



Rails to Trails

Report Prepared by the Advanced Planning Practice Trail Group from the
University of Guelph in conjunction with the Huron and Perth Planning
Departments

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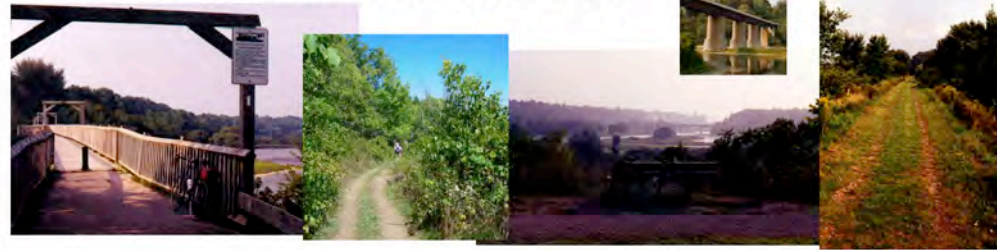


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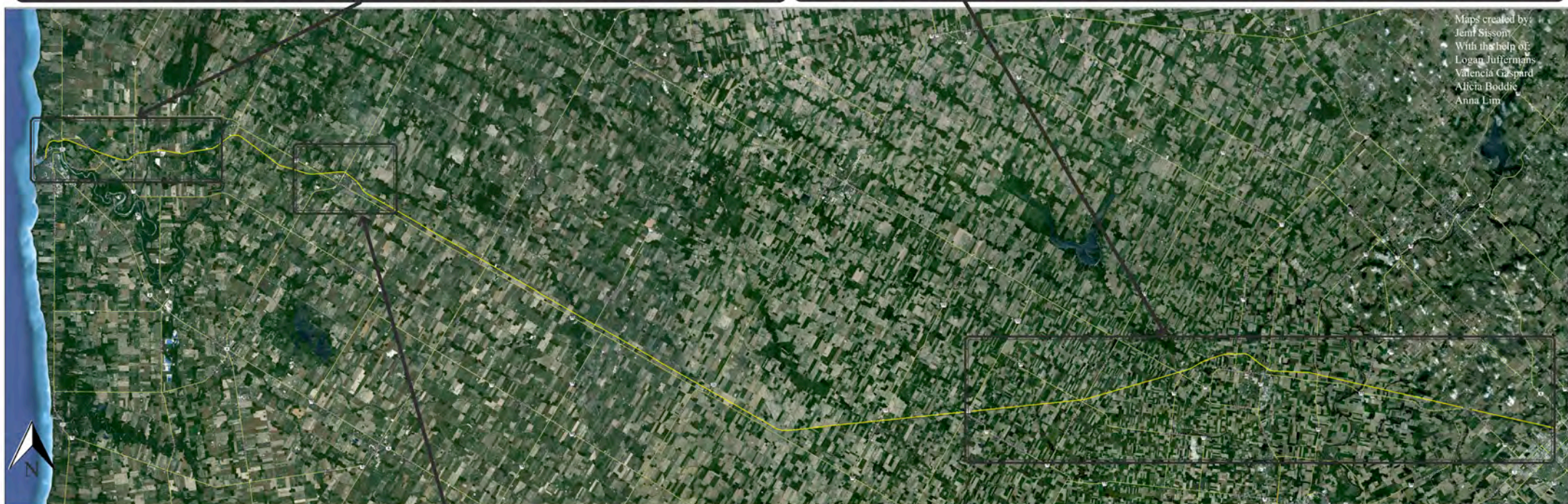
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1.0 PROPOSED TRAIL ROUTE MAPS

Goderich to Auburn Rail Trail



Kissing Bridge Trail



Blyth Brook Community Greenway Trail



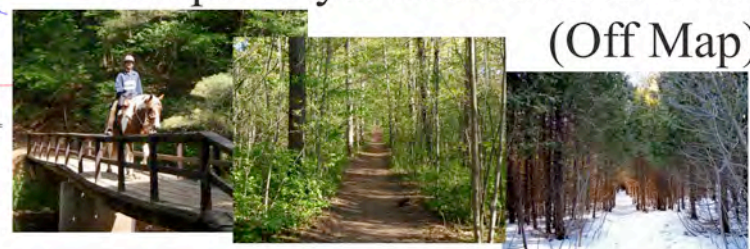
Blyth Greenway Trail



Speed River Trail



Guelph Royal Recreational Trail (Off Map)



Huron County Rail Trail



Legend

Water crossing



Bridge out



Photo 1 shows the bridge over the Maitland River in Goderich
Photo 2 shows the beginning of the cycling path, leaving the Goderich area

Photo 3 shows a couple enjoying the new Blyth Greenway Trail

Counties and Municipalities



Maps created by:
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Perth County Rail Trail



Photos 1, 2 & 5 show a few areas of interest, some maintenance will be needed in these areas
 Photo 3 shows one of several areas requiring a bridge to span a gap over a road or waterway
 Photo 4 shows a part of the path that is currently inaccessible to cyclists

Legend

Water crossing

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Bridge out

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Maps created by:
 Jean Sisson
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 Logan Auffermann
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What Communities Need to Do to Get the Trail Up and Running

- *Collaboration between the two counties can be beneficial for both areas*

Planning Work

- *Planning and scoping the project.*
- *Creating a joint committee*
- *Assessing available resources such as partner organizations, funding, volunteers and information*

Marketing Work

- *Ensuring that stakeholders and potential stakeholders are aware of trail activities and are involved in the planning process - they could be valuable sources of information and support*
- *Specifically, ensuring that abutting landowners are engaged in the process by intentionally reaching out to them*

Trail Work

- *Upgrade trail, consider trail width, accessibility, signage, fencing and trail bed materials*
- *Repair bridges as needed or re-route trail*
- *Carry out trail grading and gravel spreading*

Opportunities for Community Involvement in the Trail

- *Public ownership and involvement are keys to success - ensure public is involved*

Recommendations for Summer and Other Student Work Assignments

- *Course projects and design competitions could be an effective way to utilize up-and-coming innovation and creativity that can benefit the trail project*
- *Both Perth County and the County of Huron are situated in close proximity to several leading academic institutions -- The University of Waterloo, Wilfred Laurier University, The University of Guelph, The University of Western Ontario, Conestoga College and Fanshawe College – there could be opportunities to partner with relevant programs.*
- *Community organizations such as Scouts, 4H, school and religious groups may be interested in volunteering with the trails*

