

Authorizing Recreational Mountain Bike Trails on Provincial Crown Land

Operational Policy

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Recreation Sites
and Trails BC

Ministry of Forests, Lands and Natural Resource
Operations

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Preface

Recreational mountain biking offers significant health benefits and contributes to local economic development. The popularity of the sport is growing rapidly, particularly riding on ‘single-track’ trails in rural forest settings.

Mountain biking enthusiasts have developed a number of trails and related facilities on Crown land throughout BC. Most of these trails were not constructed with authorization by the Province, which is a requirement under the *Forest and Range Practices Act*. In many cases, local groups take it upon themselves to maintain these trails.

There is growing interest among a significant segment of mountain biking community to create challenging riding experiences by developing trails that incorporate natural or man-made jumps, drops, elevated bridges and other ‘technical trail features’ (TTFs). Public safety and legal liability associated with these TTFs is a significant issue facing recreational mountain bike trail development and maintenance.

The Ministry of Forests, Lands and Natural Resource Operations (the Ministry) intent, as the agency responsible for public recreation on Crown land outside parks and settled areas, is to accommodate the demand for recreational mountain biking within BC’s existing network of recreational trails, and to authorize new trails, provided: (1) the trails and facilities are properly located, safe, and do not result in significant user conflicts or environmental damage, and (2) the proponent is willing to make a long-term commitment to manage the new trails.

This Operational Policy complements the ministry’s adventure tourism program of providing suitable opportunities for commercial mountain bike guiding on Crown land. Local governments also play a role in meeting demand for mountain bike riding opportunities (e.g., community mountain bike skills parks), as does the private sector (e.g., summer riding on commercial ski hills).

The Ministry does not have the capacity to locate, maintain and manage all the mountain bike trails that have been built on Crown land. Accordingly, the main strategy for accommodating recreational mountain bike trail building activity on Crown land is to enter into partnership agreements with mountain bike clubs and other local organizations that allow them to use, maintain and develop trails on certain Crown lands. The agreements will contain terms that enable the Ministry to achieve policy objectives regarding public safety, user conflict avoidance, and environmental stewardship. Unless these policy objectives can be achieved, the Ministry will not authorize trail development and maintenance on Crown land, and trails and facilities known to have been constructed without authorization will be removed.

1. Application

- (a) This document describes the Ministry's policy and procedures for authorizing non-commercial, recreational mountain bike trail construction, rehabilitation, maintenance and use on Crown land, except for Crown land that is a provincial park or protected area.

Notes:

1. *Commercial* mountain bike guiding activities on Crown land (i.e., profit-oriented, fee-for-service operations) are managed by Regional Operations under the ministry's Adventure Tourism policy – see [Adventure Tourism](#)
2. Mountain bike activities within provincial parks and protected areas are managed by the Ministry of Environment (BC Parks), under that ministry's policy and procedures.

2. References

The following references provide context and more detailed information regarding recreational mountain biking on Crown land.

- (a) *Forest and Range Practices Act* (SBC 2002), Chapter 69 – sections 56, 57, 58, and 118. <http://www.for.gov.bc.ca/code/>
- (b) Forest Recreation Regulation (BC Reg. 16/2004). See http://www.bclaws.ca/EPLibraries/bclaws_new/document/ID/freeside/16_2004.
- (c) Government Actions Regulation (BC Reg. 17/2004). See http://www.bclaws.ca/EPLibraries/bclaws_new/document/ID/freeside/582_2004.
- (d) Whistler Trail Standards: Environmental and Technical Trail Features, Edition 1. See http://www.mbta.ca/assets/pdfs/trail_standards_first_edition.pdf
- (e) Trail Solutions: IMBA's Guide to Building Sweet Singletrack. See <http://www.imba.com/catalog/book-trail-solutions>; and Managing Mountain Biking: IMBA's Guide to Providing Great Riding <http://www.imba.com/catalog/book-mmb>.
- (f) Best Management Practices for Recreational Activities on Grasslands in the Thompson and Okanagan Basins. See http://www.env.gov.bc.ca/wld/documents/bmp/grasslands_th_ok_bmp.pdf
- (g) RSTBC Recreation Manual, Trail Section. See <http://www.sitesandtrailsbc.ca/documents/manual/chapter10.pdf>

