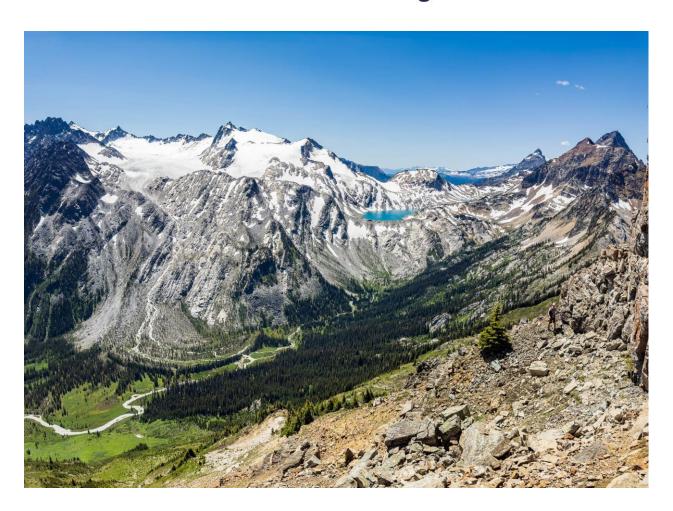
Columbia Valley

Recreation Planning Initiative



Forster Landscape Unit - Inventory of Public Recreation Uses and Values DRAFT – February 2024

Report prepared through the Columbia Valley Recreation Planning Imitative (CVRPI), a multi-stakeholder 'community-led' and collaborative initiative with the goal of identifying recommendations for improved recreation management in the Columbia Valley.

Acknowledgements

The Columbia Valley Recreation Planning Initiative (CVRPI) acknowledges that the Forster Landscape Unit is within the traditional territory of the Ktunaxa Nation (Ktunaxa ?amak?is) and the Shuswap Band. It is further acknowledged that First Nations have occupied this territory since time immemorial and have rights and title to the land that have not been extinguished. The recommendations in this report can only be implemented with support from the local First Nations and through government-to-government decisions.

Funding for the CVRPI planning process has been provided by the Regional District of East Kootenay, the BC Ministry of Water, Land and Resource Stewardship, Columbia Basin Trust, and Recreation Sites and Trails BC.

The **CVRPI Planning Committee**, including the Co-Chairs Clara Reinhardt and Adrian Pery, led the development of this report, tirelessly contributing their time and providing advice and direction to ensure the success of the process.

The **CVRPI Advisory Committee** was instrumental in the development of this Report; contributing their time and providing essential local knowledge, to the Planning Committee and consulting team.

The information within this report was prepared by a consulting team led by Jeff Zukiwsky (Zumundo Consultants) with communications and engagement support from Ingrid Liepa (The Connecting Link) and GIS and mapping by Marie-Ange Fournier-Beck (Vivid Consultants).

*Cover photo provided by Pat Morrow

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1. Introduction

The goal of this report is to identify recreation uses and important values in the Forster Landscape Unit (LU) of the Columbia Valley. Specifically, the goal is to answer the following questions:

- What types of recreation use are occurring in the LU, when and where?
- What other land uses occur in the LU that could affect, or be affected by, recreation use?
- What are the important values or features, that exist in the region? and
- What are the existing or potential future issues and what opportunities exist to enhance or improve public recreation within the Forster LU?

This report was completed as part of the <u>Columbia Valley Recreation Planning Initiative</u> (CVRPI). The CVRPI is a multi-stakeholder, collaborative community-led planning initiative with the goal of identifying recommendations to sustainably manage recreation use on public lands and protect important values in the Columbia Valley.

The CVRPI is currently focused on developing recreation management recommendations for the 16,615 hectare Forster LU, which is located about 10 kilometres west of the Village of Radium Hot Springs and is accessed via the Forster Creek Forest Service Road to the headwaters of Forster Creek (Figure 1).

1.1 Project background

Since 2008, stakeholders in the Columbia Valley have been working towards a recreation strategy for the region that respects and balances the needs of different users while safeguarding the core values that make this region an exceptional place to live, work, and play. The roots of the CVRPI can be traced back to the mid-1990s when the Province of BC completed the Kootenay-Boundary Land Use Plan. While the Columbia Valley was included in the Plan's Implementation Strategy, management guidelines for backcountry recreation and access were limited and are now dated, leaving a gap that has yet to be filled.

In 2017, the CVRAMP (Columbia Valley Recreation Access Management Plan) process began, with the goal of developing recreation management plans for the Columbia Valley. In 2021, the initiative was renamed the Columbia Valley Recreation Planning Initiative (CVRPI) to better reflect the scope and objectives of the process.

The nature and scope of the CVRPI planning process is characterized as follows:

- It is a community-led planning process.
- The initiative is committed to collaborative engagement with citizens, recreation users and user groups, regional stakeholders, and subject matter experts.
- The initiative is committed to supporting the B.C. Government in reconciliation with Indigenous governments and the implementation of the Declaration on the Rights of Indigenous Peoples Act
- Local governments in the area are actively participating in and supporting the process.
- The BC Government is participating and will support the process when capacity allows. The recommendations are mindful of the current capacity and resources of the BC Government with respect to recreation management across the province.
- The focus is on recreation activities occurring on public lands within the Columbia Valley.
- The primary objective is to identify which recreation activities and uses are appropriate (and recommended), at which locations and times of year.

- The CVRPI will recommend recreation management strategies and options as guidance to inform future land use decision-making by the Province.
- The initiative will not make recommendations related to the management of commercial recreation, tenured land uses, private land, federal land, parks and protected areas, lakes, rivers and waterways, or lands with existing management plans, designations and/or access restrictions.

The CVRPI is led by a Planning Committee (PC) made up largely of community volunteers committed to working collaboratively to develop recreation strategies for the Columbia Valley. The PC leads and coordinates the initiative—acquiring funding, facilitating meetings,

Objectives of the CVRPI

Reduce conflicts between and amongst recreation users, residents, visitors, commercial recreation and other land users.

Recognize and consider important values, including but not limited to: Indigenous cultural and archaeological values and resources; Environmental values including environmentally sensitive areas, significant ecological values, important wildlife habitat; and Range and agricultural values.

Provide a secure and certain basis for long-term public and commercial recreation use and access.

Help inform future land use decisions.

Promote and support responsible recreation use through effective communications.

Engage with and involve the public and affected stakeholders in the process to ensure their concerns and aspirations are understood and considered

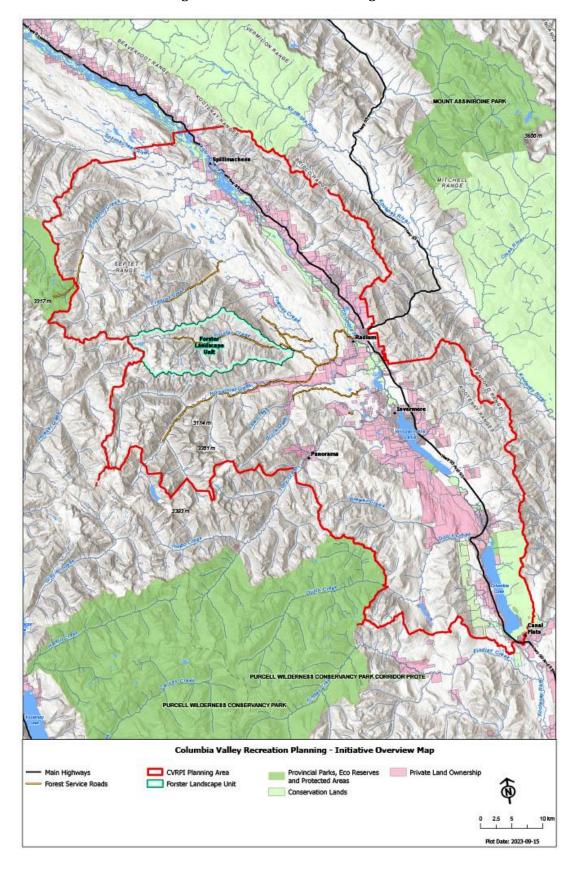
engaging the broader community, and managing the administration and contracting for planning support, public engagement, and GIS. The Planning committee established the Forster recreation advisory committee (AC) to support and inform the development of recreation recommendations for the area. The AC includes representatives from different sectors and interest groups in the region, including individuals with direct experience of the Forster Landscape Unit. It provides local advice and recommendations to the PC.

