

Trans Canada Trail — Linking Communities Initiative Recreational Route Study — Merritt To Brookmere

Final Report

Friday, 2nd June, 2000

Prepared by:

Graham Seefeldt Aestech Consulting Inc. PO Box 4062, 529 Aberdeen Road Lower Nicola, BC V0K 1Y0

Telephone (250) 378-3512 - Fax (250) 378-3542

E-mail: aestech@uniserve.com

With assistance from:

Murphy Shewchuk PO Box 400 Merritt, BC V1K 1B8

Telephone/Fax: (250) 378-5930

and

Elizabeth Salomon-de-Friedberg 1964 Greaves Avenue Merritt, BC V1K 1B8

Telephone: (250) 378-4087

Prepared for:

City of Merritt PO Box 189, 2185 Voght Street Merritt, BC V1K 1B8

Telephone: (250) 378-4224 - Fax: (250) 378-2600

and the

Nicola Valley Explorers Society PO Box 1499 Merritt, BC V1K 1B8

Sponsored by:

Ministry of Community Development, Cooperatives and Volunteers PO Box 9915, Stn Prov Gov Victoria, BC V8W 9R1

Telephone: (250) 387-0053 - Fax: (250) 387-2935

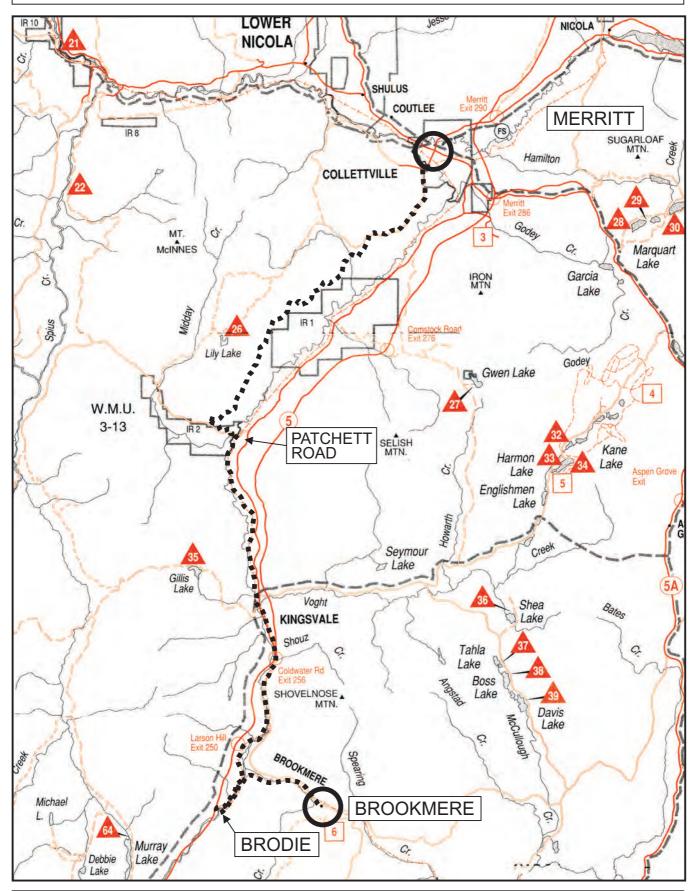


Table of Contents

1. Executive Summary	3	4.4.1 Introduction	31
1.1 Overview	3	4.4.2 Merritt to Patchett Road	31
1.2 Methodology	3	4.4.3 Patchett Road to Brodie	32
1.3 Route Recommendation	4		
1.4 Issues and Resolutions	5	5. Major Infrastructure	33
1.5 Study Recommendations	6	5.1 Bridges: Brook Creek	33
1.5 Study Recommendations	Ū	5.1.1 Brook Creek Bridge # 1.	33
2. Introduction	7	5.1.2 Brook Creek Bridge # 2.	33
2.1 Area Description	7	5.1.3 Brook Creek Bridge # 3.	34
2.2 Report Background	7	5.2 Bridges: Coldwater River	
2.3 Report Funding Source	8	5.2.1 Coldwater Bridge # 1	2.5
2.4 Report Presentation	8	(Brodie).	35
2.4 Report I resentation	· ·	5.2.2 Coldwater Bridge # 2 (Brodie to Kingsvale).	35
3. Methodology	9	5.2.3 Coldwater Bridge # 3	55
3.1 Public Consultation	9	(Brodie to Kingsvale).	36
3.2 Field Reconnaissance	10	5.2.4 Coldwater Bridge # 4	26
3.3 Research	10	(Brodie to Kingsvale).	36
3.4 Draft and Final Reports	10	5.2.5 Coldwater Bridge # 5 (Brodie to Kingsvale).	37
		5.2.6 Coldwater Bridge # 6	
4. Route Recommendations	11	(Brodie to Kingsvale).	37
4.1 Merritt to Patchett Road	11	5.2.7 Coldwater Bridge # 7 (Patchett Road to Merritt).	38
4.1.1 Statistics.	11	5.2.8 Coldwater Bridge # 8	30
4.1.2 Route Description.	11	(Patchett Road to Merritt	
4.1.3 Recommended Improvements.	12	Merritt Mtn Music Festival).	39
4.1.4 Maps: Merritt - Patchett Road.	13	5.3 Bridges: Voght Creek	40
4.2 Patchett Road to Brodie	19	5.3.1 Voght Creek Bridge	
4.2.1 Statistics.	19	Coldwater Road at Kingsvale.	40
4.2.2 Route Description.	19	5.4 Washouts & Landslides	41
4.2.3 Recommended Improvements.	21	5.4.1 Merritt to Patchett Road.	41
4.2.4 Maps: Patchett Road to Brodie.	22	5.4.2 Patchett Road to Brodie.	41
4.3 Brodie to Brookmere	29	5.4.3 Brodie to Brookmere	43
4.3.1 Statistics.	29		4 -
4.3.2 Route Description.	29	6. Issues & Resolutions	45
4.3.3 Recommended Improvements.	30	6.1 Introduction	45
4.3.4 Maps: Brodie to Brookmere.	30	6.2 Identification of Issues	45
4.4 Route Options & Rationale	31	6.3 Issues and Proposed Resolutions	46

8.		ppendix C roject Schedule and Timelines	57
8.	8.2 Appendix B Community Participation		55
8.		ppendix A lanning Team Members	55
8.	App	endices	55
7.	Reco	ommendations	53
	6.3.11	Agricultural Land Reserve	52
	6.3.10	Private Property: Access & Fencing	51
	6.3.9	Impacts on Landowners	50
	6.3.8	Acceptable Trail Uses	49
	6.3.7	Policing the Trail	49
	6.3.6	Weed Control	48
	6.3.5	Toilets & Campgrounds	48
	6.3.4	Long Term Maintenance	47
	6.3.3	Washouts - Repair Vs. Relocation	47
	6.3.2	Road Crossings	47
	6.3.1	Planning & Development Costs	46



Fig. 1. Brookmere Water Tank. (Date: 2000-04-02 — By: Murphy Shewchuk.)

1. Executive Summary

1.1 Overview

Over the past several decades, the development of trails and trail networks has become a topic of much interest throughout North America. In recent years, the promotion of the Trans Canada Trail has created additional interest in the development of local and regional trail networks.

In October 1995, the Province of British Columbia announced the acquisition of more than 425 kilometres of abandoned railway corridors. This included more than 250 kilometres of the former Kettle Valley Railway / Canadian Pacific Railway right-of-way between Spences Bridge and Okanagan Falls. The only sections not included in the purchase where those passing through Indian Reserves and Municipalities.

To date, the designated route of the Trans Canada Trail includes much of the former KVR/CPR right-of-way between Midway in the Boundary District and Brodie, some six kilometres west of Brookmere. From the Brodie junction, the Trans Canada Trail is expected to continue to Hope, but the exact route has yet to be determined. Significant interest in linking Merritt to the Trans Canada Trail at Brodie via the KVR/CPR right-of-way led to a study funded by the Ministry of Community Development, Cooperatives and Volunteers.

The purpose of the study was twofold:

- 1) To identify and recommend a route that will link the City of Merritt with the Trans Canada Trail near Brookmere.
- 2) To identify work that needs to be done to bring the route up to a safe standard.

The principal local sponsors of the study were the Nicola Valley Explorers Society and the City of Merritt. Aestech Consulting Inc. was hired to carry out the study in consultation with the community, stakeholders, interest groups, industry, government agencies and ministries.

1.2 Methodology

The study incorporated an extensive public consultation process, in-depth field reconnaissance and mapping, and research into land ownership, issues and resolutions. Given the relatively short timelines for completing this project, the first task for the consultant group was the setting out of a project schedule that did three key things: a) helped define the public consultation process;

- b) delineated the roles and responsibilities of the Planning Team and the consulting group;
- c) provided direction for each stage of the project and set out fixed dates for two of the three components of the public consultation process: public meetings and planning team workshops.

The public consultation process focused on getting the involvement and active participation of the community and in particular, certain stakeholder groups. This was achieved through:

- a) public meetings, three in number;
- b) three Planning Team workshops; and
- c) consultations with individual landowners (and tenure holders) adjacent to or in the vicinity of the route.

In order to ensure that information reached the key stakeholders, some 125 letters were sent at the start of the study period to local ranchers, forest license holders, First Nations, interest groups, elected officials in Merritt and the TNRD, and to provincial government agencies and crown corporations. This letter included general information about the study, an invitation to attend the first public meeting and to contact Aestech Consulting Inc. to discuss the project and any issues or concerns. The first public meeting introduced and explained the nature of the study and the objectives; and invited members from the community to be a part of the Planning Team. A detailed project schedule and timeline was also distributed at the meeting.

After the first meeting, a further 60 letters were sent to other landowners that could be impacted. The recipients were invited to join the Planning Team, to contact the consultant and to attend upcoming public meetings.

Meanwhile the Planning Team attended its first workshop and a second one followed three weeks later. The discussion and feedback at these workshops provided the consulting group with valuable information and helped direct their work. Route options were identified and discussed at length, issues raised and solutions proposed and the consultant reported on work done in between the workshops.

After the second workshop, a second public meeting was held at which the most viable route options were presented for comment. In addition, there was a presentation in issues and possible solutions with a questions and answer period that followed. Feedback from all meetings was incorporated into a draft report, a summary of which was presented at the third public meeting. In all ninety-eight people attended the public meetings. The workshops were also well attended with an overall attendance rate of 80%.

Further consultation took place via meetings with stakeholders as well as lengthy telephone conversations with a number of landowners. A meeting was arranged with the Chief of the Coldwater Indian Band and discussions followed with him as the route options were narrowed. The Coldwater Indian Band and the other Indian Bands in the area all received the first letter of invitation at the start of the study. Finally, once the recommended route was identified, the consulting group attempted to contact all landowners who had not yet been heard from.

In order to meet the second study objective, a different approach was required and involved driving, cycling or walking every metre of the recommended route and almost every route option. In this way, the route options were inventoried with the help of a GPS and a digital camera. In addition, the route corridor was viewed from a fixed-wing aircraft. Air photos were used to verify landmarks and landscape features.

The third component of the methodology was research. Once issues were identified they were more fully investigated with particular emphasis on solutions. A variety of sources were accessed with the most important being the Land Use Coordination Office, Ministry of Forests - Merritt District Office, Trails BC, BC Assets and Land Corporation and the Ministry of Transportation and Highways, Nicola Highways District.

Research was also undertaken to determine land ownership. This was done by visiting the BC Assessment Authority (Kamloops), the Land Registration Office (Kamloops) and the Ministry of Transportation and Highways - Nicola Highways District.

1.3 Route Recommendation

The study has identified a feasible route for a recreational trail between Merritt and the Trans Canada Trail at Brodie. It is recommended that the route begin at Claybanks Bridge in Merritt (see page 11), and continue south along the western slopes of the Coldwater River valley, via Midday Valley Road and secondary roads and trails west of the Coldwater Indian Reserve, to Patchett Road. There the route would turn east and follow Patchett Road to the KVR/CPR right-of way. From that point, the route would continue south along the KVR/CPR right-of-way to Brodie (see page 19) where it would meet the Trans Canada Trail.

The entire route, as mapped, covers a distance of 44 kilometres. This route passes through pine forests, along the Coldwater River, on public roads and through rangeland. For the most part, private residences are not in the vicinity or are hidden from view. Some sections of the trail would be quite steep, while others almost flat.

Recommended Improvements

Given the varied terrain, the proximity of some sections to the Coldwater River and the use of public roads, the proposed route will require a wide range of improvements to bring it to an acceptable standard for a multi-use recreational trail. In some places, a section of trail may need to be constructed along a public road and in other places, minor grading and graveling will need to be done. Where the trail meets up with rangeland, cattleguards will need to be installed and fencing. Cattle trails will need to be widened and a trail built around a major mudslide. At Kingsvale, a suitable access route will have to be constructed from the railway grade to Coldwater Road to bypass the missing bridge over Voght Creek and the Coldwater Road.

The trail will use six KVR/CPR bridges that cross the Coldwater River between Kingsvale and Brodie (see page 35). They will need suitable decking and safety rails installed. Other work includes contouring creek bottoms to minimize erosion, installing signs and barriers to reduce industrial vehicle traffic conflict and planting of willows and other shrubs to reduce bank erosion.

Brodie to Brookmere

The 6.2 kilometre section of the KVR/CPR railway right-of-way between Brodie and Brookmere (see page 29) has been designated a part of the Trans Canada Trail, but is not yet under the stewardship of any particular group. Work to be done along this section includes some grading, brush cutting, bank stabilization and culvert cleaning. Significant problems include a mudslide, a washout and the repair of three wooden bridges (see page 33).

1.4 Issues and Resolutions

The issues identified ranged from "motherhood" concerns with regard to the identification and development of a recreational route to very site-specific concerns with the consideration of route options (see page 45 for details).

Cost of Route Planning & Development

Concerns were raised as to whether costs of trail development and management would be a wise investment for the government and the community in terms of economic benefit.

If the Trans Canada Trail experience could be applied, funding would likely come from private sources.

Safety - Trail Crossings of Public / Industrial Roads

A concern was expressed with regard to the safe crossing of industrial roads.

Specific crossing locations, signing and structures would be implemented during the trail development phase.

Repetitious Trail Washouts - Repair Vs. Relocation

The Coldwater River constantly changes course and causes problems with erosion of improvements. The question was raised as to whether it would be wise to invest in these high risk areas.

Washouts and erosion, including mudslides, have been inventoried and detailed in Section 5 of this report. Alternate or bypass routes with little risk for further erosion, or manageable maintenance have been identified.

Trail Facilities / Garbage Along Trail / Long Term Maintenance

Indiscriminate camping in inappropriate locations can lead to unsanitary conditions, fires and litter. A maintenance strategy must address garbage and the cleaning of facilities, and the repair of infrastructure.

This report will recommend that any route approved by the Province will require the development of a comprehensive operational / management plan prior to the development of public facilities.

Weed Control Along Route Corridor

Since the abandonment of the rail lines, the control of weeds has either been left as a problem of the landowner or not addressed at all. The development of a recreational trail could increase the spread of weeds if not controlled.

A weed management strategy must be developed as a component of an overall trail management plan.

Policing of the Trail

A concern was expressed that the development of a recreational route, especially near private holdings, increases the risk of vandalism and trespassing, and that some means of addressing this issue would be required.

The issue of active enforcement is not a consideration. Key areas of risk along any approved recreational route should be identified during the planning stage and site specific solutions developed.

Acceptable Trail Uses

The Trans Canada Trail restricts use, in most instances, to five core activities: hiking, bicycling, horse riding, cross country skiing, and snowmobiling.

It is the intention of this study to adopt the same general principles of trail management and use. The recreational use of All Terrain Vehicles is not considered an acceptable use.

Impacts on Landowners

Loss of privacy, trespassing, vandalism and increased costs of insurance was the subject of much debate.

A trail management plan must identify key areas of concern and develop site specific solutions. Where specific concerns have been identified, the planning team has recommended options to minimize the impact.

Access to and Fencing of Private Property

In the event that a landowner has property on both sides of an approved recreational route, there will be a need to provide access to the landowner.

