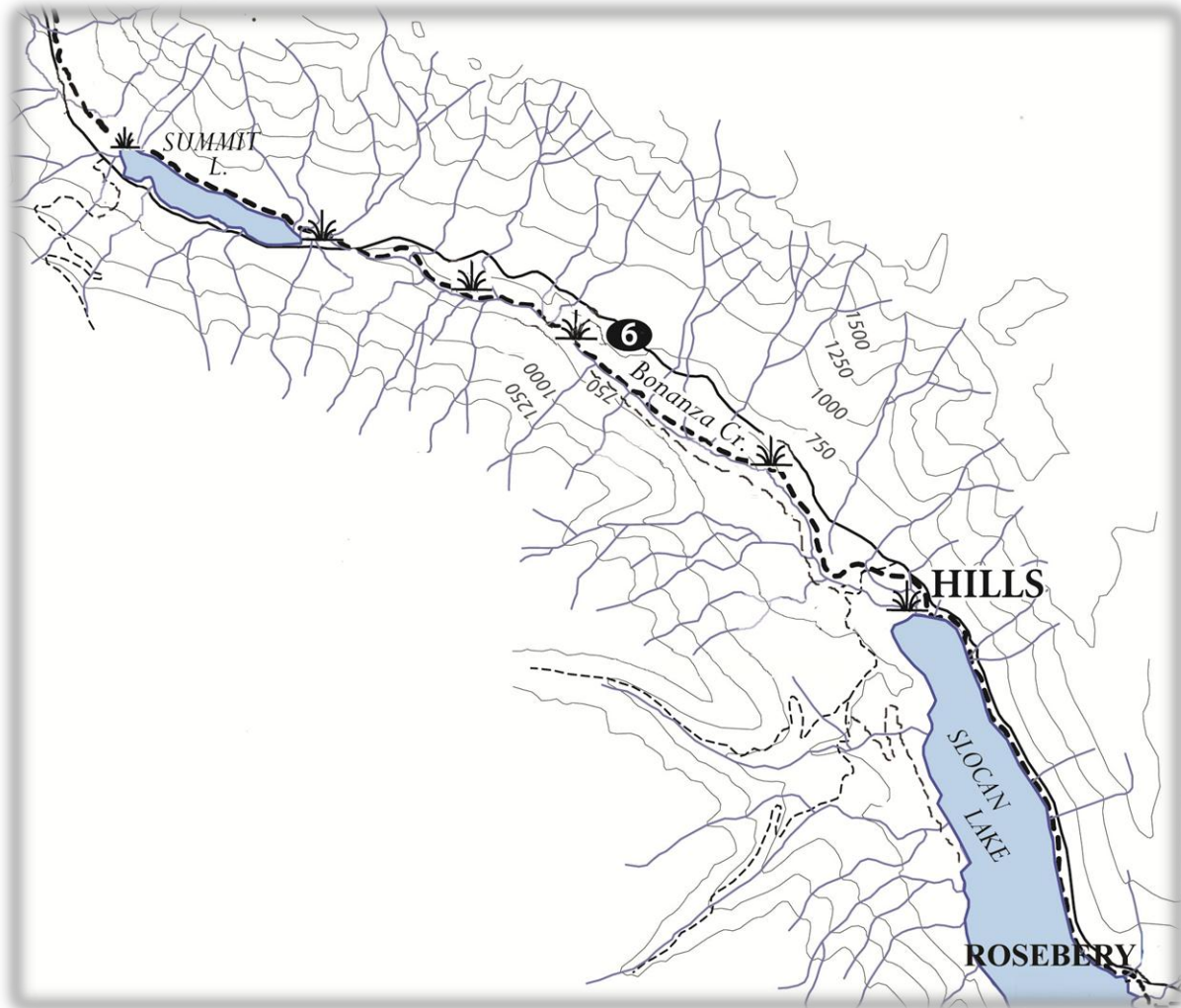


Rosebery-Summit Lake Rail Trail Management Plan Proposal



*Prepared by
Rosebery-Summit Lake Rail Trail Steering Committee
May 2015*

Table of Contents

1. INTRODUCTION	3
2. PURPOSE AND RATIONALE FOR THE MANAGEMENT PLAN.....	3
2.1 WHY A RAIL TRAIL MANAGEMENT PLAN?.....	3
2.2 HISTORICAL BACKGROUND	4
2.3 COMMUNITY SUPPORT	5
3. TRAIL DESCRIPTION AND CURRENT STATE.....	5
3.1 OVERVIEW	5
<i>Section 1 – North Slocan Lakeshore.....</i>	<i>6</i>
<i>Section 2 – Bonanza Corridor.....</i>	<i>7</i>
<i>Section 3 – Summit Lake.....</i>	<i>8</i>
3.2 CURRENT TRAIL USAGE.....	8
4. STAKEHOLDERS AND GOVERNANCE	9
4.1 STAKEHOLDERS	9
4.2 GOVERNANCE.....	9
4.2.1. Management Plan Approval Process	9
4.2.2 Ongoing Governance and Community Engagement.....	10
5. TRAIL USE AND MANAGEMENT	10
5.1 RATIONALE FOR RECOMMENDATIONS	10
5.2 TRAIL USE RECOMMENDATIONS	13
<i>All Sections</i>	<i>13</i>
<i>North Slocan Lakeshore.....</i>	<i>13</i>
<i>Bonanza Corridor.....</i>	<i>14</i>
<i>Summit Lake.....</i>	<i>14</i>
6. OPERATIONS AND FUNDING.....	14
6.1 OVERVIEW	14
6.2 PROPOSED IMPLEMENTATION PLAN	15
6.3 ANNUAL MAINTENANCE AND WINTER OPERATIONS.....	15
6.4 ONGOING FUNDING.....	15
7. ONGOING RISK MANAGEMENT	16
7.1 SAFETY AND ETHICS	16
7.2 INSURANCE.....	16
7.3 ISSUE MITIGATION	16
APPENDIX A – ABANDONED RAIL TIES	17
APPENDIX B – MAPS (1).....	18
APPENDIX B – MAPS (2).....	19
APPENDIX C – STEERING COMMITTEE AND PROJECT CONTRIBUTORS.....	20

1. Introduction

In 1889, surveyor George Dawson documented a First Nations foot trail running from Nakusp to Summit Lake and along Bonanza Creek to Slocan Lake.¹ During the 1890s, along much the same route, the CPR built the Nakusp & Slocan Railway to connect the booming silver mines around Sandon to the transport system on the Arrow Lakes. A century later, the now-abandoned rail route provides residents, recreational groups and visitors with opportunities to appreciate the scenery, history and pristine nature of the area. The north and south ends of this rail trail are already designated and well-used public trails (i.e. Galena and Nakusp-Summit Lake). The Rosebery to Summit Lake section is well-used but as yet not officially designated as a public trail. Running north from the Galena Trail in Rosebery, it follows the shorelines of Slocan Lake, Bonanza Creek and Summit Lake and continues to the Regional District of Central Kootenay (RDCK) Area H/K Boundary, linking up with the Nakusp trail.

The Rosebery-Summit Lake Rail Trail is in need of attention. The trail bed has been deteriorating from unmanaged water flows, beaver activity, culvert failures, wash-outs, rutting from vehicle use in wet conditions, and bank sloughing. There is also increasing use by some adjacent landowners and notice from the province that it may consider selling lakefront property adjoining the trail, which could lead to a loss of continuity. The time is right to secure this rail trail for public use. As one New Denver resident put it, “The Rosebery-Summit Lake Rail Trail is a jewel waiting to be polished.”

