III. ISSUES AND RECOMMENDATIONS

This section of the plan will identify issues raised during the planning process and provide recommendations to resolve these issues.

Access/Parking. Five major access/parking areas were identified by the Eagle River Greenbelt Planning Team. These access/parking areas have been prioritized based upon public comment and will be developed based upon legislative funding. As demand increases, and/or as private land adjacent to the greenbelt is developed, other access/parking areas may be developed through special easements/rights-of-way or land purchases or exchanges. The Chugach State Park Master Plan addresses parking areas stating they should combine the qualities of simplicity, attractiveness, safety and function. The exact numbers of cars to be accommodated in any one area will be determined by site suitability, need and qualities of design listed above. Facilities such as restrooms, parking areas, picnic tables, benches, trails and kiosks should be provided when access points are developed. Access points will serve multiple use purposes. The following is the list of parking areas as identified as priorities by the public. (Figure 11-12)

- 1. Roop Road (North Fork) Site
- 2. Eagle River Campground
- 3. Hiland Bridge (Southside)
- 4. McIntyre Road Site
- 5. South Fork Sites (Confluence and Waterfall)

Recommendation: The division should seek funding to begin site-specific design and construction for each parking/access area. Plans should be reviewed by the Chugach State Park Citizens' Advisory Board.

* All-Terrain Vehicles. All-terrain vehicle use, other than snowmachines, is considered a non-compatible recreational use within the boundary of the Eagle River Greenbelt.

Recommendation: All-terrain vehicles, other than snowmachines, should be prohibited within the Eagle River Greenbelt area.

* Acquisition of Land. The 1985 Municipal Eagle River Greenbelt Plan identified 3 parcels of land, totaling 33 acres, which border the greenbelt for future purchase. These parcels are discussed in Section II, G-4 Land Acquisitions of this document. The state is acquiring 9 acres of the Barbara Gross property near the South Fork Waterfall site.

Recommendation: It is recommended that the exchange or purchase of parcels of land as prioritized in this plan be incorporated into the Eagle River Greenbelt.

* Area Name Change. According to the USGS in 1989, the name "Yuklahitna" was the Indian name given to the river. Pronounced "Yukla-hina", the name literally means "Eagle River". The Chugach State Park Citizens' Advisory Board suggested the greenbelt be named "Yuklahitna". The Eagle River Greenbelt Planning Team felt, however, that a kiosk should be placed in the greenbelt honoring the native people of the area along with a historical account of how the land became a State Park Unit rather than renaming the area. The Director agreed with the Planning Team's decision.

Recommendation: The name "Yuklahitna" be used in interpretive literature and exhibits rather than an area name change.

* Campgrounds. The Eagle River Campground, located near the Glenn Highway, is currently the only campground within the Eagle River Greenbelt. The Chugach State Park Master Plan calls for enlarging the existing 38-unit campground by adding up to 50 additional sites with additional separate tent and vehicle camping; removing existing units which are too close to the river and highway; and, providing a wood storage bin, firepits, tables, dumpsters, water pump and an outdoor program area.

The Master Plan additionally calls for enlarging the picnic area up to 50 sites, mostly in the vicinity of the canoe takeout area. Providing toilets, tables, firepits, 2 picnic shelters and parking for 50-75 cars and one-half mile of road.

Recommendation: The Eagle River Campground should be enlarged as stated in the Chugach State Park Master Plan. Additional parking areas and restroom facilities may be constructed as needed. The Eagle River Campground roads and spur roads may be upgraded to pavement. No additional campground facilities are being recommended for other locations within the Eagle River Greenbelt at this time, except for no-trace camping on gravel bars.

* Carrying Capacity (Eagle River, commercial and noncommercial use). Carrying capacity for both commercial and noncommercial users of the Eagle River has not yet been determined due to the lack of visitor use statistics. The Chugach State Park Master Plan Amendment called for a carrying capacity to be established in the Eagle River Greenbelt Management Plan.

