KOOCANUSA RECREATION STRATEGY MAY 2021

[NOTE: The 2021 Koocanusa Recreation Strategy addresses some of the feedback received through the public engagement process by permitting camping in undeveloped camping areas for the summer of 2021. The results of the public engagement will be considered further in future Strategy updates]

The Koocanusa Recreation Steering Committee is a partnership between the Province of B.C., Ktunaxa National Council, Regional District of East Kootenay and Columbia Basin Trust. It supports Crown land recreation that maintains the economic value, ecological integrity and aesthetic appeal of the Koocanusa area for current and future users.









Disclaimer: This Strategy provides guidance and recommendations for recreation management in the Koocanusa area. Implementation of actions will depend on government priorities, budgetary constraints, and legal, social and economic factors. Success will require the commitment and cooperation of recreation users, stakeholders and other partners across the region.

TABLE OF CONTENTS

A New Recreation Strategy for Koocanusa	2
1. Background	3
1.1 What has been accomplished to date?	;
2. Important Values in Koocanusa	7
2.1 Archeological Values	7
2.2 Ktunaxa Cultural Resources	7
2.3 Grasslands and Open Forests	8
2.4 Species and Ecosystems at Risk	8
2.5 Range and Agriculture Values	ç
2.6 Riparian, Shoreline, and Drawdown Zone areas	
2.7 Aesthetic Values	10
2.8 Recreation Values	10
3. Recreation Issues and Impacts in Koocanusa	11
4. Managing Recreation Across Koocanusa	12
4.1 Vision	12
4.2 Guiding Principles	12
4.3 Broad Recreation Management Strategies	13
4.4 Detailed Recreation Management Approach	13
4.4.1 Sensitive Areas	
4.4.2 Undeveloped Camping Areas	
4.4.3 Recreation Access Roads	
4.4.5 Day Use Access Areas	
4.4.6 Informational Signage	
4.4.7 Rehabilitation and decommissioning	30
5.0 Carrying Capacity	31
6.0 Monitoring and Evaluation	31
7.0 Implementation	33
Appendix A: Ecological Values – Sensitive Lands	34
Appendix B: Ecological Values — Wildlife and Habitat	35
Appendix C: Range Features	36

A NEW RECREATION STRATEGY FOR KOOCANUSA

A new recreation management approach is in place for the Koocanusa area, including additional areas identified for Crown land camping. The new approach aligns with the BC Government's Recreation Order for the Area which limits motorized recreation to the roads, trails, and camping areas identified in this Strategy.

A Recreation Strategy has been in place since 2017, and aspects of the Strategy are being implemented across the Koocanusa Area, including newly established Recreation Sites, staging areas and trails in the Grasmere area. The Koocanusa Recreation Strategy seeks to address the significant concerns raised by local residents, stakeholders and First Nations regarding the growing impacts of Crown land recreation in the Koocanusa area. It also recognizes the importance and value of recreation in the area and strives to maintain a balance between allowing recreation use and access to continue, while protecting the area's most valued resources.

The Strategy represents over five years of hard work and dedication from the Koocanusa Recreation Steering Committee, the Public Advisory Group, and the hundreds of local residents, recreation users, and other stakeholders that have contributed to the process. Since 2014, over \$1 million has been invested to improve enforcement, enhance signage and communications, improve waste management, complete recreation inventories, conduct assessments, and begin implementing management strategies in the Grasmere area, including establishment of parking areas, overnight camping areas, and recreation trails.

To help address community concerns, this draft Strategy identifies:

- 1. Sensitive areas where recreation use and access should be managed to prevent impacts to important values (Section 4.4.1).
- 2. Undeveloped camping areas (Section 4.4.2).
- 3. A network of roads for recreation use and access (Section 4.4.3).
- 4. Existing recreation trails for motorized and non-motorized users (Section 4.4.4).
- 5. Day-use areas that facilitate access to recreation trails and features (Section 4.4.5).
- 6. Locations where informational signage should be installed to enhance education and communications to recreation users (Section 4.4.6).
- 7. Sites where unsustainable recreation use has led to significant impacts, and where restoration efforts should be focused in the future (Section 4.4.7).

The recreation approaches will be implemented through a phased approach. This Strategy represents Phase 1 and will be implemented and enforced in the summer of 2021. Observations and proposed monitoring work over the summer, along with feedback from the public engagement process, will be used to update the Koocanusa Recreation Strategy in 2022. During Phase 1, camping on Crown land is permitted only in the camping areas identified in this Strategy, and motorized recreation is permitted only on the roads and trails identified in the Strategy.

Phase 2 is a longer-term process of conducting more detailed assessments of undeveloped camping areas, roads, trails and day use access areas, to determine suitability for future use. Through Phase 2, the potential locations of overnight camping areas, roads, trails, and day-use access areas are likely to change as new assessment work is completed and monitoring of recreation activities continues. Overnight camping areas identified in Phase one may a) remain as undeveloped Crown land camping areas with no site development, b) become designated camping sites with enhanced facilities, or c) be removed from consideration.

1. BACKGROUND

The Koocanusa area encompasses 570 square kilometres (57,000 hectares) extending from Wardner in the North to the United States border in the south (Figure 1). The area has become a regionally important tourism and recreation asset, attracting tens of thousands of outdoor enthusiasts for activities such as fishing, hunting, camping, boating, wildlife viewing, and off-road vehicle use. It is also an area of traditional use for First Nations and falls within the traditional territory of the Ktunaxa Nation. Crown land in the area is extensive, and existing tenures include grazing, trapping, timber harvesting and guiding.

Local residents and stakeholders have expressed significant concern about the growing impacts of Crown land recreation in the Koocanusa area. Most recreational issues and impacts are the result of relatively easy access to open forest and grasslands with few access controls. Recreation issues identified by residents, stakeholders and recreation users are summarized in Section 3. To help address these community concerns, a multi-agency steering committee, the Koocanusa Recreation Steering Committee, (KRSC) was established in 2014 to identify and implement recreation management solutions. The KRSC is a partnership between the Ktunaxa Nation, Tobacco Plains Indian Band, Regional District of East Kootenay, Columbia Basin Trust and the Province of B.C.

In 2014, the KRSC commissioned a Situational Analysis, which made recommendations focused on improving recreation management, whilst maintaining ecological integrity, cultural values, aesthetic appeal and economic value of the area for current and future users. In 2015, the Koocanusa Recreation Public Advisory Group (KRPAG) was formed to provide a voice to local citizens in the development of a recreation strategy for the area. KRPAG members, consisting primarily of local residents and recreation users, have provided valuable input and perspectives on current recreation use and impacts, and options for future management direction.

Consultation with First Nations, residents and stakeholders has provided the foundation for this Strategy. Extensive community engagement processes were conducted in 2014, 2017, and 2019 to gather feedback from local residents and stakeholders to help identify preferred options to improve management of recreation on Crown land across Koocanusa area. A summary of engagement efforts to date, and their results, are provided in section 1.1.

