

Babine River Watershed Recreation

Opportunity Spectrum Analysis

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Executive Summary

The Babine Watershed has several land management plans that apply to its landbase. The Babine Watershed Monitoring Trust is an organization that monitors the implementation and effectiveness of these plans. This report was commissioned by the Babine Watershed Monitoring Trust to assist with its monitoring activities related to recreation.

Recreation Opportunity Spectrum (ROS) mapping is a method of looking at the landscape to determine what types of recreational experiences are being provided in terms of remoteness, naturalness and expected social experience. The landbase is mapped into categories based on these factors. The categories mapped in the Babine Watershed were: Primitive, Semi-primitive non-motorized, Semi-primitive motorized, Roaded natural and Roaded modified. A map of the road network in the area, interviews with people familiar with recreation in the area and past ROS mapping were used in the mapping process.

Recreational features in the Babine watershed include alpine areas, lakes and waterways, with some facilities and trails present to service these features. Recreational activities in the watershed include: angling, hiking, hunting, camping, snowmobiling, all terrain vehicle travel, skiing, rafting, kayaking, jet-boating, botanical forest product harvesting, and wildlife viewing. Some of these activities, such as angling, are concentrated mostly on one feature – the Babine River, while others, such as snowmobiling are dispersed over much of the watershed.

Hectares and % of study area in each Recreation Opportunity			
Spectrum class			
ROS class	Area (ha)	% of total area	
Primitive	107,535	26.8	
Semi-primitive non-motorized	128,878	32.1	
Semi-primitive motorized	38,984	9.7	
Roaded natural	6,818	1.7	
Roaded modified	119,718	29.8	

Five Recreation Opportunity Classes were mapped in the Babine Watershed. Areas that are essentially nonmotorized cover 61% of the watershed, being in the Primitive or Semi-primitive non-motorised classes. The Roaded modified class covers the second largest area in the

watershed, covering all areas where forest harvesting has occurred. Semi-primitive motorized areas are few due to the difficulty of travelling in non-roaded areas with motorized vehicles, and the relatively low levels of motorized use in this remote area.

Lakes in the watershed occurred in most ROS classes, with eleven lakes being in the Primitive class, nine in the Roaded modified class, four in the Semi-primitive non-motorized class and one in the Semi-primitive motorized class. Most of the Babine River is in the Semi-primitive motorized class, due to use by jet-boats.

Most alpine areas are in the Semi-primitive non-motorized class due to the proximity of roads, though significant portions of the alpine in the north are in the Primitive class. Some alpine areas in the Primitive and Semi-primitive non-motorized classes will have some motorized use, especially from snowmobiles, but their remoteness means motorized usage will be light enough to justify these non-motorized classes.

The land management plans covering the Babine Watershed give direction to implement several access control points to protect wilderness values and tourism, and grizzly bears. Some of these access control points have not been implemented or are ineffective in controlling access as intended. The lack of plan implementation or ineffectiveness of measures in the plan should be rectified so that recreational values are not compromised.

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1.0 Introduction

Recreation opportunity spectrum mapping is a method of mapping the landscape based on the type of recreational experiences that might be obtained by visitors to an area. The mapping is based on three factors remoteness, naturalness and expected social experience. These factors are each defined by two criteria as follows: remoteness by distance from a road and size of area; naturalness by presence of motorized use and evidence of humans; and social experience by solitude/self-reliance and social encounters (Ministry of Forests 1998, Clark and Stankey 1979).

Recreational activities and facilities will be focussed on landscape or biological features that are attractive to users, including rivers and creeks (especially areas with high fish numbers), lakes (especially those with high fish numbers or an attractive setting), alpine areas and areas with good wildlife densities for hunting. For these reasons, particular attention was paid to these areas in this report.

The Babine Watershed is located 65 km north of Smithers and 30 km north of Hazelton BC, with the Babine River being a tributary to the Skeena River. The Babine River has been subject of much interest from regarding land management due to its high value resources, including high value steelhead angling, large sockeye salmon run, excellent river rafting and timber resources. This project was commissioned by the Babine Watershed Monitoring Trust, as part of its mandate to monitor the effectiveness of land management plans for the Babine Watershed. These management plans are focussed on either the Bulkley Timber Supply Area in the east or the Kispiox Timber Supply Area in the west, each of which cover a portion of the Babine Watershed (Figure 7).