Role of the Municipality Once the Trail is created

- *Ideally, the counties should seek to establish trails and then steward the maintenance to an interested community organization*
- *Further role would include promoting the trails to the general public*

Further Recommendations

- *Clarify and collaborate between counties regarding trail goal, vision and objectives*
- *Ensure the involvement of all potential stakeholders from both counties within the trail planning work*
- *Develop educational and promotional materials to encourage broader public involvement in the planning and visioning of the trail (ex. Naming competition)*

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- *Encourage university and group volunteer work and interest*
- *Understand and embrace the current situation moving forward with small steps:*
 - *trail pamphlets,*
 - *signage,*
 - *initial grading/clearing, which builds out from highest quality sections*
- *Develop long-term goals of connectivity, accessibility and tourism potential*
- *Apply for outside funding and conduct local fundraising in order to build out to long-term goals*

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3.0 INTRODUCTION

As trade and manufacturing has changed and evolved, rail infrastructure has often been left behind. The Counties of Huron and Perth have sought to utilize their historical rail infrastructure right-of-way to create a network of trails, with the eventual goal of connecting them across counties. This report seeks to provide an overview of the potential benefits, challenges and opportunities available in the establishment of trails in the two Counties.

Each County has undertaken extensive work in planning for the potential trail network. Committee's composed of municipal staff, elected representatives, health officials, provincial specialists and private organizations are progressing towards the creation of a trail network which stretches from Goderich to Guelph. Preliminary work has drawn together the combined resources available within each county in order to move forward with the proposed recreational opportunity and new active transportation corridor. Each county is aware of the many benefits of providing recreational trails for their communities, along with the potential negative impacts that can occur such as trespass or traffic/parking congestion issues.

Moving forward each county must initiate continued planning work while progressing with the rehabilitation of the railway corridor. A variety of best practices are illustrated within this report, which build from previous experience in other trail work locations. While these recommendations may assist in informing the planning process, both Huron and Perth Counties must be considerate of the local context and what the vision for the future trail will require. As a final moving forward consideration, some recommendations for next steps within this process are provided. These recommendations are not all inclusive, however provide some additional considerations beyond existing work being undertaken.

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4.0 BENEFITS OF RECREATIONAL TRAILS:

Environmental	Economical	Social	Physical/Mental Health	Other
Protects local ecosystems by ensuring users stay on marked paths as to not interrupt natural landscape.	Relatively low cost for users.	Facilitates social interactions with friends and family members.	Presents opportunity to be physically active (assisting healthy cardiovascular, respiratory, nervous systems).	Provides outdoor educational opportunities for area schools.
Reduces automobile emissions when used as alternative transportation.	Supports local economy as it is convenient for users patronize local businesses.	Encourages intergenerational recreation and socialization.	Assists with management of mental health issues (depression, anxiety).	Potential re-use of otherwise unmaintained or abandoned land along trail route.
Provides data to researchers (biologists, ecologists) on edge effects.	Maintenance and management provide employment opportunities.	Can satisfy those seeking adventure as well as those seeking to enjoy leisure time.	Increased air quality provided by the vegetation surrounding trails.	Opportunity to see and generate interest in other trail activities.
Increased opportunity for transect observation (involve community in species sighting counts).	Attracts tourists who frequent trails.	Develops community pride and unity.	Completing trail provides user with a sense of accomplishment.	
	Opportunity for expansion.	Links geographic areas & neighbourhoods allowing people with similar interests to connect.		

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5.0 DRAWBACKS OF RECREATIONAL TRAILS:

Environmental	Disturbances	Patrol	Management	Other
Could inadvertently create undesirable habitat, e.g. invasive species habitat.	Neighbours to the trail are subject to noise and users.	Ensuring proper usage by all patrons may be challenging.	May not be accessible to all mobility restrictions. How can it be barrier free?	Can generate stakeholder group conflict.
Recreational vehicles may disrupt wildlife. Can effects be mitigated?	Vandalism and other physical damage can result as a product of higher traffic area.	Establishing open communication with users for feedback/concerns is costly.	Could the land trail be more profitable if developed?	In face of expansion widened trails can become less appealing and give 'highway' feeling.
Improper site draining can facilitate deep trenching.	Unwanted attention/gatherings to otherwise quiet neighbourhoods.	How can safety be assured on the trail?	Safety is assured through upkeep and use which are products of making the trail known. Where will marketing budget arise?	Shortcuts can result between marked trail areas.
	May become target location for unwanted activities.	Securing trail signage and labelling.	Ongoing upkeep and maintenance may be required (erosion and use can expose rock and tree roots).	
			Gauging governmental involvement.	

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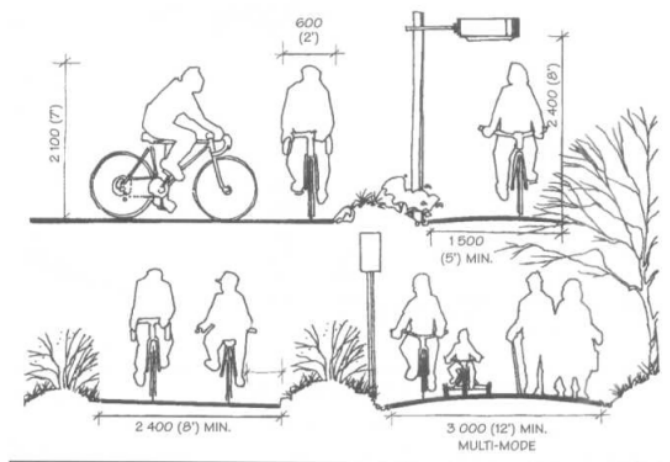
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6.0 BEST MANAGEMENT PRACTICES:

There is a breadth of knowledge on trail systems. This section of the report has amalgamated key best practices for the development and implementation of a new trail. By examining precedents from past trails, Huron and Perth can use these practices to develop a functional and innovative trail master plan. The strategies in this report have been found to be successful in other organizations and trail groups. The term “best practices” represents comprehensive mutually agreed upon practices that have been implemented in many other trails and have found wide success elsewhere.

