CHAPTER 3

POLICIES

Policy on Naming and Numbering of Trails

Trails within Chugach State Park should be named and numbered. Naming is important because it provides descriptive information about the trail to users and enables them to identify ground locations from maps. It is also vital to rangers in identifying the location of events or incidents. Naming trails is akin to the importance of naming streets in a city.

Numbering offers additional advantages. It prevents any misunderstanding of trail identity when names are similar. While naming provides valuable information about origin-destination and environment of a trail, numbering can key the trail to a particular management unit of the park and will be valuable in the future as the maintenance management system for the division begins to be coded for computerization.

Names for trails should be descriptive of origin-destination or the character of the country through which the trail passes. For example, "Middle Fork Loop Trail" describes the former and "Hemlock Knob Trail" the latter. Trails in Chugach State Park will be numbered as follows within the five planning units of the master plan:

1. Eklutna/Peters Creek - 100 series
2. Eagle River - 200 series
3. Ship Creek - 300 series
4. Hillside - 400 series
5. Turnagain Arm - 500 series.

A trail passing through several different planning units may carry the same origin-destination name but will carry the numbering system of that particular drainage (planning unit). The Arctic Valley/Indian Valley Trail would carry a 300 series and 500 series number respectively, dividing at Indian Pass.

Policy on Signing Trails

Trail names should be posted at the trailhead/terminus with a relatively small, rustic low-maintenance sign. The size of the sign should be carefully scaled to the distance to be read and speed of the user, yet it should not be obtrusive. Trail numbers are not necessary at trailheads or trail intersections. Trail names and directions are necessary at intersections of major trails, but optional at intersections of minor trails, depending on demonstrated need.

Motorized trail corridors within non-motorized zones of the park should be well marked at both ends and marked on both sides of the trail with small, low maintenance directional markers at 100 foot intervals. Where the motorized corridor is physically confined by thick brush, the interval between signs can increase to up to 600 feet.

Horse trail corridors should be posted at the trailhead/terminus and at trail intersections with a small, rustic low-maintenance sign. Sled dog trails should be posted in a similar manner.

For more detailed information regarding trail signs and signing, refer to the UNIFORM TRAIL MARKING SYSTEM of the Alaska Recreation Trail Plan (pp. 67-77).

Trail Classification System

Class A Trails. Class A trails are wide, graded trails with gentle grades and graceful, easy turns. They can serve a variety of heavy duty-type functions. These include double-track ski trails, horse trails, handicapped trails and mainstem access corridors from important trailheads. Such trails may also be suitable for natural history interpretation; dog sleds, mountain bikes, three-wheelers or snowmobile use. In the Hillside Unit of Chugach State Park, existing trails that fit into this category are the old homestead roads (Wolverine Bowl, Southfork of Campbell Creek (east rim and lower part of west rim), the powerline trail, gasline trail, and Glen Alps access trail.

Class A trails should have a tread width of 8 to 10 feet with at least one foot of additional clearing on each side. Grades should be a maximum of 8%, with steeper grades permitted for short distances. Handicapped trails at heavily used visitor parking areas should be restricted to 6 to 8 percent grades. These trails should be surfaced with gravel or equivalent material, or even paved. 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.

Class B Trails. Class B trails are trails of moderate width and grades which feature a narrow, hand-worked tread, or comparable machine-worked tread. They serve a variety of functions such as single track ski trails, horse trails, hiking, nature trails, or low speed access corridors for snowmobiles, three-wheelers or dirt bikes. Existing trails of this type are the Johnson Trail along Turnagain Arm and new portions of the Middle Fork Loop Trail, the Willawaw Lakes Trail (following the middle fork) and Eagle River Snowmobile Access Trail.

Class B trails should have a tread width of 4 to 6 feet with at least one foot of additional clearing on each side. Grades should be a maximum of 12% with steeper grades permitted for short distances. Grades for ski trails should be confined to less than 10%. These trails are generally not hard surfaced and must be carefully located and assigned for uses which do not result in degradation or mudholes. 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 are the lowest standard of improved and maintained trail. They feature no tread grading and serve a variety of uses such as single-track skiing, hiking, and wildlife observation. These trails are less adequate for horse use, snowmobiling, sled dog mushing, mountain bikes or three-wheelers and dirt bikes. Existing trails of this type are the South Fork Rim Trail, Hemlock Knob Trail and the East Fork of Eklutna River Trail.

Class C trails should have a cleared tread width of 2 to 3 feet with a total clearing width of 4 to 6 feet. Grades should be kept under 8% for those designed for winter ski use, and under 20% for hiking to avoid soil erosion. Sustained grades should be avoided to reduce erosion as well. 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 clearings 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.