2.0 Methods

Mapping was done following methods in Recreation Opportunity Spectrum Inventory Procedures and Standards Manual (Ministry of Forests 1998). In the Babine Watershed area this resulted in five ROS classes being mapped: Primitive (P), Semi-primitive non-motorized (SPNM), Semiprimitive motorized (SPM), Roaded Natural (RN) and Roaded modified (RM). Rural and urban ROS classes are not present in the Babine Watershed, with the community of Fort Babine not being large enough to map as rural.

People familiar with recreation in the Babine Watershed were contacted and their knowledge of recreation in the area recorded. A total of twenty-six individuals (Appendix 1) were contacted to determine recreational activities and destinations. This information was used to define the boundaries of the ROS classes.

The initial mapping step was to obtain the location of all roads in the Babine Watershed. These roads were then buffered a 1 km and 8 km as the initial step in defining the Primitive (>8 km from a road), Semi-primitive (<8 km and >1 km from a road) and Roaded (<1 km from a road) recreational classes. The Semi-primitive class was then split into motorized and non-motorized based on information on intensity of motorized recreational activities. Areas that were regularly used for motorized recreation were classified as SPM, and areas that were never used or occasionally used for motorized recreation were classified SPNM. The Roaded class was then split into Roaded Natural and Roaded Modified based on the presence of forest harvesting, with areas with harvesting being classed Roaded Modified and those without harvesting being classed Roaded Modified and those motorized based information gathered during the project.

A list of lakes and alpine areas in the Babine Watershed and recreational usage of them was compiled, as these landscape features are often destinations for recreational activities. The ROS class of these lakes and alpine areas is presented.

Recreational usage levels were for the most part not estimated, as in these remote areas numbers of users are very difficult to determine. This is because recreational activities are all self-organized with no data collection activities. Also, some areas are frequently used by First Nations communities as part of their traditional territory. Attempting to separate recreational use from this traditional use for a project of this nature is not possible.

3.0 Recreational Features

3.1 Alpine areas

Alpine areas are often highly valued for their recreational appeal. In the Babine Watershed alpine areas include: Atna Range (including Cline, Shedin and Kisgegas peaks), Sicintine Range (including Shelagyote and Nilkitkwa peaks), Bait Range, French Peak, Mt. Horetzky, Mt. Thoen, Mt. Thomlinson, Mt. Tommy Jack and Shelf Ridge (Table 1, Figure 1). Most of these alpine areas are only partly in the Babine Watershed area as they are on the perimeter of the watershed area. As such, access to them may be from locations outside of the Babine Watershed. The alpine areas in the Babine Watershed are used for a variety of recreational pursuits, including hiking, skiing, snowmobiling, hunting and camping. All alpine areas with mountain goats are likely to see some hunting use.

Area	Access ¹	Recreational usage	ROS class
Atna Range	Access via Shenismike FSR then old firefighting trail from end of road	Used for hiking, snowmobiling, skiing and ATVing, who go to cabin, then go to the alpine to Goathead Pass and Goathead Mountain. Presence of cabin as destination makes the immediate area SPM.	Mostly P but some SPNM and SPM
Bait Range	From forestry roads immediately north of Charleston Creek and from Kotsine Pass.	Occasional use for snowmobiling, skiing, hunting and hiking. ATV tracks reported to be present in the alpine, but no information on use obtained. Some use by guide- outfitter.	SPNM
Bait Range North	None	Some use by guide-outfitter	SPNM
Bait Range Southwest	None	Some use by guide-outfitter	SPNM
French Peak	Hiking trail from branch road of Nilkitkwa FSR at 48km. Snowmobilers use old mining road near hiking trail for access.	Moderate levels of usage for hiking, hunting and snowmobiling	SPM
Kotsine Mountain	From Kotsine Pass area	Some use by guide-outfitter	SPNM
Mt. Horetzky	Nearby forestry roads	None known	SPNM
Mt. Thoen	Trail from Nichyeskwa North FSR	Some usage for hiking, hunting and snowmobiling	SPM
Mt. Thomlinson	Several access points from Skeena River side of the mountain	Some usage for hiking, hunting, skiing, snowmobiling and ATVing, but mostly on Skeena River side of mountain.	SPNM
Mt. Tommy Jack	Access via Damsumlo FSR. Road has not been maintained recently so is very rough.	Some use for hunting, hiking, ATVing, snowmobiling and skiing. Usage likely very low.	SPNM
Shelf Ridge	Access via Shenismike FSR	Usage likely very low, no known trails	Mostly P but some SPNM
Sicintine Range	None	Some use by guide-outfitter for hunting and recreational trips, and occasional use for skiing.	Mostly P but some SPNM