Trail width

The minimum recommended pathway width for pedestrians and public walkways is 1.2m (~4ft). For cyclists, depending on expected traffic, a standard minimum width is 1.5m (~5ft). For mixed uses, and areas with higher traffic, 3.5m (~12ft) is the suggested minimum distance (see Figure 1). Assuming a 20m right of way for the trail corridor, and the trail on the former rail bed of 10 feet, for expected usage, 1.5m to 3.5m (5ft to 12ft) is the most suitable range of widths. In areas where heavy use is anticipated a 3.5m to 4m (12ft to 14ft) width is recommended (Dines & Harris, 1998; RTC, 2007). As the existing rail corridor has an existing width which varies anywhere from 5ft to 14ft, the minimum recommendations in these trail width best practices should be achievable in most areas.



*Figure 1: Multi-Use Trail Width
(Dines & Harris, 1998; RTC, 2007).*

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Parking/Access Areas

Parking areas should be developed where there is natural access to the trail. This could occur in the form of widening the road shoulder in areas where the trail crosses smaller roads or in creating highly visible and attractive areas to park and access the trail from towns along the route. These areas would serve the dual purpose of attracting local trail users as well as those who are navigating along the trail to the nearby amenities. Further considerations should be made for the type of vehicles using the parking facilities and if additional space for trailers or animal waste receptacles should be provided.

Trail Furnishings

Amenities along the trail could include; rest areas, seating, convenience elements, lighting, signage, fencing and washrooms. A group or several groups would be required to take care of the maintenance of these items as well as garbage/recycling collection and cleaning.

Rest Areas

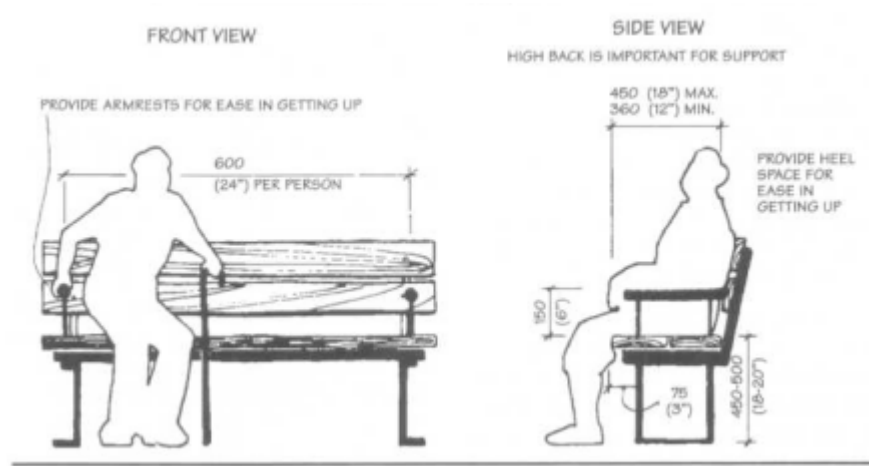
Areas off the trail for rest should occur every 100 to 150m (300-400 ft) along the trail within residential or urban areas, and every few miles in rural areas. These could be as simple as natural seating or benches offside of the trail, and should include waste receptacles within town limits.

Seating

Key principles for seating are comfort, simplicity of form and detail, ease of maintenance, durability of finish, and resistance to vandalism. Seating can be used to take advantage of scenic views, and careful placement can provide shelter from the wind or make use of sitting in the sun or shade for various trail users. Seating could be in the form of benches, ledges, seat walls or even steps, where appropriate, and should be situated several feet from the trail edge and face towards it (Dines & Harris, 1998). Some design guidelines to make benches more accessible for everyone can be seen in Figure 2.

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*Figure 2: Accessible Seating
(Dines & Harris, 1998; RTC, 2007).*

Convenience elements

In general, convenience elements should be easily recognizable, and placed to reduce clutter and facilitate easy access. Within the trail system, the elements that are recommended for convenience are; waste receptacles, drinking fountains, bike racks and information stands. These should be again focused around towns and points of interest (Dines & Harris, 1998). Businesses within communities may be enlisted to assist or provide many of these convenience elements in order to entice trail users.

Lighting

The height of light standards determines the quality of light and 'ambience'. Lighting should be functionally appropriate and properly scaled for trail users. This means the light source should be below the tree canopy, but high enough to give clearance for equestrian riders, or spaced offside of the trail. Lighting will not be appropriate along the entire trail and should be limited to populated areas due to costs, maintenance and necessity (Dines & Harris, 1998).

Signage

Outdoor information can be grouped into four categories: directional, locational, identificational and display. For the rail trail, it is likely that desired signage would include all of these categories, but with a keen focus on locational and directional signage to direct trail users. These signs should

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be placed within easy view of trail users, at approximately eye level, which falls in the range of 1.5m to 2m (4.5ft to 6ft). Signs along the trail are important to make trail users aware of history, culture, issues and opportunities along the trail. The signage system along the Huron and Perth trail should be comprehensive in nature and also ensure that the signs are visible, but do not distract from the environment. Signs should be placed along the trail so trail users know that they are continuing on a marked trail. Signs at the beginning of any trail should be very specific in the possible routes, amenities available along the trail and rules to follow. Regulatory signs allow for trail users to become aware of the appropriate uses for the trail.

Types of signage that should be included:

- Trailhead kiosks with maps and emergency contact numbers (placed in parking lots, mid way, end of trail)
- Directional and clear signs to the trail from the road – easy to see for people who are unfamiliar in the area
- Directional and clear signs on the trail to direct people
- Warning and safety signs
- What is permitted along trail (motorized vehicles, horseback riding etc.)
- Regulatory signs – trail usage
- Educational signs – information about flora and fauna, sensitive areas

Signage is a critical part of a successful trail, but it is important to remember that excessive use of signs may detract from the aesthetic experience. Before signs are put up, they should go through a committee review process in order to ensure their placement is conducive to the overall trail experience.