The recommended management approaches for recreation in the Forster LU will be guided by the overarching vision for recreation on public lands in the Columbia Valley:

RECREATION VISION STATEMENT

The Columbia Valley offers a broad range of well-managed recreation experiences in a clean and safe environment. Recreation trails, camping areas, and other services for recreation users are well-marked and easy to navigate. Recreation is managed such that important values are not degraded.

Figure 1: The Forster LU Planning Area



1.2 Inventory approach

To support backcountry recreation planning for public lands in the Forster LU, this report outlines:

- The location of known recreation uses, assets and features in the area, including existing recreation trails, and areas used for camping, access and staging for recreation use.
- **Environmental values**, such as wildlife, forest and water-related values known to exist in the region which may be affected by recreation use.
- Commercial uses and values and Crown tenures, including commercial recreation, trapping, forestry, and cattle grazing.

The information presented in this report reflects the best data available at the time of drafting. The following information sources and data gathering methods were used:

- A Recreation Inventory of the Invermere Timber Supply Area was completed in 2018. The 2018 inventory included interviews and surveys with local stakeholders, and a compilation of recreation uses based on all publicly available maps, reports, and GIS data.
- Results of information gathered through the CVRAMP process, which culminated in early 2020 and included map-based input on recreation priorities in the Forster area.
- Spatial data on values and land uses was compiled from existing government data sources, such as DataBC.
- Input from PC and Forster AC members, including a field tour on July 4, 2023
- Engagement with local and provincial subject matter experts

1.3 Existing Land Use Plans

Existing and historic land use plans covering the Forster LU provide decision-making direction for Government and help guide the CVRPI and its recommendations. The East Kootenay Land Use Plan was completed in 1994 under the provincial Commission on Resources and Environment (CORE) land use planning process. The BC Government created the CORE process to address long-standing conflicts over land and resource use, and the East Kootenay was identified as a priority area for this process. The East Kootenay Land Use Plan was developed through widespread consultations with residents and stakeholders across the region. The resulting Plan contains a high-level land use map, 108 land use policy recommendations, a strategy to assist the economic and social transition, as well as a framework for implementation and monitoring of the Plan.

The Kootenay Boundary Land Use Plan and Implementation Strategy, completed in 1997, establishes more specific land and resource objectives for the region¹. It contains general management direction and guidelines for backcountry recreation and access across the region, as well as more specific objectives and management strategies for Forest Districts, including the Invermere Forest District where the Forster LU is situated. The general management direction is to ensure public lands in the region "...provide a range of outdoor recreation settings" and to "...maintain recreation features and provide new trails, campsites and related infrastructure."

¹ For more information see: Kootenay Boundary Land Use Plans: https://www2.gov.bc.ca/gov/content/industry/crown-land-water/land-use-planning/regions/kootenay-boundary-kootenay-boundary-rlup

More specific backcountry recreation management guidelines are provided and follow the Recreation Opportunity Spectrum (ROS) methodology outlined below in section 2.10. Backcountry recreation management guidelines generally focused on minimizing the impacts of resource exploration activities on recreation trails and use in the region. The Forster watershed is identified in the Kootenay Boundary Land Use Plan as having an 'intermediate' emphasis on biodiversity management, for its wildlife connectivity and alpine habitat values.

Importantly, the Kootenay Boundary Land Use Plan and Implementation Strategy is not a legally binding Plan; it provides guidance for decision makers. However, there is an expectation that subsequent land use planning initiatives be guided by, and consistent with, the strategic direction in the Plan.

In 2018, the B.C. government committed to begin working collaboratively with Indigenous governments, communities, and stakeholders to modernize land use planning. Modernized land use planning is led by the B.C. government in partnership with Indigenous governments and with engagement of communities, local governments, industry and other stakeholders, with goals to advance reconciliation efforts, support economic opportunities, and guide stewardship of provincial public land and resources².

Community-led land use planning initiatives, such as the CVRPI, play an important role in land use planning across Province³. Community-based planning is a highly collaborative process which allows citizens to work together to shape future land use decisions in their region. These initiatives are particularly important given the provincial governments limited capacity to conduct comprehensive land use planning⁴. Community-led initiatives can help kickstart more comprehensive government-led planning processes and can influence land use management decisions and regulatory changes.

2. Public Recreation Uses and Values

This section provides a summary of the recreation inventory for the Forster area. It identifies all known locations of recreation uses, assets and features in the region. A recreation inventory map is provided in Section 6.1 (Recreation Use in the Forster LU area).

2.1 Cabins/huts

The Forster area contains three recreational huts that provide refuge for recreational users:

- 1. The Forster Creek Cabin is a designated Recreation Site (2.3 hectares in size), operated by the Windermere Valley Snowmobile Society. It is a day-use snowmobile cabin accessed via snowmobile using the Forster Creek Trail and is located at the end of Forster Creek Trail and Forest Service Road (FSR) at kilometre (km) 42⁵.
- 2. The Olive Hut is a designated Recreation Site (2.3 hectares in size), operated by the Columbia Valley Hut Society. It is located above the Forster Basin on the edge of the Catamount Glacier. It is accessible in both summer and winter via the Forster Creek FSR, and is generally used for hiking, mountaineering

² For more information see: https://www2.gov.bc.ca/gov/content/industry/crown-land-water/land-use-planning/modernizing-land-use-planning

³ For more details on community-based land use planning see: Community-Led Land Use Management and Planning, available at: https://y2y.net/blog/community-based-land-use-planning-in-the-upper-columbia/

⁴ See: Forest Practices Board (2021). Management of Forest Recreation in BC

⁵ For more information, see Recreation Sites and Trails BC: http://www.sitesandtrailsbc.ca/search/search-result.aspx?site=REC5186&type=Site

- and ski touring⁶. In 2022, Olive Hut was occupied for about 100 days of the year, with the majority of use occurring in March (occupied 23 nights) and April (21 nights)⁷. With an average party size of 4, there are about 400 users in Olive Hut each year. Olive Hut use has been increasing annually since at least 2018.
- 3. Dave White Cabin is a designated Recreation Site (1 hectare in size), operated by the Columbia Valley Hut Society. It is located on a rocky knoll surrounded by dense mature timber about 50 meters above Forster Creek meadow. It is accessible in both summer and winter via the Forster Creek FSR, and is generally used for hiking, mountaineering and ski touring⁸. In 2022, Dave White Cabin was occupied for about 150 days of the year, with the majority of use occurring in January (occupied 27 nights) and March (28 nights)⁹. With an average party size of 4, there are about 600 users at Dave White Cabin each year and hut use has been increasing annually since at least 2018.

R.K. Heliski also has an emergency shelter in the North Star Creek area.