Recommendation: A study of the carrying capacity for both commercial and non-commercial user's of the Eagle River should be conducted. The division should work with local river users and the Knik Kanoer's and Kayaker's group to develop a model to determine carrying capacity. Carrying capacities should be reviewed each five years.

* Chugach State Park Master Plan. The Chugach State Park Master Plan included information, management objectives and a phasing development plan for the Eagle River Planning Unit. The Eagle River Greenbelt is encompassed within the planning unit.

Recommendation: The Chugach State Park Master Plan should continue to provide over-all direction for the Eagle River Greenbelt Management Plan whenever possible. The Chugach State Park Master Plan should be used whenever issues are not addressed in the Greenbelt Management Plan.

* Commercial Operations. Commercial use permits will fall under regulations governing commercial use permits within Alaska State Parks. Chapter 11 AAC 18.030 (Park Use Permits for Commercial Activities)

The Chugach State Park Master Plan amendment regarding commercial activities states that: Commercial activities shall be limited in number through concession contracts rather than through park use permits. Activities related to the possible development of a downhill ski area may be allowed but shall be controlled to insure that the natural and recreational resource values of the unit are maintained.

Recommendation: The management plan shall follow the recommendations set forth by the Chugach State Park Master Plan.

- * Conflicts (Possible Recreational Use). With any area of land where a multitude of recreational uses is allowed, recreational use conflicts occur. It is not possible to predict all of the conflicts that may occur, however the most common have been listed below.
 - The poaching of both fish and game is a problem throughout the area. Additional staff presence in the area could reduce this conflict.
 - The unauthorized and unjudicious use of off-road vehicles in the greenbelt creates problems for users and managers in areas where such use is damaging to the soil and vegetation and in areas that may be more suited to non-motorized recreation. Additional staff presence in the area could reduce this conflict.
 - Possible conflicts could arise between cross-country skiers and snowmachiners and/or dog mushers utilizing the same trails. If this conflict arises, it is recommended that these user groups be separated and areas be signed to avoid possible conflict.
 - Possible conflicts could arise between hikers and mountain bikers utilizing the same trails. If this occurs, it is recommended that certain trails or areas be signed to separate these user groups to avoid possible conflict.

Resolution of potential and real conflicts will be aired through a public process involving the Chugach State Park Citizens' Advisory Board.

* Dog Mushing. This recreational use is compatible within the Eagle River Greenbelt. There is possible conflict if mushing and cross-country skiing are allowed on the same trail. Specific dog mushing trails could be signed on the river and/or gravel bars with the help of various musher organizations. Likewise, there could be conflict if mushing and snowmachines are allowed on the same trail. This should be monitored and if conflicts arise specific trails should be designated to avoid user conflict.

Recommendations: Dog mushing is compatible within the Eagle River Greenbelt and should continue to an allowed recreational use. Prescribed trails should be looked into if recreational use conflicts arise between user groups. During late autumn a training area could be established to assist mushers in preparation for the Iditarod, Yukon Quest or other dog mushing events.

- * Eagle River Recreational Water Classification. With the help of the Knik Kanoers and Kayakers, the following are suggested recommendations for classifying the Eagle River for boater safety. An appropriate level of signing will be necessary to warn boaters of various water classifications, possible dangers, and put-in/take-out points. (Figures 13 & 14) However, sign size, color and location should be unobtrusive while still providing necessary warning.
 - Echo Bend to Rapids Camp: Class IV. Due to boulders, possible log jams, and narrow passages, this section should only be used by kayakers or the most experienced canoers. Put-in is difficult.
 - Rapids Camp to Eagle River Visitor Center: Class II. Good for the experienced canoer or kayaker.
 - Eagle River Visitor Center put-in to Moose Pond: Class I. Recommended route would be through the braids avoiding the main channel due to sweepers. Possible portages. Area should be signed to show direction to the north slough. If this is missed the next take-out could be the South Fork confluence.
 - Moose Pond to Roop Road: Class I. This is a short stretch of river with possible log jams.
 - Roop Road to South Fork Confluence: Class I. Probably the best stretch of river for general use. This area provides the sense of a real wilderness outing, which in reality is close to urban development.