Fencing

Purposes of fencing can be to provide privacy, safety/security, define boundaries, control access and movement, modify environmental conditions, and to develop a trail aesthetic. For the rail trail boundary, security fencing may be necessary in a few areas to discourage deliberate trespassing. These fences should be transparent or semi-transparent to permit supervision from either side. Fencing may also be used to control circulation, and gates or portals can be designed to be inviting to direct people into a space. Environmental modification can be achieved through the use of fencing to eliminate heavy winds, noise, drifting snow and/or strong sunlight. Some considerations for if and where fences should be located along the trail will include their purpose, type, size,

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material, as well as construction and maintenance costs (Dines & Harris, 1998). Additionally, consideration should be given to private property owners who may want or be required to put up fencing and 'no trespassing' signs where their property abuts the proposed rail trail.

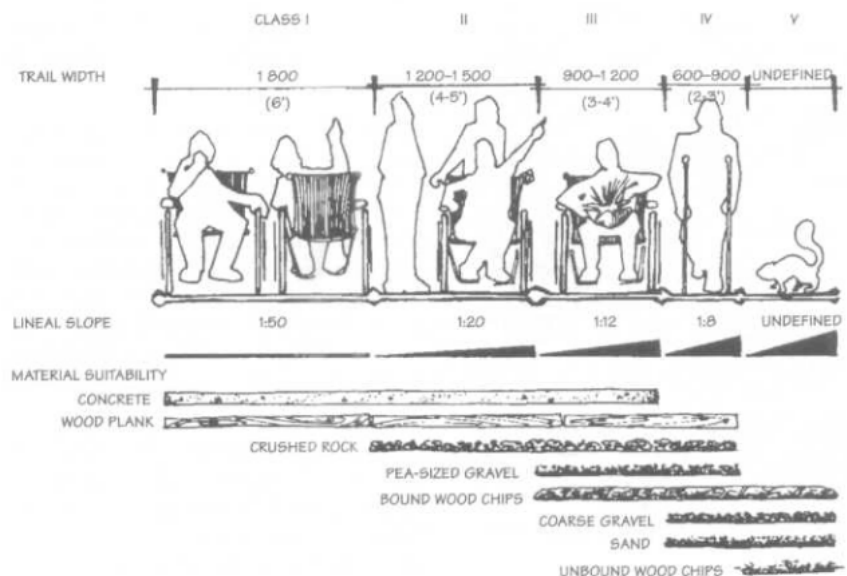
Washroom Facilities

Washrooms are not necessary along the trail, but may be included if there is a desire for them and the resources required to maintain them are available. Signage that directs trail users to washrooms within towns could be an effective alternative to building washrooms and also bring trail users into municipalities.

In all cases, trail furnishings and amenities will be concentrated around town centers and residential areas. In concentrating these efforts there is an opportunity to have the town 'buy-in' to the trail, design the rest areas, and fund the construction and maintenance of these amenities within each community. These will in turn benefit local businesses as they attract and encourage people to stop in for a while (Dines & Harris, 1998).

Accessibility

The rail trail should aim to be highly accessible with focus within towns and residential areas. Additional efforts should be made to make sections of the trail accessible for users with mobility aids and/or disabilities. Considerations for accessibility include rest stop spacing and type, width, slope, shoulder and material of trail, and any structures along the trail edge such as curbs or



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fencing. To encourage the highest level of accessibility within towns, rest stops should be located every 30m to 45m (100ft to 150ft), the trail width should be 2m (6ft) with very little slope, and the shoulder should be at least 0.3m (1ft) wide, clear of underbrush and have a definite texture change (Dines & Harris, 1998). Sections of the trail will be less accessible than the higher levels of accessibility (class I-III). This will be determined on a need/cost basis. Refer to Figure 3 for further information.

Potential Users

Types of transportation allowed on trails will vary across the path. Overall, pedestrian uses, cycling, strollers, motorized scooters (used as a mobility tool for a person with a disability), cross-country skiing, and snowshoeing will always be permitted. Other motorized activities such as ATV's and snowmobiles along with equestrian use will be permitted where it is deemed allowable by relevant authorities. Some considerations when determining which users will be able to use particular parts of the trail will be: opportunities for funding, stewardship and maintenance; what materials will be required and the related maintenance costs; and what other facilities, amenities and furnishings will be necessary. For example, for a part of the trail that will be used heavily by horses, loose or compacted dirt is typically preferred by horse riders because hard surfaces such as asphalt, concrete and coarse gravel can injure horse hooves. An alternative to compacted dirt is the placement of a separate soft 1.5m (5ft) wide tread for horses alongside the main path (Dines & Harris, 1998; RTC, 2007). Equestrian use increases the maintenance cost of the trail as well, and this should be considered when determining which uses will be encouraged along each section of the trail (Project Advisory Committee, 2011). Permitted uses will have to be determined by sections, and a cost/benefit analysis should be undertaken with all of the above considerations accounted for.

Materials

Trail bed material requirements vary depending on the expected users of the trail. As mentioned above, equestrian users would prefer a softer material, but require a higher maintenance cost. Considerations will need to be made for the type of material that is used in each section based on expected trail patrons, expected use (light to heavy), cost and maintenance. Potential materials include; concrete, asphalt, wood planks, crushed rock, pea-sized gravel, coarse gravel, sand, or a

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naturally occurring path material of dirt or grass (Dines & Harris, 1998). The existing rail corridor is comprised of varying amounts of gravel, railway material and developing soil. These materials provide a valuable foundation for any additional materials that will then be added. In many areas, aside from vegetation clearing, the existing corridor materials will be all that is required.

Creation of Ad Hoc Trails Committee

The current committees for Perth and Huron should establish an Active Transportation and Trails Advisory Committee for Perth and Huron Counties. This cross-county committee's responsibilities would be to further investigate best practices, work with both counties and the public, and to develop a thorough implementation plan for the rail trail development.

Access to Trail Information:

Trail information should be accessible from online sources, pamphlets and on the trail itself. Huron and Perth should ensure that there is a website which has information about the trail such as conditions, trail difficulty, length and amenities along sections of the route. This will ensure that trail users are prepared before they set out. This practice can also entice potential trail users if they know that there are certain amenities available, e.g length of trail parking availability.

