not disrupt wildlife.

Standards and Guidelines

1. **(ST)** Maintain or increase habitat effectiveness, except where new access is required by law.
2. **(ST)** Discourage or prohibit human activities and travel wherever necessary, to allow effective habitat use during season of primary use by elk, deer and bighorn sheep. Minimum periods are May 15 through June 30 for elk calving, June 1 through June 30 for deer fawning, May 15 through June 30 for bighorn lambing, and December 1 through March 31 for wintering deer, elk and bighorn.
3. **(ST)** Discourage or prohibit human activities and travel wherever necessary to allow effective habitat use by other wildlife species, especially during the seasons of birthing and rearing of young.
4. **(ST)** Do not construct new roads except when they contribute to improved habitat or provide legal access. Obliterate any temporary roads within one year following intended use.

5. **(ST)** Adjust livestock grazing to meet wildlife habitat objectives.
6. **(ST)** Withdraw area from mineral entry and designate it as unavailable for oil and gas leasing.
7. **(ST)** Do not encourage snowmobile use and allow use on only a few designated roads.
8. **(GL)** Within existing spruce-fir and lodgepole pine old growth that is known or discovered, exclude vegetation treatments.
9. **(GL)** Allow, through vegetation protection, or encourage, through vegetation treatments, the development of future lodgepole pine and spruce-fir old-growth conditions.
10. **(GL)** Restrict mountain bicycle use to designated routes.

4.2 SCENERY

Theme: Areas are managed to protect or preserve scenic values and recreational uses of designated scenic byways and other heavily used scenic travel corridors.

Desired Condition

Physical/Biological

Maintain a variety of successional stages, plant communities, and associated wildlife through a combination of human manipulation and natural processes. Maintain or improve the communities to provide a pleasing appearance for visitors and to complement the recreational values. Emphasize the health and appearance of these communities to maintain their important scenic qualities. Vegetation alterations may be carried out to enhance viewing opportunities and to maintain long-term vigor and health of the vegetation. Vegetation management activities are, however, kept visually subordinate to the surrounding landscape.

Vegetation varies from background areas which appear natural to foreground and middle-ground areas where modifications may be noticed but do not attract attention. Improve areas to restore the desired appearance. Design new vegetation modifications to resemble natural patterns or to reflect less intrusion onto the landscape. Other ecological changes may affect the appearance.

Social

Opportunities exist to view high-quality scenery that represents the natural character of the Forests and Grassland. Opportunities also exist for viewing a variety of wildlife. Evidence of human activities or habitation due to mining, milling, or grazing may be present now and in the future.

Encounters between individuals or parties vary on most travelways. Expect less frequent contacts on primitive roads or trails, but frequent contact is acceptable in most cases. Limit use where frequent contact is not acceptable. Contacts away from trails are generally infrequent. Contacts are usually

common in areas where use concentrates. Sounds from people or motorized recreational activities are usually common, and limit opportunities for solitude or isolation.

Provide a variety of motorized and nonmotorized recreational opportunities. Open roads provide access and roaded recreational opportunities, while closed roads provide nonmotorized opportunities. Provide access to natural attractions, water features, or areas that provide desired recreational opportunities. Use may be concentrated or dispersed, depending on the need to protect an area from degradation. A social type of recreational experience may be provided.

Administrative

Developed recreational sites may be common and are often emphasized in these travel corridors. Facilities may be present to enhance viewing or recreational opportunities. Improvements such as improved roads, primitive roads, trails, bridges, fences, shelters, overlooks, signs or water diversions will blend into the landscape where feasible, be removed if no longer needed, or will be designed to be minimally intrusive into the landscape. Private facilities and communities may be present along these corridors.

Actively pursue acquisition of undeveloped inholdings in which development of the parcels would be inconsistent with the management area objectives. Acquire scenic easements. Retain lands that enhance management area objectives or where potential development would be inconsistent with the remaining NFS lands. Dispose of lands that do not contribute to the character of the area and whose potential development would not change the character of the remaining lands. Allow compatible special uses.

Directional, regulatory and informational signs are frequent to foster safe use, identify requirements for use of the area, and to provide route information.

Appendix E – Response to Comments

This list reflects those that have commented on the Berthoud Pass Assessment. The comments and responses have been grouped into categories and the number at the end of each response corresponds to the person or group listed below. Appendix E includes the actual public comment letters.

