Mountain Biking Guidelines



Regional Parks			
Capital Regional District	April 2021		

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Traditional Territory Acknowledgement

We acknowledge that we are on the traditional territory of WSIKEM (Tseycum), WJOŁEŁP (Tsartlip), SXÁUTW (Tsawout), BOKEĆEN (Pauquachin), MÁLEXEŁ (Malahat), Songhees, Esquimalt, T'Sou-ke, Sc'ianew (Beecher Bay), Cowichan, Penelakut, Lyackson and Pacheedaht First Nations. Indigenous culture, land, food, medicine and storytelling are all inextricably tied to the surrounding lands and waters.

As we explore these Mountain Biking Guidelines, let us be mindful of the potential implications that our decisions have on Indigenous peoples and their territories and thank them for sharing this land with us.

Glossary

Activity Optimized Trails allow two or more distinct activities to occur on the trail, but have been designed and incorporate activity optimized features that elevate the experience for only one of the activities.

Board means the Board of the Capital Regional District.

CRD means the Capital Regional District.

Constructed Technical Training Features are human-made structures that often require the use of artificial materials such as processed lumber and metal fasteners.

Engagement means communicating with stakeholders through a variety of means. This can be through, but not limited to, conversations, workshops, surveys or information circulated/distributed by CRD staff.

Enhanced Technical Training Features manipulate natural materials to increase the challenge.

Flow Trail (*Flowy*) is a trail that is usually machine-built or constructed and typically contains berms, rollers and potentially jumps, designed to emphasize rhythm and meander through the landscape, connecting features that use the rider's momentum to minimize pedaling and braking.

IMBA Standards refers to the International Mountain Biking Association's guide for trail building¹.

Linear Disturbance refers to straight or curvilinear movement corridors that usually contrast with the adjacent landscape. In a regional context these are often old logging roads or hydro line paths.

Mountain Biking Experience is defined as the ability for a rider to take part in their desired discipline on a trail that provides their desired level of difficulty within a desired recreation setting and landscape.

Mountain Biking is an outdoor recreation activity involving riding bicycles off-road, often over rough terrain, using specially designed mountain bikes. It is an umbrella term used to refer to a variety of more specific mountain biking disciplines (such as cross country, all mountain, downhill and adaptive mountain biking) that seek out different terrain, trail design characteristics, technical trail features and supporting infrastructure.

Multi-use Trails allow two or more distinct activities to occur on a single trail but the experience and amenities have not been optimized for any particular activity.

Natural Technical Training Features incorporate the use of existing natural features into the trail design – these highlight the landscape of the area.

¹ Felton, V. (2004) *Trail Solutions: IMBA's Guide to Building Sweet Singletrack*

Park Values means the value of regional parks to the residents of the CRD, as outlined in the Regional Parks Strategic Plan², including the parks' contribution to regional sustainability, environmental protection, building healthy communities, contributing to the regional economy, and reflecting local cultural heritage.

Pedal Assist is a mode of power engagement that requires pedaling feedback/input from the user to engage the motor.

Recreational Setting is made up of the characteristics of the area (i.e., developed vs pristine wilderness) along with the distinct ecosystem in which it exists.

Self-Propelled is the propulsion by pedals using human power. This includes pedal-assist cycles which enhance the effort of the rider only when they are pedaling.

Single-use Trails allow only one recreation activity and have been designed to optimize the experience for that activity.

Single-track Trails are a type of mountain biking trail approximately the width of the bike.

Special Use is any commercial or non-commercial service, activity or event that attracts participants or spectators, for which a park permit is required, and includes but is not limited to festival, competition, tournament, show or outdoor ceremony. A park use permit is required for all special use.

Technical Trail is a trail that integrates rough terrain, such as roots, rocks and obstacles and can require a greater degree of skill to ride as they involve a greater degree of pedaling and braking.

Technical Trail Features (TTFs) are obstacles or design elements on a mountain biking trail that improve trail flow or add difficulty in order to challenge the skill of trail users. The three TTFs are natural, enhanced and constructed.

Technical Training Area is a special use area that features a variety of technical trail features. The focus is on riders' skill development.

Trail is a type of infrastructure that is purposefully designed, constructed, and used to facilitate one or more recreational activities. To be recognized as a trail, the route must be approved by the landowner/land manager, mapped, marked or signed, and actively managed and maintained.

² https://www.crd.bc.ca/docs/default-source/crd-document-library/plans-reports/parks-recreation/regional-parks-strategic-plan-2012-21.pdf?sfvrsn=b19788c9_2

Mountain Biking Guidelines

Application

The Mountain Biking Guidelines apply to all mountain biking activities taking place within the CRD regional parks system. This includes mountain biking as an activity as well as the construction and maintenance of mountain biking trails and related facilities and infrastructure.

The guidelines are forward-looking and intended to be applied by CRD staff, Committees and the Board during:

- Strategic planning
- Park management planning
- Land acquisition
- Capital planning
- Sustainable service delivery
- Operations and facility maintenance
- Compliance and enforcement
- Collaboration and partnership opportunities

The guidelines serve as a tool for standardized language and common understanding as we work with stakeholders. These guidelines are to be implemented in a manner consistent with overarching legal requirements and strategic policies applicable to CRD Regional Parks. The key documents related to these guidelines may be updated and changed from time to time. The current list of documents can be found in Appendix 1.

Background

Visitation to regional parks is growing yearly, with an increase from 5.2 million in 2010 to 8.6 million in 2020. The increase in park users and uses has resulted in more demand for outdoor recreation opportunities for a range of experiences and activities, including mountain biking. As of 2020, CRD Regional Parks has 239 kilometres of trails, although not necessarily optimized or rated for mountain biking, that offer some form of mountain biking or cycling. Out of these trails, 67 kilometres have been assessed and given a difficulty rating for mountain biking.

Regional Parks recognizes that mountain biking is a mainstream outdoor recreation activity that has increased in popularity throughout North America and is enjoyed by a diversity of people of all ages and abilities for the physical, mental and social benefits. Mountain biking creates an opportunity to connect riders with nature, as well as, provides the excitement and challenge that the riders are seeking. The capital region's temperate climate, together with its growing network of trails and suitable terrain, make the region appealing for mountain biking year round.

