

Electoral Area Services

Thursday, September 11, 2014 - 4:30 pm

**The Regional District of Kootenay
Boundary Board Room, RDKB Board Room,
843 Rossland Ave., Trail, BC**

A G E N D A

1. CALL TO ORDER
2. ACCEPTANCE OF AGENDA (ADDITIONS/DELETIONS)

A) September 11, 2014

Recommendation: That the September 11, 2014 Electoral Area Services Agenda be adopted.

3. MINUTES

A) Minutes of the August 14, 2014 Electoral Area Services Committee meeting.

Recommendation: That the minutes of the August 14, 2014 Electoral Area Services Committee meeting be received.

[Minutes - Electoral Area Services - 14 Aug 2014 - Pdf](#)

4. DELEGATIONS
5. UNFINISHED BUSINESS

A) The Electoral Area Services Committee memorandum of Action Items to the end of August 2014.

Recommendation: That the Electoral Area Services

Committee memorandum of Action Items to the end of August 2014 be received.

[ToEndOfAugforSept.pdf](#)

6. NEW BUSINESS

A) **STOFFEL, THOMAS**

RE: Site Specific Exemption to Floodplain Management Bylaw

6870 Christian Valley Road, Area 'E'/West Boundary
Lot 1, DL 3637, SDYD, Plan KAP12818, Subsidy Lot 8 Portion SOUTH 1445 FT.

RDKB file: E-3637-07193.200

Recommendation: That the application for a Site Specific Exemption to the Floodplain Management Bylaw submitted by Thomas Stoffel, in order to construct a single family dwelling on the property legally described as Lot 1, DL 3637, SDYD, Plan KAP12818, Subsidy Lot 8 Portion SOUTH 1445 FT. be approved, subject to:

- Adherence to all the recommendations included in the Flood Hazard Assessment Geotechnical Report submitted by Chris Wallis, P. Eng., of Beacon Geotechnical Ltd; and
- The owner registering a new standard floodplain covenant on title in favour of the Regional District of Kootenay Boundary prior to issuance of a building permit.

[Sep E Site Specific Stoffel.pdf](#)

B) **MIKALISHEN, STEWART & ZOObKOFF, ANGELA**

RE: Ministry of Transportation & Infrastructure Subdivision-Boundary Adjustment

22 John Road, and adjacent undeveloped parcel, Beaver Falls, Electoral Area 'A'.

Lot 2, DL 8392, KD, Plan NEP2533, Except Plan REF PL 110328I; AND Lot 3, DL 8392, KD, Plan NEP2533, Parcel A (REF PL 110328I) Parcel A Lot 2 Plan NEP2533 DL 8392 KD

(REF PL 110328I)
RDKB File: A-8392-09323.003

Recommendation: That the staff report regarding the subdivision referral from the Ministry of Transportation and Infrastructure regarding a proposed subdivision for the two parcels legally described as Lot 2, DL 8392, KD, Plan NEP2533, Except Plan REF PL 110328I; and Lot 3, DL 8392, KD, Plan NEP2533, Parcel A (REF PL 110328I) Parcel A Lot 2 Plan NEP2533 DL 8392 KD (REF PL 110328I), be received, that the APC Comments on bylaw compliance be provided to the Ministry for consideration, and that the Approving Officer be requested to not grant Preliminary Layout Approval until the applicants demonstrate full compliance with the RDKB Area 'A' Zoning regulations regarding derelict vehicles on the parcel.

[2014 Sep A Sub Mikalishen.pdf](#)

C) **Staff Report by Donna Dean, Manager of Planning and Development**
RE: ALR Regulation Consultation

Recommendation: That the staff report by Donna Dean, Manager of Planning and Development, regarding the Provincial Agricultural Land Reserve Regulation Consultation be received.

[2014 Sep ALC RegConsultation.pdf](#)

D) **Grant in Aid Record Keeping and Application Process**
For Discussion

E) **Anaconda Water System Assessment**

A Staff Report from Bryan Teasdale, Manager of Infrastructure and Sustainability, regarding an assessment of the existing potable water distribution system for the unincorporated area of Anaconda.

Recommendation:

That the Electoral Area Services Committee recommend to the RDKB Board of Directors that the Staff Report from Bryan Teasdale, Manager of Infrastructure and Sustainability, regarding an assessment of the existing potable water distribution system for the unincorporated area of Anaconda, be received.

[Staff Report - EAS - Anaconda Water Assessment Study - Aug2014 - Pdf](#)

F) **Grant in Aid Update**

Recommendation: That the Grant in Aid report be received.
[2014Grant-in-Aids.pdf](#)

G) **Gas Tax Update**

Recommendation: That the Gas Tax report be received.
[GasTaxAgreement_EACommittee.pdf](#)

7. LATE (EMERGENT) ITEMS

8. DIRECTOR REQUEST FOR STAFF RESOURCES (DISCUSSION)

9. CLOSED (IN CAMERA) SESSION

10. ADJOURNMENT



**Electoral Area Services
Minutes**

Thursday, August 14, 2014, 4:30 p.m.
RDKB Board Room
2140 Central Ave., Grand Forks, BC

Directors Present:

Director Linda Worley, Chair
Director Grace McGregor
Director Bill Baird
Director Roly Russell

Directors Absent:

Director Ali Grieve

Staff Present:

Donna Dean, Manager of Planning & Development
Maria Ciardullo, Senior Planning Secretary/Recording Secretary

Others Present:

Kathy Canuel

CALL TO ORDER

Chair Worley called the meeting to order at 4:38 p.m.

ACCEPTANCE OF AGENDA (ADDITIONS/DELETIONS)

The agenda for the August 14, 2014 Electoral Area Services Committee was presented.
Item #6C was brought forward on the agenda as Kathy Canuel was in attendance.

Moved: Director McGregor

Seconded: Director Baird

That the August 14, 2014 Electoral Area Services Agenda be adopted as amended.

Carried.

MINUTES

The Minutes of the July 17, 2014 Electoral Area Services Committee meeting were presented.

Donna Dean, Manager of Planning and Development, stated she made some changes to the minutes with regards to Staff Title changes and Electoral Area names.

Moved: Director Baird

Seconded: Director Russell

That the minutes of the July 17, 2014 Electoral Area Services Committee meeting be received as presented.

Carried.

DELEGATIONS

There were no delegations in attendance.

UNFINISHED BUSINESS

The Electoral Area Services Committee Memorandum of Action Items for the period ending July 2014 was presented.

Moved: Director McGregor

Seconded: Director Baird

That the Electoral Area Services Committee Memorandum of Action Items for the period ending July 2014 be received as presented.

Carried.

NEW BUSINESS**Donavon & Patricia Lawrence (Cascade Par 3)****RE: OCP and Zoning Amendment**

282-2nd Ave., Electoral Area 'C'/Christina Lake

Lot A, DL 269, SDYD, Plan KAP84802

RDKB File: C-269-00179-910

The staff report regarding the application for amendments to the Electoral Area 'C'/Christina Lake Official Community Plan and Zoning Bylaw submitted by Donavon and Patricia Lawrence for the property legally described as Lot A, Plan KAP84802, DL269, SDYD, was presented.

Donna Dean, Manager of Planning and Development, reviewed the application with the Committee members and a powerpoint was presented.

Page 2 of 6

Electoral Area Services

August 14, 2014

A discussion commenced regarding the OCP/Zoning amendment. Some points of discussion were:

- The Electoral Area 'C' APC supports this application.
- Do the ALC regulations take precedence over the RDKB Zoning.
- The land in question is completely in the ALR.
- Should the land be excluded from the ALR before subdividing it?

Moved: Director McGregor

Seconded: Director Baird

That the staff report regarding the application for amendments to the Electoral Area 'C'/Christina Lake Official Community Plan and Zoning Bylaw submitted by Donavon and Patricia Lawrence for the property legally described as Lot A, Plan KAP84802, DL269, SDYD, be received as presented.

Carried.

Moved: Director McGregor
Opposed: Director Russell

Seconded: Director Baird

That the application for amendments to the Electoral Area 'C'/Christina Lake Official Community Plan and Zoning Bylaw submitted by Donavon and Patricia Lawrence for the property legally described as Lot A, Plan KAP84802, DL269, SDYD, be supported AND FURTHER that staff be directed to draft amending bylaws for presentation to the Board of Directors for first and second readings and to schedule and hold a public hearing on the proposed OCP/Zoning Bylaw amendments.

Carried.

Don and Chantelle Haessel

Re: Development Variance Permit

441 Barclay Road, Southeast of Fruitvale, Electoral Area 'A'
Lot A, DL 1236, KD, Plan NEP23031 manufactured Home Reg. 58144
RDKB File: A-126-05512.200

A staff report regarding the application for a Development Variance Permit submitted by Don and Chantelle Haessel for the property legally described as Lot A, DL 1236, KD, Plan NEP23031, was presented.

Moved: Director Baird

Seconded: Director McGregor

That the staff report regarding the application for a Development Variance Permit submitted by Don and Chantelle Haessel for the property legally described as Lot A, DL 1236, KD, Plan NEP23031, be received as presented.

Carried.

Donna Dean, Manager of Planning and Development, reviewed the application with the Committee members and presented a powerpoint. The APC supports this application.

Moved: Director McGregor

Seconded: Director Russell

That the Development Variance Permit application submitted by Don and Chantelle Haessel for the property legally described as Lot A, DL 1236, KD, Plan NEP23031, requesting a front parcel line variance of 3m (from 7.5m to 4.5m), to construct an addition to a single family dwelling, be presented to the Board for consideration with a recommendation of support.

Carried.

Linda and William Thompson

RE: Ministry of Transportation Subdivision

2980 Spruce Road, North of Fruitvale, Electoral Area 'A'

Lot 1, DL 1236, KD, Plan NEP11159

RDKB File: A-1236-05536.010

The staff report regarding the subdivision referral from the Ministry of Transportation and Infrastructure regarding a proposed subdivision for a parcel legally described as Lot 1, DL 1236, KD, Plan NEP11159, was presented.

Donna Dean, Manager of Planning and Development, reviewed the application with the Committee members. She noted the history with the ALR and that the APC is supportive of this application.

Moved: Director Baird

Seconded: Director McGregor

That the staff report regarding the subdivision referral from the Ministry of Transportation and Infrastructure regarding a proposed subdivision for a parcel legally described as Lot 1, DL 1236, KD, Plan NEP11159, be received as presented.

Carried.

Mt. Baldy Request for Bylaw Amendments from Strata KAS1840

RDKB File: M-13

The staff report regarding a Request for Bylaw Amendments for the Eagle Residential Area was presented.

Director Baird spoke on this application and stated that his Electoral Area 'E' APC does not support the amendments regarding sprinkler, parking and landscaping regulations, although they are in favour of the snow management plan.

Moved: Director McGregor

Seconded: Director Baird

That the staff report regarding a Request for Bylaw Amendments for the Eagle Residential Area be received as presented.

Carried.

Moved: Director McGregor

Seconded: Director Baird

That the proposed amendment to the Mt. Baldy Official Community Plan (Bylaw No. 1501) to add to the Eagle Residential Development Permit Area a requirement for a Snow Management Plan prepared by a qualified professional to ensure protection of people and property from snow shedding off roofs, be supported AND FURTHER that staff be directed to draft amending bylaws for presentation to the Board of Directors for first and second readings and to hold a public hearing on the proposed OCP amendment.

Carried.

Moved: Director Baird

Seconded: Director McGregor

That the application fee be waived and any required changes be a Regional District initiative.

Carried.

Grant in Aid update

The Grant in Aid report was presented.

Moved: Director Baird

Seconded: Director Russell

That the Grant in Aid report be received as presented.

Carried.

Gas Tax update

The Gas Tax report was presented.

Director Baird questioned whether gas tax money could be used for infrastructure. Director McGregor stated that it could be.

Moved: Director McGregor

Seconded: Director Baird

That the Gas Tax report be received as presented.

Carried.

LATE (EMERGENT) ITEMS

There were no late/emergent items

DISCUSSION OF ITEMS FOR FUTURE AGENDAS

The Committee would like Staff to give an update on the new ALR regulations.

QUESTION PERIOD FOR PUBLIC AND MEDIA

There was no Media in attendance.

CLOSED (IN CAMERA) SESSION

There was no in-camera meeting.

ADJOURNMENT

There being no further business to discuss, Chair Worley adjourned the meeting at 5:25 p.m.

**RDKB MEMORANDUM OF
COMMITTEE ACTION ITEMS
ELECTORAL AREA SERVICES COMMITTEE**

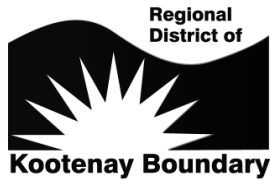
Action Items Arising from Electoral Area Services Committee Direction (Task List)

Pending Tasks

Date	Item/Issue	Actions Required/Taken	Status – C / IP
Oct. 11/12	Bridesville Unsightly Premises	Staff to draft costs for potential Service Establishment Bylaw & To forward the draft unsightly premises bylaw to a solicitor	IP
Feb. 14/13	Boundary Ag Plan Implementation	Consider areas 'C' & 'D' OCP review recommendations; Consult with Area 'E' residents re: needs assessment survey recommendations; Have Agricultural capability maps available on the RDKB website;	IP

Tasks from Electoral Area Services Committee Meeting August 14, 2014

Date	Item/Issue	Actions Required/Taken	Status – C / IP
August 14/14	Mt. Baldy (Bylaw Amendments)	Staff to draft amending bylaws for presentation to the Board of Directors for 1 st and 2 nd readings and to hold a public hearing.	IP
	LAWRENCE (Cascade Par 3) (Bylaw Amendments)	Recommendation sent to Board – August 28/14	IP
	HAESSEL DVP	Recommendation sent to Board – August 28/14	C



Electoral Area Services Committee Staff Report

Prepared for meeting of September 2014

Site Specific Exemption to Floodplain Management Bylaw			
Owner: Thomas Stoffel		File No: E-3637-07193.200	
Location: 6870 Christian Valley Road, Electoral Area 'E'/West Boundary			
Legal Description: Lot 1, DL 3637, SDYD, Plan KAP12818, Subsidy Lot 8 Portion SOUTH 1445 FT.		Area: 19.46 ha (48.08 acres)	
OCP Designation: None	Zoning: None	ALR Status: Entirely In	DP Area: None
Contact Information: Thomas Stoffel PO Box 2307 Banks Centre Kelowna, BC V1X 6A5 (250) 212-9913 amanda.beaudry5@gmail.com			
Report Prepared by: Jeff Ginalias, Planner			

ISSUE INTRODUCTION

Thomas Stoffel has submitted an application for a Site Specific Exemption to the RDKB's Floodplain Management Bylaw, in order to construct a single family dwelling on his property off Christian Valley Road (*see Site Location Map*). The original dwelling was destroyed by fire and the new dwelling will be built in the same general location. A Site Specific Exemption to the Floodplain Management Bylaw is necessary because the applicant is proposing to build within the 200 year floodplain of the Kettle River.