1. Jeremy Town	Received 04/06/04
2. Scott Davis	Received 04/06/04
3. Ike & Lucy Garst	Received 03/29/04
4. Kim Hedberg	Received 03/25/04
5. Ron Breuer	Received 03/25/04
6. Don Bachman	Received 03/21/04
7. James Wolf	Received 01/16/04
8. Woody Sherwood	Received 12/11/03
9. Peter Small	Received 04/06/04
10. Casey Jordan	Received 04/06/04
11. Rob Mullen	Received 04/06/04
12. James Dunn	Received 04/01/04
13. Gigetta Nadeau	Received 04/01/04
14. Bill Carle	Received 04/09/04
15. Wendall Funk	Received 04/06/04 & 11/25/03
16. Summary of public meeting	Received 10/09/03
17. Summary of public meeting	Received 12/16/03
18. Summary of open house	Received 03/25/04
19. Chris Cavallaro	Received 04/07/04
20. Bruce McQuistan	Received 04/07/04
21. Charles Mayfield – SolVista	Received 04/06/04
22. Jamie Wolter	Received 04/08/04
23. Carol Hunter	Received 04/07/04
24. Don Woster	Received 04/07/04
25. Peggy Stokstad – Clear Creek Economic Development	Received 04/08/04
26. Jon Strand – Friends of Berthoud Pass	Received 04/09/04
27. Clear Creek County	Received 04/13/04
28. Dave Colvin – Berthoud Pass Ski Patrol	Received 04/08/04
29. Mitch Kirwan	Received 04/09/04
30. Dr. Nick DeBonis	Received 04/11/04
31. Felicia Muftic	Received 04/06/06
32. Brian Ciciora – Mongalow	Received 04/09/04

Wildlife

Comment: Protection of the wildlife resource in the alpine and timberline environments should be a high priority and major consideration of this assessment as you have indicated. (6)

I agree the lynx migration is of great concern for Berthoud Pass, whether an entity is located there or not. We should take precautions to ensure the lynx ability to use this corridor. (1)

Response: The recommendation of the assessment is to provide for a wildlife travel corridor across Berthoud Pass. The allocation of a wildlife corridor will be fully evaluated during the Forest Plan amendment process. The wildlife issue will be considered in future project level analyses.

Comment: The wildlife assessment is a joke. In 10 years of working at the pass 6 days a week and living there full time for two years, I have seen the following animals and tracks; squirrel, rabbits, fox, coyote, pine marten, pica, marmot and ptarmigan. I have never seen any sign of bear, lynx, elk, deer, or mountain goat or sheep. (22, 29)

Response: Numerous wildlife species are known to occur or likely to occur in the Berthoud Pass vicinity. In addition, many wildlife species are known to use or are likely to move through the Berthoud Pass area. The Berthoud wildlife assessment is based on decades of observations and records from Colorado Division of Wildlife and the Wildlife Resource Information System database. The area adjacent to Berthoud Highway is avoided by many species, but habitat is available and used by wildlife at times and places when human disturbance is absent.

Comment: I'm confused by the reference to the Hoop Ck. and Floral Park underpass. Is this a feature of the highway reconstruction at Floral Park? A pedestrian underpass on the pass that could double for wildlife mitigation should be funded by FHWA. In fact, there are opportunities to have much of the vehicle related facility improvements and development funded in this manner. The Friends of BP group could put energy into this campaign through contact with the congressional delegation. An overpass should not be considered for a number of reasons, including esthetic, security, snow removal needs and maintenance. (6)

Response: Hoop Creek flows through Floral Park and there is a wildlife underpass at Floral Park. This underpass was recently constructed during the initial phases of the Highway 40 reconstruction effort. An additional wildlife underpass will be constructed in the next phase of the Highway 40 reconstruction effort at the "Stanley slide" area. As part of the road reconstruction, a pedestrian undercrossing may be constructed at Berthoud Pass.

Recreation

Comment: The recreation issue offers the Forest Service with the most opportunities to provide public benefits from this area. (6)

Response: Recreation opportunities will be analyzed in future project level analyses. Decisions on levels of recreation use will be balanced with the resource protection and other issues identified during the project level analyses.

