

population dynamics from 1990 to 1993 by the Spatsizi Association for Biological Research (SABR);

- research on early caribou calf mortality and caribou rutting behaviour in the Spatsizi area in the late 1970s and early 1980s; and,
- numerous caribou and Stone's sheep inventories in the Spatsizi Plateau Wilderness Provincial Park area and in Mount Edziza Provincial Park in the 1970s and 1980s.

However, since the late 1980s, few wildlife inventories have been conducted in Stikine Country Protected Areas. In addition to research and inventory activities conducted on wildlife in Stikine Country Protected Areas, comprehensive information on wildlife harvests is also available. Environmental Stewardship Division maintains a database containing wildlife harvest information based on annual hunting guide returns, compulsory inspection reports and resident hunter surveys; hunting guide returns have been submitted since 1948.

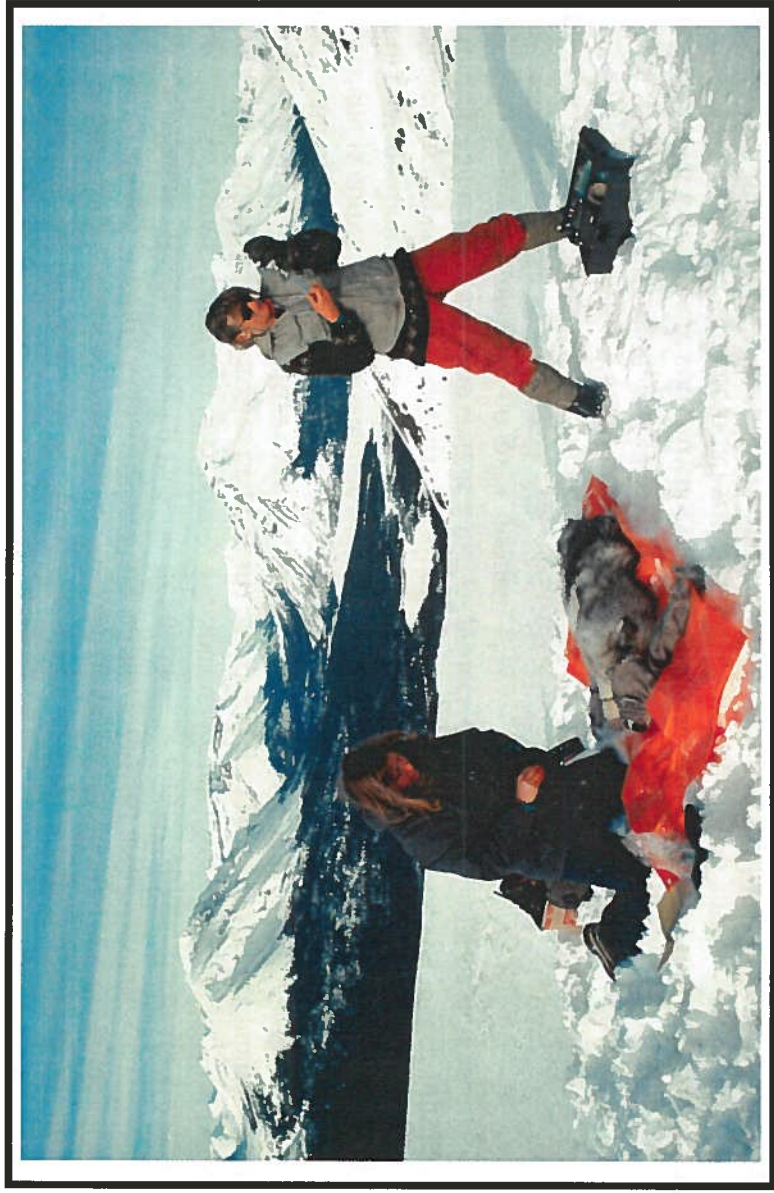


Figure 11. Wolf capture for research conducted by the Spatsizi Association for Biological Research.

Standards for conducting wildlife inventories in British Columbia have been developed by the Resource Inventory Standards Committee (RISC, formerly Resources Inventory Committee) during recent years.

8.5.3.2 Hunting

Hunting of wildlife has been an important sustenance activity for First Nations people in the Stikine Country Protected Areas region. Within the last 100 years hunting has become a significant activity for both British Columbia resident hunters and non-resident hunters. In the Ministry of Water, Land and Air Protection, Skeena Region, hunting opportunities are available

on 92% of the protected area land base. Resident and non-resident hunters must comply with hunting regulations and a guide must accompany non-resident hunters. Little information is available on current levels of First Nations harvest in the area; however, reliable resident and non-resident harvest data are available from 1975 to the present.

The *Ecological Reserve Act* prohibits hunting in Gladys Lake Ecological Reserve; otherwise, hunting occurs in all other Stikine Country Protected Areas. Some protected areas or portions of some protected areas are closed to hunting of certain wildlife species. Mule deer hunting is closed in the Stikine Country Protected Areas region. Mount Edziza Provincial Park, the proposed Mount Edziza Protected Area, and the Mount Edziza Resource Management Zone (formerly the Mount Edziza Recreation Area) are closed to caribou hunting and Tatlatui Provincial Park is closed to Stone's sheep hunting, because of low population numbers in both areas. A portion of Spatsizi Plateau Wilderness Provincial Park is closed to mountain goat hunting because of the low number of mountain goats in that area.

Hunting regulations and guide-quotas for individual protected areas within the Stikine Country Protected Areas region are rather complicated because of the intersection of several guide-outfitter territories and Wildlife Management Units within protected area boundaries (Appendix 8). Stikine River Provincial Park (as defined by the former Stikine Recreation Area) is divided into two units: East (east of Highway 37; Spatsizi Greater Ecosystem) and West (west of Highway 37; Mount Edziza Greater Ecosystem) based on Management Unit boundaries. East of the highway the Stikine River Recreation Area (both the MU6-19 and 6-20 portions) was combined with Spatsizi Plateau Wilderness Provincial Park (wholly within MU6-20) to create MU6-20A and is currently managed as one unit. For MU6-20A all major species (Stone's sheep, mountain goat, caribou, moose and grizzly bear) are under Limited Entry Hunting regulations and protected area-specific guide quotas. For all other protected areas, there is a mix of Limited Entry Hunting and open seasons as well as a mix of protected area-specific guide quotas, territory specific guide quotas and no guide quotas.

New protected areas and additions including Mess Creek and Klastine additions to Mount Edziza Provincial Park; northern additions to Stikine River Recreation Area East; Metsantan addition to Spatsizi Plateau Wilderness Provincial Park; Pitman River Protected Area; and Chukachida Protected Area are currently not included in park zones within Wildlife Management Units. Mess Creek and Klastine both fall within MU6-21 and each falls entirely within one guide territory. Pitman River Protected Area falls entirely within MU6-19 and one guide territory and Metsantan falls entirely within MU6-20 and one guide territory. Chukachida Protected Area lies entirely within one guide territory but within two MUs (6-19, 6-20). The northern addition to the Stikine River Recreation Area lies within MU6-19 and one guide territory. Currently the general hunting regulations for those management units and territory wide guide quotas apply to those new protected areas.

Hunting is managed within parks and protected areas for quality outdoor recreation opportunities rather than to maximize harvests. Both resident and non-resident average annual harvests appear to be within limits; however, further work is required to update the average annual harvest data and to reconcile inconsistencies with protected area-specific guide-outfitter quotas, because of the new additions to the Stikine Country Protected Areas system. The current lack of inventories for hunted wildlife populations warrants a continued conservative approach to managing wildlife harvests in Stikine Country Protected Areas.

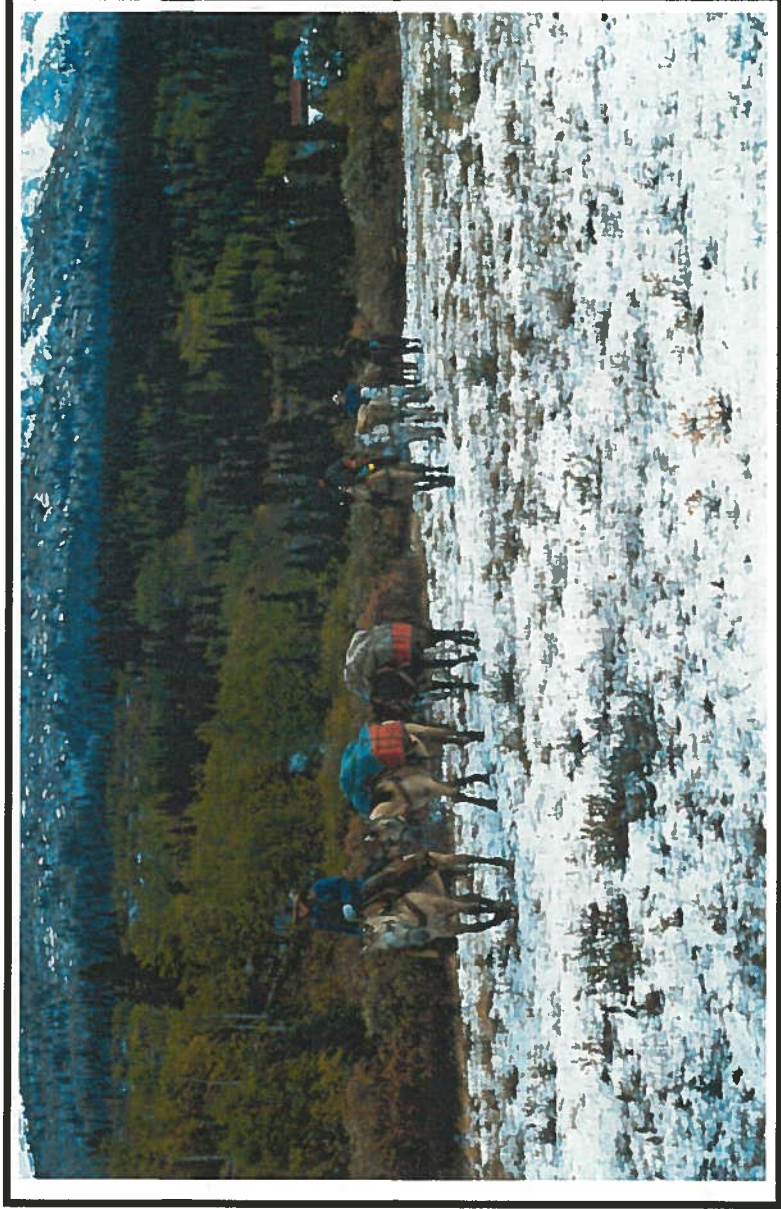


Figure 12. Hunting party, Spatsizi Plateau Wilderness Provincial Park.

As hunting is one of many outdoor recreation activities offered in the Stikine Country Protected Areas System, to ensure the maintenance of wildlife populations in protected areas at a long-term viable level, harvest rates within the system are more conservative and, therefore, lower than harvest rates on adjacent lands. This policy provides several benefits to both biodiversity and outdoor recreation objectives. Biodiversity benefits include:

- wildlife population numbers are maintained closer to natural population levels and, therefore, can act as wildlife research areas;
- wildlife populations act as core populations for adjacent lands; and,
- wildlife populations act as gene banks for adjacent populations.

Outdoor recreation benefits include:

- special, high quality wilderness hunting experiences provided in naturally scenic areas;
- non-mechanized ground access to most of the Stikine Country Protected Areas System provides a special quality hunting experience;
- larger wildlife populations in protected areas may afford hunters a greater chance of hunting success and a greater chance of finding trophy animals; and,
- wildlife populations in protected areas provide excellent opportunities for wildlife viewing, education and appreciation values.

To ensure management of wildlife populations in Stikine Country Protected Areas is based on science-based decision making, monitoring of both harvest levels and wildlife populations levels is required. BC Parks' policy requires that inventories of hunted populations be conducted a

minimum of once every five years to determine population levels. Following inventories, biologists review and adjust harvest levels in consideration of conservation objectives, First Nations harvests and outdoor recreation requirements. Harvest levels are managed to maintain the biodiversity and recreation benefits described above.

8.5.3.3 Trapping

Trapping is an important subsistence and/or commercial activity for First Nations and non-First Nations trappers. Portions or all of 15 traplines lie within Stikine Country Protected Areas although only two are presently considered active. Regulations follow the general regional trapping regulations. Currently little information exists about protected area-specific trapping harvests.

8.5.3.4 Predator Management

Predator management is a controversial wildlife management issue. BC Parks Conservation Program Policies (1997) allows for predator management only if a prey population is threatened, and not for consumptive purposes.

- *Natural processes such as wildfire, succession, or predation will prevail unless they threaten the existence of a species or critical habitat that has been identified for conservation.*
- *Artificial enhancement of all wildlife populations for consumptive purposes within parks will not be permitted unless specifically stated in an approved management plan. It is not permitted at any time in ecological reserves.*

Artificial enhancement could include habitat manipulation or predator management.