Access, fencing, and gating will be site specific and should be clearly identified in the trail management plan. Specific infrastructure should not be the burden of the landowner.

Agricultural Land Reserve

The issue was whether a recreational trail is an acceptable use within the Agricultural Land Reserve.

Any recommended route will be subject to government decisions with respect to the Agriculture Land Reserve.

1.5 Study Recommendations

(See page 53 for details.)

- 1. The Province approve a recreational route linking Merritt with the Trans Canada Trail at Brookmere.
- 2. The Province perform structural assessments on bridges between Kingsvale and Brookmere.
- 3. A trail management plan be developed to address key issues prior to the development of the route.
- 4. The trail accommodate five core users: cyclists, hikers, horse riders, x-c skiers, and snowmobilers.
- 5. All Terrain Vehicles and other motorized traffic be restricted from the route not part of existing roads.
- 6. Improvements be made to Midday Valley Road to allow for safe self-propelled transportation.
- 7. A pedestrian crossing be built into the replacement of the Voght Creek Bridge at Kingsvale.
- 8. An easement be obtained to provide a reasonable approach to the new Voght Creek Bridge alignment.
- 9. A bicycle path be included in any future Coldwater Road realignment.
- 10. The Province develop a registry for All Terrain Vehicles (ATVs) and other motorized off-road vehicles.
- 11. Provisions be made for current non-recreational uses of the trail corridor by landowners and stakeholders.
- 12. Interim work be undertaken to minimize further erosion of the KVR right-of-way.

2. Introduction

2.1 Area Description

The area covered by the Merritt to Brookmere Recreational Route Study lies in a generally north-south direction approximately 250 km northeast of Vancouver. It is drained by the Coldwater River and its primary tributaries, Midday Creek, Voght Creek and Brook Creek. The Coldwater River flows northward and into the Nicola River on the western outskirts of Merritt.

In the northern portion, the route follows the Coldwater Valley along the southeastern edge of the Coutlee Plateau. From Patchett Road south to the Brodie junction, the route generally follows the Coldwater River upstream along the valley floor. Between Brodie and Brookmere, the route climbs away from the Coldwater Valley and into the Brook Creek drainage.

The Coldwater Valley is longitudinally bisected by Coquihalla Highway 5 and Coldwater Road, with a number of lateral feeder roads including Midday Valley Road, Gwen Lake Road, Patchett Road, Kane Valley Road and Murray Lake / Gillis Lake Road. The valley is also the north-south route of buried natural gas and oil piplines and a fiber-optic communications cable. BC Hydro 500,000 volt lines traverse the valley near Kingsvale.



Fig. 2. Nicola Lake, northeast of Merritt. (Date: 2000-04-09 — By: Murphy Shewchuk.)

The valley floor ranges in elevation from 587 metres (1928 feet) at the junction of the Coldwater and Nicola Rivers in Merritt to 975 metres (3200 feet) at Brookmere. The surrounding mountains reach an elevation of 1693 metres (5556 feet) on the east [Iron Mountain] and 1684 metres (5525 feet) on the west [Mount McInnes].

Temperature and Precipitation

The region is generally dry with a moderate Interior climate. Temperatures range from -20° C in winter to $+30^{\circ}$ in summer. Precipitation ranges from 15 to 25 cm per year with May and June the wettest months.

Communities

Merritt is the largest community in the region with a population of approximately 10,000. Much smaller communities are situated at the Coldwater Reserve, Kingsvale and Brookmere.

2.2 Report Background

Over the past several decades, the development of trails and trail networks has become a topic of much interest and discussion in towns and cities across British Columbia, the rest of Canada and the United States. Partly in response to an aging population looking for healthy recreational activities; and partly in response to a growing interest in the natural environment and in outdoor pursuits, the demand for and interest in recreational trails has increased significantly. In recent years, the promotion of the Trans Canada Trail project has raised awareness among the general public and created new interest in the development of local and regional trail networks.

One example of the growing interest in regional trail networks is an initiative in the Cariboo Region. Recreational trail advocates there are exploring routes that would tie historic First Nations, fur trade, and gold rush trails to the

Trans Canada Trail. Merritt could become an important link in the trail network that could eventually extend from Central America to Alaska. With the Trans Canada Trail passing relatively near Merritt, an opportunity was identified to provide a connecting link from the City of Merritt to the Trans Canada Trail at Brodie, some 45 kilometres to the south.

2.3 Report Funding Source

The Ministry of Community Development, Cooperatives and Volunteers provided funding to carry out a study with these objectives:

- 1) To identify and recommend a route that will link the City of Merritt with the Trans Canada Trail near Brookmere.
- 2) To identify work that needs to be done to bring the route up to a safe standard.

The principal local sponsors of the study were the Nicola Valley Explorers Society and the City of Merritt. Aestech Consulting Inc. was hired to carry out the study in consultation with the community, stakeholders, interest groups, industry, government agencies and ministries. The project commenced early in March with the final report completed at the end of May, 2000.

Fig. 3. Cross-country skiing at Brodie. (Date: 1999-02 — By: Murphy Shewchuk.)

2.4 Report Presentation

This report presents the findings of the research, consultation process and field reconnaissance; and

identifies a feasible route between Merritt and Brodie. In addition, information about the condition of the proposed Trans Canada Trail section - Brodie to Brookmere - is provided.

The next section (Section 3) of the report describes the methodology used by Aestech Consulting Inc. to meet the study objectives. Section 4 describes in detail the recommended route providing both a written description of the route and maps. It also provides recommendations for upgrading the existing roads, trails and railway right-of-way that the recreational trail will follow. A certain amount of route construction and upgrading will need to be done to provide a safe and enjoyable recreational route while at the same time mitigating conflicts with other users and addressing some of the concerns of adjacent landowners.

Section 5 is an inventory of the more significant problem areas and shortcomings found along the route during the field reconnaissance. The photographs provided were taken with a digital camera and help to show the extent of the problems.

Section 6 provides a discussion of issues and some possible solutions including processes by which some of the issues could be resolved.

Section 7 lists recommendations proposed by the Planning Team for inclusion into the final report and arising from the work done by the consulting group on the project and stemming from the feedback and information received during the public consultation process.

A number of appendices follow in Section 8 which provide additional information about the community's participation in this study, the process, work plan and other research findings.

3. Methodology

The methodology used to meet the study objectives incorporated an extensive public consultation process, in-depth field reconnaissance and mapping of findings, and research into land ownership, issues and resolutions. Given the relatively short timelines for completing this project, the first task for the consultant group was the setting out of a project schedule that did three key things:

- a) helped define the public consultation process;
- b) delineated the roles and responsibilities of the Planning Team and the consulting group;
- c) provided direction for each stage of the project and set out fixed dates for two of the three components of the public consultation process: public meetings and planning team workshops.

The project schedule was developed for the first public meeting where it was distributed; and at the first workshop of the Planning Team, it was reviewed, discussed and adopted. A copy of this schedule is found in Appendix C.

The first public meeting was followed by two workshops (March 22, and April 12) for the Planning Team, followed by a public meeting (May 3). The third and final workshop took place a week later (May 10), and two weeks after that, the third and final public meeting on May 24. In between the workshops and public meetings, the consulting group followed the work plan as identified in the project schedule and as directed by the Planning Team.

3.1 Public Consultation

Aestech Consulting Inc. identified from the start that public consultation was key to meeting the first study objective: identifying a feasible route for the recreational trail. To start the public consultation process, a public meeting was organized for March 15. The meeting was advertised in the local weekly newspapers and on the radio and in addition, some 125 letters were mailed to a cross section of the community inviting stakeholders to attend this meeting and consider being a part of the Planning Team. The stakeholders included ranchers, landowners, business people, business organizations, government agencies, crown corporations, forest licensees, elected officials of the City of Merritt and of the electoral rural areas as well as outdoor sport and recreation enthusiasts. A further 60 letters were sent after the first public meeting to individuals who lived in the corridor and who had not been identified for the first mail out. The second letter provided much of the same information as the first letter but also stressed that it was not too late to join the Planning Team and gave the date of the next public meeting.

Response to the letters of invitation to the first public meeting was most encouraging with 55 people showing up. For the second public meeting which was also advertised on the radio and in the local newspapers, attendance was 45. Everyone who had attended the first public meeting also received a letter inviting them to the second meeting. The third public meeting was again advertised in the newspapers but for this meeting, a reminder letter was not sent out. Attendance at the last public meeting was 42. In total, ninety-eight (98) individuals representing a wide variety of interests, attended one or more public meetings. Many attended all three.

All three public meetings provided an opportunity for the public to present their views and/or provide information. The public's comments, questions and issues were duly recorded and then taken to the Planning Team workshops for further discussion and where possible, resolution. All input was helpful and helped shape the content of the final report.

One objective of the first public meeting was to seek volunteers to be members of the Planning Team. Twenty individuals came forward and met three times as a group between the first and third public meetings. The purpose of these workshops, which lasted anywhere from 2 and one-half hours to four, was to provide information and feedback to the consulting group as the route options were identified and to raise issues and concerns with a view of finding solutions. Meetings were well attended with an overall attendance rate of 80% and discussion flew freely. Opinions were delivered on a wide variety of topics ranging from issues and concerns to where a particular

section of the route should go. There was a diversity of opinion which was not particularly surprising given the range of interests of the group; and this in turn proved to be beneficial to the study objectives. In all, twenty-three individuals attended these workshops and represented industry, outdoor enthusiasts, business, landowners and ranchers. A list of the Planning Team members and their affiliation is found is Appendix A.

The discussion and feedback at these workshops provided the consulting group with valuable information and helped direct their work. However, public consultation did not end there. A number of individual meetings were held with concerned landowners, range lease holders, ranchers and other stakeholders. A meeting was arranged with the Chief of the Coldwater Indian Band and several more discussions then followed with him. The Coldwater Indian Band and the other Indian Bands in the area had all received the first letter of invitation early in March.

As the route options were narrowed down to the final recommended one, the consulting group proceeded to contact all landowners along the route since not all had yet been heard from. By the last week of May, the consulting group had talked to all but four landowners who for one reason or another could not be reached. None

of them are significant landowners from the point of view of the amount of frontage that abuts the route.

3.2 Field Reconnaissance

In order to meet the second study objective, a different approach was required and involved walking or riding (using a bicycle) every metre of the recommended route and almost every route option. In this way, the routes were inventoried with the help of a GPS and a digital camera. In addition, the route corridor was viewed from the air. Air photos were borrowed from the Ministry of Forests for additional information and to verify landmarks and landscape features as the route options were narrowed. These aerial photographs and the pictures taken by the digital camera of problem areas proved to be a very useful visual aid at the Planning Team workshops and the second and third public meetings.

3.3 Research

The third element or component of the methodology was research. Once issues were identified, be it at public meetings, the workshops of the Planning Team, or by other means, they were more fully investigated with particular emphasis on solutions. A variety of sources

Fig. 4. Coldwater KVR Bridge # 6. (Date: 2000-04-02 — By: Murphy Shewchuk.)

were accessed for solutions with the most important ones being the Land Use Coordinating Office, Ministry of Forests - Merritt District Office, Trails BC, BC Assets and Land Corporation and the Ministry of Transportation and Highways, Nicola Highways District.

Research was also undertaken to determine land ownership and this was done by visiting the BC Assessment Authority (Kamloops), the Land Registration Office (Kamloops) and the Ministry of Transportation and Highways - Nicola Highways District.

3.4 Draft and Final Reports

After the final Planning Team workshop, a draft report was prepared and distributed to the Planning Team a few days prior to the third and final public meeting. Sections of the draft were also distributed at the public meeting. The comments and feedback from that meeting were incorporated into the final report.

4. Route Recommendations

Overview

The study has identified a feasible route for a recreational trail linking Merritt with the Trans Canada Trail at the former KVR/CPR Brodie junction, approximately 40 km south of Merritt via Coquihalla Highway 5. The northern half of the route follows the western slopes of the Coldwater Valley, skirting the Coldwater Indian Reserve and the agricultural bottomland. This portion also bypasses a section of the Coldwater Valley and the former KVR/CPR right-of-way that has been subject to considerable erosion during the past decade. The northern section descends to the valley floor at Patchett Road, in the lower reaches of Midday Valley. It then follows Patchett Road eastward to the Coldwater River and the former KVR/CPR right-of-way. From that point, the recommended route generally follows the rail grade south through Kingsvale to the Brodie junction where it links with the Trans Canada Trail. The last part of the route recommendations describes the Brodie to Brookmere section of the route. Although part of the "designated" Trans Canada Trail and not officially part of the "linking trail", it is an integral part of the "Linking Communities Initiative".

The following pages provide a detailed description of the route as well as recommendations for work that should be done to bring the trail up to a safe standard. In addition to recreational user safety, there is also considerable work required to minimize the recreational traffic impact on the traditional users of the route. Adjacent landowners, ranchers, First Nations and forest industry concerns must be taken into consideration if the route is to gain widespread acceptance.

4.1 Merritt to Patchett Road

4.1.1 Statistics.

Length: 22.5 km from Merritt, at Claybanks Bridge, via Midday

Valley Road and secondary roads and trails to the

KVR/CPR right-of-way at Patchett Road.

Elevation Merritt = 610 metres (2000 feet).

Change: Height-of-land west of Coldwater Reserve = 1040 metres

(3412 feet).

Patchett Road = 747 metres (2450 feet).

Average grade approximately 3.2 percent between either

terminus and the height-of-land.

4.1.2 Route Description.

This route begins (and ends, depending on direction of travel) at the Claybanks Bridge at the south end of Voght Street approximately 0.5 kilometres south of Merritt's downtown core. This reference point has been chosen because the Claybanks Bridge is a well-known landmark and because of the services available at the nearby Claybanks Campground and RV Park. In the future nearby Claybanks Park may become the terminus for a network of City trails. The elevation at the bridge is approximately 610 metres (2000 feet) above sea level.



Fig. 5. Side road near KM 7.0. (Date: 2000-05-16 — By: Murphy Shewchuk.)

With the Claybanks Bridge at the south foot of Voght Street (near the Claybanks RV Park) as the Kilometre 0.0 reference, the route crosses the Coldwater River and follows Lindley Creek Road west for 200 metres before continuing south on Midday Valley Road, also known locally as Lily Lake Road. The route then follows Midday Valley Road south at a minimal grade for 0.7 kilometres to the junction with Houston Street.

From the junction with Houston Street (KM 1.0 on Map 1 on page 14), the route begins a steady climb up Midday Valley Road. It passes the Mountain Music Festival "west gate" at KM 2.0. The gravel road narrows somewhat south of KM 2.0 and continues a narrow and twisting climb until it reaches a grassland clearing at KM 5.0. Here, at an elevation of 860 metres, the route leaves private property and enters Crown rangeland. This four-kilometre climb, at an average grade of 5.75 percent, is the most prolonged climb in the Merritt - Brookmere route.

The route then continues a winding, but relatively level, course along Midday Valley Road for another 0.9 kilometres before taking a little-used level side road to the left near KM 6.0. (See Map 2 on page 15.) The route continues to follow this side road southwest. A junction at KM 7.0 marks an alternate route southeast and then northeast along the lower slopes of the plateau, however it crosses private land in several places. After a descent of about 30 metres between KM 6.0 and KM 7.0, the route begins climbing toward the high point above the Coldwater Reserve, passing through a gate and a de-activation trench at KM 9.7.

Much of the route from KM 4.0 to KM 10.0 is through lightly timbered rangeland. The little-used road is somewhat rutted in places with grass growing in the centre. It serves the ranchers in the summer months and may see hunting traffic in the fall. Because the road is blocked to four-wheeled traffic at KM 9.7, (see Map 3 on page 16) there is likely to be little conflict with self-propelled recreationists. Should the traffic warrant it, the open timber would make it easy to construct a trail off the road.

From KM 10 to KM 13, the route continues to follow a little used road. Just west of "Pine" Lake, the road swings north and west to the pipeline right-of-way. Instead of following the road, the trail would follow an unused diversion ditch westward to the pipeline service road, avoiding a significant climb and the grassland meadows adjacent to the pipeline right-of-way. From KM 13.5 to KM 16.6, the route follows Talapus Creek Forest Road. Here, at a "Y" junction, it leaves the Forest Road and follows a network of cattle trails for about 1.6 kilometres to an old log landing (see Map 5 on page 18). From the log landing, the route follows a fairly level grade on the forest road for about one kilometre before making a steady descent to Patchett Road near the 3K marker.