Comment: I feel that the legacy of recreation on Berthoud Pass needs to be preserved, while at the same time keeping human impact to a minimum. I fully agree with the assessment with regards to mechanized use (please don't allow snowmobiles), and I have great sympathy for the needs of the flora and fauna on the Pass. (2)

Response: The assessment recommends the current semi-primitive non-motorized recreation use be managed for as the primary emphasis for the area. In addition, the assessment recommends that part of the area be managed as a wildlife corridor.

Comment: I am writing to express my support of the draft assessment and of keeping Berthoud Pass open for backcountry non-motorized recreation. (9)

We believe strongly in the Forest Service assessment with regard to providing for backcountry skiing, snowshoeing and snowboarding as outlined in the document. We recognize the myriad potential public uses of the area and support them all to the extent that one activity doesn't supercede another to its detriment. (26)

Response: The recommendation of the assessment is to provide for a back-country non-motorized recreation at Berthoud Pass. The allocation of a back-country non-motorized area will be fully evaluated during the Forest Plan amendment process. Other public uses appropriate on National Forest System lands will be considered during the amendment process.

Comment: In ideal conditions, it would be nice to have a recreational park for those who do not desire to ski at lift-served resorts. (10)

Response: The recommendation of the assessment is to convert the area from a ski based resort to a combination of back-country non-motorized recreation area and wildlife corridor allocations. These allocations will be fully evaluated during the Forest Plan amendment process

Comment: I agree with the management destiny of Berthoud Pass such as snow play, backcountry skiing portal, summer trailhead, scenery, and so on. The matter of risk to winter users from avalanche potential demands thorough assessment and management planning beyond this document. The district should utilize the services and advice of the Colorado Avalanche Information Center and the Forest Service National Avalanche center to this end. (6)

The Berthoud Pass Volunteer Ski Patrol is willing to work with involved parties, to increase the safety of Berthoud Pass. First aid, search and rescue and education have been their focus throughout the years. (28)

Response: Risk of avalanches to winter users is a concern and will need to be considered during future project level analyses. The Colorado Avalanche Information Center, the Forest Service National Avalanche center, and the Berthoud Pass Volunteer Ski Patrol will be considered as resources during the development of future projects in the area.

Comment: Things needed to improve the quality of the pass: trash cans or some kind of project to dispose of trash; make the public aware of trash and pollution problems – trash, urinate in designated areas, cleanup after your pets; have Forest Service presence on weekends to make public aware of trash and avalanche awareness; and plow additional parking spaces at the top of pass for better recreational use. (5, 20)

Structures should be removed. Area should be kept as backcountry area with no services and please make sure if someone sets up shop as a commercial operator, allow people who just want to ski or hike, without paying a fee. The environment, not economic prospects must govern the decision. (4, 11b, 15, 19)

We hope that services will be available at Berthoud Pass for the use of Continental Divide National Scenic Trail hikers. If food and sundry items are no longer to be available for purchase, we would still like to see the following: pay telephone, public transportation access (including scheduled or flag stop) trash receptacles, privy and informational kiosk at trailheads. (7)

The best use of the Pass will be a outdoor education area and trailhead for recreation users. Outfitters such as REI or CMS could use the land for winter hikes or avalanche courses, perhaps paying a fee to the Forest Service to help offset the cost of operating the Pass. I foresee the Pass as a trailhead only, with limited facilities, but adequate sanitation. (11)

Response: Management needs identified in the assessment include restroom facilities, refuse collection, interpretation and education, and management of the Continental Divide National Scenic Trail and snowplay area. These needs will generate future project proposals. The issues raised above will be considered during the future project analyses.

Visual Resources

Comment: Scenery: Lots of room for improvement to the foreground and the Mines Peak electronic site and power line. (6)

I understand the points of improving the visual condition of the pass and can also understand the concerns of land uses on the wildlife and eco-system. (1, 25)

Response: The assessment recognizes the area is degraded due to power lines, access roads, Mines Peak road and electronic site, and obsolete ski area structures and facilities. The assessment recommends the terms and conditions of the ski area permit be fully implemented by removing the ski area structures and facilities. This would result in improvement of visual quality along the Highway 40 foreground. However, access to the power lines, Mines Peak road, and the electronic site will remain and would continue to impact the visual quality of the area.

Land Uses

Comment: Land Uses: The assessment should include reference to the NRCS Berthoud summit Snotel Site (#335) located approximately 2000' north of the pass on the west side of the highway, at a location known as 'Q-12 Park'. This site provides climate and hydrology information as part of network of hundreds of sites across the western US, and is critical for prediction of water yield for the Denver Metropolitan Area, due to its unique location on the Continental Divide and accessibility. As recreation use grows, provisions should be made for greater security to prevent unintentional disturbance of the instrumentation and location. (6)

Response: The omission of the snotel site in the draft assessment was an oversight. The final assessment has considered this site.