Practices to Increase Access to Trail Information:

- Internet based, "one stop" for trail users to access maps and information
 - Create a website and link to Ontario Trail Council/Hike Ontario/Cycle Ontario
- Create a "one window" access point for trail users, property owners and organizations can find information on development and approval processes (Active2010, 2010)
- Create pamphlets for the trails at tourist stops and visitor centers
- Involve community groups – word of mouth will spread trail information
- Create clear signage to direct people to the trails

Accessibility of trails

While there are a variety of potential trail users, including those previously identified, no activities should be excluded from use or impacted by a different trail use type. Pedestrians and cyclists should feel safe when using the trail, even though there are horses and motorized vehicles such as ATV's and snowmobiles operating along the route. To ensure the safety of all users, the rules for horses and motorized vehicles should be clearly stated, and enforced by partner organizations. An additional issue to consider when designing trails is to make them as accessible as possible to

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those with limited mobility (wheelchairs, walkers etc). With an aging population, it is important to make the trail accessible to these users, as the number of elderly will continue to increase.

User Conflict on Multi-Use Trails

There is sometimes friction between non-motorized and motorized trail users for both safety and personal preference reasons. Safety becomes a big issue if there are different users who are going at different speeds along the trail. One group of users may think that their trail experience will be diminished because of the noise, trail degradation or other issues caused by another group. To minimize this, it is important to ensure clear communication and expectations between all participating groups. Furthermore, contingency plans should be created to address accidents that may occur because of the different users.

Ways to combat conflict and potential accidents: (Squamish – Lillooet Regional District and Cascade Environment, 2007):

- Good trail design and maintenance
 - Proper width for people to safely pass along the trails, depending on their trail use
 - Minimize blind corners
 - Ensure the trail is made from materials that can be well drained
- Educate all trail users on proper etiquette on the trail
- Involve the various trail user groups in decisions

Environmental Issues

With the expansion and disruption of any environment, it is important to maintain a strong advocacy for the protection of species and wildlife in the area. Knowledge of native plant and animal species should be considered before beginning any major construction. Recreational activities can have detrimental effects on wildlife due to habitat loss or changes as well as soil disturbances and disturbances from people/animals/vehicles (Grasslands Conservation Council of British Columbia and BC Ministry of Water, Land and Air Protection, 2004). Trails can often travel through environmentally sensitive areas and a well-designed trail can mitigate the impact human activity in the area might have (Active2010, 2010). Trails can be used as environmental buffers to protect these areas, and allow the public an opportunity for education while enjoying nature. Discussion with conservation authority staff regarding the trail is encouraged in the planning and development stages.

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Practices to mitigate environmental concerns:

- Minimize Soil Disturbances (compaction, muddiness, displacement, erosion)
 - Have an environmental professional examine the area to identify areas for concern
 - Put up signs throughout the trail to encourage users to minimize their impact
 - Provide a drop box on the trail with reporting forms so trail users can report problems to maintenance personnel
 - Discourage off trail travel
 - Where possible, build trails in dry cohesive soils (International Mountain Bicycling Association, 2007)
- Examine Potential Contaminants from Rails (Rails to Trails Conservancy, 2004)
 - Hire an environmental professional to conduct an environmental assessment if there is evidence of the trail corridor being contaminated
 - Examine for illegal dumping of waste
 - Look for contaminated soil and dead zones (lack of vegetation)
- Disturbance of wildlife
 - Any time trails are created and people are introduced into an area, there will be wildlife disturbances and this can degrade and fragment wildlife habitat
 - Signage of wildlife at risk should be posted
 - Make the trail only wide enough to accommodate the intended use – wider trails have a greater risk for erosion by wind or water
 - Trail users that want to feed wildlife can contribute to the food related attraction behaviour of wild life – educate trail users on this practice as it can endanger the health and well being of wildlife
- Proper disposal of waste management
 - Have garbage and recycling bins strategically placed along the trail
 - “Leave no trace behind” philosophy

Environmental degradation can be minimized when trail users abide by the regulations designed through trail management. A well-designed trail can minimize the environmental impacts as many studies have shown that poorly designed trails are the root cause of many adjacent problems (International Mountain Bicycling Association, 2007).

Risk Management, Liability and Insurance

Trail developers and planners are faced with the issue of liability insurance. This is significant for community groups because many volunteers may want to take part in the construction or maintenance of the trail, while lacking coverage in the case of an injury. Additionally, property owners who allow the trail to run through their property present concern around liability for injuries that occur on their property. Issues that landowners face include trespassing into unauthorized areas, escape or damage of livestock from damaged fences or gates and the problem

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of increased insurance premiums (Attridge, 2002). While the trail is on publicly owned land, there may be areas that will divert on to private lands when there may be a bridge out or another obstacle. This means that trail users will have to go on to private lands to go back onto the trail. To combat this, property owners should be educated by trail developers and planners on the **Occupiers Liability Act**. An occupier is defined as someone who is not only the landowner but also the person with care and control of the property, such as someone leasing it (Attridge, 2002). The Occupier Liability Act was intended to reduce the liability for landowners in specific situations.

The Occupiers Liability Act states that:

- People using a recreational trail in a rural area and paying no fee for its use – assume their own liability for their actions on it
- Landowners responsibility is to not deliberately or knowingly create a hazardous situation

The Occupiers Liability Act does not however impede lawsuits, and court cases may still occur if a trail user is injured. A report done in 2002 searched all the court cases in Canada which reference trails, occupier's liability and related issues (Attridge, 2002). They found that landowners were rarely held liable for recreational trail accidents and that courts tend to find trail users responsible for assuming the risks.