3. Definitions

- (a) *Authorization to construct, rehabilitate or maintain a recreation trail* – Authorization granted pursuant to Section 57 of the Forest and Range Practices Act.
- (b) *Established Recreation Trail* – A recreation trail that has been established by the minister or the minister’s delegate under section 56 of the *Forest and Range Practices Act*. The main purpose of establishing recreation trails under section 56 is to enforce rules concerning the use of recreation trails and ensure the trails are recognized and accommodated during forest development planning and operations.
- (c) *IMBA Guidelines* – The International Mountain Biking Association Guidelines for trail building, as documented in the IMBA publication, “*Trail Solutions: IMBA’s Guide to Building Sweet Single Track*” – see <http://www.imba.com/catalog/book-trail-solutions>.
- (d) *Mountain Bike Trail Construction* – Recreational mountain bike trail building activities that involve:
- ground disturbance (i.e., grubbing or excavating soils or rocks along a linear route to establish a visible, long-lasting tread way);
 - clearing or cutting vegetation (i.e., significant, continuous uprooting of shrubs or understory plants along a linear route, or cutting standing trees); or
 - construction of structures, such as water bars, bridges, TTFs and other structures, of a long-term or permanent nature.

The following is *not* considered to be trail construction and Recreation Facilities and Trails authorization (FRPA S57) is not required:

- Basic travel through/across Crown land, whether on a one-time basis or repetitive use of the same route;
 - Route-finding or marking using ribbons, cairns or other directional indicators;
 - Minor, piecemeal or incidental clearing of brush or downed trees on or off established trails;
 - Emergency repairs to a trail to prevent imminent damage to the environment or the trail; and
 - Emergency construction or maintenance of a trail when that is the only reasonable way of minimizing risk to personal safety.
- (e) *Mountain Bike Trail Rehabilitation and Maintenance* – Recreational mountain bike trail upkeep activities to enable/facilitate safe, enjoyable and impact-free mountain bike trail riding, such as grading and filling holes/ruts, armouring against erosion, improving drainage, removing hazardous roots or stones, trimming encroaching vegetation, and replacing deteriorated structures such as handrails, steps or bridging.

- (f) *District Recreation Officer* – The Ministry of Forests, Lands and Natural Resource Operations, District Recreation Officer.
- (g) *Technical Trail Features (TTFs)* – An obstacle on a mountain bike trail designed to add a degree of difficulty to a trail in order to challenge the skill of mountain bike trail users. Technical trail features can be either natural (e.g., rock face) or man-made (e.g., jump ramp). For the purposes of this policy, works constructed solely for the purpose of enhancing trail safety or access (e.g., a bridge across a stream or gully), or to protect the environment (e.g., an elevated pathway over a wetland) will not be considered technical trail features.
- (h) *Trail Partnership Agreement* – The form of authorization issued to eligible parties by MFLNRO to enable recreation mountain bike trail construction, rehabilitation and maintenance on Crown land. Trail agreements are issued pursuant to section 118 of the *Forest and Range Practices Act* and may contain terms and conditions that are appropriate to individual situations for enabling MFLNRO to achieve public safety, and conflict and impact management objectives.
- (i) *Whistler Trail Standards* – The standards for mountain bike trail signage, fall zones, inspection and maintenance, and TTF design and construction that are specified in the most recent version of the publication developed by the Resort Municipality of Whistler titled, “*Whistler Trail Standards: Environment and Technical Trail Features*.” See http://www.mbta.ca/assets/pdfs/trail_standards_first_edition.pdf.