BACKGROUND

Section 910 of the *Local Government Act* grants Regional Districts authority to approve site specific exemptions to Flood Management Bylaws if they are either consistent with Provincial Guidelines, or if a professional engineer or geoscientist has certified that the land may be used safely for the use intended. The applicant has submitted a report from a professional engineer which concludes that the land may be safely used for the use intended, i.e., the dwelling may be safely constructed and inhabited in the

proposed location.

The Regional District Floodplain Management Bylaw specifies a setback distance of 30m from the natural boundary of the Kettle River and a flood construction level of 3m above the natural boundary.

PROPOSAL

The applicant wishes to construct a single family dwelling on the property to replace one destroyed by fire in 2013. The proposed house would be located in the same general area as the original (*see Ortho Photo*). The applicant suggests that this location is the best site on the property to construct, with respect to elevation (*see Applicants Submission*).

The proposed location satisfies the setback requirement, but the area will be below the flood construction level. Thus, he seeks an exemption to the Floodplain Bylaw to permit him to construct a single family dwelling below the flood construction level set forth in the Bylaw.

IMPLICATIONS

The proposed location, about 200m back from the natural boundary of the Kettle River, satisfies the floodplain development setback. However, the ground surface elevation at the site is approximately 0.9m above the natural boundary. The underside of the floor joists will be about 1 meter. This would place the new home about 1.9 meters above the natural boundary, which is below the 3m flood construction level (elevation) required in the floodplain bylaw. Thus, an exemption from the floodplain bylaw is required for the development to occur on this location. In support of the exemption request, the applicant has submitted a professional geotechnical report.

The geotechnical report, dated August 14, 2014, was prepared by Chris Wallis, P. Eng., of Beacon Geotechnical Ltd. The Report reviews the **applicant's proposal** in light of the flood hazard threat, and provides comments, conclusions and recommendations. The following is a summary of the Report.

As noted, the ground level for the proposed house is about 0.9 meters above the present natural boundary. The undersides of the floor joists, being another meter, place the underside of the floor 1.9 meters above the natural boundary. To satisfy the elevation requirement in Floodplain Bylaw, the elevation would need to be an additional 1.1m (3m above the natural boundary). Thus, the applicant seeks a Site Specific Exemption from the Floodplain Bylaw.

In his review, the qualified professional considered the historic flows at the closest monitoring station, near Westbridge, about 35 kilometers downstream. He computed the average maximum flow and identified the maximum recorded peak flow (occurred in 1997). He concluded that this 1997 peak flow is near the 1:200 year flood level.

Then he calculated the dispersal area available to flood water at the subject property from a flood event. He used the recorded peak flow at the monitoring station and determined that the rise in the Kettle River on the subject property would be

approximately 0.6m above the existing site grade at the proposed location for the home. He concluded that in the event of a flow rate in line with the 1997 event, which would be near the 1:200 year flood level, the elevation of the river would be 1.3 meters below the joist elevation for the home. Based on this, he concludes that the proposed elevation for the new home would provide adequate flood protection and that the land may be used safely for the use intended (*see Flood Hazard Assessment Report*).

APC COMMENTS

The Electoral Area 'E'/West Boundary APC comments were not available at the time this report was prepared. Comments received will be provided to the Committee at the meeting.

PLANNING AND DEVELOPMENT DEPARTMENT COMMENTS

Section 910.6 of the *Local Government Act* grants the local government discretion in granting a floodplain exemption and further allows the local government to impose any terms or conditions they deem advisable when granting an exemption. The statute specially provides that the local government may require the person obtaining the exemption to enter into a covenant under Section 219 of the *Land Title Act*.

Accordingly, if the exemption is to be approved, it is recommended that it be subject to the owner registering a covenant on title, in favour of the Regional District, waiving any liability.

RECOMMENDATION(S)

That the application for a Site Specific Exemption to the Floodplain Management Bylaw submitted by Thomas Stoffel, in order to construct a single family dwelling on the property legally described as Lot 1, DL 3637, SDYD, Plan KAP12818, Subsidy Lot 8 Portion SOUTH 1445 FT. be received.

That the application for a Site Specific Exemption to the Floodplain Management Bylaw submitted by Thomas Stoffel, in order to construct a single family dwelling on the property legally described as Lot 1, DL 3637, SDYD, Plan KAP12818, Subsidy Lot 8 Portion SOUTH 1445 FT. be approved, subject to:

- Adherence to all the recommendations included in the Flood Hazard Assessment Geotechnical Report submitted by Chris Wallis, P. Eng., of Beacon Geotechnical Ltd; and
- The owner registering a new standard floodplain covenant on title in favour of the Regional District of Kootenay Boundary prior to issuance of a building permit.

ATTACHMENTS

Site Location Map

Ortho Photo

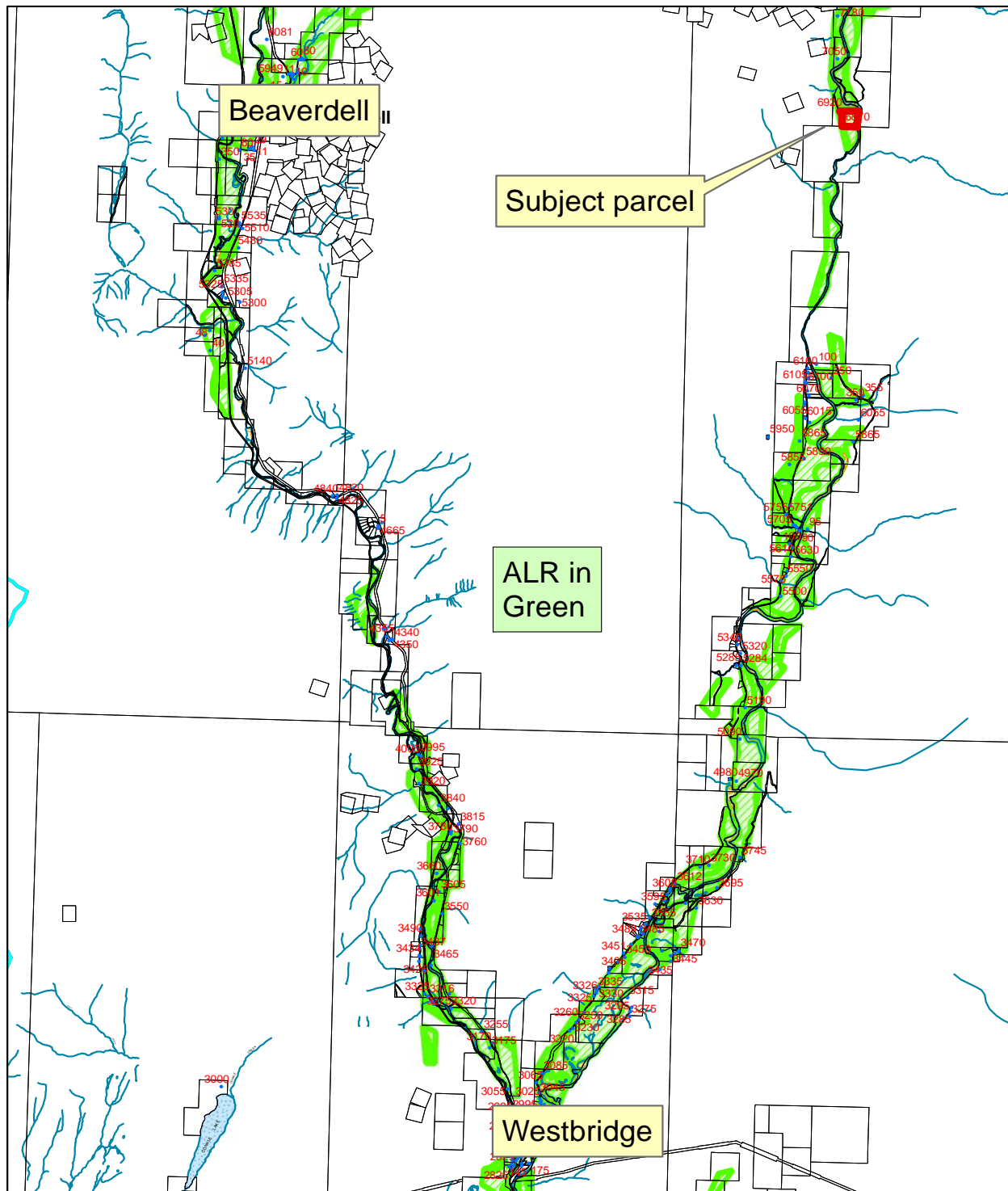
Applicant's Submission

Flood Hazard Assessment Report

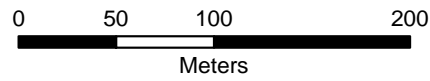


0 2.5 5 10
Kilometers

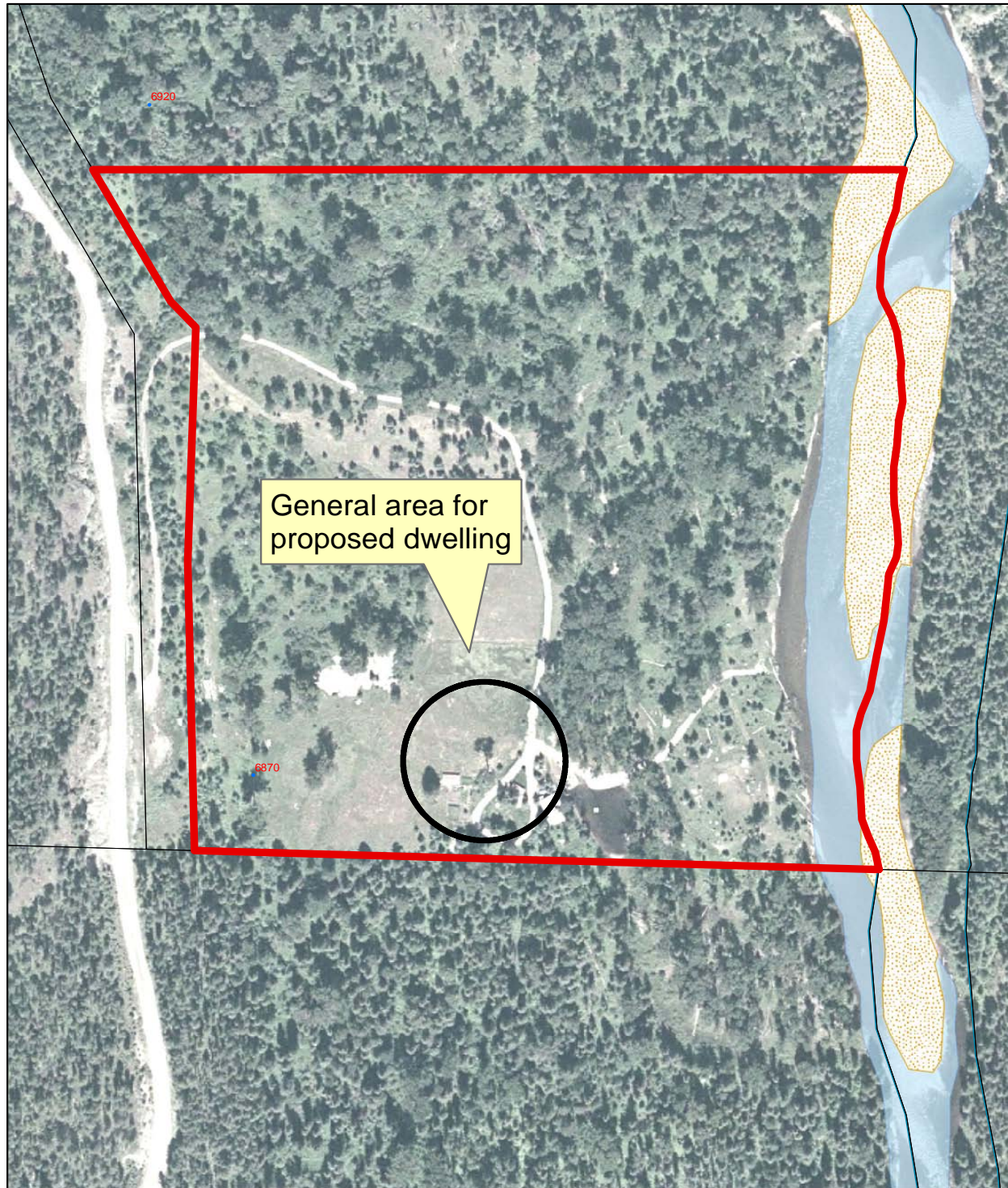
Site Location Map




Projected Coordinate System:
NAD 83 UTM Zone 11N



Ortho Photo



Projected Coordinate System:
NAD 83 UTM Zone 11N

REGIONAL DISTRICT OF KOOTENAY BOUNDARY FILE # Regional District of AUG 22 2014 PLANNING AND DEVELOPMENT DEPARTMENT APPLICATION FORM ELECTORAL AREAS 'A' TO 'E'		
 Kootenay Boundary	RDKB Main Office 202-843 Rossland Avenue Trail, BC V1R 4S8 Telephone: 250-368-9148 Fax: 250-368-3990	Toll Free: 1-800-355-7352 Email: plandept@rdkb.com
RDKB Sub-Office PO Box 1965 Grand Forks, BC V0H 1H0 Telephone: 250-442-2708 Fax: 250-442-2668	Toll Free: 1-877-520-7352 Email: plandept@rdkb.com	

TYPE OF APPLICATION (PLEASE CHECK THE APPROPRIATE BOX):

- (a) ☐ Zoning Amendment Only
 (b) ☐ Zoning & Official Community Plan Amendment
 (c) ☐ Official Community Plan Amendment Only
 (d) ☐ Development Permit
 (e) ☐ Development Permit Amendment
 (f) ☐ Development Variance Permit
 (g) ☐ Temporary Use Permit
 (h) ☐ Temporary Use Permit Renewal
 (i) ☒ Site-specific exemption to Floodplain Bylaw
 (j) ☐ Designation of Heritage Properties

APPLICATION FEES:

Types (a) or (c) application	\$1000.00	+ \$100.00 Sign Fee
Type (b) application	\$1200.00	+ \$100.00 Sign Fee
Type (d) application for construction value exceeding \$4000.00	\$200.00	
Type (d) application for construction value under \$4000.00	\$50.00	
Type (e) application	\$50.00	
Type (f) application	\$450.00	+ \$100.00 Sign Fee
Type (g) application	\$650.00	+ \$100.00 Sign Fee
Type (h) application	\$200.00	
Type (i) application	\$200.00	
Type (j) application	\$1,000.00	

**Please make all cheques payable to *The Regional District of Kootenay Boundary*

DEVELOPMENT PROPOSAL SIGN FEE

The Regional District's Fees and Procedures Bylaw No. 1231 requires the posting of a Development Proposal Sign in certain circumstances. If such a sign is necessary, a fee of \$100 additional to the above-noted fees, is required for the sign board and preparation of text. Applicants will be refunded \$70.00 once the sign has been returned to the RDKB in good condition.