A cornerstone of recreation management efforts is stewardship and education campaigns that support responsible recreation use and provide information to recreation users on how they can become better stewards while enjoying the area for its beauty and recreation opportunities.

Working with Ktunaxa Nation

Representatives from Ktunaxa Nation Council and Yaq'it ?a·knuqti'it (Tobacco Plains Band) are actively participating in development of the Koocanusa Recreation Strategy, as members of the KRSC.

FIGURE 1: KOOCANUSA RECREATION MANAGEMENT AREA - OVERVIEW MAP Wardner Jalliey Eko Baynes Lake Alberta British Columbia USA P Existing Parking / Day Use Area Undeveloped Camping Area Designated Camping Area Private Camping Area Garbage Facilities Grasmere Sani-Dump Boat Launch Road --- Road (Gravel) Stream Waterbody Koocanusa Recreation Management Area Yaqit ?a knuqli'it (Tobacco Plains) Parks and Protected Areas Motor Vehicle Closed Area Private Land

1.1 What has been accomplished to date?

Since 2014, the KRSC has invested over \$1 million to improve recreation management in the Koocanusa Area. This includes funds directed towards:

- Improved enforcement presence
- Improved signage and communications
- Improved garbage and sanitation facilities
- Recreation inventories, planning assessments and mapping
- Decommissioning unauthorized motorized recreation trails and restoring impacted sites
- Establishing designated camping areas, parking areas and recreation trails
- Invasive species management

The Table below summarizes important accomplishments to date.

Date	Key Milestone / Event	Description	
2014	Form the Koocanusa Recreation Steering Committee (KRSC)	To address Crown Land recreation issues	✓
	Public consultation to identify recreation issues and potential solutions	 Recreation survey completed by nearly 300 residents, including survey mailed to all residents of RDEK Area B (290 completed Identified local support for improved recreation management and increased enforcement 	✓
2015	Situational Analysis Report and Recommendations	Commitment to develop a Recreation Management Strategy for Koocanusa	✓
	Form the Koocanusa Recreation Public Advisory Group (KRPAG)	 To provide local input and perspectives on recreation management issues, options and approaches 	✓
	Values Inventory	 To identify important values across the landscape 	✓
	Recreation Guidelines and Brochure	 Recreation guidelines developed for Koocanusa, and brochure created 5000 brochures printed and distributed each year since 2015 	✓
	Dedicated website created	www.koocanusarecreation.ca	✓
2016	Recreation Management in Grasmere area	 Ongoing meetings with user groups and stakeholders to identify values and management priorities Complete inventory of recreation roads, trails, and existing camping and staging areas in Grasmere area 	✓
2017	Public Consultation process	 Five community open houses hosted in Tobacco Plains, Grasmere, Jaffray, Cranbrook and Fernie Public survey receives over 1,100 responses Survey results show significant support for improved management of recreation across Koocanusa 	✓

Date	Key Milestone / Event	Description	
2017	Grasmere Recreation Assessment	Complete a detailed recreation assessment with recommendations for trail networks, camping areas and parking areas	√
	Koocanusa Recreation Strategy	 A Koocanusa Recreation Strategy was developed following the public consultation process 	√
2018	Begin Implementation in Grasmere area	 Install signage to educate recreation users Begin decommissioning unauthorized recreation trails 	√
	Koocanusa Recreation Inventory	 Complete inventory of recreation roads, trails, camping areas and parking areas across Koocanusa 	√
2019	Implementation in Grasmere area	 Decommission over 75 kilometres of unauthorized trails Establish camping and parking areas Establish trails for motorized and non-motorized users Conduct archaeological impact assessments Improve signage and communications 	√
	Public Consultation process	 Four community open houses hosted in Grasmere, Jaffray, Elko and Baynes Lake Survey results show continued support for improved management of recreation, particularly amongst local residents 	✓
	Koocanusa Recreation Assessment	 Complete a detailed recreation assessment with recommendations for trail networks, camping areas and parking areas 	✓
2020	Galton Range Motor Vehicle Closed Area (MVCA) expansion	 Galton Range MVCA expanded to include high value wildlife habitat along the Elk River corridor. 	✓
	Koocanusa Invasive Plant Management Project	 Conducted invasive plant treatments at high priority sites, in areas impacted by recreation use 	✓
2021	Public and stakeholder engagement	 Public survey administered in March/April. 244 responses. Results will be considered in future updates to this Strategy 	√
	Updated Koocanusa Recreation Strategy	 Completed in May 2021 with additional undeveloped camping areas identified Province of BC Recreation Order amended to align with Koocanusa Recreation Strategy 	√
	Observations and monitoring of recreation use to determine future directions	• In progress	

2. IMPORTANT VALUES IN KOOCANUSA

The Koocanusa area contains many important values that have been documented and digitized to inform the recreation planning process. These important values are summarized below.

The approach to recreation management in the Koocanusa area is meant to support sustainable management of the diverse values of the region. The goal is to maintain a balance between allowing recreation use and access to continue, while protecting our most valued resources. The approach will be implemented through various means including planning, education, monitoring, regulation and enforcement.

2.1 Archeological Values

Archaeological value is the value derived from preserved historic artifacts and sites that give a glimpse into what life was like thousands of years ago. These sites provide a record of social, cultural, and environmental change, providing a tangible connection to the past. Intact archeological sites are rare, as they can only be preserved through specific environmental conditions, such as certain soils formation or processes. These sites are constantly under threat from many factors including ecological change and human-caused disturbances, including recreation use.

The Koocanusa area has a rich cultural history extending back at least 10,000 years. There are registered archaeological sites in the Koocanusa area, and sites that have been identified but not yet recorded. All archaeological sites and associated cultural resources are of great importance and value to the Ktunaxa, the local communities, and the general public and as such are a protected resource.

Archaeological sites that predate 1846 or represent significant events, activities, or individuals in the history of the Province are protected by the BC Heritage Conservation Act. Due to the large number of sites within the region, cultural resources are continuously being disturbed by increased use of the land and activities such as motorized vehicle use, random camping, timber harvesting, private development, and reservoir impacts (i.e., wave erosion, shoreline undercutting, post reservoir sediment deposition and debris management). Many archaeological sites were lost with the development of Libby Dam and creation of the reservoir.

To provide a picture of the archeological value of the Recreation Area, an Archaeological Overview Assessment (AOA) was conducted. This assessment highlighted existing recorded and unrecorded archeological sites in the area as well as areas determined to have archeological potential. There are a significant number of pre-contact archeological sites and several areas of high archeological potential that will be considered in the ongoing development of recreation management approaches. Protecting and preserving archaeological values will continue to be a high priority through implementation of the Koocanusa Recreation Strategy.

2.2 Ktunaxa Cultural Resources

Cultural heritage can be defined as the study of the physical evidence of how and where past peoples lived. In addition to the physical remnants of the past, cultural resources can include sites such as places of spiritual significance, named locales, known travel routes and other places of cultural value regardless of the presence or absence of physical remains. The Koocanusa Area holds significant cultural value for the Ktunaxa, within whose Traditional Territory the recreation area lies. Cultural resources encompass a wide variety of features, including key ecosystems and water bodies, traditional and contemporary use areas, and archeological sites. These features are important to the past and present Ktunaxa way of life, supporting the Ktunaxa's significant

connection to the land. As such, it is essential that these cultural areas are considered in the development of recreation management approaches, to retain the integrity of these values and mitigate any conflicts that could impact their continued use.