Photo: Olive Hut10

⁶ For more information see Columbia Valley Hut Society: https://cvhsinfo.org/olive-hut

⁷ Olive Hut user data provided by the Columbia Valley Hut Society

⁸ For more information see Columbia Valley Hut Society: https://cvhsinfo.org/dave-white-cabin

⁹ Dave White Cabin user data provided by the Columbia Valley Hut Society

¹⁰ Source: Recreation Sites and Trails BC: http://www.sitesandtrailsbc.ca/search/search-result.aspx?site=REC6072&type=Site

2.2 Camping

Both the Dave White Cabin and Olive Hut (designated recreation sites) have areas defined for camping adjacent to them. The Summit Trail Makers Society, the managing partner of the Welsh Lake Trails, recently constructed a primitive campground in the Lower Welsh Lake Area. The campground includes eight tent pads, an outhouse, picnic tables, and a bear cache. No other defined locations for overnight camping have been identified in the Forster area.



Photo: Camping area at Lower Welsh Lake¹¹

2.3 Designated trails

Two designated recreation trails exist in the Forster LU, each is described below.

Forster Creek Trail

The Forster Creek Trail is a 23-kilometre-long snowmobile trail, operated by the Windermere Valley Snowmobile Society (WVSS). The Forster Creek Trail is groomed regularly and provides winter snowmobile access along the Forster Creek FSR, to the Forster Creek cabin, with access to the Forster Meadows and Catamount Glacier snowmobile and ski touring areas, as well as access to Olive Hut and Dave White Cabin. The WVSS maintains the trail and the warming cabin (Forster Creek Cabin), provides firewood and a barbecue for user comfort and safety, and also provides user education regarding avalanche safety and motorized closures in the area. A \$20 daily use fee per sled, or annual memberships with the Windermere Valley Snowmobile Society, is required to access the trail. Based on data collected by a trail counter along the Forster FSR (at the 20km mark), 4,844 users accessed the trail in 2022¹² (Figure 2). Saturday is the highest volume day with 1,559 users over the year.

¹¹ Source: Summit Trail Makers Society (W Lyons))

¹² Data provided by the Windermere Valley Snowmobile Society, from the Recreation Sites and Trails BC trail counter

Figure 2 Forster Creek trail use (2022)¹³

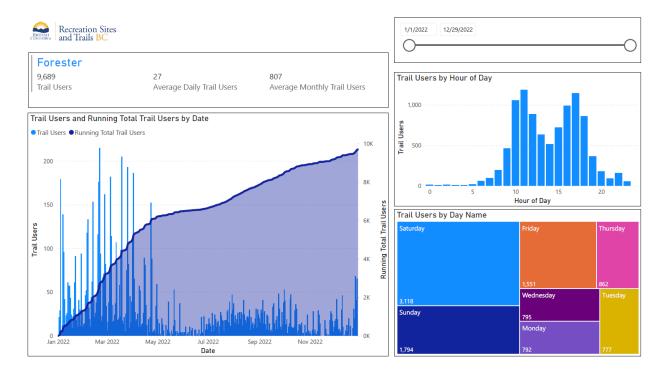




Photo: Forster Creek Cabin at the end of the Forster Creek Trail¹⁴

¹³ Note: the numbers in this figure count all users that cross the trail, so one user would count twice, once going in and once going out. The numbers are divided by two to determine number of users.

¹⁴ Source: Recreation Sites and Trails BC: http://www.sitesandtrailsbc.ca/search/search-result.aspx?site=REC5915&type=Trail

Welsh Lake Trails

The Welsh Lake Trail network is a 16 kilometre loop trail past lower, middle and upper Welsh Lakes, and Aberytwyth Lake. The trail is managed and maintained by the Summit Trail Makers Society. Welsh Lakes is a popular trail and it is estimated that about 1,000 people use the trail each year¹⁵.

There are two additional trails which, although not established as designated trails, are popular with hikers in the summer months:

- Thunderwater Lake Trail: a 6-kilometre-long summer hiking trail starting from the end of Forster Creek FSR at the 42 km mark. The trail climbs 435 metres to Thunderwater Lake and is poorly defined requiring several creek crossings and travel over sections of large rock faces¹⁶.
- Irish Creek Trail: a 4.4 km trail leading to Irish Lake, via Irish Creek and Tara Lake.



Photo: Welsh Lakes Trail¹⁷

¹⁵ Trail use estimate provided by the Summit Trail Makers Society, July 5 2023 presentation to CVRPI

 $^{^{16}}$ Information from Recreation Sites and Trails BC: $\underline{http://www.sites and trails bc.ca/search/search-result.aspx?site=REC5096\&type=Trail}$

¹⁷ Source: Recreation Sites and Trails BC: http://www.sitesandtrailsbc.ca/search/search-result.aspx?site=REC5095&type=Trail

2.4 Parking and staging

In the winter months, the primary staging point for snowmobile access to the area is at the 19km mark on the Forster Creek FSR, at the start of the Forster Creek Trail. This staging area is in the Steamboat LU. From this staging area, users typically follow the Forster Creek Trail to the Forster Creek Cabin and Forster Creek Parking area at Kilometre 42. There is also a parking area and designated Recreation Site at kilometre 27.7 which is 0.9 hectares in size. This parking and staging areas provides access to the Forster Meadows and Catamount Glacier snowmobile and ski touring areas, as well as access to Olive Hut and Dave White Cabin.

In the summer months, it is possible to drive to the end of the Forster Creek FSR (42km mark), at which point there is a foot bridge for access to hiking and mountaineering opportunities, including access to Thunderwater Lake Trail, Dave White cabin, and Olive Hut. For access to the Welsh Lakes Trail, there is a short access road off Forster Creek FSR that ends in a small parking area.



Photo: Thunderwater Lake¹⁸

¹⁸ Source: Recreation Sites and Trails BC: http://www.sitesandtrailsbc.ca/search/search-result.aspx?site=REC5096&type=Trail

2.5 Roads

There are two main roads used to access the Forster area – Horsethief FSR, which runs west from Radium via Foresters Landing Road, and Westside Road, which heads north from Wilmer to Spillimacheen. Both roads lead to the Forster FSR, the primary and only access point into the Forster LU. Within the Forster LU, the Forster FSR is 21 kilometers long. An additional 94 kilometers of resource roads (or wilderness roads) are identified in the LU. These are typically unmaintained roads, the majority of which are active or inactive forest harvesting roads. It is important to note that while best efforts were made to document the road network in the Forster LU, the maps and road network information very likely contain some inaccuracies.



Photo: Forster Creek FSR at the Welsh Lakes Trail turnoff¹⁹

¹⁹ Source: Recreation Sites and Trails BC: http://www.sitesandtrailsbc.ca/search/search-result.aspx?site=REC5095&type=Trail

2.6 Non-motorized recreation use

The upper Forster watershed, including Forster Meadows, Catamount Glacier and Northstar Glacier are popular areas for both winter and summer non-motorized recreation use. In the winter months, the majority of use is ski touring, with users accessing either the Dave White Cabin or Olive Hut via helicopter or snowmobile and touring from there.

In the summer months, the majority of use is hiking and occurs on the designated Welsh Lakes trail (described in Section 2.3). Off-trail hiking and mountaineering are also possible in the Forster LU. Most are day trippers but many users are likely to access these activities via the Dave White Cabin or Olive Hut. The Thunderwater Lake / Forster Creek Meadows area is the most popular off-trail hiking area, including the ridge between Azure Lake Trail and McLean Creek Trail. The Alpine Club of Canada has been known to use the Forster Area for mountaineering camps in the past²⁰.

In recent years, helicopter-access hiking and biking has occurred in the Forster area with some local helicopter companies offering helicopter access biking, camping, weddings, hiking, picnics and ski touring²¹. New forestry access roads also enable recreation users to access higher elevation areas that may not have been previously accessible.