1 - air access is not considered

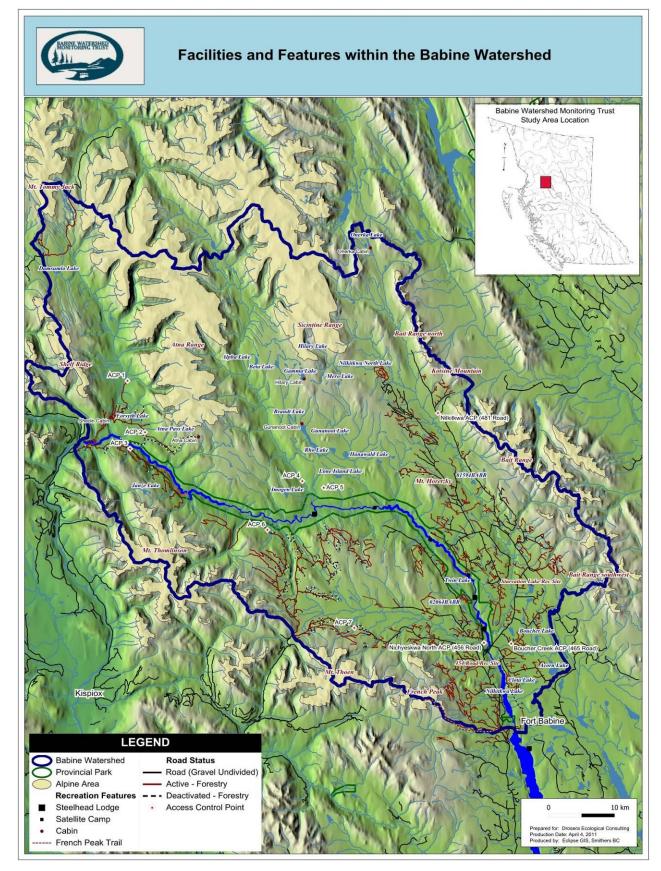


Figure 1. Location of recreational facilities and features



Figure 2. Photo of Atna Mountain area (photo by Jim Easterday)

Use levels by all activities in alpine areas are generally quite low; likely less than 100 user days per year. Areas that could be higher than this are French Peak, due to the presence of a trail and both summer and winter usage, and the south end of the Atna Range due to the presence of an old fire road and a cabin that are used both in summer and winter. Mt. Thoen and Mt. Thomlinson also have trails, but these are outside the Babine Watershed. Winter use could increase in the eastern part of Mt. Thomlinson with the recent establishment of a cat-skiing tenure in this area. There is some commercial recreation use of the Sicintine Range.

3.2 Facilities

Public facilities are few. Recreation Sites & Trails BC, of the Ministry of Natural Resource Operations has recreation sites on Sucker/Starvation Lake with two campsites and on the 454 road three km southwest of the Babine Bridge with 15 campsites, toilet and water. Other facilities include a boat launch at the Babine weir, and a number of informal campsites along Babine River.

Private facilities are more numerous and include: the Silver Hilton lodge and cabin, the Babine Norlakes lodge and cabin, the Babine Steelhead lodge and cabin, a snowmobile cabin in Atna Pass, and guide-outfitter cabins on Gunanoot, Onerka and Hilary¹ lakes, and a cabin used by the guide-outfitter on Shedin Creek. Additionally, First Nations groups have cabins and residences in and around the Kisgegas area, and there are a number of private cabins on Nilkitkwa Lake.

3.3 Lakes

Twenty-five lakes were identified in the Babine Watershed (Table 2) through lake survey files and topographic maps. Most are small and likely have only light recreational usage, if they are used at all. Several lakes in the watershed have cabins or recreation sites on them and will see higher, though still light, usage. These facilities are accessed by road, snowmobile or floatplane, with Sucker Lake having a small Forest Recreation site on it.

¹ Gamma Lake is incorrectly called Hilary Lake by some users.