This management plan proposal has been prepared by a local volunteer stakeholder steering committee which has reviewed relevant background studies and reports and the results of public discussions related to this trail over the past 15 years. Local residents involved with the trail have also been consulted to ensure broad input. This proposal will be distributed for public review and endorsement by the residents of RDCK Area H North (Enterprise Creek to Summit Lake). If endorsed, the steering committee will oversee the establishment of a registered non-profit society dedicated to implementing the management plan. No special taxation from residents will be sought for implementation or for ongoing trail management under the terms of this proposal.

2. Purpose and Rationale for the Management Plan

2.1 Why a Rail Trail Management Plan?

The intent of this management plan is to provide a framework that will:

- Officially establish the Rosebery- Summit Lake rail trail as a recognized provincial recreational trail.
- Protect and foster an appreciation for the trail’s ecological and cultural values.
- Provide safe and high quality recreational opportunities.
- Recognize and support the pattern of established local trail uses
- Provide a suitable framework for public input.
- Limit development to what is necessary to meet these objectives.

Trails, and rail trails in particular, are highly-valued community assets throughout BC, including the north Slocan Valley, and are desirable destinations for an increasing number of trail users. The gentle grade of a rail trail provides an opportunity for active living for all skill and age levels. Established trails aid in the protection of the natural environment while retaining public access.

¹ Eileen Delehanty Pearkes, *The Geography of Memory*, 2002, Kutenai House Press, p. 18-19

The *Trails Strategy for BC* was adopted by the provincial government in April 2013. It cites numerous benefits of trails for users and local communities, all of which can be expected from the Rosebery-Summit Lake Rail Trail. These include:

- Community and Social – more cohesive communities and enhanced quality of life
- Economic – increased tourism revenues, business investment and property values
- Educational – outdoor classrooms for the study of nature, culture, and history
- Environment – enhanced awareness, stewardship, and understanding of our natural heritage
- Health and Fitness – improved health and well-being for individuals and communities
- Heritage and Culture – recognition of First Nations' and other cultural and historical values
- Transportation – greener recreation and commuting opportunities, reducing greenhouse gas emissions

2.2 Historical Background

Recreational use of the Rosebery-Summit Lake Rail Trail has a long history. For several decades prior to the track removal in the 1980s, it was used for hiking, nature walks, horse-back riding, cross-country skiing, and snow-shoeing. Most of these activities have increased significantly since the track removal, and others have developed (see Current Uses on p.10). Remnants of the railway still remain including Red House, a dilapidated small station house north of Hills, and isolated small piles of ties (see Appendix A), a few culverts and various spikes, washers and iron plates scattered along the trail.

Community interest in securing the corridor for public recreational-use and protection of its natural features has grown since its acquisition by the province in 1990. At one point it was considered for designation as a provincial park.² In 2000-2001, the RDCK-commissioned a study and public consultation that looked at the trails linking Nakusp-New Denver-Kaslo. After much discussion and considerable interest, no consensus was reached on the management of the Rosebery to Summit Lake section. Participants asked for a) more information to help make this decision and b) a fair process for doing so.³ The final report from this study made the following recommendations: a) that a public agency assume jurisdiction of the rail trail; b) that the managing agency continue to work with stakeholders; and c) that it undertake a biological feasibility study to assess the impacts of recreational use of the rail trail on plant, fish and other animal species, with suggestions on how to limit damage. The RDCK board passed resolutions adopting all of these recommendations.⁴

In a follow-up round of public meetings and discussions among stakeholders from 2004-2007, the various interest groups came a long way toward agreeing on the details of a management plan, including the issue of motorized vs. non-motorized use. Although some participants preferred leaving the trail “as is”, unmanaged and maintained by users as needed, most saw benefit in securing the trail for public use and setting up an organized means of restoring and maintaining it for public benefit while protecting sensitive wildlife habitats and wetlands.

In 2009 the RDCK applied to the province to assume jurisdiction over the trail but, because of high costs associated with meeting the province's requirements⁵, withdrew its application in 2013. Input was received by Front Counter BC from various branches of government and from the public in response to the RDCK application which was reviewed for this management plan proposal.

Following the RDCK withdrawal, the North Slokan Trails Society, which already had two local trail partnership agreements with Recreation Sites and Trails BC (RSTBC), applied for a similar agreement to cover the Rosebery-Summit Lake Rail Trail. RSTBC is a branch of the BC Ministry of Forests, Lands and Natural Resource Operations. The stated purpose of RSTBC is “to develop, maintain and manage

² Phil Whitfield, former BC Parks planner, personal communication

³ *Trans Canada Trail Linking Communities Initiative-Kootenay Loop Trail Project*, Final Report, March 16, 2001, Hanne Smith-Heintz, p31.

⁴ RDCK Minutes, Board Meeting of March 24, 2001

⁵ Report from RDCK staff to Rosebery Parklands and Trails Commission, March 12, 2014.

a network of recreation sites and trails to provide safe, quality recreation opportunities for the public.” It oversees most public trails in the Slocan Lake and adjacent areas.⁶ RSTBC indicated an interest in becoming the managing agency for the Rosebery-Summit Lake Rail Trail and in entering into a partnership agreement, and it held discussions with RDCK staff. This led to the present effort to develop a management plan proposal for the trail that would have “broad community support”.

With endorsement of this management plan proposal by local residents, Rec Sites and Trails BC has indicated it will proceed with the interagency review required for official trail designation and with consultation with the RDCK and local First Nations. With official trail designation, a local registered non-profit society will be formed to partner with RSTBC and to engage residents and user groups in stewarding the ongoing maintenance and development of the trail.

2.3 Community Support

Direct input from local residents indicates a preference for minimal to moderate development of the rail trail while retaining its local character and protecting its high ecological values. For example, in the 2009 *Hills Community Recreation Survey* (82% response rate), 52% favoured “moderate development” (improve trail surfaces and creek crossings, clear brush, post signs), while 31% wanted “minimal development (maintain it pretty much as it is). 10% wanted “no further development” of the trail, and 4% wanted a “high level of development”.⁷

Some adjacent land-owners have also been consulted. The 2000-2001 RDCK study reported that “Overall it seems the (adjacent) landowners would accept a managed trail if their needs and concerns could be addressed,” p 31). In the 2009 Hills survey, these landowners identified concerns similar to other residents: safety, signage, parking, garbage and litter, noise and privacy, fish and wildlife issues, types of use and overuse.

Locally, the Official *Community Plan for Slocan Lake North*⁸ (OCP), a product of extensive public input, gives direction to this project in its objective:

“To work toward the development of a comprehensive trail system which encourages and accommodates a variety of users and uses; which is consistent and complementary to existing trail systems within the Plan area.”

The RDCK added its support in the OCP document, stating that it:

“Encourages investigation of options for public ownership and management of the rail to trail between Rosebery and Nakusp, including but not limited to designation of sections of the trail to accommodate a variety of users and uses.”

3. Trail Description and Current State

3.1 Overview

The Rosebery-Summit Lake Rail Trail extends over 26 km, hugging lakeshores and creek sides along its route, and offering beautiful Selkirk mountain scenery and a wide range of recreation options. Much of the trail passes through important year-round and seasonal habitat for a variety of mammals, birds, amphibians and other wildlife. Construction of the original rail berm has over time created important

⁶ Including the following trails: Idaho Peak, Alps Alturas , Dennis Creek, K&S Railroad, Shannon Lake, Wakefield, Drinnon Lake, and the Slocan Valley Rail Trail.