Recognizing that mountain biking groups play a key role in championing mountain biking etiquette and sanctioned trails, monitoring and advocating for safe and quality experiences, and celebrating the recreational community, mountain biking experiences in the region are likely to be more successful when involving a local mountain biking group.

The regional parks system currently offers a mountain biking trail network in two regional parks: Mount Work and Sea to Sea. The trails in these locations are assigned with a trail difficulty rating adopted from the International Mountain Biking Association standards. At this time, mountain biking trails include all trail designations, including multi-use trails and/or access roads. These trails may not be optimized for mountain biking. The proportion of each trail difficulty rating on designated trails, although not necessarily optimized, is outlined as follows:

Regional Park	Green	Blue	Black	Double Black	Total
Mariat Work, Hartland	20.7%	18.3%	49.9%	11.1%	100%
Mount Work – Hartland	(9.5 km)	(8.4 km)	(22.9 km)	(5.1 km)	(45.9 km)
	39.5%	17.7%	37.8%	5.0%	100%
Sea to Sea – Mount Manuel Quimper	(9.4 km)	(4.2 km)	(9.0 km)	(1.2 km)	(23.8 km)

Figure 1: Based on CRD Regional Parks & Environmental Services GPS regional park trail data (2019).

The CRD recognizes there is a gap between the demand for mountain biking and the outdoor recreation offer in the region. Although the full demand may never be met, CRD Regional Parks can play a role in providing mountain biking opportunities as well as optimizing existing trails/trail networks that contribute to the overall mountain biking experience.

In order to improve the mountain biking experience in regional parks, a Mountain Biking Advisory Committee (MBAC) was established in 2020. This committee developed the *Mountain Bike Guidelines:* Advice and Guidance to CRD Regional Parks which supported staff in the development of these guidelines.

Regional parks are part of the mountain biking offer within the entire region and are not able to provide all mountain biking experiences in all locations for all users. A region-wide approach is required in order to provide a diversity of mountain biking experiences for regional residents and visitors, see map (Appendix 2) when considering a regional approach to the mountain biking offer within the greater region.

Purpose

The purpose of the Mountain Biking Guidelines is to provide clear direction and a systematic and consistent decision-making process for planning, developing and managing mountain biking activities throughout CRD regional parks. These guidelines do not provide a plan for where, how and when mountain biking opportunities should occur in regional parks, nor do they make any commitments.

Principles

The following principles guide the application of the guidelines:

- The CRD acknowledges that opportunities for sustainable and safe mountain biking will be provided within the regional park system.
- CRD Regional Parks will continue to provide mountain biking opportunities that allow for quality experiences for a range of ages and abilities.
- CRD Regional Parks allows for mountain biking as a self-propelled, including pedal assist, outdoor recreation activity on designated trails.
- The CRD recognizes that mountain biking is an activity that cannot be supported in all regional parks.
- As per the CRD's commitments to First Nations' reconciliation within the regional park system, mountain biking decisions will honour First Nation relationships with the land and water and help ensure protection of important cultural values.
- The CRD recognizes that engagement with the mountain biking community is key to success.
- CRD Regional Parks will continue working with mountain bikers to better understand the range of desired mountain biking experiences in regional parks (i.e., supply, discipline, and difficulty level).
- CRD Regional Parks will plan for and manage for recreational activities in a way that prevents or minimizes the potential for conflicts and safety risks.
- CRD Regional Parks will close and remediate mountain biking trails that are considered unsafe, unauthorized, redundant or have an unacceptable level of impact to park values.
- CRD Regional Parks will ensure that building and maintaining mountain biking infrastructure is compatible with sustainable service delivery.
- Proposed mountain biking events will have to be applied for through the park permitting process.
- CRD Regional Parks will commit to ongoing staff training on construction/development and design of mountain biking facilities to stay current, increase expertise and collaborate with the mountain biking community.

Disciplines

Context

Mountain biking is an umbrella term that is used to refer to a variety of more specific mountain biking disciplines. Each of these disciplines seek out different terrain, trail design characteristics, technical trail features and supporting infrastructure. With the exception of adaptive mountain biking, most mountain bike disciplines seek single-track, purpose-built and mountain bike optimized trails. In general, these single-track trails can be designed to provide a "flow" experience and/or a "technical" experience.

Though mountain bike disciplines continue to evolve, the most typical mountain biking disciplines referenced today include:

• Cross country (as well as gravel riding & cyclocross which use cross-country trails): involving off-roading through a variety of terrain. Trails incorporate long climbs and flowing descents, and sometimes will incorporate technical trail features like rock gardens.

- All mountain: this discipline entails overcoming extreme natural obstacles and is more of a technical ride and less flowy than cross-country trails. These trails have more of a focus on downhill sections of the trail with a number of technical trail features.
- Downhill: trails are designed to take riders down rough and steep hills that incorporates technical trail features along the descent. This discipline is focused on one direction riding using gravity to propel a rider down the hill and other means of transportation such as vehicle or lift to bring the rider back to the top.
- Adaptive Mountain Biking: for riders who require a certain type of bike and trail to be ridden. These bikes can vary from trike bikes to hand bikes and wheelchair bikes. Properly designed and constructed adaptive mountain biking trails are required to accommodate the specifications of these bikes.

Guidance

Regional Parks will focus on the development of cross country and all mountain disciplines and will further research best practices for creating opportunities for Adaptive Mountain Biking in regional parks.

Trail Designations

Context

A trail is a type of infrastructure that is purposefully designed, constructed, and used to facilitate one or more recreational activities. Trail designations influence how people experience the trail and determine if it is intended for one or multiple user groups. There are a number of factors determining how a trail will be designated, including the park management zone, recreational setting, ecological and cultural heritage considerations, range of recreational users, potential for user conflicts, visitation levels, and maintenance requirements among others.