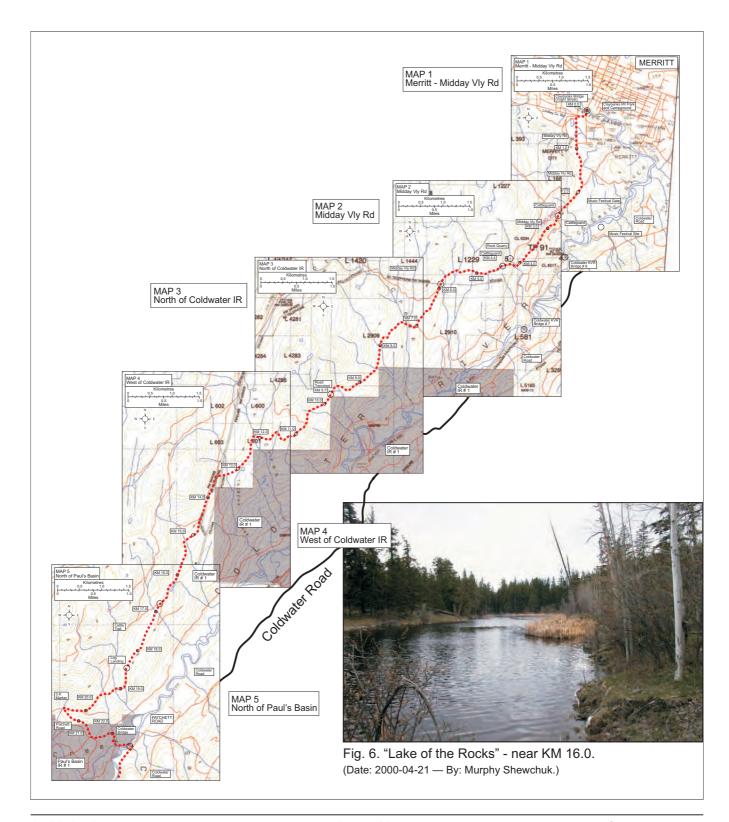
From the 3K marker, the route follows Patchett Road south east to the bridge across the Coldwater River and the former KVR/CPR right-of-way.

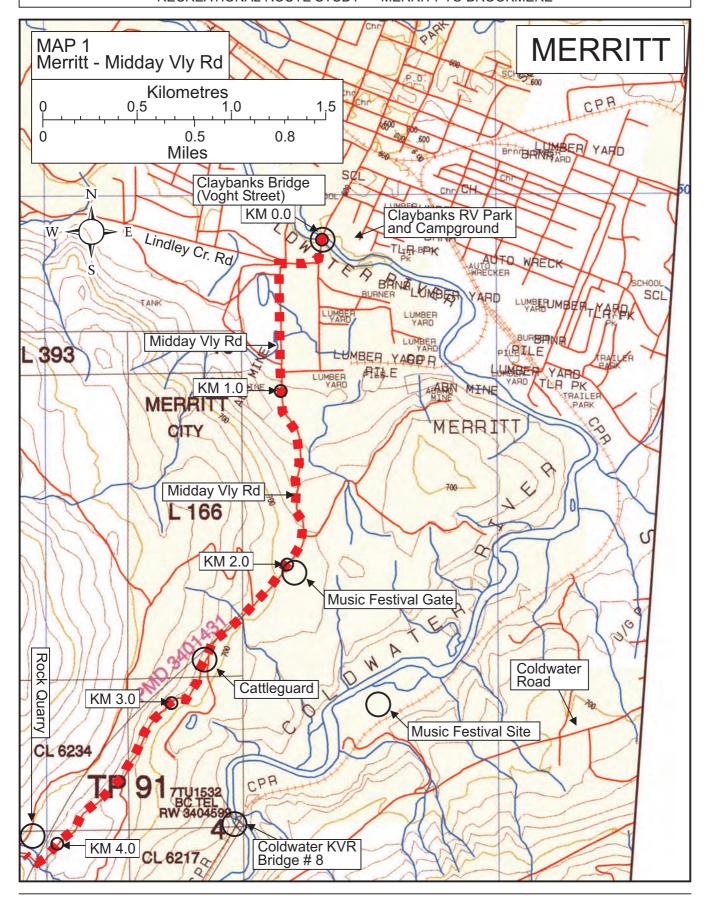
4.1.3 Recommended Improvements.

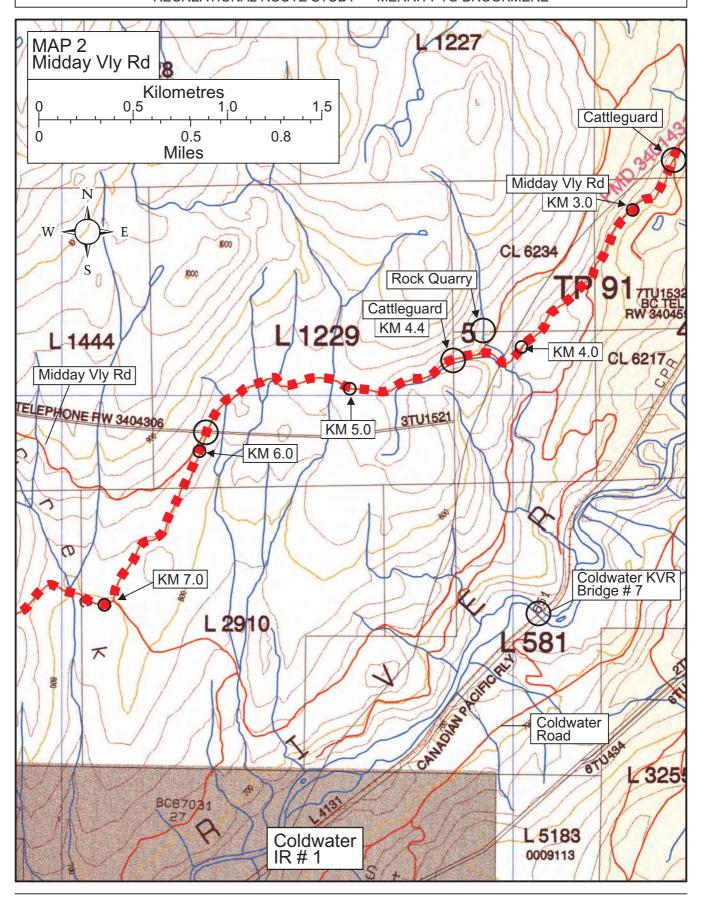
Location (km)	Recommendation
0 to 5 km	Future road work should consider self-propelled recreation traffic.
5 to 6 km	An alternate route to Midday Valley Road could be constructed through the trees.
6 to 13 km	Minor grading and graveling would improve cycling on old road.
9.7 km	A narrow cattleguard (1 to 1.5 metres) could be considered at the fence/trench.
13 to 13.5 km	Trail should be constructed across Talapus Creek valley.
13.5 to 16.6 km	Off-road trail options exist and could be developed when and where appropriate.
16.6 to 18.2 km	Cattle trails should be cleared and widened to a minimum of 1 metre.
18.2 to 20.1 km	An alternate switch-back route could be considered to reduce the grade.
20.1 to 22.1 km	(Patchett Road) Future road work should consider self-propelled recreation traffic.

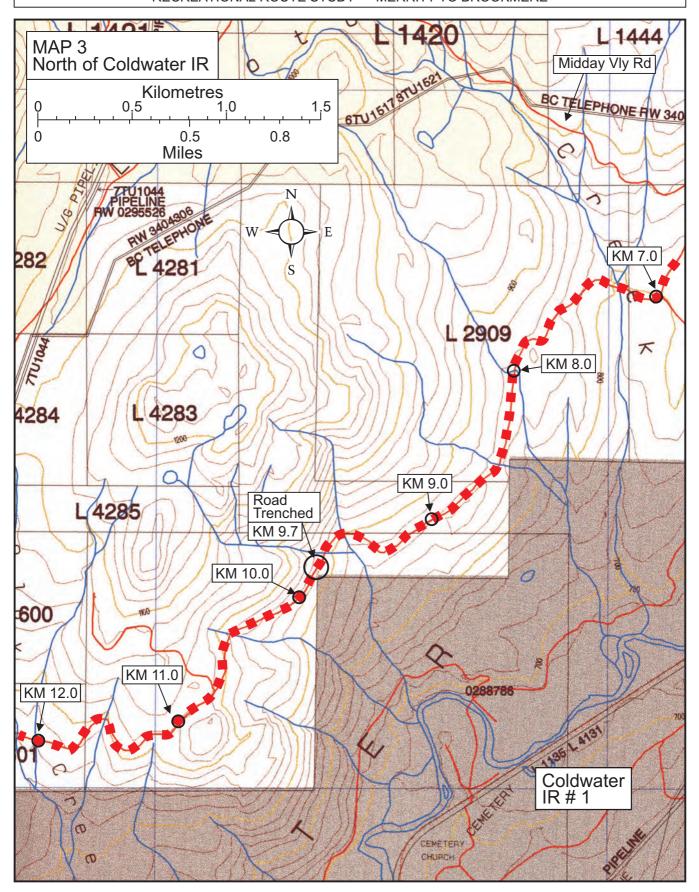
4.1.4 Maps: Merritt - Patchett Road.

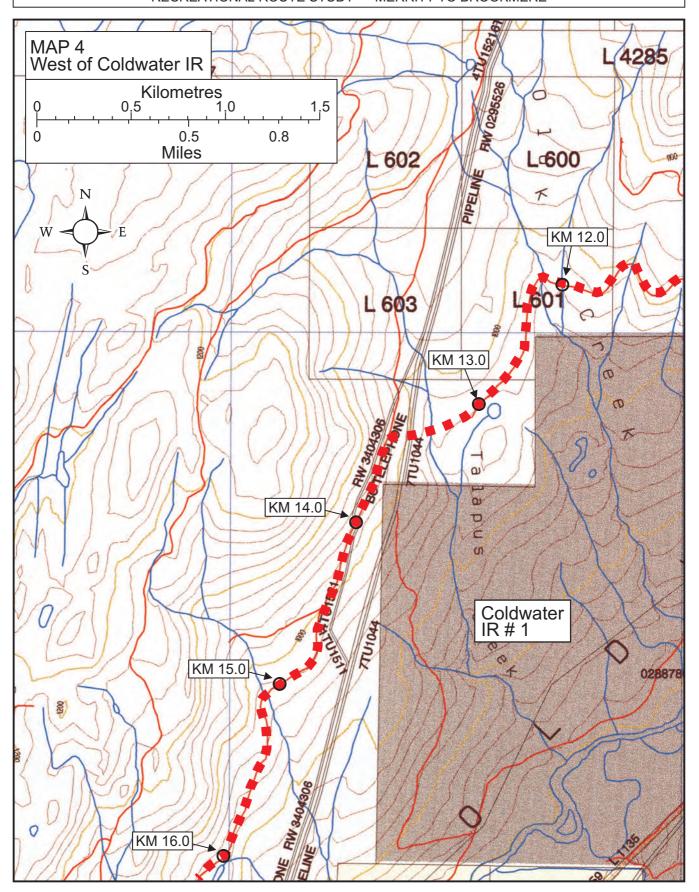
Below is a composite map of the route from Merritt to Patchett Road. Individual maps are on the following pages.

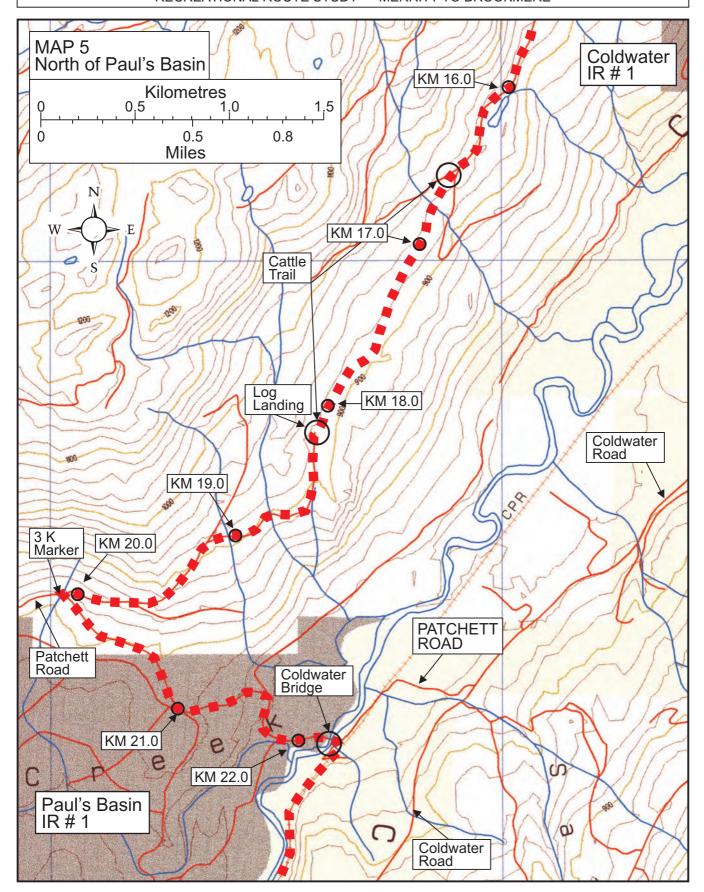












4.2 Patchett Road to Brodie

4.2.1 Statistics.

Length: 21.5 km from the Coldwater River Bridge at Patchett Road to the Coldwater River Railway

Bridge (#1) at the Brodie junction, primarily via the former KVR/CPR right-of-way.

Elevation Patchett Road = 747 metres (2450 feet).
Change: Brodie Junction = 921.4 metres (3023 feet).
Average grade approximately 0.8 percent.

4.2.2 Route Description.

This route description is based on access to the former KVR/CPR right-of-way being created due east of the Patchett Road Bridge across the Coldwater River. This access from the road to the former railway right-of-way could be via a gate or, more appropriately, a suitable narrow cattleguard. See the "Recommended Improvements" table on page 21 for more information.

With this access as the KM 0.0 reference, the route follows the KVR/CPR right-of-way south, past the entrance driveway to the Pine Ranch headquarters and through wire gate in a cattle fence before reaching a mudslide "fan" near KM 0.6. The mudslide fan can currently (May, 2000) be traversed on foot with a minimum of difficulty.

South of the mudslide, the rail grade follows the base of the mountain, occasionally sandwiched between the Coldwater River and the timbered hillside. The area is isolated from any homes or road traffic and has a wilderness ambience. It is also an excellent wildlife corridor.

The remainder of the KVR/CPR right-of-way to a washout at KM 2.2 is in good condition and would require minimal maintenance to keep it useable. (See Map 6 on page 23 for details.) The washout at KM 2.2 is presently

(May, 2000) a major deterrent to through traffic. Although there are indications of foot traffic and a rudimentary trail across it, the Coldwater River is cutting away at the base and the uphill clay and gravel slope is unstable.

From KM 2.2 to the second Peterson Road crossing near KM 4.9, the KVR/CPR right-of-way is in good condition. Some grading and weed control would be an asset. The adjacent landowner at KM 3.0 has indicated a willingness to consider regular maintenance as well as to establish camping facilities if the traffic supports it. The Peterson Road crossings at KM 3.5 and 4.9 may require signage and/or traffic barriers to minimize conflicts between trail and road traffic. A creek crossing near KM 4.3 may require a culvert, but it should not pose any difficulty throughout most of the year.



Fig. 7. Washout and landslide near KM 2.2. Viewed from the south. (Date: 2000-04-24—By: Murphy Shewchuk.)

From KM 5.0 south to Kingsvale, near KM 9.4, (see Map 7 on page 24) the right-of-way is in good condition with portions of it being used for access by local residents and ranchers. Some brushing and weed control maintenance may be required along this route. Signage may be appropriate in several locations to minimize conflict between local traffic and recreationists.