REFUNDS:

If type (a) or (c) application is denied before public hearing	\$500.00
If type (b) application is denied before public hearing	\$600.00
If a Development Proposal Sign is returned in good condition	\$70.00

**Fees for application types (d), (e), (f), (g), (h) and (i) are non refundable

Name(s) of registered owner(s): Thomas Staffel
 Address: 6870 Christian Valley Rd Westbridge B.C.
 Telephone/Fax: 250) 212-9913 Email: _____ Land Area in ha _____
 Legal description of land under application: _____

Please explain your reasons for requesting this application, and please also describe in detail your development proposal (use space provided on the back of this form, or attach a separate sheet of paper if needed):

Rebuilding family home. The reason for my application is due to former
mouse building permit that was approved and never floded. The house
was 3 feet above grade level. I plan on building the site to 6 feet above
grade level. I recognize that this doesn't meet with your 10 feet
requirements and therefore I am requesting an exemption for the
site. I have already submitted a GEO technical report to support
my application. The site is best location on 50 acre property
with respect to elevation.

SUPPORTING INFORMATION REQUIRED

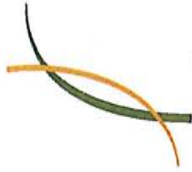
In support of your application, please answer the following questions:

- | | YES | NO |
|--|----------------------------------|----------------------------------|
| 1. Are there any Restrictive Covenants registered on the subject property? | <input type="radio"/> | <input checked="" type="radio"/> |
| 2. Are there any registered Easements over the subject property? | <input type="radio"/> | <input checked="" type="radio"/> |
| 3. Is there legal and practical road access to the subject property? | <input checked="" type="radio"/> | <input type="radio"/> |

****The following information is also required (failure to do so may delay or jeopardise the application):**

1. A copy of the Certificate of Title or recent Tax Assessment notice for the subject property or properties;
2. A plan drawn to an appropriate scale, accompanied by a written report (if necessary) showing:
 - the legal boundaries and dimensions of the subject property;
 - boundaries and dimensions of any proposed lots (if subdivision is being proposed);
 - the location of any physical or topographic constraints on the subject property (such as watercourses, shorelines, ravines, wetlands, steep slopes, bedrock outcrops, etc.);
 - the location of permanent buildings and structures on the subject property;
 - the location of any proposed buildings, structures or additions thereto;
 - the location of any existing or proposed access roads, driveways, screening and fences;
 - the proposed method of sewage disposal and the location of any existing and/or proposed septic tank, tile field, sewer line or similar, and water sources (well or community water service pipe location); and
 - the location of any earthworks\grading and\or proposed landscaping on the subject property.
3. **Application types (d) and (i) only:** A copy of a professional's report which addresses relevant development permit guidelines may be required. Please consult the Regional District Planning and Development Department if you are unsure about this requirement.
4. Additional material, or more detailed information may be requested by the Regional District upon reviewing your application.

If the Regional District believes it to be necessary for the property boundaries and the location of improvements thereon to be more accurately defined due to uncertainty over natural boundaries of watercourses or other reasons, a sketch prepared by a British Columbia Land Surveyor may be required. The voluntary submission of such a sketch may prevent a possible delay in processing the application.



BEACON GEOTECHNICAL LTD.

August 14, 2014

Beacon File No: 14-J1681

Mr. Thomas Stoffel
P.O. Box 2307, Banks Centre
Kelowna, BC
V1X 6A5

Dear Sir,

**Re: Flood Hazard Assessment – 6870 Christian Valley Road
Regional District of Kootenay Boundary, B.C.**

At your request, Beacon Geotechnical Ltd. has carried out a review of the site located at 6870 Christian Valley Road, in the Regional District of Kootenay Boundary, B.C. The property is located on the Kettle River in the Christian Valley and is subject to the Regional District of Kootenay Boundary Bylaw 677. The purpose of the review was to assess the flood potential for a proposed new home to be constructed on the property. This letter summarizes our review and provides our comments.

Based on the information provided by you, we understand that you intend to construct a single family home on the property located at 6870 Christian Valley Road. The new home will replace the home destroyed by fire in 2013. The new home will be located in roughly the same location as the old home. This location is approximately 200 metres from the Kettle River. Based on the letter prepared by Hoefsloot Land Surveying Ltd., we understand that the elevation of the existing ground surface is approximately 0.9 metres above the present natural boundary of the Kettle River. We also understand that the proposed elevation of the underside of the floor joists for the new home will be approximately 1.0 metre above the existing site grade, or 1.9 metres above the present natural boundary.

The property encompasses approximately 16 hectares and is legally described as Lot 1, Plan KAP12818. It is situated downstream, on the outside of a bend in the river on fluvial flood plain deposits. The site is relatively flat with the western portion of the property sloping steeply up to Christian Valley Road, approximately 20 metres above. The level portion of the site measures approximately 400 metres in the north-south direction and 300 metres in the east-west direction. Immediately upstream of the property, the channel of the Kettle River the flood plain switches to the east side of the river. Downstream, the level flood plain continues for approximately 600 metres until the channel narrows to half of the width at the subject property. The gradient is approximately 0.1% to 0.2% in this stretch of the river.

#201 – 1889 Spall Road, Kelowna, British Columbia V1Y 4R2
Phone: 250-861-6859 Fax: 250-762-8073 e-mail: beacongeo@telus.net

The property is subject to the RDKB Bylaw 677. No flood plain mapping is available for this portion of the Kettle River, however, in the bylaw, the required flood protection includes that all buildings are setback from the present natural boundary of the Kettle River a distance of 30 metres and that the elevation of the underside of the floor joists be a minimum of 3.0 metres above the present natural boundary. The location of the new home meets the setback distance criteria, however, the new building is non-compliant with the required elevation of 3.0 metres above the present natural boundary. The Bylaw does allow for a site specific exemption in the flood protection criteria, pursuant to Section 910(5) of the Local Government Act provided that a registered professional engineer prepares a report stating "that the land may be used safely for the use intended".

No flood plain mapping is available for this stretch of the Kettle River and the closest monitoring station is near Westbridge (Station 08NN026), approximately 35 kilometres downstream (south) of the property. Beacon has reviewed the available historic flows (from 1979) at the monitoring station and found that the average maximum flow is 235 cubic metres/second, and the maximum recorded peak flow of 374 cubic metres/second occurred in 1997. Peak flows typically occur in mid to late May. It should be noted that several tributaries enter the Kettle River between the subject property and the monitoring station, 35 kilometres downstream. Taking this into account, the maximum peak flow would be less at the subject site than measured at the monitoring station in Westbridge. On June 3, the flow near the site was approximately 0.3 metres lower than the present natural boundary and the measured flow at the Westbridge station was approximately 150 cubic metres/second. The channel width is approximately 25 metres.

Given the area of dispersal available to the flood water breaching the present natural boundary of the Kettle River, at the subject property, we estimate that the elevation of the flow rate of 374 cubic metres/second reported at Westbridge, would raise the level of the Kettle River to approximately 0.6 metres above the existing site grade at the location of the proposed home. Based on the information provided by the land surveyor, the elevation of the river would be 1.3 metres below the joist elevation of the home. It is expected that the 1997 flow rate of 374 cubic metres/second would be near the 1:200 year flood level.

The engineering for this flood hazard assessment was completed by Chris Wallis, P.Eng., of Beacon Geotechnical Ltd. Mr. Wallis has over 25 years of consulting experience in the geotechnical consulting field and 19 of those years in the Okanagan Valley working on many land development and civil infrastructure projects, including several beach and channel erosion projects.

Beacon File No: 14-J1681

- 3 -

August 14, 2014

The work was based on a personal site inspection, aerial photos, survey information from Hoefsloot Land Surveying Ltd., and available hydrologic information from the Westbridge monitoring station (08NN026). Beacon also referenced the B.C. Ministry of Water, Land and Air Protection, May 2004, *Flood Hazard Area Land Use Management Guidelines* during the preparation of this report. No site specific flood plain mapping or hydrologic information was available for this site. The work was completed using generally accepted engineering practice. No other warranty, expressed or implied, is intended. Based on this information, we conclude that the proposed elevation of the new home would provide adequate flood protection and the land may be used safely for the use intended. We therefore recommend that the Regional District of Kootenay Boundary grant an exemption from Bylaw 677.

We trust that this report satisfies your present requirements. Should you have any further questions, please feel free to contact our office.

Yours truly,
Beacon Geotechnical Ltd.



Chris Wallis, P.Eng.
Geotechnical Engineer

Attachments: Figure 1 – Vicinity Plan
 Figure 2 – Site Plan
 Geotechnical Report – General Conditions

Thomas Stoffel – Flood Hazard Assessment – 6870 Christian Valley Road, RDKB, B.C.





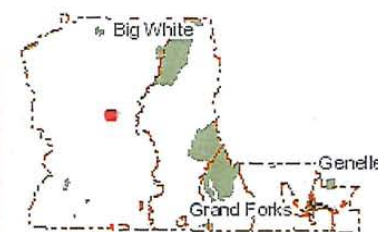
PROJECT: FLOOD HAZARD ASSESSMENT
 CLIENT: THOMAS STOFFEL
 LOCATION: 6870 CHRISTIAN VALLEY ROAD
 REGIONAL DISTRICT OF KOOTENAY BOUNDARY

VICINITY MAP		
DATE: AUGUST 2014	DRAWN BY: CCW	FILE NO: 14-J1681
SCALE: NTS	CHECKED BY: CCW	FIGURE NO: 1



Regional District of Kootenay Boundary
Interactive Mapping System

Stoffel Property - 6870 Christian Valley Road

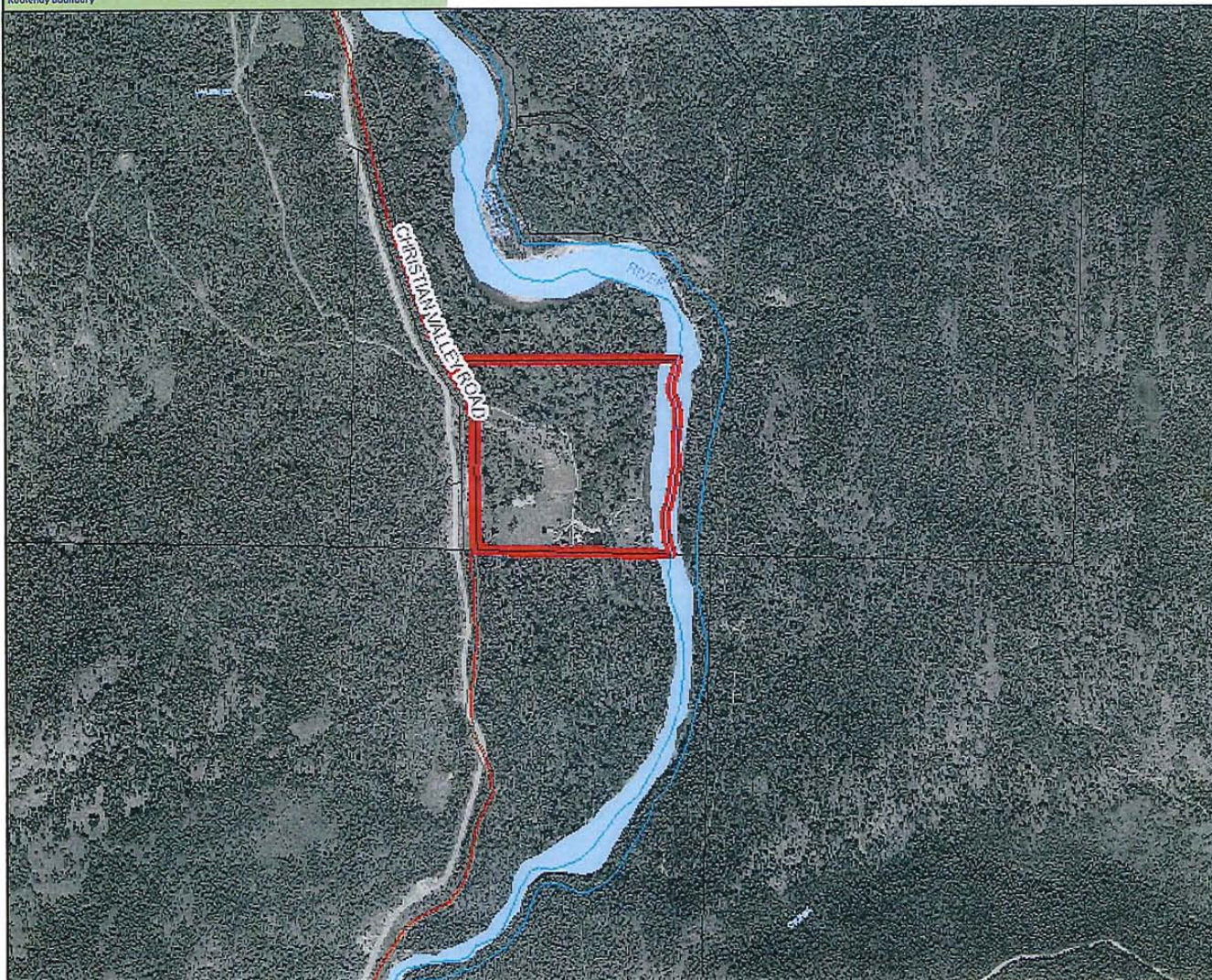


Legend

- Admin
- Cadastral Lines
 - CAD_DISTRICT_LOT
 - CAD_GAS
 - CAD_HIGHWAY
 - CAD_HYDRO
 - CAD_INTER_BDY
 - CAD_LOTLINE
 - CAD_LOTLINE_LICENSE
 - CAD_LOTLINE_WATER
 - CAD_RAILWAY
 - CAD_RAILWAY_ABAN
 - CAD_ROAD
 - CAD_TELEPHONE
 - CAD_TOWNSHIP
- Miscellaneous Cadastral Lines
 - CADM_AIRSTRIP
 - CADM_ARROW
 - CADM_BRIDGE
 - CADM_DEWDNEY_TRAIL
 - CADM_EASEMENT
 - CADM_HOOK
 - CADM_LEASE_LICENSE

Scale: 1: 13,367

1 cm represents 133.67 m



0 0.5 1 km

Datum: NAD 1983 Projection: UTM Zone 11N

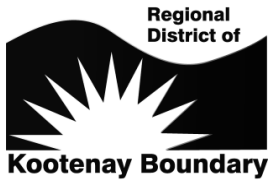
Printed on 14-Aug-2014

Notes:

This map is for general information only. The RDKB does not guarantee its accuracy or correctness. All information should be verified.