The most common trail designations are:

Multi-use Trails

Multi-use trails or shared-use trails allow for two or more distinct recreation activities to access and share a trail. The characteristics of a multi-use trail are:

- Accommodates a range of recreational activities.
- Creates opportunities to develop mutual respect and build awareness among different recreational activities and users.
- Takes advantage of limited space when there are many different activities and allow access to unique destinations for all users.
- Limits ecosystem impacts by concentrating recreational impact on a single trail.

Single-use Trails

Single-use trails allow for one recreation activity to access and use a trail. The characteristics of single-use trails are:

- Helps alleviate crowding on the trails.
- Helps avoid trailhead crowding by separating access points for specific recreation activities.
- Targets the desired experience of the specific recreation group.
- Allows specific recreational users to travel at their desired speed without worry of affecting others.
- Provide skill areas that allow specific recreational activities to focus on and improve their abilities.

Activity Optimized Trails

Activity optimized trails allow for two or more recreational activities to access and share the trail but are designed to optimize the experience of only one recreational activity. The advantages of activity optimized trails are:

- Combine many of the benefits of multi-use and single-use trails.
- Can utilize optimized features that enhance the experience for a specific recreational activity.

Guidance

Trail designations can greatly influence the user experience. Trails that have been optimized for mountain biking may look and feel quite different from those that are designed for multiple activities. The trail designation needs to consider what activities will be using the trail, the mountain biking discipline the trail is being designed for as well as the direction of travel of a rider. The trail designation must also consider if it lies within a regional parks management zone (Appendix 3) or special use area (Appendix 4), such as a mountain biking area, as these speak to the acceptable trail density as well as influence the experiences the trail can offer.

Trail Difficulty Rating

Context

A trail difficulty rating system enables visitors to understand the nature of the trail(s) before beginning their ride and allows them to plan their ride for the experience that they are seeking.

Guidance

When trails will be designated for mountain biking opportunities, the CRD will apply the trail difficulty rating included in Appendix 5. Only mountain bike single-use and activity optimized trails will be rated.

Technical Trail Features

Context

Technical trail features (TTFs) are obstacles or design elements on a mountain biking trail that improve trail flow or add difficulty in order to challenge the skill of trail riders. TTFs are an important part of mountain biking trails and are meant to enhance the mountain biking experience. Typically, a mountain biker has the option to ride or bypass TTFs. Work constructed solely for the purpose of enhancing trail safety or access (e.g., a bridge crossing a stream) or to maintain ecological integrity or cultural values are not considered TTFs.

Below are three categories of TTFs with examples of features under each:

Natural	Enhanced	Constructed
Drop	Rock garden	Wooden berm
Rock face / slab	Dirt berm	Bridge (used for play)
Rock roll	Switch berm	Wall ride
Exposure	Small rollers	Skinny
Roots	Log ride	Jumps that are human built
Natural rock garden	Table top	Gap jump
	Step up/down	Pump track
	Jump using existing natural features	

Figure 2: Based on information from IMBA.

Guidance

For CRD Regional Parks, the focus will be to incorporate natural trail features along with enhanced trail features. TTFs should be developed using natural materials as they are more durable and blend into the surrounding landscape. The use of constructed TTFs should be kept to a minimum and will mostly be considered for the use in technical training areas. CRD staff will review proposed features in order to determine their acceptability based on risk, sustainability, difficulty rating as well as any other factors that go into the trail development process. Professional engineers may have to design the more technical features.

Risk Management

Context

Mountain biking carries a certain amount of risk that most riders come to expect. They feel the associated potential hazards contributes to the enjoyment of the activity (i.e., uneven ground; steep slopes; cliffs).

It is important to recognize the potential safety hazards associated with mountain biking in order to minimize/mitigate the impact of this outdoor recreation activity on the riders and other park visitors. Risk management focuses on identifying, assessing, mitigating, communicating and documenting risks to illustrate reasonable action has been taken to minimize the negative consequences.

As trails are developed, appropriate mitigation measures will be developed to lower the risk to all regional park users. Some of the key risks related to mountain biking in regional parks are:

- Absent, inadequate or misleading signage trails will be clearly identified, evaluated, rated and marked. Trails need to be identified as recreational infrastructure and users assume all risk when using the trails.
- Unauthorized trails and structures/features developed by users, expanding and changing trails and trail networks, creating unsafe paths for other users all these changes create safety concerns as they are not identified in the formal trail network. These changes do not adhere to site emergency plans, and

- are not regularly inspected or maintained. Regional Parks will close and remediate unauthorized trail construction or trail modification.
- Other considerations such as rider safety and trail design must be considered during the trail planning process.

Guidance

Mitigation measures that are used to reduce risk are:

- Applying trail difficulty ratings to inform users of potential hazards associated with mountain biking use.
- Minimizing constructed TTFs, especially wood features, and following approved regional parks standards or sound engineering design. This minimizes the level of maintenance involved with upkeep and potential liability associated with substandard structures.
- Developing properly designed trails that include design standards for specific uses, with associated operational, monitoring and maintenance activity. Have ongoing monitoring and maintenance documented by staff or the license agreement holder who will provide such documents at specified intervals to the CRD. Extremely hazardous conditions should be reported immediately (i.e., dangerous trees, fallen trees, unstable terrain, etc.) to the CRD.
- Conducting independent evaluations at specified intervals (approximately every 5 years) to formally assess the maintenance, evaluate the difficulty levels for each trail and recommend changes/modifications where appropriate. Review by an Engineer where required or an IMBA certified trail builder is necessary to ensure the work/maintenance/design comply with CRD standards.
- Including all mountain biking areas in the park emergency plan for that location. Key features to identify are: risks, emergency response organizations, responsibilities and coordination between agencies, and maps of the area with key access points and key infrastructure among others.
- All special use events on CRD land require a permit with the CRD and the appropriate insurance requirements identified. Accompanying permit applications should include a site safety plan, identify attendee conduct, parking requirements, emergency planning, crowd control, etc.

Quality Experience

Context

A mountain bike experience relies on a number of elements, including the mountain biking discipline, the level of difficulty of the trail and the recreational setting in which it takes place.

