Trail User Group Conflicts and Risk Management

Regional governments, community groups and trail users need to collectively endorse a systematic conflict resolution and risk management model for successful implementation of a trail Master Plan. In order to accept a methodology for conflict resolution and the associated risks, stakeholders need to take ownership of the root sources of trail conflict and risk.

From a master planning and trail management perspective, trail users are grouped into two general classes; non-motorized and motorized. This generally accepted division has evolved as a result of a persistent desire by the non-motorized sector to separate itself from the motorized sector due to actual or perceived conflict arising from differing experiential values. In the absence of active management strategies and in order to achieve the experiential goals, the subordinate affected sector separates itself, either spatially or temporally from conflict by avoidance. While this displacement pressure occurs between the motorized and non-motorized groups, it also occurs between the various trail user types within the groups. As the most sensitive activity, hiking/walking is subordinate of all trail users and is generally the most adversely affected from an experiential standpoint of all user types and groups.

Trail Use Conflicts

Conflicts between trail users, particularly motorized and non-motorized recreationalists, are a major concern for trail managers. The *Trail Strategy for British Columbia* (2009) states that “Collaborative partnerships between trail user groups, governments and First Nations help ensure strong support and buy-in. And a collaborative planning process ensures that the interests and desires of motorized and non-motorized trail users are accommodated in a manner that promotes mutual respect and cooperation. In these processes it will be important to strategically integrate urban and rural settings with regard to recreation opportunities, transportation needs and protection of open space.”

Conflicts arising amongst different types of trail users are indicative of the value trail users place on the recreation experience and the trails themselves. Conflicts can be attributed to perceptions about activity style (mode of travel, level of technology), focus of trip, expectations, attitudes toward and perceptions of the environment, levels of tolerance for others and norms held by different users (Moore 1994). Conflicts can be active (i.e. trail encounters) or residual (i.e. trail degradation) and may also include real or perceived risk of safety or to the environment.

The increased demand for unconfined, relatively unstructured outdoor recreation experiences is not specific to any one user group or type of use. Hikers, bikers, ORV users, runners, equestrians, commuters and dog walkers all hold expectations for use of natural areas. Increased availability, changing social norms, and advances in equipment technology have contributed to a proliferation of trail users, thereby increasing opportunities for contact amongst different users and potential for conflict. Contact, however, is not always a pre-requisite for conflict.

Historically, the most common conflict is between non-motorized users (hikers, bikers, etc.) and motorized users on rail corridors and other high-traffic public trails. However, conflicts can and do exist between equestrians and mountain bikers, dog walkers and hikers or any other combination of users. Conflict is often asymmetrical where negative perception is held by one group towards another but the reverse is not true (Moore 1994).
Trail use conflicts can be grouped into three categories:

1. **Trail use type conflicts** (e.g. equestrian and cyclist, hiker and dirt bike, etc.) where one group perceives the other group to be incompatible with their own activity. This includes trail surface modification or degradation (environmental risk) as a result of one sector.

2. **Trail user goal conflicts** (e.g. bird watcher versus a group ATV outing) where one activity is perceived to be disruptive to another. This includes noise, fumes or fugitive dust arising from one or more sectors.

3. **Trail norm or values perception conflicts** (e.g. differently held perceptions on what activities are appropriate, as between a cyclist and an ATV rider, including same activity expectations, as between beginner and expert abilities) where one user group perceives that their activity is legitimate while another is inappropriate (safety risk). This includes trails that were not designed or built for use by a specific sector(s).

In order to voluntarily address and overcome these potential sources of conflict, groups must learn to respect other trail user types. The respect-based model is founded on the principle that use of the trail by any one sector is a privilege, not a right, and that if use of that trail adversely impacts other users, management intervention may occur. In order to avoid that outcome, the various trail user sectors have developed programs aimed at educating their constituents and the other trail users about codes of conduct and respect-based conflict avoidance.