8.5.3.5 General Management Direction

Overall Direction

The priority of wildlife population management in the Stikine Country Protected Areas System is to maintain viable populations of all large mammal species while allowing for natural population fluctuations. Accurate monitoring of wildlife population numbers is a priority for ensuring viability of populations. First Nations traditional activities such as hunting and trapping are an important component of the wildlife system. Non-First Nations hunting and guided hunting will continue to be managed more conservatively than in adjacent areas. Trapping will continue as a commercial activity.

Objectives and Strategies

To manage the main wildlife populations in Stikine Country Protected Areas to allow natural processes to continue.

- Manage large mammal populations (i.e. caribou, Stone’s sheep, mountain goat, moose, grizzly bear) based on reliable population inventory and other scientific information.
- Consider artificial enhancement of wildlife populations, such as habitat manipulation or predator management, for: wildlife populations or portions of populations that are significantly declining because of human disturbance or intervention; or local populations that are at risk of becoming extirpated or that are in marked decline (i.e. >50% of baseline population). Artificial enhancement efforts for wildlife populations will not be considered for the primary purpose of maintaining or enhancing wildlife populations for outdoor

recreation purposes such as hunting or wildlife viewing. Consider whether outdoor recreation activities (consumptive and/or non-consumptive) should be removed in the area where artificial enhancement is conducted, until the population has recovered.

To monitor and report on the population status (condition and trend) of the main large mammal species (i.e. caribou, Stone's sheep, mountain goat, moose, grizzly bear, black bear, wolf) in the Stikine Country Protected Areas System.

- Update all large mammal population estimates for caribou, Stone's sheep, mountain goat and moose within five years as funding permits.
- Conduct surveys of hunted populations of caribou, Stone's sheep, moose and mountain goats. Suggested time interval: every four to six years.
- Conduct surveys of unhunted populations of caribou, Stone's sheep, moose and mountain goats. Suggested time interval: every six to eight years.
- Develop a population monitoring strategy for wolves.
- Ensure coordination of wildlife population surveys for populations in and adjacent to the Stikine Country Protected Areas System.
- Ensure wildlife inventories are conducted based on existing Wildlife Inventory Zones and RISC standards, and are promptly written up.
- Delineate Wildlife Inventory Zones for Stikine River Provincial Park, Chukachida Protected Area, Pitman River Protected Area and additions to Mount Edziza and Spatsizi Plateau Wilderness provincial parks.
- Monitor current literature for new techniques for determining population status.

To manage small and moderate-sized wildlife species as intact viable populations.

- Allow natural fluctuations of small and moderate-sized wildlife species to continue.
- Monitor populations when conservation concerns arise.

To continue to improve the level of understanding of wildlife population dynamics in the Stikine Country Protected Areas System.

- Encourage universities and other credible research organizations to conduct research on wildlife and wildlife population dynamics in the Stikine Country Protected Areas System. Research proposals will be subject to BC Parks Impact Assessment Process and involvement of provincial government biologists.
- Investigate new sources of funding for wildlife management activities.

To maintain established First Nations hunting and trapping rights that are consistent with conservation and public safety objectives.

- Work with First Nations to develop and implement a harvest monitoring program to evaluate current First Nations harvest levels in the Stikine Country Protected Areas System.
- Work with First Nations to develop a First Nations harvest management strategy.

To provide high quality wilderness-based hunting opportunities for resident and non-resident hunters that are consistent with conservation objectives.

- Continue to follow BC Parks hunter harvest management policies to manage resident and non-resident hunting opportunities and annual allowable harvests more conservatively than outside of protected areas. Where specific BC Parks policies do not exist, follow

Fish and Wildlife Recreation and Allocation Branch policies as part of the provincial Wildlife Harvest Strategy.

- Review hunter harvests on an annual basis to ensure that they do not exceed annual allowable harvest levels.
- Ensure resident and non-resident hunting regulations and guide-outfitter quotas are managed in a coordinated and consistent manner within individual protected areas in the Spatsizi Greater Ecosystem and the Mount Edziza Greater Ecosystem.
- Conduct a full review of population levels and harvest rates for all species for both resident and guided hunts to ensure hunting levels are sustainable, conservation and First Nations considerations are met, and recreational hunting allocations are consistent with management objectives. This review will be conducted in consultation with government wildlife biologists, First Nations, local hunters, the BC Wildlife Federation, protected area managers, guide-outfitters and other stakeholders.
- Develop a strategy for managing wildlife hunting recreation activities that considers issues such as hunting zones, levels of harvest and consistency of regulations. This strategy will ensure that guide-outfitter quotas and LEH hunts are applied consistently between protected areas within each Greater Ecosystem and will be developed in consultation with government wildlife biologists, First Nations, local hunters, the BC Wildlife Federation, protected area managers, guide-outfitters and other stakeholders. Limited Entry Hunting and protected area guide-outfitter quotas are the preferred methods for managing hunting opportunities in Stikine Country Protected Areas.
- Consider managing hunting opportunities within the Stikine Country Protected Areas System within three zones:
 - Tatlatui Provincial Park;
 - Stikine Country Protected Areas east of Highway 37 (excluding Tatlatui Provincial Park); and,
 - Stikine Country Protected Areas west of Highway 37.
- Consider amending Management Unit zone boundaries for these three zones by:
 - amending Management Unit 6-20A to include:
 - ⇒ the new Stikine River Provincial Park boundary east of Highway 37;
 - ⇒ the Metsantan addition to Spatsizi Plateau Wilderness Provincial Park; and,
 - ⇒ Chukachida Protected Area and Pitman River Protected Area.
 - amending Management Unit 6-21A to include:
 - ⇒ the Mess Creek and Klastine additions to Mount Edziza Provincial Park; and,
 - ⇒ Stikine River Provincial Park west of Highway 37.
- Work with First Nations and the Skeena Hunter Advisory Committee on proposed revisions to hunting regulations.
- Revise hunting regulations, when necessary, to provide clear boundary definitions and to facilitate enforcement activities. Conduct these changes in consultation with government wildlife biologists, First Nations, local hunters, the BC Wildlife Federation, protected area managers, guide-outfitters and other local stakeholders.
- Provide hunting opportunities for wildlife populations where inventories demonstrate sufficient numbers of animals to sustain a harvest.
- Continue to maintain a closed season for mule deer within the Stikine Country Protected Areas System as part of larger management unit-wide regulations.

To maintain trapping opportunities that are consistent with conservation objectives.

- Manage traplines and portions of traplines that lie within Stikine Country Protected Areas as commercial operations.
- Monitor trapping harvests specific to Stikine Country Protected Areas.
- Purchase and retire traplines if they are voluntarily offered for sale. Consult with First Nations if traplines are held by First Nation individuals.

To establish baseline information on wildlife species other than large mammals.

- Investigate funding sources and partnerships for collecting baseline information on medium and small mammals, amphibians and invertebrates in the Stikine Country Protected Areas System.

8.5.3.6 Protected Area-Specific Management Direction

Mount Edziza Provincial Park and Proposed Mount Edziza Protected Area - Objectives and Strategies

To protect wildlife populations of known conservation concern.

- Continue the closed season for caribou in Mount Edziza Provincial Park given the lack of current inventory information and low numbers counted during the most recent inventory.
- Conduct a caribou inventory during the fall rut to determine a population estimate.

Tatlatui Provincial Park - Objectives and Strategies

To protect wildlife populations of known conservation concern.

- Continue the closed season for Stone's sheep in Tatlatui Provincial Park given the lack of current inventory information and low numbers counted during the most recent inventory.

8.5.4 Species at Risk and Unique/Sensitive Species

The British Columbia Conservation Data Centre (CDC) provides listings for species at risk in British Columbia. Species on the "Red" list are species that are designated as Threatened or Endangered under the *Wildlife Act*, are candidates for this designation, or are extirpated but were once part of the natural fauna of British Columbia. Species on the "Blue" list are candidates for the Red List in the foreseeable future, are generally suspected to be vulnerable due to limited information and/or are in need of special management to ensure their survival.

Four blue-listed mammal species (i.e. caribou, grizzly bear, wolverine and fisher) occur within Stikine Country Protected Areas. All four species require large relatively undisturbed home ranges. For fisher and wolverine, the combined size of the contiguous Stikine Country Protected Areas is likely sufficient to maintain viable populations, especially for the protected areas east of Highway 37. For caribou, the Spatsizi Greater Ecosystem and the Mount Edziza Greater Ecosystem are believed to contain most life history and seasonal habitat requirements for the Spatsizi and Mount Edziza caribou populations respectively. One major information gap is wintering areas of the Mount Edziza caribou population. For grizzly bears, the Stikine Country Protected Areas System provides a large area of protected range, which functions as a "core" area for maintaining a viable population over a larger area.

Eleven red, blue and yellow-listed bird species have been recorded in Stikine Country Protected Areas (Table 4). Long-tailed ducks (*Clangula hyemalis*, previously known as Oldsquaw) and upland sandpipers (*Bartramia longicauda*) are recorded as migrants whereas all other species are either known or suspected to breed within the protected areas.



Figure 13. Grizzly bear, blue-listed by the BC Conservation Data Centre.

The “northern” ecotype of woodland caribou in British Columbia (Northern Caribou), which live in the Stikine Country Protected Areas, were blue-listed (S3S4) by the British Columbia Conservation Data Centre (CDC) in 2000. In May 2000, the federal Committee on the Status of Endangered Wildlife in Canada (COSEWIC) designated woodland caribou in the southern two thirds of British Columbia in the Southern Mountains National Ecological Area (SMNEA) as nationally threatened. Threatened species are considered likely to become endangered if limiting factors are not reversed and are species at risk under the federal *Species at Risk Act*. Woodland caribou in Stikine Country Protected Areas are in the Northern Mountains National Ecological Area (NMNEA) and are designated as Special Concern and are not species at risk under the *Species at Risk Act*. A species is designated Special Concern because of characteristics that make it particularly sensitive to human activities or natural events. The provincial government is currently in the process of finalizing a recovery strategy for Northern Caribou in the Southern Mountains National Ecological Area.

Table 4. Red, Blue and Yellow Listed Bird Species Observed in Stikine Country Protected Areas.					
Species	Provincial List	Mount Ediza Provincial Park and proposed Protected Area	Stikine River Provincial Park	Spatsizi Plateau Wilderness Provincial Park and Gladys Lake Ecological Reserve	Tatlatui Provincial Park
Trumpeter Swan	Blue		+		
Long-tailed ducks (Oldsquaw)	Blue	+			+
Lesser Golden Plover	Blue	+		+	
Wandering Tattler	Blue	+		+	
Upland Sandpiper	Red			+	
Red-necked Phalarope	Blue	+		+	+
Bald Eagle	Yellow	+	+	+	+
Peregrine Falcon ssp. Anatum	Red	+		U	
Gyrfalcon	Blue	+	+		+
Short-eared Owl	Blue			+	
Smith's Longspur	Blue			+	+

+ = confirmed sighting; U = unconfirmed sighting

The peregrine falcon (subspecies *anatum*), which was designated as Threatened by COSEWIC in May 2000, is the only species in the Stikine Country Protected Areas System that is protected under the federal *Species at Risk Act*. Other COSEWIC designations for species found in the Stikine Country Protected Areas include:

- short-eared owl – Special Concern (1994);
- grizzly bear – Special Concern (May 2002);
- wolverine – Special Concern (1989);
- gyrfalcon – Not at Risk (1987); and,
- trumpeter swan – Not at Risk (1996).

A prime conservation concern for species at risk in the Stikine Country Protected Areas System is the lack of basic inventory information. Additional species at risk may also be present but remain unidentified. More information is also required to verify existence of unique animals such as pikas and melanistic chipmunks in Tatlatui Provincial Park.

Recently, amphibian abundance has been declining worldwide. The Stikine Country Protected Areas System will be important for baseline information on amphibians in a system relatively undisturbed by humans.

8.5.4.1 General Management Direction

Overall Direction

For wildlife species at risk and special and sensitive species, the role of the Stikine Country Protected Areas System is to provide a large core area of habitat that is for the most part undisturbed by humans. The focus is on understanding, monitoring and maintaining habitat and dynamics of species at risk.

Objectives and Strategies

To protect known wildlife species at risk and their habitat.

- Compile known locations of wildlife species at risk in the Stikine Country Protected Areas System.

- Determine habitat and life cycle requirements of wildlife species at risk known to occur in Stikine Country Protected Areas.
- Develop guidelines for minimizing disturbance to wildlife species at risk and their habitat.
- Support development and implementation of recovery plans (required by the Federal *Species at Risk Act*) for species at risk.

To increase the information base on wildlife species at risk.

- Collaborate with the British Columbia Conservation Data Centre to determine potential wildlife species at risk present in Stikine Country Protected Areas.
- Conduct surveys for potential wildlife species at risk.

To monitor population status of grizzly bear, wolverine and fisher.