The recreational setting is important to consider in relation to experience. Is the setting backcountry or urban, what topography is present, what is the dominant ecosystem type and are there desirable vistas? These factors contribute to the overall type of recreational setting available in any given location and in turn what kind of experience those settings will provide for mountain bikers.

Mountain bikers are typically looking for experiences that test their endurance, develop their skills and abilities, and provide the element of risk while enjoying nature and reducing stress. The social experiences of mountain biking can range from seeking solitude and independence to being with family and friends. A quality mountain biking trail relies on factors such as play, technical challenge, skills progression and trail rhythm. These experiences can vary from rider to rider or day to day depending on the objectives the rider is looking for. Below is a list of mountain biking objectives to be considered and discussed when defining what type of experience is being provided on an existing mountain biking trail or when planning for future trail development.

Mountain Biking Objectives	Description
Nature	Connection to nature. This can be anything from being among a few trees in the middle of an
	urban area to remote wilderness. Nature is an important factor to many riders.
Escape	Something that takes a person away from their daily routine and allows them to get lost in
	the experience of riding. It often means getting away from the urban environment, but can
	be escaping to purpose built trails.
Solitude	Getting away from the urban environment to be active but alone in the quiet of the outdoors.
Challenge	Seeking to improve technical ability, to solve a problem and reach a sense of accomplishment.
Risk	Exposure to danger, harm, or loss and the intentional interaction with uncertainty. The
	perception of risk creates a thrill for many trail users. It can be a positive or negative part of
	the trail experience depending on expectation and risk tolerance.
Play/Playfulness	Engaging in the activity purely for enjoyment, bringing a childlike wonder to the pursuit with
	no destination. This often means seeking features to enhance/alter the experience rather than
	simply riding from point to point. Play/playfulness is a very important factor that distinguishes
	mountain bikers from many other trail users.
Exercise	Health and fitness are part of the sport of mountain biking. For some this is a primary goal,
	for others it is a result of other factors and objectives. Exercise can also be an obstacle.
Efficiency	Efficiency is about getting to a destination or accomplishing a task with the least amount of
	time or effort expended. Road climbs are very efficient, as are trails that ascend directly to a
	destination. Efficiency sometimes means compromising sustainability and fun/play.
Education	Sometimes learning is the objective, such as the case with interpretive trails for nature, culture,
	or historical topics.

Figure 3: List of mountain biking objectives to be considered and discussed³

Guidance

The mountain biking objectives establish a common language that should be used in describing/discussing all the factors that go into a mountain biking experience. These objectives should be used when looking at new trails and trail networks, along with evaluating the existing offer. These objectives can vary along

³ Adapted from https://www.blm.gov/sites/blm.gov/files/Guidelines-for-a-Quality-Trail-Experience-2017.pdf

a spectrum and can change from rider to rider; engaging with the local mountain biking community, when possible, will create a better understanding of the desired objective for each trail.

Assessment Criteria

Context

An Assessment Checklist (Appendix 6) has been developed to help guide the careful consideration of mountain biking trails/infrastructure in regional parks. As the guidelines are intended to help inform other decision-making processes, such as park management plans, this checklist is a means to promote systematic and consistent approaches to determining the scale, location, objective and density of mountain biking trails and related infrastructure within the regional parks system. The checklist is not exhaustive and other factors may be considered during planning processes.

Planning and Land Acquisition

Mountain biking will be permitted within specific regional parks as directed through the park management planning process. Specifically, in developing a park management plan, or interim management guidelines, opportunities for mountain biking will be considered when compatible with the objectives and vision of the park.

Through the development of park management plans or interim management guidelines, park zoning is determined. Park zoning helps specify, where appropriate, the types of mountain biking experiences, trail configurations and related infrastructure that are deemed permissible. Park management planning processes undergo extensive First Nations, stakeholder and public consultation. A zoning matrix table (Figure 4) provides a framework for assessing the compatibility of mountain biking in each park zone type and is to be used to support the management planning process.

		Park Management Zones				
		Environmental Protection	Cultural Heritage Protection	Regional Wilderness	Natural Environment	Outdoor Recreation
9	Cross Country					
Discipline	All Mountain					
isci	Adaptive Mountain Biking					
	Technical Training Area					
논	Dense Network					
two	Dispersed Network					
ail Netwo	Stand Alone Trail					
Trail Network Density	Long Distance Regional Connector Trails					

Compatible Use	Uses that are considered to be consistent with the intent of the park management zone under normal trail design and visitor management practices
May Be Permitted	Uses that may be compatible with the intent of the park management zone under certain circumstances and under special conditions and controls where necessary
Not Permitted	Uses that are not compatible with the intent of the park management zone

Figure 4: Mountain biking zoning matrix table.

The Mountain Bike Guidelines: Advice and guidance to CRD Regional Parks report developed by the Mountain Biking Advisory Committee identified gaps in the mountain biking offer in both the greater region and in CRD regional parks specifically. Along with this guidance and an internal gap analysis, the CRD will work to address the gaps through future land acquisition and other planning initiatives. It is important to note that future land acquisition is determined through the land acquisition strategy and the land acquisition criteria as approved by the CRD Board and that any proposed acquisition must fit within this larger strategy.

Conservation Values

One of the missions of CRD Regional Parks is to "establish and expand a diverse and connected system of regional parks that protect the region's biodiversity, varied ecosystems and landscapes" (Regional Parks Strategic Plan 2012-2021, p. 9)⁴. In order to align the mountain biking offer with this mission, the CRD's Impact Assessment Process will be used to ensure that trails are sited away from sensitive habitats and areas of potential conflict with wildlife (i.e., riparian corridors, known wildlife corridors, den sites, etc.). The assessment will be conducted by a qualified professional prior to the approval or development of mountain biking infrastructure and events. To minimize environmental fragmentation, existing linear disturbances such as power lines and logging roads will be assessed for mountain biking. If utilized, these linear disturbances will be improved to offer quality mountain biking experience or serve the purpose of

⁴ https://www.crd.bc.ca/docs/default-source/crd-document-library/plans-reports/parks-recreation/regional-parks-strategic-plan-2012-21.pdf?sfvrsn=b19788c9_2

connectivity as a multi-use trail or as key emergency access routes. Due to conservation values and species at risk, mountain biking may not be supported in some parks or park zones.

