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# Implementation

The recommendations presented in this report identify strategies and projects that will help the Town achieve its trail development goals over time. While many ideas emerged from the community engagement and trail inventory and analysis, the focus has been on choosing recommendations which support the Guiding Principles.

It should be noted that this Trails Master Plan represents a long-term vision for trail development in Portugal Cove - St. Philip's. This Plan is only a first step, and the changes outlined herein will not happen overnight. Implementation will require an organized effort, dedicated champions, strategic partnerships, and further investment before the recommendations presented become a reality. This section of the report is dedicated to identifying the next steps required to begin that process.

## Roles and Responsibilities

### ***Town of Portugal Cove - St. Philip's***

As the Town moves forward with realizing recommendations from this plan, they will be responsible for the following tasks:

- Review the Trails Master Plan and set priorities for project implementation;
- Work with Council to allocate budget each year to advance the initiatives of this plan;
- Become the champion for implementing the recommendations of this plan; consider making this part of the Recreation Committee's mandate;
- Liaise with other levels of government as needed;
- Work with the landowners and government to secure land agreements for priority projects that require property not currently owned by the Town;
- Apply for funding or undertake fundraising initiatives, consider striking a sub-committee to lead this;
- Promote the importance of the initiatives of this plan to the residents of Portugal Cove - St. Philip's;
- Engage residents on a regular basis to provide updates, prioritize projects, and to create project support. Throughout the planning process, it was evident that a strong sense of pride and passion for the community exists among residents of Portugal Cove - St. Philip's. The success of this plan will only be possible with the participation and involvement of these community members.

### ***Design and Planning Team***

Good trail planning requires experience and expertise in many different areas. The Town should ensure that any design and planning teams that they hire for detailed trail design or construction have practical experience in:

- Community, Indigenous, and stakeholder engagement and communications;
- Inventory and assessment of environmental, cultural, and historic resources;
- Federal, provincial and local legislation, regulations and permitting processes (e.g. planner);
- Engineering (e.g. civil, transportation);
- Geographic Information Systems (GIS) based spatial analysis and mapping;
- Tourism market research;
- Trail planning (e.g. trail planner, recreation planner, landscape architect);
- Technical trail routing and design (e.g. trail design specialist, landscape architect);
- Trail construction (e.g. trail construction inspector/supervisor, landscape architect)

## Detailed Design Process

The typical trail planning phases are outlined in this section and provide an overview of the steps that are required to ensure a successful and well-constructed trail network.

### *Phase 1: Defining the Trail Experience and Vision*

1. Identify the Area of Interest
2. Determine Trail User Objectives
3. Determine Trail Classification
4. Determine the Desired Maintenance and Risk Management Frequency
5. Determine the Design Features, Amenities and Challenge Features
6. Determine the Trail Significance and Theming
7. Meet with the Public Land Manager
  - Arrange a meeting with the Crown Lands Division of the Department of Fisheries, Forestry, and Agriculture to discuss the plans for the trail. The Crown Lands Officer will help explain the application process. This can be a lengthy process depending on the jurisdictions that may be involved, so this meeting should occur early in the planning process to help avoid delays.

**Items number 1-6 in this phase have been completed for nineteen proposed trails as a part of this Plan. Please see the Recommendations section for more detail.**

## *Phase 2: Analysis, Constraints and Opportunities*

1. Review and Summarize Relevant Provincial and Local Land Management Policies
  - The meeting with the Crown Lands Officer from the previous phase will provide insight about relevant policies and plans that will need to be considered as part of the trail planning.
2. Review Existing Land Uses and Land Ownership
  - This has been done at a conceptual level for this plan, however, resources such as exact locations of adjacent property boundaries were not available in all cases. During the detailed design phase, the Town will need to confirm any conflicts within property boundaries, and may need to adjust the trail route to address the conflict.
3. Conduct a Site Inventory and Analysis
  - General trail routes were highlighted in the Recommendations section of this plan, and preliminary inventory and analysis was conducted for each trail. However, certain parts of trails could not be visited due to low accessibility and lack of available project time. Therefore, each proposed trail route will need to be inventoried and analyzed in detail.
  - Local knowledge should be leveraged during this phase. It was clear during the engagement phase that there are many residents who are very interested in trail development. These residents should be included in the routing process if possible.
  - Data collected in the field should be compared to the general analysis presented in this report and any necessary changes to the proposed trail routes can be made to address these opportunities or constraints.