Forster Creek is also identified as a whitewater paddling route, however the paddling section within the Forster Creek LU likely sees very minimal recreational paddling due to it's 'extraordinarily difficult' rating²².



Photo: Off-trail hikers

²⁰ Information provided by members of the Forster Advisory Committee. Additional details of use are unknown

²¹ See for example, Glacier Helicopters: https://www.glacierhelicopters.ca/tours-adventures-invermere/; or Whitetooth Helicopters: https://whitetoothheli.com/#work

²² Reference: Smith, S. (1995) Canadian Rockies Whitewater.

2.7 Motorized recreation

Winter snowmobiling is the most popular motorized recreation activity in the Forster LU with the Forster Creek Trail providing the main access into the area. The trail is groomed regularly and provides winter snowmobile access along the Forster Creek FSR, to the Forster Creek cabin, with access to the Forster Meadows and Catamount Glacier snowmobile and ski touring areas, as well as access to Olive Hut and Dave White Cabin. It is estimated that about 4,000 snowmobilers access the Forster area each year²³.

The majority of summer motorized recreation use likely occurs on the existing road network for the purpose of hunting or sight-seeing, and with the use of a truck, quad or side by side. Some off-trail motorized recreation is known to exist in the open and alpine areas in the upper part of the watershed. The density of the forest in the lower elevation (valley bottom) areas of the Forster LU limit options for off-trail motorized recreation.

Motorized recreation closures exist in the area and are described below (Section 2.9).

2.8 Hunting

Hunting occurs in the Forster area, however very limited information is available on the numbers of hunters in this area, where they go, or when. The Forster area is in Management Unit 4-27 which has the following generally open seasons:

Species	Class	Season Dates	Bag limit
Elk	6 Point Bulls	Sept 10 - Oct 5	1
Moose	Spike-fork Bulls	Sept 20 - Oct 31	1
Moose (bow only)	Spike-fork Bulls	Sept 1 – Sept 19	1
Wolf	-	Sept 1 – Jun 15	NBL
Cougar	-	Sept 1 – Mar 31	1
Whitetail Deer			
Mule Deer			

2.9 Recreation Closures

Three important recreation access closures exist in the Forster Area. These closures are defined under the Forest and Range Practices Act (Section 58) and include²⁴:

- Area 1 Forster Creek Meadows: Closed to motorized use June 1 to November 30 annually. (No motorized use permitted past the summer road's end during these dates.)
- Area 2 Catamount Glacier: Closed to motorized use from June 1 to February 14 annually. (Open to snowmobiling Feb 15th to May 31st)
- Area 3 North Star Glacier: Closed to motorized use January 1 to December 31 annually (No snowmobiling permitted in this area)

2.10 Summary and characterization of recreation use

The intent of this section is to summarize and characterize public recreation use in the Forster LU.

²³ Based on data from 2022 provided by the Windermere Valley Snowmobile Society and Recreation Sites and Trails BC trail counter.

²⁴ For additional details see the Recreation Sites and Trails BC - Forster Creek Recreation Area brochure: http://www.sitesandtrailsbc.ca/resources/REC6072/sitemaps/Forster%20Creek%20Area%20Brochure.pdf

2.10.1 Recreation Features Inventory

The BC Recreation Features Inventory (RFI) identifies, classifies and records biophysical, cultural and historic features across the Province; providing information about recreation features to assist land use planners and managers in making decisions on appropriate land uses, resource development objectives and management prescriptions. Specifically, the RFI delineates the provincial land base into polygons based on recreation features and the activities those features support; and classifies those polygons in terms of their local significance (for providing recreation opportunities and supporting recreation activities) and sensitivity to alteration. It is a subjective rating used to indicate the relative importance of each polygon to recreation, assessed based on the following factors: activity attraction capability, accessibility, uniqueness, amount of current recreation use, scarcity, scenic view and other factors²⁵.

Figure 3 shows the RFI for the Forster LU. Areas of 'high' recreation significance include the Welsh Lakes Trail area, Irish Creek, the Northstar and Catamount Glacier areas, and Thunderwater and Whirlpool Lakes. The majority of the LU is characterized as 'low' significance.

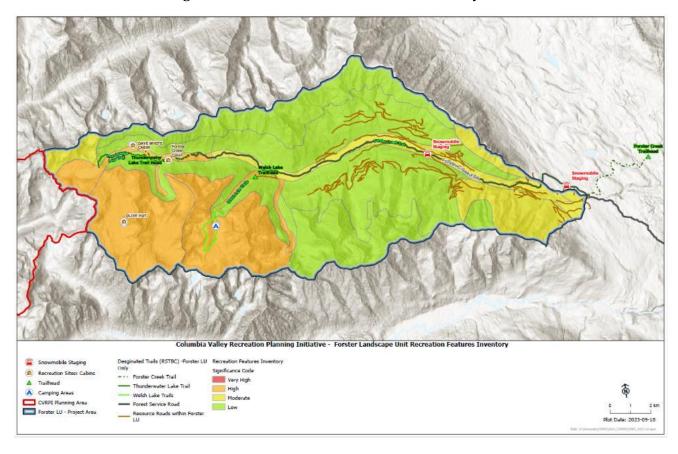


Figure 3 Forster LU Recreation Features Inventory

²⁵ Reference: Recreation Features Inventory - Procedures and Standards Manual (1998), Version 3.0. Available at: https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/nr-laws-policy/risc/rfi.pdf

2.10.2 Recreation Opportunity Spectrum

The Recreation Opportunity Spectrum (ROS) identifies, delineates, classifies and records areas within the province into recreation opportunity classes based on their current state of remoteness, naturalness and expected social experience²⁶. The goal of the ROS is to provide information about existing recreation opportunities to land use planners and decision makers on appropriate land uses, resource development objectives and management prescriptions. The ROS Inventory characterizes recreation opportunities and probable experience opportunities along a continuum or spectrum of recreation opportunity classes. The spectrum includes seven classes, which range from the most remote and natural experience (Primitive) to the least remote and natural experience (Urban):

Primitive	Most remote and natural
Semi-Primitive Non-Motorized	
Semi-Primitive Motorized	
Roaded Natural	
Roaded Modified	
Rural	•
Urban	Least remote and natural

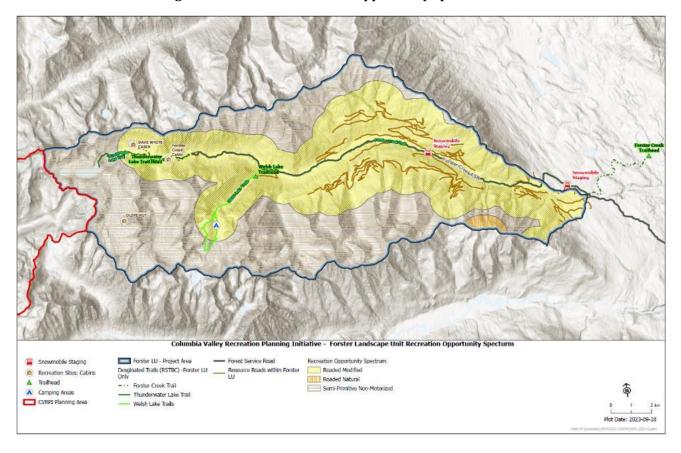
The ROS Inventory for the Forster LU is shown in Figure 4. In general, the Forster FSR and valley bottom areas are rated as 'Roaded Modified', which is defined as having:

- A moderate to high degree of motorized use for both access and recreation;
- A low degree of naturalness;
- A moderate number of more highly developed structures;
- Highly modified in areas;
- Generally dominated by resource extraction activities;
- On-the-ground evidence of other people and on-site controls.
- A low to moderate opportunity to experience solitude, closeness to nature, self-reliance and challenge
- A moderate to high interaction with other people; and
- Moderate to large party sizes expected;

Higher elevation areas, and the upper portions of the watershed, including the Northstar and Catamount Glacier areas, and Thunderwater Lake area, are rated as 'Semi-Primitive Non-Motorized', which is characterized as being more remote and natural than the 'Roaded Modified' areas in the valley bottom. Importantly, the ROS inventory for the Forster LU was completed as part of the Kootenay Boundary Land Use Plan process in 1997 and likely does not reflect current use patterns. For example, the Forster Meadows and Catamount Glacier snowmobile areas would likely be rated as less remote and natural today (e.g., 'Roaded Natural' or 'Roaded Modified').