Photo [x]: Mutual respect and effective communication can help to prevent conflict between trail users. Photo: Kelley Cook

**Respect based solutions.**

Implementing a conflict management strategy may have limited success in the absence of ‘respect’ amongst trail users. Respect in this context refers to an inter-related set of values or perceptions that will promote resolution of trail conflicts in the event they occur. These values can best be summed up as comprised of the following understandings or code of behaviours that foster reduced potential for trail conflicts:
- Trails are a shared community resource and care for them extends to all users, i.e. responsibility for trail safety, maintenance and behaviour extends to all users. Degradation of trails by a specific trail user type or group is a universal source of conflict. *If you use it, maintain it and if you wreck it, fix it.*

- Trail use is a privilege and no user type has more ‘rights’ to a trail than another user type or individual. *A multi-use trail is for all legitimate users and is shared equally.*

- A yield hierarchy exists to ensure passing or encounters are codified to enable a predictable system of response. *The most sensitive or vulnerable (e.g. the elderly or equestrians) are yielded to by others.*

- Cooperation and compromise is preferable to competition and exclusion. *Slow down, communicate with the people you meet, be prepared to stop, and pass safely.*

- The unpredictable nature of outdoor recreation implies a degree of responsibility for one’s own actions and safety while using trails. *Stay within your ability level and in control for both your own and other users’ safety.*

- *Trail conflicts between trail user types hurt the entire trail community.*

These values articulate an approach to trail use where respect for the trail and other users, as well as one’s own responsibilities, are an integral part of enjoying an outdoor recreation experience. In the absence of a proactive spirit of respect there is a risk that trail user groups become territorial, precipitating a potential cycle of events leading to displacement of other users.

As an example, consider equestrians on multi-use trails. The key issue presented by equestrian trail users is the need for education on sharing the trails with horses. The following guidelines for sharing a trail system with horses were developed by *Americans for Responsible Recreational Access* (2011):
### Equestrians on shared trails:

- Keep your horse under control when encountering other trail users. It can be helpful to work with local ORV riders to gradually expose your horse to vehicles in a safe environment.
- Watch for other trail users. If possible, guide your horse to the side of the trail if you see or hear ORV or bicycle riders approaching.
- The rules of the trail apply to staging areas as well. Ensure your horse is secured away from any adjacent roadways or passing traffic.
- Communicate with other trail users when you meet on the trail. Clearly state your needs and ask them to pull aside or slow down.
- Less experienced horses and riders should ride near the back of a group.
- If you are travelling with more than one horse, ensure it is secured and travel slowly.

### All non-equestrian trail users encountering horses on the trail:

- At the first sight of equestrian trail users, pull to the side of the trail in a manner that allows horses to pass safely.
- When stopping to let horses by, pull to the downhill side of the trail if possible.
- If communicating with the oncoming rider and horse, speak in a friendly, relaxed tone. Avoid yelling and large hand gestures, even in tense situations.
- If you encounter horses pulled off to the side of a trail, stop and wait for instructions from the rider on how to proceed.
- When pulled to the side of a trail, ask equestrians how to proceed. A rider will know his/her own horse and may either ask you to stay where you are and let him/her pass or will ride to the side of the trail and ask you to proceed slowly.
- Be alert and aware for horses or other oncoming trail users.
- Keep pets under control.

### ORV riders encountering horses on the trail:

- If possible, turn off your motor and remove your helmet to allow horses to recognize you as human.
- When passing a horse, keep your RPM and noise level as low as possible so as not to startle the horse.

### Bicyclists encountering horses on the trail:

- As soon as you are aware of approaching horses, pull to the side of the trail and allow horses to pass.

By following this set of best practices, potentially conflicting encounters between equestrians and other trail user types can be avoided. If either of the trail user types fails to act according to these best practices during an encounter, then there is risk of an active conflict occurring.
Land managers are increasingly faced with addressing user conflicts over trails within their jurisdiction. It is increasingly important to employ a coordinated, transparent, and multi-faceted approach to the issues. It may not be possible to completely eliminate conflicts, however a proactive approach to trail management issues can largely reduce the potential for conflicts, as well as establishing a framework for addressing them and when they occur.

**Action Item 1** Strike an Advisory Trails Committee with representation across trail all major user groups. Membership on the Committee should be restricted to local resident participation. The mandate of this committee is to ensure the trail network is developed and managed for the use of all sectors wherever possible.

Local trail stewardship groups and clubs should be empowered to develop and maintain trails to their own standards. A Trails Advisory Committee (ATC) can facilitate planning and approval for individual clubs to plan and carry out specific capital trail projects. A specific project should be identified and vetted through staff and the ATC prior to funding approval or section 56/57 recommendation.