- South Fork Confluence to Loop Road: Class I. Another good stretch of river for general use. Loop Road take-out should be clearly marked. Signing on the river to warn boaters of Class II whitewater beyond this point is necessary. An easy take-out point should be identified and developed.
- Loop Road to Eagle River Campground: Class II whitewater. It is recommended for experienced canoer or intermediate kayaker. The Eagle River Campground takeout should be clearly marked with a warning sign of "Class III beyond this take-out" (known as the Campground Rapids).
- Eagle River Campground Take-out to Day Use Area: Class III. During periods of high water this could reach Class IV. This section of the river is recommended for experienced boaters only. This area has been used for the Alaska State Whitewater Slalom Championship Races. The river below this point to the Eagle River Flats flows across military land, in Fort Richardson, which is outside of the Eagle River Greenbelt.

Recommendation: It is recommended that the division adopt river classes set forth by the Knik Kanoers and Kayakers Association.

* Land Title Encumbrances, Documented and Undocumented. Several encumbrances are placed on land within the Eagle River Greenbelt. These are listed in the land exchange agreement between the State of Alaska and Eklutna, Inc. Documented encumbrances are those which are authorized under permit. Undocumented or unauthorized encumbrances are those without legal permit. A list of encumbrances can be found in Appendix B.

Recommendation: The division will recognize all valid land title encumbrances and easements of record and will work with parties holding an interest in these encumbrances to avoid degradation of the greenbelt's natural scenic or recreational resources.

* Equestrian Trails. Equestrian use may be a compatible recreational use within the Eagle River Greenbelt when there are suitable trails to accommodate such use.

Recommendation: If suitable terrain is found the division should work with the equestrian community in the development of an equestrian trail system. Existing regulations or any changes to those regulations shall be adhered to. 11 AAC 20.030 (b) states: The use of horses, mules, and burros is subject to the following conditions: (1) groups using 10 or more animals must obtain authorization from the director under 11 AAC 18.010 before entering the state park; (2) tethering horses, mules, or burrows within 100 feet of fresh water is prohibited; (3) loose herding of animals is prohibited.

Assuming suitable terrain is found, issues of protecting the resource and resolving possible conflicts should be addressed when developing plans for equestrian trails.

* Fishing and Hunting Impacts/Regulations. Under 11 AAC 20.010. Use of Weapons, the use and discharge of a weapon is prohibited in the Eagle River Greenbelt. The Department of Fish and Game regulates trapping as well as fishing within the Eagle River Greenbelt (Game Management Unit 14).

Recommendation: The division will continue to adhere to fish and game regulations set forth by ADF&G. The area will remain closed to the use and discharge of a weapon.

* Flightseeing. The Federal Department of Transportation, and more specifically the Federal Aviation Administration, regulates air space. Currently, as listed in the Alaska Airman Supplement, the minimum altitude for Chugach State Park is 1,500 feet above ground level (AGL). The Division of Parks and Outdoor Recreation has no authority to regulate a minimum altitude for aircraft.

Recommendation: The division will monitor flight activity over the greenbelt. If user conflicts occur it is recommended the division work with the Federal Aviation Administrative to revise minimum flight elevations over the area.

* Golf Course Development. The Eagle River Planning Team feels that the development of a golf course is not compatible with the management goals of the Eagle River Greenbelt Management Plan, the Chugach State Park Master Plan, or the Alaska State Park System: Statewide Framework. Such recreational activities would be better suited on private or municipal lands.

Recommendation: Golf course development is prohibited within the Eagle River Greenbelt area.

* Hiland Bridge Crossing. The Alaska State Department of Transportation and Public Facilities (DOT/PF) is building a 4-lane bridge crossing the Eagle River from the Eagle Valley Loop Road, on the north side of Eagle River, connecting to the Glenn Highway west of the Hiland Road interchange. A bike trail access off the south end of the bridge is being planned to loop under the bridge. Also, an off-ramp to the 1D9 (Homesteader's Road) is planned. This ramp could be used to provide vehicular access to a parking area for river and trail use. The Division of Parks and Outdoor Recreation should develop this access point. Funding should be sought from the State Legislature to allow for the development of this access point during construction of the new bridge crossing.