A Ktunaxa Cultural Conservation Values Study was conducted to identify areas of significant Ktunaxa cultural importance. In high culturally valued areas, defined as "Enhanced Engagement Zones", recreation management recommendations were provided to inform the Koocanusa recreation management planning process. For example, in areas of high traditional use, recreation should be carefully managed through the use of capacity limits, signage, and increased enforcement. High cultural value areas exist near the Elk River mouth, Loon/Edwards Lake, adjacent Yaqit ?a·knuqti'it (Tobacco Plains Reserve), Newgate, Gold Creek, Suzanne Lake/Aye's Ranch, and Sand Creek. Ongoing communication and collaboration with Ktunaxa is essential to ensuring that cultural values are effectively conserved in the ongoing management of the area.

2.3 Grasslands and Open Forests

The grassland and open forest ecosystems in the Koocanusa area support various wildlife and plant species that are not found in other ecosystem types. Many of these species are rare or threatened due to dwindling habitat supply and competing pressures on the land base that has led to high levels of habitat loss. The grasslands in the Koocanusa area provide important winter range for a variety of ungulates including elk, moose, bighorn sheep, white-tail deer, and mule deer. Changes in natural and human caused disturbance regimes have significant impacts to important forage resources and wildlife habitat. Changes and degradation of ecosystem health can lead to a reduced carrying capacity for wild ungulates and domestic cattle, leading to increased demand on limited resources and potentially further degradation of the grassland ecosystems.

Grassland and open forest habitats in the Rocky Mountain Trench, including the Koocanusa area, are threatened by factors such as invasive plants, human activities and forest encroachment. Ease of access due to open grassland and forested terrain allows for broadly distributed recreational use across the vast majority of the region. Recreation use degrades habitat conditions and increases the spread of invasive species. Steep slope areas are also commonly found throughout the landscape, where motorized recreational activities are causing landscape erosion. Remaining grassland and open forest ecosystems must be preserved to maintain the intrinsic value of the land for generations to come.

The Sensitive Lands map (Appendix A) depicts the extent of sensitive grasslands and Ungulate Winter Range in the Koocanusa area.

2.4 Species and Ecosystems at Risk

The Koocanusa area contains sensitive and vulnerable species and ecosystems, including species and ecosystems at risk such as: long-billed curlew, American badger, spalding's campion, pinewood peavine, Lewis's woodpecker, painted turtle, and Montana larkspur. Several approved and proposed wildlife habitat areas (WHAs) are present in the Koocanusa area. WHAs designate critical wildlife habitats in which activities such as recreation use, access and pesticide use are managed to limit impacts to a specific species. Thirty-five WHAs exist in the Koocanusa area to protect: Lewis's woodpecker, long-billed curlew, western screech owl, American badger, flammulated owl, antelope-brush/bluebunch wheatgrass, Douglas-fir/snowberry/balsamroot, Williamson's sapsucker and great blue heron.

Motor Vehicle Closed Areas (MVCAs), formerly known as Access Management Areas or AMAs, are designed to protect specific wildlife and habitat values. Three MVCAs exist within the Koocanusa Recreation Management Area:

- Baynes Lake MVCA for high quality nesting habitat for long-billed curlews;
- Galton Range MVCA for high value winter range for mule deer, bighorn sheep and elk; and
- Linklater MVCA for high quality elk and mule deer spring, fall and winter range

In addition, the Pickering Hills and Sheep Mountain MVCAs lie immediately adjacent the area. In 2020, the Galton Range MVCA was expanded to include high value wildlife habitat along the Elk River corridor, and to support the ongoing implementation of the Koocanusa Recreation Strategy. Recreation management in the Koocanusa will continue to focus on reducing impacts to high value wildlife habitat and ecosystems.

The Wildlife and Habitat Values map (Appendix B) shows the location of known sensitive species and ecosystems in the Koocanusa area.

2.5 Range and Agriculture Values

The ranching community in the Koocanusa area has a long history of Agricultural use of the land. These extensive Crown land grazing agreements are fundamental to the ranching community to support their operations, produce protein and contribute to food security. The vast majority of the area is within the Agricultural Land Reserve (ALR). The ALR is a provincial designation in which agriculture is recognized as the priority use. In general, the ranching community is dependant on these lands for livestock grazing from May until November. Impacts to this range from recreation and increased motor vehicle use is of significant concern due to increased potential for livestock displacement and harassment during grazing periods, direct forage loss from trail development and unregulated camping, and range degradation due to invasive plants. The Range Features map (Appendix C) contains more detailed information about range and agriculture values in the Koocanusa area.

2.6 Riparian, Shoreline, and Drawdown Zone areas

Similar to other reservoirs, the foreshore and riparian habitats generally associated with large natural lake ecosystems are absent in the Koocanusa area. The inconsistent water levels and wave action associated with the rising and receding water levels makes it difficult to establish and sustain productive riparian and foreshore vegetation or habitat. There are four fish species of concern in the Koocanusa reservoir and its tributary streams: Kokanee salmon, bull trout, cutthroat trout and mountain whitefish. Low gradient areas of the reservoir drawdown zone such as Waldo Cove, Sandy Shores and Dorr Bay, as well as the inlet areas of tributary streams such as Gold Creek, Kikomun Creek, Sand Creek and the Elk River, provide important habitat for both aquatic and terrestrial species. The shallow seasonal bays along the shoreline provide warm waters that can be highly productive as forage areas for juvenile fish.

There are several elevated ridges and mounds in the drawdown zone that may either remain dry during full pool or receive relatively short periods of flooding, thereby allowing grassland communities to establish and sustain themselves. Many of these sites are located in the Waldo Cove, Sandy Shores, Kikomun Bridge and Dorr Bay areas. These ecosystems have potential value for long-billed curlew habitat and as forage for ungulates. Many riparian habitats in the lower Kootenay River were lost with the construction of the Libby Dam and creation of the reservoir. In addition to the loss of habitat and impact on species diversity, this has placed additional pressure on remaining habitats along the reservoir as well as numerous wetland features within the Koocanusa area.

In 2017, a Sensitive Habitat Inventory and Mapping (SHIM) project was completed for the Koocanusa Reservoir, providing baseline information on foreshore condition and environmental values. Through this project, a foreshore inventory was completed, as well as an aquatic habitat index, leading to Shoreline

Management Guidelines which support land use planning and decision-making along the reservoir. Development of the Koocanusa Recreation Strategy considered the ecological value of the shoreline and sensitive areas identified in the SHIM project.

The Sensitive Lands map (Appendix A) depicts shoreline ecological values along the Koocanusa Reservoir.