4. Abbreviations

FRPA	<i>Forest and Range Practices Act</i>
IMBA	International Mountain Biking Association
MFLNRO	Ministry of Forests, Lands and Natural Resource Operations
RSTBC	Recreation Sites and Trails BC
TTF	Technical Trail Feature

5. Policy Goals

- (a) Recognize recreational mountain bike trail construction, maintenance and rehabilitation as legitimate activities on Crown land, provided they are authorized and sustainable in the sense that they occur in suitable locations and do not result in unacceptable safety hazards, user conflicts, or negative environmental impacts.
- (b) Provide appropriate recreational mountain bike opportunities on Crown land as a means of promoting healthy lifestyles and supporting local economic development.
- (c) Provide recreational mountain bike opportunities on Crown land that accommodate rider demand for various types of mountain bike trails, facilities and experiences, recognize user demand for new and varied types of riding experiences will continue to evolve over time.
- (d) Promote efficient Crown land use for mountain bike trail development by encouraging new trail authorizations to locate on/around existing, established recreation trail networks and infrastructure.

- (e) Manage safety hazards and risks associated with recreational mountain bike activity on Crown land, and associated legal liability for the Crown and other stakeholders.
- (f) Minimize potential conflicts on Crown land between recreational mountain bike riders and: (1) other recreational users, (2) other approved resource users, and (3) private property owners.
- (g) Minimize potential impacts of recreational mountain bike activities on environmental and other sensitive values.
- (h) Foster cooperative partnerships with local mountain bike clubs and other interests as a means of meeting public demand for mountain bike trail infrastructure and to address the issue of limited MFLNRO resources to develop, maintain and manage mountain bike trails in all locations where rider demand exists.
- (i) Recognize a role for other partners/participants in responding to demand for mountain bike riding experiences, including local governments and the private sector.

6. Recreational Mountain Bike Riding on Crown Land

- (a) Recreational mountain bike *riding* on Crown land (as distinct from mountain bike trail construction, rehabilitation and maintenance) is a permitted activity unless restricted or prohibited by a government order issued pursuant to section 58 of FRPA or section 20(3) of the Forest Recreation Regulation. This includes mountain bike riding on established recreation trails.
- (b) Orders that restrict or prohibit recreation activities on Crown land, including mountain bike riding, will normally result from a local planning process that has been undertaken to address user conflict and impact issues.
- (c) Orders that restrict or prohibit recreational activities, including mountain bike riding, on Crown land will be issued according to the provisions of Part 2 of the Forest Recreation Regulation or the Operational Policy for Section 58 Orders for Managing Recreation Use on Crown Lands. Orders will generally be published in a local newspaper, on the RSTBC website or posted in the area to which the order applies.
- (d) Persons that use established recreation trails must abide by the rules identified in Part 4 of the Forest Recreation Regulation to prevent user and resource conflicts and impacts.
See http://www.bclaws.ca/EPLibraries/bclaws_new/document/ID/freeside/16_2004.
Users that contravene these rules may be served notice by the Recreation Officer to vacate the recreational trail, and for certain contraventions, the offence provisions of the Forest Recreation Regulation may apply (i.e., ticket and fine).

7. Trail Construction, Rehabilitation and Maintenance

- (a) Recreational mountain bike trail construction, rehabilitation or maintenance on Crown land is not permitted unless authorized by the MFLNRO District Recreation Officer.
- (b) Applications to construct, rehabilitate or maintain trails on Crown land for recreational mountain bike purposes should be submitted to the appropriate [FrontCounterBC](#) office. Front Counter BC staff will guide proponents through the authorization process. Applications should contain the information described in Part 10 of this policy.
- (c) Authorization decisions will be made by the District Recreation Officer on the basis of various information sources, including some or all of the following:
 - information submitted by the proponent in the application package;
 - land status reports;
 - relevant sections of land/resource management plans, including recreation management plans or strategies, if available;
 - referral comments;
 - site investigations;
 - consultation with stakeholders and the public; and
 - First Nations consultation

8. Applicant Eligibility

- (a) Legally established groups and organizations are eligible to submit proposals for recreation trail construction, rehabilitation or maintenance, including:
 - Non-profit organizations established under the *Society Act* (e.g., mountain bike club or association);
 - Local government organizations;
 - Local economic development organizations;
 - First Nations organizations; and
 - Appropriate corporate organizations, as determined by the Recreation Officer (e.g., forest licensee, ski hill operator).
- (b) Individuals (or groups of individuals) are eligible to submit proposals only for short-term, 'one-off' trail maintenance or rehabilitation projects.