Name and	Recreational usage	Elevation	Size	ROS
Waterbody identfier ¹		(m)	(ha)	class
Acorn Lake	None known	829	170	RM
<i>Alpha</i> Lake 00647BABR	None known	997	45	Р
Atna Pass Lake 01253BABR	Snowmobile cabin, used by ATV and snowmobile parties	1286	6	SPM
<i>Beta</i> Lake 00663BABR	None known	1145	33	Р
Boucher Lake	None known	833	39	RM
Brandt Lake 01023BABR	None known	1003	25	Р
Clota Lake	None known	804	58	RM
Damsumlo Lake	None known	940	100	SPNM
Forsyth Lake 01130BABR	Short trail to lake from forestry road	635	19	RM
Gamma Lake 00713BABR	Guide-outfitters cabin used by hunting, angling, snowmobiling, and hiking groups (Gamma Lake is sometimes incorrectly called Hilary Lake),	1350	72	Р
Gunanoot Lake	Guide-outfitters cabin used for hunting and angling	975	260	Р
Hanawald Lake	None known	948	50	Р
Hilary Lake	Some use by guided recreational and hunting groups	1470	47	Р
Imogen Lake 01610BABR	None known	970	46	Р
Janze Lake	None known	1245	32	SPNM
<i>Lone Island</i> Lake 01625BABR	None known	911	45	Р
Mero Lake 00744BABR Un-named – 3	None known	1347	12	SPNM
Nilkitkwa Lake	Very important fishing area between Babine River and Babine Lake. A number of recreational cabins on lake.	710	483	RM
<i>Nilkitkwa North</i> Lake 00699BABR	None known	1205	13	SPNM
Onerka Lake	Guide-outfitter cabin used for angling and hunting, with some snowmobile usage.	1200	40	Р
<i>Rho</i> Lake 01346BABR	None known	965	44	Р
Sucker / Starvation Lake	Recreation site with 2 campsites	856	95	RM
<i>Twin</i> Lake 01947BABR	None known	773	32	RM
01594BABR Alias b32 Un-named 2	None known	935	31	RM
02064BABR Alias b33	None known	808	25	RM

Table 2. List of lakes within the Babine watershed area

1 -names in italics are not gazetted, and are mostly taken from other sources. When non-gazetted names are used the waterbody identifier is given.

3.4 Trails

There are few maintained trails in the Babine Watershed. Short trails originate from the Babine River Bridge and go downstream on both sides of Babine River; on the east side, three km to the confluence with the Nilkitkwa River, and on the west side downstream to the confluence with Nichyeskwa Creek. There is also a trail up to the alpine of French Peak. Trails to Mt Thomlinson and Mt Thoen are outside the Babine watershed. Other trails are maintained by guide-outfitters that operate in the area, including a trail that runs from Gunanoot Lake to Gamma Lake and then into the alpine.

Several traditional First Nations trails are located, in whole or in part, in the Babine Watershed, these include the Kisgegas to Bear Lake trail (a.k.a. Atna Pass Trail) and the Nilkitkwa River trail. Part of the Kisgegas to Bear Lake trail (a.k.a. Atna Pass Trail) has been worked on in recent years by the Git<u>x</u>san. Some interest exists in repairing this trail over its entire 80 km length with a view to offering commercial backcountry trips along it (K. Rabnett pers. comm.). The Nilkitkwa River trail starts near the Babine weir and goes north on the east side of Nilkitkwa River, past Onerka Lake and Motase Lake to areas north of the Babine Watershed, with a branch going through Kotsine Pass (Harrison 2011, K. Rabnett pers. comm). The Nilkitkwa River trail also connects to the Kisgegas to Bear Lake trail. Other traditional trails exist in the watershed, but are likely only lightly used recreationally.

3.5 Waterways

Babine River is a very important river for recreational usage in the Skeena Region. It is famous for its excellent steelhead and rainbow trout angling and it large sockeye salmon run. Three steelhead angling guiding operations are located on the Babine River. The Babine River is also very well known for its high quality white-water rafting and kayaking, with several rafting tour operators offering trips on it. Rainbow Alley, which is located between Babine Lake and Nilkitkwa Lake, is a prime rainbow trout angling area in the spring. Other major tributary rivers and creeks in the Babine Watershed are: Nilkitkwa River, Nichyeskwa Creek, Shelagyote Creek, Thomlinson Creek, Shedin Creek and Shegisie Creek; these waterways are little used recreationally. More information is contained in the sections on specific recreational activities.