- Develop a monitoring strategy for wolverine and fisher for Stikine Country Protected Areas and monitor population status of those species.
- Monitor hunter harvests for grizzly bear and trapping harvests for wolverine and fisher and revise or establish quotas if necessary.
- Continue to review new developments in estimating grizzly bear abundance techniques.

To establish a baseline monitoring program for amphibians in an ecosystem relatively undisturbed by humans.

- Undertake basic amphibian inventories in the Stikine Country Protected Areas System.
- Develop a baseline monitoring program for amphibians that are found to occur in Stikine Country Protected Areas.

8.5.4.2 Protected Area-Specific Management Direction

Tatlatui Provincial Park – Objectives and Strategies

To conserve pikas and melanistic chipmunks.

- Confirm sightings of pikas and melanistic chipmunks.
- Conduct ground investigations to determine extent and range of those species.
- Develop guidelines to minimize disturbance to habitat and colonies.

Mount Edziza Provincial Park and Proposed Mount Edziza Protected Area – Objectives and Strategies

To assess caribou winter habitat requirements.

- Conduct a study using radio-collars for caribou to determine winter habitat use and important wintering areas.

8.5.5 Wildlife Movements

Although Stikine Country Protected Areas conserve over 1.4 million contiguous hectares of land and water, animals will continue to move beyond protected area boundaries and be influenced by management activities outside of the protected areas. Populations of large mammals such as grizzly bear, black bear, wolf, wolverine, caribou, moose, Stone’s sheep and mountain goat are likely to move beyond protected area boundaries for habitat or life cycle requirements. Smaller animals moving beyond protected area boundaries are likely dispersers or animals with home

ranges near boundaries. Stikine Country Protected Areas encompass a large enough area to maintain self-sustaining populations of those smaller species. Stikine Country Protected Areas also provide low elevation wildlife corridors along the Pitman and Chukachida rivers to high value wildlife habitat and protected areas to the east.

Three significant wildlife habitat areas identified adjacent to the Stikine Country Protected Areas System include the McBride River area, the Klappan River area, and the Sturdee River area. The McBride River area includes important winter range for the Spatsizi caribou population; the Klappan River area includes important moose winter range and some caribou range; and the Sturdee River area provides some caribou and moose winter range.

8.5.5.1 General Management Direction

Overall Direction

The Stikine Country Protected Areas System is a core of protected areas for large mammal species in the region. Environmental Stewardship Division will work with other agencies and First Nations to coordinate management of known areas of use outside of protected area boundaries and to maintain wildlife movement corridors along the Pitman and Chukachida rivers.

Objectives and Strategies

To coordinate with other agencies and First Nations to minimize impacts on Stikine Country Protected Areas' wildlife moving beyond protected area boundaries.

- Ensure protected area objectives are considered in hunting and trapping regulations in areas adjacent to the Stikine Country Protected Areas System within the Spatsizi Greater Ecosystem and Mount Edziza Greater Ecosystem.
- Collaborate with the Ministry of Forests to establish habitat management objectives for areas adjacent to the protected areas that are known to be used by protected area wildlife.
- Work with the Ministry of Energy and Mines during planning and development activities on adjacent lands in the Spatsizi Greater Ecosystem and Mount Edziza Greater Ecosystem to minimize disturbance to protected area wildlife populations.
- Collaborate with the Ministry of Energy and Mines and the mining industry to minimize and mitigate impacts on the Pitman River and Chukachida River wildlife movement corridors.
- Work with other agencies, First Nations and the resource industry to maintain regional connectivity for wide ranging large mammal species.

8.5.6 Wildlife/human interactions

Wildlife and human interactions may be neutral, positive or negative. Neutral interactions include humans observing wildlife undetected. Negative interactions between humans and wildlife include displacement of wildlife from high quality habitats, disturbance to wildlife habitat, human-caused mortalities and disruption of social bonds and behaviour. Although most human disturbance is often unintentional, the effects of disturbance are often negative regardless of the intent. Bear/human interactions are the most significant impacts of wildlife on humans. Bear/human interactions can result in injury or death to humans, and subsequent mortality of the

responsible bear(s). Therefore, for visitor safety, avoidance of bear/human interactions is preferable.

8.5.6.1 General Management Direction

Overall Direction

The management priority for Stikine Country Protected Areas is conservation of natural and cultural values. Therefore, human/wildlife interactions will be managed to minimize negative impacts to wildlife populations.

Objectives and Strategies

To protect wildlife populations during sensitive seasons, such as winter, and the spring birthing season.

- Monitor outdoor recreation and commercial activities and their impacts on wildlife during sensitive seasons and implement strategies to minimize disturbance if necessary.
- Encourage visitors and commercial operators to avoid known high value winter habitat and birthing areas during those seasons. If necessary, close areas to human access to protect wildlife during sensitive seasons.

To minimize habitat disturbance.

- Identify important wildlife habitat and characteristics.
- Provide visitors and commercial operators with information on the significance of wildlife habitat and impacts from disturbance, especially those habitats highly sensitive to disturbance.
- Encourage visitors and commercial operators to avoid using known high value sensitive habitat. If necessary, close areas to human access to protect sensitive wildlife habitat.

To minimize human/bear interactions.

- Provide visitors and commercial operators with information on how to avoid human/bear interactions.
- Enforce garbage handling and disposal guidelines for commercial operators in Stikine Country Protected Areas.
- Implement the BC Parks Skeena District Bear/Human Interaction Plan. Key elements of this plan include:
 - preventative management:
 - ⇒ visitor information/education on bear behaviour and bear-human conflict prevention;
 - ⇒ visitor information/education on appropriate human behaviour to minimize the potential for bear-human conflicts;
 - ⇒ appropriate facility location and design; and,
 - ⇒ appropriate food and garbage handling.
- responsive management if necessary:
 - ⇒ monitoring bear activity;
 - ⇒ advising visitors;
 - ⇒ aversive conditioning;
 - ⇒ area closures; and/or,
 - ⇒ as a last resort, trapping and translocating or destroying a bear.

- To investigate potential impacts of new or expanded commercial recreation activities on wildlife.*
- Develop funding partnerships with commercial operators to identify potential effects of new or expanded commercial recreation activities on wildlife and to monitor those effects.

To encourage neutral human/wildlife interactions.

- Develop guidelines for encounters between protected area visitors and wildlife to minimize disturbance and displacement of animals.
- Encourage wildlife viewing opportunities that avoid animal disturbance.

8.6 Aquatics

Watersheds in Stikine Country Protected Areas drain into both the Pacific and Arctic oceans. In Tatlatui Provincial Park all water flows through the Firesteel River to the Finlay and Peace River systems and into the Arctic Ocean. Waters in all the other protected areas empty into the Pacific Ocean via the Stikine and Iskut rivers. Aquatic ecosystems in Stikine Country Protected Areas are diverse, ranging from high mountain lakes to low elevation lakes and wetlands.

In 1998, DeGisi collated and summarized existing information about fish in Stikine Country Protected Areas for BC Parks (DeGisi 1998). Most of the available information is limited to recreationally significant species; therefore little is known about other species. Aquatic inventories were conducted for some lakes in Spatsizi Plateau Wilderness and Tatlatui provincial parks in 1976, and in Mount Edziza Provincial Park in 1982; drainages near the western boundary of Spatsizi Plateau Wilderness Provincial Park were recently sampled during an Overview of Fish and Fish Habitat Inventory of the Klappan watershed. Information for other waters in Stikine Country Protected Areas, including the Chukachida and Pitman rivers, is limited.

One reason for the limited information on fish species in the Stikine Country Protected Areas System is the expense of collecting the information. The remoteness of most waters within the Stikine Country Protected Areas System creates numerous logistical difficulties.

8.6.1 Fish Species and Distribution

Fish species present in Stikine Country Protected Areas are representative of northern interior and Pacific systems. All protected areas encompass portions of, or complete watersheds and lake systems.

Records show rainbow trout are the most widely distributed species and exist in all waters surveyed in Stikine Country Protected Areas except Kliweguh Creek in Spatsizi Plateau Wilderness Provincial Park (Appendix 9). Rainbow trout are the only fish species found in all waters in Tatlatui Provincial Park and in waters in the Kakiddi Creek system (Kakiddi Creek, Kakiddi Lake, Mowchilla Lake, Mowdade Lake and Nuttlude Lake) in Mount Edziza Provincial Park. These are the only two areas in British Columbia where a monoculture of rainbow trout occurs over a large area (>1000 km²). In the upper Iskut River system, a barrier to upstream migration for other fish species exists at a canyon near Forest Kerr Creek. In the Firesteel River system in Tatlatui Provincial Park, velocity barriers at the lower end of the river prevent

upstream movement of other fish. Rainbow trout are also the only species present in Buckinghorse and Klahowya lakes in Spatsizi Plateau Wilderness Provincial Park.



Figure 14. Firesteel River, Tatlatui Provincial Park.

There are two species of char in the Stikine River drainage within Stikine River and Spatsizi Plateau Wilderness provincial parks, bull trout and Dolly Varden (*Salvelinus malma*). Other species found in the Stikine River system within Stikine River and Spatsizi Plateau Wilderness provincial parks include Arctic grayling (*Thymallus arcticus*), burbot (*Lota lota*), lake trout (*Salvelinus namaycush*), longnose sucker (*Catostomus catostomus*), prickly sculpin (*Cottus asper*) and mountain whitefish (*Prosopium williamsoni*). Lake trout are generally limited in distribution and have been detected only in Cold Fish Lake, Mink Creek and the Stikine River in the Stikine Country Protected Areas System. Although lake trout have been recorded in the Stikine River, they are likely only transients in the river and are not a self-sustaining population. Arctic grayling exist primarily in Arctic waters; their occurrence in Pacific waters in the Stikine River system is of particular interest.

Buckley Lake is believed to be a naturally fishless lake although there are reports that it was illegally stocked with rainbow trout probably around 1990. Rainbow trout found in the lake today are typically large and unconfirmed reports suggest that some reproduction may be occurring. Further information is required to determine the origin and status of the rainbow trout population. Buckley Lake may have also been stocked with rainbow trout in the 1930s but a self-sustaining population was not established. No records exist of any other authorized or unauthorized fish stocking of lakes in Stikine Country Protected Areas. Trout stocking in other areas has resulted in declines in amphibian numbers (Funk and Dunlap 1999).

Because of lower average temperatures, a shorter “growing” season and typically nutrient-poor conditions, waters in northwestern British Columbia are generally less productive than waters in other areas of the province. Individual fish may still reach large body size through low natural mortality, delayed maturity and longevity, especially if population numbers are low because of limited reproductive habitat. However, such populations are vulnerable to overexploitation.

Lakes in Mount Edziza Provincial Park and Mount Edziza Protected Area (proposed) are relatively productive for northern British Columbia, probably because of the nutrient content of the surrounding volcanic soils. Rainbow trout in those lakes are small to moderate in body size and exist at high densities, likely a result of high productivity and abundant accessible spawning habitat.

Lakes in Tatlatui Provincial Park are deep and unproductive and, with the exception of the ‘middle’ Firesteel River, most streams and rivers are turbulent with many rapids and chutes. Because of the high gradient and barriers to fish movement, several discrete populations of rainbow trout appear to exist including: Tatlatui Lake; the upper Firesteel River (possibly continuous with Tatlatui Lake); the low gradient ‘middle’ Firesteel River; the turbulent lower Firesteel River; Kitchener Lake, lower Stalk Creek and upper Rognaas Creek; and Stalk Lakes and upper Stalk Creek. Rainbow trout in Tatlatui Provincial Park rarely exceed two kilograms in weight.

The Grand Canyon of the Stikine River acts as a velocity barrier that prevents anadromous fish species from moving upstream. The distribution of chinook (*Oncorhynchus tshawytscha*), coho (*O. kisutch*) and sockeye salmon (*O. nerka*), steelhead, and cutthroat trout (*O. clarki*) is restricted to the lower reaches of the Stikine River and its tributaries within Stikine River and Mount Edziza provincial parks. Chinook salmon have been reported at the mouth of the Klastline River but they do not appear to reach the Tanzilla River. Most of the anadromous species found in the Stikine River are in transit to the Tahltan and lower Tuya rivers. The Tahltan and Tuya rivers lie outside of Stikine Country Protected Areas. Within Stikine River and Mount Edziza provincial parks, extremely limited spawning may occur in the lower reaches of Stikine River tributaries and possibly in the Stikine River mainstem itself. Chinook salmon and steelhead have also been recorded in Mess Creek and likely occur in the lower reaches of Line Creek in Mount Edziza Provincial Park. The Stikine River and its tributaries below the canyon also support resident rainbow trout, cutthroat, bull trout, Dolly Varden, mountain whitefish and Arctic grayling. In addition, lake chub (*Couesius plumbeus*) have been recorded in the Stikine River near Telegraph Creek. No information exists to indicate whether the species occurs upstream.