Recommendation: The division should continue working with the Department of Transportation and seek funding to develop the Hiland Bridge access/parking area in conjunction with the construction of the bridge and connecting road.

* Interpretation. The Eagle River Visitor Center currently provides natural and historical interpretative programs as well as general information for visitors to Chugach State Park. The center also provides educational opportunities for local schools, clubs and organizations. The center attracts over 42,000 visitors annually. As state tourism, area population, and recreational demand in the Eagle River Greenbelt increase, additional visitation pressures will be placed upon the visitor center.

Recommendation: It is recommended that additional staff be provided so that the visitor center can be opened 7 days per week during the summer season and a minimum of 4 days in winter. With the enlargement of the Eagle River Campground, it is recommended that an interpretive area be established for camper and river use orientation, as well as day-time and evening programs.

The Chugach State Park Master Plan Land-Use Zones. identifies three land-use classification zones for the park, and designates appropriate activities and facilities that may be permitted within each zone. The three land-use classifications include: (1) Recreation Development Zone, (2) Natural Environment Zone. (3) Wilderness Zone. Most of the Eagle River Greenbelt portion of Chugach State Park has been identified as a "Natural Zone" with pockets of land around the Eagle River Visitor Center, Eagle River Campground, and a stretch of land along the south portion of the Eagle River upstream from the South Fork designated as a Recreation Development Zone. There is no designated Wilderness Zone within the Eagle River Greenbelt. Natural Environment zones are relatively undeveloped and undisturbed, have high scenic qualities, and are accessible by trail or road and provide visitors with the opportunity for a significant natural outdoor experience. Recreation Development zones are established to meet intensive recreation needs of people by providing easy and well-defined access points into the park, and by developing appropriate facilities.

The Eagle River Planning Team further divided the Eagle River Greenbelt into two recreational use areas with the separation line being the future McIntyre School site at mile 6.6 on the Eagle River Road (refer to Figure 2.) Up-river from the McIntyre School site to the Eagle River Visitor Center is designated as a low recreational use area while down-river from the McIntyre School Site to the Eagle River Campground is designated as a high recreational use area. The lower valley is designated a high impact recreational use area due to the intensity of development that is rapidly occurring on both sides of the river, the future construction of the new bridge crossing, and the existing Eagle River Campground development. The upper valley is being viewed as a less intensive recreational use area to preserve the wildlife habitat and wildlife that presently exists.

Recommendation: The division adopt the Planning Team's recreational use areas and consider the two areas when developing facilities in each respective area.

Operations Budget. There is currently no funding available for the development or operation of any facilities including access points, parking areas, restroom facilities, etc., for the Eagle River Greenbelt. Funding will have to be appropriated by the Legislature for both facility development and additional park personnel. Park rangers currently do periodic checks within the Eagle River Greenbelt but do not have time to provide routine operational services to the area. As facilities in the Eagle River Greenbelt are developed, it is anticipated that at least one fulltime year-round Park Ranger I plus a vehicle and radio will be needed to adequately manage the area. Additional staffing will also be needed if the Eagle River Visitor Center hours are extended. It is further anticipated that approximately \$10,000 will need to be appropriated for contractual services (i.e. private contracts) to clean up abandoned cars and other debris as well as provide proper signing of the area to help the public use and enjoy the area.

Recommendation: The division should seek funding to provide for one additional Park Ranger I plus a vehicle and radio; additional park staff to cover increased hours of operation at the Eagle River Visitor Center; \$10,000 for contractual services to clean up abandoned cars and other debris and to provide proper signing of the greenbelt area.

* Park Regulations. The Eagle River Greenbelt is subject to the same regulations that apply to Chugach State Park (Alaska Administrative Code: Title 11, Chapters 05, 12,14,18, and 20).