⁷ *Hills Recreation Society - Community Recreation Survey Results*. 2009, Hills Recreation Society, page 19

⁸ *Area H (Slocan Lake North) Official Community Plan*, 2009, available at <http://www.rdck.ca>

wetland complexes along Bonanza Creek. These, along with Bonanza Marsh and the wetlands at the south end of Summit Lake (Summit Lake Marsh), constitute a corridor of high biological diversity with a wide variety of habitats and wildlife.⁹ Since removal of tracks and ties, trail users have undertaken informal volunteer maintenance, mainly brushing and bridging of a few small tributaries to Bonanza Creek. There are numerous abandoned creosoted railroad ties in small piles and individually along the rail trail, some in wetland and riparian areas, which pose a special problem (see Appendix A). Currently, the trail has little infrastructure aside from a few culverts and small rustic bridges. RSTBC staff conducted an extensive inventory documenting the condition of the trail in 2014.

The rail corridor is readily divided into three sections, each with unique characteristics and considerations. Following is a description of each section including a summary of its current state, access points and related structures.

Section 1 – North Slocan Lakeshore

Description: Starting at the Rosebery Parklands/Galena Trail boundary in Rosebery, this section runs about 8.4 km along the eastern shore of Slocan Lake. It is typically 30-40m down a steep treed bank from Hwy 6 and runs parallel to it. Most of the trail here is less than 6m above the high water mark of Slocan Lake, closely following the lakeshore. It provides access to several small beaches. Near the north end of the lake is the site locally known as the ‘Girl Guide Camp’ which features a beach well-used by locals. The Girl Guides of Canada recently relinquished their tenure to this area and removed their buildings. This area experienced a major debris torrent in the past and has been classified by the RDCK as a Non-Standard Flooding and Erosion Area with development restrictions.¹⁰ There is occasional camping on the trail here and at a rough campsite on the lakeshore about 1km south. North from the Girl Guide camp, the trail rises from the lake and widens to road width for about 1km to Bonanza Rd, passing above the privately-owned Bonanza Marsh.

A 2009 archaeological report indicated two sites of potential interest along the lakeshore: a First Nations house pit /cache site with stone tool fragments and an old wagon road.¹¹ However, a complete archeological survey is still needed.

Trail Condition: Drainage improvements, trail repair, and brushing are required in several locations due to unmanaged bank seepages, rockfall, bank sloughing, and rutting from usage in wet conditions. There are no culverts. In 2014 there were three locations where, due to water action, the slope above had sloughed onto the trail. There were also eight substantial wet areas with small flowing seeps and trail-wide puddles many metres long.

Access: Public access to this section of the trail is available from Bonanza Road in Hills, from Hwy 6 above the Girl Guide Camp, by a primitive road from another point on Hwy 6 mid-way between Rosebery and Hills, and from the Galena Trail trailhead in Rosebery (non-motorized access only).

Ecology: Common wildlife includes deer, black bears (especially in berry season), coyotes, bald eagles, loons, and great blue heron. Various species of waterfowl are common at the north end of Slocan Lake and Bonanza Marsh especially during spring and fall migrations. In winter, elk, white-tailed deer and mule deer, which winter upslope, are sometimes forced down during inclement snow conditions. Carnivores including cougar, bobcat, coyote and gray wolf have been known to travel the lakeshore and rail trail searching for road-killed ungulates, especially in winter.

⁹ M. Mahr, Hills BC, personal communication, May 2015.

¹⁰ *Floodplain Management Bylaw No. 2080*, 2009, available at <http://www.rdck.ca>

¹¹ *Preliminary Archaeological Site Assessment Report*, Archer CRM Partnership, December 2009. Submitted to FrontCounter BC.

Studies of the lakeshore by the Slocan Lake Stewardship Society and others show the north end of Slocan Lake, at the confluence area with Bonanza Creek and Bonanza Marsh, to be the most important wildlife habitat on the lake. Bonanza Marsh, in particular, has been recognized as one of the best remaining natural wetlands in the West Kootenays. It is a critical nesting area for many resident and migratory bird species, contains rare wetland-dependent plants, and is a major breeding area in the spring for the Pacific tree frog and Western toad. The marsh is also a major staging, rearing, and migratory route for a large run of Kokanee. Local teachers and students visit this area to study the marsh ecosystem.

Section 2 – Bonanza Corridor

Description: This section begins at Bonanza Rd in Hills and heads north past private properties and a government gravel pit, through a 10m deep cut where a culvert was removed by the CPR, and past several more private properties, getting back to Bonanza Creek at the north end of Hills. From there, the scenery opens up to mountain views, and the trail follows the creek alongside (and sometimes through) wetlands and shrub patches. Several small tributaries cross the trail and flow into Bonanza Creek. A low-lying ridge separates the northern part of this section from Hwy 6. Through the Hills area, several private residences border the trail. About 6km is groomed in winter by volunteers for cross-country skiers and is well used.

Trail Condition: The current state of this section ranges from good to rough, narrow and overgrown. Beaver activity is very high with dams changing yearly and resulting in some undermining, eroding, or flooding the trail bed, especially in the northern half. A few culverts and rudimentary bridges exist. A wash out from above the highway has deposited gravel and silt across a 100m section of trail near the north end, with several small water channels running through it most of the year. In 2014, extensive brushing and bridge repairs were undertaken in preparation for an annual running and cycling competition, and this has improved trail conditions considerably.

Access: There are 2 public access points to this section of the trail in Hills (Bonanza and Reiben roads) and a pull out where Highway 6 crosses Bonanza Creek just south of Summit Lake.

Ecology: Bonanza Creek corridor provides year-round and seasonal habitat for a number of large mammals including grizzly and black bear, moose, elk, deer, marten, wolf, cougar, otter and beaver. The riparian areas from the north end of Hills to Summit Lake are prime grizzly bear habitat in the spring when the bears descend from alpine dens to feed on new plant growth along the trail. As a result,¹² grizzly bear warning signs are posted at either end of the corridor in the spring and removed at the onset of summer. Recognized species at risk found in this section include western skink, Coeur d'Alene salamander, great blue heron and western toad.

Patches of Sitka willow and Red-osier dogwood provide forage for over-wintering moose, which also calve in the riparian areas in the spring. Aggressive behaviour in defense of their young can pose a threat to public safety. Some elk travel through the area as well, and this section is recognized as a major cross-valley corridor for grizzly bears, wolverine and other species traveling between Valhalla and Goat Range Parks.

In addition, the Bonanza ecosystem supports numerous migrating and nesting birds. It is recognized as particularly valuable bird habitat because of the widespread regional loss of wetlands resulting from damming under the Columbia River Treaty.¹³ Bonanza Creek itself has been recognized as the most important fish spawning stream in the Slocan Lake watershed.¹⁴

¹¹ grizzly bear risk identified in the *Upper Slocan Valley Bear-People Hazard Study* Paquet and McCrory, 2010, BC Bear Smart program

¹³ Gary Davidson, Nakusp, BC, personal communication, April 2015

¹⁴ *Slocan Valley Development Guidelines*, RDCK and Prov. of BC, 1984, p.32

Section 3 – Summit Lake

Description: After crossing Highway 6, the trail runs for about 6kms, the first km alongside Summit Lake Marsh which extends southeast from Summit Lake. The trail continues around the eastern shore of the lake, typically 5-20m from the shoreline. Beyond Summit Lake, the trail passes through another small wetland area, then open meadow and a few private properties before connecting with the Nakusp-Summit Lake Trail at the RDCK Area H/K Boundary. ..