9. Type and Term of Approval

- (a) Where approved by the District Recreation Officer, mountain bike trail construction, rehabilitation and maintenance is authorized in one of two ways:
 - 1) By issuance of an Authorization to construct, rehabilitate or maintain a trail pursuant to Section 57 of the Forests and Range Practices Act; or
 - 2) By issuance of a Trail Partnership Agreement that explicitly authorizes construction, maintenance or rehabilitation, on an established recreation trail, in association with a schedule and/or approved operating or management plans.
- (b) An authorization pursuant to Section 57 of FRPA is granted to a specified party and will include conditions including a commitment by the applicant to enter into a Trail Partnership Agreement upon completion of the trail construction and subsequent establishment of the trail pursuant to Section 56 of FRPA.
- (c) Trail Agreements may be issued for terms of up to 10 years, at the discretion of the District Recreation Officer. The duration of Trail Agreements will be commensurate with the nature and scope of trail activities being contemplated. Trail Agreements that effect long-term trail management arrangements between MFLNRO and a partner organization will normally be issued for 10-year terms; Trail Agreements that authorize short-term, small-scale trail works will normally be issued for one year or less.
- (c) Trail Agreements may be renewed where agreed upon by both parties.
- (d) Trail Agreement documents will be individually customized to contain terms and conditions that are appropriate to the nature and scale of the trail construction, rehabilitation and maintenance activities being approved – see Part 12, Special Requirements.

10. Content of Applications

- (a) Application for authorization to construct, rehabilitate or maintain a trail should be submitted to Front Counter BC using the ministry's application form available at: <http://www.frontcounterbc.gov.bc.ca/apps/app139.html>
- (b) Applications for straightforward, short-term trail works require inclusion of the following basic information:
 - Name, address and contact information of the applicant organization (or individuals);
 - Location of the proposed works, including a map showing the area of the proposed works, and names of existing trails, as appropriate;
 - General description of the proposed trail construction, rehabilitation or maintenance activities that will be undertaken; and
 - Timeframes when the work would occur.

- (c) Applications for multi-year Trail Partnership Agreements, where an ongoing trail management role by the applicant is envisioned, should include the above information as well as:
- Demonstration of the capability, capacity and commitment of the organization to provide trail management and maintenance services over the longer-term;
 - An indication of other recreational users and resource users of the trail area under application, and measures proposed for preventing or minimizing user and resource conflicts;
 - Measures proposed for ensuring trails will be safe and durable;
 - Measures that will be employed to ensure trail work is environmentally sound; and
 - If trail user fees are being contemplated to offset trail management costs, a rationale for the proposed fee level in relation to estimated trail construction, maintenance and rehabilitation costs.

11. Approval Process

The process for dealing with applications under this policy will depend on whether the area under proposal is already part of the ministry's system of established recreation trails, or the proposal is for new trails that are not established according to the Act. Wherever possible, MFLNRO will encourage mountain bike use on the ministry's existing network of established recreation trails to prevent a proliferation of uncoordinated and unplanned trail development on Crown land.

11.1 Proposals Involving Established Recreation Trails

- (a) Subject to 11.1(c), proposals for mountain bike *trail maintenance or rehabilitation* on established recreation trails may be approved provided that public safety, user conflicts, and environmental issues can be successfully managed.
- (b) Subject to 11.1(c), proposals to expand/diversify an existing established trail by *constructing new mountain bike trails* that inter-connect with the existing trails will be approved, provided that:
- (i) Public safety, user conflicts, and environmental issues can be successfully managed; and
 - (ii) The District Recreation Officer is of the opinion that the ministry has the resource capacity to adequately manage the expanded trail system. If RSTBC management of the expanded trail system would not be possible within existing resource levels, the proposal will be entertained only if the proponent agrees to take on a long-term trail management role and the proponent can demonstrate the capacity to take on such a role.