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This classification system establishes three broad categories which contain trails of surprising diversity in terms of intended uses. In terms of construction standards and impacts on the land, the three trail classes provide the range of options needed for different uses. No classification system for trails is perfect. It is hoped that this three-level system based largely on impacts on the land and number of users served will guide future trail construction and maintenance decisions.

Location, Design and Construction of New Trails

This chapter makes specific recommendations about locating, designing and construction of trails to serve the expectations of users identified in the previous chapter. References are also made to Class A, B, and C trails as a means of achieving these recommendations.

Ski Trails

Trails to be used for competition or beginning skiers and family use should be double-track Class A trails with equal parts of uphill, downhill and level terrain. Curves at the bottom of a hill should be gentle enough to accommodate a high speed run out. The wide Class A trails should avoid steep side hills which would result in severe gouging of the landscape. During construction, removal of all large trees is desirable before grading begins to reduce scarring of surrounding "leave" trees, and to prevent large trees from being left adjacent to the trail. Bulldozed trees are very unsightly, constitute a fire hazard and may permit the build-up of epidemic bark beetle populations. Wherever possible, on-the-ground trail location should avoid large trees. In most of the open-canopy spruce forest of the Hillside unit this is quite possible. Usually only alder brush or ground debris must be removed.

In areas where the spruce canopy is quite open and there is little or no alder brush, the grading can be omitted and hand work substituted. The great advantage here lies in the fact that not disturbing the moss, cranberry, crowberry and other small plants prevents alder from growing in thickets along the edge of the trail, creating an expensive maintenance problem on a recurring basis. Many of the older homestead roads in the park are easily

recognizable today because they are a corridor of alder in otherwise open spruce forest. These roads (trails) were created by bulldozing down to mineral soil over 20 years ago.

Single-track ski trails are lesser impact Class B trails which serve recreational skiers with a variety of opportunities from easy to challenging. Grades are permissible up to 10% with steeper grades for short distances. While the tread width is 4 to 6 feet, the clearing width is 6 to 8 feet. The tread of Class B trails should be hand cleared to avoid impacts, or machine cleared only if the impact is comparable to hand clearing. Grades that roll with the terrain, gentle curves, and equal parts of uphill, flat and downhill areas are desired goals. The National Ski Association suggests the following grades. The maximum grade for beginner trails is 10%. The maximum grade for general purpose trails is 17% for no more than 300 feet. Racing trails may have grades up to 30% for 100 feet or less. However, the most enjoyable and safest grade for track set and well-used trails is 8% or less due to the frequent hard pack or icy conditions encountered in Chugach State Park.

Single-track "adventuring" or "exploring" trails should be narrow and low impact Class C trails. Because they are narrow, grades should be confined to less than 8% when designed for skiing use. Generally speaking, only brush needs to be cut to open up and maintain these trails. No grubbing of the tread is necessary. Long, sustained grades should be avoided to prevent too much speed build-up. Trees would seldom have to be cut to provide these trails except in mountain hemlock thickets or young spruce stands. These would be excellent winter wildlife viewing trails.

Equestrian Trails

Trails to be used for horseback riding should be Class A or Class B trails. While Class C trails without graded treads can be used, they are often too narrow and offer poor footing on sidehills and rocky terrain. The most crucial element in selecting equestrian trails in Alaska is to avoid wet areas that could result in mud holes. These conditions, for example, make the Johnson Trail along Turnagain Arm unusable by horses. Both good drainage and soils that can sustain compaction are both desirable horse trail location criteria. Horses seldom need a treadway wider than three or four feet; however, adequate overhead clearance is crucial.

Equestrian trails for winter use should be free of areas that form aufeis (glaciering ice). Equestrian trails should also be closed to all motorized uses which represent a safety problem. Some of the wider Class A trails that are suitable for winter horse use should have the horse tread separated from the ski tread (tracks). This is necessary to avoid ruining the comparatively fragile ski tracks. In the Hillside area, the gasline trail is about 16 feet wide, half of which could be reserved for horses and half for skiers. The powerline trail, on the other hand, has a clearing over 50 feet wide, and if the eastern portion were used by skiers, the western part of the clearing would be excellent separation for horse use.

Alpine areas developed for horse trails should be limited to well-drained, erosion-resistant, trample-resistant areas. However, horses are used for sheep and moose hunting in Chugach State Park. Horses are relied upon for hauling out moose from the North Fork of Ship Creek and this use has become

traditional. Route relocation will be necessary in Ship Creek to avoid mudholes that are becoming larger and more numerous each year. In some cases, hard surfacing of existing trails may be necessary to sustain horse use.