Recreational Values

Another key mission of Regional Parks is to "provide a range of compatible and accessible non-motorized outdoor visitor experiences and activities, for people of all ages and abilities, throughout the regional parks and trails system that foster enjoyment of and appreciation and respect for the region's natural environment" (Regional Parks Strategic Plan 2012-2021, p. 9). In order to align the mountain biking offer with this mission, the quality of recreational use will be assessed through visitor use surveys, resident surveys and engagement with the mountain biking community.

Using the assessment checklist will be key to ensure that the mountain biking objectives and desired mountain biking experience are considered and to determine if there is a demonstrated gap to be filled or a priority to be addressed.

Cultural Heritage Values

It is the mission of Regional Parks to "integrate the interests of First Nations in park management" (Regional Parks Strategic Plan 2012-2021, p. 10). The CRD follows cultural heritage policies such as First Nations engagement during planning processes and archaeological assessments, to better protect cultural heritage values in regional parks.

In order to align the mountain biking offer with this mission, the CRD's Impact Assessment Process will be used to ensure that trails are sited away from areas of cultural importance (i.e., sacred sites, middens, etc.). The assessment will be conducted by a qualified professional prior to the approval or development of mountain biking infrastructure and events as required. To minimize impacts to cultural resources, CRD will be working with local First Nations, where possible, to better understand the cultural values on the landscape and ensure that recreational uses are compatible. Due to cultural heritage values, mountain biking may not be supported in some parks or park zones.

Trail Sustainability

A sustainable trail is an authorized trail that allows visitors to have a quality experience while creating the least amount of adverse impacts to the environment and cultural heritage values, minimizes visitor conflicts, maximizes safety and requires only routine maintenance.

Any proposed trail/trail networks should also be considering if there is adequate supporting infrastructure such as parking, washrooms, etc. If there is a need for supporting infrastructure, the land base should be assessed to ensure that there is appropriate space available to develop this infrastructure.

By only developing trails which have been assessed using the CRD's Impact Assessment Process, trails will aim to be properly situated to ensure greater sustainability over time. Trails will be monitored through

staff observations, trail counts, park steward observations, and feedback from park users to help assess their ongoing sustainability.

Trails need to be continually assessed though the lens of sustainable service delivery to ensure the cost of maintaining mountain biking trails, at specific standards, are weighted against maintenance and service delivery costs.

Guidance

CRD Regional Parks should use the assessment criteria to support management planning, land acquisition evaluation for recreational values, new mountain biking trail development and the evaluation of existing mountain biking trails. The assessment checklist is to be used along with the criteria to support decision making. The assessment checklist can be used as a whole or to address specific questions or concerns in the decision-making process.

Further Considerations to Support Decision Making

The following considerations influence the decision-making process and align with the guiding principles of the mountain biking guidelines.

The mountain biking guidelines are designed to support decision making, documents and processes developed by Regional Parks. The mountain biking guidelines will be nested within the broader outcomes of the latest Regional Parks Strategic Plan and Board priorities.

The mountain biking offer in regional parks needs to align with Board priorities, strategic priorities and commitments as well as meet sustainable service delivery and CRD bylaws (see Appendix 1). While Regional Parks recognizes the importance of mountain biking as one of the recreational opportunities offered in regional parks, it also needs to balance the demands of other recreational users, parks values, and previous commitments.

The financial cost of building and/or enhancing mountain biking trails and supporting infrastructure can represent a limitation. Budgeting for those activities needs to be planned ahead and included in the appropriate budget cycle accordingly. The service delivery criteria will help CRD place the planning for, and implementing of, mountain biking trails and supporting infrastructure within the larger context of sustainable service delivery.

As mountain biking is an evolving discipline, so are the decision-making tools developed by CRD Regional Parks. Trails standards are currently being developed by Regional Parks and will be used to assess all trails, including mountain biking trails. All trails will be assessed and maintained following the latest standards adopted by CRD Regional Parks.

All special use events on CRD land require a permit, along with appropriate insurance requirements. The permit application requires a site safety plan which may include projected attendee numbers, parking

requirements, safety measures, emergency planning, crowd control, repair/replacement of any damaged infrastructure, etc.

The guidelines are forward-looking and will be applied during the park and trail management planning processes undertaken after this document's approval.

Monitoring

Specific performance indicators, monitoring, and reporting requirements should be described in the individual park management plans or other planning documents that are supported by these guidelines.

The guidelines are developed to address current issues and challenges while recognizing that mountain biking is ever evolving. As such, these will be reviewed for effectiveness every 5 years by CRD Regional Parks. Staff will revise the guidelines as needed to ensure they are relevant and cohesive with other CRD documents and that they are keeping up with emerging trends in the region and with the evolution of mountain biking disciplines. Engagement for reviewing the guidelines will be undertaken only if major changes will be considered for these guidelines.

Appendix 1: Relationship to other Documents

Regional Growth Strategy

The Regional Growth Strategy is a framework, developed by municipalities and the regional district in partnership, for identifying social, economic and environmental objectives. The vision of the Regional Growth Strategy is that in 2038, Capital Regional District residents enjoy a healthy and rewarding quality of life within a region that is economically vital, where communities are livable and where the environment and natural resources are stewarded with care.

CRD Regional Parks Strategic Plan

The CRD Regional Parks Strategic Plan 2012-2021 sets out the vision and strategic direction of regional parks and establishes a park classification system. It guides the development of policy documents to align them with the purpose of regional parks. The strategic plan indicates that the purpose of regional parks is to protect the natural environment and provide a range of compatible outdoor visitor opportunities and experiences that connect people with nature. These guidelines were developed to reflect the Regional Parks Strategic Plan 2012-2021 and will be reviewed periodically to ensure consistency.

Park Management Plans

Parks management plans are, or will be, developed for each park in the regional parks system and include policies and direction to guide visitor experiences, environmental conservation, cultural heritage protection, and park facilities.