2.7 Aesthetic Values

Beyond the "use" value of the land for ranching, agriculture, recreation and forestry, the land in the Koocanusa area holds intrinsic and aesthetic values. Aesthetic values include viewscapes, beauty, pristineness and the ability to enjoy peace and quiet while in nature. These values are very important to local residents and visitors and are part of the reason many people choose to live and recreate in the Koocanusa area.

2.8 Recreation Values

Development of the Koocanusa Reservoir has created a regionally important tourism and recreation asset, attracting outdoor enthusiasts for activities such as fishing, hunting, camping, boating, equestrian, mountain biking, wildlife viewing, AT V and dirt biking. The reservoir is one of the largest bodies of water in the region and the accessibility of the surrounding Crown land, the unique open grassland ecosystem, the warm and dry climate and attractive viewscapes has made the area a prime recreation destination.

The volume of visitors to the Koocanusa area has not been documented; however, anecdotal evidence suggests that over 100,000 visitors come to the area every summer, with up to 25,000 visitors on the busiest long weekends. Large areas of easily accessible Crown land are an attractive venue for large group gatherings and events that can attract hundreds or even thousands of people. While the primary goal of the Koocanusa Recreation Strategy is to reduce the impacts of recreation, it is also important to recognize the value and importance of recreation use, and the need to ensure that recreation values are sustainably managed.

3. RECREATION ISSUES AND IMPACTS IN KOOCANUSA

In recent years, local residents and stakeholders have expressed significant concern about the growing impacts of Crown land recreation in the Koocanusa area. Most recreational issues and impacts are the result of relatively easy access to open forest and grasslands and few access controls. Recreation issues identified by residents, stakeholders, and recreation users include:

Damage to sensitive ecosystems and grasslands, including important wetlands and grasslands for cattle and ungulate grazing.

Disturbance to wildlife, wildlife habitat and species at risk, including winter range for a variety of flora and fauna that are endangered or threatened in BC such as spalding's campion, Lewis' woodpecker and American badger.

Effects on Indigenous rights and traditional activities including but not limited to harvesting of plants and animals as well as disturbance and destruction, both intentional and inadvertent, of archaeological sites - which are protected under the Heritage Conservation Act and impacts to cultural materials.

Random camping and illegal occupancy which is leading to localized impacts in high-use areas, such as litter, aesthetic and environmental impacts, trampling/ destroying of sensitive grasses, forbs, and delicate crusts, soil compaction, noise disturbances and illegal cutting of trees.

Unauthorized large events and gatherings resulting in increased garbage and human waste, noise disturbances, and public safety issues.

An increase in the spread of terrestrial and aquatic invasive species.

Increased wildfire risks related to uncontrolled access and illegal campfires, and potential evacuation difficulties due to the large number and dispersed nature of recreation users.

Public health and safety concerns associated with the unsafe operation of motorized vehicles, irresponsible use of firearms, and an increase in belligerent behavior by some recreationists, with instances of property damage, trespassing and vandalism.

Negative impacts on local ranchers as a result of damage to sensitive grazing lands, livestock at large due to gates being left open and fences being cut or damaged by recreation users.

4. MANAGING RECREATION ACROSS KOOCANUSA

This section proposes a long-term vision and guiding principles for managing recreation in the Koocanusa area.

4.1 Vision

The following vision is intended to guide and inform Koocanusa recreation management efforts:

Crown land recreation use in the Koocanusa area enables residents and visitors to enjoy safe and sustainable recreation that respects important ecological, cultural and resource values and conserves what is unique, special and distinctive about the area. Local stakeholders and stewardship groups play a key role in recreation management.

4.2 Guiding Principles

The following principles reflect both the approach to and desired outcomes of Koocanusa recreation management efforts:

- 1. Encourage sustainable recreation use through improved information and education
- 2. Land use regulations are clearly communicated, and enforced where necessary
- 3. Respect and safeguard Ktunaxa cultural and archaeological values and resources.
- 4. Reduce recreation impacts on existing tenured activities on Crown land.
- 5. Avoid additional tax burdens on local residents, and develop approaches that are funded, at least in part, by recreation users.
- 6. Build on previous recreation management planning processes and seek collaboration with future planning.
- 7. Avoid measures that will result in relocating Koocanusa recreation management issues and conflicts to surrounding areas.
- 8. Engage local residents and stakeholders with respect for diverse beliefs and values.
- 9. Apply adaptive management approaches based on best available information to support flexible, integrated solutions.
- 10. Encourage recreation that supports local economic development and provides benefits to local residents, businesses, recreation users and the Province.
- 11. Ensure that the selection, development and maintenance of recreation sites and trails is conducted in accordance with accepted provincial guidelines and best management practices.¹

¹ Guidelines include: Guidelines and Best Practices for Planning, Design and Development of Summer Off-Highway Vehicle Trails; Wildlife Guidelines for Backcountry Tourism/Commercial Recreation in British Columbia; Province of BC Guide to Using and Developing Trails in Farm and Ranch Areas; International Mountain Biking Association's Trail Solutions: Guide to Building Sweet Singletrack; and the National Off-Highway Vehicle Conservation Council's Great Trails: Providing Quality OHV Trails and Experiences.

4.3 Broad Recreation Management Strategies

The KRSC continues to support and work towards implementation of sustainable recreation management across the Koocanusa area. In 2021 and beyond the KRSC will continue to:

- Engage with Ktunaxa Nation Council and members of the Tobacco Plains Indian Band to determine the most effective management approaches for addressing recreation issues.
- Support and explore options for a Crown land recreation user-pay system where recreation users, including those from outside the region, pay a fee to utilize and maintain recreation facilities (trails, camping, garbage, etc.) in the Koocanusa area.
- Advocate for the development of reciprocal enforcement agreements with adjacent jurisdictions and increased enforceability of tickets issued for recreation-related offences.
- Advocate for an increased enforcement presence in the Koocanusa area, including support for the Ktunaxa Nation Council's Guardian Watchmen Program.
- Engage with residents and stakeholders as needed to determine the most effective management approaches for addressing recreation issues.
- Support the expansion of existing Recreation Sites, where feasible and logical to do so
- Identify road and trail decommissioning, and priority sites for rehabilitation that have been degraded through unsustainable recreation use.
- Provide opportunities for local stewardship groups to be effective partners in recreation management.
- Communicate information about appropriate recreation use and behaviour to recreation users.
- Monitor recreation use, trends and impacts and adjust management approaches accordingly.

4.4 Detailed Recreation Management Approach

A new recreation management approach is proposed and being implemented across the Koocanusa to mitigate the growing number of recreation impacts in this area. The approach includes:

- 1. Limiting motorized recreation use and vehicle access in highly sensitive areas.
- 2. Identifying appropriate areas for overnight camping on Crown land and restricting camping outside those areas.
- 3. Identifying a logical network of roads and trails for recreation use.
- 4. Identifying day use areas to facilitate access to recreation trails and features.
- 5. Installing signage to enhance education and communications to recreation users.