Comment: The management of the area will really benefit from the exclusion of motorized use, except to access the Mines Peak electronic site. Non-motorized/non-wilderness winter recreation areas are increasingly rare and should be preserved. By maintaining this status the Forest Service will avoid future user conflicts. (6)

Response: The recommendation of the assessment is to manage the area for non-motorized uses except for access to Mines Peak electronic site. The allocation of non-motorized use will be fully evaluated during the Forest Plan amendment process.

Comment: The reconstruction of Berthoud Pass highway will result in greater traffic volume and higher speeds at the summit. Careful coordination with CDOT and FHWA should be initiated to investigate opportunities for wildlife crossing, possibly in conjunction with a pedestrian underpass. The shifting of the highway alignment to the west should provide more parking in the existing lot. The design should easily avoid the run-out from the Trough and Lift Gully avalanche paths which culminate to the north of the bottom chair terminal, but some hazard engineer should take a look, just in case. Final design of the Berthoud Pass area must consider the location and disturbance from the highway construction. (6, 24, 8)

Response: Colorado Department of Transportation and Federal Highways Administration will be contacted during future project level analyses. The ongoing Highway 40 reconstruction effort already incorporates wildlife crossing underpasses. Future site designs at Berthoud Pass will consider proximity to the highway.

Facilities

Comment: The recommendations section of the report states "The lodge is too large for the management need, inefficient to operate,..." Have all the possible business entities been considered? Also what is the basis for the inefficiencies statement? I did not see any operating information, cost benefit analysis or the like to support this statement. The report does not suggest the existing lodge may indeed be the right answer for the right entity. What if the right entity requires 16,000 feet of space? Might it be less expensive to renovate versus building anew? (1, 21)

We would like to see the lodge saved so that many more generations can enjoy what we had for so many years. What a waste of Berthoud is left to die. Colorado has a heritage and it should be preserved. (12, 13, 30)

I have been down the 'this building has outlived its useful life' before and all I know is that is easier to keep what you have than get it back after it is gone. The world is full of places that work well but don't look like much. It is not a big deal. No bathrooms or porta-lets are worse. (14)

The original building, opened in 1949, has been added to in 1957, 1977 and several decks in recent years. Clearly, Berthoud Pass is a historical asset, ripe for developing again. The Forest Service is doing a great disservice by not seeking another bid for development. (3)

The draft fails to mention that the lodge was operational less than one year ago. It fails to acknowledge that I am not the only one to see great commercial potential here. It never mentions that it was a successful summer operation for at least 20 years. It doesn't compare the cost of a new building versus opening the doors on the existing one. To me, it appears the decision to remove the lodge was really made years ago and now the process is being used to justify that decision. It ends

with the absurd conclusion that a concessionaire or someone will be able to build something that will provide restrooms, interpretation, trash collection, parking lot maintenance with snow removal, a pedestrian overpass all being supported by a snow play area. The reality is that the existing building could provide most services, especially restrooms and could do so at a profit if managed by an experienced operator. (14, 22, 29,)

Friends of Berthoud Pass (FOBP) has made clear that we support the existence of some type of shelter at the top of the Pass. The benefits of a permanent facility at the summit have been well identified by the parties and the Forest Service and FOBP will support any effort to erect and operate sustainable facilities insofar as such a building falls within the scope of our organization. It is central to our mission that public recreation opportunities at Berthoud Pass remain accessible in a safe manner. A small scale, environmentally sensitive shelter, with safe parking are key ingredients to this long term goal. (26)

We have come to realize that because the Lodge does not fit into the Forest Service current guideline does not necessarily mean that the Lodge should be torn down especially with plans to minimize future activities at Berthoud Pass. We would like to proceed with a transitional plan that allows for a concessionaire to offer services to the traveling public in the current Lodge while working towards a more unified plan for the future. (25, 27)

Draft assessment underplays the commercial potential for tourism of this site. At both public meetings, there were organizations capable and willing to upgrade and maintain the building to provide for public needs and services and operate at a minimal cost to the taxpayer. Draft underplays the public support and local government support to keep this facility. We need to have the Forest Service understand that we have the knowledge, experience and resources to make a successful business on Berthoud Pass. (14)