Impact Assessment Process

The Regional Parks impact assessment process assesses an action's potential impact on the environment and social, cultural and/or recreational values so that appropriate decisions can be made. Actions can range from minor to extensive/major in terms of the potential impact on regional parks values.

CRD Corporate Plan

The CRD Corporate Plan identifies services and strategies to deliver on the CRD's vision. The Corporate Plan captures the CRD's service mandates, Board priorities, and corporate priorities.

Protection and Conservation of Heritage Sites Policy

This policy is used to guide staff when undertaking land altering works on the appropriate steps to ensure the protection of cultural heritage. The policy uses the *Heritage Conservation Act* as a baseline and has additional measures in place to guard against accidental damage to First Nations' heritage sites.

Land Acquisition Strategy

The Land Acquisition Strategy (LAS) provides the Regional Parks Committee and the Board with a roadmap for acquiring land for regional parks and trails. The LAS defines the principles that guide land acquisition, the process for acquiring land, and sets the acquisition priorities.

Regional Parks Sign Standards

Consistent sign standards present an immediate and recognizable CRD brand throughout the regional parks system. They are a significant way visitors experience parks and convey everything from directional, regulatory and safety information to educational, conservation and interpretive information.

CRD Parks Regulation Bylaw No. 1, 2018

Regional Parks Regulation Bylaw No. 1, 2018 regulates the use of regional parks and trails. Schedule 18 to the Capital Regional District No. 1857 provides the ticketing authority for the Regional Parks Regulation Bylaw.

Sustainable Service Delivery

The Sustainable Service Delivery report provides the Regional Parks Committee and the Board with an overview of the services provided through regional parks, the status of built infrastructure needed to support service delivery, and the capacity for Regional Parks to fund infrastructure renewal needs. The report is an important step for achieving financial sustainability.

Appendix 2: Map of Mountain Biking Offer in the Capital Region

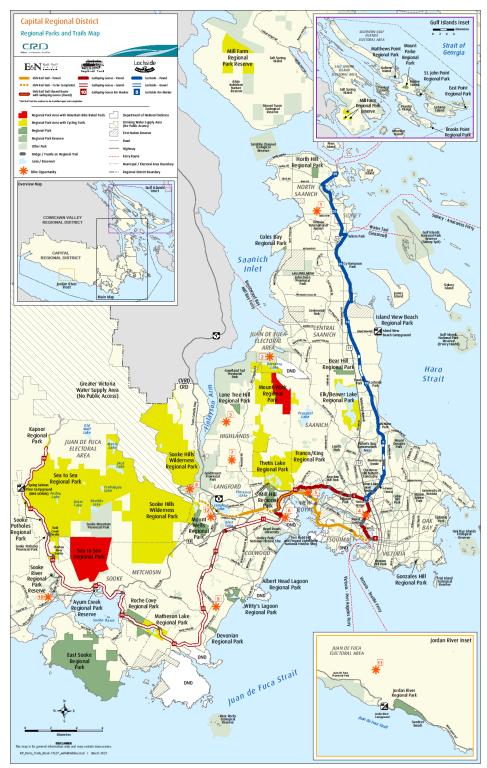


Figure 5: Map offers a region wide scan of the mountain biking offer in 2021.

Map ID	Municipality/ Electoral Area	Name	Description & Notes
1	North Saanich	Free Ride Park	Recently developed North Saanich park for riders of all ages and abilities
2	Central Saanich	Gowlland Tod Provincial Park	Multi-use trails from all three trailheads at the park
3	Highlands	Twinflower Park	Bike jump trail
4	Victoria	Cecelia Ravine Bike Park	Bike skills park
5	View Royal	View Royal Park Bike Pump Track	Paved, continuous circuit track with rollers, berms and jumps
6	Colwood	Greater Victoria BMX Track	BMX bike park
7	Langford	Highlands Valley Loop	Family-friendly loop for intermediate riders. 5 km distance, 1 m or more width
7	Langford	Skirt Mountain Lookout Trail	Family-friendly loop for intermediate riders. 5 km distance, 1 m or more width. Sections of loose gravel & steep ascents/descents
7	Langford	Canada Cup Trail	Used for hosting Canada Cup XC Race. 1.5 km, intermediate, single track. Steep ascents/descents, natural surface trail
7	Langford	Flow Trail	Directional descent, machine groomed trail starting near the north side of the Langford Recreation Centre. 1.3 km distance, intermediate difficulty with 1.5-2 m wide trails
7	Langford	"The Chainsaw" Downhill Trail	"Black Diamond Advanced Level", 688 m downhill only rocky, technical terrain
8	Langford	Goldstream Provincial Park Pump Track & Skills Trails	240 m of beginner and intermediate skills trails with small obstacles. Helmets mandatory, eye protection, gloves and pads recommended
9	Metchosin	Bike Jump Park	Bike jump park
10	Sooke	Sooke Bike Park	Pump track and circular hard-dirt surface with hills and jumps. Designed to entertain and challenge all levels of riders
11	Juan de Fuca	Tansky Recreation Riding Area	Recreational dirt bike and mountain bike recreation area
12	Langford	Cyclocross	*Not yet open* 3 km distance, 3 m width, with obstacles on track (April 2021)
12	Langford	Dirt Jump	*Not yet open* Intermediate and expert lines (April 2021)
12	Langford	Pump Track	*Not yet open* Graduated paved tracks (April 2021)
12	Langford	Singletrack	*Not yet open* Mountain bike trails for all ages and abilities (April 2021)

Figure 6: Index of Mountain Biking Offer Outside of CRD Regional Parks in the Greater Capital Region.