When implemented, this new management approach will yield important benefits, including:

- Improved health of grasslands and ecosystems for local wildlife populations, species at risk and ranching operations.
- Mitigation of impacts on archaeological and cultural values.
- Mitigation of impacts on highly sensitive areas with significant ecological or cultural values.
- Reduction in potential for conflicts with other Crown land users.
- Improved public health and safety.
- An enhanced recreation experience.

The descriptions below, along with the Koocanusa Recreation Strategy maps at Figure 2 (North Koocanusa) and Figure 3 (South Koocanusa) provide the details of the 2021 Koocanusa Recreation Strategy.

FIGURE 2: KOOCANUSA RECREATION STRATEGY MAP - NORTH KOOCANUSA

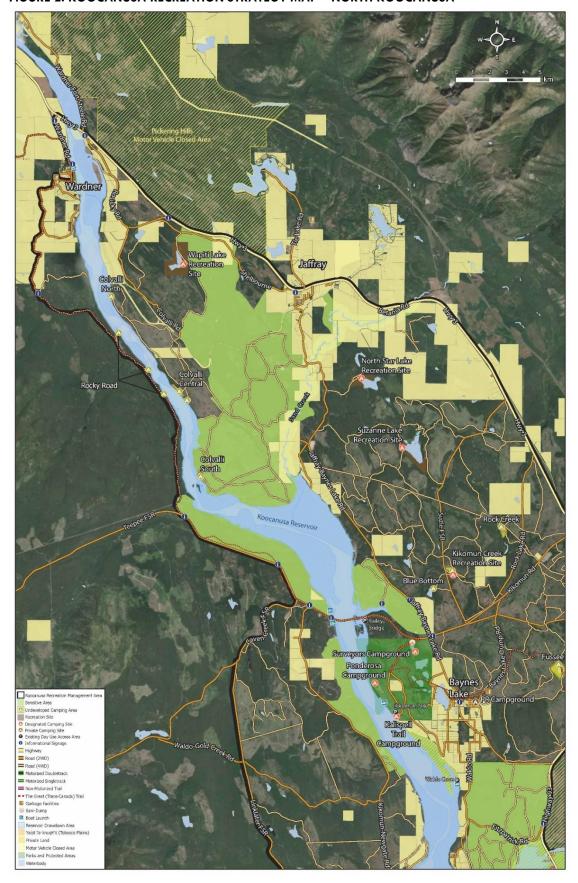
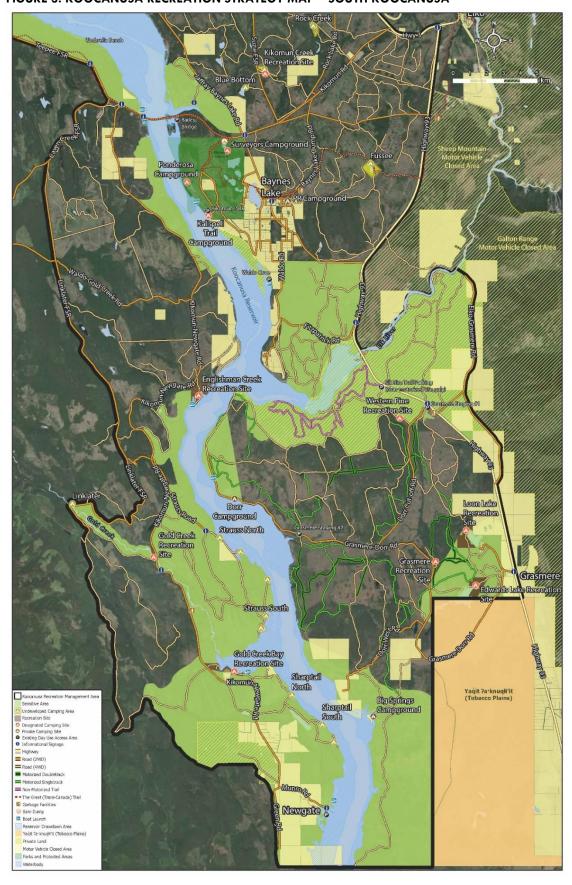


FIGURE 3: KOOCANUSA RECREATION STRATEGY MAP - SOUTH KOOCANUSA



4.4.1 Sensitive Areas

Highly sensitive areas are defined on the map and identify areas where recreation will be limited to prevent impacts to important values. Sensitive areas were identified based on existing data and known information regarding ecological values in the region. The KRSC also supported detailed ecological values mapping, and a cultural values assessment, to inform identification of sensitive areas. Recreation use in these areas should focus on non-motorized, non-mechanized, and non-intensive uses, and should be minimized or avoided if possible. Where recreation occurs in sensitive areas, it should be managed to avoid negative impacts to important values.

The following management approaches will be pursued in Sensitive Areas:

- 1. Enhanced monitoring and enforcement to ensure motorized and mechanized use and access occurs on existing and appropriate roads and trails.
- 2. Decommission unauthorized recreation trails currently being used by off-road vehicles.
- 3. Deactivate or rehabilitate roads and trails that traverse areas with high value such as sensitive grasslands, habitat for species and ecosystems at risk, wetlands or important wildlife and livestock watering areas, Ktunaxa cultural or archaeological values or areas of high aesthetic value.
- 4. Consider seasonal closures of existing roads, trails, and undeveloped camping areas to minimize disturbance to wildlife (e.g., spring calving grounds, winter ungulate habitat) or during periods of snowmelt, to avoid increased erosion.
- 5. Install informational signage at prominent recreation access points with maps and information about recreation guidelines and use in the area.
- 6. Establishment of motorized recreation trails will not be considered. Establishment of non-motorized and mechanized recreation trails may be considered, on a case-by-case basis, depending on local values and management priorities. Where trails exist in sensitive areas, proposed trail modifications will be assessed for sustainability and alignment with this Strategy.

Sensitive Areas are identified across Koocanusa in the maps at Figure 2 and Figure 3.

4.4.2 Undeveloped Camping Areas

The Koocanusa Area contains 305 public camping sites for overnight recreation use. These sites are located in Kikomun Creek Provincial Park (168 sites), and at the nine existing recreation sites in the area with 137 overnight camping spots at Wapiti, North Star, Suzanne Lake, Kikomun Creek, Loon Lake, Edwards Lake, Gold Creek Bay, Gold Creek and Englishman Creek. Two additional recreation sites were established in the Grasmere area in 2019 – Western Pine and Grasmere, both of which provide undeveloped camping and can support about 20 camping units each. In addition, there are various private campgrounds in the region that provide overnight camping opportunities.

Through this Strategy, an additional 20 areas are identified for undeveloped camping on Crown land. These camping areas have a total capacity of about 200 camping units. They were identified to support current recreation use patterns, for their high suitability for recreation use, and to mitigate impacts in sensitive areas and to important values. Collectively, the camping areas are about 95 hectares in size, and represent 0.15% of Crown land in the Koocanusa. With all recreation sites considered, existing and potential camping areas encompass less than 1% of Crown land in the Koocanusa Recreation Management area. Overnight camping would not be permitted on the remaining the 99% of the land base.