- (c) Proposals to **construct TTFs at existing established recreation trails** will only be considered if the proponent agrees to enter into a long-term Trail Partnership Agreement.
- (d) In reviewing and adjudicating proposals involving existing established recreation trails, the District Recreation Officer will consider the various measures identified in Appendix 1 for addressing safety, user conflicts, and environmental impact issues.

11.2 Proposals for New Mountain Bike Trails

- (a) Proposals to develop new mountain bike trails on Crown land that are *not* part of or integrated with an existing established recreational trail system will be accepted for review only if:
 - (i) An approved, integrated land-use plan exists which recommends the area for mountain bike trail development/use; or
 - (i) The proponent is a local government, or has the written support of the local government; or
 - (iii) The proponent is representative of a multi-user, broad, community based trail organization and has support of the local trail community; and
 - (iii) The proponent is willing to take on a long-term trail management role and can demonstrate the capacity to take on such a role.

This applies to mountain bike trails that have been built on Crown land without prior authorization.

- (b) Where applications are accepted for review, the District Recreation Officer will assess the suitability of the proposal on its merits. This will involve reference to information from: a land status check; referral to other interest groups; review of existing land-use plans, as appropriate; compliance with First Nations consultation requirements; and reference to the considerations and impact mitigation strategies identified in Appendix 1.
- (c) If approved, the District Recreation Officer will authorize construction of the new trail under authority of Section 57 of the Forest and Range Practices Act. Upon completion of construction the District Recreation Officer will formally establish the new trail, pursuant to section 56 of FRPA, as part of the RSTBC inventory of recreation trails.
- (d) If not approved, the application will be disallowed, and the proponent and the local government will be notified of the decision. If an application that is disallowed involves trails that had been built without prior authorization, the District Recreation Officer may order removal of the illegal trail facilities.
- (e) If new mountain bike trail construction is approved, RSTBC will negotiate the terms of a Trail Partnership Agreement with the proponent. The trail agreement will include appropriate provisions for addressing safety, conflict and impact issues (e.g., see Appendix 1), and any special requirements identified in Part 12 of this policy.

12. Special Requirements

- (a) Issuance of a trail agreement does not extend a right of exclusive control, use or possession of the authorized trails. All recreation mountain bike trails authorized under this policy will continue to be multi-use recreational trails that are open to all types of recreation, unless otherwise restricted or prohibited.
- (b) Where TTFs ARE NOT proposed:
- These authorizations are subject to the requirement for the agreement holders to follow the ministry's and IMBA's trail building guidelines and any other requirements included in Trail Partnership Agreement.
- (c) Where TTFs ARE proposed, agreement holders will be required to meet the following provisions aimed at minimizing public safety and liability risks:
- Follow the IMBA Guidelines and the Whistler Trail Standards when planning, constructing, rehabilitating and maintaining trails. *Note: consistent with Whistler Trail Standards, Expert Unlimited trails will not be authorized, however there may be some of these elements on a trail based on conditions specified by the Ministry.*
 - Follow the Ministry's procedures for managing and maintaining mountain bike trails as specified in a Trail Partnership Agreement including initial and annual inspections of trails and TTF's as prescribed.
 - Appoint a trail safety coordinator with specific responsibility to oversee and coordinate trail safety on behalf of the agreement holder.
 - Repair or eliminate known safety hazards.
 - Report annually in writing to the District Recreation Officer on trail and TTF inspection activities and results, and any maintenance activities undertaken.
- (d) Trail Agreements will contain an operating plan schedule that describes, in appropriate detail, the trail construction, rehabilitation or maintenance work that the agreement holder is authorized to conduct.
- In the case of simple, one-off, short-term trail works proposals, the operating plan should be commensurately simple (e.g., sketch map and/or a few sentences describing the approved works.)
 - In the case of multi-year Trail Partnership Agreements, the agreement holder will be required to annually submit a proposed operating plan for approval by the District Recreation Officer before the trail work may commence. Annual operating plans should contain a description of the location (map required at appropriate scale – e.g., 1:20 000), and the nature and timing of the proposed trail works. Operating plans should also identify measures that will be implemented for ensuring trail safety, preventing/minimizing conflicts with other trail and resource users, and preventing/minimizing environmental impacts.