²⁶ See: Recreation Opportunity Spectrum Inventory: Procedures and Standards Manual (1998). Available at: https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/nr-laws-policy/risc/ros.pdf

Figure 4 Forster LU Recreation Opportunity Spectrum



2.10.3 Strava Global Heatmap

An additional piece of information to help understand and characterize recreation use in the Forster LU is the Strava Global Heatmap. The Heatmap shows recreation activities recorded on the Strava GPS App over the past 12 months. Areas of higher 'heat' (darker colours) represent areas of relatively higher use (Figure 5).



Figure 5 Strava Global Heatmap of the Forster Area²⁷

2.10.4 Intensity of Recreation Uses in Forster LU

To support the characterization of recreation use in the Forster LU, a recreation use intensity scale has been developed (Table 1). The scale, which is based largely on the inventory of recreation opportunities and probable experiences outlined in the ROS, ranges from very high intensity of use to very low intensity of use. The purpose of recreation intensity scale is to establish general agreement on the relative intensity level of different recreation activities occurring in the Forster LU. Note that intensity levels do not (necessarily) correspond to levels of potential impact of recreation activities, which are outlined in Section 5 of this report.

²⁷ Source: https://www.strava.com/heatmap#12.68/-116.50608/50.65178/hot/all.

Table 1 Scale for characterizing recreation use intensity in the Columbia Valley

Recreation Use Intensity	Description			
Very high	 Very high degree of recreation use and access Very low degree of naturalness for those partaking in activity, and very low opportunity to experience solitude Very high site modification with numerous structures and developments Recreation facilities, such as parking areas, may be at or beyond capacity Obvious on the ground evidence of people and management controls Very high interactions with other people with large party sizes expected Known or estimated recreation user counts are likely to be in the thousands (1,000s) of users per season 			
High	[Local examples: James Chabot Trail, Lillian Lakes, Swansea, Old Coach Road]			
Moderate	 Moderate degree of recreation use and access Moderate degree of naturalness for those partaking in activity, and some opportunity to experience solitude Some site modification evident with structures and developments Recreation facilities, such as parking areas, may exist but are unlikely to be at or near capacity Some on the ground evidence of people and management controls Some interactions with other people with small to large party sizes expected Known or estimated recreation user counts are likely to be in the hundreds (100s) of users per season [Local examples: Toby Creek Trails, Lake of the Hanging Glacier, Diana Lake] 			
Low				
Very low	 Very low degree of recreation use and access Very high degree of 'naturalness' for those partaking in activity, and very high opportunity to experience solitude Very low site modification with no or very primitive structures and developments Recreation facilities, like parking areas, are rudimentary or non-existent Little to no on the ground evidence of people and management controls Very low interactions with other people and small party sizes expected Known or estimated recreation user counts are likely to be in the tens (10s) of users per season [Local examples: Pinto Trail] 			
None	Activity is not currently known to exist in the planning area			

Using the recreation use intensity scale (Table 1) as a guideline, the intensity of different public recreation uses in the Forster LU is characterized below in (Table 2).

Table 2 Recreation Use Intensity in the Forster LU

Recreation use	Intensity	Description
Snowmobiling – on road/trail	Very high	Primarily snowmobilers travelling the Forster Creek Trail along Forster Creek FSR, with some minimal use on other roads. Estimated annual users around 4,000
Snowmobiling – off road/trail	Very high	Primarily snowmobilers in the Forster Creek Meadows and Catamount Glacier snowmobiling areas. Estimated annual users around 4,000
Hiking / backpacking – on trail	High	Primarily hikers on the established Welsh Lake Trail, as well as Irish Creek trail. Estimated annual users of around 1,000
Ski touring	Moderate	Namely ski touring with users accessing the Dave White Cabin or Olive Hut, via helicopter or snowmobile, which are occupied about 250 nights per year (150 and 100 nights respectively) with the majority of use occurring in the winter months
Hiking / backpacking — off trail	Moderate	Primarily hikers travelling to Thunderwater Lake and Forster Creek Meadows area, as well as the ridge between Azure Lake Trail and McLean Creek Trail (Forster Ridge)
All-Terrain Vehicle (ATV) — on road	Moderate	Recreation users travelling primarily on the Forster Creek FSR, and on other forestry roads in the LU
4-wheel Driving - on road	Moderate	Recreation users travelling primarily on the Forster Creek FSR, and on other forestry roads in the LU
Camping – designated sites	Moderate	Primarily hikers on the Welsh Lake Trail staying overnight at the established camping area at Lower Welsh Lake
Mountaineering / climbing	Low	Summer / fall users accessing routes primarily via Olive Hut
Hunting	Low	Limited information is known about hunting in the area
Camping – random	Low	Some random camping occurs in higher elevation areas (e.g., for mountaineering purposes). Limited random camping is known to exist in lower elevation areas of the LU.
Snow shoeing	Low	Users accessing the Dave White Cabin or Olive Hut, via helicopter or snowmobile?
Mountain biking – on road/trail	Very low	Very limited known use occurs on existing roads within the LU
Mountain biking – off road/trail	Very low	Very limited known use occurs off road in open alpine areas of the LU with some users accessing via helicopter
Motorized biking – off road/trail	Very low	Very limited known use occurs off road in open alpine areas of the LU
All-Terrain Vehicle (ATV) – off road	Very low	Very limited known use occurs off road in open alpine areas of the LU
Gathering activities (berry, mushroom)	Very low	Very limited known use in the LU
Fishing	Very low	Very limited known use in the LU
Nature viewing / photography	Very low	Very limited known use in the LU
Water sports (canoe, kayak, swimming)	Very low	Very minimal whitewater kayaking use on Forster Creek
Exploring activities (caving, canyoning)	None	Not currently known to exist in the Forster LU
Cross country skiing	None	Not currently known to exist in the Forster LU
Air sports (hang gliding/paragliding)	None	Not currently known to exist in the Forster LU

3. Landscape Values

In addition to the important value of the Forster area for recreation use, the area also contains other significant and important values which are summarized below.

3.1 Indigenous Values

Indigenous values exist across the landscape, including within the Forester Landscape Unit (LU). Indigenous values include cultural, as well as archaeological values.

The Heritage Conservation Act (2019) recognizes the historical, cultural, scientific, spiritual, and educational value of archaeological sites to First Nations, local communities, and the public. The purpose of the Heritage Conservation Act (HCA) is to encourage and facilitate the protection and conservation of heritage property in British Columbia.

Forester contains both recorded and unrecorded archaeological sites, both of which are protected under the HCA. Because of the significance of archaeological sites to Indigenous peoples, the information is considered confidential.