Each of the undeveloped camping areas are described below and depicted on the Koocanusa Recreation Strategy maps in Figure 2 and Figure 3.

The identification of undeveloped camping areas represents a first phase of the Recreation Strategy and will be implemented in the summer of 2021. The BC Government's Recreation Order permits camping in the undeveloped camping areas identified in this Strategy.

Phase two is a longer-term process of conducting more detailed assessments of undeveloped camping areas to determine suitability for future use. Through Phase two, the locations and boundaries of camping areas are likely to change as new assessment work is completed and monitoring of recreation activities continues. Each undeveloped camping area may be managed in one of the following ways in the future:

- Continue to be managed as an undeveloped camping area. In this case, the site would be managed
 as a free, 'rustic' camping area with some enhanced management and controls, but no individually
 designated camping sites, or other infrastructure or facilities.
- 2. **Established as a designated camping site.** In this case, the area would become a more formal camping site (for example a Recreation Site) with individual camping sites, fees and some facilities such as pit toilets, picnic tables and fire rings.
- 3. Removed from consideration. If new assessment work, monitoring, or future consultation indicates that the site is no longer appropriate or acceptable, it could be removed as a camping area. In this case, access roads into the site may be decommissioned and the area rehabilitated to maintain important values.

Through Phase one, including for the summer of 2021, the following management approaches will be pursued at each of the overnight camping areas:

- 1. Clear delineation of the camping area boundaries, for example with rocks, signage, fencing, or by other means, to contain traffic.
- 2. Informational signage installed.
- 3. Monitor use and adapt management over time, including consideration of the camping area boundary, and the need for additional facilities.

The undeveloped camping areas outlined in this Strategy (below) are rustic and dispersed camping areas with no facilities. Recreation users must be prepared and self-contained and are permitted to overnight camp for a period of up to 14 days in these areas. Access roads into the camping areas are unmaintained and may be impassable at any time. A four-wheel drive vehicle is strongly recommended on all identified roads in the Koocanusa area.

SHARPTAIL

North of Newgate and south of Gold Creek Bay, this is a popular Crown land camping area due to its aesthetic quality, nice beaches and water access. The area is identified as a "Sensitive Area" under the Strategy as it contains very high ecological, shoreline, archaeological and cultural values. To maintain these values, off road vehicle use is not permitted at or near the camping areas. Access roads into this area are very poor; a four-wheel drive vehicle is mandatory.

Sharptail contains three undeveloped camping areas. About ten camping units could be accommodated at each area, for a total of approximately 30 camping units.

Sharptail North





Sharptail South





STRAUSS

The reservoir area near Strauss Road is a very popular Crown land camping area due to its aesthetic quality, nice beaches and water access. The area is currently identified as a "Sensitive Area" as it contains very high ecological, shoreline, archaeological and cultural values. To maintain these values, off road vehicle use is not permitted in this area.

Five undeveloped camping areas are identified at Strauss, with a total capacity of approximately 50 camping units.

Strauss North





Strauss South





LINKLATER

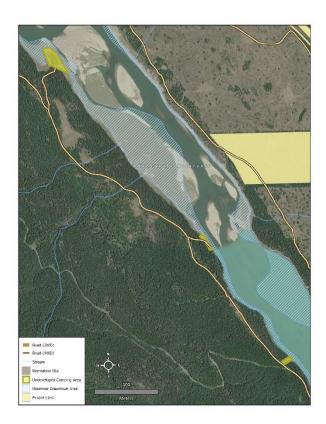
A small but popular site at the junction of Linklater Road and Gold Creek. The area contains several fire rings and could accommodate about five camping units.





ROCKY ROAD (CASEY'S)

There are three well-used areas along the west side of the reservoir, about seven kilometres south of Wardner, which are suitable for undeveloped camping. Each site can accommodate about five camping units, for a total of 15 units in three sites. Access roads into this area, particularly the northern most site, are very poor; a four-wheel drive vehicle is mandatory.





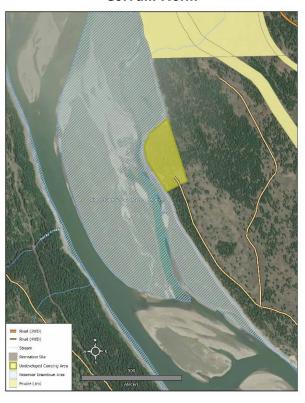


COLVALLI

The Colvalli Road shoreline area is a popular Crown land camping spot with aesthetic views and access to the Koocanusa reservoir. This area contains high ecological, shoreline, archaeological and cultural values. To maintain these values, off road vehicle use is not permitted in this area. There are three locations in Colvalli:

- Colvalli North, which could accommodate approximately 10 camping units.
- Two sites at Colvalli Central, which could accommodate about 20 camping units.
- Colvalli South, which could accommodate approximately 10 camping units.

Colvalli North





Colvalli Central





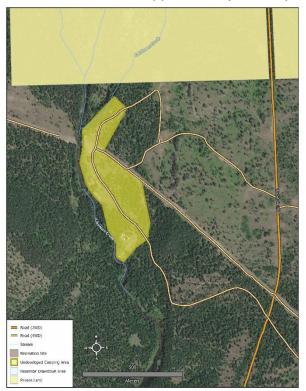
Colvalli South





ROCK CREEK

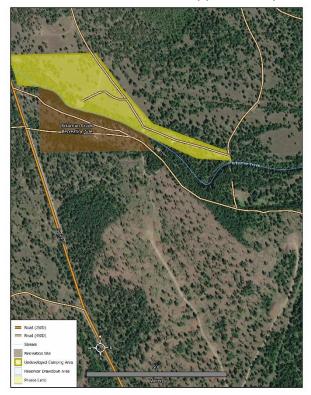
A historic Recreation Site, Rock Creek is a very popular area for dispersed camping along a creek. Rock Creek could accommodate approximately 20 camping units.





KIKOMUN CREEK

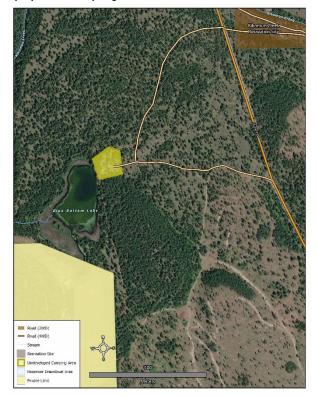
Three camping areas along Kikomun Creek, across from the existing Kikomun Creek Recreation Site. These three sites could accommodate approximately 10 camping units.





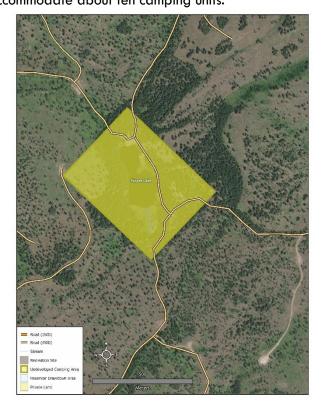
BLUE BOTTOM

A popular camping area near a small lake. This area could accommodate about five camping units.