Conflicts can be mitigated through trail design in most cases. Trail groups use and maintain activity specific networks of trails on Crown land. If the trails are not attractive to other types of trail-based recreationalists, they are effectively unregulated single use type trails. *Conflict occurs more often on poorly designed trails.*

Most trail conflicts occur near urban centres and other areas where access to these trail networks is shared. *Trail use is often a function of convenience or opportunity.* Conflict management strategies can range from stringent enforcement measures by the RCMP and others to voluntary compliance with management guidelines. The Conflict Management Strategy produced by the Trans Canada Trail (TCT) in their Trailbuilding Guidelines (2010) is comprised of four options that are designed to provide trail managers with a progression of measures:
1. **Identify the nature of the conflict.** This includes identifying the party causing the issue, followed by discussion with trail users and creating an initial needs profile for the affected users. In some cases, conflict management may be as simple as installing signage or undertaking a small trail construction project to redesign a problem section of trail.

2. **Engage with affected user groups.** Engagement includes identifying affected users and understanding their goals, motivations, experience expectations, and other possible needs. Forums for interaction can include joint development of educational signage, education via websites, and formation of trail advisory committees to discuss issues and opportunities.

3. **Trail Management Strategies.** The following strategies can be employed once items 1 and 2 are underway.

   **Signage** is an important component of any trail strategy and can fulfill a range of functions from direction to education. Signage can:
   - Designate which route a user group should use (e.g. expert route or beginner route)
   - Designate approved activity type(s) for a given trail (e.g. motorized/non-motorized/multi-use etc.)
   - Direct users to specific use trails (e.g. Nature Trail – Pedestrians Only)
   - Designate One Way or closed on specific days to specific users single use trails
   - Warn of restricted vision corners
   - Provide yield hierarchies
   - Alert users to preferred activity types
   - Influence behavior (e.g. Slow Down or Close Gates)
   - Influence when to ride due to environmental considerations (e.g. Closed Due To Wet Conditions)
   - Warn of upcoming congestion areas
   - General trail etiquette (e.g. how to ride downhill without creating erosion, how to pass equestrians, what to do if livestock is on a path, etc.)

   **Re-design the sections of the trail** to resolve the identified conflict areas. How a trail or trail system fits within the landscape has a significant influence on trail user experience and behavior as well as environmental impact. Trails that have been built without consideration for the range of user types, or without structural modifications as new users have begun to use a trail, are likely to encounter conflicts as trail user capacity and design limitations are exceeded. Reducing conflict entails consideration of trail designs that include the concept of sustainability. Responsible trail design considers the user groups for which the trail was constructed, and will attract certain users whilst discouraging uses that damage the trail, rendering it less enjoyable for other users and damaging to the environment. Options for responsible trail design include:
   - Providing a diversity of trail experiences to disperse trail users within a given area (i.e. a trail or trail system should provide different experiences to allow users to gravitate to preferred trail types which in turn spreads out users)
   - Design challenging trails or sections further away from staging areas and wider, easier trails or sections closer to staging areas so that different ability levels are separated
   - Plan for shared use trails instead of single use trails
Single use trails concentrate users on a single trail resulting in 
crowding
- Single use trails require more trails, therefore more environmental 
  impacts and use of resources for maintenance, signage, etc
- Single use trails may result in uneven trail maintenance or trail 
  quality resulting in friction when groups ‘poach’ or encroach

- One way trails can be an appropriate strategy if:
  - Congestion is a source of conflict
  - Sight lines are poor
  - Terrain profile would better suit one way travel to reduce downhill 
    horseback and/or cycling erosion
  - Terrain creates safety concerns when higher speed cyclists 
    encounter horseback or pedestrian users
  - Trail is a loop configuration that flows or provides users with better 
    experiences (i.e. viewscapes) in one direction