Within the Forester LU are cultural sites and values integral to Ktunaxa and Secwepemc speaking peoples' historic and current ways of life. Cultural values include both traditional and spiritual values and are part of the living culture and history of Indigenous peoples. Examples include harvesting practices of wild game, species of plants harvested for use and consumption, as well as Indigenous language and laws. Cultural values are unique to each First Nation.

The Province is and will continue to engage with First Nations on the recommendations from the committee. Cultural and archaeological values are very important considerations in this engagement

3.2 Wildlife

The Forster area contains many significant wildlife and ecosystem values, including:

- The entire Forster area is identified as critical habitat for woodland caribou (*Rangifer tarandus caribou*) the Southern Mountain population. However, there are currently no caribou in the Forster area and it is unlikely they will be in the Forster area in the future²⁸
- The majority of the Forster LU (75% or 12,404 hectares) is identified as Ungulate Winter Range (UWR) for Mountain Goat (*Oreamnos americanus*), meaning it contains habitat necessary to meet the winter habitat requirements of Mountain Goats in the area. UWR in this case contains both winter and summer habitat for Mountain Goat.
- A small proportion of the LU (1% or 195 hectares) is identified as UWR for Moose (Alces alces)
- A very small proportion (6 hectares) is identified as UWR for Elk/Bighorn Sheep/Mule Deer.
- Much of the Forster LU is identified as high-quality Elk (*Cervus canadensis*) Habitat, and an Elk travel corridor²⁹.

²⁸ Personal communication with Wildlife Biologist (Aaron Reid) with the Ministry of Water, Land and Resource Stewardship ²⁹ Information provided by the Columbia Wetlands Stewardship Partners and Kootenay Connect. Spatial data is not available for Elk Migratory Habitat in the Forster area.

- A small portion of the lower Forster Creek (1,392 hectares) is identified as an area containing Bighorn Sheep (*Ovis canadensis*)³⁰
- Forster Creek is identified as a Grizzly Bear (*Ursus arctos*) travel corridor with areas of core habitat identified in the northwest portion of the LU³¹.

There are currently no defined Wildlife Habitat Areas or wildlife habitat features, as defined in the *Wildlife Act* and Government Actions Regulation under the *Forest & Range Practices Act* (FRPA), within the Forster LU.

Section 6.2 includes a map of wildlife corridors, and Section 6.3 is a map of Ungulate Habitat values in the Forster area. In addition to the maps provided in Section 6, additional mapping and information on wildlife values in the Forster LU was provided by the Columbia Wetlands Stewardship Partners and Kootenay Connect. These maps are shown below in Figure 6, and include (from top left, clockwise):

- Elk Habitat Quality map showing some isolated areas that contain 'good' and 'very good' Elk habitat³².
- Grizzly Bear habitat with an obvious polygon of 'core' grizzly bear habitat in the northwest portion of the LU, and many other areas of important 'corridor' habitat³³.
- Mountain Goat UWR which identifies 'Core Winter Areas', 'Management Zones', and a 'Specified Area' for mountain goat habitat in the Forster LU³⁴.
- The overlapping values map (bottom left) shows the overlapping areas of high value for multiple species in the Forster LU.

³⁰ Source: BC Wild Mountain Sheep Registry: https://open.canada.ca/data/en/dataset/0b229ec0-da50-4b29-88da-49c85a5944e2

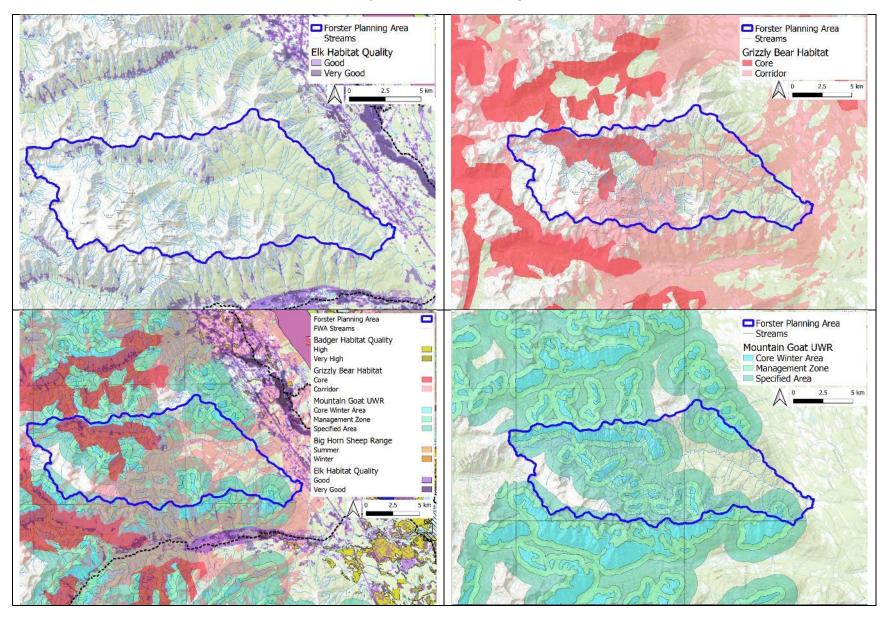
³¹ Information provided by Michael Proctor via the Columbia Wetlands Stewardship Partners and Kootenay Connect. Spatial data is not available for Grizzly Bear Habitat in the Forster area.

 $^{^{32}}$ Elk Habitat Quality map was based on a habitat selection model derived from radio collared elk from Cranbrook area as the basis for Kelly Mulligan's MSc thesis. CWSP worked with Kelly Mulligan to extend the model to the Columbia Valley. The good and very good ranking had higher RSF scores than the other areas.

³³ Grizzly bear habitat selection model was developed by Dr. Michael Proctor based on radio colored bears. Modelling was extended up the Columbia Valley based on greenness scores for the RSF selection model. Core habitat areas represent 'clusters' of better habitat and corridors represent connectors between the core areas. More information on the methodology is available in: Proctor et el., 2015. Grizzly Bear Connectivity Mapping in the Canada–United States Trans-Border Region. The Journal of Wildlife Management 79(4):544–558.

³⁴ The Mountain Goat habitat map is based on existing B.C. government data and modelling which was analyzed by Dr. Michael Proctor.

Figure 6 Wildlife Value Maps



3.3 Forests

Important forest-related values in the Forster LU include:

- 16,508 hectares (99% of the Forster LU) are proposed as critical habitat for Whitebark Pine (*Pinus albicaulis*), a federally listed species at risk.
- 273 hectares (2% of the Forster LU) are identified as a species at risk area for Whitebark Pine (*Pinus albicaulis*)
- 887 hectares (5% of area) are defined as Old Growth Management Area
- 1,295 hectares (8%) defined for harvesting 'deferral' (due to existence of old growth trees)

Section 6.4 includes a map of forest values in the Forster area.

3.4 Water

The following is a summary of water-related values and features in the Forster area:

- Several lakes exist in the LU, totalling 116 hectares (0.7% of LU). The most prominent lakes are Thunderwater, Irish, Welsh, Tara, Whirlpool, and Aberystwyth.
- Wetlands cover 63 hectares (0.035% of LU).
- Glaciers cover 1,247 hectares, with Catamount, NorthStar, Centaurus, and Shannon glaciers being prominent (7.5% of LU).
- There are 492 linear kilometres of streams, with Forster Creek being the most prominent, with all other streams draining into Forster Creek, which meets the Columbia River.

The entire Forster LU is a designated Community Watershed under the *Forest & Range Practices Act* (FRPA), which is defined as a drainage area that is upslope of the lowest point from which water is diverted for human consumption by a licensed waterworks. To protect the water that is diverted for human consumption, Community Watersheds require special management to conserve the quality, quantity and timing of water flow; and to prevent cumulative hydrological effects having a material adverse effect on water³⁵. The Community Watershed designation under FRPA sets out requirements for forest companies and rancher operations for various activities, such as road building or harvesting, within community watersheds.