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Unless specifically required by the District Recreation Officer, agreement holders are *not* required to submit detailed 'engineering type' drawings or sketches of proposed trails, facilities or TTFs. In reviewing and approving operating plans, the District Recreation Officer may consider and apply the factors and strategies identified in Appendix 1 for addressing concerns about safety hazards, user conflicts, and environmental impacts.

- (e) MFLNRO acknowledges the need for trail agreement holders to acquire funds for undertaking sustainable trail management. However, the District Recreation Officer will inform proponents of the occupiers' liability implications that are potentially associated with receiving a payment or other consideration from trail users. If MFLNRO approves the collection of user fees, they must be used only for constructing, rehabilitating or maintaining established recreation trails. Agreement holders that collect fees must record and report annually the amount of fee income received in the preceding year. District Recreation Officers will assist multi-year permit holders, to the extent possible, with obtaining operating funds through other innovative means, such as obtaining grants, sponsorships or other forms of donation. District Recreation Officers will ensure that provincial policy is observed in the event that a corporate sponsor wishes to place corporate logos or promotional material on trail signage on Crown land.

13. Authorization Decision Review

- (a) If an applicant is dissatisfied with an MFLNRO decision on an Authorization to Construct, Rehabilitate or Maintain a trail or a Recreation Trail Partnership Agreement application, a review of the application may be requested. The general process is for the applicant to contact the District Recreation Officer to first try to address the issue informally at the local level.
- (b) If that approach is unsuccessful, the formal FRPA procedure for administrative review and appeal of decisions may apply, as set out in the Act.

14. Monitoring and Enforcing Trail Agreements

- (a) District Recreation Officers will, within available levels of resource capacity, monitor and inspect authorized trails and assess compliance with Trail Agreement terms and conditions, including the requirement to comply with the IMBA Guidelines and the Whistler Trail Standards. The District Recreation Officer may retain independent technical expertise in mountain bike trail and TTF development to assess / audit compliance with the guidelines and standards.
- (b) If public safety, user or resource conflicts, environmental impact issues, or agreement compliance deficiencies are identified, the District Recreation Officer will provide the agreement holder with verbal and written notice of the problem and a reasonable amount of time for the problem to be corrected. The District Recreation Officer may independently take action to correct an urgent public safety problem (e.g., close a trail section; repair or remove a structure).

- (c) Where disputes arise between MFLNRO and an agreement holder over compliance questions, the first level of dispute resolution will be at the district level. If disputes cannot be addressed locally, they may be referred to the Recreation Sites and Trails Region Manager or Branch Director for resolution, or an independent mediator may be appointed in efforts to achieve agreement. Ultimately, however, MFLNRO has the legal authority to vary or cancel trail agreements to address public safety, trail or resource user conflicts, or environmental impact issues.

15. Where Trail Agreements Are Not Possible

- (a) Where MFLNRO becomes aware of the existence of unauthorized mountain bike trails and there is *not* a local organization with the interest or capacity to assume an ongoing trail management role, the District Recreation Officer will assess the trails from a public interest perspective. If the trails:
- Are in an appropriate location;
 - Are popular with local mountain bike riders and/or other recreational users;
 - Do not contain TTFs;
 - Do not otherwise pose public safety, user/resource conflicts, or environmental impact concerns; and
 - Can be managed by RSTBC within existing district budget and staff levels...