4.1 Aircraft Use

Silver Hilton Lodge flies their clients in and out of their lodge by helicopter; there is also an unpaved runway at this lodge but it is not considered safe to use. Aircraft are also used by one guide-outfitter to access lakes they operate from, including Gunanoot, Onerka, Gamma and Hilary lakes. Some steelhead anglers raft down the Babine River to Le Clair Creek and fly out from there by helicopter.

4.2 All Terrain Vehicles

All terrain vehicles (ATVs) are commonly used during hunting trips and recreationally in the Babine Watershed. Destinations include Tommy Jack Pass and Atna Pass. The difficult terrain of other alpine areas may restrict ATV use. Other areas are used, especially logging roads for moose hunting.

4.3 Angling

The Babine Watershed has three distinct fisheries: angling for rainbow trout in the spring on Rainbow Alley, an early mixed fishery focussing on harvesting sockeye salmon, and a later steelhead fishery focussing on catching and releasing large steelhead in a wilderness environment. The fisheries are discussed separately as they have different characteristics.

4.3.1 Rainbow Trout

Rainbow trout angling in Rainbow Alley, located between Babine Lake and Nilkitkwa Lake, is excellent in the spring. Angling guides have been operating in this area for many years. Access to Rainbow Alley has been identified as an issue due to the lack of overnight parking and boat launch facilities. Angling occurs on some of the lakes in the Babine Watershed, often in conjunction with other uses such as hunting.

4.3.2 <u>Salmon</u>

Salmon fishing, targeting primarily sockeye but also chinook salmon, is popular on the Babine River. The August sockeye fly-fishery attracts many anglers if fish abundance is high. The salmon concentrate below the Department of Fisheries and Oceans (DFO) weir on the Babine River and are relatively easy to catch. The Babine River fishery is considered by resident anglers as the best sockeye fishing opportunity within the region (Hillcrest *et al.* 2001). Although some sockeye anglers practice catch-and-release, most retain fish for consumption. Anglers concentrate in the top 3 km of the upper river down to the confluence with the Nilkitkwa River. Some anglers also fish for salmon in Rainbow Alley, which is immediately below Babine Lake, and near the confluence with the Skeena River. First Nations food fisheries occur on the Babine River, at the DFO weir and near Kisgegas.



Figure 3. Angling on Gamma Lake (Photo by Spatsizi Wilderness Vacations)

4.3.3 <u>Steelhead</u>

Babine River offers world-class steelhead angling on a wilderness river. The steelhead fishery usually begins in September and runs until November (depending on weather and water clarity). Unguided anglers concentrate in the upper portion of the river. Most fish in the vicinity of the Babine bridge, with some anglers walking down trails to spots in the three km above the Nilkitkwa confluence. Other portions of the river are difficult for unguided anglers to access, because they require a jet-boat and excellent navigation skills, or a raft followed by helicopter pick-up at the Le Clair Creek confluence. However, some anglers do use rafts and jet-boats to access the river; these users may stay on the river for up to two weeks (de Groot and Price 2007).

The good chance of catching big fish, clear water, and wilderness setting attract international visitors for a guided steelhead fishing experience based from lodges along the river. There are three guiding operations, all fishing exclusively for steelhead on a catch-and-release basis. Visitors to two upper lodges usually fish between the Nilkitkwa confluence and Beaver Flats. Visitors to the third lodge generally fish between Le Clair Creek and Shahnagh Creek.

Three angling guides host guests in permanent lodges and satellite camps at about 6 km, 12 km and 50 km downstream of the park entrance. Capacity is about 12 guests at each lodge. The lowest lodge is separated from the upper two by difficult water, dividing the angling population between the top 15 km of the river and a 20 km stretch above Shelagyote River.

4.4 Botanical Forest Products

Botanical forest products in this area will mainly be mushrooms and berries. Gail Creek and Nichyeskwa Creek are fairly heavily used for berry picking, with the Kisgegas and Upper Thomlinson Creek areas being historical Git<u>x</u>san berry patches (Burton *et al.* 2000, Crossroads Cultural Resource Management and Geoborealis 2007). Pine mushroom habitat is found mostly in the ICHmc1 and 2 subzone, which occurs in the lower portion of the Babine Watershed, including Shedin and Shegisie creeks (Friesen 2002). The use of specific locations for harvesting mushrooms and berries were not documented for this report.