Figure 2 - Site Plan

Selkirk College



Electoral Area Services Committee Staff Report

Prepared for meeting of September 2014

Ministry of Transportation and Infrastructure - Subdivision			
Owners: Stewart Mikalishen and Angela Zoobkoff		File No: A-8392-09323.002 and A-8392-09323.003	
Location: 22 John Road, and adjacent undeveloped parcel, Beaver Falls, Electoral Area 'A'			
Legal Description: Lot 2, DL 8392, KD, Plan NEP2533, Except Plan REF PL 110328I; and Lot 3, DL 8392, KD, Plan NEP2533, Parcel A (REFPL 110328I) Parcel A Lot 2 Plan NEP2533 DL 8392 KD (REF PL 110328I)		Area: 4654m ² (1.15 acres) 2347m ² (0.58 acres)	
OCP Designation: Rural Residential 2	Zoning: Rural Residential 2 (R2)	ALR status: Out	DP Area: No
Contact Information: Stewart Mikalishen and Angela Zoobkoff PO Box 1253 Fruitvale, BC V0G 1L0 (250) 367-7954 zerbie57@hotmail.com			
Report Prepared by: Jeff Ginalias, Planner			

ISSUE INTRODUCTION

The Regional District has received this referral from the Ministry of Transportation and Infrastructure for a proposed subdivision between John Road and Christie Road, in Electoral Area 'A' (*see Site Location Map*).

The applicants own two adjacent parcels. One parcel (22 John Road) is developed with a dwelling and two accessory buildings. The other parcel is undeveloped. The undeveloped lot is the larger of the two. The applicants propose a boundary adjustment to make the lots closer to the same size. A boundary adjustment is a form of subdivision.

PROPOSAL

The applicants are proposing an alteration of the interior parcel line between the two parcels (i.e., a boundary adjustment), making the developed parcel larger and reducing the area of the undeveloped parcel accordingly. The distance of the proposed relocation of the parcel line is not provided, but appears to be about 20m (*see Applicants' Submission; Proposed Subdivision*). Accordingly, the change in the area of each parcel would be about 1200m². The actual distance and area will be determined by survey at the subdivision approval stage, if the application proceeds that far.

IMPLICATIONS

Both parcels are designated 'Rural Residential 2' in the Electoral Area 'A' Official Community Plan and zoned and 'Rural Residential 2' (R2) in the Electoral Area 'A' Zoning Bylaw. The minimum parcel area for subdivision in R2 Zone is 1 hectares if connected to a community water system and 2 hectares when not connected to a community water system. The parcels do not satisfy this requirement. However the zoning provides a minimum parcel area exception for alteration of interior parcel lines (boundary adjustments).

Section 310(4) of the Zoning Bylaw permits the alteration of one or more interior parcel lines between two or more parcels provided that:

- no additional parcels are created upon completion of the alteration;
- the alteration does not infringe within the required minimum setbacks for an existing building or structure; and
- the alteration does not reduce the site area required for a sewage disposal system on any parcel being altered.

The developed parcel is serviced by the Beaver Falls Water District and the applicant states that the Water District has advised him they can service the undeveloped parcel. The undeveloped parcel does not have a sewage disposal system. If the subdivision is approved, the undeveloped parcel will be about 0.85 acre (about 3500m²). The application was likely referred to Interior Health. If the application proceeds, the Approving Officer can determine whether the proposed lot is large enough to satisfy sewage disposal requirements. As there are no buildings or structures on the undeveloped parcel, there are no concerns about infringing on minimum setback requirements.

Access to the undeveloped parcel would be from Christie Road.

APC COMMENTS

The Advisory Planning Commission expressed concern regarding derelict vehicles on the property, and inquired whether the property conforms to Section 303 of the Zoning Bylaw.

PLANNING AND DEVELOPMENT DEPARTMENT COMMENTS

The developed parcel (22 John Road) parcel is not in compliance with Section 303 of the Zoning Bylaw, addressing prohibited uses. Section 303.3 prohibits any parcel not zoned for automobile salvage yard use to be used for the parking or storage of derelict vehicles.

For the past few decades, the owner has engaged in classic car restoration on the parcel. For the most part, the derelict vehicles are older models used for the classic car restoration hobby/occupation. The owner concedes there has been very little car restoration activity in the past several years, and several derelict vehicles remain.

The RDKB has an on-going bylaw contravention case going with the owner, which has been in progress for about 3 years now. There has been some progress on the parcel. The owner has removed at least one half dozen old chassis, and consolidated the rest. Still, the number of derelict vehicles remaining is significant, and unless a purchaser of the parcel requests they be removed as a term of the sale, it is unlikely the owner will bring the parcel into full compliance.

RDKB staff has asked the Approving Officer what her authority is for subdivision approval when a bylaw contravention matter is pending, which is indirectly related to the subdivision. At the time of this report, we have not heard back.

Before final subdivision approval, the Approving Officer requires an applicant to provide confirmation that the proposed subdivision complies with all applicable local government zoning regulations. If the parcel is not in compliance by then (usually several months after closing of the referral process), the RDKB will advise the Approving Officer accordingly.

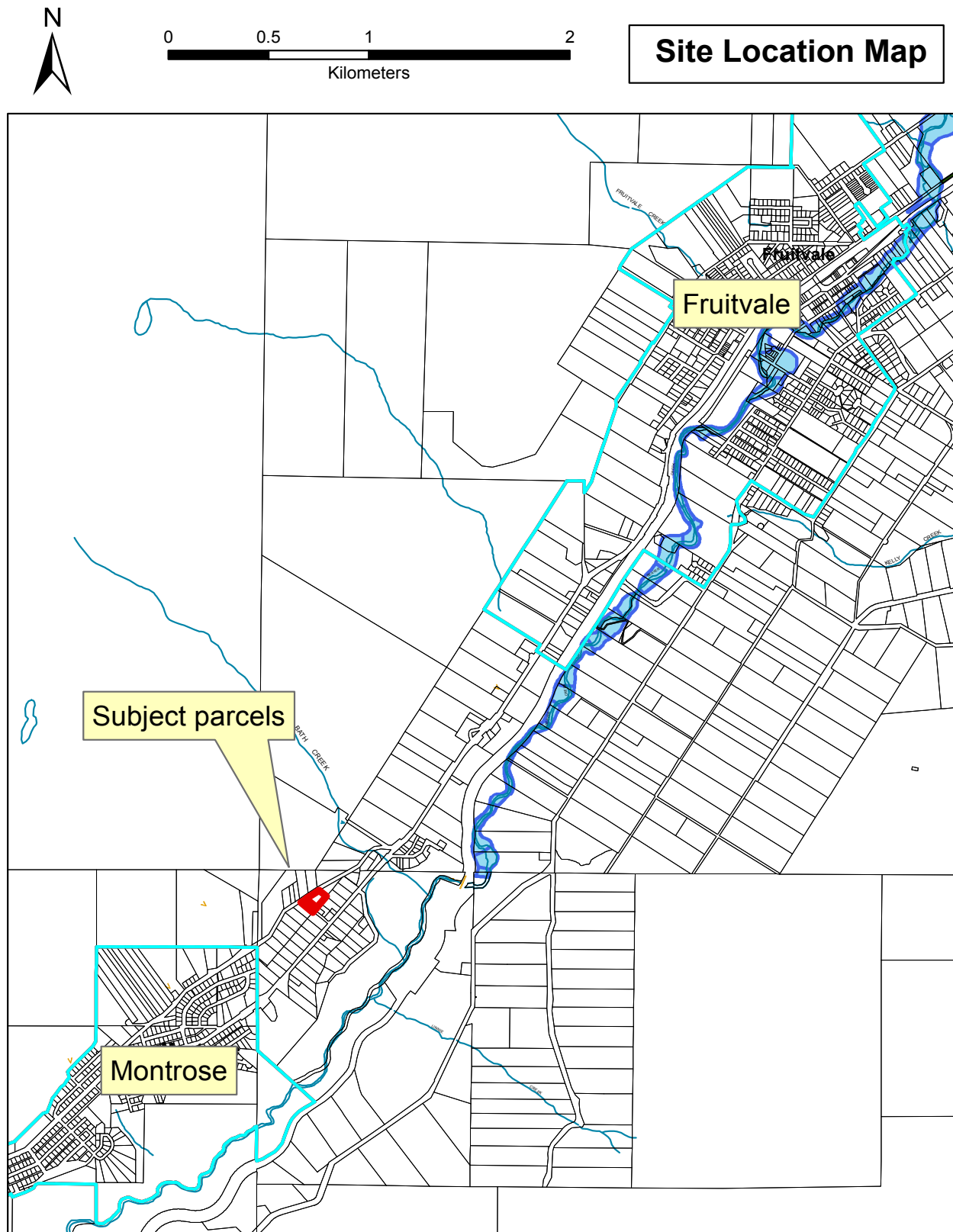
On water service, the referral is for a boundary adjustment. No new lot is being created. As noted above, the undeveloped parcel is not currently serviced with water, but the applicant states he has been advised by the Beaver Falls Water District that the parcel can be serviced. For final subdivision approval, the Approving Officer will require the applicant to prove they can properly serve the parcel with water.

RECOMMENDATIONS

That the staff report regarding the subdivision referral from the Ministry of Transportation and Infrastructure regarding a proposed subdivision for the two parcels legally described as Lot 2, DL 8392, KD, Plan NEP2533, Except Plan REF PL 110328I; and Lot 3, DL 8392, KD, Plan NEP2533, Parcel A (REFPL 110328I) Parcel A Lot 2 Plan NEP2533 DL 8392 KD (REF PL 110328I), be received, that the APC Comments on bylaw compliance be provided to the Ministry for consideration, and that the Approving Officer be requested to not grant Preliminary Layout Approval until the applicants demonstrate full compliance with the RDKB Area 'A' Zoning regulations regarding derelict vehicles on the parcel.

ATTACHMENTS

Site Location Map
Applicants' Submission
Proposed Subdivision



Projected Coordinate System:
NAD 83 UTM Zone 11N

BRITISH
COLUMBIAMinistry of Transportation
and Infrastructure**DEVELOPMENT APPROVALS
REFERRAL**

Applicant File #:

eDAS File #: 2014-03542

Date: Jul/22/2014

REGIONAL DISTRICT OF
KOOTENAY BOUNDARY

FILE #

JUL 30 2014

DOC. #

REF. TO:

CO:

Regional District of Kootenay Boundary
202-843 Rossland Avenue
TRAIL, BC V1R 4S8

Re: Proposed Conventional Subdivision Boundary Adjustment Application for:
22 John Road, Beaver Falls
PID 015-248-941, Lot 2, DL 8392, Kootenay, Plan 2533
PID 015-290-417, Pcl A, Lot 3, DL 8392, Kootenay, Plan 2533

Enclosed is a copy of a proposed boundary Adjustment Application regarding the above noted location(s) on John Rd & Christie Rd.

It would be appreciated if you would examine this application from the viewpoint of your regulations and policies and give us your comments. Please send your reply to this office, with a copy to the applicant:

Stewart Mikalishen & Angela Zoobkoff
PO Box 1253
Fruitvale, BC V0G 1L0
Phone: (250) 367-7954

The applicant has been advised of this referral and might contact you to discuss their proposal. In order to expedite the processing of the application, your agency's response would be appreciated August 22, 2014, after which we will prepare recommendations for the Approving Officer's decision.

Contact the applicant for any additional information you may require. If you have any questions please feel free to call Jill Carruthers at (250) 442-4311.

Please quote file number 2014-03542 when contacting this office.

Yours truly,

Jennifer MacDonald
A/Assistant Development Technician

Local District Address

West Kootenay District

310 Ward Street
Nelson, BC V1L 5S4
Canada

Phone: (250) 354-6400 Fax: (250) 354-6547

H1162-eDAS (2013/05)

Page 1 of 1

BRITISH
COLUMBIAMinistry of Transportation
and Infrastructure**PRELIMINARY
SUBDIVISION APPLICATION**

Submit this application to the Ministry of Transportation and Infrastructure District Office in your area.

A. PROPOSAL *This is an application for preliminary layout approval for all properties involved*

Applicant File Number		Ministry File Number <u>2014-03542</u>	
Subdivision Type	<input checked="" type="checkbox"/> Conventional (fee simple) Subdivision <input type="checkbox"/> Bare Land Strata		No. of Lots Including remainder
	<input type="checkbox"/> Other (Specify)		
Full Legal Description(s) per State of Title Certificate(s)	① LOT 3 PL: NEP2533 DL: 8392 PARCELA (REF PL 110328) PID 015-290-361 PARCELA LOT 2 PLAN NEP2533, DISTRICT LOT 8392, KOOTENAY LAND ② LOT 2 PL: NEP2533 DL: 8392 EXCEPT REF PL 1103281 PID 015-248-941		
Full Civic Address	22 JOHN RD, BEAVER FALLS, BC - CHRISTIE RD		
Property Location	_____ Kilometres <input type="checkbox"/> North <input type="checkbox"/> South <input type="checkbox"/> East <input type="checkbox"/> West from _____ Local Gov't _____		
	Access Road		Property Zoning
	Existing Land Use		Intended Land Use
Surrounding Land Use	North	South	East West
Proposed Sewage Disposal	<input checked="" type="checkbox"/> Septic Tank <input type="checkbox"/> Community System <input type="checkbox"/> Other (specify)		
Proposed Water Supply	<input type="checkbox"/> Well <input checked="" type="checkbox"/> Community System (name of existing system)		
	<input type="checkbox"/> Water Licenses (License #)		<input type="checkbox"/> Other (specify)

B. APPLICATION INFORMATION Incomplete applications will not be accepted

Required items include:

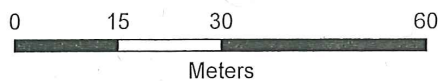
- ☐ Subdivision application form.
- ☐ The Preliminary Subdivision Application fee. Please make cheques payable to the Minister of Finance. (see page 2)
- ☐ An authorization letter from the owner(s) if someone else is applying on the owner's behalf. (Permission to Act as an Agent H1275)
- ☐ A copy of BC Assessment Authority Property Assessment Notice showing property tax classification.
- ☐ All new lots MAY require a sewage report—please contact your local Transportation office for clarification.
- ☐ One copy of the current State of Title Certificate so that property encumbrances can be checked.
- ☐ Copies of any covenants, easements, rights-of-way or other charges registered against the title. These are available through the Land Title Office.
- ☐ A copy of Contaminated Sites Profile form or Contaminated Sites declaration statement, duly completed and signed.
- ☐ Original copy and a .PDF file of a scaleable sketch plan of proposed layout with metric dimensions.