The crossing of the Coldwater Road and Voght Creek at Kingsvale (see Map 8 on page 25) will require routing trail traffic off the KVR/CPR right-of-way. One solution north of the crossing may be to obtain permission to leave the right-of-way near KM 8.8 and build a trail across private land southeast to the Coldwater Road. A second solution may be to leave the right-of-way about 50 metres north of the north abutment and access the road and the Voght Creek bridge via the Trans Mountain Pipe Line Company right-of-way. South of Kingsvale, access to the KVR/CPR right-of-way could be gained by a sloping trail just south of the remaining station buildings. Both locations may require cattleguards to reduce the risk of cattle being set loose.



Fig. 8. The KVR right-of-way near KM 2.5 on the Patchett - Kingsvale section. (Date: 2000-04-24 — By: Murphy Shewchuk.)

Any present solution should be considered temporary as there are strong indications that the Ministry of Transportation and Highways plan to rebuild the road and install a new bridge across Voght Creek.

The former railway right-of-way from Kingsvale to Brodie is in generally good conditions with the few exceptions as noted below.

The Coldwater River has undermined a small portion of the right-of-way near KM 14.0. The river now appears to be striking bedrock or a large boulder and the erosion does not appear to be increasing. Similar erosion has taken place at KM 15.0. Here ground water may have also been a factor. Initial observations suggest that the planting of willows or other suitable riparian cover above and below the right-of-way will have a long-term stabilization benefit.

Signs and/or barriers may be required at the Coldwater Road crossing near KM 15.7. Access from Coldwater Road to the KVR/CPR bridge at KM 16.1 is presently blocked by a large boulder.

South of the Coldwater Road crossing, the route follows the railway right-of-way upstream to the former Brodie junction near the south foot of Larson Hill. This is one of the more picturesque sections of the route with six bridges each 30 metres and more in length. There are also several rock-cuts and a few places with access to the Coldwater River. A creek near KM 21.2 (about 200 metres from the Brodie Bridge) may require a footbridge as it runs about two metres wide and 0.5 metres deep in spring runoff. A short detour may also be available providing a gate can be installed.

Although not far from Coquihalla Highway 5, the section of the railway right-of-way between the Coldwater Road crossing (KM 15.7) and Brodie is still an isolated "wilderness" setting suitable for wildlife and bird watching.



Fig. 9. Coldwater KVR Bridge # 6. Note swimming hole in centre of photo. (Date: 2000-05-08 — By: Murphy Shewchuk.)

4.2.3 Recommended Improvements.

Location (km)	Recommendation
0 km	Install cattleguard 1.5-metre-wide (5 ft) x 2.5-metre-long (8 ft) to facilitate self-propelled traffic and minimize vehicle or cattle access. Cost estimate \$600.00.
0.5 km	Install cattleguard see above for details.
0.6 km	Smooth mudslide fan for easier cycling or hiking.
1.9 to 2.5 km	Build trail over or across the washout and slide area at KM 2.2. Consider diverting creek that is contributing to landslide or building a boardwalk to allow traffic over the area.
3.5 and 4.9 km	Install signs and/or barriers to reduce Peterson Road vehicle traffic conflict.
4.3 km	Contour creek bottom to minimize erosion and traffic problems during high water.
9.0 to 9.5 km	Create suitable access routes from the railway grade to Coldwater Road to bypass the missing bridge over Voght Creek and the Coldwater Road.
11.3 km	Contour creek bottom to minimize erosion and trail problems during high water.
12.5 km	Install signs and/or barriers to reduce logging road vehicle traffic conflict.
15.0 km	Plant willows and other shrubs (cuttings from elsewhere on the trail) to reduce erosion.
15.7 km	Install signs and/or barriers to reduce Coldwater Road vehicle traffic conflict.
15.7 to 21.5 km	Clean out culverts and trim brush encroaching on right-of-way.
16.1 to 21.5 km	Upgrade six KVR/CPR Bridges across the Coldwater River. Replace damaged or rotting ties. Install suitable decking and safety rails. See Map 10 on page 27 and the section starting on page 35 for more information.
21.2 km	Build a footbridge across "Salt" Creek to accommodate trail traffic during spring runoff.
21.5 km	Work with the Pine Ranch to establish suitable controls to minimize conflicts with range cattle and fences near the Brodie Coldwater River Bridge.

4.2.4 Maps: Patchett Road to Brodie.

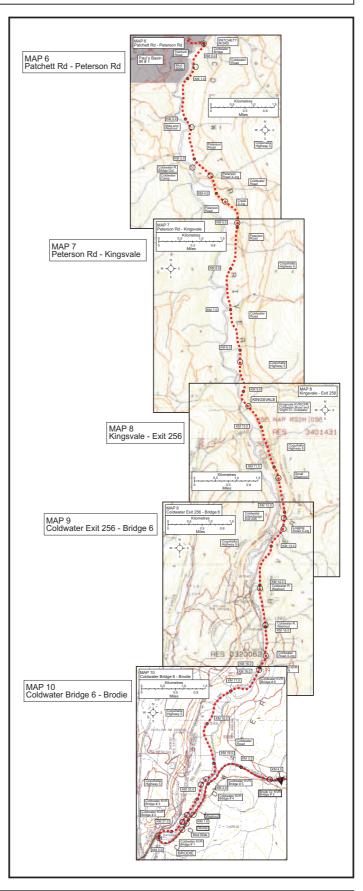
To the right is a composite map of the route from Patchett Road to the Brodie Junction. Individual maps are on the following pages.

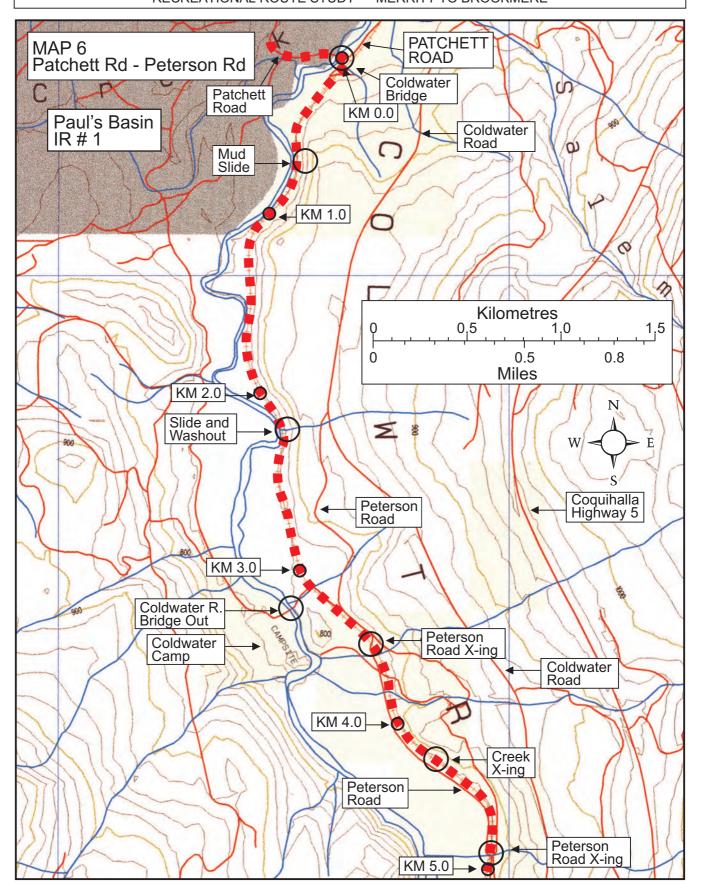


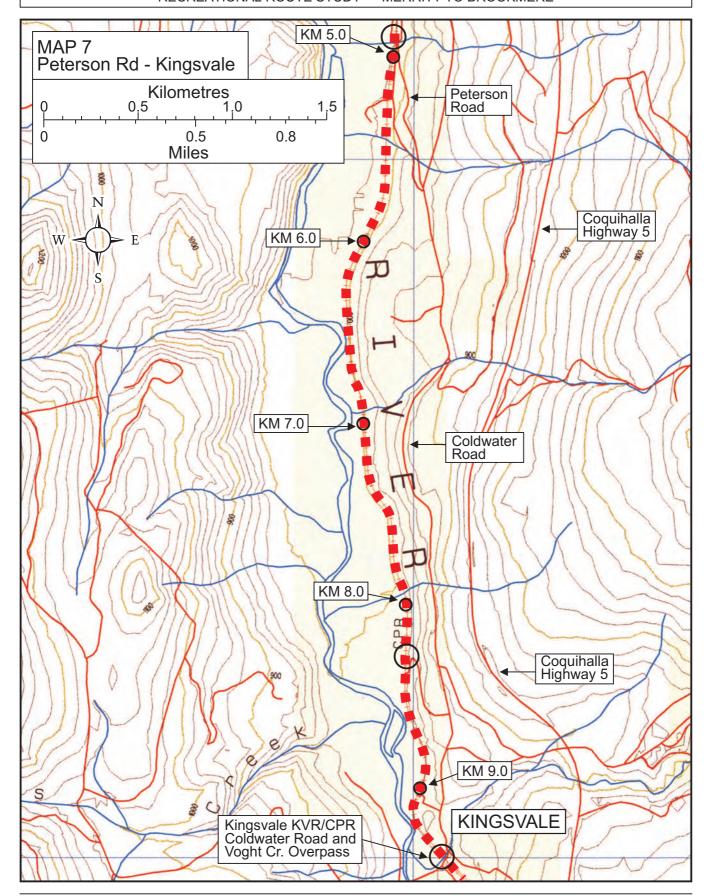
Fig. 10. Voght Creek Bridge abutments at KM 9.4. (Date: 2000-04-24 — By: Murphy Shewchuk.)

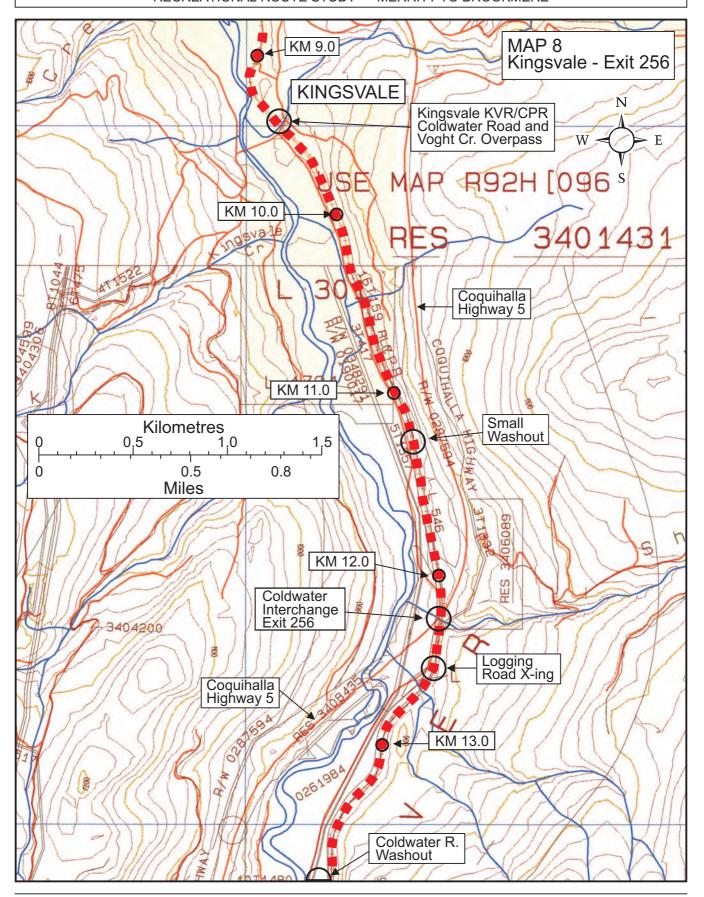


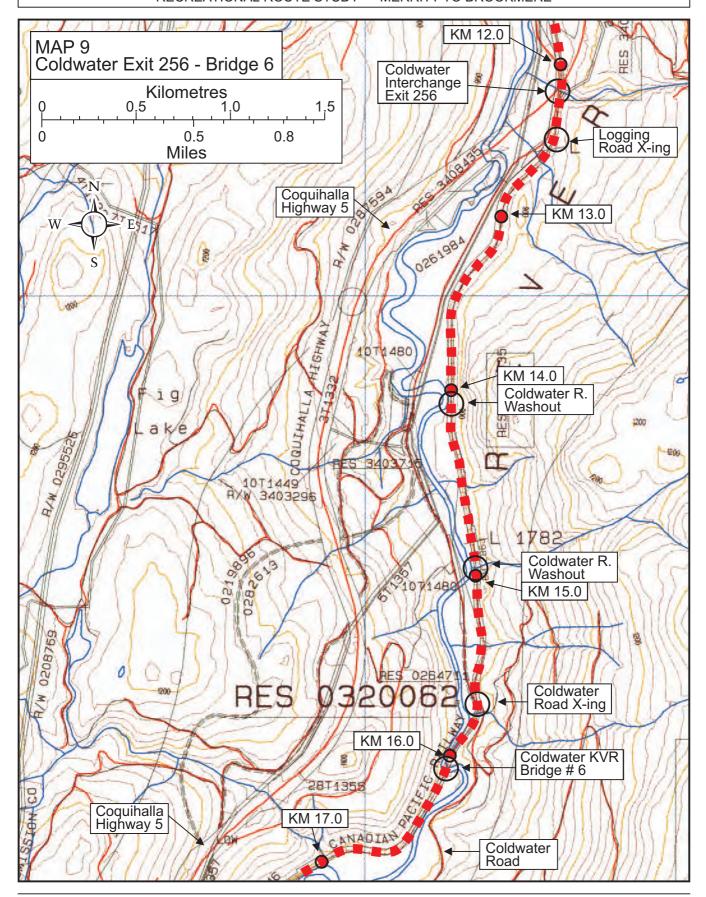
Fig. 11. "Salt Creek" near Brodie - KM 21.2. (Date: 2000-04-18 — By: Murphy Shewchuk.)

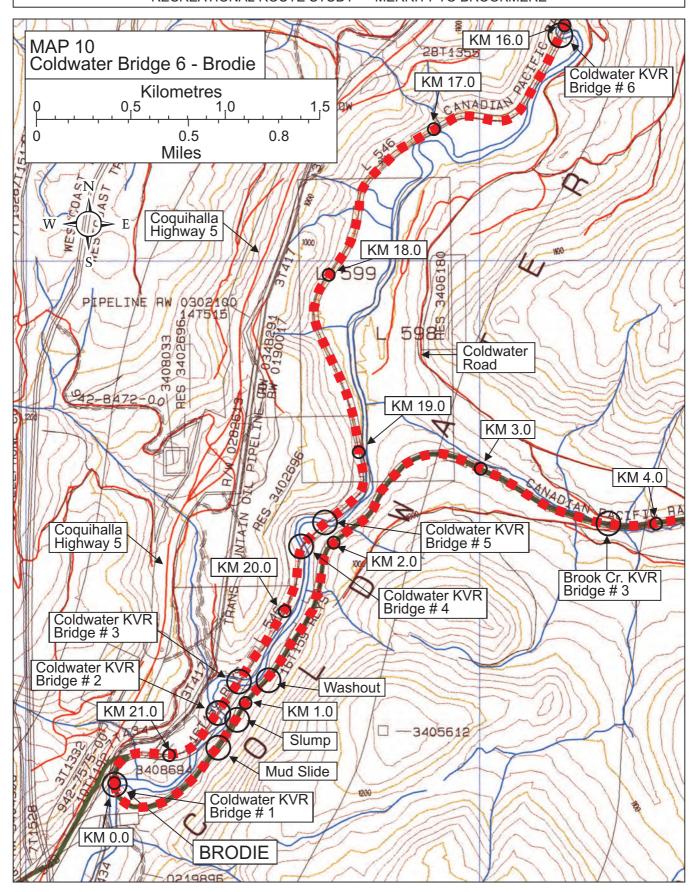


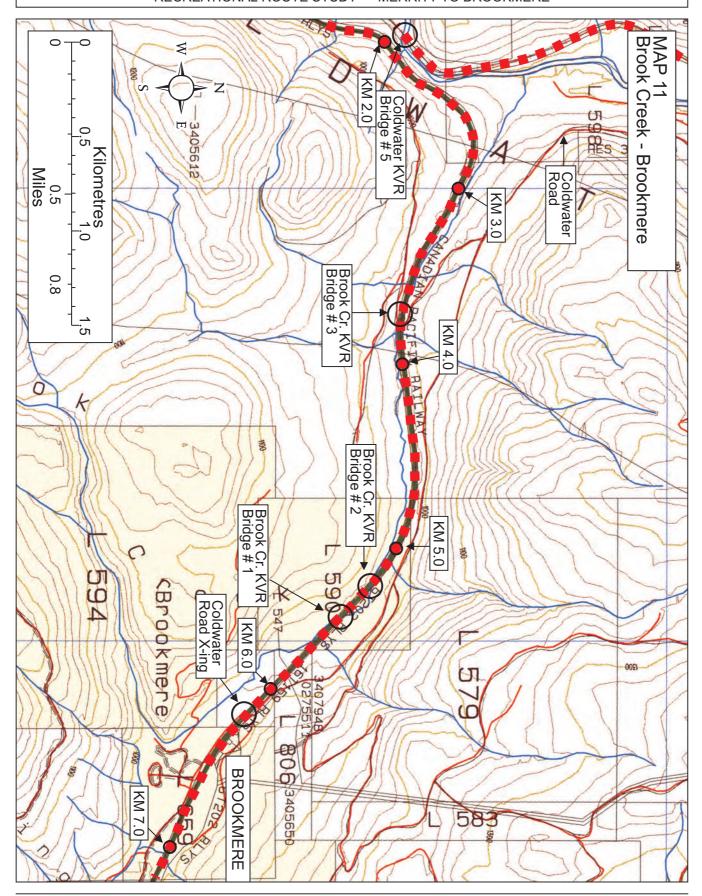












4.3 Brodie to Brookmere

4.3.1 Statistics.

Length: 6.2 km from Coldwater River Bridge (#1) at the Brodie junction to the Coldwater Road

crossing at the west end of the Brookmere townsite, via the former KVR/CPR right-of-way.