Trail Condition: Along Summit Lake Marsh, a section of the trail is generally flooded most of the year, usually drying out somewhat in late summer/fall. Along the shoreline of Summit Lake and beyond to the RDCK Area H/K boundary, the trail grade is in generally good condition with some water management needed.

Access: Public access to this section is available where Bonanza Creek crosses Highway 6 south of Summit Lake, at Ruby Ridge Rd at the north end of the lake, and where it passes close to Hwy 6 at the RDCK Area H/K boundary.

Ecology: Beaver activity is high in the Summit Lake Marsh area, often flooding part of the trail. In late summer when water levels drop, this section sees high concentrations of young western toads, a recognized species at risk, as they congregate to begin their upslope migration. Summit Lake Provincial Park, across the lake from the trail, has a recovery plan for the western toad which includes interpretive signage, highway-underpass structures, and an annual Toadfest. Grizzly bears are also active in this trail section during the spring, feeding on new plant growth. At the southeastern corner of the lake, there is mountain goat wintering bluff habitat with the occasional goat descending to the trail and lakeshore. Like Bonanza Marsh and the Bonanza Creek corridor, Summit Lake Marsh and wetlands provide regionally important bird habitat and nesting sites for many species.¹⁵

3.2 Current Trail Usage

Uses of the rail trail include:

- Mountain biking – all sections
- Hiking/walking/jogging/running – all sections
- Beach access – high use along Slokan Lake
- Cross-country skiing, snowshoeing - high use along Bonanza Creek and Summit Lake sections, limited along Slokan lakeshore due to low snowfall.
- ATVing, dirt-biking – occasional in all sections
- Fishing – all sections
- Snowmobiling - rare in all sections.
- Wildlife and bird viewing – high in all sections
- Horse-back riding - occasional at Summit Lake end, rare along Slokan Lake and Bonanza Creek
- Adjacent landowner use for moving equipment, access to property –occasional in the Rosebery, Hills and Summit Lake areas.
- Educational use by local students/teachers, nature study groups – all sections
- Scientific wetland research –Bonanza Marsh, Hunter Siding, Summit Lake Marsh

¹⁵ Gary Davidson, Nakusp, BC, personal communication, April 2015

4. Stakeholders and Governance

4.1 Stakeholders

Wildlife

As noted, this rail corridor is abundant with wildlife and serves both as habitat and as a seasonal movement route for large and small mammals, birds, reptiles and amphibians. Some of these, such as the western toad, western skink, Coeur d'Alene salamander, and great blue heron, are recognized species at risk. For purposes of this plan, wildlife and other important biota are treated as a distinct stakeholder group to ensure that habitat is protected to the extent possible and that wildlife presence is recognized for the safety of all trail users.

First Nations

The original trail along much of this route was established by First Nations (see p.1). Consultation with local Indigenous peoples regarding their knowledge of the area and their concerns regarding trail development and potential impacts on traditional interests is required. This management plan proposal will be circulated for consideration and input prior to adoption.

Local

Trails repeatedly show up as highly-valued recreational assets in local surveys.¹⁶ An RDCK commission and an existing trail society steward and manage designated trails in the area (Galena, Wakefield, and K & S trails). Local stakeholders include individuals, communities, and recreational and environmental stewardship societies and groups with an interest in the trail. These individuals and groups will be encouraged to join in the formation of a registered Society that will be dedicated to managing the Rosebery-Summit Lake Rail Trail if this management plan goes forward.

Adjacent Land Owners

Sections of the trail in the Hills, Summit Lake, and Rosebery Parklands areas are adjacent to private land. It is important to ensure that planning for the trail incorporates land owner expectations for coexistence (see p. 6).

Provincial/ Regional

The Nelson office of Recreation Sites and Trails BC, a branch of the BC Ministry of Forests, Lands and Natural Resource Operations oversees many public trails in the area. It is interested in taking on management of this trail and entering into a partnership agreement with a local society. It is also collaborating on this project with staff of the RDCK which has a history of advocacy in establishing this trail as a public recreation corridor (see p. 4).

4.2 Governance

4.2.1. Management Plan Approval Process

Local residents must support this management plan proposal as a condition of its moving forward. A household poll of residents in RDCK Area H north will be used to gauge this support. This poll will be conducted and the results tabulated by an independent consultant. With approval by local residents, Rec Sites and Trails BC has indicated it will proceed with the interagency review required for official trail designation and with consultation with the RDCK and local First Nations. Following this review and consultation, the Rosebery-Summit Lake Rail Trail will become an official trail under Rec Sites and Trails BC.

¹⁶ Hills Community Recreation Survey, 2009; RDCK Area H Recreation Master Plan (draft), March 2015.

4.2.2 Ongoing Governance and Community Engagement

Once the trail is officially designated, RSTBC will have authority to develop regulations in keeping with the management plan, supported by the ministry's Compliance and Enforcement branch.

Also with official trail designation, a registered non-profit society will be formed to partner with RSTBC to implement the management plan, to guide and oversee the maintenance and development of the trail, and to raise funds for its operation. Interested individuals and local organizations will be encouraged to join in the formation of this society. The society will seek to engage residents and user groups in the ongoing operation of the trail, will solicit public input as appropriate, and will keep the community informed via newsletters, meetings and other means.

5. Trail Use and Management

5.1 Rationale for Recommendations

The task set out for this project is to recommend a trail management plan that will be broadly supported in the community. As indicated elsewhere in this document, there has been much discussion and public consultation over the past 15 years. The steering committee has reviewed this information and consulted with people who have been involved. The trail use recommendations in this section have been guided by the following principles derived from this review and consultation:

- Protection of the ecology of the rail corridor including habitat for year-round and seasonal fish and wildlife species and native plants.
- Identification and protection of First Nations cultural heritage and traditional use sites and other cultural and historic features
- Provision of safe and high quality trail experiences for all user groups
- Provision of recreational opportunities that support the pattern of established local uses

Protection of the Ecology

High wildlife values along the trail are a central consideration of this management plan. As discussed above in Section 3, the rail corridor provides year-round and seasonal habitat for many species of mammals, birds, fish, amphibians, reptiles, and other land and aquatic organisms. Some of these species are rare, and some are small but nonetheless essential to the overall functioning of the ecosystem. The rail trail corridor also serves as a major cross-valley wildlife movement corridor for grizzly bears, wolverine and other species traveling between Valhalla and Goat Range Parks, a function that is becoming more valuable as climate change causes animals to be increasingly on the move.¹⁷

Proximity of the trail to water and wetlands is another of its major characteristics. For nearly its entire length, the trail follows either lakeshore or creek with water moving across it and into these bodies of water in many places. Except through Hills, the trail lies almost completely within wetland and riparian areas. Wetland areas such as Bonanza and Summit Lake marshes and much of the area along

¹⁷ *Land Conservation – Threats to Biodiversity*, The Nature Trust of BC available at: <http://www.naturetrust.bc.ca>

Bonanza Creek, including the Hunter Siding wetland complex, have been recognized for providing many ecological services, such as water filtration, downstream erosion reduction, and habitat for many species. Wetland protection has become a focus in many areas of BC. The Slocan Valley, one of the last undammed, largely-intact riparian corridors in the Columbia River Basin, has been designated one of six priority areas for conservation, sustainable use, and community engagement initiatives under the 2014 Columbia Basin Riparian and Wetlands Action Plan.¹⁸ Locally, a collaborative, multi-agency effort called the “Slocan Wetlands Assessment and Monitoring Project” (SWAMP) has several study areas along the rail trail including Bonanza Marsh, Hunter Siding and Summit Lake Marsh. Protection of these wetlands is also a priority of this management plan.