Recommendation: The rules for the use and management of the Eagle River Greenbelt will be promulgated under AS 41.21, the Alaska Administrative Procedures Act and as proposed in the park master plan, this plan and subsequent step down planning or related decision-making efforts of the division.

* Private Inholding/Land Status. There are no private inholdings within the Eagle River Greenbelt boundary. Several private parcels border greenbelt land. Section II-G explains land status within the greenbelt.

Recommendation: The division should monitor land use and development on lands that border the Eagle River Greenbelt to assure protection of water quality, wildlife, wildlife habitat, and recreational use of greenbelt lands.

* Public Use Cabins. No public use cabins are proposed for the Eagle River Greenbelt area due to both its small size and close proximity to an urban area.

Recommendation: Public use cabins will not be constructed within the Eagle River Greenbelt area.

* Refuse Disposal and Clean-up. Refuse disposal continues to be a problem on lands within the Eagle River Greenbelt. Abandoned cars and common household refuse can be found and create both visual pollution and problems of health and safety.

Recommendation: The division should seek funding to clean the area of refuse disposal. Additionally, the state should involve private citizens and local organizations, on an ongoing basis, to help clean up and maintain the Eagle River Greenbelt area. See also, Operations Budget.

* Resort/Ski Area Development. In the past, there have been plans to construct a major destination downhill ski area near the South Fork confluence. Although most resort facilities were proposed to be built on private land adjacent to the Eagle River Greenbelt, some downhill ski runs and other associated facilities

were proposed on greenbelt lands. If a major downhill ski area were developed adjacent to Eagle River Greenbelt lands, it is possible that other facilities such as a ski jump, luge and bobsled could be built on private land adjacent to greenbelt land as well.

Recommendation: The resort/ski area is addressed in the amendments to the Chugach State Park Master Plan. If a resort is developed at the confluence of the South Fork or a separate downhill ski area is developed on nearby park lands, the division may develop additional associated facilities in the Eagle River Greenbelt provided that:

- development plans conform to the general intent of this plan, the Chugach State Park Master Plan and applicable laws and regulations;
- ii. Eagle River Greenbelt resource values are maintained;
- iii. plans are reviewed by the Chugach State Park Citizens' Advisory Board, other agencies, and the general public is given the opportunity to review and comment on the plans;
- iv. the facilities are developed to enhance public use and enjoyment of the Eagle River Greenbelt or other public park lands; and,
- v. golf courses and other intensive types of facilities which serve as attractions in and of themselves, rather than supporting public use and enjoyment of greenbelt lands, will not be allowed.

In the event that other related facilities (i.e. ski jump, luge and bobsled runs, etc.) are planned on or adjacent to Eagle River Greenbelt land, the division will work with the developer to help mitigate any adverse environmental effects the development might have on the greenbelt and its resources.

* Resource Protection. Resource protection is a major management objective for the Eagle River Greenbelt. This includes, but is not limited to, the protection of wildlife, wildlife habitat, wetlands, vegetation, and air and water quality. These are important elements in the quality of life for residents and visitors alike. Visitor surveys conducted by the Division of Tourism indicated that the majority of persons who come to visit Alaska come primarily because of the wildlife and wilderness character of the land. The greenbelt is an area which contains both scenic vistas and healthy populations of wildlife. By protecting and preserving wildlife and wildlife habitat, the attraction of visitors to the area will be enhanced.

Recommendation: The division should continue to work with the Department of Fish and Game in enforcing the regulations which protect wildlife within the greenbelt.

To enhance visitor experience within the Eagle River Greenbelt, selective hand thinning of vegetation may be done to improve distant vistas of Eagle Peak and foreground views of the river. Selective hand thinning could also be done to maintain a successional growth stage, for fire suppression, research and/or wildlife habitat.

Resource protection should be a primary concern in the development of any facility.

* Signing. It is important that proper signing of recreational uses, specific greenbelt features and/or regulations of the Eagle River Greenbelt be implemented to help visitors understand and better utilize the area.