FUSSEE A historic Recreation Site, Fussee is a popular area for dispersed camping at Fussee Lake. This area could accommodate about ten camping units.





4.4.3 Recreation Access Roads

The Koocanusa Recreation Strategy identifies a network of over 530 kilometres of access roads which may be appropriate for recreation use and access. The goal of recreation access roads is to provide public access to recreation features, including hunting access, while avoiding high value ecological, cultural, and archaeological areas. Motorized off-road recreation vehicles (dirt bike, quad, side-by-side, etc.), and mechanized use (pedal bikes) should be permitted on recreation access roads. Seasonal restrictions will be considered in Sensitive Areas, and to protect important values.

Management approaches will seek to deactivate and/or rehabilitate roads that traverse areas with exceptionally high value such as sensitive grasslands, habitat for species and ecosystems at risk, wetlands or important wildlife and livestock watering areas, and cultural or archaeological values. Roads that do not form part of a logical road network for recreation access, such as small spur roads that lead to fragmentation and 'dead-ends', and which are not required for access by First Nations, tenure holders or other land users, should also be considered for deactivation and rehabilitation over time.

Recreation access roads are identified on the Koocanusa Recreation Strategy maps in Figure 2 and Figure 3 as "Roads (4WD)". Access roads are unmaintained and may be impassable at any time. A four-wheel drive vehicle is strongly recommended on all identified roads in the Koocanusa area.

4.4.4 Recreation Trails

Recreation Trails are designated under the Forest and Range Practices Act (Recreation Regulation) and the Province of BC enters into partnership agreements with local stewardship groups for the ongoing management and maintenance of trails across the Province. There are currently two established non-motorized recreation trails in the Koocanusa Recreation Management Area:

- The Elk Rim Trail near Dorr Road. A 21-km trail network with three loop trails, appropriate for hiking and mountain biking; and
- The Trans Canada Trail, which follows existing roads and trails through the area, and forms part of the 27,000-kilometre Great Trail of Canada.

In addition, a network of motorized recreation trails is identified in the Dorr Road-Grasmere Area, including 61km of single-track trails and 24 km of double track (ATV) trails. Existing recreation trails are depicted on the Koocanusa Recreation Strategy maps (Figure 2 and Figure 3).

The establishment of additional motorized and non-motorized trails will be considered, on a case-by-case basis, and in alignment with the Sensitive Areas and management approaches outlined in this Strategy. Recreation trails would only be established when and where a local partner is identified for trail maintenance and management.

4.4.5 Day Use Access Areas

Day use access areas provide parking options and facilitate access to recreation assets such as trails, lakes, rivers and beaches. The Koocanusa Recreation Strategy maps at Figure 2 and Figure 3 identify eight locations which are popular day use access area for recreation users. Through implementation of the Koocanusa Recreation Strategy, additional day use access areas may be identified and established, and new management approach may be implemented at day use access areas to reduce impacts.

There are many other sites in the Koocanusa area that are utilized for day use activities, including existing recreation sites, Crown land areas, as well as day use areas provided by private camping operators. Some of the identified day use access areas are not formally designated sites, and as such have experienced site degradation over the years. Through the Koocanusa Recreation Strategy, additional management approaches may be needed at these sites to reduce impacts, including education, assessment and monitoring.

4.4.6 Informational Signage

Since 2015, the KRSC has been working to improve recreation communications, and education of recreation users, including through the installation of informational signage. Currently, informational signage exists at 23 locations, including five large kiosk signs, and 18 small informational signs. The maps at Figure 2 and Figure 3 identify 21 locations where kiosk signs exist and will be updated or are proposed for installation. These locations are in addition to signage that may be installed or updated at existing Recreation Sites, proposed overnight camping areas, and day use access areas.

The purpose of the informational signage is to emphasize sustainable and appropriate recreation use, and direct recreation users to appropriate roads, trails, camping areas, day use areas, and other established recreation features. In some cases, the signage can be used to identify the end of the recreation access road network, and to discourage use beyond a certain point.

4.4.7 Rehabilitation and decommissioning

It is recognized that there are many sites across the Koocanusa area that have been severely degraded through unsustainable and unmanaged recreation use. The KRSC is in the process of identifying priority road and trail decommissioning, and priority sites for rehabilitation. As funds become available, the following management actions may be implemented at priority sites:

- Deactivate unauthorized roads and trails.
- Conduct erosion control activities to address water issues.
- Plant appropriate vegetation to restore grassland values.
- Conduct post-treatment evaluations.
- Install educational signage.

5.0 CARRYING CAPACITY

Given the ecological importance and recreational value of the Koocanusa area, the 'Carrying Capacity' of the landscape must be acknowledged. Carrying capacity is generally defined as the amount of use an area can sustain without excessive degradation of ecological function, or without exceeding the limits of socially acceptable use. As such, carrying capacity is dependent on both physical and biological components, such as soils, terrain, topography, vegetation, wildlife, climate, etc., as well as the level of development, and the type and intensity of recreation use and other uses in an area. The carrying capacity of an area is also affected by other non-recreation land uses such as natural resource extraction, forestry, ranching, community development, commercial tourism, road development, etc.

The KRSC, through this Strategy, is working to address the issue of recreation carrying capacity in the Koocanusa area. Most importantly, this involves being flexible and adapting management approaches over time based on observed impacts, recreation use patterns, and ongoing engagement and feedback from First Nations, residents, recreation users and other stakeholders. There are several well-established techniques that support managing for carrying capacity, which are already being employed by the KRSC, or are being proposed through this Strategy, including: identifying appropriate roads and trails for recreation use; deactivation and restoration of unsustainable roads and trails; permitting camping in identified sites only; increased enforcement; and improving education and awareness.

6.0 MONITORING AND EVALUATION

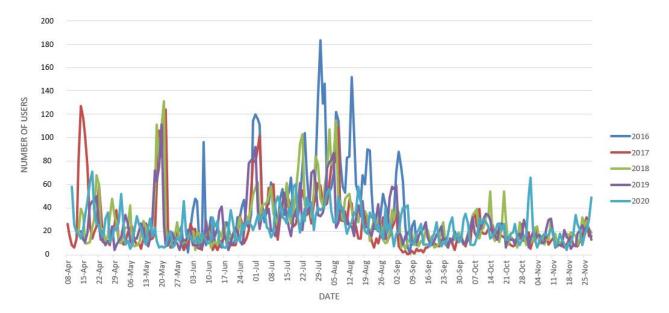
Monitoring and evaluation activities provide insights into trends and patterns about recreation use, and the effectiveness of recreation management actions in reducing conflicts and impacts. Since 2016, the KRSC has been monitoring recreation use in the Koocanusa Area to help provide management direction and ensure management actions are effective and continue to be supported by local residents and recreation users. For example:

- Traffic counters are installed at 13 locations across Koocanusa. Figure 4 provides an example of traffic counter data from Dorr cut-off road, demonstrating increased recreation use and access in the summer months, and on long weekends in particular.
- Surveys have been conducted by Natural Resources Officers and Recreation Officers to better understand the locations, activities and needs of Crown land recreation users.
- Recreation occupancy statistics and use rates at the Yaqakxaqtamki Boat Launch and Recreation Sites.