I am interested in pursuing a potential business opportunity with the now defunct Berthoud Pass lodge and ski area. I am putting together a business plan for an adventure center that would use many aspects of the current operation and would renovate the existing lodge. Has any decision on the future of the area been made? Would you be willing to entertain such a proposal for this piece of land? (1)

I would hope that you would preserve the lodge. Not only does it have historical interest, but it provides a service to tourists who stop to take pictures of the spectacular view and the continental divide marker and it is a refuge in bad weather conditions. (31)

Response: The existing structure was designed as a ski area lodge. The area no longer functions as a developed ski area and all the lifts have been removed, so a ski lodge is not necessary. The Forest will be analyzing a change in the current management direction from a developed ski area to address the recommendations in this assessment. No ski lodge is anticipated to meet future management needs.

The assessment recognizes the need for some sort of facility at Berthoud Pass to help meet current visitor and management needs including provision of restrooms, refuse collection, interpretation and education, and management of CDNST and snowplay activities. The size and scale of the building is far in excess of what is needed for resource based recreation activities identified in the assessment. It is not an appropriate use of public land and resources to just try to support the

existing lodge with any commercial venture. Rather, the facility should fit the need – “form follows function”, not the other way around.

Furthermore, the Forest Service does not believe it is in the best interest of the public to take liability of the structure because of high maintenance costs, needed upgrades, and the fact the structure does not meet current design standards. Since this lodge is the property of SolVista, the Forest Service has no independent authority to require retrofitting the structure to serve another function. The independent authority that the Forest Service retains with regard to the lodge is limited to the agency’s ability to enforce the permit requirement for SolVista to remove this structure. The Forest Service is not interested in retrofitting the structure to serve another function due to the uncertainties and complexities of transferring ownership while maintaining financial responsibility of its removal with the current owners.

There has been no analysis as to how visitor and management needs could be met at Berthoud Pass. These details will be determined in a future project level analysis. Business opportunities for meeting Forest Service management objectives may be identified during this analysis and special use permits would be available for interested businesses.

Comment: The single brief paragraph under Facilities Desired Conditions on page 21 should be expanded to describe potential activities that would be allowed in the facilities so the management functions that the Forest Service lays out become economically feasible. Also, the Clear Creek Master Plan specifically calls out this area with a locally endorsed vision (gateway to county). (27)

Response: The facilities desired condition has been expanded. Details of potential activities that would be allowed in future facilities need to be developed through the project level planning process, which will occur in the next 1 to 2 years. The project level planning process will follow National Environmental Policy Act (NEPA) requirements and will require collaboration with the public.

Comment: The lack of public comment – conclusions section of report – is a ridiculous statement. There was plenty of commentary, you just didn’t hear it. Maybe the idea of comments falling on deaf ears was too much for those actually commenting. (29)

Response: The statement regarding the lack of public comment was incorrect and has been removed from the final assessment.

Ski Area

Comment: For almost 11 years we made our living and employed a number of people by running a summer tourist business (where most of our money was made) consisting of chair lift rides, gift shop and café. In the winter we ran the ski area and while we certainly didn’t get rich, we paid our taxes, provided jobs and a host of basic services to the public, including restrooms, emergency services, parking space, food services, phones and shelter. We sold Berthoud Pass in the fall of 1987 and since then the Forest Service has leased and re-leased the facility to various groups who have significantly remodeled the lodge, put up and taken down various chair lifts, and have, in general, been inept and inconsistent in their operation of the area. The latest operators of Berthoud Pass, the group who operates SolVista, have run the area with snowcat tours for the past two years. They were not open during the past two summers, where most of the profit is made. (3)

The vast majority of Berthoud's business occurs from Memorial Day to late September. Berthoud functions best on a part-time and niche basis – that is during the entire summer and on weekend and holidays during the winter. For anyone who has driven over highway 40 en route to Winter Park or western Colorado, the extreme nature of the area is quite marked. This schedule of part-time operations allows for a small core of full-time staff, part-time staff. Unique industry like this is what keeps tourists coming back for years and years and maintains Colorado's identity. It cannot be said enough: to demolish Berthoud Pass is a terrible waste of opportunity, a destruction of Colorado's roots and a terribly sad event. The part-time schedule was successful for 30 years – before the Garst era and when Irma Hill ran the area from 1962 until 1977. Berthoud also caters to a niche market of intermediate to extreme skiers who are extremely loyal to the area. Berthoud can flourish as what is rapidly becoming an old idea – an area dedicated to skiing and snowboarding, particularly for the local and advanced crowd, with an opportunity for community to develop side-by-side with business. (3)