8.6.2 Fish Species at Risk

Bull trout is a blue-listed species that occurs in waters within Spatsizi Plateau Wilderness and Stikine River provincial parks. Both Dolly Varden and bull trout exist in the area; however, it remains unclear if the two species coexist because of the difficulty in distinguishing between the two species. Large resident char (up to eight kilograms) are more likely to be bull trout as non-anadromous Dolly Varden do not usually attain such size. Spatsizi Plateau Wilderness and Stikine River provincial parks along with Chukachida Protected Area and Pitman River Protected Area constitute the only fully protected area in British Columbia enclosing contiguous streams, large rivers and lakes believed to support this species in the full diversity of its life histories (except anadromy).

Bull trout are either lake residents or river residents and can make long migrations (up to 300 kilometres) to spawn in smaller clear water streams in late summer and fall. Large char found in the larger rivers (e.g. Stikine, Spatsizi, Pitman and Chukachida rivers) may either be residents of those rivers or are migrating to spawning areas. During migration and reproduction (during the late summer and fall) the fish are aggressive and accessible, and are therefore highly vulnerable to angling. Because these fish are slow growing, late maturing and relatively low in abundance, excessive angling can have significant effects on the populations. Various regulations to protect bull trout such as “slot” size limits and non-retention in streams have been introduced in other areas of British Columbia.

Currently, limited information is available about bull trout for the Pitman and Chukachida rivers. Both rivers support large, migratory bull trout, which migrate from larger waters downstream, such as the Stikine River, to headwaters to reproduce. In shallower parts of the river, bull trout collect in pools or at confluences before proceeding upstream when conditions are good. Bull trout are vulnerable during migration especially where bridges or roads are close to migratory aggregation areas.

8.6.3 Angling

Angling regulations for Stikine Country Protected Areas generally follow Skeena Region-wide regulations. Tatlatui Provincial Park lies within the British Columbia Ministry of Water, Land and Air Protection’s Region 7 and all other protected areas lie within Region 6 (Appendix 9).

In the Stikine River system in Region 6, anglers have a monthly quota of two and an annual quota of 10 steelhead. In addition, when an angler has caught and retained the daily quota of steelhead they must stop fishing that water for the remainder of that day.

Few regulations specific to Stikine Country Protected Areas’ waters exist. Specific regulations for Buckinghorse and Klahowya lakes in Spatsizi Plateau Wilderness Provincial Park were implemented to maintain the small population of large-sized rainbow trout. A bait ban was instituted for Stalk Lakes in Tatlatui Provincial Park and a daily catch quota of two rainbow trout was established for Tatlatui Lake. In 2002, Skeena Region established a bait ban, single barbless hook and daily catch quota of two rainbow trout (none over 50 centimetres) for Buckley Lake.

Several park use permits have been issued for guided angling within the protected areas. For those protected areas in Region 6, rod-days were allocated to angling guides for specific water bodies. Three angling guides operate in Tatlatui Provincial Park; however no angler-day allocations are specified. Most angling guides promote non-retention angling. Management of commercial angling guiding has traditionally consisted of considering angler-day applications by guides. DeGisi (1998) proposed a potential approach for managing angling guiding for parks and protected areas in Environmental Stewardship Division, Skeena Region. The system defines an angling zone for each water body or set of adjoining waterbodies, classifies waterbodies (or angling zones) into angling “experience” categories, and assigns rod-days by experience category by protected area.

Under the *Wildlife Act*, a “guide for fish” is:

- “a person who, for compensation or reward received or promised, (a) accompanies another person and assists that person to angle,

- (b) attends another person at or near an angling site in a manner that, directly or indirectly, assists that person to angle, or
 - (c) transports, for the purpose of angling, another person to, from or between angling sites,
- but does not include a member of a class of persons prescribed by the Lieutenant Governor in Council. ”



Figure 15. Anglers on the Spatsizi River, Spatsizi Plateau Wilderness Provincial Park.

An “angling guide” is a person licensed as an angling guide under the *Wildlife Act*. Therefore, commercial operators require permits for angling guiding even if their primary activity is not angling but their clients wish to angle as part of their outdoor recreation experience. Currently, most of the permitted angling guides in the Stikine Country Protected Areas System use their rod-day allocations conducting angling guiding as an exclusive activity. However, because of the definition of guided angling, there is increasing interest in guided angling permits that are incidental to other activities such as rafting, canoeing or hiking. Angling guides submit annual reports on guided angling activities and fish harvested.

Less information is available on non-guided angling. Currently, voluntary creel surveys are conducted in portions of Spatsizi Plateau Wilderness Provincial Park. Voluntary creel surveys in other areas in Stikine Country Protected Areas have been more challenging to conduct because of difficult access to those areas.

8.6.4 General Management Direction

Overall Direction

The management priority for fish is to conserve natural fish population diversity, distribution and dynamics throughout waters in Stikine Country Protected Areas. Fish stocking will not be considered unless populations are declining severely and population viability is threatened because of human-caused disturbances. Similarly, stocking will not be considered to enhance angling opportunities. Determining the status and maintaining viable populations of bull trout is a priority.

Objectives and Strategies

To ensure the natural functioning of fish populations.

- Identify and establish waters that can be used as benchmarks for the study of native fish species that are unaffected by human disturbance, including angling.
- Identify aquatic habitats that are sensitive to jet boat use and implement restrictions if necessary.
- Monitor the rainbow trout only aquatic systems of Stikine Country Protected Areas.

To provide a range of recreation angling opportunities that has low impacts on fish populations.

- Establish a system of waters that includes a variety of recreational angling opportunities, such as limited daily catch quotas and catch and release only angling, in consultation with angling guides, anglers and First Nations.
- Investigate and implement angling regulations that conserve large-sized bull trout in the Stikine River system. Pay special attention to the fall spawning season when bull trout are especially vulnerable because of their aggressive nature and aggregating behaviour, and when riverboat travel is greatest because of hunting.
- Encourage angler compliance with angling regulations by maintaining postings of provincial sport angling regulations at access points to the protected areas where angler reports are distributed and collected (especially Highway 37).
- Annually review the angling effort and harvest levels to ensure levels do not adversely influence conservation objectives.
- Assess impacts of angling on the lake trout population in Cold Fish Lake and implement water-specific angling regulations if necessary.
- Investigate the degree of angler interest in Arctic grayling in the Stikine Country Protected Areas System and implement measures to conserve Arctic grayling populations if necessary.
- Consider implementing restrictive regulations for angling harvest of species at risk such as bull trout.
- Consider managing angling opportunities within the protected areas system more conservatively than angling opportunities outside of protected areas.

To quantify non-guided angling activity and harvest.

- Develop a system for monitoring angling pressure by non-guided anglers.
- Continue voluntary creel censuses with distribution and drop points at all registration and access locations. Cards should be coded prior to distribution to identify angler data by point of origin.

- Investigate and implement means of achieving higher participation rates for creel surveys.
- Implement a simple reporting program by angling guides of observed non-guided angling activities.

To manage angling guide activities.

- Monitor angling guide activity through annual reporting of client angling activity, catch and harvest on each waterbody for each guide and compile information annually.
- Determine existing angling guides and rod-day allocations within recently established protected areas and additions and accommodate existing tenures.
- Consider developing a system for managing angling and angling guiding that defines an angling zone for each water body or set of continuous waterbodies, classifies waterbodies (or angling zones) into angling experience categories, and assigns rod-days by angling category by protected area. Develop the system in consultation with angling guides, anglers and First Nations.
- Consider angling guide permits for commercial operators offering guided angling opportunities incidental to other commercial outdoor recreation activities on an individual basis. The intent of these permits is to allow clients some angling opportunities as part of their outdoor recreation experience but not as their primary activity. General angling regulations will apply with additional restrictions on daily catch quotas and possession limits.
- Consider new angling opportunities only if an analysis determines that conservation and wilderness objectives will not be compromised.

To minimize and mitigate impacts of increased angling pressure on protected area fish populations if improved road access is required.

- Monitor angling pressure prior to and after development if improved access is required and revise angling regulations if necessary.

To safeguard the opportunity of First Nations to take fish for ceremonial or sustenance purposes.

- Continue to work with First Nations on issues pertaining to opportunities to take fish for ceremonial or sustenance purposes.

8.6.5 Protected Area-Specific Management Direction

Mount Edziza Provincial Park and Proposed Mount Edziza Protected Area – Objectives and Strategies

To ensure that if a mining road is required to provide access to mining activities in the Mount Edziza Resource Management Zone (formerly the Mount Edziza Recreation Area) that it has minimal impacts on fish populations on the Kakiddi Lakes chain.

- Monitor angling pressure on the Kakiddi Lakes chain prior to and after development if a mining access road is required and revise angling regulations if necessary.

To investigate the status of the rainbow trout population in Buckley Lake.

- Conduct investigations to determine the population and reproductive status of the rainbow trout population including:
 - field sampling of age class structure;

- assessment of potential spawning streams; and,
- interviews with First Nations elders.
- Reassess angling regulations based on new biological information collected.
- Monitor harvest levels and changes in population structure.
- Do not allow further stocking of Buckley Lake.

To manage the rainbow trout population in Buckley Lake as a quality rainbow trout fishery.

- Use the system for managing angling and angling guiding that will be developed to assign an appropriate lake classification and angling use levels for Buckley Lake.
- Provide appropriate opportunity for commercial guided angling.

Chukachida Protected Area and Pitman River Protected Area – Objectives and Strategies

To ensure that if bridges/road crossings are required across the Pitman or Chukachida rivers that they do not result in increased impacts such as increased angling pressure on fish populations in those rivers.

- Conduct aquatic inventories for the Chukachida River and Pitman River to identify important bull trout habitat and to collect basic aquatic information.
- Work with other agencies and First Nations to ensure that if bridges are developed across the Pitman River or Chukachida River that they avoid crossing those rivers near important bull trout habitat.
- Work with other agencies and First Nations on access management for the Chukachida and Pitman rivers if roads crossing those rivers are developed.
- Monitor angling pressure on the Pitman River prior to and after development if bridge/road crossing is required and revise angling regulations if necessary.
- Monitor angling pressure on the Chukachida River prior to and after development if bridge/road crossing is required and revise angling regulations if necessary.

Spatsizi Plateau Wilderness Provincial Park and Stikine River Provincial Park - Objectives and Strategies

To quantify angling activity and harvest.

- Conduct a “Voluntary Angler Report” program for waters in the Stikine River drainage east of Highway 37, which includes distribution/drop boxes at Cold Fish Lake, Didene Portage, Tuaton or Laslui Lake, and the Highway 37 access point.

To manage guided angling activity to maintain a quality wilderness angling experience for both guided and unguided anglers.

- Consider additional angling guide permits and/or additional rod-days for commercial operators offering guided angling opportunities that are not incidental to other commercial outdoor recreation activities only if an analysis determines compatibility with conservation and wilderness objectives.
- Consider angling guide permits for commercial operators offering guided angling opportunities incidental to other commercial outdoor recreation activities on an individual basis. The intent of these permits is to allow clients some angling opportunities as part of their outdoor recreation experience but not as their primary activity. General angling

regulations will apply with additional restrictions on daily catch quotas and possession limits.

Tatlatui Provincial Park - Objectives and Strategies

To manage guided angling activity to maintain a quality wilderness angling experience for both guided and unguided anglers.

- Allow no more than three angling guides to conduct guided angling activities.
- Establish a working group consisting of government staff, First Nations, angling guides, anglers, and other stakeholders to develop specific guidelines for angling and angling guide management in Tatlatui Provincial Park. Consider defining an angling zone for each waterbody or adjoining waterbodies, classifying waterbodies (or angling zones) into angling experience categories, and assigning rod-days by experience category.
- Maintain Trygve Lake as the single unguided water body.
- Monitor all angling guide activity, including that occurring in months other than July and August, through annual reporting of client angling activity, catch and harvest.

8.7 Scientific Research and Education

Detailed information about the natural and cultural values in protected areas is critical for proper management. To obtain this information, Environmental Stewardship Division will foster and encourage scientific research projects within Stikine Country Protected Areas. The northern focus of the University of Northern British Columbia makes this institution a logical partner in research projects.

8.7.1 General Management Direction

Overall Direction

The management priority for scientific research and education is to promote initiatives that are consistent with management direction established for the Stikine Country Protected Areas System.

Objectives and Strategies

To collect information on the natural and cultural features of Stikine Country Protected Areas and make results of the studies known and understandable.

- Encourage the study of all aspects of Stikine Country Protected Areas’ natural history by academic and scientific organizations, with special attention to the following priorities:
 - harvested fish and wildlife;
 - vegetation including species at risk;
 - non-harvested fish and wildlife;
 - terrestrial ecosystem inventories;
 - backcountry outdoor recreation use and activity and their effects on natural and cultural values; and,
 - cultural heritage.
- Encourage the study of cultural heritage and history of the protected areas that respects First Nations’ concerns.
- Ensure that information collected is analyzed and written up promptly and communicated appropriately to end users and the public.