### *Phase 3: Trail Concept Planning and Order of Magnitude Costing*

#### 1. Draft Trail Concept Plan

- This plan provides conceptual routes for each trail, but as trails are slated for development, more detailed mapping needs to be produced for each trail. The draft trail plan should include information such as:
  - Any route options including pros and cons, and the preferred option;
  - Trail classification (can vary for different sections of trail if necessary);
  - Notes on whether any existing footpaths are to be upgraded, or whether it is new construction;
  - Type and general location of any technical trail features and infrastructure (bridge, stairs, drainage systems, boardwalks, etc.);
  - Type and general location of amenities (washrooms, seating, etc.);
  - Type and general location of lookouts or destinations;
  - Signage plan;
  - Notes on any measures that need to be taken to manage risk or impacts to environmental resources;
  - General statistics (distance, trail rating, targeted users, etc.).

#### 2. Public Engagement

- Before moving into detailed design, release the draft trail concept plan for public review and comment. Revise the draft trail concept plan as necessary.

#### 3. Order of Magnitude Costing

- If required, prepare a Class D order of magnitude capital and operational cost estimate for the trail. The accepted accuracy of a Class D cost estimate is +/- 30%.

#### 4. Public Lands Application and Referrals

- Phase 2 included a meeting with Crown Lands Division to review the necessary submissions for a Crown Lands application, and this phase includes the submission of those necessary applications.

#### *Phase 4: Detailed Trail Design*

1. Detailed Trail Layout and Flagging
  - The draft trail concept plan identified the general corridor and route for the trail and this phase includes the detailed locating of these elements.
  - Determine and flag the trail corridor with flagging tape ties at eye level.
  - Locate trail features, amenities and other infrastructure using flagging tape or marking paint.
  - Undertake a detailed GPS-based inventory of the trail tread, amenities, and infrastructure locations that will inform detailed cost estimates and tender package preparation.
  - If topography varies significantly, consider engaging a qualified surveyor to provide a topographic survey for use as a base plan for detailed design.
2. Prepare Construction Drawings
  - Prepare construction drawings that provide detailed information about the following:
    - Trail tread/surface material
    - Trail amenities (washrooms, seating, etc.)
    - Technical trail features and infrastructure (bridges, retaining walls, drainage structures, stairs, boardwalks, lookouts, etc.)
    - Signage
3. Final Detailed Cost Estimate
  - A detailed cost estimate can be completed using the detailed construction drawings and quantities.

### *Phase 5: Tendering and Construction*

1. Tendering and Procurement (if construction is by a contractor)
  - Prepare bid package and quantities document.
  - Establish a Bid Review and Selection Team.
  - Advertise the opportunity.
  - Set up and host a pre-bid site meeting.
  - Receive bids and evaluate.
  - Award the project to the successful proponent and provide them with a project management plan for the construction phase.
2. Construct Trail
  - Proceed with trail construction following the construction drawings and project management plan.
3. Construction Administration and Inspection
  - Regularly review construction progress.
4. Final Acceptance and Opening
  - Complete a final inspection. If work is acceptable, open the trail to the public.

## Setting Priorities

### Summary Chart

In order to assist the Town in setting priorities for trail development, a summary chart has been created that identifies the following information about the proposed trails. This chart is meant to be a tool that the Town can use to prioritize trail development as needed.

- **Level of Effort** - Represented as High, Medium, or Low; trails have been assigned a level based on the estimated amount of effort that is required to develop the trail to the Trail Classification Type highlighted in the Recommendations section.
- **Impact Level** - Represented as High, Medium, or Low; trails have been assigned a level based on the amount of public feedback about that trail. Trails assigned High means that the desire level was high for that trail during public engagement. Trails assigned Low did not have as much public comment about them, but the design team believes they help achieve the Guiding Principles.
- **Potential Partners** - Potential partner organizations have been highlighted that may be able to assist the Town with the development of that specific trail.
- **Consulting and Design Fees** - Professional cost estimates of design and consulting fees have been prepared for each trail. Refer to Costing Notes.
- **Construction Costs** - Conceptual construction cost estimates have been prepared for each trail. A cost/km rate was developed based on past trail development in the province. The rates were informed by the level of development required for each type of trail, considering the amount of clearing required, the ground surface material, and whether infrastructure like bridges or stairs were required. Many of these trail routes were not fully accessible during the inventory phase, which meant that a desktop review of the topography conditions was used to determine the type of necessary infrastructure.