A general environmental consideration addressed by the rail trail is the provision of easily accessible and user-friendly options for recreation and travel between communities with reduced greenhouse gas emissions. The BC Government, the RDCK, and 180 of BC’s 188 municipalities have signed the BC Climate Action Charter which acknowledges the need to reduce human-caused greenhouse gas emissions.¹⁹

The first priority of this management proposal is to maintain, protect, and restore where necessary the rail trail ecosystem. A key step in this direction will be a biological feasibility study to assess the impacts of recreational use of the rail trail on plant, fish and other wildlife species, with suggestions on how to limit damage, a study first recommended in 2001 (see p. 4). A well-respected and homegrown tool for guiding this work is ecosystem-based conservation planning as developed by Slocan Valley forester and ecologist Herb Hammond and associates²⁰. Until the assessment is completed, the trail will be managed for known ecological and wildlife issues which will likely include seasonal limitations on trail use.

Protection of Cultural and Historic Features

First Nations people were the first to use this route and likely introduced early prospectors and settlers to it. As noted elsewhere in this proposal, consultation with local Indigenous peoples regarding their knowledge of the area and their concerns regarding trail development and potential impacts on traditional interests is required. A preliminary archaeological report mentions a First Nations house pit / cache site with stone tool fragments, and likely other sites will be discovered with a follow-up study. There are also remains of an old wagon road along the trail and remnants from the CPR. It is the intent of this management plan to protect and highlight these cultural and historic features.

Providing Safe and High Quality Trail Experiences

High quality trail experiences depend upon clear and adequate trail rules and an attitude of consideration and respect by all user groups for one another and for the trail. This is based on the concept that use of the trail is a privilege, not a right, and if one group’s actions adversely impact others, management intervention may occur. Posting clear trail etiquette helps, for example, to ensure that passing and other encounters on the trail are handled in a predictable and safe manner.²¹

As well, trails need to be built and maintained to specifications that ensure safe use and minimal degradation by intended user groups. These specifications are readily available, and current conditions

¹⁸ *Columbia Basin Riparian and Wetland Action Plan (Draft)*, BC Hydro Fish and Wildlife Compensation Program, Sept. 2014, p48-49, available at www.bchydro.com

¹⁹ *British Columbia Climate Action Charter*. available at: <http://www.livesmartbc.ca>

²⁰ for more information on Herb Hammond, his work and the Silva Forest Foundation, see <http://www.silvafor.org>

²¹ same as #17

on the rail trail need to be measured against them. It is reasonable to expect that, given the present state of the rail trail, there may be limits on allowable uses, especially at wet times of the year.

Supporting Established Local Uses: Compatibility and Balance

A challenging issue in this project has been addressing the mixing of human-powered and motorized trail uses, an issue in many areas of BC and beyond. The Rosebery-Summit trail connects to the non-motorized Galena Trail in the south and to the motorized Nakusp-Summit Lake Trail in the north. The BC Recreation Manual, used by government ministries to plan and design trails, states that “Wherever possible, single-use trails are the best choice for both trail builders and trail users,” and further that “in most cases, motorized and non-motorized use on the same trail is not recommended.”²²

Experience elsewhere has documented that not all trail uses are compatible, particularly between non-motorized and motorized users. This happens when actions of one group are disruptive to others (trail degradation, noise, fumes, dust clouds etc), or when one group sees danger in the actions of another. Often these conflicts are asymmetrical, that is one group feels negatively impacted while the other does not, and the result is that the impacted group often just quits using the trail.²³

The 2009 Hills survey reported that most households use the rail trail and that 70 to over 90% of that activity is non-motorized, depending on season. Reports from other trail users support this pattern. Walkers, joggers, cross-country skiers, and cyclists may especially appreciate the relatively flat grade, the peace and quiet along the lakes and creek, and the considerable bird and wildlife presence.

However, there is a history of use and maintenance of the rail trail by some local ATVers, and a mostly friendly relationship exists between local user groups, with only rare incidents of conflict. There has been an effort over the years to work out an arrangement that would accommodate this limited local motorized use and be agreeable to the majority of trail users and residents.

Wide-open motorized designation is not the preferred option of anyone consulted during development of this management plan proposal, including local motorized users. There is a recognition that with several easy access points, with campgrounds at both ends of the trail, and with increased publicity that comes with official trail designation, the level of motorized use could easily increase to the point that it radically alters the current use pattern, seriously impacting the experience of the non-motorized majority and the condition of the trail bed.

One option from earlier stakeholder discussions continues to have support and forms part of this proposal: offering current local ATV users limited access to the trail. Such an arrangement has compliance and enforcement challenges, but this management plan proposes a trial period to see if it is workable. One possibility is through membership in a “Friends of the Trail” group within the proposed trail Society. These ATV-user memberships will be limited in number and available only to those who are residents of RDCK Area H North and current users of the rail rail, or who have disabled or elderly family members who could not otherwise enjoy it. Like other trail users, this group will be subject to conditions including a speed limit (likely 10km/h), and seasonal restrictions (which may be different for ATVs) based on wildlife issues and trail conditions. It is expected that the ATV Friends will help patrol the trail, checking for hazards and possibly performing routine maintenance during their outings. Membership will include a visible means of identification. Under this option, trail signage will read “This is a non-motorized trail. Authorized motorized-use only” or something similar. ATV operation may be limited to certain days of the week. The Society may also consider special one-day ATV permits, with limitations, that could be issued when wildlife and trail conditions are favourable. Notice of such permits would have to be clearly posted to advise other trail users.

²² *Recreation Manual*, Recreation Sites and Trails BC, ch.10, sec.10.3.2 and 10.3.5, available at <http://www.sitesandtrailsbc.ca>

²³ *Regional Trails Master Plan*, Regional District of Okanagan Similkameen, 2012, p.48, available at <http://www.rdos.bc.ca>

Success of the ATV Friends program will depend upon the cooperation and goodwill of all parties and upon self-monitoring and enforcement support from the ATV Friends group including redirecting visiting ATV users to other local trails. It will be reviewed one year after adoption. As stated previously, once the trail is officially designated, RSTBC will have authority to develop regulations in keeping with the management plan, supported by the ministry's Compliance and Enforcement branch. The ministry's "Limits of Acceptable Change" planning system will be used to monitor and adapt trail use policies as needed. The ATV option will, like all trail uses, be subject to restrictions that may arise from the scheduled recreational use impact assessment.

The use of 'dirt bikes' or other motorcycles on the trail is deemed inappropriate given the high noise levels and speeds associated with these machines and the many alternative roads and trails that are easily accessible in the area. Current recreational snowmobile use is extremely small and will be limited to this level in the same manner described above for ATVs.