Recommendation: The signing of the Eagle River Greenbelt will follow the standards set by the division. This will provide continuity while insuring public safety and enjoyment and avoid the possibility of over-signing. Warning signs should be placed along the Eagle River to mark changes in river conditions, take-out points, etc., for boaters. It is recommended that informational kiosks be placed within the greenbelt, one of which to describe not only the history of the greenbelt but the importance of the area to the native people who once inhabited it. "Local Access Only" signs should be constructed in neighborhoods where a homeowners' association or subdivision developers

builds and maintains a trail that connects into the Eagle River Greenbelt. No parking facilities will be constructed at local use only access points.

Snow Vehicles. Five alternatives were considered during the planning process. The selected alternative which allows the use of snow vehicles in the greenbelt, downstream from the Eagle River Visitor Center and as adopted by the Director of Parks and Outdoor Recreation, shall constitute an amendment of the Chugach State Park Master Plan. (Figures 15 & 16)

Recommendation: To allow the use of snow vehicles on the Eagle River water courses and gravel bars from the Eagle River Visitor Center downstream to the Eagle River Campground. Further, that there is a stipulation to allow for snow vehicle access corridors from parking areas to the Eagle River water courses and gravel bars. It is recommended that the area from the Eagle River Visitor Center upriver be closed to snow vehicles.

* Sport Fish. The Alaska Department of Fish and Game planted 12,000 King salmon for 1990 and plans to continue stocking Eagle River with King salmon. Should this program develop into a popular sport fishery, as has happened at a number of locations on the Kenai Peninsula and in the Susitna Valley, a major increase in public use of the greenbelt can be expected.

Recommendation: Division staff should work closely with the Sport Fish Division in ADF&G to manage the increased use of the the river in a manner that is compatible with the purposes of Chugach State Park, its master plan and this plan. Both divisions should jointly prepare a plan for public review which deals with the potential increase in public use of the greenbelt by sport anglers. The plan should address facilities needed to accommodate the use and recommend funding sources, such as federal Dingell-Johnson grant monies, to pay for the needed improvements. It is recognized that the funding priorities for the facilities recommended in these plans may need to be altered to deal with increased sport fishing use. The plan should also consider using methods

and means of harvesting controls or other management techniques as a way of focusing angling pressure on the river below the proposed MacIntyre Road Access Site, which is the portion of the greenbelt to be managed for higher intensity use.

Special Note: This issue was not dealt with by the planning team because it was identified late in the planning process. The discussion of the issue and recommendation presented here are solely the work of the Division of Parks and Outdoor Recreation staff. It was the division's view that because this issue occurred after the planning process was completed, it was not feasible or appropriate to reopen the planning process. Instead, the division has chosen to deal with this issue through a separate planning process to be conducted in conjunction with the Division of Sport Fish (ADF&G). The information presented here is intended to identify the issue and set the stage for the more detailed planning process which will include public involvement.

* Storm Drains. Storm draings, with sediment traps and/or oil/grease separators, are frequently being installed in housing development areas. These facilities will help to maintain water quality in stormwater outfalls into river and drainage systems.

Recommendations: Stormwater outfalls into the Eagle River should be closely monitored to insure that proper safeguards such as sediment traps and/or oil/grease separators are built and adequately maintained. The division should continue working with the Municipality of Anchorage to guarantee the placement of these safeguards. Storm drains are addressed in section II F.

* Trails/Trail Design/Trail Development. To help safeguard against resource damage or degradation and visitor safety, the proper design and location of trails and trail design is essential to the overall management of the Eagle River Greenbelt area. Four trail alternatives were considered with limiting factors for both the number of trails and specific trail classifications for the Eagle River Greenbelt. (Figures 17 & 18)

Recommendation: The selected trail alternative for the Eagle River Greenbelt was developed from: (a) criteria in the alternative chosen by the public, and (b) through land reconnaissance by park staff. In addition, the chosen trail plan policy was designed according to the criteria in the appendix of the Chugach Sate Park Master Plan.