According to Hike Ontario, a trail association's risk management strategy should include (Hike Ontario, 2002):

1. Trail built and maintained to a standard
2. Monitoring of trail conditions
3. Trail repairs made promptly
4. Hazards marked, trail re-routed or closed
5. Training of hike leaders, trail workers and other volunteers
6. Waivers of liability and acceptance of risk
7. Accident and incident reports
8. Land use agreements with owners
9. Insurance

To mitigate the risk from trails, municipalities should (Hike Ontario, 2002):

- Have written agreement with landowners to give access to trails (abutting areas or when trail users have to go on private land to get back onto the trail)
- Landowners can request to be listed as "additional insured" on trail association policy
- Ensure volunteers and trail associates (eg. hike leaders) sign waiver forms acknowledging risks
- Ensure volunteers and trail associates are properly trained and qualified for activities
- Acquire Commercial General Liability Insurance

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- Commercial General Liability Insurance can provide increased coverage to the association/landowner brought by a third party against an association, officers, trip leader and or volunteer worker
- Insurance coverage protects against negligent acts resulting in third party bodily injury, property damage
- If people owning land adjacent to the trail are worried about liability, they can post signs informing the trail users that they are not allowed on the land through fencing and signage

Additional Legal Considerations

In 1989, the Ontario Court of Appeal released an important decision called *Cormack v. Township of Mara (5)* that clarified a municipality did not have a responsibility to maintain a bridge on an unopened road allowance and thus was not required to compensate a snowmobiler who was injured while travelling at high speed on the allowance.

Ontario laws describe certain classes of premises on which non-paying entrants are deemed to assume their own risk. Section 4(4) of the Occupiers Liability Act stipulates that the following types of rural lands are covered by this approach:

- Lands used for agricultural purposes that are not fenced or marked;
- Vacant or undeveloped premises;
- Forested or wilderness premise;
- Golf courses when not open for playing golf;
- Utility rights of way and corridors, excluding structures located therein;
- Unopened road allowances;
- Private roads, reasonably marked by notice as such; and
- Recreational trails reasonably marked by notice as such

Trail Maintenance

Users are safest on a trail that is properly maintained. One case study we looked at, the Avon Trail, has at least two maintenance reports filled out – one usually occurs in the Spring followed by one in the Fall. The Avon Trail has four maintenance days a year, led by the trail coordinator with the support of volunteers (Avon Trail, 2012). The creation of a new trail in Huron and Perth could recruit and rely on community groups and businesses to maintain specific sections. This “Adopt a Trail” practice would have several community groups take ownership of parts of the trail and have volunteers of the specific committee ensure that the trail is well maintained. Huron and Perth's responsibility would lay in establishing trail maintenance sections that would be given to community groups to ensure that each section is monitored regularly.

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Once the trail is in use:

- Regular inspection of the trail by a trail manager or qualified person who can identify hazardous conditions and maintenance issues (Rails to Trails Conservancy, 2002)
- Trail clearing done by trail maintenance crews
 - Avon Trail states that their weeds must be cleared to at least 1.5m (5ft) along the trail –Huron and Perth should come up with an agreed upon number among the different committees in charge of maintenance
- If there are problems – document and correct problem as soon as possible – if the problem cannot be fixed right away, provide very clear warnings to trail users or close the section of the trail until the problem is dealt with
- Records of all inspections should be maintained by community groups or municipalities

These practices can ensure that the trail is properly maintained and may serve to prevent the injury of patrons. Following these practices can also protect the managing agency from potential lawsuits. One system that can be potentially developed, is the creation of digital trail maintenance forms that trail users can easily fill out online. This will allow for trail users to let maintenance crews know the approximate location, the issue (fallen trees, branches, or washouts, etc.) and the date so that the problem area can be addressed.

Vision

After creating a committee led by Huron and Perth municipalities to bring together interested parties, the two counties should create a Trail Master Plan. This will be used to guide the development and implementation of the trail network. There should be a short, mid, and long-term vision for the trail with goals under each. This vision plan will be helpful for forecasting future concerns and budgetary needs for the trail.

Examples of Short Term Vision/goals (present – 5 years)

- Have the Rail to Trail project complete with necessary repairs and upgrades
- Establish sections of the trail and find community groups willing to maintain and manage the sections
- Connect this Rail to Trails project with other existing trails

Examples of Mid Term Vision/goals (5-15 years)

- Complete additional trail enhancements including new bridges or enhanced amenities
- Undertake an evaluation of the Rails to Trails project to see what trail usage is, and if certain trail user groups need to be targeted more than others
- Implement changes from the evaluation recommendations
- Measurement of enhanced quality of life through survey for people using the trails and in the area

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Examples of Long Term Vision/goals (15+ years)

- Economic connection between trail and local business.

7.0 NEXT STEPS

What do the communities need to do to get the trail up and running

While this report does not intend to replicate the work and knowledge already gathered, it might offer an opportunity to compile those ideas and direct action toward the future trail network of Huron and Perth counties.

An additional consideration of this report accepts that while it would be ideal for both counties to be progressing through this project at similar rates, however, the 2011 tornado and other planning circumstances in Huron County have impacted the progression of planning work. Moving forward, Huron should strive to learn from the work completed in Perth County. This will allow Huron to proceed through their trail planning work at a quick pace while still incorporating the unique opportunities and features, which are available within Huron County.

Planning Work

Immediate results and action are a desired first step for many in building a trail. However, it is imperative to realize that a great deal of planning is incredibly important in order to allow for the potential trail network to develop, flourish and be maintained in long-term perpetuity. While action regarding trail clearing and grading are clearly examples of next steps to be taken, it is pivotal that both counties move forward on the trail network together and establish linked or joint trail committees that can communicate planning and actions in unison. Both counties appear to realize that a continuous trail network is a greater recreational opportunity than any individual efforts, however connecting county staff or organizations can be difficult. Involving private partners whose interests extend beyond municipal boundaries will improve inter-county efforts. Organizations such as the Ontario Trails Council, Cycle Ontario, Maitland Trail Association, District 9 Federation of Snowmobile Clubs, Huron and Perth Federations of Agriculture may offer energy, volunteers and marketing resources which could lead to a successful trail project result.

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Marketing Work

There can be many agencies and groups involved in the development of the trail. This includes private, non-profit and public organizations that are working together from different counties. Through involving all potential stakeholders, project interest can be expanded so as to incorporate all potential social interests. Involving all partners from the planning stages and moving forward allows for traditional information sharing (word of mouth, organization participation) that will serve to benefit the project in the long run. Making the public aware of the recreational opportunities available in their county must be an ongoing project from now and in the future in order to ensure buy-in and continued interest and use of the trail network. An example of this was discussed which addressed the issue of a trail name or designation. Opening such a problem up to the broader community will provide an opportunity for marketing the potential trail through creating public interest and a connection to the eventual recreational corridor.