Elevation Brodie junction = 921.4 metres (3023 feet).

Change: Brookmere = 975 metres (3200 feet).

Average grade approximately 0.86 percent.

4.3.2 Route Description.

In general terms, the KVR/CPR right-of-way between Brodie and Brookmere is intact with the exception of a landslide, a land slump and a washout that will be detailed later. The right-of-way surface consists of various grades of coarse gravel. The loose coarse gravel on some sections is not particularly suitable for safe and easy bicycling. It will require grading and, when possible, the addition of finer crush that will compact to a smoother

surface. Alder, willow and other species of brush are encroaching on the travelled portion of the right-of-way, particularly in the moist, sheltered areas. This will require regular hand-trimming to maintain an open travel surface while allowing the "edge" growth to serve as bank stabilization. As Brook Creek and the Coldwater River run near the right-of-way, chemical controls are not a recommended option.

With the Brodie junction as KM 0.0, this route description covers the route in a generally eastward direction toward Brookmere. The route gradually climbs northeast and up above the Coldwater River for about 2.5 kilometres before swing east and then southeast up Brook Creek to the height-of-land at Brookmere. The initial few kilometres offer some excellent views of the Coldwater River valley and the bridges below.

The first problem area is a mudslide at KM 0.8. The 100-metre-wide fan of the slide has spread across the right-of-way, however it doesn't pose a significant hazard to self-propelled traffic. A land slump has split the right-of-way diagonally at KM 0.9. This may have been caused by a blocked culvert saturating the rail grade. The culvert has been cleaned out and the land appears stable. It is not being undermined by the Coldwater River.

A major washout has occurred at KM 1.2. The Coldwater River has undermined the bank and the feeder creek has contributed to the problem. A trail has been cut around the washout at grade level, but remedial work will have to be done for long-term stability. Engineering advice should be sought here.

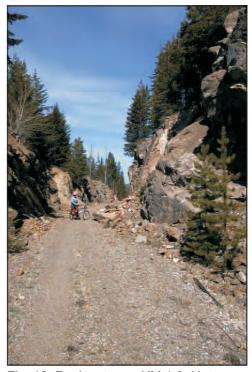


Fig. 12. Rock cut near KM 1.9. Note cyclist near centre of photograph. (Date: 2000-04-18 — By: Murphy Shewchuk.)

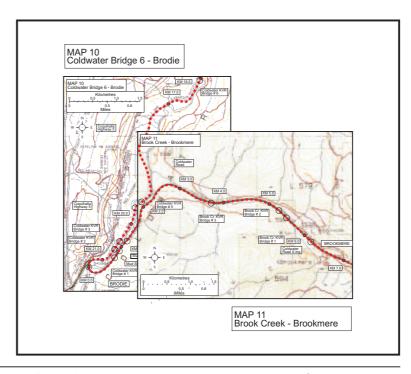
The right-of-way goes through a rock cut at KM 1.9. Some of the material may be suitable for remedial work elsewhere along the route. There are several culverts near KM 3.5 that will require cleaning and/or replacement. There are also three wooden bridges along the route at KM 3.76, KM 5.21 and KM 5.45. These will require decking and handrails for maximum safety. As this is a high snow area, the design should take snow load into consideration. Brush is encroaching on the grade in numerous places. The cuttings could serve to stabilize the bank in several locations including the washouts near Juliet.

4.3.3 Recommended Improvements.

Location (km)	Recommendation
0 km	Upgrade KVR/CPR bridge across the Coldwater River. Replace damaged or rotting ties. Install suitable decking and safety rails. See Map 10 on page 31 and the section starting on page 35 for more information.
0.8 km	Periodically grade mudslide fan. Check source for possible diversion.
0.9 km	Repair land slump. Clean and enlarge culvert catch basin. Install rock on slope and plant willows to reduce further erosion.
1.2 km	Obtain engineering suggestions on how to minimize erosion at this washout.
3.7 to 5.5 km	Upgrade KVR/CPR wooden bridges across Brook Creek. Replace damaged or rotting ties. Install suitable decking and safety rails. See Map 11 on page 28 and the section starting on page 35 for more information.
0 to 6.2 km	Periodic maintenance is required to clean culverts and cut back encroaching brush.

4.3.4 Maps: Brodie to Brookmere.

To the lower right is a composite map of the route from the Brodie Junction to Brookmere. Individual maps are on the preceding pages 27 and 28.



4.4 Route Options & Rationale

4.4.1 Introduction

A key objective of this study was to identify a feasible route to link the City of Merritt with the Trans Canada Trail at Brodie. It is equally important to recognize that the study also set out to determine if the community supported the development of such a recreational route.

The public consultation process has been detailed earlier in this report. However, it should be noted that significant concerns were raised early in the planning process regarding actual route location. Despite the concerns, the majority of local landowners, stakeholders, members of interest groups, and the general public were receptive to the development of a recreational route, subject to adequate resolution of specific concerns.

The use of the former KVR/CPR right-of-way south of Merritt for a recreational corridor became the key issue. Many interest groups wanting access to, and in some cases, ownership of the now public right-of-way. While the initial proposal for this study clearly identified that the abandoned rail line would be evaluated for use as a recreational route, it became clear that other options must also be considered.

4.4.2 Merritt to Patchett Road

Initial route identification on the northern-most section focused on the viability of the KVR/CPR line south of Merritt. With good access from the municipality, a minimal grade, and substantial existing recreational use, the abandoned right-of-way appeared to be a prime candidate for consideration. However, research, consultation, and field reconnaissance identified a number of land ownership issues and physical obstacles.

Severe flooding in the fall of 1994 had caused significant damage to the right-of-way between Merritt and the Coldwater Indian Reserve. Most notable was the damage to two bridge structures immediately south of Merritt. The Coldwater River had washed away the approach and undermined the northern abutment on the first bridge, and in the case of the second structure, changed course and bypassed the bridge altogether. (See section 5.2).

The physical shortcomings of this section of the KVR/CPR right-of-way all but eliminated this option from consideration. In addition, the Chief of the Coldwater Indian Band confirmed that members of that community would not consider any use of the former KVR/CPR right-of-way through Reserve Lands. The former right-of-way is now under the jurisdiction of the Coldwater Indian Band, and used extensively by the community for a range of activities that would not be compatible with a public trail.

Deeded lands adjacent to the KVR/CPR right-of-way between the municipal boundaries of Merritt and the Coldwater Indian Reserve eliminated any option to bypass the existing washouts and gain access to Crown Land west of the Coldwater Indian Reserve. Field reconnaissance focused on the use of public roads, crown range, and non-status roads to provide a continuous route from Merritt to Patchett Road via the Coutlee Plateau, west of the Coldwater River Valley.

Due to an error in researching land titles, a Crown Lot adjacent to the Coldwater Indian Reserve on the west was reported as deeded property, which led to discussion with the apparent landowner and the development of additional options to bypass this property if required. The error was soon discovered and with ownership confirmed as the Province, the alternative routes were dropped from consideration.

The only feasible option became a route on the west side of the valley. Beginning in Merritt, it climbs south up the Midday Valley Road then continues through Crown Land to the west of the Coldwater Indian Reserve before descending to Patchett Road and returning to the KVR/CPR right-of-way. It therefore became the recommended route for this study.

4.4.3 Patchett Road to Brodie

The KVR/CPR right-of-way between the Coldwater River crossing on Patchett Road and the Brodie junction was known to be in reasonably good condition and receiving moderate levels of use for both public and private access. Although landowner opposition around its use a public recreational route had been conveyed in the initial public and planning team meetings, the evaluation of the abandoned right-of-way for its trail potential was completed for consideration as part of the study.

While the abandoned rail line between Kingsvale and Brodie was much less contentious from the outset, the proposed use of approximately nine kilometres of the KVR right-of-way between Patchett Road and Kingsvale as a recreational corridor became a focus of this study. With several landowners adjacent to this stretch of the right-of-way in a rural setting, concerns with trespass, vandalism, and liability were identified, however the impact of this route on the resident's privacy became the leading issue.

The planning group was requested to develop an alternative option that would see the proposed recreational corridor re-routed to bypass the Patchett Road to Kingsvale section of the KVR. Two options were explored; the use of public roads (including sections of the Coldwater and Peterson Roads) to connect with the KVR at Kingsvale and continuing south, and secondly the use of the buried gas pipeline right-of-way essentially parallel to the Coldwater Road.

Each option was explored on the ground by the consulting team and an evaluation prepared for the review of the planning team. The use of the Coldwater Road as a recreational corridor demonstrated problems with road width and little opportunity for the development of a trail within the public right-of-way, suggesting concerns with public safety in sharing a public highway with self-propelled means of transport. The pipeline right-of-way, although considered a viable alternative at first, was discovered to have poor drainage due to disturbed soils. It is unlikely to sustain trail use without sustaining some level of degradation, especially during the spring season. This route also involved a notable gain and loss of elevation.

The KVR right-of-way between Patchett Road and Kingsvale was evaluated as the most feasible option from the perspective of meeting recreation objectives, public safety, and the cost of trail development. A challenge is that a significant washout will require the construction of a bypass trail above the railway grade. However, this route is an existing public corridor at a minimal grade with a hardened surface. Significant conflict with little opportunity for resolution would have to be identified to rationalize dismissing this particular option.

The planning team focused then on the identification and resolution of issues for this particular section of the KVR right-of-way. Significant effort was made by the consulting team to contact each and every landowner along the subject stretch for input to the study.

A short easement through private property near the Voght Creek crossing at Kingsvale was suggested by one particular landowner to provide reasonable access to the proposed realignment of the Voght Creek Bridge on the Coldwater Road. This also reduces the impact on the privacy of one residence, and this report recommends that the acquisition of an easement be pursued as the preferred route option.

Noting opposition from some members of the planning team and the public, and that the best efforts of the this group were employed to satisfactorily address landowner issues, the Kettle Valley Railway right-of-way between Patchett Road and Brodie was determined to be the recommended route for the linking trail. Each planning team member in attendance at the third and final workshop agreed they could live with this recommendation.

5. Major Infrastructure

5.1 Bridges: Brook Creek

Note that these bridges have been numbered in a downstream direction to correspond with previous studies of the KVR/CPR right-of-way, particularly the Reid Crowther Kettle Valley Railway Evaluation published in September, 1996.

5.1.1 Brook Creek Bridge # 1.

Location: KM 5.45 - see Map 11 on page 28. 0.7 km northwest of Brookmere Coldwater Road right-of-way crossing.

(N 49° 49.485′ W 120° 53.026′)

Description: Wooden bridge 20 ft (6 metres) long. Bridge deck 10 ft (3 metres) above creek bed.

Condition: (2000-04-04) Rotting curbs and dry ties. Some debris and large rocks near upstream entrance. May prompt beaver dam construction.

Work: Curbs to be replaced. Decking and handrails to be installed. Channel could be cleared to minimize future problems.



Fig. 13. Note debris build-up upstream from bridge. (Date: 2000-04-02 — By: Murphy Shewchuk.)

5.1.2 Brook Creek Bridge # 2.

Location: KM 5.21 - see Map 11 on page 28. 1.0 km northwest of Brookmere Coldwater Road RoW crossing.

(N 49° 49.555′ W 120° 53.192′)

Description: Wooden bridge 20 ft (6 metres) long. Bridge deck 10 ft (3 metres) above creek bed.

Condition: (2000-04-04) Rotting curbs and dry ties.

Work: Curbs to be replaced. Decking and handrails to be installed.

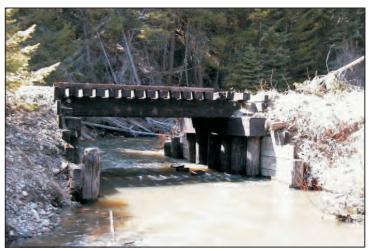


Fig. 14. Channel curves before and after bridge. Beaverdam upstream from bridge.

(Date: 2000-04-26 — By: Murphy Shewchuk.)

5.1.3 Brook Creek Bridge # 3.



Fig. 15. Brook Creek Bridge # 3. View from upstream side. (Date: 2000-04-26 — By: Murphy Shewchuk.)

Location: KM 3.76 - see Map 11 on page 28. 2.4 km northwest of Brookmere RoW crossing. (N 49° 49.646′ W 120° 54.359′)

Description: Wooden bridge 16 ft (5 metres) long. Bridge deck approximately 8 ft (2.5 metres) above creek bed.

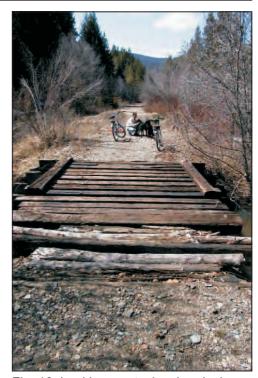


Fig. 16. Looking west, showing deck and KVR RoW.

(Date: 2000-04-26 — By: Murphy Shewchuk.)

Condition: Brush growing in around bridge. Downstream channel is packed with brush. Ties missing at east end of bridge.

5.2 Bridges: Coldwater River

Note that these bridges have been numbered in a downstream direction to correspond with previous studies of the KVR/CPR right-of-way, particularly the Reid Crowther Kettle Valley Railway Evaluation published in September, 1996.

5.2.1 Coldwater Bridge # 1 (Brodie).

Location: KM 21.4 - see Map 10 on page 27. At Brodie Junction, approximately 6.3 km west of Brookmere RoW crossing. Near south foot of Larson Hill on Coquihalla Highway 5. (N 49° 48.901′ W 120° 56.578′)

Description: Steel box-frame bridge approximately 105 ft (32 metres) long. Bridge deck approximately 20 ft (6 metres) above Coldwater River bed.

Condition: Some cracked ties. Otherwise in good condition.

Work: Curbs to be replaced. Decking and handrails to be installed.



Fig. 17. Coldwater Bridge # 1 (Brodie) looking north. (Date: 2000-04-18 — By: Murphy Shewchuk.)

5.2.2 Coldwater Bridge # 2 (Brodie to Kingsvale).

Location: KM 20.6 - see Map 10 on page 27. Approx. 0.6 km north of Brodie "Y" and 5.0 km south RoW crossing on Coldwater Road (near water measuring station). (N 49° 49.126′ W 120° 56.072′)

Description: Steel bridge approximately 110 ft (33.5 metres) long. Bridge deck approximately 20 ft (6 metres) above Coldwater River bed.