Sled Dog Trails

Sled dog trails are generally the wider, flatter Class A trails with gentle turns and grades. The gasline trail and powerline trail are the two most used trails in the Hillside unit for these very reasons. The other vital requirement is freedom from motorized conflicts, either on the same trail or crossing the dog trail. The development of future sled dog trails should take into consideration access from Far North Bicentennial Park and appropriate motor-free areas in Bird Creek Valley.

The location, design and construction of sled dog trails should follow the requirements spelled out previously under Class A ski trails.

Snowmobile Trails

Snowmobile trails are generally wide Class A trails which can accommodate a wide variety of grades and turns. If these trails are not to be used during the summer season, the quality of the tread is not a major factor. Swamp areas are suitable once they are frozen and snow covered. However, such trails should be blocked in summer to prevent site degradation of swampy areas. Upper Huffman snowmobile access is a good example.

Where snowmobile trails are provided an access corridor through an area closed to motorized vehicles, very careful site investigation is necessary to locate the trail as much as possible out-of-sight and sound of non-motorized users. This may mean deliberately reducing snowmobile speed through trail design and signing, location in dense timber or brush, and utilization of terrain interceptions. It is likewise very important to locate snowmobile corridors through non-motorized areas so that they intercept non-motorized trails as little as possible. This physically reduces the opportunity for penetration into non-motorized closed areas. It also reduces the need for extensive signing and makes the management of snowmobile use easier for field staff. The existing situation is virtually unenforceable in the Hillside at current staffing levels. A better defined access corridor also protects non-motorized users from having the quiet of their experience shattered by illegal snowmobile use and prevents carefully honed ski trails from being destroyed. It also protects the rights of snowmobilers to use a particular valley by preventing the ease and frequency of illegal penetration by a careless or uncaring few, resulting in pressure to remove all motorized uses from the valley because the situation is "unmanageable".

In valleys that are currently open to snowmobile use in Chugach State Park, and this is half of the major valleys in the park, it is frequently possible to accommodate both motorized and non-motorized uses by building new trails which physically separate the uses. These could be either motorized or non-motorized trails. In some cases it may mean building both types of trails because the present trail is unsuitable for either use and should be closed. Adequate physical separation is the key factor, using vegetation and terrain wherever possible to achieve this. Other constraints on motorized trails are

wilderness areas of the park, and areas where noise and wildlife incompatibility would prevent use.

Three-wheeler and Motorbike Trails

Three-wheeler and motorbike trails are Class A and Class B trails which can feature a wide variety and grades and turns. These trails must be hard surfaced to avoid mudholes and related site degradation. Grades should be confined to slopes that minimize soil erosion for the particular soil involved.

Many of the locational factors that apply to snowmobile trails (previously), apply to three-wheeler and bike trails as well. The physical separation of motorized and non-motorized uses is very important during the snow-free months when trails open for foot use could be easily damaged by motorbikes.

Alpine areas are particularly susceptible to motorbike damage because the soils are thin and easily eroded, and vegetation is very fragile and slow growing. Motorbike trails should always stop in heavy vegetation before the alpine zone is reached. Once motorbikes enter the alpine zone, they are uncontrollable and potentially very damaging. The current situation in Little Peters Creek Valley illustrates this very well, as the damage to alpine tundra here is very extensive and worsens yearly.

Developing an adequate physical barrier may be a vital factor in the proper management of motorbike use. Otherwise total closures and strict enforcement may be the only options to avoid unacceptable site degradation in Chugach State Park.

Mountain Bike Trails

Mountain bike trails are Class A and Class B trails with hardened treads and moderate grades (generally under 15%). The trail should be free of muddy or boggy areas which would impede use and result in site degradation. The most used trails at the present time are the powerline trail (for its entire length), the gasline trail in the Hillside area, and the Eklutna Lake Road between Campground "A" and the glacier.

The physical and social impact of mountain bike use is not well understood in Chugach State Park. Until more is known, no new trails will be recommended. The continuation of suitable existing trails should be the thrust of current management.

Hiking and Walking Trails

Hiking trails cover the entire gamut of trails - Classes A, B, and C. Many of the gentle gradient, wide cross-country skiing trails are excellent for family activities or large groups of people on social outings such as weekend walks, berry picking and nature observation. Hiking trails are also used by runners and joggers.