Response: The Berthoud Pass Ski Area Needs Assessment (Appendix A) determined that a ski area at Berthoud Pass is no longer viable. Two of the last four operators of this ski area filed for Chapter 11 bankruptcy protection and the last operator, Sol Vista, has acknowledged that they were unable to compete with other ski areas in the area. The demonstrated inability of this ski area to compete with its larger neighbors is consistent with the trend that has seen a 33 percent decline in the number of operating ski areas in the last 20 years.

Comment: Although I agree with the assessment that a typical ski resort seems unlikely to survive on the Pass, I disagree with the conclusion that an organized ski operation could not be successful there. The key is to think outside the lines, and open up a ski operation that doesn't have to compete with the Vail's and Aspens of the world. Much like the club fields of New Zealand, or Silverton Mountain in southwest Colorado, there is a market for an advanced/expert ski operation that survives without the high capital expenditures that the big resorts make. The key is to reduce costs. Lifts and lodges are expensive, so they must be minimized. Chairlifts aren't needed, when a poma or t-bar could accomplish the same goals with far fewer costs. Once the lodge comes down, put up a yurt – the core skiers attracted to Berthoud don't need fancy services. Less infrastructure would give the added benefit of lower insurance costs. This needs more thorough analysis in the document. (1e, 2a, 26c, 27b)

The incremental failure of Berthoud Pass as a ski area over the past few decades should not be exclusively attributed to ski market trends, or Front Range skier characteristics specifically. Goals and implementation by the various operators must be factored in to these failures. Having said that, the terrain remains suitable for skiing, and some future lift facilities, especially on the west side of the road may someday be built. That is not for this assessment to determine or even consider. However, maintaining Lynx and wildlife baseline studies could help determine the suitability of such development should the need ever arise. (6, 29)

Response: The assessment considered a study by Sno.engineering , as well as site characteristics, expense of needed upgrades, and natural resources. The assessment recommends converting management of this area from a developed ski area to back-country non-motorized recreation and wildlife corridor. The area will still be suitable and accessible for skiing. However, it will not be lift based skiing. Future project level analyses will determine the specifics of any proposed operations in the area.

Monitoring for lynx and other wildlife for the Berthoud Pass area will be considered during development of the Forest's program of work.

Comment: The assertion that skier visits were down annually is incorrect. Our numbers, running as a ski area, were up as much as 22-23% per year. The interest in Berthoud was growing. We had clientele coming from areas like the Front Range, Crested Butte, Summit County, Vail and Aspen. It is a mistake to ‘compare apples to oranges’ in comparing Berthoud to big mainstream areas. (29)

Response: The skier visits in the Needs Assessment are based on agency records and information from Colorado Ski Country USA. It is appropriate to evaluate the competitive status of a potential ski area at Berthoud Pass with other near by ski areas since such an area at Berthoud would be in direct competition with these ski areas. As discussed in the Needs Assessment, the last operator of a ski area in this location expressed an inability to compete with other ski areas serving the Metro Denver area.

Comment: Sufficient analysis dismantling not only the ski area business model but the ski area industry in general is provided in excruciating detail. As a side note, have all the industry trends and conclusions been validated by the NSAA. (1a)

Response: While documents produced by NSAA provided much of the factual information used, this organization did not elect to comment on the conclusions of the analysis.

Comment: I still think that the possibility of successful lift served skiing could exist on the pass, at this time the question of the lodge and all of its problems is almost irrelevant to my plan for lift served skiing. The future plan for the ski area could exist with or without the lodge in its current location, now that the old lifts have been removed. This is not to say that the lodge problem could or should be ignored; just that the cost difference between resolving the existing problems or picking a new location that may be better integrated into the ski area plan and starting from scratch may not be that great especially if you factor in long term operating costs. My question to you is: is lift served alpine skiing still on the table? If so, what is the best process to follow to signify my interest? (8)

Response: Lift served alpine skiing at Berthoud Pass is not being considered by the Forest Service at this point. If during the Forest Plan amendment process, the responsible official decides to retain the management direction of a developed ski area, then lift served alpine skiing operations would be considered. This assessment recommends converting the management direction for the area from developed ski area to back-country, non-motorized recreation and wildlife corridor.