These criteria are as follows and should be adhered to during the location and construction of trails within the Eagle River Greenbelt:

- i. Every effort should be made to locate the trail in such a manner that it will blend harmoniously with the natural topography and vegetation of the area.
- ii. The alignment of a trail should not necessarily be designed for expedience, but rather to provide the opportunity for interesting viewing or to reach an interpretive or natural feature along an aesthetically pleasing route.
- iii. The grade of trail should not be steeper than 15%, except in extreme cases, and should when possible, be held to a maximum of 10%. In short stretches of not over 150 feet, and in very exceptional cases, a grade up to 20% may be permitted, but only after it has been determined that other alternatives are too costly in terms of price or environmental considerations.
- iv. In some cases trail width will necessarily vary, due to terrain features or unusual circumstances, but for the most part (depending upon trail classification), the trail should be cleared for a width of four feet.
- v. The greenbelt trails system should be connected to municipal trails in the area including the Eagle River Road and Glenn Highway bike paths.

- vi. The trail should be cleared as high overhead as can be reached. If trails are used in the winter, clearing limits need to accommodate the typical snowpack. It may be desirable, however, to leave a high overhang of branches whenever the type of forest growth will permit. An occasional low branch or other feature that may enhance the beauty of the trail may be left uncut provided that the feature is not a safety hazard. As in the case of trail width, discretion is needed.
- vii. Large trees should be cut only when it is impracticable to build around them. Trees and brush should be cut as close to the ground as possible. This practice will discourage resprouting and minimize tripping hazards.
- viii. Brush and logs from clearing should be disposed of or cut, removed and stockpiled for future use as firewood, etc. Cut vegetation which cannot be utilized should be disposed of farther into the woods. It is essential that all evidence of construction outside of the trail prism be held to a minimum.
- ix. Precipitation and run-off characteristics in a locality should be observed to properly determine the methods best suited for the disposal of drainage water. A dip in the grade of a trail is one means of disposing of drainage water. Where it is not practical to dip the grade, water breaks or culverts should be provided.
- x. Park staff should meet with various user groups prior to any trail development to seek suggestions, private expertise, and assistance.

All trails will be designed to consider resource protection, possible user groups and experience, maintenance and operating costs, site constraints, avoidance of user conflicts and public preferences.

There are three trail classifications that should be used when developing trails within the Eagle River Greenbelt. These are:

Class A Trails. Class A trails should have a tread width of 8 to 10 feet with at least one foot of additional clearing on each side. The general intent of Class A trails is to provide the capability of accommodating a large number of users at one time with little conflict. It is also to provide for activities which require trails with hardened surfaces and adequate width (natural history interpretation, dog sleds, double-track ski trails, horse trails, handicapped trails, and mountain bikes).

Class B Trails. Class B trails should have a width of 4 to 6 feet with at least one foot of additional clearing on each side. These trails are generally not hard surfaced and must be carefully located and assigned for uses which do not result in degradation or mud holes. The general intent of these trails is to provide the capability of accommodating a moderate number of visitors with little tread scarring on the landscape and lesser clearing widths than Class A trails. It is also to provide for activities which would not require hardened surfaces, precisely graded treads or additional clearing width.

Class C Trails. Class C trails should have a cleared tread width of 2 to 3 feet with a total clearing width of 4 to 6 feet. The general intent of these trails is to provide the capability of accommodating a small number of users with no appreciable tread scarring other than that which occurs with normal foot traffic. They also feature the most narrow clearing width (trees would seldom ever have to be cut; mostly just brush or scrub trees), but a width adequate for hiking, wildlife observation and exploratory skiing. Class C trails

could be established in the more sensitive landscapes such as wilderness or where narrow clearing and no tread cutting is required. In alpine areas where no clearing is necessary, Class C Trails become Routes, and are identified as such on the trail maps.

Trail Development Recommendations:

Up to 2 Class A Trails, up to 10 Kilometers in length from each major development in the Lower Valley (Class B or C trails could be substituted).

Up to 2 connecting Class A Trails within the Lower Valley (Class B or C trails could be substituted).