8.7.2 Protected Area-Specific Management Direction

Gladys Lake Ecological Reserve

To encourage scientific research that focuses on naturally functioning ecosystems with a priority on Stone's sheep, mountain goat, caribou and grizzly bear populations and habitat, and on species and plant communities at risk.

- Consider proposals for scientific research consistent with the objectives for the ecological reserve and this management plan. Research priorities include: naturally functioning ecosystems (including use of the ecological reserve as a benchmark for measuring the effects of human use that occurs in other areas); Stone's sheep, mountain goat, caribou and grizzly bear populations and habitat; and species and plant communities at risk.

To accommodate guided and unguided ecological education.

- Consider proposals for guided or unguided educational opportunities involving an approved educational plan and subject to a full assessment of potential impacts on ecological reserve values. Priority topics for educational activities are: the significance and intent of the Ecological Reserve system in British Columbia; the role of Gladys Lake Ecological Reserve in the protected areas system in British Columbia; Gladys Lake Ecological Reserve values; natural ecosystem function; wildlife ecology (especially on Stone's sheep, mountain goats, caribou and grizzly bears); boreal vegetation ecology; species and plant communities at risk; geological features and processes; and the role of humans in the ecosystem. Activities that compromise ecological reserve values will not be considered.

9 A Place for People to Enjoy – Managing Outdoor Recreation Opportunities

9.1 Introduction

The Stikine Country Protected Areas System contains a diverse range of natural features that support a wide variety of outdoor recreation activities and users. These protected areas are internationally renowned for their outstanding wilderness and wildlife. The remote wilderness quality of much of Stikine Country Protected Areas is one of its most significant features. Extensive areas of unroaded wilderness are becoming rare in British Columbia as industrial development continues into previously inaccessible areas. The Stikine Country Protected Areas System provides a major contribution to the protection of wilderness provincially, nationally and internationally.

The protected areas provide opportunities for wilderness tourism and wilderness recreation in a vast, mostly unroaded wilderness region containing mountains, alpine plateaus, low elevation boreal forests and navigable rivers, where signs of human activity are few. Few places in British Columbia and Canada rival the diversity of landscapes, intact wild land ecosystems, large and small mammal wildlife populations, non-consumptive and consumptive outdoor recreation opportunities and special cultural heritage values that exist in this region.

Outdoor recreation activities include extended backcountry hiking and horse trips, wilderness canoeing and rafting, wildlife viewing, nature appreciation, and resident and commercial hunting and fishing. All of these outdoor recreation activities take place in a relatively pristine wilderness setting with difficult access, except by air transport. Most backcountry users are self-sufficient during their trips; however, some facility-based recreation opportunities are available at the public cabins at Cold Fish Lake in Spatsizi Plateau Wilderness Provincial Park. Wilderness tourism is also available through commercial guided backcountry recreation trips. Although Highway 37 and the Telegraph Creek Road pass through Stikine River Provincial Park, few frontcountry facilities exist in the area. The landscapes of Stikine Country Protected Areas, especially the volcanic deposits and the Grand Canyon of the Stikine River, are not widely found outside the protected areas; these features are a focus for visitors to and residents of the Cassiar area.

This section of the management plan describes outdoor recreation opportunities in Stikine Country Protected Areas, the general outdoor recreation management direction, management objectives, and management strategies for attaining these objectives. The goal for visitor management in Stikine Country Protected Areas is to provide opportunities for visitors to have a safe and enjoyable visit without compromising natural and cultural heritage values or visitor wilderness experience. Therefore, two primary factors have to be evaluated to assess whether this goal is currently being achieved:

- visitor impacts on natural and cultural heritage; and,
- visitor impacts on other visitors.

Conservation of natural and cultural values is the management priority in the Stikine Country Protected Areas System. The challenge within these protected areas is to sustain the pristine environment and wildlife populations that these protected areas are renowned for, while maintaining the wilderness experience for all visitors and providing outdoor recreation opportunities. Another challenge is to maintain facilities such as trails for public and commercial recreation with declining budgets; additional sources of revenue or partnerships in maintaining facilities will be necessary.

9.2 Outdoor Recreation Opportunities, Facilities and Access

9.2.1 Access

Access to Stikine Country Protected Areas is primarily by floatplane to the lakes of the protected areas; by foot or horse from various road access points; by floatcraft (i.e. raft, canoe or kayak) down the Stikine and Spatsizi rivers; and by motorboat up the Stikine River. Others means of access include limited helicopter access and some snowmobile access on the Klastine Trail to the Klastine area.

Access management is critical to the protection of natural, cultural heritage and wilderness values. Inappropriate levels or modes of access can affect fish and wildlife populations, assist the introduction of exotic plants and animals, damage special cultural and geological features, and degrade wilderness values. The careful management of access can maintain these values while still providing outdoor recreation use of the protected areas.

9.2.1.1 General Management Direction

Appropriate access to and within Stikine Country Protected Areas will continue for management, outdoor recreation, and traditional use purposes. Since maintaining a wilderness experience is a priority, acceptable types of access will be carefully managed at appropriate levels to ensure that impacts on natural, cultural heritage and wilderness values are avoided. Reasonable access by First Nations to exercise existing aboriginal rights will be accommodated consistent with court decisions and management direction in this plan. Access for management purposes by Ministry of Water, Lands and Air Protection staff and designated contractors will be permitted to all areas within the Stikine Country Protected Areas System by appropriate means.

9.2.1.2 Air

Floatplanes are commonly used by private groups and commercial operators to gain access to Stikine Country Protected Areas. Floatplane landings take place on many lakes and some rivers within the protected areas including: Buckinghorse, Bug, Cartmel, Cold Fish, Ella, Happy, Hotleskiwa, Laslui, Metsantan and Tuaton lakes and the Spatsizi River in Spatsizi Plateau Wilderness Provincial Park; Buckley, Mowdade, Nuttlude, Kakiddi and Little Ball lakes in Mount Edziza Provincial Park; Kitchener, Stalk, Tatlatui and Trygye lakes as well as the Firesteel River in Tatlatui Provincial Park; Chukachida Lake in Chukachida Protected Area; Pitman Lake in Pitman River Protected Area; and, the Stikine River in Stikine River Provincial Park.



Figure 16. Floatplanes are commonly used to access Stikine Country Protected Areas.

Wheel plane activity is currently low because of limited landing opportunities. In the past, landings occurred more frequently when the airstrip at Cold Fish Lake was operational. The airstrip at Cold Fish Lake is no longer maintained and is marked as closed. However, a small number of private planes still use the airstrip each year. A landing strip exists on the private property at Hyland Post, which the owners use to bring clients into their guide-outfitting area. People use skiplanes to gain access to some areas in the winter. Air traffic can disturb wildlife and spoil visitor experiences by disturbing them and by increasing the number of people in the backcountry.

Helicopter access to the protected areas is not as common as floatplane access. Helicopter landings on the cinder cones are prohibited in Mount Edziza Provincial Park. Some scenic flight activity occurs over the Grand Canyon of the Stikine River. According to the 2003 *Park Act* regulations, visitors are required to have authorization from Environmental Stewardship Division before arriving or departing from Spatsizi Plateau Wilderness, Mount Edziza and Tatlatui provincial parks with an aircraft. Gladys Lake Ecological Reserve is closed to aircraft access.

General Management Direction

Overall Direction

Floatplanes are recognized as an historical and important means of access to Stikine Country Protected Areas. Air access to the protected areas will continue to be primarily by floatplane with small numbers of helicopter drop-offs and pick-ups. Aircraft use will be managed as a form of

transportation and will be carefully managed to maintain natural, cultural heritage and wilderness values. New methods of air access will not be allowed.

Objectives and Strategies

To provide a level of floatplane and stipline access that allows visitors to enjoy Stikine Country Protected Areas without unacceptable impacts on natural and cultural heritage values and the wilderness experience of other users.

- Manage aircraft use as a means of transportation.
- Monitor the number of flights, visitor experience quality and possible environmental impacts over time. In consultation with the BC Floatplane Association, the BC Aviation Council, commercial operators and private users, assess whether guidelines or site specific restrictions (e.g. number of commercial aircraft charter companies) are desirable. Implement management regime as necessary.
- Discourage, and if necessary, in consultation with Transport Canada, limit low aircraft flights during the ungulate birthing and post-natal season, May 15 – July 15, in birthing and rearing areas.
- In consultation with the BC Floatplane Association (BCFA), Canadian Owners and Pilots Association (COPA), BC Aviation Council, commercial operators, charter operators and other users, develop protocols/approaches to manage aircraft use to meet protected area management objectives. In the short term, approaches will recognize the existing regulation governing aircraft use.
- Add updated protected area boundaries to aeronautical charts. Also, add sensitive sites to aeronautical charts if necessary.
- Work with aviation organizations (BC Floatplane Association, BC Aviation Council, etc.) and commercial air charter companies to educate pilots on the effects of aircraft on wildlife.

To provide low levels of helicopter access for limited purposes.

- Limit helicopter access to drop-off and pick-up points for multi-day trips. Some areas will be closed to helicopter access and other areas will have designated landing sites. Consider other helicopter landings only if they have extremely low impacts and provide significant benefits to the protected areas system.
- Allow helicopter landings for management purposes and approved research or inventory projects.
- Designate helicopter landing sites for outdoor recreation purposes if necessary and require prior approval to land within the protected areas system. Helicopter landing sites should be more than 2000 meters from mountain goat and mountain sheep habitat as per the draft Ministry of Water, Land and Air Protection Skeena Region's Heli-sport Performance Criteria.
- Prohibit outdoor recreation day-use of helicopters involving multiple take-offs and landings (i.e. heli-hiking, heli-skiing and heli-fishing). Multiple take-offs and landings in one day may be considered only for portaging canoes and rafts, or from the Intensive Recreation Zone near Highway 37 (but not for heli-hiking, heli-skiing or heli-fishing purposes).

Protected Area-Specific Management Direction

Mount Edziza Provincial Park and Proposed Mount Edziza Protected Area - Objectives and Strategies

To maintain the present pattern of floatplane landings in the park and protected area with a greater number of landings on lakes in the Buckley Lake and Kakiddi Lakes areas than in the Spectrum Range area.

- Monitor aircraft use levels and visitor satisfaction to determine the need for use limits.

To protect sensitive plateau areas from disturbances.

- Maintain the prohibition of wheeled aircraft landings.
- Close the Volcanic Plateau to helicopter landing.

To ensure that helicopter access does not result in unacceptable impacts on cinder cones, and on hot springs and their calcite deposits.

- Maintain the ban on helicopter landings on the cinder cones and implement a ban on helicopter landings on calcite deposits, associated plant communities or other associated features at any hot springs.

Spatsizi Plateau Wilderness Provincial Park, Stikine River Provincial Park - Objectives and Strategies

To protect the wilderness character of Stikine Country Protected Areas.

- Close the Stikine Grand Canyon, Dawson/Tomias, Eaglenest/Plateau, Upper Stikine, Metsantan and Chapea management areas to helicopter landing, except for management purposes or by special permit, and only if they have extremely low impacts and provide significant benefits to the protected area system.

Spatsizi Plateau Wilderness Provincial Park - Objectives and Strategies

To maintain floatplane access as the main air access method.

- Continue to maintain the deactivated status of the Cold Fish Lake airstrip.

To protect the cultural heritage values of Metsantan village.

- Manage aircraft access to Metsantan Lake to protect cultural values.

Gladys Lake Ecological Reserve - Objectives and Strategies

To eliminate aircraft landings in Gladys Lake Ecological Reserve.

- Close Gladys Lake to aircraft landings, except for research and management purposes.

Stikine River Provincial Park - Objectives and Strategies

To prevent unacceptable impacts of aircraft activity on mountain goats in the Grand Canyon of the Stikine River.

- Maintain current avoidance specifications for mountain goats in the Grand Canyon of the Stikine River:
 - Flying over the Stikine Canyon (Latham Creek to Telegraph Creek) is permitted at an altitude of greater than 1050 meters (3500 feet) above sea level.

- Flying within the Stikine Canyon is permitted only from site Z (UTM 255422) to UTM 140447, and must be low in the canyon, and only when wind, visibility, and pilot skill permits. No hovering or circling is permitted to take place.
- All efforts are to be made to avoid disturbing mountain goats occupying the area of site Z (UTM 255422).
- Flying within the Stikine Canyon is prohibited during the kidding season May 15 to July 15.
- Monitor the effects of aircraft on the mountain goats for possible impacts and develop and implement additional management strategies if necessary.

Tatlatui Provincial Park - Objectives and Strategies

To manage aircraft access levels and patterns to maintain the wilderness experience of park visitors, and pilot safety.

- Encourage affected stakeholders to develop an acceptable strategy for dealing with current user issues in Tatlatui Provincial Park.

9.2.1.3 Roads

Land access into Stikine Country Protected Areas is limited because of the few roads in the region; the only two all weather roads are Highway 37 and the Telegraph Creek Road. Highway 37 provides access to a small part of Stikine River Provincial Park including the boat launch at the Highway 37 Bridge. The Telegraph Creek Road gives access to the westernmost parts of Stikine River Provincial Park.