Properly engineered drawings will be required for final approval. The sketch must contain:

- ☐ the date it was drawn
- ☐ the scale
- ☐ north arrow
- ☐ legal description of the property being subdivided, and its adjacent properties
- ☐ outline of the subdivision in heavy black line
- ☐ all proposed lots, remainders, parks, rights-of-way, easements and roads showing metric dimensions and areas
- ☐ any existing property lines or roads proposed to be removed, closed or relocated
- ☐ all steep banks or slopes exceeding 2 m high and all slopes of 25% or greater, within or adjacent to the proposal area
- ☐ location of existing buildings and structures, wells and sewage disposal fields on the property, as well as adjacent properties within 30 m of property boundaries
- ☐ location of any onsite water sources to be developed (wells, surface)
- ☐ approximate location of all existing and proposed utility services
- ☐ existing access roads and other roads and trails on the property (state names of roads)
- ☐ location of all water courses (seasonal or otherwise) and water bodies

Include these items as well, where applicable

- ☐ A copy of the Provincial Agricultural Land Commission application (if located within ALR). While a developer can apply for subdivision approval before he or she receives permission to proceed from the Agricultural Land Commission or the local government if it has been delegated the authority, the Provincial Approving Officer can only give approval if the property has cleared the Land Commission process in the meantime.
- ☐ One copy of any test required by the Regional Health Authority.
- ☐ A Development Permit and plan where applicable.



22 Johns Road



Source: Esri, DigitalGlobe, GeoEye, I-rubed, USDA, USGS, AEX,
Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

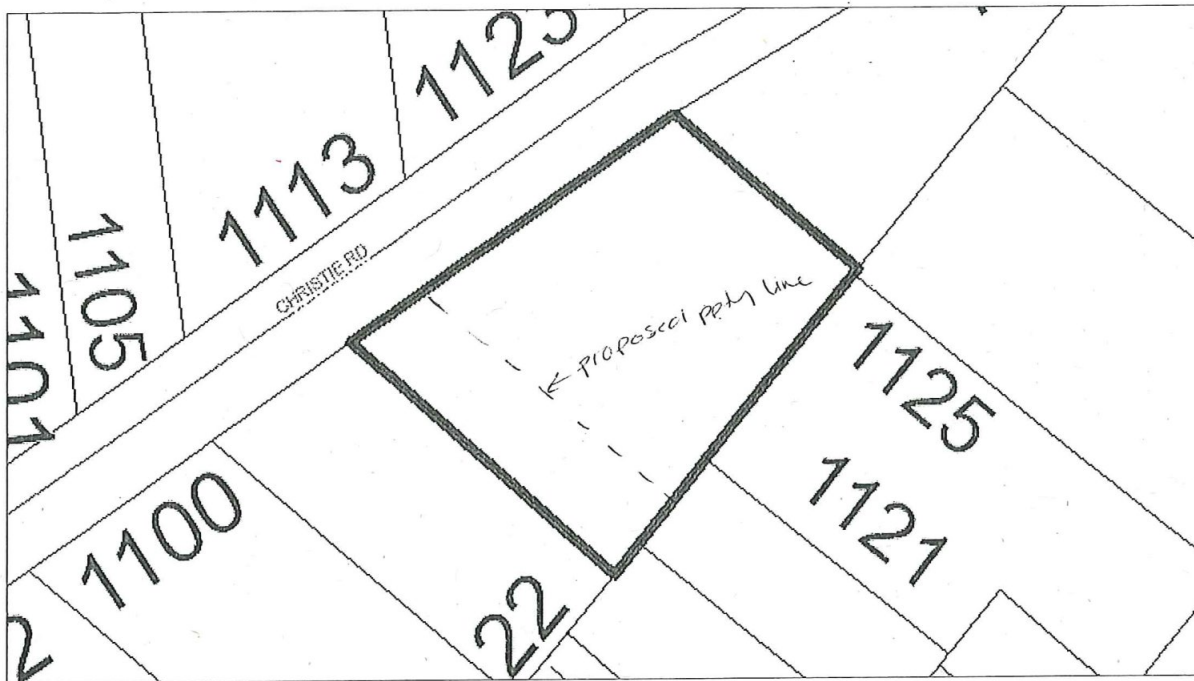
Projected Coordinate System:
NAD 83 UTM Zone 11N



Regional District of Kootenay Boundary
Interactive Mapping System

Owner Report

Monday, March 10, 2014



Scale 1: 1,187

Legal Information

Plan: NEP2533	Section:	Jurs: 711	Lot Area: 1.15
Block:	Township:	Roll: 9323002	Area Unit: acr
Lot: 2	Land District: 26	PID: 015-248-941	Width (ft): 0
District Lot: 8392			Depth (ft): 0
Street: CHRISTIE RD			
Description: Except Plan REF PL 1103281.			

Owner Information:

STEWART M. MIKALISHEN
ANGELA L. ZOEBKOFF

PO BOX 1253
FRUITVALE BC
V0G1L0

CONFIDENTIAL

This report and map is for general information only. The RDKB does not guarantee its accuracy or correctness. All information should be verified. This ownership information should be used for internal government use only and is to be kept confidential.

Page 1 of 1



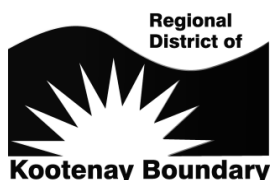
0 20 40 80
Meters

Proposed Subdivision

Proposed boundary adjustment.
Yellow is general area
for new parcel line.



Projected Coordinate System:
NAD 83 UTM Zone 11N



Electoral Area Services Committee Staff Report

Prepared for meeting of September 2014

Provincial ALR Regulation Consultation	A3
Report Prepared by: Donna Dean, Manager of Planning and Development	

ISSUE INTRODUCTION

The Ministry of Agriculture consulted with Regional Districts, representatives of the agricultural industry, and the public regarding potential changes to the ALR Regulation. The purpose of this report is to provide a brief description of the consultation process and the eleven questions the Province requested comments on.

BACKGROUND

Amendments were made to the *Agricultural Land Commission Act* in May 2014. Those changes to the *Act* could result in subsequent changes to the ALC Regulation regarding permitted uses in the ALR and subdivision in the ALR.

Amendments to the ALC Act of note are:

- The establishment of two ALR zones, each comprised of three of the six ALR Regions:
 - Zone 1 includes the Okanagan, South Coast and Vancouver Island Regions
 - Zone 2 includes the Interior, Kootenay and North Regions (note that the Kootenay Region includes all of the RDKB)
- In Zone 2, the ALC is now required by legislation to consider, in descending order of priority:
 - The purposes of the ALC as defined in Section 6 of the Act
 - Economic, cultural and social values;
 - Regional and community planning objectives; and
 - Other prescribed considerations

The consultation period took place between mid-July to August 22 and included meetings, an on-line survey and an opportunity to provide written comments. A summary of the consultation is expected to be released by the Province sometime this fall.

IMPLICATIONS

Given the very short consultation period, which took place during the summer months, there was no time to go through the Planning and Development Department's normal referral process. Therefore the following comments were provided to the Province. The comments were based somewhat on my own opinions, my experience as a land use planner at the RDKB for the last 11 years and discussion with Director Russell. Some general comments that were provided to the Province follow:

"The timing of the consultation process and the request for a quick turnaround time has presented some challenges for our Regional District. A longer turnaround time would have allowed for an opinion of the entire Board rather than mine as an employee, which I do not feel entirely comfortable offering. There also seems to have been some confusion regarding who should be invited to attend the consultation session on August 8th in Cranbrook since no one from the agricultural sector in the Kootenay Boundary area was invited.

I believe the creation of two zones, with the RDKB being included in Zone 2, has increased the amount of speculation regarding agricultural land in our area where there seems to have been a general acceptance and support for the regulations for ALR land. I would suggest that the regulations apply equally across the Province."

My comments regarding the eleven questions regarding land use and subdivision follow:

#	Question Asked	Comments Provided to the Province
	Farm Use	
1.	Should the parameters for allowable on-farm food storage, packing, processing and retail establishments be revised?	Leave this as is and keep the option for land owners to apply for non-farm use. That way each situation can be considered on a case by case basis.
2.	Should breweries, distilleries and meaderies be allowed on ALR land on the same or similar terms as wineries and cideries are currently allowed?	Yes
3.	Should the allowable footprint for consumption areas (or 'lounges') ancillary to wineries and cideries (and potentially also breweries, distilleries and meaderies) be increased, and if so on what basis?	No, the area is large enough now, and the application process for non-farm use is working fine.

4.	To what extent should wineries and cideries (and potential breweries, distilleries and meaderies) be allowed to sell alcohol that was produced elsewhere in BC, not at the winery or cidery?	Yes this should be supported and a number that first comes to mind is 50% without doing any research on the subject.
Permitted Uses		
5.	Should anaerobic digesters be permitted in the ALR if the inputs are generated from farm activities?	I believe animal waste should be composted and used as a soil amendment. I would be concerned if greenhouse gases are produced by this process.
6.	Should on-farm co-generation facilities be permitted on farms where a portion of the energy created is used on-farm?	Qualified yes, provided greenhouse gases are also used on farm or captured and stored
7.	Should the parameters be expanded for when non-agricultural related businesses are allowed to operate on ALR properties in Zone 2	No, the area is large enough now; application process works well
Sub-division		
8.	Should subdivision of ALR properties in Zone 2 to a minimum parcel size of a quarter-section be allowed without an application to the ALC?	This change would have little impact in our area because we do not have farms of this scale.
9.	Should the subdivision of ALR parcels in Zone 2 that are of a defined size, and that are divided by a major highway or waterway, be allowed without an application to the ALC?	I can see support for this but 'major highway' and 'waterway' would have to be defined.
Agri-Tourism		
10.	Should greater clarity be provided on what constitutes an agri-tourism activity that is allowable in the ALR without an application, and if so what parameters should be established?	Yes it would be useful if this was defined better for some uses.

	Leasing	
11.	Should temporary leases of portions of a property in Zone 2 of the ALR be allowed without a application to the ALC for: (a) Intergenerational transfer of an active farm or ranch operation; and/or (b) To encourage the use of otherwise unfarmed land by existing or new farmers?	Yes to both a) and b), provided the land is assessed for farm use.

RECOMMENDATION

That the September 2014 staff report regarding the Provincial Agricultural Land Reserve Regulation Consultation be received.

ATTACHMENTS

Consultation on Potential Changes to the Agricultural Land Commission Act: Agricultural Land Reserve Use, Subdivision and Procedure Regulation, July 2014.

Consultation on Potential Changes to the *Agricultural Land Commission Act*: Agricultural Land Reserve Use, Subdivision and Procedure Regulation

July 2014



Ministry of
Agriculture

Table of Contents

1. Purpose	1
2. Background	1
3. Consultation Process	2
<i>Minister's Reference Group and ALC</i>	2
<i>Regional Stakeholder Consultations</i>	2
<i>Public Input</i>	2
4. Overview of Changes to the ALCA	3
a) <i>Zones, Regions and Regional Panels</i>	3
b) <i>Decision Making</i>	3
c) <i>Allowable Uses of ALR Land</i>	4
d) <i>Governance</i>	4
e) <i>Other Regulation Making Authorities</i>	4
f) <i>Summary</i>	5
5. Land Uses Currently Allowed in the ALR	5
6. Consultation Questions	7
<i>Farm Use</i>	7
<i>Permitted Use</i>	8
<i>Sub-division</i>	9
<i>Agri-tourism</i>	9
<i>Leasing land</i>	10
7. Thank you!	10
Appendix A:	
List of Recent Amendments to the Agricultural Land Commission Act	11
Appendix B:	
Excerpt from the Agricultural Land Reserve Use, Subdivision and Procedure Regulation	13

1. Purpose

The purpose of this consultation is to invite your input on some proposed additional activities that could be allowed on farmland in the Agricultural Land Reserve without a requirement to make an application to the Agricultural Land Commission, on whether and to what extent these allowable uses should vary between different regions of the province, and on what parameters you think should be put around the proposed new uses.

2. Background

Approximately five percent of BC's land base is included in the Agricultural Land Reserve (ALR), a provincial zone within which agriculture is recognized as the priority activity. The ALR includes public and privately held land and is administered by the Agricultural Land Commission (ALC), an independent government tribunal, with the purpose of preserving agricultural land and encouraging its use for farming.

The *Agricultural Land Commission Act* (the Act) establishes both the ALR and the ALC in legislation. The Act sets out the structure and operations of the ALC and identifies permissible land uses within the ALR. The Agricultural Land Reserve Use, Subdivision and Procedure Regulation (ALR Regulation) provides greater specificity to many of the provisions in the Act.

Amongst other things, the ALR Regulation identifies specific land uses allowable on farmland in the ALR without an application to the ALC. Current examples include such things as growing plants and raising animals, putting up buildings necessary for the farm, selling agricultural products direct to the public, limited food processing and, unless prohibited a local government, specified non-farm activities such as agri-tourism accommodation, temporary sawmills, kennels, and others.

Any activities not permitted by the ALR Regulation do require an application to the ALC, which can approve, deny or vary the application. Applications are required in order to include or exclude land from ALR, to subdivide land within the ALR, or to carry out an activity not expressly permitted in the Act or Regulations.

The passage of Bill 24 in May 2014 introduced amendments to the Act that change the way in which the ALC is structured and governed. Some of the detail that determines how these legislative changes will be implemented will be provided through changes to the ALR Regulation. One aspect of regulatory change contemplated by the amendments is to expand the list of allowable uses on ALR land, and possibly to vary them between ALR regions.

The focus of this consultation is to ask the question: what further activities should be allowable on farmland in the ALR without an application to the ALC, what parameters should be put around them, and should they vary between regions? A Reference Group convened by the Minister of Agriculture and comprised of representatives from the ALC, the Union of British Columbia Municipalities (UBCM) and the BC Agriculture Council (BCAC) has made a number of specific suggestions in answer to this question, and these suggestions are presented in this paper for your consideration and comment.

Context for the questions is provided in sections 4 and 5 of this paper. Section 6 provides some specific suggestions for new activities that should be allowable in the ALR without an application to the ALC, and also some further specific suggestions for regulatory change related to agri-tourism and the subdivision and leasing of land in the ALR.