It is important to keep in mind that, regardless of trail use policies, everyone is welcome and encouraged to use the trail. One may not have the option to operate a car or bicycle on a sidewalk in town because of safety and consideration of the needs of others but is certainly otherwise welcome. So, too, on the rail trail.

5.2 Trail Use Recommendations

All Sections

Trail use in all sections will be subject to trail conditions, wildlife issues, and other circumstances that may be present at any given time. Future trail use will likely also be affected by recommendations from the recreational use impact assessment to be organized by the rail trail society (see pages 4, 10).

In keeping with the historic and current use pattern, the entire trail will be managed for non-motorized recreational use with limited local ATV use through a "Friends of the Trail" program as described on page 12. Exceptions are the Girl Guide Camp area near Hills and the northernmost part of the trail where it connects with the Nakusp-Summit Lake trail. In these areas, motorized use is expected to be higher.

Following is a summary of key characteristics, issues and recommendations particular to each trail section.

North Slokan Lakeshore

Rosebery to Girl Guide camp

This section is characterized by close proximity to Slokan Lake shoreline with access to small beaches. Common wildlife includes deer, black bears (especially in berry season) and coyotes. Bald eagles, loons, and various waterfowl are common.

This section has the softest soils and most wet areas of the entire trail. Drainage improvements, trail repair, and brushing are required in several locations due to unmanaged bank seepages, rockfall, bank sloughing, and rutting from vehicle use in wet conditions. It is grown in and narrow with poor sight lines in several places. The large majority of present use is non-motorized, and at the south end it connects to the non-motorized Galena Trail. Given all these factors, this section will be managed for non-motorized use with very limited ATV access. There is potential to provide wheel-chair access to the lakeshore.

Girl Guide Camp to Bonanza Road

This area is centered on a popular beach used by both Hills residents and visitors. Access is from the highway via a short steep road or along the trail from either direction, with regular road vehicles occasional on the trail except in winter. Local preference is to keep this area low key and undeveloped. Informal parking has been established for half dozen or so vehicles. Camping has been occasional, both on the trail here and at a rough lakeside campsite about 1km south. There are no toilets or other facilities in the area.

This section of the trail will continue to accommodate local access to the popular beach and safe movement of other trail users through the area. Private owners of the Bonanza marsh and other adjacent landowners will need to be assured that their interests are protected. Existing motor vehicle access through this section could be maintained, but there is limited parking. Further assessment is required to clarify options. Toilet facilities are needed. As elsewhere, there will be no camping on or immediately next to the trail. The former Girl Guide camp property, which adjoins the rail trail and recently reverted to the province, will be included in the application for official trail designation.

Bonanza Corridor

This section has very high values for wildlife and fisheries (see p.8) and, from Baldwin Rd in Hills, lies entirely within the riparian and wetland areas of Bonanza Creek. This location, along with extensive beaver activity, the removal of CPR culverts, and upslope landslide activity has resulted in several areas with drainage issues. The seasonal presence of grizzly bears, black bears and moose are potential hazards to trail users. As along the Slokan lakeshore, the large majority of use is non-motorized. Cross-country ski track-setting equipment is used on a 6km section in the Hills area with skier-set tracks extending to the Hwy 6 crossing at Summit Lake

The planned recreational-use impact assessment will be conducted as a first priority for this section with results guiding management decisions. Because of high wildlife, fisheries, wetland and water values, until the study is completed the trail will be managed for known concerns and for existing trail conditions. Cross-country ski use will be accommodated subject to results from the impact assessment. Consideration could be given to designating this a Wildlife Management Area under the BC Wildlife Act.

Summit Lake

This section is characterized by its proximity to well-used provincial and private campgrounds, to Summit Lake wetlands and shoreline, and to upland wildlife habitat (see p. 7). The first km of this trail section is frequently flooded and has high grizzly presence in the spring and high western toad concentrations in late summer/fall. The northwest end connects to the Nakusp-Summit Lake Trail.

The section along Summit Lake Marsh will be managed for wildlife, including grizzly bears, bird habitat and western toads. At the northwest end, from the RDCK Area H/K boundary to Ruby Range Road, trail use will be managed consistent with the motorized Nakusp-Summit Lake trail. This will enable motorized users from the Nakusp direction continued access for to the McDonald Creek logging road network to the west. Southeast of Ruby Range Rd. motorized use will be restricted as on the rest of the trail.

6. Operations and Funding

6.1 Overview

On an annual basis an Operations Plan and Budget shall be prepared by the Society to categorize maintenance and capital activities into three levels. First, baseline repair and maintenance activities will be identified as ongoing work programs for the required upkeep of the trail. Secondly, all special

projects that are needed to assess or address major trail repairs will be separately identified. The last budget category will be for required infrastructure or structural improvements. Infrastructure projects shall be justified on a case-by-case basis, communicating and seeking public approval as and when required. This approach to budgeting will greatly assist the Society in determining required funding levels for the year and permit priorities to be reassessed in the event of a funding shortfall.

6.2 Proposed Implementation Plan

The following 5-year plan outlines the basic approach needed to address remediation priorities and establish detailed requirements for the ongoing management of the trail.

Year 1 – Establishment of a Society to partner with BC Rec Sites and Trails to oversee the trail. Budget and fund raise for assessments and identified priorities. Conduct assessments for biological impact, First Nations sites, trail bed and hazard conditions. Conduct stakeholder consultations. Prioritize improvements based on above and develop time line. It is important to note that initial trail improvement priorities will be to restore and preserve the trail bed. Infrastructure improvements (parking, shelters, kiosks, signage etc) will be prioritized with input from stakeholders and the public.

Year 2 – Archeological and infrastructure assessment and planning. Continue with year one improvements. Budget and raise funds for improvements. Trail remediation and improvement will be a multi-year endeavor requiring consultation with trail building experts and likely biologists, hydrologists and engineers. Archeological and infrastructure planning will be accomplished with the input of locals and stakeholders as well as First Nations.

Year 3 – Continue with improvements. Prioritize and implement recommendations of archeological and infrastructure assessments. Budget and fund raise.

Year 4 – Continue with improvements. Initiate archeological projects. More fund-raising.

Year 5 – Complete improvements, archeological and infrastructure projects and continue with fund-raising.

6.3 Annual Maintenance and Winter Operations

Trail operation and maintenance will be undertaken by the society as outlined in an annual operating plan. This plan will be developed as an outcome of Year-1 assessment. Annual routine maintenance typically covers:

- Clearing of deadfall and brush
- Trail and facility inspection
- Clearing of culverts and water courses
- Repair of trail surface as required
- Trail hazard identification and trail closure, as required

Additional aspects of the annual operating plan will be developed with public input as appropriate including, but not limited to: access points, signage, rest areas, sanitation facilities, demarcations and any required fencing.

6.4 Ongoing Funding

It is anticipated that annual routine maintenance of the 26 km of trail will require a minimum base budget of approximately \$5000. Some of this cost can be mitigated with in kind volunteer labour. Additionally, about \$1000 will be required for insurance and admin costs. Additional funding will be required for assessments, major trail work, and infrastructure projects. Funding will be by application to programs offered by CBT, the Province, the RDCK, and other agencies and organizations, as well as by fund raising events, donations etc.