Modify the trail to resolve site specific conflicts through the introduction of traffic 
calming features or barriers to passage.
- Install trail features in problem areas to influence user behavior
  - Use fixed objects (e.g. boulders, logs, bollards) to create bottlenecks 
    or surface changes that force users to slow down, or eliminates 
    specific users (e.g. gates to restrict access to ATVs)
- Separate users on the same trail via paint line, berm, painted symbols, 
  bollards, landscaping, etc
  - Used on wider trails (>3 m) with either a gravel or paved surface
  - Segregate users based on compatible speeds (e.g. cyclist, 
    rollerbladers together)
- Provide pull-out sections on problematic areas of trail to allow different users 
  to pass safely without inconvenience (e.g. cyclists passing horseback riders)
- Maintain sight lines to provide sufficient reaction time for users (e.g. trim 
  vegetation to ensure hikers or horseback riders can see oncoming cyclists)
- Construct parallel trail segments for problematic trail sections to segregate 
  user types (e.g. re-route a steep section of trail for horseback riders due to 
  safety or erosion concerns)

4. Patrol and enforcement. Closures, patrols and enforcement should be considered 
as a last resort and imposed only when voluntary compliance cannot be achieved. 
Enforcement can be conducted by law enforcement officials, recreation officers, or 
volunteer marshals designated as official representatives of their user groups. If 
volunteers are used, they should be supported by law enforcement (adapted from 
TCT, 2010).

The TCT’s conflict management guidelines are applicable as there is value in having a consistent 
set of strategies for the entire region, and to support provincial trail management practices. The 
most important component of trail education, voluntary compliance, and respect- based conflict 
resolution framework, is a stakeholder-based arbitration entity. Creation of an Advisory Trails 
Committee to discuss trail conflicts as they arise, and to work toward local solutions, should serve 
that purpose.

Single use or restricted user type trails may be appropriate if incompatible activities result in 
intractable conflicts, displacement, excessive maintenance costs, high environmental costs, or 
safety concerns that cannot be addressed via strategies discussed above. This may warrant
development of a new trail or restricted use trail for a specific user type(s). Excluded activities should still be able to access trails in the same area or similar location.

**Risk Management**

Risk management and liability is a primary concern amongst public agencies responsible for trail management. For the purpose of this document, the discussions regarding liability apply to all trail users and include risk and potential liability relating to personal health and safety as well as risk to the environment.

While all trail use has the potential to result in injury and therefore create liability issues, it is the recent and dramatic rise of “extreme sports” such as climbing, trail running, freeride mountain biking, dirt biking and ATV use that has brought liability and risk management to the attention of public agencies and trail stakeholders (MTSA, 2008). Before the Ministry of Tourism, Sport and the Arts (MTSA) consents to authorizing a trail, by regulation the proponent must submit a proposal that demonstrates that trail construction and management will not cause, to the satisfaction of MTSA, either: (a) significant risk to public safety; (b) unacceptable damage to the environment; or (c) unacceptable conflicts with other resource values or users (MTSA, 2007).

The practice of risk management does not intend to eliminate risks, but instead to diligently identify, reduce, and manage them in order to decrease both risk to the user and potential liability to land managers or partners. The word ‘risk’ as it applies to health and safety with respect to trail management has two meanings. The first is the relationship of the trail user to perceived and real risks of traveling in an uncontrolled environment. The second and perhaps more important meaning in trails management is the risk incurred by land managers (and private land owners) of providing access to recreational trails for a variety of uses (Keen, 2006). The Province has examined this issue thoroughly and has produced a set of general recommendations (MTSA, 2008, *pers. comm. J. Hawkings, January 12, 2012*):

- Develop, adopt and implement trail standards, particularly with respect to technical trail features (TTFs) and signage.
- Evaluate implementation of the Provincial Trails Strategy.
- Encourage adoption of formal risk management programs by responsible land managers.
- Continue to assess position of land managers with respect to risk(s) associated with trail use.

**Occupier’s Liability Act**

In preparing a Trails Strategy for British Columbia (MTSA, 2007), the Province examined the Occupier’s Liability Act. The following is an interpretation of the Act as it applies to risk management of trails.

“The provincial government changed the Occupier’s Liability Act in 1998 to improve non-commercial recreational access, including recreation trails, on Crown and private land throughout BC. Prior to the change in the Act, Crown land managers and private landowners had a “duty of care” to ensure that people were “reasonably safe” while on their property. To avoid risk of liability, many landowners simply chose not to allow recreational use, such as trails, on their property.