3. Consultation Process

Minister's Reference Group and ALC

- A Minister's Reference Group comprised of representatives from the ALC, UBCM and the BCAC has been struck to inform the consultation process and any regulatory outcomes.
- An initial meeting of the Reference Group was held in early July to provide advice on the consultation process, and to provide substantive input on the consultation questions.
- A separate meeting was then held with the ALC (commissioners and staff) to solicit further input on the consultation questions.
- The input gained from the Reference Group and the ALC form the basis of the consultation questions presented in this paper.
- As well, the ALC has provided a number of specific, technical suggestions for regulatory amendments aimed at providing greater clarity for landowners, local governments and the ALC itself around some existing allowable uses. While these suggestions are not the subject of this consultation, [they will be provided on the consultation website](#) (see Public Input, below) for your information.
- The Reference Group will meet again mid-way through the process to review stakeholder feedback and provide any additional, interim advice.
- A final meeting of the Reference Group will be held at the end of the consultation process to review outcomes and provide input on any draft regulations the Ministry may consider at that time.

Regional Stakeholder Consultations

- Seven regional meetings will take place between July 22nd and August 22nd encompassing all six ALR regions.
- Invited stakeholders include local government (all Regional Districts), industry (wide cross-section of agriculture associations and farmers' institutes) and other key organizations (e.g. agriculture programs from post-secondary institutions).
- The Ministry will lead the consultation process. The ALC will also attend the regional meetings.

Public Input

- Public input on the consultation questions will be solicited via a consultation website: <http://engage.gov.bc.ca/landreserve> or via a dedicated Ministry email address: ALCA_Feedback@gov.bc.ca
- The website will be live from July 22nd to August 22nd.
- Submissions can also be sent by mail to:
ALR Reg. Consultation
PO Box 9120 Stn. Provincial Government
Victoria BC V8W 9B4

4. Overview of Changes to the ALCA

The Act was most recently amended in May 2014, by the passage of Bill 24. At that time, several legislative changes were introduced regarding how the ALC is structured and how it makes decisions on applications. These changes directly inform the framework of this consultation – to discuss what activities should be allowable on farmland in the ALR without an application to the ALC, and if these should vary between regions.

a) Zones, Regions and Regional Panels

The May 2014 amendments to the Act codify the existing six ALR regions into law, and require that a regional panel of at least two commissioners be established in each of the six regions.

The amendments also establish two ALR zones, each comprised of three of the six ALR regions:

Zone 1:

Okanagan region
South Coast region
Vancouver Island region

Zone 2:

Interior region
Kootenay region
North region

All applications to the ALC (for land exclusions, land inclusions, subdivisions, and land uses not otherwise permitted by the Act or Regulations) must now be forwarded by the Chair of the ALC to the appropriate regional panel for decision. At its discretion, a regional panel may take an application referred to it by the Chair, and refer this application instead to the ALC Executive Committee.

Subject to any regulations, if the Chair of the ALC determines that an application is of provincial importance, is novel or of general importance to the application of the Act, or may affect more than one panel region, the Chair may also refer the application to the ALC Executive Committee for decision, instead of referring it to a regional panel. The ALC Executive Committee is made up of the six regional panel vice-chairs, and the Chair of the ALC.

While the amendments to the Act provide the ability to further define in regulation when the Chair may refer an application to the Executive Committee, the Minister's Reference Group has advised that the Act provides enough specificity as written (i.e. the Chair may refer an application to the Executive Committee when the Chair considers an application is of provincial importance, is novel or of general importance to the application of the Act, or may affect more than one panel region). As such, it is preferable to allow the Chair the discretion to work within the legislative parameters provided, without further definition being required in regulation at this time.

b) Decision Making

The amendments to the Act also introduced new factors for the ALC to consider when making decisions on applications in Zone 2. In making decisions on applications the ALC has always considered the purpose of the ALC as defined in Section 6 of the Act:

- a. to preserve agricultural land;
- b. to encourage farming on agricultural land in collaboration with other communities of interest;

Consultation on Potential Changes to the *Agricultural Land Commission Act*

- c. to encourage local governments, first nations, the government and its agents to enable and accommodate farm use of agricultural land and uses compatible with agriculture in their plans, bylaws and policies.

This has not changed in Zone 1.

In Zone 2, however, the ALC is now required by legislation to consider, in descending order of priority:

- The purposes of the ALC as defined in section 6 of the Act
- Economic, cultural and social values;
- Regional and community planning objectives; and
- Other prescribed considerations.

While the amendments to the Act provide the ability to further define in regulation the factors the ALC must consider in deciding on applications in Zone 2, there is no intention to develop such regulations at this time, and this consultation does not therefore include any questions on this topic.

c) Allowable Uses of ALR Land

The activities that are allowable on ALR land without requiring an application to the ALC are established in the ALR Regulation. There are two broad categories of allowable uses, called Farm Uses and Permitted Uses. Farm Uses include a range of things including: the growing of plants and raising of animals, horse riding, the application of fertilizers, the construction of farm buildings, farm related agri-tourism, and agro-forestry (i.e. activities directly related to farming). Farm Uses may not vary between Zone 1 and Zone 2, and may not be prohibited by local governments. Permitted Uses include such things as limited bed and breakfast accommodation, agri-tourism accommodation, temporary sawmills, kennels, and within certain limitations also non-agricultural home-based businesses. Permitted Uses are viewed as less directly related to agriculture than Farm Uses, but as still compatible with (of low impact to) the farm operation. Permitted Uses may vary between Zone 1 and Zone 2, and may be prohibited by local governments.

Whether and to what extent the list of Farm Uses and Permitted Uses in the ALR Regulation should be updated, and how if at all Permitted Uses should vary between zones, is the focus of this consultation. Further detail on what currently constitutes a Farm Use and a Permitted Use, together with suggestions for additional allowable uses, are provided in sections 5 and 6 of this paper for your consideration and comment.

d) Governance

Other legislative changes introduced in May 2014 include the establishment of additional reporting requirements for the ALC, including a review of operations, performance indicators, details on applications received, survey results, plans, special problems and trends.

The Ministry will be working together with the ALC and other experts in administrative tribunal governance to further define the details of these new operational requirements.

e) Other Regulation Making Authorities

The May 2014 amendments to the Act also provide new regulation making authorities to: define terms not otherwise defined in the Act; determine how the ALC should make certain information on its operations and decisions public; and to establish residency requirements for commissioners on regional panels.

Consultation on Potential Changes to the *Agricultural Land Commission Act*

Regulations establishing residency requirements for commissioners are being developed as part of the process to bring the recent Act amendments into force. Otherwise, there is no intention to move ahead on regulations at this time, other than on the central question of what activities (i.e. Farm Uses and Permitted Uses) should be allowed in the ALR without an application to the ALC, and how, if at all, these should vary between zones.

f) Summary

In summary, the May 2014 amendments to the Act have introduced changes to the way in which the ALR is structured and governed. Some of the detail that determines how these legislative changes will be implemented will be determined through changes to the ALR Regulation that supports the Act. This consultation is intended to solicit input on potential regulatory changes as they relate to changes in the land use activities allowable in Zone 1 and Zone 2.

An itemized list of the recent amendments to the Act is provided in Appendix A.

5. Land Uses Currently Allowed in the ALR

Currently, land in the ALR can be used for farming, ranching, and other uses specified in the ALR Regulation. All other activities require an application to the ALC. The specific land uses permitted in the ALR without application to the ALC are listed in the ALR Regulation either as Farm Uses (Section 2 of the Regulation) or as Permitted Uses (Section 3). Land use activities not included in those sections, such as subdividing land, building additional residences, and excluding land from the ALR, require approval by the ALC through the application process.

Farm Uses include activities that are most directly aligned with the business of farming. Many of these activities are captured in the definition of farm use set out in the Act:

an occupation or use of land for farm purposes, including farming of land, plants and animals and any other similar activity designated as farm use by regulation, and includes a farm operation as defined in the Farm Practices Protection (Right to Farm) Act¹. ALCA s.1 (1)

Section 2 of the ALR Regulation duly designates various activities as Farm Use, including: farm retail sales; operating farm wineries or cideries; storage, packing, and product preparation; timber production; agro-forestry; agri-tourism; and others (the full list of farm uses found in section 2 of the ALR Regulation is provided in Appendix B).

The majority of the activities listed in section 2 are restricted by specific parameters that ensure they support an active farm and have only a minimum impact on agricultural land. For example, farm retail sales are permitted only when either all of the farm products offered are produced on the farm, or at least half of the sales area is for products from the farm. Food processing is permitted only when half of the product being produced was sourced on the farm, or is feed for consumption on the farm. The activities listed in section 2 may be regulated but cannot be prohibited by local governments. The Act does not permit that the activities listed in section 2 may vary between Zone 1 and Zone 2.

Permitted Uses include activities that are not specifically agricultural in nature, but which are permitted

¹ http://www.bclaws.ca/civix/document/id/complete/statreg/96131_01

Consultation on Potential Changes to the *Agricultural Land Commission Act*

by regulation on ALR land without application to the ALC. Permitted uses are set out in section 3 of the ALR Regulation and include such activities as: bed and breakfast accommodations; temporary sawmills; breeding pets; establishing telecommunications equipment; and others (a full list of the permitted uses found in section 3 of the ALR Regulation is provided in Appendix B).

Similar to Farm Uses under section 2, parameters are established in the Regulation for the majority of these land uses in order to minimize their impact on agricultural land. For instance, temporary sawmills are permitted when half of the timber harvested is from the farm; bed and breakfasts are limited in size; and biodiversity conservation, passive recreation, heritage, wildlife and scenery viewing land uses are permitted so long as related buildings do not exceed a specified footprint. The permitted uses listed in section 3 may be restricted or prohibited by local governments. Permitted Uses may vary between Zone 1 and Zone 2 of the ALR.

Table 1 illustrates the main differences between farm uses, permitted uses and non-farm uses as provided by the ALR Regulation.

Possible Uses of Land:

A. Farm Use	B. Permitted Use	C. Non-farm Use
▶ Defined as “farm use” in the ALR Regulation s.2	▶ Defined specifically in ALR Regulation s.3	▶ Not permitted on ALR land without ALC approval
▶ No application to the Commission required	▶ No application to the Commission required	▶ Requires application to the Commission
▶ May be regulated but not prohibited by local government (s.2 ALR Regulation)	▶ Permitted unless prohibited by local government bylaw (s.3 ALR Regulation)	▶ Applications go to local government ahead of the Commission. Local Government can refuse to authorize the application, which ends the process, or forward to the Commission with comments and recommendations; the Commission then decides the application.

6. Consultation Questions

Farm Use

To help identify potential changes to the ALR Regulation, the Ministry has consulted with the Minister's Reference Group (UBCM, BCAC, ALC), and separately also with the ALC. As a result of these consultations, two possible changes to what is an allowable Farm Use of land in the ALR are presented for your consideration and comment. Two additional changes are also presented for your consideration, based on the findings of the recent provincial Liquor Policy Review.

If added to the ALR Regulation, these land use activities would be permitted in the ALR without an application to the ALC, could be regulated but not prohibited by a local government, and would not be able to vary between Zone 1 and Zone 2.

Q 1) *Should the parameters for allowable on-farm food storage, packing, processing and retail establishments be revised?*

Currently the Regulation states that food storage, packing, product preparation, and food processing are permitted "if at least 50% of the farm product being stored, packed, prepared or processed is produced on the farm or is feed required for farm production purposes on the farm". Retail sales are permitted if "at least 50% of the retail sales area is limited to the sale of farm products produced on the farm on which the retail sales are taking place and the total area ... does not exceed 300m²."

These restrictions can inhibit neighbouring farms from investing in joint storage, packing, processing or retail establishment in the ALR, favouring instead the establishment of a number of small, similar operations. This may be an inefficient use of productive farmland, and cost prohibitive for individual small producers. One benefit of the proposed amendment would therefore be to enable cooperative arrangements between farms in proximity to one another.

Amongst other things, lessening the restrictions on on-farm processing could allow the establishment of abattoirs (large, small or mobile), on farms, to serve surrounding cattle, game or poultry farms. Other examples of potential new processing opportunities include value added, further-processing activities related to fresh produce (e.g. grape juice), dairy products (e.g. cheese), or nutraceutical / pharmaceutical products (e.g. related to medical marijuana).

Similarly, lessening restrictions on on-farm retail operations could further enable on-farm markets to sell products from several farms.

Q 2) *Should breweries, distilleries and meaderies be allowed on ALR land on the same or similar terms as wineries and cideries are currently allowed?*

Currently, wineries and cideries are allowed on ALR land without application to the ALC, so long as a prescribed percentage of the agricultural product used to produce the final product comes from either the farm on which the winery/cideries sits, or another BC farm. The idea here is to extend the same provisions and conditions to breweries, distilleries and meaderies.

Q 3) *Should the allowable footprint for consumption areas (or 'lounges') ancillary to wineries and cideries (and potentially also breweries, distilleries and meaderies) be increased, and if so on what basis?*

Currently, wineries and cideries in the ALR are allowed to establish consumption areas (or 'lounges') to a maximum size of 125m² inside, and 125m² outside, which is roughly equal to a maximum of 130 people.

Consultation on Potential Changes to the *Agricultural Land Commission Act*

One of the findings from the recent provincial Liquor Policy Review is that government should consult on increasing the limit for allowable consumption areas.

Q 4) *To what extent should wineries and cideries (and potentially breweries, distilleries and meaderies) be allowed to sell alcohol that was produced elsewhere in BC, not at the winery or cidery?*

Currently, a winery or cidery may only sell alcohol produced at that winery or cidery. One of the findings from the recent provincial Liquor Policy Review is that government should consult on allowing the sale of alcohol produced in BC, but not produced on the farm.

Note: In all cases, whether expanding existing farm uses or creating new ones, careful consideration should be given to any appropriate parameters for limiting the Farm Use, for example by limiting the total footprint of any facilities in relation to the size of the farm, prescribing the location of a facility on a farm, the percentage of any inputs that should be derived from the farm, and the impact on neighbouring farms. The question of whether or not the property is actually being farmed may also be a consideration, as may be the impact of the proposed activity to the farm operation.

Permitted Use

To help identify potential changes to the ALR Regulation, the Ministry has consulted with the Minister's Reference Group (UBCM, BCAC, ALC), and separately also with the ALC. As a result of these consultations, three possible changes to what is an allowable Permitted Use of land in the ALR are presented for your consideration and comment. If added to the ALR Regulation, these land use activities would be permitted in the ALR without an application to the ALC, could be prohibited by a local government, and could vary between Zone 1 and Zone 2.

Q 5) *Should anaerobic digesters be permitted in the ALR if the inputs are generated from farming activities?*

Anaerobic digestion is defined as a collection of processes by which [microorganisms](#) break down [biodegradable](#) material in the absence of [oxygen](#). In the farm context, biodegradable material primarily means animal waste, or manure. The process is used to manage farm waste and/or to produce fuels, which may then be used on farm or sold for revenue. Dairy farms in particular may benefit from being able to establish anaerobic digesters on-farm without an application to the ALC, given the ready availability of feedstock.