Municipalities along the existing historical railway corridor should initiate contact with abutting landowners early in the process in order to gauge opinion and allow participation in the trail development. It is not known how much of a role the county should or could play in this work, however, it is important that the directly impacted public be made aware of what is proposed and encouraged to discuss the proposed project. Early and frequent participation is recognized as beneficial in proceeding through projects smoothly and can offer insights into project design which might have otherwise been overlooked.

While it has been discussed in the Perth County Active Transportation and Trails Subcommittee, it is difficult to forecast use and interest until the trail is built to some scale. The question of “if you build it, they will come” may be impacted by awareness and interest from the public. Therefore it is crucial that all potential organizations that could use the trail are involved from the planning stages through to physical work on the trail.

Currently, multiple organizations are involved in the initial planning work within Perth, although it is understood that in order to expedite the process some groups are taking a lead role. The role of stakeholder organizations in Huron County is not as clearly understood and may be an opportunity for improved participation. While both counties should be commended on their initial planning

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work, improvements in stakeholder involvement and public awareness appear to be possible. Continued stakeholder involvement is recommended moving forward in order to raise awareness and market the benefits and unique possibilities available due to the existing rail right-of-way corridor.

Trail Work

A great deal of work is required before physical efforts should be expended on the trail network. However, it is recognized that at some point the project focus must shift to developing the existing railway right-of-way. A number of items will need to be addressed, and will depend upon the initial planning work completed. Depending on the developed objectives of the combined county planning groups, the trail will need to be upgraded from its existing state to suit the needs of the target user group(s). These upgrades will consist of ideas identified already within this report under best practices. These important considerations include trail width, accessibility, signage, fencing and trail bed materials needed.

One of the more important features that will need to be addressed throughout this process will remain bridge reconstruction or the safe rerouting of trail users around missing bridge connections. While these bridge connections have been identified within the Guelph to Goderich Trail map included within this report, additional culvert installations or railings may also be required in the long-term development of the trail.

A more immediate step for trail work may be the first step along the path to full trail development and consist of trail grading and gravel spreading. Certain stretches of the trail should be addressed in this manner in order to maintain the existing resource and initiate further interest such as bridge development fundraising.

As it stands, the trail network is a broken, although invaluable link across Huron and Perth counties. It offers a great opportunity for meeting public recreational, environmental and tourism objectives stated in Huron's Take Action Report, 2010. The Goderich to Guelph Trail is an exciting possibility which, due to historical needs and the considerable efforts of Huron and Perth

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municipalities, may once again serve as a link to the broader region of Ontario and improve the livelihoods of Huron and Perth residents.

Opportunities for community involvement in the trail

While building local capacity and involvement was previously addressed within this report, it should be highlighted that the success and longevity of the project requires considerable involvement and ownership (attachment and care) from the public.

Examples of community participation can be viewed in other trail efforts such as the Kissing Bridge Trail, which enlisted the assistance of:

- The Guelph Hiking Trail Club
- The Waterloo Cycling Club
- Elmira Lions Club
- Conestogo-Winterbourne Optimist Club
- Linwood Lions Club
- Golden Triangle Snowmobile Club

Community involvement will serve to reduce the time and financial outlays by any single organization and create an end product that is well used and better maintained.

Recommendations for student and youth work

There exists a recognized opportunity for exploiting resources available to the communities through engaging universities and colleges or even high schools in course projects and design competitions. Incorporating community-developed logos, signage and trail ideas into course projects, could provide polished and usable awareness and education tools, which can then be distributed throughout each county. It is recommended that any efforts undertaken regarding this project be considered and discussed with course instructors at (though not exclusive to) the following institutions:

The University of Waterloo, Wilfred Laurier University, The University of Guelph, The University of Western Ontario, Conestoga College and Fanshawe College.

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Additionally, scouting, 4H, or religious groups are an additional resource that will likely be interested in trail participation, and use. Connections developed at an early age may provide a benefit in connecting future generations to the trail project.

Trillium or other types of funding

It is recognized that Huron and Perth County staff have a great knowledge of funding applications and grant opportunity procedures. All funding opportunities should be accessed and it is this report's recommendation that a specific focus from all participating municipalities to the Ontario Trillium foundation for trail project funding should be undertaken. These requests can come from each county although they will likely require an application by a municipality below the county level or through a partnership with a non-profit stakeholder organization in order to qualify.

Additional applications to provincial and federal county representatives may be needed at a later time in the project to secure the funding necessary for bridge and large infrastructure requirements. The undeniable benefits (listed earlier in the report) and the potential for developing linkages across southwestern Ontario should provide opportunities for additional funding.

Role of municipalities once the trail is created

The initial planning and development work recognizes that municipalities and the counties along the trail length will have a role to play regarding liability and maintenance due to the required leasing agreement from the province. However, it would be in the best interests of all involved if stakeholder groups were able to take over some management of the project in order to enforce, police, clean or make minor repairs and upgrades to the trail network. Local efforts will allow for a higher quality of trail to be maintained and encourage expansion of the trail system beyond the preliminary development stages. Municipalities will be more likely to secure support, funding and political will for improvements if they can demonstrate community support. The municipal or county role will then be the continued championing of the trail project to the general public in order to maintain interest and awareness of the trails status and needs. The municipality must capture the interest of the public and promote ways in which the public can become involved.