Condition: Good condition. Steel work requires paint.

Work: Curbs to be replaced. Decking and handrails to be

installed.



Fig. 18. Coldwater River Bridge # 2. (Date: 2000-04-26 — By: Murphy Shewchuk.)

5.2.3 Coldwater Bridge # 3 (Brodie to Kingsvale).

Location: KM 20.4 - see Map 10 on page 27. Approx. 0.8 km north of Brodie "Y" and 4.8 km south RoW crossing on Coldwater Road (near water measuring station). (N 49° 49.196′ W 120° 56.020′)

Description: Steel bridge approximately 110 ft (33.5 metres) long. Bridge deck approximately 20 ft (6 metres) above Coldwater River bed.

Condition: Some cracked ties. Otherwise in good condition.Work: Curbs to be replaced. Decking and handrails to be

installed.

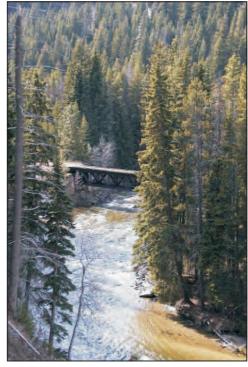


Fig. 19. Coldwater River Bridge # 3. (Date: 2000-04-18 — By: Murphy Shewchuk.)

5.2.4 Coldwater Bridge # 4 (Brodie to Kingsvale).

Location: KM 19.6 - see Map 10 on page 27. Approx. 1.6 km north of Brodie "Y" and 4.0 km south of

RoW crossing on Coldwater Road (near water measuring station).

(N 49° 49.588′ W 120° 55.723′)

Description: Steel bridge approximately 111 ft (33.8 metres) long. Bridge deck approximately 20 ft (6 metres) above Coldwater River bed.

Condition: Some cracked ties. Otherwise in good condition.

Work: Curbs to be replaced. Decking and handrails to be installed.



Fig. 20. Coldwater River Bridge # 4. (Date: 2000-04-26 — By: Murphy Shewchuk.)

5.2.5 Coldwater Bridge # 5 (Brodie to Kingsvale).

Location: KM 19.4 - see Map 10 on page 27. Approx. 1.9 km north of Brodie "Y" and 3.8 km south of RoW crossing on Coldwater Road (near water measuring station). (N 49° 49.656′ W 120° 55.623′)

Description: Steel box-frame bridge approximately 113 ft (34.4 metres) long. Bridge deck approximately 20 ft (6 metres) above Coldwater River bed.

Condition: Ties in good shape. Some weathering.

Work: Curbs to be replaced. Decking and handrails to be

installed.



Fig. 21. Coldwater River Bridge # 5. (Date: 2000-04-26 — By: Murphy Shewchuk.)

5.2.6 Coldwater Bridge # 6 (Brodie to Kingsvale).

Location: KM 16.1 - see Map 10 on page 27. Approx. 5.3 km north of Brodie "Y" and 0.4 km south RoW crossing on Coldwater Road (near water measuring station). (N 49° 51.027′ W 120° 54.551′)

Description: Steel bridge approximately 112 ft (34 metres) long. Bridge deck approximately 20 ft (6 metres) above Coldwater River bed.

Condition: Several ties missing at north end.

Work: Curbs to be replaced. Decking and handrails to be installed.

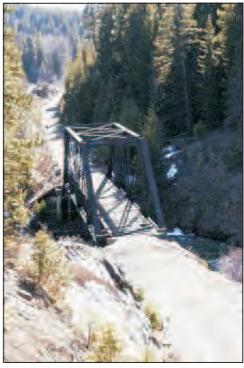


Fig. 22. Coldwater Bridge # 6. (Date: 2000-04-02 — By: Murphy Shewchuk.)

5.2.7 Coldwater Bridge # 7 (Patchett Road to Merritt).

Location: Approximately 4.5 km south of junction of Neilson St. and Pooley Ave. in Merritt.

Approx. 2.5 km south of Merritt Mtn Music Festival bandshell.

(N 50° 04.241′ W 120° 48.350′)

Description: Steel bridge approximately 112 ft (34 metres) long. Bridge deck approximately 20 ft (6 metres) above Coldwater River bed.

Condition: South approach washed out -- Coldwater River bypasses bridge.

Work: Due to numerous washouts and other conflicts, this bridge is not part of the recommended trail system.



Fig. 23. Coldwater Bridge # 7. (Date: 2000-04-19 — By: Murphy Shewchuk.)



Fig. 24. Coldwater Bridge # 7. (Date: 2000-04-02 — By: Murphy Shewchuk.)

5.2.8 Coldwater Bridge # 8 (Patchett Road to Merritt Merritt Mtn Music Festival).



Fig. 25. View from downstream at north side of bridge. (Date: 2000-03-30 — By: Murphy Shewchuk.)

Location: Mile 135 (Reid Crowther Report)

Approximately 3.0 km south of junction of Neilson St. and Pooley Ave. in Merritt.

Approx. 1.0 km south of Merritt Mtn Music Festival bandshell. (N 50° 04.584′ W 120° 47.989′)



Fig. 26. View from railway RoW from north side of bridge. Date: 2000-03-30 — By: Murphy Shewchuk.)

Description: Steel frame bridge approximately 115 ft (35 metres) long. Bridge deck approximately 20 ft (6 metres) above Coldwater River bed.

Condition: North abutment undermined. Twisted structure. Gap of approximately 38 ft (11.5 metres) from end of RoW to bridge deck. Ties missing at south end of deck.

Work: Curbs to be replaced. Decking and handrails to be installed. Ties to be replaced.

Note: Due to numerous washouts and other conflicts, this bridge is not part of the recommended trail system.

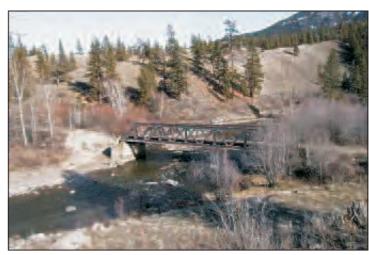


Fig. 27. View from hillside on southwest side of bridge looking northeast toward Coldwater Road. Date: 2000-03-30 — By: Murphy Shewchuk.)

5.3 Bridges: Voght Creek

5.3.1 Voght Creek Bridge Coldwater Road at Kingsvale.

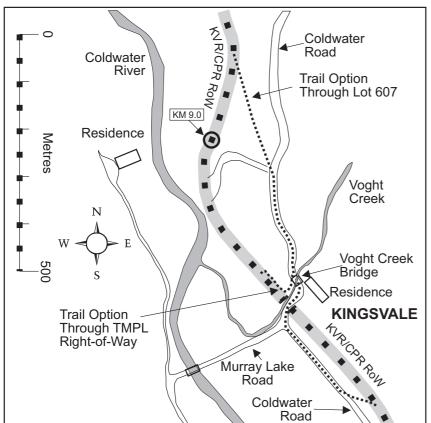
Location: KM 9.4 - see Map 8 on page 25. At Kingsvale at Coldwater Road - Murray Lake / Gillis Lake Road Junction, approx. 3 km north of Coquihalla Highway 5 Exit 256. (N 49° 54.420′ W 120° 54.830′)

Description: Bridge has been removed due to restricted clearance and planned Coldwater Road re-alignment.

Work: An access route around the missing bridge will have to be constructed. The map below shows two options. The northern option through Lot 607 would allow access to the Coldwater Road north of the anticipated re-alignment. Access through the Trans Mountain Pipe Line right-of-way may be a short-term solution.



Fig. 28. Voght Creek Bridge abutments at KM 9.4. See Map 8 on page 25. (Date: 2000-04-02 — By: Murphy Shewchuk.)



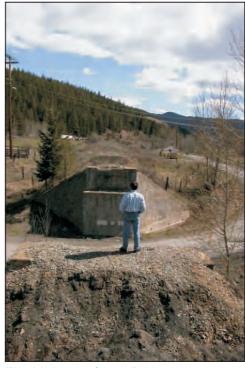


Fig. 29. Voght Creek Bridge abutments at KM 9.4. See Map 8 on page 25. (Date: 2000-04-02 — By: Murphy Shewchuk.)

2011-04-14 Page 40 Aestech Consulting Inc.

5.4 Washouts & Landslides

5.4.1 Merritt to Patchett Road.

There are no significant land disturbances on the proposed route between Merritt and Patchett Road.

5.4.2 Patchett Road to Brodie.

There are two significant land disturbances between Patchett Road and Kingsvale and three more between Kingsvale and the Brodie junction.

Mudslide: KM 0.6

(N 49° 58.73′ W 120° 55.87′)

This mud "fan", according to Bill Strande, has been a recurring problem that has plagued the railway for years. It appears to be due to an accumulation of run-off water above the RoW and subject to movement in spring or after a heavy rain. It is also being undermined by the Coldwater River in flood years.

The solution here may be to allow it to build and "groom" the surface periodically to make it easier to traverse.



Fig. 30. Mudslide area approximately 0.6 km south of Patchett Road. (Date: 2000-05-24 — By: Murphy Shewchuk.)

Mudslide and Washout: KM 2.2

(N 49° 57.98′ W 120° 55.95′)

This combination mudslide/washout at KM 2.2 is likely the most significant on the route between Patchett and Brodie. The Coldwater River has removed approximately 100 metres of railbed on a wide



Fig. 31. Mudslide/washout at KM 2.2 looking north. (Date: 2000-04-24 — By: Murphy Shewchuk.)

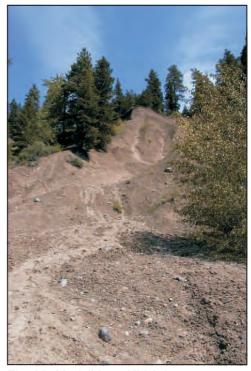


Fig. 32. Mudslide at KM 2.2. (Date: 2000-05-24 — By: Murphy Shewchuk.)

curve and could remove more during the next major flood. The clay and gravel hillside above (east) of the washout has slowly eroded into several relatively shallow gullies which continue to erode during spring runoff and rain or windstorms.

A trail has evolved to the east of the washout. From the north, it climbs through the trees, across a lightly timbered gully and then across the clay and gravel slide. The portion across the slide continues to erode and, as of 2000-05-24, would require considerable dexterity and determination to cross. The remnants of concrete and wooden pilings at the water's edge help make this a very unsafe crossing.

A short-term solution here would be to manually improve the foot trail on the north side of the washout and to manually, or with small machinery, carve a one-metre-wide trail across the lower third of the gravel fan. This would be a few metres above the previous rail grade level and would link with the foot trail from the north side.

Long-term solutions could include a two- or three-span foot bridge across the outflows of the gullies or a longer trail that starts well north and south of the washout and climbs above the cliff shown in Figure 32 on page 41.

Creek Crossing: KM 4.3

(N 49° 57.20′ W 120° 55.48′)

A culvert could be installed in this seasonal creek or it could be contoured to ease cycle traffic.

Small Washout: KM 11.3

(N 49° 53.48′ W 120° 54.22′)

This small washout, approximately 1 kilometre north of Coquihalla Highway 5 Exit 256, appears to be partially a result of the highway construction and the resulting re-alignment of hillside water flows. The culvert has been plugged by coarse gravel and sand and the railbed has been eroded.

While it is still easily traversed on foot or vehicle, remedial action such as removing and replacing the culvert or contouring the crossing will be necessary to minimize further erosion.



Fig. 33. Washout at KM 14.1. Note the rocky outcrops near the base. (Date: 2000-05-08 — By: Murphy Shewchuk.)



Fig. 34. Washout at KM 14.9. Note the growth starting on the embankment. (Date: 2000-05-08 — By: Murphy Shewchuk.)



Fig. 35. Washout at KM 14.9. Note the embankment above the right-of-way. (Date: 2000-05-08 — By: Murphy Shewchuk.)

Washout: KM 14.1

(N 49° 52.08′ W 120° 54.54′)

The Coldwater River has undermined the railbed, washing away about 30 percent of the width of the grade. Initial observations indicate that the river has struck the bedrock or a large boulder, reducing further erosion and leaving about 3 metres of the railbed.

Washout: KM 14.9

(N 49° 51.62′ W 120° 54.45′)

As in the previous washout, the river has undermined the railbed. However there is still sufficient width for truck traffic. Here preliminary observations suggest that planting local shrubs above and below the right-of-way would improve the riparian habitat and streambank protection.

Seasonal creeks and culverts: KM 16.0 to 21.4

There are several small creeks that flow through culverts in this section. All will need maintenance to insure that they don't overflow and erode the railbed. Salt Creek, about 200 metres north of the Brodie junction, has taken out the culvert and any temporary attempts to bridge it with loose ties.

5.4.3 Brodie to Brookmere

Mud Slide: KM 0.8

(N 49° 49.03′ W 120° 56.09′)

As with the mudslide near Patchett Road, the solution here may be to periodically "groom" the fan and allow it to build and stabilize. It does not appear to be undermined by the Coldwater River.



Fig. 36. Salt Creek, near Brodie. (Date: 2000-04-18 — By: Murphy Shewchuk.)



Fig. 37. Mudslide at KM 0.8 (Brodie-Brookmere) from across Coldwater River. (Date: 2000-05-24 — By: Murphy Shewchuk.)

Land subsidence: KM 0.9

(N 49° 49.07′ W 120° 55.96′)

As described in the recomendations on page 30, riparian shrubs coupled with culvert improvements should minimize further erosion.

Washout: KM 1.2

(N 49° 49.16′ W 120° 55.85′)

A trail has been cut around the head of this washout. However it will require remedial work to minimize further erosion and reduce the risk of silt being carried into the Coldwater River.

Rock Cut: KM 1.9

(N 49° 49.54′ W 120° 55.64′)

The rock cut will require occasional maintenance to remove fallen rock from the right-of-way. It may also serve as a source of material for bank stabilization elsewhere.

Culverts and ditches: KM 3.0 to KM 6.2

Several culverts require repair and ditches cleaning out in the section of right-of-way bordering on Brook Creek.



Fig. 39. Land slump or subsidence at KM 0.9.

(Date: 2000-04-18 — By: Murphy Shewchuk.)



Fig. 38. Mudslide at KM 0.8 (Brodie-Brookmere). Note cyclist on the right-of-way near the centre of the slide. (Date: 2000-04-18 — By: Murphy Shewchuk.)



Fig. 40. Major washout at KM 1.2. Note the cyclist on the far side of the washout and that trail goes through trees in the middle right of the photograph.

(Date: 2000-04-18 — By: Murphy Shewchuk.)

6. Issues & Resolutions

6.1 Introduction

In October 1995, the Province of British Columbia announced the purchased of more than 425 kilometres of abandoned railroad right-of-way. This included more than 240 kilometres in the Princeton Subdivision. The last train rolled over the Okanagan Falls to Spences Bridge section in 1989. It included the route through Penticton, Summerland and Princeton, then along a northwesterly route through Brookmere, Merritt, and through to Spences Bridge. These now public lands included sections of both the old CPR and KVR (Kettle Valley Railroad) lines excepting lands within the bounds of Indian Reserves and Municipalities, which were returned to those jurisdictions. Although the development of the Trans Canada Trail was in its infancy, the acquisition of these lands at the time was for consideration as a recreational corridor that could contribute to the national initiative to link the country from coast to coast.

These lands were placed under the jurisdiction of British Columbia Lands Branch, now known as BC Assets and Land Corporation. Severe flooding within the Coldwater River watershed in the mid-1990s caused significant and irreparable damage in several locations to both the right-of-way itself and two bridges along the route. Despite a post-flooding inventory funded by BC Assets and Land Corporation to identify both the extent of the damage and to make recommendations to minimize further erosion, no physical works were ever initiated.

Although widespread interest in the railroad corridors generated several proposed uses for these lands including recreational trails, public roads, and acquisition as deeded land by adjacent landowners, BC Assets and Land Corporation deferred any decision on use or sale until a public planning process had been completed. Over the next six years and without involvement from government, local use developed on the right-of-ways and included motorized access (public, industrial, and agricultural), recreational use including cycling, hiking, and snowmobiling, and in some cases, the unsanctioned reclamation of these lands by adjacent landowners.