Q 6) *Should on-farm cogeneration facilities be permitted on farms where a portion of the energy created is used on-farm?*

Cogeneration or combined heat and power (CHP) is the use of a [heat engine](#) or [power station](#) to simultaneously generate [electricity](#), [useful heat](#), and CO₂, which can either be used on the farm or sold. Greenhouse operations in particular may benefit from being able to establish co-gen facilities on-farm without an application to the ALC, since heat and CO₂ are both used in greenhouse production.

Q 7) *Should the parameters be expanded for when non-agriculture related businesses are allowed to operate on ALR properties in Zone 2?*

Currently the Regulation permits a home occupation use that is accessory to a dwelling, of not more than 100 m² or such other area as specified in a local government bylaw. One idea is to expand opportunities for a broader range of land-based non-agricultural businesses, such as certain oil and gas ancillary services.

Consultation on Potential Changes to the *Agricultural Land Commission Act*

Note: As with Farm Uses, careful consideration should be given to any appropriate parameters for limiting the proposed new activities, including the size and location of any facilities, their permanence, the percentage of inputs derived from the farm and/or the percentage of outputs used on the farm, their impact on neighbouring farms, options for land reclamation after the use ends, whether or not the property is actually being farmed, and the likely impact of the proposed use to the farm operation.

Sub-division

Although most subdivisions require an application to the ALC, section 10 of the ALR Regulation establishes when and how subdivisions of ALR properties can be made by local government (and provincial) Approving Officers, without an application to the ALC. These include subdivisions that will consolidate two or more parcels into a single parcel, and certain other subdivisions when the subdivision will not result in any increase in the number of parcels.

Two ideas have been proposed to enable farmers and ranchers to expand the circumstances under which subdivisions can be approved by an Approving Officer without application to the ALC.

Q 8) *Should the subdivision of ALR properties in Zone 2 to a minimum parcel size of a quarter section be allowed without an application to the ALC?*

From 1997 to 2003 the ALC “Quarter Section General Order” (or policy) permitted subdivisions down to a minimum size of a quarter section, without an application, in the Peace River and Northern Rockies Regional Districts. The idea here is to reinstate this practice, through regulation, and apply it throughout Zone 2.

Q 9) *Should the subdivision of ALR parcels in Zone 2 that are of a defined size, and that are divided by a major highway or waterway, be allowed without an application to the ALC?*

Farm properties are often difficult to manage with a major obstruction in the way, and the ALC often allows subdivision of these parcels through an application. The idea here is to allow an Approving Officer to approve subdivisions where such a major obstruction (to be defined in regulation) exists.

Agri-tourism

One proposal is that further definition of what constitutes an “agri-tourism activity” could usefully be provided in section 2 of the Regulation. Section 2 currently provides that agri-tourism activities are allowable as a farm use if the use is temporary and seasonal, and promotes or markets farm products grown, raised or processed on the farm. Providing greater clarity on what constitutes a “temporary and seasonal” activity and when that activity “promotes or markets farm products” may be beneficial for farmers, local governments and the ALC.

It has similarly been proposed that further definition be provided on when agri-tourism accommodations are permitted under section 3 of the Regulation, to ensure that any such accommodations are tied to a legitimate agri-tourism activity under section 2.

Q 10) *Should greater clarity be provided on what constitutes an agri-tourism activity that is allowable in the ALR without an application, and if so what parameters should be established?*

Leasing land

Currently a landowner in the ALR may lease their entire property without making an application to the ALC, but must make an application in order to lease a portion of their property. It has been proposed that temporary leases of a portion of a property be allowed without an application if the lease is to (a) enable the intergenerational transfer of active farm or ranch operations without a subdivision, or (b) to encourage the use of otherwise unfarmed land by existing or new farmers.

Q 11) *Should temporary leases of portions of a property in Zone 2 of the ALR be allowed without an application to the ALC for:*
(a) intergenerational transfer of an active farm or ranch operation; and/or
(b) to encourage the use of otherwise unfarmed land by existing or new farmers?

Allowing “life estate leases” for inter-generational transfer would allow retiring farmers to continue to live on their property while leasing or selling it to their children or other new entrants. The lease could allow a second residence to be established on the property, but no permanent subdivision of property would be involved.

Allowing temporary leases of a portion of a property to bring fallow ALR land into production could help new entrants/young farmers get into agriculture, and/or could increase opportunities for existing farmers to access more land without purchase. This kind of lease would not lead to additional residences being permitted on the farm and would not require a subdivision.

7. Thank you!

Your input into this consultation is greatly appreciated. If you would like to contribute further comments, you may do so by email at ALCA_feedback@gov.bc.ca or through our consultation website at <http://engage.gov.bc.ca/landreserve>

Comments can also be submitted by mail at:

ALR Reg. Consultation
 PO Box 9120 Stn. Provincial Government
 Victoria BC V8W 9B4

Appendix A:

List of Recent Amendments to the *Agricultural Land Commission Act*

General "Theme"	Description of Change	Section Reference
1) ALC Reporting and Accountability	Allow government, by regulation, to set service standards and reporting requirements for the Commission to the Minister.	ALCA Section 12(2)
	Minister can by order set performance standards.	ALCA Section 12(2.1)
2) Panel Regions and Panel Composition	Establish the 6 existing panel regions (defined geographically in the new Schedule to ALCA)	ALCA Section 4.1
	Require that a panel be established for each of the 6 panel regions.	ALCA Section 11(1)
	Require that the Chair refer applications from a panel region to the panel for that panel region.	ALCA Section 11(6)
	Sets out when chair of the Commission can refer an application to the executive committee.	ALCA Section 11.2
	Commission must consist of at least 13 individuals.	ALCA Section 5(1)
	Regional panels will have a minimum of 2 members, one of whom will be vice chair for the panel appointed by the LGIC.	ALCA Section 5(2) and ALCA Section 11
3) Zones	Vice chairs and members must be resident in the region of the panel to which they are appointed ('residency' to be defined by regulation).	ALCA Section 5(2) and ALCA Section 11(3)
	Zone 1 = Island, South Coast and Okanagan panel regions. Zone 2 = the rest of BC (i.e. Interior, Kootenay, North panel regions, and other).	ALCA Section 4.2

Consultation on Potential Changes to the *Agricultural Land Commission Act*

General "Theme"	Description of Change	Section Reference
4) Decision-Making in Zones	<p>Zone 1 – no change to decision-making – ALC considers applications on case-by-case basis within the legislated purpose of the Commission, which are as follows:</p> <ul style="list-style-type: none"> (a) to preserve agricultural land; (b) to encourage farming on agricultural land in collaboration with other communities of interest; (c) to encourage local governments, first nations, the government and its agents to enable and accommodate farm use of agricultural land and uses compatible with agriculture in their plans, bylaws and policies. <p>In rendering its decisions in Zone 2, the Commission must also now consider other factors in descending order of priority:</p> <ul style="list-style-type: none"> • economic, cultural and social values; • regional and community planning objectives; and • any other considerations prescribed by regulation. <p>This does not require the Commission to make decisions that only reflect these new considerations. The Commission is still an independent body and will balance agricultural factors with these other considerations.</p> <p>The legislation provides for greater flexibility in ALC decision-making to allow farmers in Zone 2 to have more options for earning an income.</p>	ALCA Section 4.3
5) Local Government Act Amendment	Section 879 of the <i>Local Government Act</i> is amended so that local governments must consult with the Commission earlier on in development of, or amendments to, an Official Community Plan (i.e. prior to first reading).	<i>Local Government Act</i> Section 879
6) Additional Regulation-Making Powers added to the ALCA	Several subsections have been added to section 58 of the ALCA to provide for additional regulation-making powers. The regulations we are consulting on in this process are tied to several of these new powers and to the other regulation-making powers that have existed for some time in the ALCA.	ALCA Section 58

Appendix B:

Excerpt from the Agricultural Land Reserve Use, Subdivision and Procedure Regulation

Activities designated as farm use

- 2 (2) The following activities are designated as farm use for the purposes of the Act and may be regulated but must not be prohibited by any local government bylaw except a bylaw under section 917 of the *Local Government Act* or, if the activity is undertaken on treaty settlement lands, by a law of the applicable treaty first nation government:
- (a) farm retail sales if
 - (i) all of the farm product offered for sale is produced on the farm on which the retail sales are taking place, or
 - (ii) at least 50% of the retail sales area is limited to the sale of farm products produced on the farm on which the retail sales are taking place and the total area, both indoors and outdoors, used for the retail sales of all products does not exceed 300 m²;
 - (b) a British Columbia licensed winery or cidery and an ancillary use if the wine or cider produced and offered for sale is made from farm product and
 - (i) at least 50% of that farm product is grown on the farm on which the winery or cidery is located, or
 - (ii) the farm that grows the farm products used to produce wine or cider is more than 2 ha in area, and, unless otherwise authorized by the commission, at least 50% of the total farm product for processing is provided under a minimum 3 year contract from a farm in British Columbia;
 - (c) storage, packing, product preparation or processing of farm products, if at least 50% of the farm product being stored, packed, prepared or processed is produced on the farm or is feed required for farm production purposes on the farm;
 - (d) land development works including clearing, levelling, draining, berming, irrigating and construction of reservoirs and ancillary works if the works are required for farm use of that farm;
 - (e) agri-tourism activities, other than accommodation, on land that is classified as a farm under the *Assessment Act*, if the use is temporary and seasonal, and promotes or markets farm products grown, raised or processed on the farm;
 - (f) timber production, harvesting, silviculture and forest protection;

Consultation on Potential Changes to the *Agricultural Land Commission Act*

- (g) agroforestry, including botanical forest products production;
 - (h) horse riding, training and boarding, including a facility for horse riding, training and boarding, if
 - (i) the stables do not have more than 40 permanent stalls, and
 - (ii) the facility does not include a racetrack licensed by the British Columbia Racing Commission;
 - (i) the storage and application of fertilizers, mulches and soil conditioners;
 - (j) the application of soil amendments collected, stored and handled in compliance with the Agricultural Waste Control Regulation, B.C. Reg. 131/92;
 - (k) the production, storage and application of compost from agricultural wastes produced on the farm for farm purposes in compliance with the Agricultural Waste Control Regulation, B.C. Reg. 131/92;
 - (l) the application of compost and biosolids produced and applied in compliance with the Organic Matter Recycling Regulation, B.C. Reg. 18/2002;
 - (m) the production, storage and application of Class A compost in compliance with the Organic Matter Recycling Regulation, B.C. Reg. 18/2002, if all the compost produced is used on the farm;
 - (n) soil sampling and testing of soil from the farm;
 - (o) the construction, maintenance and operation of farm buildings including, but not limited to, any of the following:
 - (i) a greenhouse;
 - (ii) a farm building or structure for use in an intensive livestock operation or for mushroom production;
 - (iii) an aquaculture facility.
- (3) Any activity designated as farm use includes the construction, maintenance and operation of a building, structure, driveway, ancillary service or utility necessary for that farm use.
- (4) Unless permitted under the *Water Act* or the *Environmental Management Act*, any use specified in subsection (2) includes soil removal or placement of fill necessary for that use as long as it does not
- (a) cause danger on or to adjacent land, structures or rights of way, or
 - (b) foul, obstruct or impede the flow of any waterway.
- (5) The removal of soil or placement of fill as part of a use designated in subsection (2) must be considered to be a designated farm use and does not require notification except under section 4.

Permitted uses for land in an agricultural land reserve

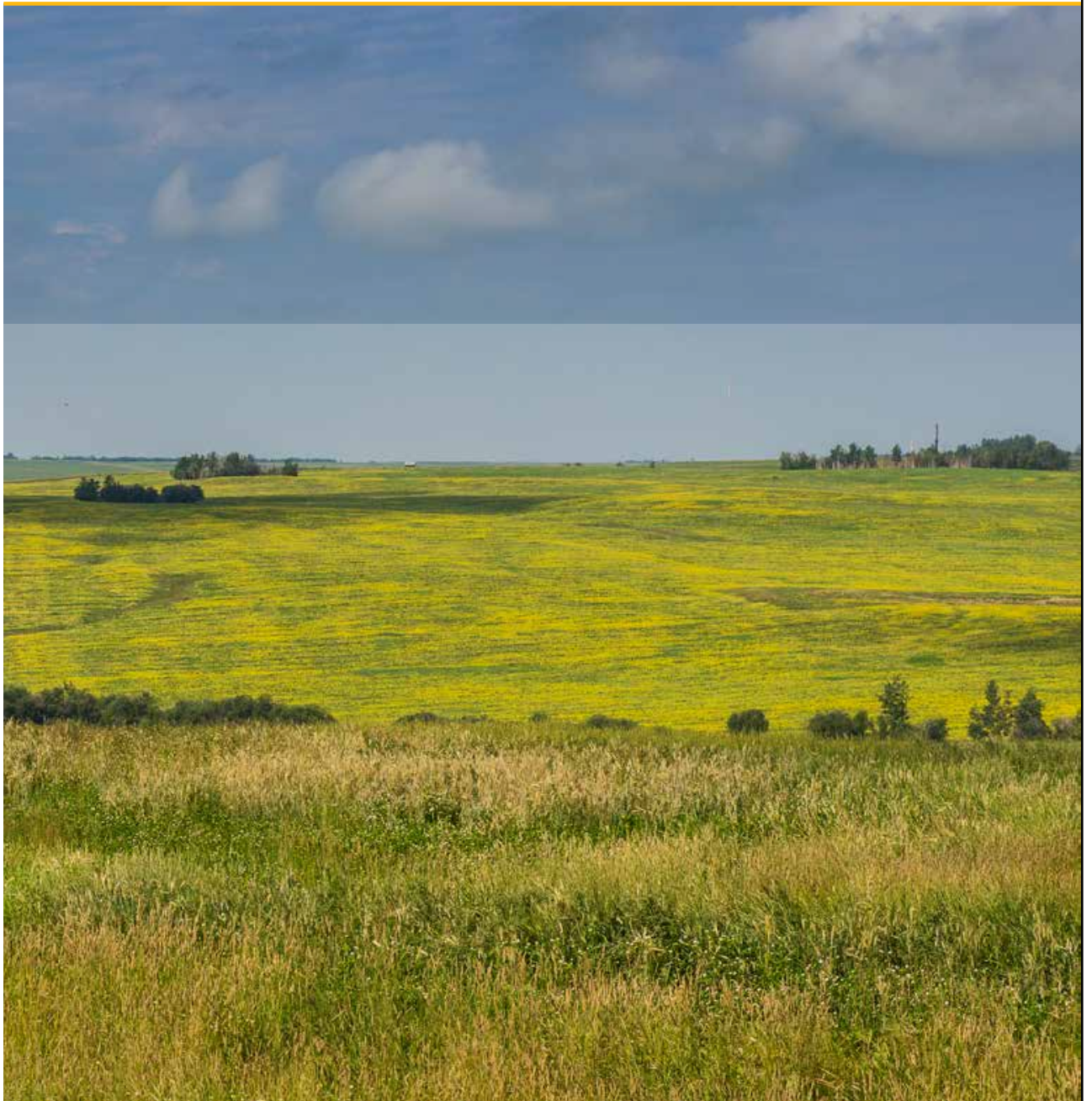
- 3 (1) The following land uses are permitted in an agricultural land reserve unless otherwise prohibited by a local government bylaw or, for lands located in an agricultural land reserve that are treaty settlement lands, by a law of the applicable treaty first nation government:
- (a) accommodation for agri-tourism on a farm if
 - (i) all or part of the parcel on which the accommodation is located is classified as a farm under the *Assessment Act*,
 - (ii) the accommodation is limited to 10 sleeping units in total of seasonal campsites, seasonal cabins or short term use of bedrooms including bed and breakfast bedrooms under paragraph (d), and
 - (iii) the total developed area for buildings, landscaping and access for the accommodation is less than 5% of the parcel;
 - (b) for each parcel,
 - (i) one secondary suite within a single family dwelling, and
 - (ii) one manufactured home, up to 9 m in width, for use by a member of the owner's immediate family;
 - (c) a home occupation use, that is accessory to a dwelling, of not more than 100 m² or such other area as specified in a local government bylaw, or treaty first nation government law, applicable to the area in which the parcel is located;
 - (d) bed and breakfast use of not more than 4 bedrooms for short term tourist accommodation or such other number of bedrooms as specified in a local government bylaw, or treaty first nation government law, applicable to the area in which the parcel is located;
 - (e) operation of a temporary sawmill if at least 50% of the volume of timber is harvested from the farm or parcel on which the sawmill is located;
 - (f) biodiversity conservation, passive recreation, heritage, wildlife and scenery viewing purposes, as long as the area occupied by any associated buildings and structures does not exceed 100 m² for each parcel;
 - (g) use of an open land park established by a local government or treaty first nation government for any of the purposes specified in paragraph (f);
 - (h) breeding pets or operating a kennel or boarding facility;
 - (i) education and research except schools under the *School Act*, respecting any use permitted under the Act and this regulation as long as the area occupied by any buildings or structures necessary for the education or research does not exceed 100 m² for each parcel;
 - (j) production and development of biological products used in integrated pest management programs as long as the area occupied by any buildings or structures necessary for the production or development does not exceed 300 m² for each parcel;