With the 1998 changes to the Act, the duty of care and liability risk to the occupiers (land owners) was reduced. Now, the occupiers only need to avoid intentionally creating a danger or acting in reckless disregard for the safety of recreation users (e.g. knowing of a danger but taking no action). This means recreation users must accept increased responsibility for their own safety on recreation trails.
Despite the changes to the Act, the issue of liability remains very much in the forefront of concerns with user groups and tourism operators who provide public and commercial recreation services such as trails.”

Many trail uses are intrinsically linked to the perception of risk involved in the experience. While recreationalists do not intend to injure themselves, it is the challenge of overcoming the risks that makes the experience enjoyable. Eliminating all perceived risks to the user could actually prove to be counterproductive to the purpose of the trail itself. Ensuring safe trail features and infrastructure and providing local Search and Rescue with up-to-date trail information goes a long way to ensure trail users have a positive experience, even when accidents occur.

**Action Item 2** Develop a risk management strategy that focuses on eliminating unreasonable ‘hazards’ from the trail (including large ruts, deadfall and unsafe or unsound bridges) and proactively reducing the exposure of land managers, partners or private land owners to liability arising out of lawsuits.

It is important to identify the legal situation of the various land managers and then provide a framework for reducing and managing their exposure to liability. Liability associated with trails crossing private land is an important component of any trail risk management discussion. Many trails in an area may cross over private land or are located on or cross Indian Reserve lands. There are serious implications of promoting the use of trails that trespass on private or First Nations lands.

**Action Item 3** Starting with the most frequently used trails and trail systems, identify trails that trespass on private land and begin the process of systematically entering into agreements with landowners; providing landowner incentives or purchasing or otherwise acquiring lands with trespassing trails.

Trails on regional district or municipally owned land expose the governing body to the same level of risk as other public recreation facilities including playgrounds, beaches, picnic sites, and skateboard parks. As with these other sites, the land managers have the ability to mitigate risk based on both design of the facility and maintenance. These facilities will generally be built with a progression where beginner riders (mountain bike or ORV) can challenge themselves on easier trails and advance at an incremental pace to harder trails. Any facilities or features that are constructed will need to be subjected to regular inspection. The rate of inspection of bridges and other features will vary based on design, but recommendations should be provided by the contractor building the facility and the governing body should follow these recommendations very closely. All trails must be well signed with difficulty indicated to avoid situations where trail users venture into terrain that they are not physically capable of navigating. In order to meet the “duty of care” of avoiding the creation of a danger or acting in disregard for the safety of recreation users, the following two action items should be incorporated into risk management planning.

**Action Item 4** Contract experts in trail construction and design for both concept and completion of any publically funded trails, features, or facilities.

**Action Item 5** Carry out regular, periodic inspections and include a public input element to receive maintenance comments for trails, features, or facilities.

Unsanctioned trails remain problematic for land managers in BC because there is no opportunity for controlling design or construction of the trails. Most trails in BC are constructed without permits by local individuals and may or may not use best practices for design, construction, or
environmental protection. As a result, duty of care liabilities may exist without the knowledge of the land manager. These liabilities can be reduced through notifications and subsequent inspections of potentially unsafe conditions received from the public as per the above Action Item.

**Action Item 6** Lobby the Province to introduce Inherent Risk Legislation that places more responsibility on individuals taking part in guided and non-guided recreation activities rendering them unable to sue for obvious inherent risks.

6.3 Signage for Conflict and Risk Management

*Good fences make good neighbours; likewise good signage makes for good trail users.* While a good signage program does not solve all potential for conflict and risk, it is the single most effective tool available to the trail manager. Signage will help educate the different trail users and will avoid erroneous perceptions and expectations.

**Action Item 7** Adopt the provincial signage standards set out in the Signage Strategy for the Spirit of 2010 Trail for use on the regional trails

Trail use pictograms approved by the Province of British Columbia (Cascade, 2010).
Spelunking allowed
Point of interest
Viewpoint

Usage restriction pictograms.

No all terrain vehicles
No bicycles
No dogs allowed
No hiking/backpacking

No horseback riding
No hunting/shooting
No motorcycles
No mountain biking

No rock climbing
No snowshoes
No Spelunking
No trials motorcycles
No snowmobiling  No cross-country skiing

Universal Code of Conduct for non-motorized trail use