4.5 Camping

The recreation site on the 454 Road is likely the most heavily used campsite in the Babine Watershed, and has the best facilities. The recreation site on Sucker/Starvation Lake is not heavily used by campers. The numerous campsites along the Babine River are regularly used by people travelling down the river. These campsites are not considered destinations on their own, but part of the overall river destination. Dispersed camping occurs in other areas of the watershed, often in combination with other activities, but no information was obtained on specific destinations other than those mentioned with other activities.

4.6 Hiking

Hiking is done in various areas in the Babine Watershed, but the area is not heavily used due to long travel times, poor roads and the lack of trails. French Peak and Mount Thoen are likely the most frequented hiking destinations, other areas that are used include, Mt. Thomlinson, Shelf Ridge, Atna Range, Bait Range, Sicintine Range and Mt. Tommy Jack. Some hiking is done from fly-in lakes such as Gamma, Hilary, Gunanoot and Onerka lakes.



Figure 4. Hiking near Hilary Lake, Sicintine Range (photo by Spatsizi Wilderness Vacations)

4.7 Hunting

Hunting is widespread in the Babine Watershed, with moose, mountain goat, grizzly bear and black bear being the main species targeted. Hunters are either residents, who are mostly unguided or non-residents who are always guided. Two guide-outfitters operate in the Babine Watershed. Facilities used by these outfitters include cabins on Gunanoot Lake, Onerka Lake and Gamma Lake and a cabin near Shedin Creek. Mountain goat hunting occurs on all the mountain ranges in the area. Moose hunting occurs in the lower elevation areas that are accessed on the numerous forestry roads in the area. Grizzly bear hunting mostly occurs near the Babine River, and black bear hunting mostly occurs in conjunction with other hunting activities.

4.8 Rafting/Kayaking/Jet-boating

Travel on the river is by jet-boat, raft or kayak; the river is not navigable by canoe. Because there is no road access to the park below the bridge at the put-in point, most float trips run the entire river taking out at Kispiox or Kisgegas; occasionally, rafting anglers fly out from near Le Clair Creek (~50 km downstream). Most recreational rafting groups travelling the entire river take 4-6 days to complete the trip, including the time on the Skeena River, to the take out point at Kispiox village. The kayakers on multi-day trips usually travel with rafts for support in carrying gear and for safety. Several commercial rafting companies operate on the Babine River.



Figure 5. Rafters on the Babine River viewing bears beside the river (photo by BC Parks)

The only boat launch is at the DFO weir, so jet-boaters need to travel back upstream to this point. Rapids at about 26 km downstream from the boat launch separate the upper and middle portions of the river; jet-boats cannot travel the lower portion of the river. These rapids were traditionally considered unpassable for jet-boats, but recently several people have navigated them successfully with jet-boats. Recreational jet-boating is limited due to the difficult waters that must be navigated. Some steelhead anglers do use jet-boats on the river in the fall, and can stay on the river for up to 2 weeks.

The greatest amount of jet-boat use on the river is by the three angling guiding operations, which use jet-boats to transport anglers to fishing spots along the river. Visitors to the Silver Hilton Lodge, located in the middle section of the river, only travel by jet-boat on the section of navigable water surrounding the lodge, and do not travel upstream to the boat launch. The two lodges on the upper river also use jet-boats to transport clients and supplies to and from the lodges.

4.9 Skiing

Backcountry skiers occasionally ski in portions of the Babine Watershed. Due to the remoteness of the area, skiers may use snowmobiles or helicopters to access their skiing location. Destinations include Bait Peak, the Sicintine Range and Mt. Thomlinson. Access to Bait Peak is from just north of Charleston Creek, to Mt Thomlinson is from Shewililba Creek, and to Sicintine Range by helicopter.

A cat-skiing operation is opening in the Mt. Thomlinson and Natlan Peak area, with access from the Suskwa River area. In the Babine Watershed, this operation will use the eastern ridges of Mt. Thomlinson between Thomlinson Creek and Gail Creek.



Figure 6. Skiing in the Bait Range (photo by Derek Willmott)

4.10 Snowmobiling

Snowmobilers can range widely around the Babine Watershed, though use overall is low in this remote area. Specific destination areas that were identified are listed here, but other areas are likely to see some usage, though perhaps not every year.

French Peak is likely the most frequented snowmobiling destination in the Babine Watershed. Access is difficult and not for beginners, but usage has been increasing in recent years. Once in the alpine of French Peak, snowmobiles can travel close to the peak of Mount Thoen. Some snowmobilers have also accessed Mount Thoen from the Suskwa Pass area. There is also some usage of the Mount Tomlinson area, with access from Shewililba Creek.