Cross-country ski trails of moderate width (Class B) in open-canopy spruce where no tread grubbing was necessary can be used as Class C walking and hiking trails during the snow-free months. With use, a narrow trail tread will develop, not unlike a well used game trail except for the wider clearing.

Class C trails, with no grubbed trail tread (just a 4 to 6 foot wide clearing), are ideal for access to mountainous backcountry through brush fields and alder patches. The Class C trail is also ideal as a wildlife viewing trail where a low impact on the landscape is desired and use is expected to be light. Wildlife viewing trails will be desirable for access within the park's dedicated wildlife viewing areas. To accommodate summer use adequately, all clearing should be done to ground level.

Handicapped Person's Trails

Trails for the physically disabled will, in most cases, be Class A trails with hardened treads and grades less than 8% for short distances. Sustained grades of less than 6% are desirable. Muddy areas should be avoided wherever possible. Major nature trails will also serve handicapped users and be designed to accommodate them using Class A standards.

Class B and C trails can be used by persons with smaller disabilities, and this challenge is important to them. However, only the safest Class A trails should be signed to invite use by handicapped persons.

Classification System for Trailheads

Trailheads will be classified into small, medium, and large size categories. This size will also be an indication of impact on the immediate surroundings, and of potential traffic generation. Broadly speaking, they are:

Small: 5 to 15 cars
Medium: 20 to 40 cars
Large: 50 to 100 cars.

Buses could also be served at large trailheads if road conditions and surfacing are adequate.

Trailheads serve as the principal access points to Chugach State Park because trails are what this park is all about. Over 60 points of entry have been identified in Chugach State Park stretching from Knik River (Hunter Creek) to East Anchorage (Hillside) to Girdwood Valley (Crow Pass). All of these could be considered to be trailheads to one degree or another. They range from 2 or 3 car pull-offs to go to 100-car parking areas at Glen Alps and Eagle River Visitor Center.

Because of the highly variable nature of Alaska weather and trail conditions, use of these trailheads fluctuates from 1 or 2 cars on a poor weekend (January - raining on ice) to 50% over design capacity on the best of Memorial Day, Fourth of July, and September autumn color weekends. Over 150 cars have been counted at the Glen Alps parking lot which is designed for 98. There is probably no way to accommodate peak weekend traffic short of over-designing the lots for average weekend and weekday use (95% of the time). To attempt to provide for peak load conditions would drive up maintenance and construction costs of parking areas (trailheads) by a large degree.

Design can reduce the impact of parking areas on the surroundings. In big trees, a series of crescent-shaped lots could be designed to fit into the natural terrain and reduce the need for extensive straight line boundaries.

Where the park trailhead borders residential areas, dirt berms can screen the view of cars and greatly reduce noise originating there. In time, brush and trees will screen the development still further.

Small trailheads would serve primarily as local or neighborhood access points, or possibly for seldom used trails. Medium trailheads would serve heavy-use local needs or popular trails that have only a limited physical capability for parking development. Large trailheads would serve very popular trails and access points for both residents and out-of-state visitors. Such areas must, of course, be physically capable of providing this space in a large lot, or by a group of linked, crescent-shaped parking areas.

Much of Chugach State Park is or soon will be surrounded by residential development. This situation exists along most of the park boundary except for Turnagain Arm where only a few subdivisions abut the park. It is understandable that most neighborhoods resist attempts to provide for parking that is accessed through their neighborhoods. They want the best of both worlds - a huge wilderness park in their back yard, and mostly use for themselves and their friends, with little traffic from outside their neighborhood.

However, the location, size and reasons that Chugach State Park was founded cannot be overlooked. Chugach State Park is nearly half a million acres in size, situated at the very edge of Alaska's largest city and rapidly developing nearby communities of Eagle River, Chugiak, Matanuska Valley and Girdwood. It would not be acceptable to deny or constrain access to the park by residents of the city as a whole, neighborhood residents or out-of-state visitors. Selecting the proper access facilities to fit the existing and projected needs, physical setting and demographic profile is much of what this plan is about.

Certain access corridors (roads) into the park have little or no residential development along them. These areas are ideal for development as major tourism and visitor destination areas in the park. Foremost among these are Eklutna Lake and Glacier, Eagle River Visitor Center, Arctic Valley, and Turnagain Arm. Each of these areas should have one or more large parking areas or a series of medium and small areas that provide an aggregate total parking capacity comparable to a large trailhead. These areas should be targeted for the majority of tourism development in Chugach State Park, including bus service.