No lakes are stocked with fish 36 , but recreational fishing occurs on some lakes within the Forster area. There are known observations of Cutthroat Trout and Brook Trout in Forster Creek 37 .

Section 6.5 includes a map of water values in the Forster area.

4. Land Tenures and Commercial Uses

³⁵ Source: https://www2.gov.bc.ca/gov/content/environment/air-land-water/water-water-quality/community-watersheds

³⁶ Reference: Freshwater Fisheries Society of BC, Fish Stocking Reports: https://www.gofishbc.com/Stocked-Fish.aspx#fish-stocking

³⁷ Based on the 'Known Fish Observations' dataset from the Province of BC. Forster Creek is not a designated watershed for Cutthroat Trout or a defined 'Fisheries Sensitive Watersheds'.

This section provides a summary of land tenures and commercial uses and values in the Forster area. Section 6.6 includes a map of Crown tenures and commercial use in the Forster area.

4.1 Adventure Tourism

Four companies hold tenures and offer adventure tourism in the Forster area:

- R.K. heliski has over 130,000 hectares of commercial recreation tenure for heli-skiing purposes, with 7,105 hectares being located in the Forster LU, covering 43% of the area. The R.K. tenure covers the entire upper portion of the Forster Creek watershed including the Forster Meadows, Catamount Glacier and North Star Glacier areas. R.K. Heliski also holds a tenure for an emergency shelter in the North Star Creek area.
- Canadian Mountain Holidays (CMH) is a heli-ski company largely operating to the north of Forster Creek. A very small proportion of CMH's Bugaboo heli-ski tenure exists within the Forster area (42 hectares). CMH offers heli-hiking in the Forster area with a tenure area of 574 hectares in the Thunderwater Lake area.
- Toby Creek Adventures holds a multiple use commercial recreation tenure in the Forster area covering 1,080 hectares in the Forster Meadows area, providing winter snowmobiling tours. Toby Creek Adventures also has a designated 'Intensive Use Site' located on Forster Creek FSR which can be used as a safety shelter. Estimates provided by Toby Creek Adventures suggest minimal use of the Forster Creek area for winter snowmobiling tours; currently less than 20 users per winter season.
- North Star Mountaineering has four 'accepted' commercial recreation tenures in the Forster area totalling over 4,000 hectares. These tenures are located in the Welsh, North Star and Irish Creek areas, and are for the purpose of providing guided mountaineering and rock climbing. North Star Mountaineering does not currently operate within the Forster LU.



Photo: Heli-skiing³⁸

³⁸ Source: R.K. Heliski: https://www.rkheliski.com/plan-your-trip/accommodations

4.2 Trapping

The Forster LU contains an active trapline covering the entire watershed, and two trapline cabins.

4.3 Forestry

Canfor holds a forest license to operate and harvest timber in the Forster LU, covering the entire LU. The map at Figure 7 shows Canfor harvesting activities in the Forster Creek watershed since 2014, as well as future harvest areas. Canfor also operates the Radium Sawmill.



Figure 7 Forster Creek Harvesting Map³⁹

4.4 Cattle Grazing

There are two active range pastures and tenures in the Forster Creek LU covering about 5% of the area (896 hectares). There are no known range features such as cattleguards, gates, corrals, enclosures, or water developments in the area. There are no areas in Forster LU within the Agricultural Land Reserve.

³⁹ Map provided by Brian Feeney, Canfor. Note, 'Reserves' on this map depict areas that Canfor has decided to protect from harvesting due to the existence of a riparian area, wildlife or other value.

5. Recreation Issues & Impacts

Based on information gathered through the inventory process (Sections 2, 3 and 4), including discussions with Advisory and Planning Committee members, and other land users in the region⁴⁰, the following potential issues and impacts of public recreation have been identified in the Forster LU to date:

- Summer off-road motorized, mechanized (mountain biking) and non-motorized recreation use in sensitive alpine ecosystems which has potential to impact important wildlife habitat and values
- Unauthorized winter motorized (snowmobile) use in existing recreation closure areas including access into Catamount Glacier prior to the February 14th opening date, and into the North Star Glacier closure area
- Conflicts between winter motorized (snowmobile) users and winter non-motorized (ski touring) recreation users as well as adventure tourism operators, particularly in the Catamount Glacier area, and due to incompatibility of different uses.
- Littering and improper disposal of waste, particularly in the Thunderwater Lake / Forster Creek Meadows area, affects the visual quality of the landscape, and may negatively impact wildlife.

Anecdotally, some of these issues appear to be getting worse, or are being exacerbated by other factors such as:

- An increasing density of forest harvesting access roads, which increases access to sensitive alpine ecosystems by recreationalists.
- Climate change, which is altering British Columbia's forests and ecosystems, including through increased risk of wildfires, invasive species and pest outbreaks, and shifts in wildlife habitat affecting biodiversity and ecosystem services⁴¹.
- The lack of capacity of provincial government staff and limited public recreation management, planning and enforcement is an issue across the Province⁴².

⁴⁰ For example, adventure tourism, range, trapping, and forestry tenure holders.

⁴¹ Source: Gifford, R., Brown, C., Baron, C., Clement, D., Melnychuk, N., Nelson, H., Sales, L. and Spittlehouse, D. (2022). British Columbia Chapter *in* Canada in a Changing Climate: Regional Perspectives Report, (ed.) F.J. Warren, N. Lulham and D.S. Lemmen; Government of Canada, Ottawa, Ontario.

⁴² See: Forest Practices Board (2010). Off-Road Vehicle Management in the Kamloops Forest District and/or Forest Practices Board (2021). Management of Forest Recreation in BC, for more detailed discussion on these topics



Photo: Evidence of motorized/mechanized use in the alpine along the north ridge of Forster⁴³



Photo: Evidence of unauthorized trails cut for access into the North Star Glacier closure area⁴⁴

⁴³ Source: Ryan Bavin

⁴⁴ Source: Jenna Schulhof

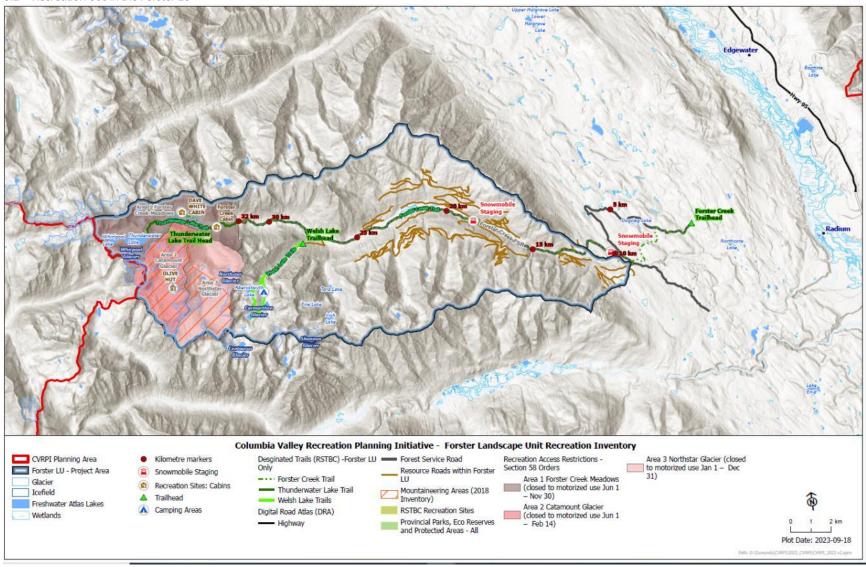
6. Maps

Maps are provided below depicting the results of the inventory or recreation uses and values in the Forster area. Map information is based on the best available data at the time of drafting and was compiled using the methods discussed in Section 1.2.