7. Ongoing Risk Management

7.1 Safety and Ethics

The safety of trail users and the responsible use of the trail will be a critical component in the ongoing management of the trail. Trail users will be responsible for their own safety, and preventive measures shall be taken by the Society to minimize risk and to inform and educate trail users. There will be an ongoing need to identify and warn users of trail hazards and to invoke seasonal closures when necessary to ensure the safety of users and protection of wildlife habitats.

Following are examples of actions to ensure appropriate trail usage and safety for all users:

- Grizzly bear seasonal warning signage will be erected and closures invoked as needed.
- Trail information will be provided regarding trail etiquette, governing regulations and emergency contact. Such information will be provided in brochures, signs and trailhead kiosks.
- Users will be informed that dogs are to be kept under control at all times.
- Users will be informed of privately held adjacent lands and that trespassing could be subject to legal action.
- All road crossings will be clearly marked.
- Camping will not be permitted on or along the trail.
- Hunting or discharge of any firearm along the trail will be strictly prohibited.
- Invasive species awareness and educational information will be provided.

To inform users of significant trail hazards, regular visual inspections of the trail corridor and related structures will be incorporated into the annual maintenance activities. When the conditions of the trail present a hazard, signage will be erected warning users of the type of danger and expected date of remediation. If there is a significant issue with a trail bed, a qualified professional would be retained to assess and prescribe remediation work. Given the drainage issues in some sections of the trail, it is reasonable to expect portions of the trail may be closed for extended periods for remediation.

7.2 Insurance

The Province of BC as the landowner of the trail will provide adequate property and liability insurance for the trail. As trail stewards, the Society shall have an appropriate level of Directors' liability insurance in place.

7.3 Issue Mitigation

With respect to user and adjacent landowner conflicts, the Society shall attempt to minimize conflicts by involving affected stakeholders in the development and management of the trail. In the event that a user or landowner issue does arise, the Society will attempt to resolve the issue through dialogue and corrective action as appropriate to the situation. When the conflict or trail issue involves a civil or criminal matter, the issue will be directed to the appropriate authorities for resolution.

Appendix A – Abandoned Rail Ties

Notes on abandoned creosote rail road ties, Rosebery to Summit Lake. April 21, 2015. W. McCrory

There are numerous abandoned creosote railroad ties intermittently scattered in piles or single individuals along most of the rail to trail from Rosebery to Summit Lake. Since the railroad was pulled in the 1980s, trees and undergrowth now conceal many of the once obvious ties. Some are in wetland and riparian areas as well as over the bank between the right-of-way and Slocan Lake.

When BC Parks was going to take over the Rosebery-Summit Lake rail-to-trail about 25 years or so ago, the issue of the abandoned railroad ties was brought up and an MOE person said they would be considered contaminated sites. At the time it was also obvious that the ties left behind were older, partly broken down ones since the good ones were recovered and were observed leaving on low-beds.

A recent on-line review shows that although there are different sources of creosote, the rail ties along the Rosebery-Summit Lake rail-to-trail corridor are most likely from the high temperature distillation of coal tar. It is a complex chemical mixture, up to 80% of which is comprised of polycyclic aromatic hydrocarbons (PAHs).

The U.S. Environmental Protection Agency (EPA) considers creosote to be a possible human carcinogen. However, its effects have never been adequately studied and so results are inconclusive. Some people still use old creosote ties for landscaping walls, etc. Home Depot gives used creosoted railroad ties away for free (see on-line). The Federal Department of Fisheries and Oceans (DFO) has guidelines for use of treated wood in aquatic environments including creosoted pilings. Studies are being done on the effect of leaching of substances from creosote-treated railroad ties on aquatic environments but are not complete. According to a Bulletin by Environment Canada on creosote-generated PAHs: *Aquatic organisms may be adversely affected by exposure to elevated levels of PAHs in sediments, freshwater or marine environment*. Apparently the chemicals stay in the wood a long time. On a warm day you can still smell the creosote on the abandoned railroad ties along the Rosebery-Summit Lake rail-to-trail.

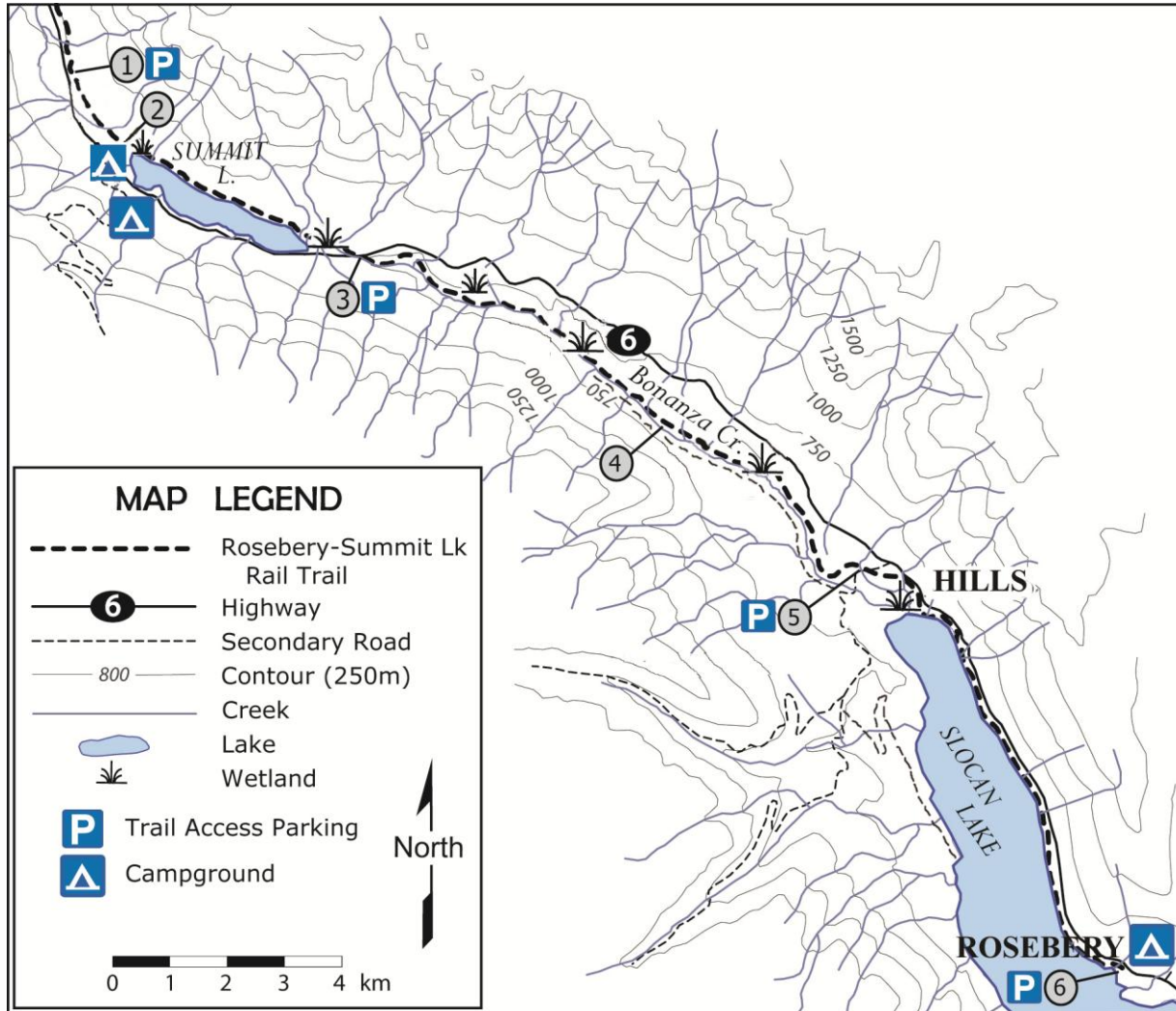
Disposal may be an issue. There are 1-2 plants in BC that burn old ties to create energy but these are controversial. The ties are chipped first so this method might not work for some of the broken down ties abandoned along our trail. Burning by the public appears discouraged, if not prohibited.
Conclusions and recommendations:

Further research is recommended as to how other rail-to-trail groups have dealt with the issue, MOE methods of disposal, etc.