The British Columbia Rail (BCR) railroad grade provides access near the southern and western parts of Spatsizi Plateau Wilderness Provincial Park; however, this route is subject to washouts. Although the railroad grade does not enter Spatsizi Plateau Wilderness Provincial Park, it substantially influences access to the park because it is drivable with four-wheel drive vehicles. The railroad grade also provides limited access to Stikine River Provincial Park. The unused BCR railroad bridge over the Stikine River remains unmaintained since its construction and needs engineering investigations to determine if it is safe.

The Willow Creek Forest Service Road comes to within two kilometres of the eastern boundary of Mount Edziza Provincial Park. Mineral exploration in the proposed Mount Edziza Resource Management Zone (formerly the Mount Edziza Recreation Area) could result in improvement of the Willow Creek Road if mining does proceed. The Cassiar Iskut-Stikine LMRP recommended that a road be allowed through Mount Edziza Provincial Park if mine development is approved in the proposed Mount Edziza Resource Management Zone. A portion of Mount Edziza Provincial Park will be designated as the Mount Edziza Protected Area, to accommodate road construction if necessary. The Cassiar Iskut-Stikine LMRP also recommended road access through Pitman River Protected Area and Chukachida Protected Area, if necessary

The Omineca Mine Road, originating from Fort St. James, comes to within several kilometres of the eastern boundary of Tatlatui Provincial Park and near the Metsantan addition. This road is open but presently receives little use from provincial park visitors, likely because of the road's remoteness and the lack of facilities in the area. The potential exists for increased snowmobile use of this road, and access to Tatlatui Provincial Park and the Metsantan area.

General Management Direction

Overall Direction

New roads are prohibited within the protected areas, except for in Pitman River Protected Area, Chukachida Protected Area and the proposed Mount Edziza Protected Area as directed by the Cassiar Iskut-Stikine LRMP, to accommodate mineral access. A short spur road may be allowed in Stikine River Provincial Park near the Highway 37 Bridge to accommodate frontcountry outdoor recreation facility developments. Where new roads or improvements to existing roads are proposed adjacent to protected areas, Environmental Stewardship Division will work co-operatively with other agencies and First Nations to minimize and mitigate impacts on protected area natural, cultural heritage and outdoor recreation values. Where increased access on adjacent land is compatible with protected area objectives, Environmental Stewardship Division will seek to gain the greatest benefits while minimizing negative impacts.

Objectives and Strategies

To coordinate management of land-based access to Stikine Country Protected Areas with other agencies and First Nations to ensure that access does not impair the natural or cultural heritage values of the protected areas.

- Work with other agencies and First Nations to ensure that Environmental Stewardship Division is fully involved with any decisions regarding road building on adjacent lands that may affect Stikine Country Protected Areas.

Protected Area-Specific Management Direction

Mount Edziza Provincial Park and Proposed Mount Edziza Protected Area - Objectives and Strategies

To ensure that Cassiar Iskut-Stikine LRMP guidelines are followed and impacts on Mount Edziza Provincial Park and proposed Mount Edziza Protected Area values are minimized and mitigated if a road is required through the proposed Mount Edziza Protected Area to the Mount Edziza Resource Management Zone (formerly Mount Edziza Recreation Area).

- Ensure application of Cassiar Iskut-Stikine LRMP guidelines if road development is required through the proposed Mount Edziza Protected Area. The following guidelines are extracted from the Cassiar Iskut-Stikine LRMP 2000:
 - Manage public use of any new access cooperatively between BC Parks and the responsible agencies in consideration of the park management plan for Mount Edziza Provincial Park.
 - Recommend that a road be permitted through Mount Edziza Provincial Park in the event of mine development being approved in the Mount Edziza Resource Management Zone. For advanced mineral exploration e.g. bulk sampling, consider allowing roaded access through Mount Edziza Provincial Park where reasonable review determines that no practicable alternative exists. Any decision to put a road through the park should be accompanied by an appropriate public review process.
 - Locate roads and mine infrastructure to minimize disruption of wildlife, in particular mountain goats during kidding season and the use of spring and summer range by mountain ungulates.
 - If road access is required, plan road layout to minimize visual impacts from Nutlud Lake (e.g. using forest screening).

- *Avoid disturbance of red- and blue-listed plants and plant communities when locating roads and mine infrastructure.*
- *Avoid disruption of the mineral lick along Tennaya Creek.*
- Work with the mining company and other land management agencies to minimize and mitigate impacts from access, mining exploration and mining activities on Mount Edziza Provincial Park and proposed Mount Edziza Protected Area values.
- Install a gate on any road into and through the proposed Mount Edziza Protected Area. Deactivate the road after use associated with mining ends.

Spatsizi Plateau Wilderness Provincial Park - Objectives and Strategies

To encourage maintenance of park access along the BCR railroad grade.

- Work with and explore partnerships with the Iskut First Nation, other agencies, commercial operators and NGOs in managing access along the BCR railroad grade.

To ensure that Cassiar Iskut-Stikine LRMP guidelines are followed regarding potential access into the Metsantan area.

- *Manage access into mineral tenures adjacent to the protected area to minimize disturbance of seasonal migration of caribou (Cassiar Iskut-Stikine LRMP 2000).*
- Work with other agencies and First Nations to manage access to mineral tenures adjacent to the Metsantan area.

Stikine River Provincial Park - Objectives and Strategies

To provide access to the Stikine River from Highway 37.

- Work with Ministry of Transportation to maintain access to the Stikine River at the Highway 37 Bridge.
- Consider road access to potential frontcountry type developments at the Highway 37 Bridge while avoiding unacceptable impacts to park values.
- Provide a pullout on the Telegraph Creek Road for access to the proposed initial trail to the Grand Canyon of the Stikine River. Provide additional pullouts for additional trails as required.
- The historical access of the owner of District Lot #371 (Willie Williams) along the existing road from Highway 37 (near the Stikine River Bridge) is recognized and will continue.

To ensure that the area around and including the BCR railroad bridge is safe.

- Work with BC Rail to determine the safety conditions at the BCR railroad bridge and implement any required measures.

Tatlatui Provincial Park and Spatsizi Plateau Wilderness Provincial Park (Metsantan addition) - Objectives and Strategies

To minimize and mitigate the effects of access from the Omineca Mine Road on protected area values.

- Work with other agencies and First Nations by participating in the planning and management of access on the Omineca Mine Road, to minimize and mitigate impacts of that access on Tatlatui Provincial Park.

Pitman River Protected Area and Chukachida Protected Area - Objectives and Strategies

To minimize and mitigate impacts to protected area values if access to mineral claims is required.

- Follow the Cassiar Iskut-Stikine LMRP guidelines if road development is required in the Pitman River Protected Area and Chukachida Protected Area. These guidelines are (Cassiar Iskut-Stikine LMRP 2000):
 - *In the event that a request is made for access and where reasonable review determines that no practicable alternative exists outside of the protected area, then government authorities will make a decision regarding the most appropriate access. The decision will be made in full consideration of the functional integrity of the protected area and the need for access for mineral activities, in accordance with applicable review and approval processes.*
 - *If a road is required, locate it to minimize environmental and wildlife impacts, including providing access controls if required. Fully deactivate road upon completion of operations.*
 - *Do not create a circle route as a result of providing access across this protected area.*
 - *The Pitman River has highly unstable terrain. If a road is required, recommend full bonding for road construction in recognition of the higher environmental risk.*
- Work with First Nations, mining companies and other agencies to minimize and mitigate impacts on protected area values from access, mining exploration and mining activities adjacent to the protected area.

9.2.1.4 Water

Motorboat Use

Motorboat use in the Stikine Country Protected Areas System includes jet and propeller driven boats.

General Management Direction

Overall Direction

Motorboat access is recognized as an ongoing use on many rivers and lakes within Stikine Country Protected Areas. Since maintaining a wilderness experience is a priority, motorboat use will be carefully managed at appropriate levels to ensure that impacts on natural, cultural heritage and wilderness values are minimized. Motorboat use will be allowed as a means of transportation but not as an outdoor recreation activity for its own sake. Other types of motorboat use such as jet-skis, hovercraft and air propelled watercraft are prohibited. It is recognized that maintaining existing motorboat access in the long term is important to people who access the protected areas system in this manner. Within the context of implementation of this plan, Environmental Stewardship Division will ensure that any proposed future changes in motorboat access will be discussed with affected users such as the Northwest Powerboat Association, commercial operators, the BC Wildlife Federation and other potentially affected user groups.

Motorboat Use on Rivers

Motorboat use on the Stikine River and its tributaries (the Pitman, Spatsizi, Klappan, and Chukachida rivers) occurs primarily in the autumn by hunters travelling to moose hunting areas. Motorboats have been used on most of these rivers for many years. The Spatsizi River upstream

from Hyland Post is closed to motorboat traffic between spring break-up and September 1 of each year except for access for the guide-outfitter to Bear Camp for maintenance purposes. Potential interactions between motorized and non-motorized boaters on the river could be minimized through monitoring and, perhaps, trip scheduling management. Motorboating also occurs on portions of the Firesteel River in Tatlatui Provincial Park in support of guided angling activities.

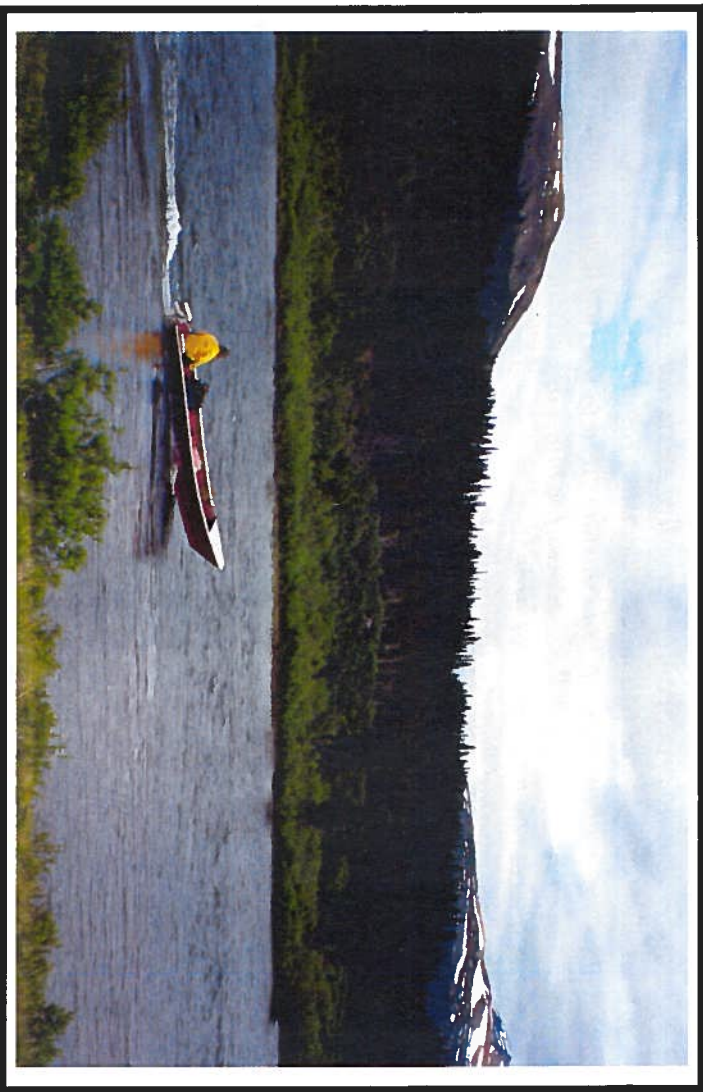


Figure 17. Motorboat use on the Firesteel River, Tatlatui Provincial Park.

The Cassiar Iskut-Stikine LRMP issued management direction that BC Parks “Continue to allow motorized boat use for recreation and hunting along the Stikine, Chukachida and Pitman rivers, consistent with acceptable types and levels of use”.

Objectives and Strategies

To provide motorboating opportunities consistent with acceptable types and levels of use.

- Manage motorboat use on rivers as a means of transportation.
- Maintain an appropriate balance between motorized and non-motorized uses, and minimize impacts on natural and cultural heritage values. In consultation with commercial operators, private users, Department of Fisheries and Oceans (DFO) and First Nations, develop management regimes to minimize negative interactions or environmental impacts if necessary. In the interim, allow motorboat access on rivers where motorboat use currently exists at current use levels.
- Consider commercial motorboat use on the Stikine River system above the Highway 37 Bridge only for drop-off and pick-up purposes of multi-day trips, and guide-outfitter support. Provide a limited number of trips by a maximum of 2 commercial operators.