...the District Recreation Officer will establish the trails under section 56 of FRPA and the trails will become part of the Province's official network of established recreation trails.

- (b) If the criteria in Part 15(a) above cannot be met, the District Recreation Officer will, in collaboration with C&E Branch take appropriate action, subject to the availability of resources, to address concerns. This action may include dismantling TTFs, environmental rehabilitation efforts, or posting an order prohibiting mountain bike use.

16. Recreation Planning

- (a) Where trail user or resource conflict issues emerge on established recreation trails, District Recreation Officers may initiate a recreation trail planning process/strategy to work with local interests and identify solutions to issues (e.g., voluntary agreements among users on ways to meet users' interests and minimize trail use conflicts).
- (b) District Recreation Officers will participate, to the extent possible, in inter-agency integrated land/resource planning initiatives to ensure that mountain biking trail Opportunities are considered in the planning process, and identify areas with Mountain bike trail potential/suitability.

Appendix 1. Mountain Bike Trail Hazard, Conflict and Impact Reduction Strategies

This appendix describes strategies for mitigating safety/ user conflicts, and impact issues that are potentially associated with mountain bike trail development and use. Depending on the specifics of individual trail situations, these may be adopted as provisions in trail agreements, proposed as voluntary measures, or put into action by MFLNRO as part of general implementation of the MFLNRO recreation sites and trails program.

A. REDUCING SAFETY HAZARDS

When processing applications and implementing agreements for mountain bike trail construction, rehabilitation and maintenance, District Recreation Officers will consider the following factors that can influence public safety risks:

- Whether the trail system involves TTFs, either man-made or natural;
- Whether the trails, facilities and features are developed and managed according to guidelines/standards;
- Steepness of trails;
- Speed at which trails are/will be ridden;
- Adequacy of visibility/sight lines along trails;
- Volume of use that the trails receive;
- Degree to which trails are accessible/proximate to settled areas, and therefore receive a high volume of use by a wide cross-section of users;
- User profile (e.g., are riders experienced/skilled, novice, knowledgeable about the area, a combination thereof);
- Potential for encounters with other trail users (e.g., hikers, equestrians, dirt bikers, etc.);
- Potential for trail instability/deterioration and environmental damage (e.g., as a result of erosion);
- Whether or not the local mountain bike club has demonstrated capacity/interest in developing and managing safe trail systems; and
- Other factors that may influence hazard/safety levels, as identified by the District Recreation Officer.

Strategies for managing public safety include:

Authorization of Appropriate Trails – Authorize trail works only if public safety (and other) issues can be sufficiently addressed.

Management Agreements – Enter into long-term trail agreements with qualified organizations to ensure appropriate trail development and upkeep.

Enforce Guidelines and Standards – Require conformance with the IMBA Guidelines and Whistler Trail Standards.

Remove Hazards – Close/dismantle all or a portion of a trail or TTF.

Mitigate a Hazard – Modify a trail or TTF to remedy a hazard situation.

Rider Education – Promote rider education/awareness of risk levels and safe riding techniques (e.g., through communication materials, safety workshops, etc.).

Rider Skills – Enhance rider skill levels/abilities (e.g., through skills camps).

Trail Builder Education – Educate trail building volunteers on skills and techniques for building safe and sustainable trails.

B. REDUCING RECREATIONAL AND RESOURCE USE CONFLICTS

Options for addressing conflict between mountain bike riders and other recreational users, and conflict with other resource users, are listed below in the general order of preference for implementation.

(Note: For more information, see the IMBA document *The Minimum Tool Rule: A Hierarchy of Options*

for *Managing Trail User Conflicts*, available at

www.imba.com/resources/bike_management/hierarchy.html).

Post Signs – For example, advising caution; reminders of trail ethics/conduct; urging cyclists to stay on routes, slow down, limit party size, consider other users; identifying any local trail ‘rules’ that may be in effect; etc.

Self-Monitoring – Encourage cyclists to patrol their own ranks in a positive way.