Nearly all of the other trailheads that provide access to the park are in or pass through neighborhoods that border it. Residents who live along the park boundary enjoy the special attributes of being at the edge of urban development; with pure water, air and natural forest and mountain landscapes starting next to their property. The other side of the coin is that it is a public park, and during nice weather or favorable snow conditions, people are going to use it, at least on weekends. And of course they have the right to use the park through reasonable means of legal access, be they other neighbors, other Anchorage residents, visitors from across the state or tourists. On balance, most residents living along the park boundary are glad to trade-off weekend use of the park by others to retain the obvious benefits they enjoy living next to the park.

Trailheads that are accessed through residential areas to a point within the park, should generally be small and medium trailheads to reduce the traffic through any one neighborhood. The decision must be carefully evaluated because if the trailhead parking is too small, a worse situation may develop if cars are parked along the access road or blocking driveways. If the trailhead is too large, an unnecessary clearing impact and expenditure of funds will have been made.

Several existing large trailheads in the Hillside do have access through subdivisions. These are Glen Alps, Upper Huffman and Prospect Heights trailheads. Due to the popularity of two of them, this was probably unavoidable, while Upper Huffman is at least 1,000 feet within the park; a wise decision since unloading of snowmobiles can create noise.

Future trailheads which are accessed through neighborhoods (subdivisions) should be of small and medium size to disperse use and limit traffic impacts on any one neighborhood. To meet demands for parking, it may be necessary to space them closer together. This has advantages too because neighborhoods bordering the park are better served. More numerous but smaller trailheads also provide for greater diversity and a better selection of winter snow and road conditions.

Public Use Cabins

There are presently three shelter cabins next to Eklutna Glacier and Whiteout Glacier on the Eklutna Lake to Girdwood traverse. These were constructed almost 20 years ago by the local mountaineering club and are maintained by them for general public use. An old log cabin at the south end of Eklutna Lake has been renovated by the district and is maintained as a patrol cabin. An old trapper's cabin up Eagle River Valley within the wilderness zone is used occasionally for ranger patrols.

In general, cabins should be used to provide a public safety function or to provide a convenience which can stimulate increased year-round use of a particular trail. In this sense, public use cabins increase recreation opportunities for visitors and residents. Cabins can also be used to reduce scarring in popular camping areas by eliminating fire scars and make-shift shelters, as well as reducing wood requirements by use of small woodstoves for heating and cooking.

One such area that has been discussed over the years by user groups is in Ship Creek Valley on the traverse to Indian. A cabin located in the trees just below timberline could serve a public safety function during inclement weather or whiteout conditions, and as a convenience during better conditions. Public cabins should be located out-of-sight of the trail both for the benefit of cabin users and to retain the natural character of the area through which the trail passes. However, cabins are not permitted in the wilderness zones of Chugach State Park (see page 28 of the Chugach Master Plan), and most of this valley lies within the wilderness zone.

Another location that has been discussed is up Eagle River Valley before ascending into the alpine zones of Raven Creek. Here again, it is in the wilderness zone and not permitted by the Chugach Master Plan. A public use cabin has also been suggested at Nine Mile Creek in Peters Creek Valley.

This location is outside of the wilderness zone. A cabin in this location would be expected to significantly increase use of the valley, especially during the colder months.

Of the five existing cabins within Chugach State Park, only the Eklutna Lake cabin is sited outside of the wilderness zone. The other four are exceptions to the rule. The primary justification for continuation of the three Eklutna Glacier/Whiteout Glacier traverse cabins is for public safety along a potentially hazardous route.

Sun Stations

Sun stations are rest stops situated at locations that take advantage of winter sunshine. They range from a simple, rustic bench to a small, wooden shelter with several reclining seats, a plexiglass front and side panel door. The function they serve is one of convenience and comfort. In good weather an open bench is desirable as a place to eat lunch, stop for a thermos of tea, or talk with friends and relax in a snow-free setting. During sunny, cold weather typical of late winter and spring skiing (late January through April), the shelter would be popular for sunbasking and enjoying a warm, wind-free space for lunch or tea.

The sun station is a recreational service feature with high appeal to users for the low cost involved. As such, it can be used as a management tool to increase use on certain trails. Their value lies not just in providing a highly visible public service at low cost, but in channeling use where it can best be sustained, and to reduce over-use of more fragile backcountry areas.

Sun stations would be sited along cross-country ski trails intended for heavy use in recreation development zones, primarily the Hillside Planning Unit. The hillside area is also one of the few areas of the park that receives direct winter sunshine during the shortest winter days. Sun stations should not be located within the wilderness zone or backcountry trails where a high volume of ski use is undesirable. They should be located where frequent ranger patrols and heavy public use is expected.