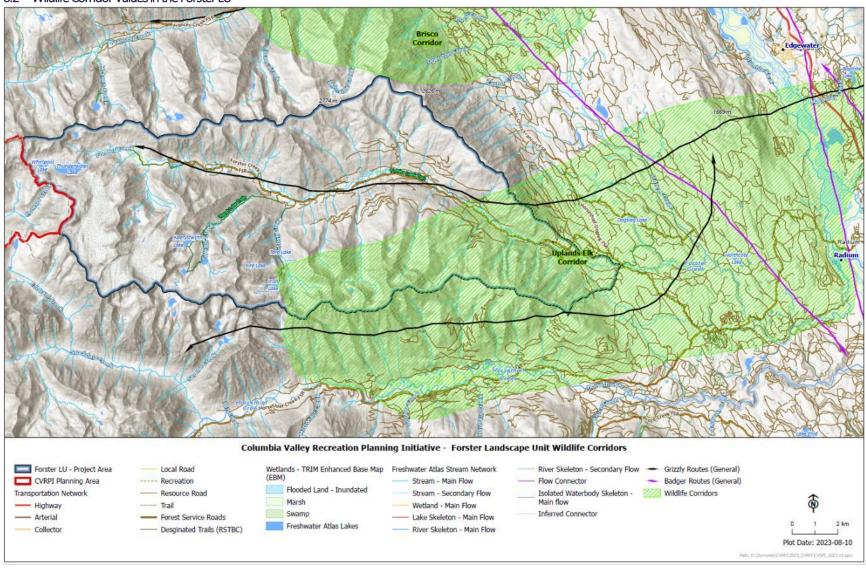
The following maps are provided below:

- 6.1 Recreation Use in the Forster LU
- 6.2 Wildlife Corridor Values in the Forster LU
- 6.3 Ungulate Habitat Values in the Forster LU
- 6.4 Forster Values in the Forster LU
- 6.5 Water Values in the Forster LU
- 6.6 Crown Tenures in the Forster LU

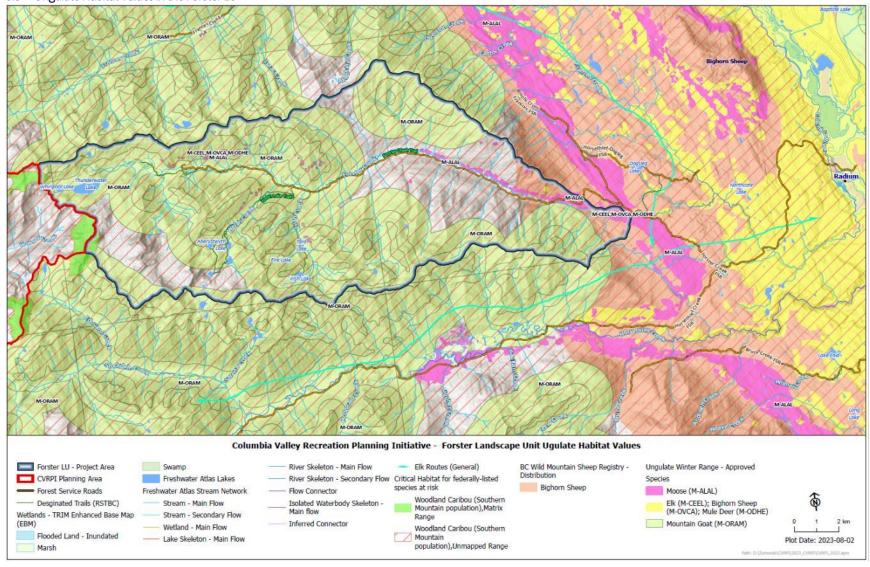
6.1 Recreation Use in the Forster LU



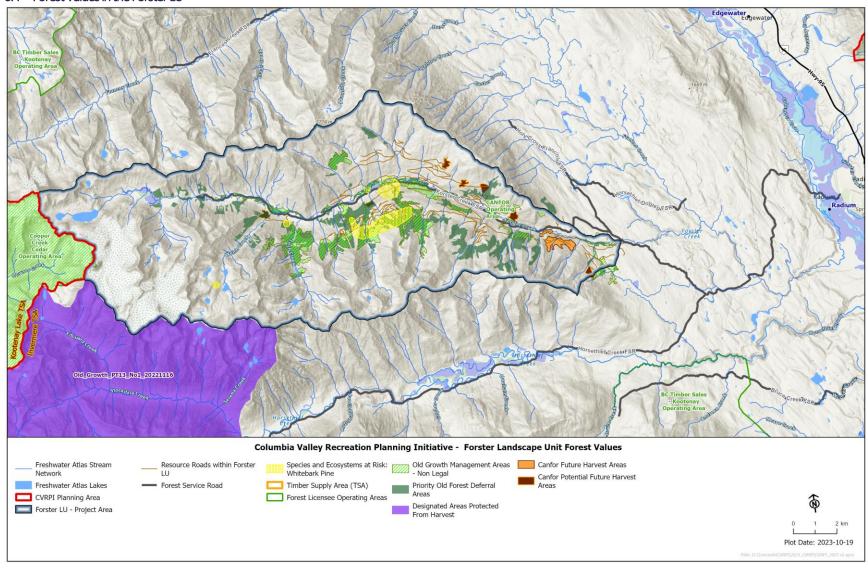
6.2 Wildlife Corridor Values in the Forster LU



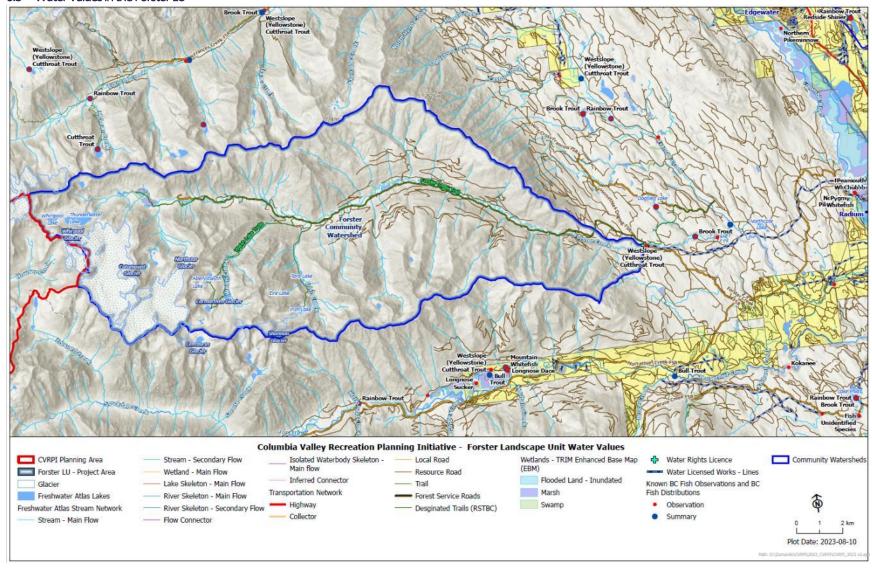
6.3 Ungulate Habitat Values in the Forster LU



6.4 Forest Values in the Forster LU



6.5 Water Values in the Forster LU



6.6 Crown Tenures in the Forster LU