Although the final word is not in on adverse effects on aquatic and other natural environments of creosote-treated abandoned railroad ties, there is enough suggestion of adverse effects that it would be advisable to weigh on the side of caution and develop a program and budget to collect and dispose of all railroad ties along the Rosebery-Summit Lake corridor. An inventory in the spring when most of the ties are visible should be part of this. Gathering more information and getting this job done should be considered as one of the first management priorities of the year one work plan. Tie removal would be a part of the initial trail corridor remediation along with remedial work to stream crossings, replacement of old culverts, etc.

Appendix B – Maps (1)

Rosebery – Summit Lake Rail Trail Map

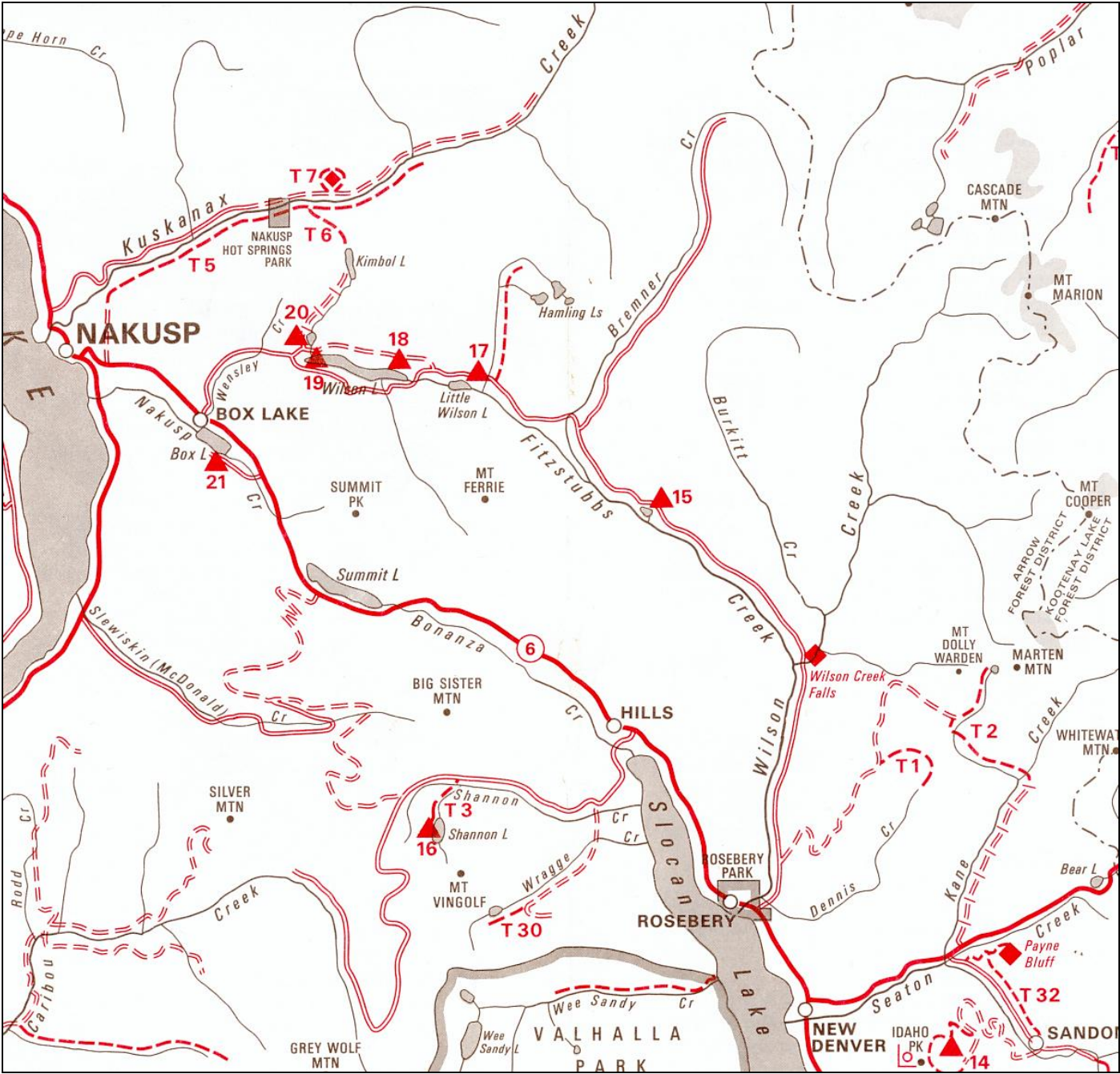


Location Key:

- ① - Boundary with Nakusp-Summit Lake Trail
- ② - Ruby Range Rd
- ③ - Highway 6 Crossing
- ④ - Red House
- ⑤ - Bonanza Creek Rd. Crossing
- ⑥ - Boundary with Galena Trail

Appendix B – Maps (2)

Area Map



Appendix C – Steering committee and project contributors

In early 2014, after the RDCK withdrew its application for tenure on the Rosebery-Summit Lake Rail Trail, Recreation Sites and Trails BC (RSTBC), a branch of the BC Ministry of Forests, Lands and Natural Resource Operations indicated an interest in becoming the managing agency and in entering into a partnership agreement with a local group. RSTBC oversees most public trails in the Slocan Lake and adjacent areas through its Nelson office. The stated purpose of RSTBC is “to develop, maintain and manage a network of recreation sites and trails to provide safe, quality recreation opportunities for the public.”

Discussions between RSTBC and RDCK staff led to the idea that the best course of action would be for a local group to develop a management plan proposal for the trail that would have “broad community support”. And, if this effort were successful, they recommended that a non-profit society be formed to partner with RSTBC in managing the trail. This led to the formation of the present steering committee whose members include:

Richard Allin – Hills, co-chair
Wendy King – Rosebery, co-chair
Mike Koolen –New Denver, co-chair
Dale Caton - Rosebery
Kip Drobish - Hills
Wayne McCrory - Hills
Debbie Pitaoulis- Summit Lake
Tim Sander - Hills
Lawrence Schiavon - Hills

Also contributing time and expertise to the project:

Gary Davidson, Nakusp
Richard Johnson, Rosebery
Marcy Mahr, Hills

Walter Popoff, Director, RDCK Area H, provided support for the public polling aspect of this project.

Inspiration

The steering committee has been guided in this project by many sources, but the words of Stan Rowe, eminent Canadian ecologist who lived in New Denver as a young man and returned to spend the last years of his life, may best sum up our hopes. The final chapter in his book *Home Place* is entitled “Modesty in the Home Place” and begins with these words:

“...we people have evolved, grown in numbers and intelligence, developed values and cultures, all within a nurturing global Ecosphere that is neither well known nor deeply appreciated...All is not lost. Time has not yet run out and we can do better.”