Comment: The proposed National Forest Service Plan does a nice job of capturing the environmental and forestry aspects of the area but is completely off base in its negative assessment of the ski industry and proposed solutions for the area. Many corporations have invested and will continue to invest millions of dollars in Colorado’s ski industry; to propose that Berthoud Pass cannot support skiing because the industry is dying is not worth the print this plan spent discussing it. To operate Berthoud Pass commercially may require an unconventional business model, but not an unproven one. Operations On Monarch Pass and Trail Ridge road have been successfully run for many years. Ike and Lucy Garst also operated a similar operation, focused on summer visitors for primary revenue generation, for many years. (32)

Response: Berthoud Pass has been the site of alpine skiing for much of the 20th century and is well known among skiers for its unique role in the evolution of the sport. In spite of its history and reputation, Berthoud is not immune to the economic realities of the ski industry today. The successful business model for ski resorts includes challenges that would be difficult or impossible

for Berthoud Pass to overcome. For example, it is becoming increasingly difficult to make money selling lift tickets. Price wars have reduced the cost of season passes. The successful ski area relies more and more on the ability to offer the customer a total resort experience including shopping, dining, and “apres-ski” activities. A small ski area like Berthoud simply cannot provide this kind of experience especially when confronted by competition from Winter Park and Summit County resorts which are in a much better position to offer these kinds of services.

Despite its earlier successes and recent attempts by several entities to make the downhill ski area model successful, the viability of Berthoud Pass as a ski area in today’s market is questionable. The past four owners have had financial difficulties operating the area. There are several limiting factors that make viability unlikely, which are further outlined in the *Berthoud Pass Ski Area Needs Assessment* (see Appendix A).

Cultural Resources

Comment: The cultural history section (page9) seems a bit light on the historical significance of the Berthoud Pass in relation to local history. We note that the bibliography cited only The Expeditions of John Charles Fremont for discussions of historical significance. We would recommend a review of the information contained in Empire and the Berthoud Pass, Louise C. Harrison author, for information on the significance of the pass for local history. (27)

Response: The literature cited above will be considered in future Berthoud Pass project level analyses.

Comment: The Chauncey Thomas Monument should be recorded and documented in the assessment. It was placed in 1943 by the Colorado Historical Society to commemorate the ‘Snow Story’ and is of special historical significance to Berthoud Pass. (24)

Response: The Chauncey Thomas Monument would be recorded and evaluated for National Register of Historic Places eligibility under the National Historic Preservation Act once an action is proposed and an area of potential effect is determined (project level planning process).

Comment: I’m surprised that the Lodge was not deemed eligible for Historic Register listing. This crummy looking edifice is still an example of early ski facility vernacular which is a rarity, and has value. Most ski areas have removed their base lodges only to replace them with faux Swiss or imaginary alpine or western barn architecture. I think that this listing potential and the possibility of restoration to serve summer and winter recreationists, should be revisited. The lodge would also be an ideal high elevation field station for continued research in snow and avalanche formation and alpine environmental studies. At the very least, the SUP requirement for demolition could be delayed, so that this well done assessment can be viewed in context with preservation of the lodge, including some historic matching funds for restoration. There should be some consideration given to utilizing the south end of the lodge, sans the 2nd and 3rd floor, as a new facility to service the demands of snowplay visitors and summer tourists. The cost of adapting this structure to the needs of the users could be less than a new structure, and more desirable than the inevitable “temporary trailer” that will be used for the next 20 years as the interpretive and management headquarters. (6, 14)

Response: The Berthoud Lodge was recorded and evaluated for National Register of Historic Places (NRHP) eligibility by the Colorado Department of Transportation in 1996. The Colorado

State Historic Preservation Office determined the site to be not eligible for the NRHP at that time. No new information is available that would dispute that determination.

General

Comment: It is difficult to identify a “zoning” which would require a Forest Plan amendment for the Pass based on contiguous zones before future opportunities can be explored further. The issue of reclassifying the land in the vicinity of the former ski area is of concern to us. If the terrain is to be re-designated with a primary interest in scenic or wildlife issues, such a designation must not hinder the ability of the recreating public to access the area. This is a potentially volatile topic if not approached carefully and cooperatively. Furthermore, FOBP is concerned that such designation not limit the future notion of a non-profit, cooperative ski and snow sports venture. (25, 26)

Response: The assessment recommends the area be converted to back-country, non-motorized recreation as well as a wildlife corridor. This recommendation will be further evaluated in a Forest Plan amendment process, which will require additional public discussions.