Appendix 3: Regional Parks Management Zone Guidelines

MANAGEMENT ZONES	OBJECTIVES	ENVIRONMENTAL VALUES	VISITOR EXPERIENCE AND ACTIVITIES	TYPICAL INFRASTRUCTURE
Environmental Protection Zone	To protect ecologically significant areas within regional parks through long-term science-based land stewardship	 Areas with rare or endangered species and ecosystems needing the highest degree of ecological protection In some areas, visitor access may be restricted 	 Nature study Environmental interpretation Visitor experience is centered on appreciation of natural features 	• Low-impact nature trails and other infrastructure that enhance appreciation of the natural feature(s)
Cultural Heritage Protection Zone	To protect culturally significant areas and features through a long-term cultural resource management strategy	Ecological features associated with culturally significant sites may be protected as part of the culturally significant features of the park or trail (e.g., heritage orchards)	 Cultural appreciation and interpretation Historical appreciation Visitor experience is one of appreciating and understanding the cultural context of the feature 	Low-impact nature trails and other infrastructure that enhance appreciation of the cultural feature(s)
Regional Wilderness Zone	To keep large natural systems functioning and provide a regional wilderness experience for park visitors	 Contiguous land areas large enough to protect the natural values Areas with outstanding natural features that create a memorable visitor experience Ecosystems are functioning in a sustainable fashion 	 Activities dispersed over a wide area Some backcountry areas could be available for hiking, cycling, and horseback riding Visitor experience is one of being in a wilderness setting Backcountry camping may be permitted 	 Long-distance hiking, equestrian and cycling trails Trails to viewpoints
Natural Environment Zone	 To provide easily-accessible natural areas within the parks To provide areas within the parks that can be used for more active recreational pursuits 	 Areas where outdoor activities take place in conjunction with protection of natural features Less remote than wilderness 	 Activities less dispersed than in wilderness zone, & more accessible to visitors Horseback riding, cycling, hiking, shoreline activities Visitor experience is one of participating in outdoor activities in a natural setting 	 Hiking, walking, equestrian, cycling trails Viewpoints Pathways Picnic areas Open fields

MANAGEMENT ZONES	OBJECTIVES	ENVIRONMENTAL VALUES	VISITOR EXPERIENCE AND ACTIVITIES	TYPICAL INFRASTRUCTURE
		Can act as a buffer between wilderness and recreation zones		
Outdoor Recreation Zone	To provide areas within a regional park that can accommodate concentrated recreation use	 Outstanding recreation features Natural values may be compromised to allow higher level of activity 	 Activities more concentrated (e.g., beach activities, swimming, boating, fishing, picnicking, multi-use trails, group picnic areas Visitor experience includes active participation in outdoor recreation activities 	 Change rooms Concessions Boat launch sites Beaches Group picnic shelters Nature houses
Park Services Zone	To provide areas within a park needed to support park services	 Natural values secondary to park service needs Considerable landscape modification allowed 	Visitor-oriented and park operation services	 Parking lots Storage areas Washroom buildings Park operations buildings

Appendix 4: Special Use Areas

CRD Regional Parks has some geographically defined areas that may have a set of specific rules, regulations, or agreements in place. These special use areas are still subject to the CRD Regulation Bylaw.

Mountain Bike Area

A sanctioned mountain bike area includes official mountain bike trails with trail difficulty ratings and warnings about risk and liability. The area may also include a technical training area and/or other features that support the activity of mountain biking.

Campgrounds

The regional park system includes three vehicle accessible campgrounds. Each of these campgrounds existed at the time of park acquisition and have been continued to provide an affordable recreational activity for park visitors. The campgrounds are managed to promote visitor convenience, safety, and enjoyment.

Other Areas to Be Determined

Regional Parks may from time to time designate other types of special use areas according to need and management focus. These areas will be identified through strategic planning or policy documents, park management planning processes, legal agreements, land acquisitions, or other means.

Appendix 5: Trail Difficulty Rating System

	Easiest	Easy	More Difficult	Most Difficult	Expert •
General Description	Fairly flat, suitable for all users	Gentle climbs with easily avoidable obstacles	Challenging riding with steep slopes and/or TTFs; trails may be narrow with poor traction; requires riding experience	A mixture of long loose trail surfaces; numerous TTFs and sharp corners; requires considerable experience; can be physically demanding	Exceptional bike control skills and balance essential to clear many challenging TTFs; expert riders only
Surface	Hardened or paved	Firm and stable	Mostly stable, some loose	Considerable variation	Considerable variation and unpredictable
Average Trail Grade	<5%	≤8%	≤10%	≤15%	20%
Maximum Trail Grade	10%	15%	≥15%	≥25%	≥30%
Technical Trail Feature (TTF) *All TTF's must contain a ride around or roll down *Multi-Pitch TTF's only approved on an individual basis *All jumps to have a safe landing zone	None	•Small roots and logs •Embedded rocks (avoidable)	•Small rock rolls •Small jumps •Medium sized logs •Some sections may exceed criteria	 Max. Length of 2m Max. Slope of 45deg. Large rock rolls Large logs Table top Large jumps (Max. Ht. 0.6m) Steep descents with sharp transitions 	 Max. Length of 3m Max. Slope of 60deg. Large jumps (Max. Ht. 1.0m) Includes and may exceeds criteria in "Most Difficult" category due to height, width and exposure to TTFs Fall zones may not meet fall zone standards

Figure 7: The trails difficulty rating system enables visitors to understand the nature of the trail(s) for single use and activity optimized trails before beginning their ride and allows them to plan their ride for the optimal experience that suits them. These standards are in line with IMBA standards.

Appendix 6: Assessment Checklist

This assessment checklist encompass a variety of the factors that should be considered in the decision-making process for upgrading existing mountain biking trails as well as considering new offerings.