Monitoring for the summer of 2021 will focus on the recreation management approaches identified through this Strategy, namely the use of overnight camping areas on Crown land. Management approaches will be

adapted over time, based on monitoring results. Potential future monitoring activities will be identified and implemented based on continued engagement with the public and key stakeholders.

FIGURE 4: EXAMPLE OF TRAFFIC COUNTER DATA AT DORR CUT-OFF ROAD



7.0 IMPLEMENTATION

Since 2017, the KRSC has been implementing recreation management actions in the Grasmere-Dorr Road area. Over \$300,000 has been invested in the past three years to:

- Decommission over 75 kilometres of unauthorized trails that were unsustainable or causing damage to important values.
- Establish trails for motorized and non-motorized users.
- Establish two new camping areas (Western Pine and Grasmere Recreation Sites).
- Establish three new parking and staging areas for recreation access.
- Conduct archaeological impact assessments.
- Improve signage and communications.

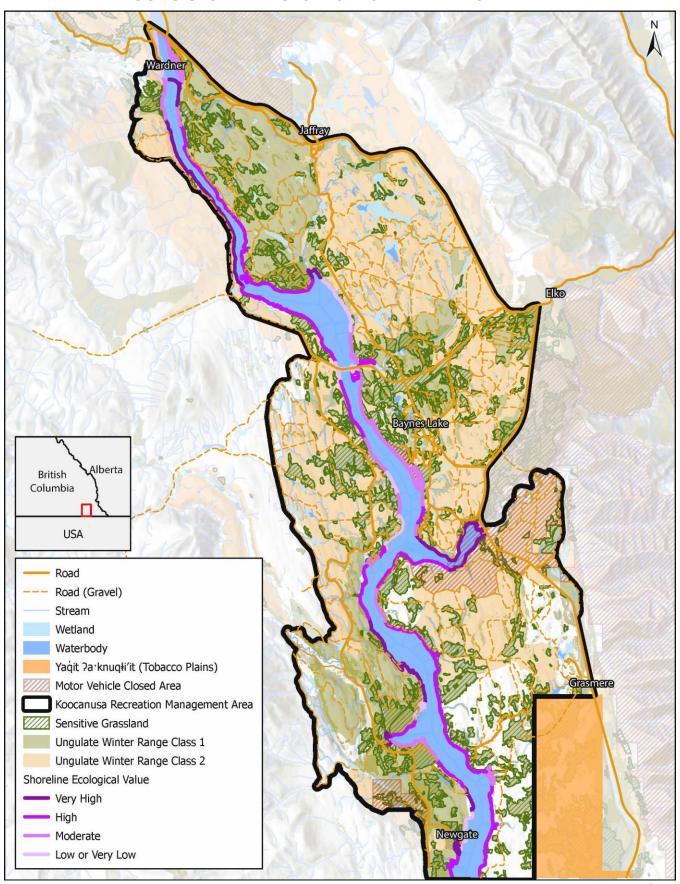
This document represents a first phase of the Koocanusa Recreation Strategy and will be implemented and enforced in the summer of 2021. Legislation is in place that permits Crown land camping only in the areas identified in this Strategy, and motorized recreation is permitted only on the roads and trails identified in this Strategy. During Phase one, starting in the summer of 2021, dispersed camping on Crown land would be permitted in the sites identified in this Strategy. Implementation of Phase two is a longer-term process of conducting more detailed assessments to determine suitability for future use. Through Phase two, the locations of potential overnight camping areas, roads, trails, parking and day use access areas are likely to change as new assessment work is completed and monitoring of recreation activities continues. Overnight camping areas may a) remain as dispersed Crown land camping areas with no site development, b) become designated camping sites with enhanced facilities, or c) be removed from consideration.

The KRSC's member governments and agencies have made commitments to support improved management of recreation in the Koocanusa area. Implementation will take a phased approach; continually responding to public and stakeholder feedback on the design, execution and outcomes of specific management actions, while striving to meet the original objectives of the Strategy. Local community perspectives and advice are critical to the success of this initiative.

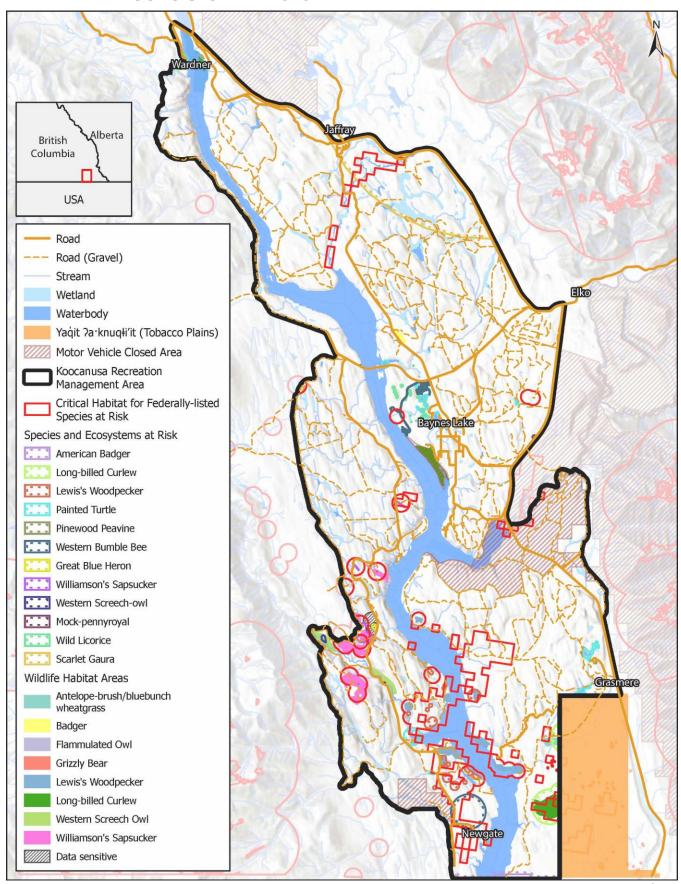
Funding is available to continue implementation of recreation management activities across Koocanusa in the coming years. Implementation activities could include establishment of designated camping areas, day use access areas, or recreation trails, additional planning and assessment works, improved signage and communications, and continued decommissioning and restoration of areas that have been degraded by recreation use.

The KRSC welcomes engagement by local and regional stewardship groups seeking to play a more significant role in recreation management in the Koocanusa area. Any implementation of management actions will include opportunities for further and more focused engagement with local residents, stakeholders, and recreation users to ensure that changes proposed have sufficient local and public support. The role of the Koocanusa Recreation Public Advisory Group in providing local information, perspectives and guidance will be continued.

APPENDIX A: ECOLOGICAL VALUES - SENSITIVE LANDS



APPENDIX B: ECOLOGICAL VALUES - WILDLIFE AND HABITAT



APPENDIX C: RANGE FEATURES