- Consider limits on motorboat use above Beggerlay Canyon before the hunting season opens, if necessary, to maintain an appropriate balance between motorized and non-motorized uses.
- Encourage use of electric motors and four stroke motors in situations where they are feasible.
- Provide motorized and non-motorized users on rivers with information on river etiquette for operation of motorboats on rivers where floatcraft (i.e. canoe, kayak, inflatable raft) use also occurs. Include information on river etiquette and safety while navigating through Jewel Rapids and Beggerlay Canyon.
- Maintain the non-motorized use restriction on the Spatsizi River upstream of Hyland Post from breakup to September 1. One exception is provided to allow the guide-outfitter to access Bear Camp for maintenance purposes.

To provide high quality wilderness motorboating opportunities to experienced boaters.

- Monitor user experience and site impacts, and establish controls on river use, if needed, to maintain visitor satisfaction. Possible controls include numbers of groups, group size, trip timing, and number of trips/day.

Motorboat Use on Lakes

Motorboating occurs on several lakes in Stikine Country Protected Areas, primarily by commercial operators for guided hunter or angler transport. BC Parks also has a motorboat on Cold Fish Lake for use by authorized personnel and volunteers. Motorboat use presently occurs on Buckingham, Buckley, Bug, Chapea, Chukachida, Cold Fish, Ella, Hotleskiwa, Kitchener, Laslui, Mess, Mowdade, Nuttlude, Pitman, Stalk, Tatlatui and Tuaton lakes. The boats are generally small runabouts with small outboard engines, and are based on the lakes where they are used. Presently no lakes in Stikine Country Protected Areas are accessible by road, preventing easy access to lakes for motorboat use.

Objectives and Strategies

To provide motorboat use opportunities consistent with acceptable types and levels of use.

- Manage motorboat use on lakes as a means of transportation.
- Maintain an appropriate balance between motorized and non-motorized uses, and minimize impacts on natural and cultural heritage values. In consultation with commercial operators, private users, DFO and First Nations, develop management regimes to minimize conflicts or environmental impacts if necessary.
- Work with commercial operators to minimize the use of motorboats on lakes in Stikine Country Protected Areas.
- Encourage the use of electric motors and four stroke motors on lakes that allow motorboat use.
- Maintain the BC Parks motorboat at Cold Fish Lake for management and safety purposes, and park host use only.

9.2.1.5 Snowmobiles

The *Park Act* and its regulations generally prohibit the use of snowmobiles in protected areas except under specific authorization. In Stikine Country Protected Areas, trapline holders are allowed to use snowmobiles, and some guide-outfitters have had permission to use snowmobiles

for firewood collection. The Cassiar Iskut-Stikine LRMp recommended that snowmobile use continue along the Klastine Trail. No other snowmobile access authorizations currently exist within Stikine Country Protected Areas.

General Management Direction

Overall Direction

Access to Stikine Country Protected Areas by snowmachine users will generally be restricted and require specific authorization. Limited snowmobile access for First Nations traditional uses, for access along the Klastine Trail, for traplines holders, and for guide-outfitters for camp maintenance will continue.

Objectives and Strategies

To provide for limited snowmachine access while avoiding unacceptable impacts to wildlife populations and other protected area values.

- Work with First Nations, trapline holders and guide-outfitters to minimize the impacts of continued limited snowmachine access on natural, outdoor recreation and cultural heritage values.

Protected Area-Specific Management Direction

Mount Edziza Provincial Park and Proposed Mount Edziza Protected Area - Objectives and Strategies

To recognize snowmobile use along the Klastine Trail in the Klastine Management Area.

- Work with the Tahltan Band Council and the Iskut First Nation to develop snowmobile use guidelines along the Klastine Trail in the Klastine Management Area.

9.2.2 Facilities

Various types of facilities exist in Stikine Country Protected Areas. Facility management, including improvements and development, is important in managing the overall level of facilities in these wilderness protected areas. Facilities include structures, trails and routes, and campsites. The following definitions apply:

- Facilities include all structures, trails, routes, and campsites.
- Trails and routes include bridges and boardwalks and any other similar trail improvements.
- Structures include shelters (cabins, tent frames), sheds, and any other constructed item other than trail improvements.

9.2.2.1 General Management Direction

Overall Direction

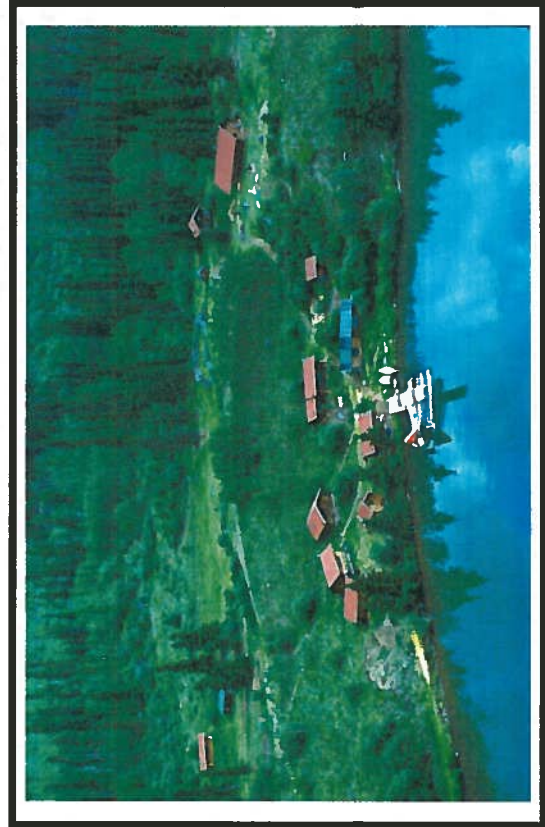
In general, the management objective is to have the fewest facilities required to support public, First Nations, and commercial use of the Stikine Country Protected Areas System. This is consistent with maintaining the wilderness character of the system. Commercial structures will be directed outside protected areas where feasible and public facilities will be consistent with maintaining a wilderness experience. Facilities that are unsafe, no longer used or not required for emergency purposes and not of significant historical or cultural heritage value will be removed.

The use of facilities (permanent and non-permanent) and the land base within Stikine Country Protected Areas as staging areas for mineral, industrial or other activities that are conducted primarily outside the protected areas system will not be permitted.

9.2.2.2 Structures

Structures have been built within Stikine Country Protected Areas for many reasons. Most structures support guide-outfitting, angling guiding and trapping. Environmental Stewardship Division maintains several structures, such as those at Cold Fish Lake camp. Traditional First Nations structures such as those at Metsantan Lake also exist.

The Tahltan Nation indicates that traditionally, Tahltans occupied the current Cold Fish Lake campsite with a temporary camp (as evidenced by obsidian flakes and pieces) and that a trapping cabin owned by Alec Dennis was burned down in 1948. The present camp on Cold Fish Lake was established in 1948 for guided hunting purposes and Tommy Walker subsequently acquired fee simple title to the site. Currently, the National Second Century Fund of British Columbia (Nature Trust of British Columbia) owns the 84 ha private lot at Cold Fish Lake camp along with the original Tommy Walker Cabin; the Province of British Columbia owns all other buildings at Cold Fish Lake camp and has a 99-year lease from Nature Trust on the property and the Tommy Walker Cabin. One of the



conditions of the lease is that the site is to be preserved as “a site of ecological interest for the use, enjoyment and benefit of the people of British Columbia.” Efforts have been made to at least partially restore some of the buildings to prevent further deterioration.

Map 4 and Appendix 10 provide descriptions of the type and location of structures currently found within the Stikine Country Protected Areas System.

Figure 18. Cold Fish Lake camp, Spatsizi Plateau Wilderness Provincial Park.

General Management Direction

Overall Direction

Structures will be carefully managed and controlled within Stikine Country Protected Areas. Shelters, including cabins and tent frames or other structures, will be considered only where their existence is consistent with zone prescriptions and management area objectives. Purpose statements will be developed for structures included in park use permits and will define allowable uses of those structures; changes to defined uses will require pre-approval. For the Klastline and Metsantan additions, Stikine River Provincial Park, Chukachida Protected Area and Pitman River Protected Area, the Cassiar Iskut-Stikine LRMP directed that cabins can be

built to support backcountry recreation and that opportunities for frontcountry tourism development near the Highway 37 Bridge be provided. The Cassiar Iskut-Stikine LRMP provided the following direction: “*Generally, physical commercial infrastructure (e.g. roads, lodgings, staging areas, etc.) will be directed outside of protected area boundaries in order to minimize impacts within Protected Areas*” (Cassiar Iskut-Stikine LRMP 2000). New shelters will be considered in the form of small, rustic backcountry shelters such as tent frames and small cabins. Present structures can be maintained, provided the structures are still required. Lodge and other structures may be considered subject to an appropriate review process approved by the Minister of Water, Land and Air Protection.

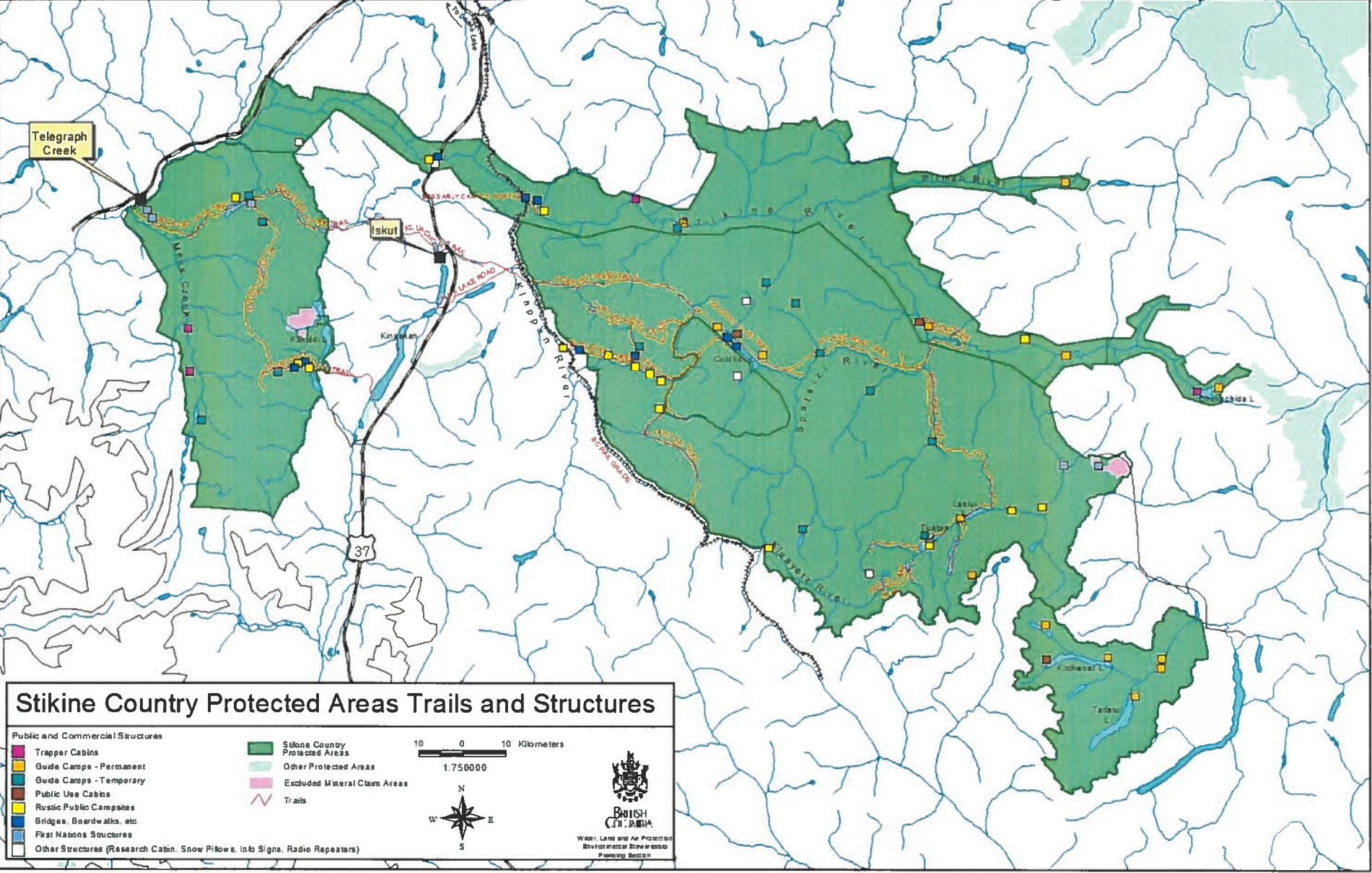
Objectives and Strategies

To keep infrastructure development to a minimum level appropriate for wilderness protected areas.

- Consider construction of structures in new locations or additions to existing camps subject to the following conditions:
 - must be consistent with management plan zone prescriptions and management area objectives;
 - must undergo an impact assessment following BC Parks Impact Assessment Process and have a minimal footprint on the land; and,
 - must be located in one of the following management areas (see Section 10.2 for a description of each management area):
 - ⇒ Buckley Lake (west of Mess Creek only);
 - ⇒ Klastine;
 - ⇒ Kakiddi Lakes;
 - ⇒ Mount Edziza Protected Area (proposed);
 - ⇒ Stikine Grand Canyon (Wilderness Recreation Zone only)
 - ⇒ Middle Stikine;
 - ⇒ Chukachida;
 - ⇒ Pitman River;
 - ⇒ Metsantan (for First Nations cultural and interpretive purposes only); and,
 - ⇒ Stikine Headwaters.