Trail	Reference Page	Trail Classification Type	Level of Effort	Impact Level	Potential Partners	Consulting and Design Fees	Construction Costs
<b>Trail 1: Broad Cove River</b>	59	Type 1	High	High	SAM	\$32,000 - \$35,000	\$315,000 - \$325,000
<b>Trail 2: Skinners Road</b>	60	Type 3 & Mountain Biking	Medium	Low	AMBA	\$8,000 - \$11,000	\$20,000 - \$25,000
<b>Trail 3: Dogberry Hill Road Pole Line</b>	61	Type 2	Medium	Low	Town of Paradise	\$8,000 - \$10,000	\$15,000 - \$20,000
<b>Trail 4: Rainbow Gully Park Extension</b>	63	Type 1	Medium	High	City of St. John's	\$12,000 - \$16,000	\$120,000 - \$130,000
<b>Trail 5: Rainbow Gully Park to Healys Pond</b>	64	Type 1	High	Medium		\$14,000 - \$17,000	\$84,000 - \$91,000
<b>Trail 6: Little Powers Pond Road to Little Power's Pond</b>	65	Type 2	Low	High	Town of Paradise, City of St. John's	Can be taken on by Town	\$3,000 - \$5,000
<b>Trail 7: Old Broad Cove Road to Tucker's Hill Road</b>	67	Type 1	Medium	High	Local Residents	\$14,000 - \$16,000	\$96,000 - \$104,000
<b>Trail 8: Knapps Road to Witch Hazel Drive</b>	68	Type 2	Low	Low		\$7,000 - \$10,000	\$27,000 - \$30,000
<b>Trail 9: Beachy Cove Brook and Conservation Area</b>	69	Type 3	High	Low	SAM, ECT	\$17,000 - \$19,000	\$45,000 - \$50,000
<b>Trail 10: Beachy Cove Hill to Nearys Pond Road</b>	70	Type 1	Low	High	ECT	\$9,000 - \$11,000	\$80,000 - \$85,000

Trail	Reference Page	Trail Classification Type	Level of Effort	Impact Level	Potential Partners	Consulting and Design Fees	Construction Costs
<b>Trail 11: Nearys Pond and Western Round Pond Loop</b>	73	Type 1	High	High		\$27,000 - \$30,000	\$276,000 - \$295,000
<b>Trail 12: Nearys Pond Road to Mercer's Road</b>	74	Type 2	High	Low		\$16,000 - \$19,000	\$39,000 - \$45,000
<b>Trail 13: Princes Mountain Lookout</b>	75	Type 1	Low	High	ECT	\$9,000 - \$11,000	\$72,000 - \$78,000
<b>Trail 14: Main River</b>	77	Type 1	High	High	SAM	\$35,000 - \$40,000	\$360,000 - \$390,000
<b>Trail 15: Blast Hole Ponds Conservation Area</b>	78	Type 2	Medium and High	Medium	SAM	\$26,000 - \$30,000	\$90,000 - \$105,000
<b>Trail 16: Blast Hole Ponds Mountain Biking Area</b>	79	Mountain Biking	Medium	High	AMBA	TBD after Town consultation with AMBA	TBD after Town consultation with AMBA
<b>Trail 17: Blast Hole Ponds to Bauline Line</b>	79	Type 2	Medium	Low		\$27,000 - \$30,000	\$81,000 - \$90,000
<b>Trail 18: Portugal Cove Road to Windsor Heights</b>	83	ATV	Medium	Low		Can be taken on by Town	\$14,000 - \$16,000
<b>Trail 19: Portugal Cove Road Pole Line</b>	84	Type 1	High	High	City of St. John's	\$26,000 - \$30,000	\$145,000 - \$155,000

ECT = East Coast Trail Association  
SAM = Stewardship Association of Municipalities  
AMBA = Avalon Mountain Biking Association  
See page 102 for descriptions of each organization

## Costing Notes

- The provided fee estimates are considered preliminary meaning they are based on an initial functional program and broad concept approach only. The assumed scope of work for the Design and Consulting Fees is as follows:
  - Conduct a Site Inventory and Analysis
  - Prepare Topographic Survey
  - Draft a Trail Concept Plan
  - Public Engagement
  - Prepare Order of Magnitude Costing
  - Organize and Submit Public Lands Application and Referrals
  - Prepare Detailed Trail Layout and Pin-Flagging
  - Prepare Construction Drawings
  - Prepare Final Detailed Construction Cost Estimate
  - Organize Tendering and Procurement
  - Oversee Construction Administration and Inspections
- Costing is based on experience on similar projects and professional judgment only. Costing should be used for general guidance only and cannot be guaranteed as to accuracy.
- Costing does not include HST.
- Costs are provided for the year 2022 and should be escalated at a rate of 2-3% each year to account for inflation and market conditions.
- Savings may be realized if separate trail projects are combined or phased in groups of work together.
- No survey costs were included for Type 3 trails.