Snowmobilers from the Hazelton area have built a cabin in Atna Pass on a small lake; they use this cabin when riding in the Atna Range. Goathead Pass and Goathead Mountain are destinations from the cabin. Some use is also made of areas east of the cabin towards Shelagyote River. The presence of a cabin as a destination contributes to this area being more heavily used than other alpine areas.

The Tommy Jack Pass area is occasionally used by snowmobilers from the Damsumlo FSR. It is possible to snowmobile both to the west of the pass towards Mount Tommy Jack and to the east onto the north end of the Atna Range. The terrain of the Atna Range is reportedly more suitable for snowmobiling than Mount Tommy Jack.

The Bait Range has been used by snowmobilers since about 1994, though use is only occasional. The Bait Range is accessed from just north of Charleston Creek. The west face of the Bait Range is steep and unsuitable for snowmobiling, but on the east side of the range it is possible to travel to northern parts of the range.

4.11 Wildlife viewing

Grizzly bear viewing is common at the Babine Bridge near the DFO weir. Fish congregated below the weir and the shallow water likely facilitates the capture of salmon at this location, with the bridge making bear-viewing relatively safe.

5.0 Results and Discussion

Five Recreation Opportunity Classes were mapped in the Babine Watershed. Areas that are essentially non-motorized cover 61% of the watershed, being in the Primitive or Semi-primitive non-motorised classes (Table 3, Figure 7). Some motorized recreation does occur in these areas, but it is at such low levels that they did not warrant being classed Semi-primitive motorized. The Roaded modified class covers the second largest area in the watershed, covering all areas where forest harvesting has occurred. The small amount of Roaded natural area covers areas where logging roads have been built but logging has yet to take place. Semi-primitive motorized areas are few due to the difficulty of travelling in non-roaded areas with motorized vehicles, and the relatively low levels of motorized use in this remote area.

ROS class	Area (ha)	% of total area	
Primitive	107,535	26.8	
Semi-primitive non-motorized	128,878	32.1	
Semi-primitive motorized	38,984	9.7	
Roaded natural	6,818	1.7	
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Table 3. Hectares and % of study area in each Recreation Opportunity Spectrum class

Lakes in the watershed were in most ROS classes, with eleven lakes being in the Primitive class, nine in the Roaded modified class, 4 in the Semi-primitive non-motorized class and 1 in the Semi-primitive motorized class. Most of the Babine River is in the Semi-primitive motorized class, due to use by jet-boats.

Most alpine areas are in the Semi-primitive non-motorized class due to the proximity of roads, though a significant portion of the alpine in northern area is in the Primitive class. Some these areas classes as Primitive and Semi-primitive non-motorized will have some motorized use, especially from snowmobiles, but their remoteness means usage will be light. The southern portion of the Atna Range is classes Semi-primitive motorized because of the motorized use of the area, by both snowmobiles and ATVs, and the presence of a cabin; recreational usage in this area could be more than 100 user days per year, but not significantly greater.

Alpine areas in the Primitive class include Atna Range, Sicintine Range and Shelf Ridge, though even these areas are partially in other classes due to the proximity of roads. Use of all alpine areas in the watershed is light, with French Peak, Mt. Thoen and Mt. Thomlinson likely seeing the most usage.

Access to recreational features such as lakes and alpine areas does not appear to have decreased as a result of industrial activity. This could change over time if forestry roads are deactivated and can no longer be used to access areas. If forest harvesting and associated road building continues, lakes and alpine areas will likely become more accessible. Mining exploration activity in the Tommy Jack Pass area has reportedly deterred recreational activity in this area.