With increasing interest and use of the abandoned KVR/CPR line south of Merritt as a recreational corridor, along with the Trans Canada Trail designated from the east to Brookmere following the abandoned KVR line, the status of the right-of-way between Brodie and Merritt became a focus from the perspective of local stakeholders and interest groups. Although the proposed route of the Trans Canada Trail would continue towards the City of Hope from Brookmere and bypass the Merritt Subdivision, significant interest in linking Merritt with the Trans Canada Trail near Brodie led to a study funded by the Ministry of Community Development, Cooperatives, and Volunteers to determine whether or not a feasible route could be identified, and if the community around Merritt as a whole supported the eventual development of such a recreational route. Local opinions regarding the use of the abandoned CPR rail line are very polarized, and an objective of this study would be to identify the issues around any such route and to mitigate solutions.

A public planning process was developed and local stakeholders, landowners, industry, and the general public alike were invited to participate and identify such issues and participate in the development of, where possible, resolutions that could garner the support of the community to recommend a route to government for consideration.

6.2 Identification of Issues

The planning and development of the Trans Canada Trail in other regions of British Columbia has both identified issues and developed solutions and by doing so in many cases, were acceptable to area stakeholders and affected parties. It was expected therefore, that in the Merritt based route planning process, many of the issues identified locally would have been addressed in other regions and that those resolutions could be drawn upon and adapted to suit local needs. It is important to note that this study to identify a route between Merritt and Brodie would be a link to the Trans Canada Trail and not be "designated" as such, despite the general trend to adopt the standards and use regulations of the national trail system.

This study therefore, was unique from similar trail planning initiatives in that it was a locally driven process with the intent of forming a community based planning group to identify local issues around the identification of any proposed recreational route, and to develop local solutions. The majority of the issues became apparent at the first public meeting held March 15, 2000 and at the first planning team workshop held one week later. The following section details those concerns.

6.3 Issues and Proposed Resolutions

The issues identified through this process ranged from "motherhood" type of concerns with regard to the identification and development of a recreational route to very site-specific concerns with the consideration of route options. The team of consultants leading the process recorded each of the issues and conducted the research required to propose solutions for consideration by the planning group. The following is a record of those issues in no particular order of priority.

6.3.1 Planning & Development Costs

An initial concern raised by both members of the public and the planning team was with respect to the cost of the trail study and the eventual costs of trail development and management. The question was raised as to whether or not any expenditure would be a wise investment for the community in terms of economic benefit, while others felt that the City of Merritt could not continue to prosper without a significant investment in tourism.

Equally as important was the issue of the source of funding. Some individuals felt strongly that the government should not be providing the funding for the development, maintenance, and management of recreation infrastructure.

Discussion:

The projection of long term revenue or economic benefit associated with the development of such a recreational route is a very difficult task. Some communities have claimed significant economic gain, while others have not. Some members of the planning team noted that the issue goes beyond the monetary sense, and the opportunity for a local recreation experience is a quality of life issue, weighing more importantly on lifestyle than economic benefit.

The Ministry of Community Development, Cooperatives, and Volunteers provided funding for the route study in the amount of \$24, 864. Although some funding may be made available by the government towards the development of the Trans Canada Trail and associated recreational routes, development to date has largely been funded by corporate sponsorship and contributions from volunteer and interest groups. The proposed Merritt to Brookmere route has had no commitment to date for developmental funding from the Province of British Columbia.

Resolution &/or Status:

A key objective of this study was to determine whether or not a feasible recreational route could be identified between Merritt and Brookmere to link with the Trans Canada Trail. Because the use and status of the abandoned rail line right-of-way has become a contentious local issue, and with the position of the BC Assets and Land Corporation that any such decision would be subject to a public planning process, the initial investment for the route study was a required expenditure.

Recognizing that the specifics of trail development and management were beyond the scope of this study, and that funding for any such development would be largely private, the group proceeded with its task of route identification.

6.3.2 Road Crossings

Regardless of any eventual recreational route location, there will be a requirement to cross public, industrial, and other roads. A concern was expressed with regard to the safe crossing of such roads by recreational users, and that industrial traffic may be asked to yield to recreational traffic assuming a large responsibility for public safety and having an impact on the efficiency of industrial operations.

Discussion:

While all traffic using public roads must be conscious of recreational trail crossings, vehicular traffic would in no circumstances be asked or held responsible to yield the right-of-way to recreational trail use.

The issue of road crossings in not unique and has been addressed in trail planning and development in other regions of the province. Where road crossings of the trail are required, signing has been erected to inform vehicle operators of pedestrian activity, simply to increase awareness and safety. Like any other crossing, as in the case of municipal trails and public roads, the trail user must also be made aware of the hazard and be responsible to cross in a safe manner. Controls must be implemented on the trail itself at required crossings, such as barricades or other means to slow or stop recreational traffic prior to proceeding across a public road.

Resolution &/or Status:

Signing and controls have proved to be an effective tool to address the crossing issue. Specific crossing locations, signing and structures must be identified and implemented during the trail development plan phase, should any recommended route be approved by government.

6.3.3 Washouts - Repair Vs. Relocation

The Coldwater River constantly changes coarse and causes problems with erosion and washouts of improvements on an annual basis. This is evidenced by the degradation of the rail line right-of-way between Merritt and Brookmere, especially since the corridor has been unmaintained for a decade. If the proposed recreational route is located near the river where washouts may occur on a regular basis, or utilizes the existing rail line right-of-way with existing erosion problems, the question was raised as to whether dollars should be invested in these high risk areas, or another route should be considered.

Discussion:

An important part of this planning process has been to evaluate potential routes identified by the planning team in the field. Where existing erosion of a route under consideration has occurred, or where the potential for further degradation exists, the field inventory explored and presented alternatives or feasible solutions. The intent of identifying a viable route location was to minimize significant developmental or maintenance costs to address route erosion.

Resolution &/or Status:

Washouts and erosion, including mudslides along the most feasible route have been inventoried in the field and detailed in section 5 of this report. Alternate or bypass routes with little risk for further erosion, or manageable maintenance have been identified.

6.3.4 Long Term Maintenance

The identification and development of a recreational route must consider the issue of garbage and maintenance along the trail. There are two issues to consider, routine or regular maintenance to address garbage and the cleaning of facilities, and longer-term maintenance and repair of improvements and infrastructure.

Discussion:

The requirement for the maintenance of recreational trails on Crown Land ultimately becomes the responsibility of the Province of British Columbia. Traditionally, funding for maintenance of such improvements has been very limited or non-existent, yet the Province has been successful in negotiating maintenance agreements with local volunteer or interest groups for this service. In the case of the Merritt to Brookmere Link, the Nicola Valley Explorers Society has expressed an interest in trail stewardship.

Generally, maintenance agreements are struck through the development of a trail management plan. Although the focus of this study is to identify a feasible recreational route and the specifics of route development and management are beyond the scope of this project, the planning team agreed that prior to any level of route development, a stewardship group would have to be identified.

Resolution &/or Status:

Any recommendation by the planning team for a recreational route between Merritt and Brookmere must first be reviewed and approved by Government. This report will include a recommendation that should approval for the development of such a proposed trail occur, a public process for the development of a management plan must first occur, and a trail stewardship group be identified. The Nicola Valley Explorers Society has agreed to form a trail stewardship committee and intends to negotiate a maintenance agreement with the Province of BC for this particular route.

6.3.5 Toilets & Campgrounds

Concerns have been raised about the need for and location of public facilities along this proposed recreational route. The issue is twofold: the absence of toilets and camping areas can result in indiscriminant use of private property and other inappropriate locations leading to unsanitary conditions, trespassing, increased fire risk, litter, and other concerns. And secondly, development of such facilities creates additional problems; few landowners are in favour of such development in their "backyard".

Discussion:

The identification and proposed development of public facilities along the proposed Merritt to Brookmere Link is beyond the scope of this project. This process recognizes there will be a need to provide such infrastructure as a component of any route development, which will be addressed through the development of a trail management plan should a recommended route be approved by the Province.

Resolution &/or Status:

This report will include as a recommendation that any recommended route approved by the Province will require the development of a comprehensive operational / management plan prior to the development of public facilities. This process must also consult with stakeholders to identify infrastructure requirements and location with a minimum impact on adjacent landowners.

6.3.6 Weed Control

The Canadian Pacific Railway was responsible for the control of noxious weed species along the railway right-of-way while in operation throughout the area. Since the abandonment of the lines a decade ago, the control of weeds has either been left as a problem of the landowner or not addressed at all. The development of a recreational trail could increase the spread of weeds if a control program is not identified.

Discussion:

There are several approaches to this issue that together could contribute to addressing the spread of noxious weeds along any developed recreational trail.

The Ministry of Forests currently funds a contract for the identification and inventory of noxious weeds within the Merritt Forest District, along with a spraying program. Although provincial funding is insufficient to contribute directly at this time, Ministry staff suggests there is an opportunity to coordinate the MoF program to include problem areas along the trail corridor to minimize treatment costs.

Other options include the employment of Environment Youth Teams or similar groups to assist in the control of noxious weeds through hand-pulling, burning, or any other means deemed effective. The Nicola Valley Explorers Society is another interest group that could be available to assist in this program. The Regional District is another key player with an existing partnership with landowners, and the management of this issue must be through the efforts of a partnership with all the players. A public education / prevention program should also be implemented.

Resolution &/or Status:

Should a recreational route be approved, a weed strategy and partnership must be developed as a component of an overall trail management plan. This, along with the required funding for implementation, will be the responsibility of the trail stewardship group.

6.3.7 Policing the Trail

A question was raised as to whether active enforcement (policing) of a recreational route would be considered or provided for. A concern was expressed that the development of a recreational route, especially in close proximity to private holdings, increases the risk of vandalism and trespassing, and that some means of addressing this issue would be required.

Discussion:

There is no provision for active enforcement or policing of any approved recreational trail through this initiative. The Trans Canada Trail in other areas of the province has demonstrated success with programs such as "Observe, Record, and Report", public awareness, and signing. Proactive planning in trail location and the development of infrastructure (fences, barricades, etc) can inhibit access to private property and significantly reduce the opportunity for such occurrences.

Resolution &/or Status:

The issue of active enforcement is not a consideration. Key areas of risk along any approved recreational route should be identified during the planning stage and site specific solutions developed.

6.3.8 Acceptable Trail Uses

The Trans Canada Trail restricts use of its network, in most instances, to five core activities: hiking, biking, horseback riding, cross country skiing, and snowmobiling. Although any proposed route between Merritt and Brodie is not considered at this time to be a designated component of the Trans Canada Trail system, it was the initial intention of this study to adopt the same general principles of trail management and use. Local stakeholders and interest groups have expressed a concern that other types of use may be restricted or prohibited in the development and management of this proposed recreational route. Specific examples included the movement of cattle along any recognized corridor, and the use of motorized vehicles other than snowmobiles (including All Terrain Vehicles).

Discussion:

The recreational trail study is a local process and will reflect local needs. While the recommendation is for this trail to be available for the five core recreational uses, the intention is to allow non-recreational uses where deemed necessary. Although motorized use of the corridor is largely incompatible with proposed core uses and will be under some level of restriction, the needs of landowners for access to property, transporting equipment, moving livestock, and crossing the trail will be accommodated. Industrial use including forestry, agriculture, and mining will be exempted from such restrictions where access is required.

Although a motion was made at one particular meeting of the working group to adopt a strictly non-motorized policy (thus restricting snowmobile use from the recognized trail corridor), the decision to allow snowmobile use was adopted by a majority vote after much debate.

The restriction of All Terrain Vehicles from the recreational route was readily accepted by all planning team members, however an associated issue was raised concerning the unauthorized use and control of such vehicles. It became apparent through discussion that although trail use by ATV's was not anticipated to be a key problem, the use of trails (legal or otherwise) to access adjacent lands is an ongoing problem and was a concern of many. Several landowners expressed a reluctance to "buy-in" to the trail planning process unless a concerted effort was made to lobby government to register such off-road vehicles, providing a means to report incidences of trespassing onto private property. One major area landowner suggested including a recommendation in the route study that the government consider a licensing program in an effort to address those concerns. The suggestion received strong support from the planning team, and a decision was made to include a recommendation in this report.

Resolution &/or Status:

The Merritt to Brookmere Link will adopt the five core activities associated with the Trans Canada Trail system.

The recreational use of All Terrain Vehicles will be restricted or prohibited as an acceptable use, also consistent with the Trans Canada Trail. This report will provide a recommendation to government regarding the registration of All Terrain Vehicles (ATV's) and other motorized recreational vehicles (such as off-road motorcycles) as a tool to manage unauthorized motorized use of any approved trail and adjacent lands.

This route recommendation will provide for specific needs of landowners and stakeholders for access and non-traditional uses on the recreational route. Site specific solutions will be recommended in the development of a management plan should the trail be approved.

6.3.9 Impacts on Landowners

The development of a recreational trail corridor between Merritt and Brookmere would provide a lineal route for public access through the valley and would attract an increasing number of users. Regardless of the eventual route location, there will be impacts to ranchers and landowners with holdings in close proximity to the corridor.

These stakeholders have expressed concerns with the loss of privacy and trespassing, and anticipate additional costs for securing property, increased insurance, and in the event of vandalism. The question has been raised as to the reimbursement of such costs.

Discussion:

This issue was the subject of much debate both at the public meetings and planning workshops. It is a complex issue with many facets. Loss of privacy, trespassing, vandalism and increased costs of insurance are of major concern but equally if not more important, is the issue of the loss of an opportunity to purchase what is locally referred to as the KVR/CPR right-of-way. While some feel very strongly that this land should be offered for sale by the current landowner, the provincial government, still others argue that this land, if in the Agricultural Land

Reserve should be returned to agricultural use. Against such strong feelings, it is difficult to find a solution that will satisfy this group of landowners.

As for the trespassing and vandalism issues, these have not been a significant problem along managed sections of the Trans Canada Trail corridor throughout the province. The trail and its core activities attract a more conscientious type of user, less likely to demonstrate aggressive or anti-social behavior, largely because of restricted motorized access. Route planning is key in limiting impacts on privacy, and controls such as barricades, fences, and signing have been successful in other areas in minimizing the opportunity for trespassing and / or vandalism. Problem areas are most often site specific and must be identified and addressed through proactive planning.

It is possible that insurance costs to the landowners will increase but hopefully they will be minimal. In other areas, trail stewardship groups have bought insurance to cover such costs as injury to user, damage to adjacent private property, etc. Also, the recent amendments to the Occupiers Liability Act have shifted the focus of culpability from the landowner and placed the responsibility on the trail user.

Loss of privacy will impact only a few landowners along the route as most of the recommended route is situated well away from people's homes.

Resolution &/or Status:

The BC Assets and Land Corporation, the agency currently responsible for the now publicly owned KVR/CPR right-of-way has clearly stated that the Crown is not prepared to sell these lands to private landowners, and that no decision on use or sale occur until a public planning process has been completed.

Should a recommended route be accepted by government, the development of a trail management plan prior to trail construction must identify key areas of concern and develop site specific solutions to minimize the opportunity for trespassing and / or vandalism on private property.

Where specific concerns regarding landowner privacy have been brought forth, the planning team has considered and recommended options to minimize the impact on residences including a bypass route in one particular instance.

There is no known provision to assist landowners with any additional costs of insurance. Landowners are recommended to purchase adequate insurance in the event of vandalism or liability claims.

6.3.10 Private Property: Access & Fencing

In the event that one landowner has property on either side of an approved recreational route, there will be a need to provide access to the landowner throughout the property, and it should be the landowner's decision on whether or not fences need to be in place. The cost of erecting "new" fences where previously not required is also an issue. This situation may also apply to deeded land adjacent to either side of the trail.

Discussion:

In no event should the development and management of a recreational route between Merritt and Brodie restrict a landowner from accessing his / her own property. Provisions will be made to ensure the needs of the landowner are met, and could include specially developed crossings, gates, etc. The need for any fencing to address access, trespassing, and similar concerns should be identified through the development of a management plan to ensure such improvements are addressed in a trail development budget.