Education – Work with local clubs, bike shops and others to educate riders about low impact and responsible trail use, riding etiquette (codes of conduct/ethics), and consideration for other users.

Develop posters, brochures, and logos or trademarks as a reminder/symbol of considerate cycling.

Educate local mountain bike groups about proper procedures/standards for designing and building sustainable trails.

Relationship Building – Encourage positive interaction among different trail users (e.g., joint trail maintenance projects, forming trail advisory committees).

Training – Develop and implement training programs on low impact cycling to be presented by clubs, organizations, bike shops, etc.

Trail Design – On new trails or trails that can be modified, include design features that restrict speed and enhance sight distance, and build wide or pull-out sections to facilitate safe passing (see Whistler and IMBA design standards/guidelines).

Barriers to Speed Control – Subject to safety considerations, leave or install barriers in the trail to control speed (e.g., rocks, roots, bumps, tight curves, down trees, speed barriers, water bars).

Requested Walking Zone – Signs that request or require cyclists to walk their bikes in certain areas where speed, recklessness or congestion are potential problems.

One-way Only – Designate direction of travel on trails with heavy use, to avoid the potential for collisions.

Post Speed Limits – Set maximum allowable or recommended speeds for cyclists. Encourage voluntary compliance or involve local cyclists in positive enforcement. Encourage speeds that allow a cyclist to stop in less than half the distance they can see.

Patrols – Use trained volunteer groups to patrol trails and talk with cyclists to dispense advice, and monitor compliance with trail rules and codes of conduct.

Restrict Cyclists by Time – Allow for mountain bike use only at certain times of the day, or on certain days when other use may be at lower levels (e.g., odd/even days or weekend/week day schedules).

Separate Sections – Construct separate routes for mountain bike use where there is the greatest congestion (e.g., at trailheads).

Zoning – Close certain areas to mountain biking (or other recreation uses) and encourage that use on other areas. This method depends on having other areas available and useable.

Closures – Close areas to mountain bike riding (by FRPA order) and enforce the closure. This option should be a last resort after other efforts have proven ineffective.

MFLNRO may also facilitate local *management planning processes* that bring together the affected interests to cooperatively identify solutions for addressing user conflicts (and possibly other) issues. The planning processes may identify any of the above, or other, solutions for addressing conflict and impact issues.

To help prevent potential mountain bike trail conflicts with other resource users (notably forest managers), MFLNRO will, as appropriate, designate mountain bike trails under FRPA (section 56), establish objectives for these trails, and/or establish trails as ‘resource features’ under the FRPA Government Actions Regulation.

C. REDUCING IMPACTS ON ENVIRONMENTAL AND RESOURCE VALUES

To address potential issues of mountain bike trail development and use impacts on environmental and other resource values, MFLNRO will apply the following strategies, as appropriate, to individual situations and as resources permit:

Proactive Planning – Ensure that areas appropriate and suitable for mountain bike trail development/use are identified through management planning processes that consider sensitive environmental and other resource values (e.g., wetlands, unstable soils, valuable habitats, cultural/heritage values).

Environmental Design – As part of the trail authorization process, encourage mountain bike clubs to work with land managers in a process to identify/map sensitive values, and design and construct trails accordingly. Apply the IMBA guidelines and Whistler standards for environmental design (e.g., stream crossings, drainage, habitat considerations, appropriate trail widths, environmentally sensitive construction materials and best practices).

Monitoring and Impact Mitigation – Monitor environmental impacts from trail development and use (e.g., erosion, water quality, vegetation disturbance, wildlife disturbance), and mitigate problems as they arise. Mitigation may involve the need to permanently or temporarily close or relocate a trail or trail segment (e.g., during wet periods, during wildlife breeding periods), rehabilitate an area, re-design a trail segment or feature, educate riders, etc.

Rider Education – Work with local mountain bike clubs and other interests to educate riders on ways to minimize environmental impacts (e.g., stay on the trail, ‘riding’ vs. ‘sliding’), and prevent the spread of noxious weeds. Use signage as appropriate.