### **Next Steps**

Based on the summary chart, it is recommended that the Town look at the following priorities in the short term.

#### ***Upgrade Trail 10: Beachy Cove Hill to Nearys Pond Road***

- Undertake the necessary planning and construction activities required to upgrade this trail to a Type 1 trail that includes an accessible surface material, wayfinding signage, and rest areas.

#### ***Upgrade Trail 13: Princes Mountain Lookout***

- Undertake the necessary planning and construction activities required to upgrade this to a Type 1 trail that includes a new parking area, an accessible surface material, and rest areas.

#### ***Upgrade Trail 6: Little Powers Pond Road to Little Powers Pond***

- Undertake the necessary planning and construction activities required to upgrade this trail to a Type 2 trail that includes a more formalized access path to Little Powers Pond where residents can then access existing hiking and ATV trails that fan out beyond the town boundaries from this area.

#### ***Begin Planning and Seek Funding for Trail 1: Broad Cove River***

- Begin the detailed design phase and start seeking funding for the Broad Cove River Trail. This trail was highly requested by residents, and will provide a safe walking route parallel to Thorburn Road.

#### ***Begin Planning and Seek Funding for Trail 14: Main River***

- Begin the detailed design phase and start seeking funding for the Main River Trail. This trail was highly requested by residents, and will provide a safe walking route parallel to Portugal Cove Road and will also connect Portugal Cove to Voisey's Brook Park.

#### ***Begin Planning and Seek Funding for Trail 16: Blast Hole Ponds Mountain Biking Area***

- Consult with AMBA and determine the required activities to install mountain biking trails in this area adjacent Blast Hole Ponds.

## **Partnerships and Funding Opportunities**

As the Town moves toward implementing the recommendations outlined in this plan, it will become clear that partners are needed. The Town has finite resources to implement the recommendations of this Plan and project partners represent an opportunity to leverage additional resources. Further, several projects described in this plan would benefit not only the Town, but other government agencies and NGOs as well.

There is also a need to consider the realities of land ownership and long-term maintenance. In some cases, the trails proposed will require land that the Town does not currently own, or may require assistance with trail maintenance. Partnerships in these cases are imperative to the project's success.

Capital costs are another significant factor that affect implementation. While the Town has been the party responsible for initiating this study, they may not necessarily be responsible for covering all project costs. This is where funding agencies and grant programs at both the Provincial and Federal level can make a difference.

Clearly, it is in everyone's interest to develop the trails in Portugal Cove - St. Philip's, and that responsibility should be shared among stakeholders. The following section outlines proposed roles of important stakeholders and potential project partners.

## **Non- Governmental Organizations (NGOs)**

### **(a) Grand Concourse Authority (GCA)**

The Town of Portugal Cove - St. Philip's has worked with the GCA in the past on trail development projects. The GCA is committed to the enhancement and protection of the walkway network through regular maintenance and upgrading, environmental initiatives, open space and park development, promotion and public education. They seek to improve the quality of life of residents in our region by encouraging an active and healthy lifestyle within a natural setting.

### **(b) Avalon Mountain Biking Association (AMBA)**

The Avalon Mountain Bike Association is a not-for-profit community organization engaged in promoting the sport of mountain biking on the Avalon Peninsula of Newfoundland and Labrador primarily through the development, maintenance and preservation of shared-use trails. They are also committed to promoting socially and environmentally responsible mountain biking and trail use, and to making mountain biking fun and accessible for riders of all levels and ages.

The AMBA was involved in the public engagement phase of this project and it was clear that they believe Portugal Cove - St. Philip's has potential to become a mountain biking destination on the Avalon. Although the scope of this Plan was to focus on hiking and walking trails, Section 3 does include suggestions for areas that could be mountain biking destinations. Now that the Plan is complete, the Town should meet with the AMBA to determine the next step to begin the development of mountain biking trails within the community.