Key questions to consider	Yes/No	Potential impacts or risks (positive & negative)	Are the impact(s) minor/moderate/major (if moderate or major, it is mandatory to complete the next column)	Proposed mitigation action (or further work/ investigation required)	Satisfied (can the impact be adequately addressed)
Planning and Land Acquisi	tion				
Is mountain biking in the					
park consistent with the					
park zoning and					
management planning					
objectives? (see matrix)					
Does this trail network					
complement the offering					
to the trails within the					
CRD?					
Are there existing and					
popular (consistently well					
used) mountain biking					
trails within the CRD that					
can adequately service					
the desired experience?					
Are you aware of any					
documents that restrict					
mountain biking in this					
regional park?					
(e.g. CRD policy,					
covenants, bylaws,					
management plans,					
regional plans or					
strategies)					
Does the trail/trail					
network connect to the					

Key questions to consider	Yes/No	Potential impacts or risks (positive & negative)	Are the impact(s) minor/moderate/major (if moderate or major, it is mandatory to complete the next column)	Proposed mitigation action (or further work/ investigation required)	Satisfied (can the impact be adequately addressed)
CRD regional trails system?					
Are there other					
recreational activities					
whose experiences may					
be effected in the area					
that need to be					
considered?					
Does the land base					
provide a regionally					
significant opportunity or					
address a gap for					
mountain bike rec					
experience (based on					
topographic features, soil					
type, etc.?) in the region					
Conservation Values					
Will there be any known					
impacts to critical habitat,					
species at risk, sensitive					
ecosystems, etc.?					
Will the trail location					
allow for minimizing					
ecological impacts?					
Will there be any impacts					
to water bodies,					
watercourses, wetlands,					
and natural drainage					
systems?					
Does the trail network go					
through any wildlife					
corridors?					

Key questions to consider	Yes/No	Potential impacts or risks (positive & negative)	Are the impact(s) minor/moderate/major (if moderate or major, it is mandatory to complete the next column)	Proposed mitigation action (or further work/ investigation required)	Satisfied (can the impact be adequately addressed)
Can existing linear					
disturbances be utilized in					
the development of a					
quality mountain biking					
experience or for the					
purpose of connectivity?					
Has the area been					
assessed for hazard trees?					
Recreational Values		T			
Are the mountain biking					
objectives and					
experiences being met by					
the trail/trail network?					
Has the local mountain					
biking community been					
engaged in the project?					
Has the recreational					
setting (ie quality of the					
landscape for intended					
rec use) been identified?					
Has the desired volume of					
trails for the area been					
established?					
Is the trail/trail network					
discipline and difficulty					
suitable to what has been					
identified by the					
mountain biking					
community?					
Are there existing or					
proposed technical trail					

Key questions to consider	Yes/No	Potential impacts or risks (positive & negative)	Are the impact(s) minor/moderate/major (if moderate or major, it is mandatory to complete the next column)	Proposed mitigation action (or further work/ investigation required)	Satisfied (can the impact be adequately addressed)
features or other built					
elements?					
Cultural Values					
Will there be any known					
impacts to cultural					
heritage resources?					
Will the trail location					
allow for minimizing					
cultural heritage resource					
impacts?					
Have the First Nations of					
this traditional territory					
been engaged in the					
project?					
Trail Sustainability					
Is there supporting infrastructure for the					
activity in place? (Parking,					
Washrooms, etc.)					
Is there an appropriate					
space for supporting					
infrastructure?					
Has an Impact					
Assessment been					
conducted on the site?					
Would this trail replace					
any trails that have					
greater impact on					
ecological, and/or cultural					
heritage values?					

Key questions to consider	Yes/No	Potential impacts or risks (positive & negative)	Are the impact(s) minor/moderate/major (if moderate or major, it is mandatory to complete the next column)	Proposed mitigation action (or further work/ investigation required)	Satisfied (can the impact be adequately addressed)
Are there available trail					
counts as indicators for					
current use?					
Is there a demonstrated					
interest in the trail by					
recreational users? If so,					
which activities?					
Are there any known or					
identified risks?					
Is there potential for					
visitor conflict between					
users with an introduction					
or increase in the					
proposed activity?					
Does unauthorized trail					
building occur in the area?					
Have there been any					
reports or notifications					
regarding the trail?					
Are there service delivery					
implications to building					
and maintaining the trail?					

Appendix 7: Regional Parks Classification Description

A Regional Wilderness Area is characterized by:

WILDERNESS AREA

- A large land base, generally more than 1,000 hectares;
- The conservation of ecosystems, with minimal human interference;
- Opportunities for visitors to experience, firsthand, the park's ecosystems;
- Opportunities for backcountry recreation and camping;
- The provision of few, if any, rudimentary services and facilities;
- The experience of remoteness, solitude and harmony with nature.

Maintaining wilderness areas in the region is an important part of the regional parks function. Wilderness is critical to sustain wildlife and plants that rely on sizable natural areas for their survival and to provide wilderness outdoor experiences and activities. They are places where residents can experience wilderness close to their home.

CONSERVATION AREA

A Regional Conservation Area protects regionally significant natural environments that contain sensitive and threatened ecosystems (e.g., they will have significant Garry oak, old-growth forest, salt marsh, or estuary ecosystems).

They contain rare or endangered plant and wildlife species and their supporting ecosystems. The size of a Regional Conservation Area should be sufficient to ensure that natural features can be protected and remain viable over the long-term.

Outdoor activities will be permitted in a Regional Conservation Area, provided they have minimal impact on the natural environment. In most cases, the main activity will be hiking. These areas will generally have basic facilities, such as trails, parking areas, toilets and signage.

NATURAL AREA

A Regional Natural Area protects the natural environment and provides opportunities for a range of appropriate outdoor experiences and activities. These natural areas are not as ecologically sensitive or diverse as those found in a Regional Conservation Area, although they may contain some sensitive and threatened ecosystems.

These ecosystems will be identified in the park management plan and conservation will be the priority in those areas.
Regional Natural Areas also protect key greenspaces that are important to the natural character of the region.

These areas will try to accommodate a range of appropriate outdoor experiences and activities. The exact uses will be outlined in the park management plan.

RECREATION AREA

A Regional Recreation Area provides opportunities for many outdoor experiences, activities and events, and will be managed to accommodate a relatively high number of visitors. Facilities will be developed to support this level of use. The area must lend itself to development for a variety of uses that meet recreational needs, and it must be able to withstand intensive public use.

This classification is distinct from other parks classifications in a number of ways:

- The emphasis is on outdoor experiences and activities, although protecting the natural environment will be addressed in all decisions about visitor use & facilities.
- The range of acceptable recreational activities is the widest within the regional parks & trails system.
- Recreation activities may include competitive sports.
- Recreation facilities operated by non-profit groups may be permitted.
- Opportunities and facilities may be provided for celebrations (festivals and group functions like picnics).