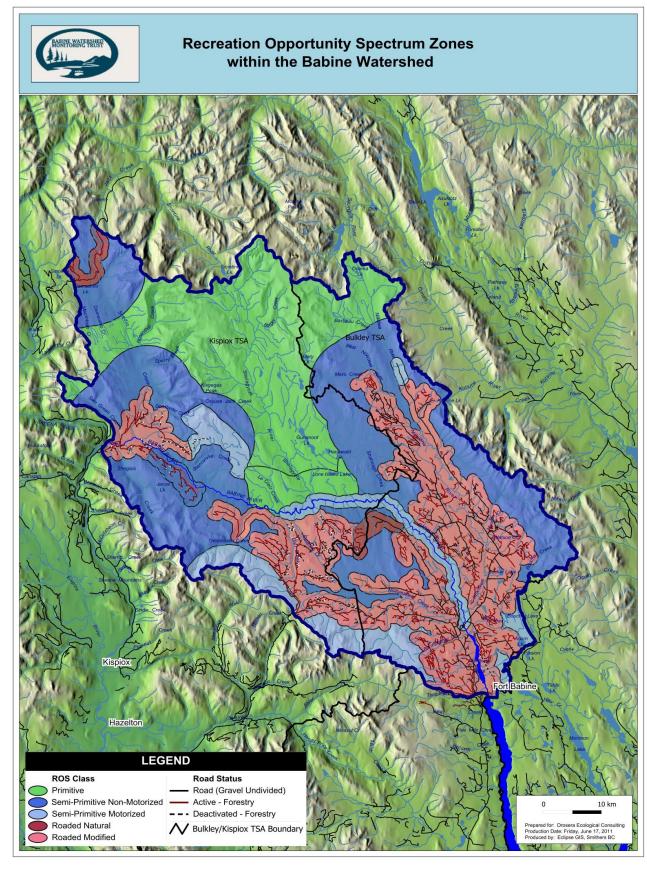


Figure 7. Recreation Opportunity Spectrum classes

6.0 Management Plans and Access

Activities in the Babine Watershed have direction from several management plans, covering different portions of the landbase. The direction on access control is the primary portion of the plans related to recreation in these plans, with wilderness values and tourism, and grizzly bears being the key values being managed. During talks with people who use the Babine Watershed, it was mentioned several times that access control points have not been implemented or are ineffective in controlling access as intended. The lack of plan implementation or ineffectiveness of measures in the plan should be rectified so that recreational values are not compromised. Specifically, the following issues were identified:

Sperry/Rosenthal 1 access control point has not been implemented

Shenismike West 2 access control point has not been implemented

Thomlinson Road 6 access control point has not been implemented

Nichyeskwa Connector 7 access control point has been breached at times

Nilkitkwa (481 Road) access control point may be being breached at times

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Appendix 1. Contacts

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Polygon number	ROS CLASS	Motorized use season	Rationale
1	Р		Small primitive area isolated by terrain and study area boundary
2	Р		Large unroaded area on Shelagyote River, Sicintine Range and Atna Range. Very light snowmobile use possible.
3	SPNM	В	More snowmobile use than on Mt Tommy Jack side of road but still light on Northern Atna Range; perhaps some ATV use
4	SPNM	В	Limited amounts of snowmobile use and perhaps some ATV use in Mt Tommy Jack area
5	SPNM		Unroaded area bounded by roaded areas, likely very little motorized use as no destination
6	SPNM		Small unroaded area bounded by roaded areas, likely very little motorized use as no destination
7	RN	В	Road access to Tommy Jack Pass but minimal amounts of forest harvesting
8	SPM	В	Access route to Atna Pass and range, for snowmobiles and ATVs, snowmobile use to Goathead Pass and towards Shelagayote River, some ATV use and cabin
9	RM	В	Several Forest Service roads and logging, Kisgegas village
10	SPNM	В	Babine Slide FSR has motorised access control, so effectively non-motorized now
11	SPM	W	Logging roads without harvesting along them to date, also access control point limits motorized use, though snowmobiles may get around it
12	SPNM	W	Likely very light snowmobile use, but terrain may limit access to alpine.
13	SPM	S	Small area between several logging roads, likely some ATV through wetlands for hunting
14	SPNM	W	Occasional snowmobile use especially in towards Sicintine Range and parts of Bait Range where wetlands facilitate access, less so in others areas, but not enough to class as motorized.
15	SPM	В	Snowmobile use of French Peak is increasing, other parts of area such as Mt Thoen have some snowmobile use. ATV use is likely only occasional
16	SPNM	W	Occasional snowmobile use is possible in the middle parts of the Atna Range, but unlikely elsewhere
17	SPM	S	Small area between several logging roads, likely some ATV through wetlands for hunting
18	Р	W	Primitive though roads closer than 8km, made primitive due to barrier of Babine River, perhaps very occasional snowmobile use
19	RM	В	Large area containing logging road network and extensive forest harvesting
20	RN	В	Logging roads without harvesting along them to date
21	SPM	S	Jet boat use in summer and fall along the Babine River to Le Clair Creek
22	SPM	W	Cat-skiing tenure area

Appendix 2. Polygon Attributes