### **(c) Inclusion NL**

InclusionNL provides support to government, businesses and organizations to make spaces, events, and resources inclusive. InclusionNL can be engaged during the detail design phase to confirm that amenities on the trail network (signage, seating, etc.), and resources like trail signs and digital maps are inclusive for all users.

***(d) Stewardship Association of Municipalities (SAM)***

The Stewardship Association of Municipalities is an incorporated non-profit organization that works to secure, enhance, and restore important wildlife habitats within municipal boundaries. SAM is comprised of a network of municipalities that have formally committed to the practice of environmental stewardship in Newfoundland and Labrador. Municipal members (including Portugal Cove - St. Philip's) sign Habitat Stewardship Agreements with the provincial government, publicly committing to the conservation of important wildlife habitat found within their municipal boundaries. SAM supports members in environmental education, habitat restoration, and enhancement projects. SAM should be consulted for any trail development within the protected Management Units in the town. Trail development is allowed and encouraged in these areas as long as they promote the protection of these areas and are respectful of the land during development.

***(e) East Coast Trail Association (ECT)***

The East Coast Trail Association is a registered charity established to provide a wilderness hiking experience by developing and maintaining the East Coast Trail, promoting public access, minimizing its impact on the natural environment and protecting it for future generations. Portions of the East Coast Trail run through Portugal Cove - St. Philip's and the Association should be consulted on any trail projects near those routes as well as parking upgrades and road connections that impact the trail.

## ***Government of Newfoundland and Labrador***

### ***(a) Department of Tourism, Culture, Arts, and Recreation (TCAR)***

TCAR is the lead for the economic, culture, and innovation agenda of the Provincial Government. Their goal is to create a vibrant, diverse and sustainable economy, with productive, prosperous and culturally-rich communities and regions, making Newfoundland and Labrador a business and tourism “destination of choice”. Some of the initiatives outlined in this plan may overlap with the TCAR’s vision for the province.

The Community Healthy Living Fund is a program that supports “The Way Forward: A Vision for Sustainability and Growth in Newfoundland and Labrador” and provides a funding opportunity to communities and organizations for projects, programs and initiatives that demonstrate direct measurable results towards the targets outlined in “The Way Forward”, specifically to increase physical activity.

### ***(b) Department of Municipal Affairs and Environment (MAE)***

MAE assists municipalities in meeting their infrastructure needs and provides the financial and administrative tools to support development of community capacity, regional cooperation, and sound governance. The Town must work closely with MAE for any work that will occur in or around a body of water as permits are required.

The Multi Year Capital Works funding is the Government of Newfoundland and Labrador’s commitment to provincial investment to larger scale municipal infrastructure. The Multi-Year Capital Works Program allows larger municipalities to avail of three-year blocks of funding which supports improved planning in larger communities which have the capacity to make multi-year commitments.

### ***(c) The Department of Fisheries, Forestry, and Agriculture: Crown Lands Division***

This division is responsible for all Crown Lands Applications. The Town can apply for trail development on Crown Land. As outlined in the process for detailed trail design, it is important that the Town meet with the Crown Lands Division to understand the necessary applications and processes for acquiring Crown Land.



## **Government of Canada**

### **(a) Atlantic Canada Opportunities Agency (ACOA)**

ACOA works to create opportunities for economic growth in Atlantic Canada by working with diverse communities to develop and diversify local economies and by championing the strengths of Atlantic Canada. Traditionally, ACOA has supported many initiatives in the province that promote tourism and economic growth and development.

The Innovative Communities Fund invests in strategic projects that build the economies of Atlantic Canada's communities. ICF focuses on investments that lead to long-term employment and economic capacity building in rural communities. Urban initiatives that stimulate the competitiveness and vitality of rural communities may be considered on a selective basis.

### **(b) Infrastructure Canada**

Infrastructure Canada provides long-term support to help Canadians benefit from world-class, modern public infrastructure and makes investments, builds partnerships, develops policies, delivers programs, and fosters knowledge about public infrastructure in Canada. They provide funding for projects that increase the potential for innovation and economic development, improve the environment and support stronger, safer communities.

The federal Gas Tax Fund is a permanent source of funding provided up front, twice-a-year, to provinces and territories, who in turn flow this funding to their municipalities to support local infrastructure priorities. Municipalities can pool, bank and borrow against this funding, providing significant financial flexibility.

The Small Communities Fund provides contribution funding for infrastructure projects in small communities with populations of 100,000 or less that contribute to economic growth, a clean environment and stronger communities. Projects will allow people and goods to move more freely, increase the potential for innovation and economic development, and help to improve the environment and support stronger, safer communities.