New shelters will be considered in the form of small, rustic backcountry shelters such as tent frames and small cabins. Additions to existing commercial recreation camps will only be considered in conjunction with new approved commercial recreation activities. For the Buckley Lake Management Area east of Mess Creek, new structures will be considered only in the form of non-permanent shelters.

Map 4





Map 4. Stikine Country Protected Areas Trails and Structures.

- Consider construction of new structures to support the exercise of existing aboriginal rights and traditional uses.
- Allow maintenance of and upgrades to existing permanent commercial camps, subject to BC Parks Impact Assessment Process, provided bed capacity for clients remains the same. Upgrades may include improved services (e.g. showers) or upgrading of existing structures (i.e. tent frame to cabin) but not additions of new structures to increase bed capacity. The following existing permanent commercial camps are recognized:
 - guide-outfitter camp on Bug Lake;
 - guide-outfitter camp on Laslui Lake;
 - guide-outfitter camp on Buckinghorse Lake;
 - guide-outfitter camp on the Stikine River (just downstream from the mouth of the Spatsizi River);
 - guide-outfitter camp on Kichener Lake;
 - guide-outfitter camp on Stalk Lake;
 - guide-outfitter camp on Buckley Lake;
 - angling guide camp on Tatlatui Lake; and,
 - angling guide camps (2) on the Firesteel River.
- Consider proposals for increased bed capacity of existing facilities to support an increased number of guides for increased guide to client ratios on an individual basis.
- Allow maintenance of and upgrades to existing public structures including Cold Fish Lake Camp, the Kichener Lake cabin and the Stikine River cabin, subject to BC Parks Impact Assessment Process.
- Establish standards for cabins and other facilities as necessary that are consistent with facility management policies of Environmental Stewardship Division.
- Remove facilities that are unsafe, no longer used or not required for emergency purposes and not of significant historic or cultural heritage value.
- At the owner's expense, remove structures built or upgraded without prior written approval.
- Ensure that some lakes accessible by floatplanes remain free of structures to preserve wilderness quality for outdoor recreation users.

Protected Area-Specific Management Direction

Chukachida Protected Area, Pitman River Protected Area, Stikine River Provincial Park and Spatsizi Plateau Wilderness Provincial Park (Upper Stikine and Metsantan Management Areas) - Objectives and Strategies

To maintain the wilderness character of the protected areas while allowing some outdoor recreation development.

- “Allow opportunities for construction of backcountry cabins, as required, to support recreational use, compatible with protected area values.” (Casiar Iskut-Stikine LRMP 2000).

Gladys Lake Ecological Reserve - Objectives and Strategies

To facilitate research within the Gladys Lake Ecological Reserve while discouraging outdoor recreation use.

- Allow use of the Gladys Lake cabin only for research and management purposes and remove mention of the Gladys Lake cabin from all protected area brochures and the official Ministry of Water, Land and Air Protection web site to discourage outdoor recreation use.
- Review the need for maintenance of the Gladys Lake cabin for research purposes and assess the level of unauthorized recreation use of the cabin.

Mount Edziza Provincial Park (Klastline Management Area) - Objectives and Strategies

To maintain the wilderness character of the park while allowing some outdoor recreation development.

- “Maintain opportunities for construction of cabins, as required, to support recreational use along the Klastline Trail.” (Cassiar Iskut-Stikine LRMP 2000)

To provide access over the Klastline River.

- Review bridge placement options over the Klastline River in consultation with the Tahltan Band Council and the Iskut First Nation and construct a bridge if funding is available.

Spatsizi Plateau Wilderness Provincial Park - Objectives and Strategies

To manage facilities at the Metsantan village site.

- Work with the Tahltan Band Council and Iskut First Nation to develop a policy for the Metsantan Site with respect to protection and possible rehabilitation of the traditional village site.
- Consider new structures for cultural and interpretive purposes only, subject to an impact assessment following BC Parks Impact Assessment Process.

To manage facilities at Cold Fish Lake.

- Consider a range of opportunities that would result in self-sustaining maintenance of the Cold Fish Camp facilities, which retain traditional and historic values and provide for continued public use. Opportunities may include:
 - increased user fees;
 - public/private sponsorship; and,
 - operation of the facilities by the Tahltan Nation, NGOs and/or other public groups or partnerships.

Any proposals would be considered in conjunction with the Nature Trust of British Columbia, the Tahltan Nation, and the proposed Stikine Country Protected Areas Advisory Committee.

- Maintain Cold Fish Lake Camp for its historical value and with a priority for public outdoor recreation use.
- Work with the Tahltan Nation to implement a cultural heritage signage and interpretation program at Cold Fish Lake camp.
- Allow maintenance of and upgrades to Cold Fish Lake camp, subject to BC Parks Impact Assessment Process.

Stikine River Provincial Park - Objectives and Strategies

To provide frontcountry outdoor recreation opportunities near the Stikine River Bridge.

- “Allow opportunities for frontcountry tourism development in the vicinity of the Stikine bridge on Highway 37.” (Cassiar Iskut-Stikine LRMP 2000)

Tatlatui Provincial Park - Objectives and Strategies

To provide an opportunity for an additional hunting guide tent frame or cabin.

- Consider allowing an additional structure in Tatlatui Provincial Park to support guided hunting activities only, subject to BC Parks Impact Assessment Process, BC Parks Design Guidelines, consultation with affected users, and no significant impacts on other existing operations in the park. Other new structures will not be considered in Tatlatui Provincial Park.

9.2.2.3 Trails, Routes and Campsites

Trails and routes fit into two categories: trails used to access protected areas, and those within protected areas. Trails are often used by both foot and horse traffic. Two trails that provide access to Mount Edziza Provincial Park are the Klastine Trail from Iskut, and the Mowdade Trail from Kinaskan Lake. The Kluchon-McEwen Creek Trail provides access to Spatsizi Plateau Wilderness Provincial Park from Iskut.

Several maintained trails (mostly rustic) and numerous routes exist within Stikine Country Protected Areas. Spatsizi Plateau Wilderness Provincial Park contains maintained trails at Eaglenest Creek, McEwan Creek, Black Fox Creek, Cold Fish Lake, Danihue Pass and Spatsizi Plateau; and portage trails at Didene Creek, Fountain Rapids, Chapea Rapids, and Beggerlay Rapids. Mount Edziza Provincial Park contains maintained trails including the Mount Edziza Trail between Buckley and Mowdade lakes, and the Buckley Lake Trail from Telegraph Creek to Buckley Lake. Established routes/trails in Spatsizi Plateau Wilderness Provincial Park include: Airplane Valley, Cartmel Lake, Gladys Lake, Hyland Post, Icebox Canyon, Mink Creek and Ram Creek trails; and Hotleskiwa Lake, Ross River, Tahtan, Tuaton Lake and Upper Stikine historical routes. The Spectrum Route from Little Ball Lake or Arctic Lake to the Mount Edziza Trail is the only established route that exists in Mount Edziza Provincial Park.

All trails in the Stikine Country Protected Areas System are Class IV trails and all routes are Class V trails according to the BC Parks’ Facility Standards. Class IV trails are intended in Wilderness Recreation zones as lightly used wilderness trails (overnight or multi-day duration trips), which do not normally have support facilities such as developed campsites; designated camping areas and/or backcountry toilets may be provided as required. Class V trails in Wilderness Recreation and Conservation zones are intended as wilderness routes (overnight or multi-day duration trips). Class V trails are simply routes with no trail development and signs and camping locations may be restricted as required.

Campsites have been built in numerous locations throughout Stikine Country Protected Areas by many different user groups. Some campsites have seen heavy use with deterioration of site quality. Several of these sites are on the Stikine River and are used by various river user groups.

The Cassiar Iskut-Stikine LRMP provided direction regarding trails in some new protected areas (see below).

General Management Direction

Overall Direction

Environmental Stewardship Division will continue to provide for maintenance of the main trails within Stikine Country Protected Areas. Secondary trails and new trails, routes and campsites will only be established or maintained to meet specific outdoor recreation goals. All new trails must undergo an evaluation under the BC Parks Impact Assessment Process. Development, maintenance and use of all trails, routes and campsites will be consistent with protected areas management plan zoning and conservation goals. Environmental Stewardship Division will work with other organizations and commercial operators (e.g. guide-outfitters, recreation guides) to maintain or upgrade protected area trails.

Objectives and Strategies

To maintain trails, routes and campsites at a minimum wilderness standard. If use levels have unacceptable impacts, consider improving, relocating, upgrading or closing them.

- Conduct periodic impact assessments of trails and campsites.
- Provide for maintenance of existing trails and campsites within the protected areas at current levels while allowing for rerouting or closures for specific reasons such as protecting natural or cultural heritage values.
- Pursue partnerships with other organizations and commercial operators (e.g. guide-outfitters, recreation guides) to assist with trail maintenance.
- Investigate the potential for designating some trails or portions of some trails as horse-only or hiking-only trails and if necessary, develop new trails subject to the BC Parks Impact Assessment Process.
- Continue to monitor the condition of campsites and trails and implement strategies to rehabilitate damaged areas and to avoid further impacts.

Protected Area-Specific Management Direction

Mount Edziza Provincial Park and Proposed Mount Edziza Protected Area - Objectives and Strategies

To protect the plant communities and physical features of the cinder cones and calcite deposits in Mount Edziza Provincial Park.

- On Eve Cone, mark and restrict access to the established route up the cinder cone.
- Provide information to park visitors on the sensitivity of cinder deposits and associated lichen crust communities.
- Monitor the effects of hiking use on the cinder cones and restrict access to designated trails or prohibit access, if necessary, to protect natural values.
- “Provide designated trails to minimize impacts to calcite deposits.” (Cassiar Iskut-Stikine LRMP 2000).
- Provide information to park visitors on the fragility of the Mess Creek hot springs calcite deposits.

Gladys Lake Ecological Reserve - Objectives and Strategies

To protect the values of the Gladys Lake Ecological Reserve while allowing specific access to Spatsizi Plateau Wilderness Provincial Park.

- Allow access to the ecological reserve by foot only except for horse travel along the following specific trails - Eaglenest Creek Trail through Danilue Pass, Icebox Canyon Trail, Waterfall Creek Trail and Paramount Trail (see Appendix 12 for a map showing designated trails in Gladys Lake Ecological Reserve). Reasonable maintenance of these trails will be allowed subject to prior agreement on the type and extent of maintenance.
- Conduct regular impact assessments on the Eaglenest, Icebox Canyon, Waterfall Creek and Paramount trails to ensure that hiking and horse use do not result in unacceptable impacts on ecological reserve values. If necessary, close or relocate portions of trails to avoid further impacts while accommodating continued hiking and horse access to areas beyond the reserve.
- Discontinue maintenance of the Gladys Lake Trail and remove references to the trail from all protected area brochures and the Ministry of Water, Land and Air Protection website to discourage outdoor recreation use.
- Allow the Airplane Creek Trail to remain open to hiking use subject to ongoing assessments of impacts on or conflicts with ecological reserve values.

Spatsizi Plateau Wilderness Provincial Park and Stikine River Provincial Park - Objectives and Strategies

To monitor impacts at campsites and trails along the Stikine River.

- Continue to monitor commercial and recreation use impacts on campsites and trails.
- Develop a site plan to assess and manage heavily used trails and campsites (e.g. Fountain Rapids).
- Assess the extent and impacts of unauthorized camps (e.g. along the Stikine River downstream from the mouth of the Spatsizi River), and develop site plans as needed. Site plans could include maintenance standards, cleanup requirements, etc. If necessary, remove some sites and designate formal camping areas.
- Encourage all river users to practice no-trace camping techniques.

Stikine River Provincial Park - Objectives and Strategies

To establish viewing opportunities over the Grand Canyon of the Stikine River as recommended by the Cassiar Iskut-Stikine LRMP.

- “Allow a range of frontcountry to backcountry viewing opportunities along the Grand Canyon of the Stikine” (Cassiar Iskut-Stikine LRMP 2000).
- “Locate trails to viewing areas to minimize potential for disturbance of mountain goats” (Cassiar Iskut-Stikine LRMP 2000).
- Initially, develop one trail or route to the Grand Canyon of the Stikine River, subject to conducting an impact assessment following the BC Parks Impact Assessment Process to avoid unacceptable impacts on mountain goat populations, or on plants or plant communities at risk, from viewing activities and trails.

To provide an opportunity for half to full day frontcountry hiking trips.

- Investigate developing a trail for half to full day frontcountry hiking trips and/or an interpretive trail in the Stikine River Bridge area.