Comment: We are disappointed with the limited ‘vision’ or scope of the draft assessment in terms of opportunities for the area in spite of the multitude of ideas and concepts generated at two public meeting this year. How did the Forest Service narrow the activities to the short list? (25)

The process the Forest Service has used to solicit input from the public has been a formality of lip service. At the end of the day, they intend to destroy the historic lodge atop Berthoud Pass in the same manner that the lodge atop Guanella pass was destroyed. The approach of the Forest Service is analogous to that of a landlord whose tenant has moved out, and instead of seeking a new tenant, burns down his or her property. Having attended all publicized meetings on this topic, I have been disappointed again and again by their unwillingness to all for action to save the pass. (3)

Response: The multitude of ideas and concepts generated by the public were reviewed by a Forest Service interdisciplinary team (IDT) and the major concerns that were relevant to determining the future management of the area were identified as key issues. The existing conditions and uses for the key issues were then determined. Desired conditions were then developed by the IDT for the key issues based on professional judgment, resource knowledge, site-specific knowledge of the area, and public comments. Management needs were identified based on the difference between the existing and desired conditions. The assessment was then written with the key issues framing the document and recommendations.

Comment: Near and long term solutions might be a more appropriate approach to the decision-making regarding Berthoud Pass. The eminent removal of the Lodge does not leave an option for any uninterrupted transitional plan but does insure the Berthoud Pass will not inspire or pass along its rich cultural history ... at least in the foreseeable future. (25, 27)

Response: The process of resolving the long-term needs for the area is outlined in the assessment (Chapter V). A gap between the ongoing situation and the solution is expected. However, the Forest Service hopes to minimize this impact by providing portable toilets and actively developing a solution for the area through the project planning phases of this process.

Comment: A discussion of the efforts of PAW relating to the Berthoud Pass Research Corridor should be added. An expanded future vision that takes into account the concepts of PAW has been developing over the years may stimulate additional possibilities and partnerships. (27f)

Response: A discussion recognizing the importance of partners at Berthoud Pass has been added to the final assessment. Partnerships will be key to the success of any future efforts at Berthoud Pass.

Comment: Chapter IV of the report outlines the recommended conditions. It calls for an entity, outside the Forest Service scope and without their funds, to manage a trailhead, restroom facilities and to serve a “demonstrated public need for natural resource based recreation opportunities, and not solely for the purpose of establishing a profit-making commercial enterprise.” What is being asked here is the impossible. Berthoud Pass under ideal circumstances is already a challenging business environment. By asking a business to “achieve a scenic integrity of ‘high’ as viewed from roads and trails”, build and maintain a bridge or tunnel, a trailhead, and sanitation as well destroys any viable business plan. The private sector will take interest only if there is sufficient ability to generate a viable profit. It does not need to be the maximum profit, but it must be a profit none-the-less. If that is not an option, then no private sector company will show interest. (1, 21, 22, 25, 29)

The Forest Service wants “Facilities at Berthoud Pass would be managed through a partnership or commercial venture, and the partner/operator would maintain the facilities as well as provide for the recreation management needs for the area. The partnership/venture would be financially self-sustaining...” yet has not provided a recommendation of that business or created an environment where that is fostered. (1, 25)

What is not addressed is what the Forest Service thinks should be at Berthoud Pass. Sufficient analysis dismantling not only the ski area business model but the ski area industry in general is provided in excruciating detail but not once did I see a suggestion for what would work. (1)

Successful solutions for Berthoud will require cooperation and corporate acceptance. Attempts by the Forest Service to remove commercial operations from the Pass and ignore the area will fail and we will be assessing greater problems in the future as a result. We need a plan with broader vision – one that will more than superficially solve our problems for this area. The proposed plan nearsightedly solves the problems of the National Forest Service but does not adequately meet the needs of the Berthoud Pass environment or community. (32)

Response: How the visitor and management needs should be met was not addressed in the assessment. These details will be determined in a future project level analysis (refer to Chapter V for a timeline on future planning process). If the needs are met through a private business entity, then some level of commercial activity is acceptable to support management of the area.