Resolution &/or Status:

Access, fencing, and gating will be site specific and should be clearly identified in the development of a trail management plan so solutions can be developed. Specific infrastructure not previously required such as fences and gates should be accommodated in a trail development budget and not be the burden of the landowner.

6.3.11 Agricultural Land Reserve

The development of a recreational trail, and whether or not recreation is an acceptable use within the Agricultural Land Reserve (ALR) became a most complex issue throughout the route planning process. While BC Reg. 7/81 of the Agricultural Land Commission Act (Subdivision and Land Use Regulation) Section 2(g) seems to allow for parks and recreation reserves to provide public access and improvements for the purpose of recreation, the planning team was presented with information that seemed to contradict this. This information was specific to the use of abandoned rail lines within the ALR, and stated further that any existing or proposed recreational use is illegal.

Discussion:

It must be clarified that the CPR right-of-way between Merritt and Brookmere, (excepting those lands within Federal Indian Reserves and municipalities) were sold to and belong to the Province of British Columbia, and are currently administered by the BC Assets and Land Corporation.

The Provincial Agricultural Land Commission, now known as the Land Reserve Commission (LRC), designated large tracts of land for agricultural use which were placed under the authority of this government agency. Roads, railways, and other features were included within these designated lands, and no effort was ever made for their exclusion.

The LRC is the approving body for the removal of any land from the ALR. Only Cabinet can change a decision on land status by the LRC.

The LRC and BC Assets and Land Corporation are both government agencies. BC Lands have taken the position that recreational use of abandoned rail lines within the ALR is an acceptable use as currently defined in the Land Commission Act, a view opposed by the LRC. Both agencies are in discussion with the objective of reaching a mutually satisfactory agreement.

In the interim, the government is supporting the planning and development of recreational trails and routes and is aware of the ALR issue.

Resolution &/or Status:

The direction provided to the Merritt based Linking Communities project was to proceed with the identification of a route that best meets local planning objectives, and that the approval of any recommended route would be subject to higher level government decisions with respect to the Agricultural Land Reserve.

The LRC has indicated that the ALR has no specific boundaries and that each individual application for an allowable use (in this case the recreational trail corridor) will be evaluated as to its inclusion / exclusion in the land reserve. A determination can not be made until an application is received and reviewed.

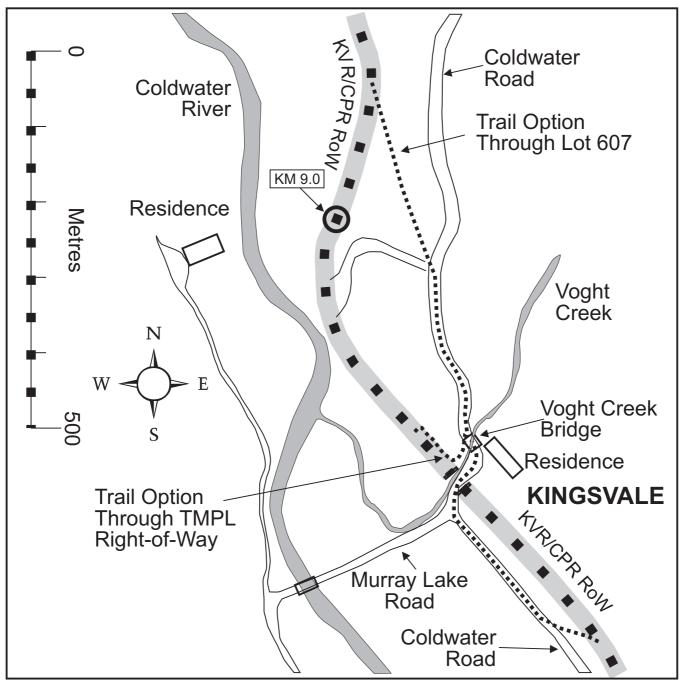
The planning team was directed to continue with the process of identifying a route that best meets the goals and objectives of the project. The planning team was cognizant of the ALR issue and would be prepared to identify alternative route(s) should the recommended route include lands within the ALR in the event an application is denied.

7. Recommendations

The "Trans Canada Trail - Linking Communities Initiative" has been a local process and reflects local solutions to concerns identified by the community. The following recommendations should be considered for the successful development and management of the proposed route from Merritt to Brookmere.

This report recommends that:

- **7.1** The Province of British Columbia recognize that these recommendations are the result of a local process and approve a recreational route linking Merritt with the Trans Canada Trail at Brookmere as detailed here-in.
- **7.2** The Province performs structural assessments of the nine (9) existing bridge structures along the recommended route between Kingsvale and Brookmere.
- **7.3** A public process be carried out for the development of a trail management plan to address key issues including the formation of a stewardship group, a maintenance agreement, funding sources, weed control, and the development of trail infrastructure (including campgrounds, fences and gates) prior to trail development.
- **7.4** The development of the Merritt to Brookmere trail adopt the five core uses of the Trans Canada Trail Network which include cycling, hiking, horseback riding, cross country skiing, and snowmobiling, and which excludes all other motorized recreational use.
- **7.5** The Ministry of Forests, under Section 105 of the Forest Practices Code of British Columbia Act, restrict or prohibit the recreational use of All Terrain Vehicles (ATVs) and other motorized vehicles on any approved linking route not part of existing roadways.
- **7.6** The Ministry of Transportation and Highways consider improvements to the Midday Valley Road to allow for the safe use of self-propelled transportation where the recommended route follows the public right-of-way.
- **7.7** The Ministry of Transportation and Highways allow for a pedestrian crossing in the realignment and replacement of the Voght Creek Bridge at Kingsvale.
- **7.8** An easement through DL 607 near the Kingsvale Voght Creek crossing be pursued to provide a reasonable approach to the new bridge alignment and to address privacy concerns as detailed in this report.
- **7.9** The Ministry of Transportation and Highways consider the Coldwater Road an integral part of an alternate or loop trail from Patchett Road to Merritt. And that, in keeping with the recently announced cycling policy, provide a two-metre-wide corridor in any future realignment and widening of the Coldwater Road.
- **7.10** The Province of British Columbia consider the registration of All Terrain Vehicles and other motorized off-road vehicles as a tool to manage the unauthorized use of the recreational corridor and access to adjacent crown and deeded lands.
- **7.11** Current non-recreational uses of the trail corridor by landowners and stakeholders be provided for as outlined in this study and which may be identified in the development of a trail management plan.
- **7.12** The Nicola Valley Explorers Society seek an interim agreement with British Columbia Assets and Land Corporation to carry out limited activities that would mitigate the further erosion and deterioration of the KVR right-of-way along the Kingsvale to Brookmere portion of the recommended route.
- **7.13** The Province of British Columbia provide an adequate timeframe for further route planning and development, including the development of a management plan for the Merritt to Brookmere Trail.



Access to the KVR/CPR right-of-way is compromised at Kingsvale because of the removal of the KVR/CPR bridge that spanned Voght Creek and Coldwater Road. Access south of the crossing should not pose any difficulty, but access north of the crossing will require approval from Trans Mountain Pipe Line Company Limited or the owners of Lot 607. Further compounding the problem is the planned re-alignment of Coldwater Road and rebuilding of the road bridge across Voght Creek.

8. **Appendices**

8.1 Appendix A **Planning Team Members**

John Anderson Rancher along KVR right-of-way

Tolko Industries Ltd. Bruce Beech

Ingrid Boys Landowner along Coldwater Road

Nicola Valley Explorers Society/ Rotary Club Dave Brown

Lou Cooke Nicola Stockbreeders Association

Philip Crack **Back Country Horsemen** Landowner, Area 'M' **Ingrid Davis**

Merritt Mountain Bike Association Colin Gage

Lloyd Gavelin Rancher

Stephen Hureau Fisheries and Oceans

Rick Isbister Nicola Valley Explorers Club Best Western, Nicola Inn Larry Lemire Joe Post Director, Electoral Area 'M'

Lions Club Ralph Poynting Darryl Racine Bonzai Cycle Gerry Sanford Community resident Will Sloan Tolko Industries Ltd.

Gord Stewart Nicola Valley Stewardship Coordinator Bill Stirling Agriculture Land Preservation Society Bill Strande Rancher along KVR right-of-way

Gisele Strodl Community resident Angela Texmo Merritt Snowmobile Club Shawn Torgerson Nicola Valley Explorers Society

8.2 Appendix B **Community Participation**

The following individuals attended one or more than one public meeting. (In alphabetical order by last name)

Alexander, Royce - Merritt, BC Anderson, John - Electoral Area 'N'

Brown, Ron - Nicola Lake, BC Byer, Wayne - Merritt, BC

Baird, Bob - Merritt, BC

Bamford, Starlene - Merritt, BC

Barry, Joe - Merritt, BC

Beaton, Carol - Electoral Area 'N' Beech, Bruce - Merritt, BC Bond, Art - Lower Nicola, BC Brandt, Dalyce - Merritt, BC Brown, Chris - Merritt, BC Brown, David - Merritt, BC Brown, Eleanor - Nicola Lake, BC Campbell, Clay - Merritt, BC

Caprian, Dave - Coldwater Indian Reserve

Cavaliere, George - Merritt, BC Cavaliere, Kylie - Merritt, BC Chong, Anne - Electoral Area 'N' Chong, Pius - Electoral Area 'N' Clark, Diane - Merritt, BC Clark, James - Merritt, BC

Clark, Stan - Merritt, BC Cody, Jennifer - Merritt, BC

Collins, George - Coldwater Indian Reserve Cooke, Lou - Electoral Area 'N' Cooke, Marilyn - Electoral Area 'N' Cowan, Albert B. - Merritt, BC Crack, Dave - Electoral Area 'M' Crack, Kathy - Electoral Area 'M' Crack, Philip - Electoral Area 'M'

Douthwright, Frank - Merritt, BC

Ewalt, Gene - Merritt, BC Ewalt, Ginger - Merritt, BC

Felske, Bev - Port Coquitlam, BC Frizzell, Terry - Merritt, BC

Gage, Colin - Merritt, BC Gage, Kari - Merritt, BC Gavelin, Lloyd - Merritt, BC

Hatton, Dave - Merritt, BC Heal, Phil - Merritt, BC Hilton, Kelly - Merritt, BC Howes, Barton - Merritt, BC Hureau, Stephen - Lillooet, BC

Isbister, Rick - Merritt, BC

Jackson, Mike - Brookmere, BC

Kane, Chuck - Kamloops, BC Kelly, Oliver - Electoral Area 'N' Kelly, Paddy - Electoral Area 'N'

Langlois, Sheila - Lower Nicola, BC Larsen, Jens - Merritt, BC Lawrence, Darcy - Merritt, BC Leclair, Kim - Merritt, BC Lees, Sasha - Merritt, BC Lemire, Larry - Merritt, BC Lindquist, Michele - Merritt, BC

Mathieu, George - Merritt, BC McDonald, Russ - Merritt, BC Mcleod, G. - Merritt, BC Miller, Brian - Victoria, BC Murray, Kathy - Lower Nicola, BC Neale, Bob - Merritt, BC

Padley, Donna - Merritt, BC
Padley, Richard - Merritt, BC
Pitt, David - Merritt, BC
Pomarensky, Ted - Lower Nicola, BC
Post, Joe - Electoral Area 'M'
Poynting, Ralph - Merritt, BC
Prince, Clayton - Salt Spring Island, BC
Prokopetz, Yvonne - Kamloops, BC

Racine, Darryl - Merritt, BC Racine, David - Merritt, BC Ramsey, Jim - Merritt, BC Robinson, Edna - Merritt, BC Rogalski, Dennis - Merritt, BC Rogalski, Iris - Merritt, BC Rose, Michael - Electoral Area 'N'

Sanford, Gerry - Merritt, BC Schindler, Wayne C. - Merritt, BC Scott, Beth - Merritt, BC Senio, Tracy - Lower Nicola, BC Sherwood, Ron - Merritt, BC Shewchuk, Katharine - Merritt, BC Sleik, Peter - Merritt, BC Sloan, Will - Merritt, BC Stewart, Gord - Kamloops, BC Stirling, Bill - Electoral Area 'M' Strodl, Gisele - Merritt, BC Stuttard, Sheldan - Merritt, BC

Texmo, Angela - Merritt, BC Texmo, Mark - Merritt, BC Torgerson, Shawn - Lower Nicola, BC Tuba, Dave - Electoral Area 'N' Tuba, Dorothy - Electoral Area 'N'

Unrau, Randi - Logan Lake, BC

Veale, Bev - Merritt, BC

Williams, Matt - Electoral Area 'M' Witt, Paul - Merritt, BC

8.3 Appendix C Project Schedule and Timelines

March 15, 2000 - Public Meeting #1

Purpose:

To establish a Planning Team that will identify and recommend a recreational route linking the City of Merritt with the Trans Canada Trail near Brookmere.

Objectives:

- to hold a public meeting with representation from stakeholders, landowners, First Nations, government agencies and the general public
- to review the specific objectives of the recreational trail study, its proposed methodology, timelines, outputs and meeting dates
- to clarify role and expectations of potential Planning Team participants
- to establish a Planning Team membership

Consulting Group - Required Preparation for Workshop #1

- preparation of source mapping (transfer of all known features, improvements and infrastructure, land ownership, washouts and obstructions, etc. to working maps)
- obtain information on land ownership and contact information
- identify key stakeholders and potential issues
- collect additional supporting documentation/information (i.e. photography, etc.)

March 22, 2000 - Planning Team Workshop #1

Purpose:

To present source information to Planning Team to solicit additional route knowledge, information and input.

Objectives:

- to formalize the Planning Team membership
- introduction of participants to include background, representation, concerns, reason for participation
- presentation and ratification of Terms of Reference
- presentation of source mapping to Planning Team to solicit and record specific input and additional route information, including apparent conflicts, key concerns and contact information
- set direction / tasks for Consulting Group and draft agenda for next workshop

Consulting Group - Required Preparation for Workshop #2

- amend source mapping to reflect input from Workshop #1
- conduct route search and/or consultation with stakeholders and others as required by Planning Team
- clarify key issues and develop range of possible solutions
- identify possible route on working maps

April 12, 2000 - Planning Team Workshop #2

Purpose:

To present route option(s) to Planning Team for evaluation and to identify alternatives if required.

Objectives:

- present proposed route location(s) based on direction set in Workshop #1 for review by the Planning Team
- presentation and discussion of the key issues and range of possible solutions
- identify alternate route location(s) for field reconnaissance and inventory
- draft agenda for public meeting scheduled for May 3

Consulting Group - Required Preparation for Public Meeting #2

- conduct field reconnaissance and inventory of possible route locations identified by Planning Team
- identify bridges/structures in need of professional assessment (engineering)
- develop photographic and GPS (Global Positioning System) record of route options
- request professional engineering assessment of structures by Province of BC
- collate field data into format for public presentation

May 3, 2000 - Public Meeting #2

Purpose:

To present a draft of a proposed route to the general public for discussion and comment.

Objectives:

- review draft route with the general public based on planning workshops and data collection
- identify and discuss specific issues and concerns with the view of finding solutions (record all input)
- determine level of community support based on participation and comments

Consulting Group - Required Preparation for Workshop #3

- incorporate public comments and input into route proposal (location and solutions)
- amend working maps to reflect changes, if any
- establish best possible route given all the information to date
- prepare final route mapping for review and assessment by Planning Team
- prepare statement of issues and resolutions for consideration by Planning Team

May 10, 2000 - Planning Team Workshop #3

Purpose:

To present final draft mapping of the proposed route to the Planning Team for assessment and support.

Objectives:

- review the comments and input from Public Meeting #2
- present final draft route mapping and statement of issues and resolutions for review by Planning Team
- obtain support of the Planning Team to recommend final route to the general public (Merritt and area residents) and the provincial government
- set direction for the development of a final project report
- draft the agenda for the final public meeting scheduled for May 24, 2000

Consulting Group - Required Preparation for Final Public Meeting

- incorporate final amendments (if any) recommended by the Planning Team
- develop draft report as directed by the Planning Team for public presentation
- incorporate structural assessments of available
- draft final route mapping for public presentation

May 24, 2000 - Public Meeting #3

Purpose:

To present final route recommendation and report to the general public for support.

Objectives:

- to obtain community support for the final route recommendation

May 31, 2000 - Final Report