Up to 1 Class A trail, up to 10 Kilometers in length from each major development in the Upper Valley (Class B or C trails could be substituted).

Up to 3 Class B connecting trails in the Upper Valley (Class C trails could be substituted).

Up to 4 pedestrian bridges can be constructed anywhere in the Eagle River Greenbelt with enough clearance for river users to pass safely beneath them.

NOTE:

- 1. Lower Valley refers to the area from the Eagle River Campground up-river to the McIntyre School Site.
- 2. Upper Valley refers to the area from the McIntyre School Site up-river to the Eagle River Visitor Center.

- 3. A substitution option of one class of trail with a lower class of trail (i.e. Class B substituting for a Class A, or a Class C for a Class B trail) is permissible under this plan due to the possibility of a lack of funding. This would enable a trail to be built with less funding with the option to upgrade it at a later date.
- * Local Trail Access/Easements. Local trail access/easements may be needed in conjunction with Greenbelt Access/Parking areas. Trail access and/or easements could be established as subdivisions are developed on private lands which border the Eagle River Greenbelt. These access points may not require facilities such as parking areas, restrooms, etc, if used locally by those living in or within walking distance to the subdivision access area.

Recommendation: The division should work with the Municipality of Anchorage and private developers to identify and provide for local greenbelt access points. These access point should be properly signed noting "Local Access Only" and maintained, if possible, by the homeowners' association.

* Trespass. Trespass across private parcels of land bordering the Eagle River Greenbelt is an ongoing problem. Currently, the most common trespass occurs across Eklutna, Inc. lands and Municipal lands at the old dump site near the Eagle River Campground; private property along the 1D9 (Homesteader's Road) which weaves in and out of the greenbelt; through subdivisions which border the greenbelt along the north side of the Eagle River; the Alascom site; and, the Roop Road access through the Donnelly private property.

Recommendation: Proper property ownership signs should be placed at access points. Acquisition of lands to allow legal access through private property is an alternative that should be pursued.

* Utility and Transportation Corridors. The Hiland Bridge Crossing is due to be completed in 1992. This bridge will likely be the only major transportation corridor which bisects the greenbelt. A number of utility easements cross the greenbelt and are discussed under land encumbrances.

Recommendation: Utilities to serve private lands adjacent to the greenbelt should be planned to avoid or minimize resource damage and user vistas. All utility lines servicing greenbelt developments should be placed underground with vegetation restored to a natural appearance, whenever feasible.

If lighting is provided along access roads, parking lots, or trails, shielded lighting (sometimes referred to as architectural lighting with type 2 reflectors) is recommended. This type of fixture reflects the lighting downward and prevents the light from illuminating the night sky. (See also Encumbrances)

* Visitor/Visit Count. It is important that visitor/visit counts be maintained for the Eagle River Greenbelt. This information is essential to help meet increased visitor use needs.

Recommendations: Accurate and complete visitor/visit statistics should be maintained for the Eagle River Greenbelt. Attendance figures are necessary to measure use preferences and trends. With this information new developments can be carried out to meet visitor demands. Trail registers should be put at all trailheads. Methods of counting visitors might include mechanically triggered trail counters, photo-electric counters, car counts and observations. Surveys of visitors could be utilized if authorized by the Director.

* Wetlands. To develop or modify wetland areas within the Eagle River Greenbelt requires a permit be issued by the U.S. Army Corps of Engineers.

Recommendation: It is recommended that the division protect and preserve wetlands within the Eagle River Greenbelt area. That open communication continues between the division and the U.S. Army Corps of Engineers. And, that any facility development follow legal permit regulations through the U.S. Army Corps of Engineers.

* Wildlife. Wildlife within the Eagle River Greenbelt is a valuable resource. The presence or lack of wildlife can be an indicator of human impact and use on a particular area. Wildlife populations and their habitat should be given close consideration in the development of facilities and related amenities.

Recommendation: Data on wildlife populations, patterns and habitat changes as well as private development on lands bordering the greenbelt should be gathered on a

year-round basis to keep wildlife population numbers in check. Volunteers or university students could gather this information.