Recommendations for next steps

1. Clarify and collaborate between counties regarding trail goal, vision and objectives

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2. Ensure the involvement of all potential stakeholders from both counties within the trail planning work
3. Develop educational and promotional materials to encourage broader public involvement in the planning and visioning of the trail (ex. Naming competition)
4. Encourage university and group volunteer work and interest
5. Understand and embrace the current situation moving forward with small steps:
 - Trail pamphlets,
 - Signage,
 - Initial grading/clearing,
 - Building trail out from existing high quality sections.
6. Develop long-term goals of connectivity, accessibility and tourism potential
7. Apply for outside funding and local fundraising in order to build out to long-term goals

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8.0 REFERENCES

- Active2010 (2010). Ontario Trail Strategy, Ministry of Health Promotion. Retrieved from http://www.mhp.gov.on.ca/en/active-living/recreation/A2010_TrailStrategy.pdf
- Avon Trails (2012). Trail Workers Guide. Retrieved from: <http://www.avontrail.ca/pdf/TrailWorkersGuide.pdf>
- Canadian Rails to Greenways Network. (1993) Legal Liability Issues for Trail and Greenway Managers: An Overview of Canadian Laws. Retrieved from <http://www.lacieg2s.ca/law/trails.htm>
- Cordell, H. K., B. Lewis and B. L. McDonald. 1995. Long-term outdoor recreation participation trends. In: Thompson, J., Gartner, B, Lime, D.W., Sames, W.M. (Eds.), Proceedings of the Fourth International Outdoor Recreation Tourism Trends Symposium and the 1995 National Recreation Resource Planning Conference, University of Minnesota, pp. 35 38.
- Dines, N.T., Harris, C.W., (1998). Time-Saver Standards for Landscape Architecture. Second Edition. McGraw-Hill Publishing Company. New York, NY. p. 340-893.
- Grasslands Conservation Council of British Columbia and BC Ministry of Water, Land and Air. Protection. (2004). Best Management Practices for Recreational Activities on Grasslands in the Thompson and Okanagan Basin. Retrieved from http://www.env.gov.bc.ca/wld/documents/bmp/grasslands_th_ok_bmp.pdf
- Government of South Australia. 2012. Recreational Trails Overview: Sustainable Recreational Trails Guidelines. Accessed at: <http://www.southaustraliantrails.com/pdf/trailmanual/chapter2sml.pdf>
- Hike Ontario (2007). Best Practices For Increasing Trail Usage by Hikers and Walkers. Retrieved from <http://www.hikeontario.com/downloads/HO-BestPractices-Web.pdf>
- Hike Ontario (2002). Risk Management Manual. Retrieved from <http://www.hikeontario.com/services/downloads/riskmgmt.pdf>
- International Mountain Bicycling Association (2007) Environmental Impacts of Mountain Biking: Science Review and Best Practices. Retrieved from <http://www.imba.com/resources/research/trail-science/environmental-impacts-mountain-biking-science-review-and-best-practices>
- Kuss, R. F. and A.R. Grafe. 1985. Effects of recreation trampling on natural area vegetation. *Journal of Leisure Research*, 17: 165–183.

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- Leung, Y. and J.L. Marion. 1996. Trail degradation as influenced by environmental factors: a state-of-the-knowledge review. *Journal of Soil Water Conservation*, 51: 130–136.
- Lynn, N. and R. D. Brown. 2003. Effects of recreational use impacts on hiking experiences in natural areas. *Landscape and Urban Planning*, 64(1-2): 77-87.
- McRobert, D. 1993. Legal Liability Issues for Trail and Greenway Managers: An Overview of Canadian Laws Ontario Round Table on Environment and Economy, *prepared for*, Canadian Rails to Greenways Network.
- Manfredo, M.J., B.L. Driver and P.J. Brown. 1983. A test of concepts inherent in experience based management of outdoor recreation areas. *Journal of Leisure Research*, 15: 263-283.
- National Trails Coalition (2010). Canadian Trails Study: A Comprehensive Analysis of Managed Trails and Trail Uses. Retrieved from http://www.ntc-canada.ca/pdf/NTC_Canadian-Trails-Study.pdf
- Project Advisory Committee, (2011). Auburn Trail/Ontario Pathways Trail Connector Feasibility Study. Retrieved from: <http://pm.b5z.net/i/u/10065743/f/trails.pdf>
- Rails to Trails Conservancy, (2007). Plan, Design, Build. Rails-to-Trails Conservancy. Retrieved from: http://www.railstotrails.org/ourwork/trailbuilding/toolbox/informationsummaries/design_for_user.html
- Rails to Trails Conservancy (2002). Rails-Trails and Liability: A primer on Trail Related Liability Issues and Risk Management Techniques. Retrieved from http://www.railstotrails.org/resources/documents/resource_docs/tgc_liability.pdf
- Rails to Trails Conservancy (2004). Understanding Environmental Contaminants: Lesson Learned and Guidance to Keep your Rail-Trail Project on Track. Retrieved from http://www.railstotrails.org/resources/documents/resource_docs/EPAReport.pdf
- Squamish – Lillooet Regional District and Cascade Environment. Sea to Sky Trail Master Plan (2007). Retrieved from http://slrd.iwebz.com/files/%7B74E34655-6B1B-42C6-8AB7B9B65D0AD606%7D070213-Master_Plan1D.pdf
- Symmonds, M.C., W.E. Hammitt and V.L. Quisenberry. 2000. Managing recreational trail environments for mountain bike user preference. *Environmental Management*, 25: 549-564.

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2.0 EXECUTIVE SUMMARY

Evolution of trade has rendered a significant portion of rail infrastructure abandoned. For many areas, transforming unused railway corridors into recreational trails has become a desirable initiative that brings potential economic, social and health benefits to a community. Both the Counties of Huron and Perth have sought to utilize their historical rail infrastructure to create a network of trails with the eventual goal of connecting the counties. This report seeks to provide an overview of the potential benefits, challenges and opportunities available in the establishment of trails in the County of Huron and Perth County.

In the first section, positive and negative effects of the proposed project are outlined. Trail systems provide environmental, economic, social, physical and psychological benefits. Many of these benefits do not require any extra planning by those creating trails, but rather are intrinsic to the trails themselves. For instance, trails present an opportunity to be physically active only by the virtue of being open. In contrast, negative challenges such as environmental issues, disturbances, patrol and management must all be carefully considered and mitigated to ensure that everyone can utilize the trails safely.

In the second section of this report, best management practices are presented. Existing literature and experiences with trails throughout Canada and the USA have created a collection of effective guidelines for trail width, parking/access areas, trail furnishings (including signs, fencing, and lighting), rest areas, accessibility, potential users, materials, committees, trail information, usage, environmental issues, maintenance, and visioning. These best practices are important for both counties to consider as their trails are being developed.

The final section of the report concludes with a set of recommendations for the Counties of Huron and Perth while moving forward with the work already completed for this project. This section records completed work, suggests greater collaboration between the counties and encourages involving the public, landowners and youth in all future trail work.