## **Post-Trail Construction**

As the Town develops the trails outlined in this plan, some additional projects can take place post-trail construction to help improve the overall trail network.

## **Marketing**

The online survey found that 30% of the respondents were non-residents of Portugal Cove - St. Philip's that travel to the town to avail of different hiking trails. It is encouraging to see that the town is already a destination, and future trail development will hopefully boost these numbers even more. Signage will be important to help visitors navigate to the different trails. See the Recommendations section for more details. Beyond signage, the Town can focus on improving their website to include an updated trail map and trail details. The trail map should present the overall trail network along with important info such as trail ratings. The trail map can live online and therefore can be easily updated as more trails are added to the network. It is important that the online map is as accessible as possible, ensuring that visitors with a disability can easily access and understand the map.

Signage and online maps will help visitors find the trails once they reach the town, but attention can also be given to marketing the trails. The Town should consider adding all of their trails to popular hiking apps like AllTrails and Wikiloc as they are developed. Trails can also be advertised on the province's tourism website, and through other partners, such as the Avalon Mountain Biking Association, as those types of trails become available.

## **Technology**

Technology can be leveraged in many ways when it comes to the trail network. Trail users are starting to rely on technology more and more to discover trail options and help improve their experience while on the trail. This section outlines a number of different ways that technology can be used to improve user experience.

### **(a) QR Codes**

QR Codes allow a smartphone to read an image and provide information such as a link to online content, a website or video. QR Codes can also be used in more creative ways, such as the QR Fitness Trails of Hamilton, Ontario (<https://www.hamilton.ca/recreation/qr-fitness-trail>). Instead of typical trail exercises such as walking or jogging, this trail system offers an array of digital exercise stations. By scanning the QR code on signs around the trail, users get instructional videos on exercises they can do while on the trail. Each trail features multiple QR signs that take the participant through a full workout, from warm up to cool down, with beginner, intermediate and advanced options. QR Fitness Trails provide free alternative fitness opportunities, guided routines by certified trainers, a family-friendly exercise experience, three skill level options, and enjoyable outdoor recreation.

### **(b) Augmented Reality**

Augmented reality is a technology that uses smartphones to create a computer-generated image of people or objects over a user's real-world view. This technology has been incorporated in a wide range of applications and presents an opportunity to increase trail user engagement. In fact, augmented reality trails have been developed around the world. These trails allow a user to take a picture of a sign or image, then receive an explanation of something about the trail (its history, nature, etc.) explained by a digital figure who appears to be on the trail in front of them. This is an excellent, interactive way to provide interpretive content without the need for a user to stop and read a traditional storyboard. Check out an exciting example of augmented reality here: <https://float4.com/en/projects/ar-experiences-at-toronto-waterfront-festival/>.

**(c) Audio Tours**

An audio tour or audio guide provides a recorded spoken commentary, through a mobile device, to a visitor attraction. Like an augmented reality trail, but without the real-world visualization, users download an app or file that provides information, context, or interpretive information on a trail. Some of the more elaborate tours may include original music and interviews. Audio tours are typically self-guided and undertaken at the user's own pace and comfort level. The Bannerman Quartet and Inside Outside Battery tours in St. John's are excellent examples of locally developed audio tours.

**(d) Geocaching**

Sometimes referred to as a "real world treasure hunt," geocaching is the activity of looking for hidden objects using GPS technology and map coordinates. Physical objects hidden anywhere, including along trails, are tagged with coordinates that lead users to secret locations containing these hidden items. Once found, the geocacher completes a logbook and puts the object back in place for the next hunter to find. Geocaching has become a worldwide phenomenon in recent years and represents an opportunity to engage users along the trail network, provide recreational activities, and promote active lifestyle.

## Other Resources

There are many documents available publicly that can assist the Town in developing their trail network. Some resources that the Town can reference beyond this report include:

- Exceptional Trails: A guide to the planning, classification, design, construction and management of trail experiences on Public Lands (Government of Alberta, 2018)
- Guidelines for a Quality Trail Experience (International Mountain Biking Association, 2017)
- Minnesota Department of Natural Resources: Trail Planning, Design, and Development Guidelines (2017)
- Trail Development Guidelines for Alberta's Public Land (Government of Alberta, 2019)
- Parks Canada National Best Management Practices, Trail Maintenance and Modification (Parks Canada, 2016)