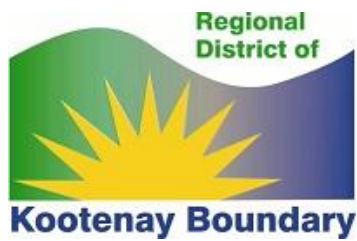
Consultation on Potential Changes to the *Agricultural Land Commission Act*

- (k) aggregate extraction if the total volume of materials removed from the parcel is less than 500 m³, as long as the cultivatable surface layer of soil is salvaged, stored on the parcel and available to reclaim the disturbed area;
 - (l) force mains, trunk sewers, gas pipelines and water lines within an existing dedicated right of way;
 - (m) telecommunications equipment, buildings and installations as long as the area occupied by the equipment, buildings and installations does not exceed 100 m² for each parcel;
 - (n) construction and maintenance, for the purpose of drainage or irrigation or to combat the threat of flooding, of
 - (i) dikes and related pumphouses, and
 - (ii) ancillary works including access roads and facilities;
 - (o) unpaved airstrip or helipad for use of aircraft flying non-scheduled flights;
 - (p) the production, storage and application of Class A compost in compliance with the Organic Matter Recycling Regulation, B.C. Reg. 18/2002, if at least 50% of the compost measured by volume is used on the farm.
- (2) Nothing in subsection (1) (a) is to be interpreted as permitting the conversion of a building into strata lots by an owner.
- (3) If a use is permitted under subsection (1) (k) it is a condition of the use that once the extraction of aggregate is complete, the disturbed area must be rehabilitated in accordance with good agricultural practice.
- (4) The following land uses are permitted in an agricultural land reserve:
- (a) any
 - (i) ecological reserve established under the *Ecological Reserve Act* or by the *Protected Areas of British Columbia Act*,
 - (ii) park established under the *Park Act* or by the *Protected Areas of British Columbia Act*,
 - (iii) protected area established under the *Environment and Land Use Act*,
 - (iv) wildlife management area established under the *Wildlife Act*, or
 - (v) recreation reserve established under the *Land Act*;
 - (b) dedication or upgrading of an existing road with vehicular access and use declared to be a highway under section 42 of the *Transportation Act*;
 - (c) road construction or upgrading within a dedicated right of way that has a constructed road bed for vehicular access and use;
 - (d) if the widening or works does not result in an overall right of way width of more than 24 m, widening of an existing constructed road right of way for
 - (i) safety or maintenance purposes, or
 - (ii) drainage or flood control works;

Consultation on Potential Changes to the *Agricultural Land Commission Act*

- (d.1) widening an existing constructed road right of way to ease one curve;
 - (e) establishing as a forest service road
 - (i) an existing road under the *Forest Act*, or
 - (ii) a new road in a managed forest;
 - (f) increasing the right of way width of a forest service road by up to 4 m if the widening does not result in an overall right of way width of more than 24 m;
 - (g) railway construction, upgrading and operations on an existing railbed within a dedicated right of way, including widening of an existing railway right of way if the widening does not result in an overall right of way width of more than 30 m;
 - (h) surveying, exploring or prospecting for gravel or minerals if all cuts, trenches and similar alterations are restored to the natural ground level on completion of the surveying, exploring or prospecting;
 - (i) surface water collection for farm use or domestic use, water well drillings, connection of water lines, access to water well sites and required rights of way or easements;
 - (j) soil research or testing as long as the soil removed or fill placed is only in an amount necessary for the research or testing.
- (5) Any permitted use specified in subsection (1) or (4) includes the construction, maintenance and operation of buildings, structures, driveways, ancillary services and utilities necessary for that use.
- (6) Unless permitted under the *Water Act* or the *Environmental Management Act*, any use specified in subsection (1) or (4) includes soil removal or placement of fill necessary for that use as long as the soil removal or placement of fill does not
- (a) cause danger on or to adjacent land, structures or rights of way, or
 - (b) foul, obstruct or impede the flow of any waterway.



**STAFF REPORT****Date:** 05 Aug 2014**File**ES Administration -
Water**To:** **Chair Worley and Members,
Electoral Area Services
Committee****From:** Bryan Teasdale, Manager of
Infrastructure and Sustainability**Re:** Anaconda Water System Assessment**Issue Introduction**

A Staff Report from Bryan Teasdale, Manager of Infrastructure and Sustainability, regarding an assessment of the existing potable water distribution system for the unincorporated area of Anaconda.

History/Background Factors

Currently, the infrastructure of the Anaconda water system is not owned by any level of government. The water system is operated and maintained by the City of Greenwood and funded (partially or wholly) by utility fees that are collected from the residents of Anaconda. Due to the fact that the Anaconda Water System has different associated costs than the Greenwood Water System, it is possible that the City may be subsidizing Anaconda in some way/fashion.

As a result, in 2013 the City of Greenwood requested the RDKB undertake a study assessment of the Anaconda Water system to review the existing infrastructure; recommendations for upgrades required to the system; preparation of a financial plan to fund operations, maintenance and capital expenditure, and a discussion regarding a possible/suitable ownership model for the system. The intention of the proposed financial plan and ownership model is to treat the Anaconda system as a fully independent operation (i.e. RDKB Localized Service Area), which is to be fully reliant upon generating its own resources to offset both current and future expenditures.

In conjunction with City of Greenwood Council and Staff, the attached draft report has now been completed.

Implications

If the Anaconda Water System were to see a change of ownership to the RDKB, based on the financial modelling presented within the draft assessment report, it is expected that the current water users would see a significant increase in annual fees (approximately 220%). This increase is directly related to the current users of the system financing 100% of the required capital upgrades to the current system, which has been identified at approximately \$940,000.

Advancement of Strategic Planning Goals

N/A

Background Information Provided

1. Anaconda Water System Assessment Draft Report

Alternatives

1. Receive the Report.
2. Receive the Report and provide further direction.
3. Not to Receive the Report.

Recommendation(s)

That the Electoral Area Services Committee recommend to the RDKB Board of Directors that the Staff Report from Bryan Teasdale, Manager of Infrastructure and Sustainability, regarding an assessment of the existing potable water distribution system for the unincorporated area of Anaconda, be received.

MMM Group Limited



Anaconda Water System Assessment

Prepared for: Regional District of Kootenay
Boundary

COMMUNITIES
TRANSPORTATION
BUILDINGS
INFRASTRUCTURE



August 2014

TABLE OF CONTENTS

1.0	EXECUTIVE SUMMARY	1
1.1	Background	1
1.2	Existing System.....	1
1.3	Recommendations	2
2.0	INTRODUCTION	3
2.1	Asset Management	3
3.0	EXISTING WATER SYSTEM	4
3.1	Water Supply and Storage	4
3.2	Water Distribution	4
3.3	Pipe Age and Condition.....	5
3.4	Water Usage.....	6
3.5	System Hydraulics	6
3.6	Fire Protection	7
4.0	RECOMMENDED INFRASTRUCTURE UPGRADES	8
5.0	OWNERSHIP	10
6.0	FINANCIAL PLAN.....	11
6.1	Utility User Fee	11
6.2	Capital Charge	12
6.2.1	Capital Charge Rate Structure Analysis	12
6.3	Rate Structure Summary	13
7.0	CONCLUSIONS	14
8.0	RECOMMENDATIONS	15

APPENDIX A – RATE STRUCTURE ANALYSIS

Regional District of Kootenay Boundary | Anaconda Water System Assessment
 MMM Group Limited | August 2014

i

STANDARD LIMITATIONS

This report was prepared by MMM Group Limited (MMM) for the account of The Regional District of Kootenay Boundary (the Client). The disclosure of any information contained in this report is the sole responsibility of the client. The material in this report reflects MMM's best judgment in light of the information available to it at the time of preparation. Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of such third parties. MMM accepts no responsibility for damages, if any, suffered by a third party as a result of decisions made or actions based on this report.

1.0 EXECUTIVE SUMMARY

1.1 Background

MMM Group Limited (MMM) has been retained by the Regional District of Kootenay Boundary (RDKB) to prepare an assessment of the existing potable water distribution system for the unincorporated area of Anaconda, British Columbia. The objective of this report is to provide a strategic short and long-term planning tool for identifying and implementing water system improvements.

The Master Plan analyzes the current deficiencies in the water system, and provides recommendations for infrastructure upgrades. The Master Plan also contains a financial review, which addresses the utility's ownership, revenue and expenditures, in order to ensure a financially stable utility. The financial review includes a rate structure analysis which compares various funding scenarios and a recommended rate structure.

In this respect, the financial plan can be thought of as a phased planning approach with Phase I being the current short-term capital improvement plan (0-5 year system needs) and Phase II encompassing longer (5-20 year) planning horizons.

1.2 Existing System

The area of Anaconda is located within the RDKB directly south of the City of Greenwood. The Anaconda water system provides service to 49 units and approximately 100 residents. Water supply is provided to the area from wells within Greenwood via a single-feed watermain. Based on the findings of the Greenwood Water Master Plan 2010 (Master Plan), it is understood that the Anaconda system is adequate to meet domestic supply demands but cannot provide the required fire flows. This is due to the single-feed watermain, as well as an undersized system composed of dead-end mains without internal looping. Furthermore, a lack of asset management and capital investment has led to the deterioration of the system over the last 50 years. Most of the infrastructure is nearing or exceeding its life expectancy. In addition, there are known health concerns with the materials of some of the pipes that are currently in place. As such, it is evident that this system is in need of significant upgrades.

Currently, the infrastructure of the Anaconda water system is not owned by any level of government. The system is operated and maintained by the City of Greenwood and funded (partially or wholly) by utility fees that are collected from the residents of Anaconda. Due to the fact that the Anaconda system has different associated costs than the Greenwood system, it is possible that Greenwood may be subsidizing Anaconda in some way. The intention of the proposed financial plan and ownership model is to treat the Anaconda system as a fully independent utility, which is to be fully reliant upon generating its own revenues to offset expenditures.

1.3 Recommendations

Based upon our review and analysis of the Anaconda Water System, MMM recommends that:

- ▶ An adequate level of Asset Management be employed now and in the future to ensure that the Anaconda water system is operating in a sustainable manner;
 - ▶ The RDKB take ownership of the Anaconda water system and enter into an agreement with Greenwood for Greenwood to provide operation and maintenance (O&M). RDKB is to collect suitable revenue from the residents of Anaconda to fund Anaconda's share of the O&M costs of the overall system and to ensure that long term capital reserves are established for replacement of the ageing infrastructure. This agreement should also specify a maximum volume of water that Greenwood is required to provide to Anaconda;
 - ▶ Infrastructure upgrades to the existing system be performed as outlined in this report. These upgrades include the following:
 - Replacement of the woodstave watermain crossing of Highway 3*;
 - Disconnecting the existing irrigation main from the potable system;
 - Replacement of the mainline watermain feed from Greenwood;
 - Installation of a water meter and check valve on the mainline feed from Greenwood;
 - Looping at the south end of the system; and
 - Eventual replacement of the remainder of the water system, which currently includes galvanized iron pipe, asbestos cement pipe and plastic (PVC/PE) pipe.

*MMM can find no records indicating that this wood stave pipe was ever replaced. Test pitting should be performed to confirm.
- Costs and timing of the upgrades are further discussed in the report;
- ▶ A revised rate structure be employed to ensure that the residents of Anaconda are wholly funding the O&M of the Anaconda system. A recommended rate structure is included in the report; and
 - ▶ The RDKB seek out senior government grant funding opportunities so that improvements can be completed with less financial impact to the Anaconda rate payers.

2.0 INTRODUCTION

The Regional District of Kootenay Boundary (RDKB) has retained MMM Group Limited (MMM) to prepare a Financial Master Plan to analyze the operation of the Anaconda water utility. The intention of the report is to ensure a financially sustainable water utility that provides an acceptable level of service to its customers. The subsequent sections of this report provide the following:

- ▶ A description of the existing water distribution system;
- ▶ An analysis of the system as it relates to current servicing levels;
- ▶ Recommendations for infrastructure upgrades;
- ▶ A review of historical revenue and expenditure for the water utility;
- ▶ An analysis of the ownership model for the water utility; and
- ▶ An analysis of the funding of future O&M and capital improvements.

2.1 Asset Management

The operation and maintenance of infrastructure is generally the responsibility of the local government that maintains ownership. The costs associated with this are primarily funded by utility fees and/or taxes. In the case of the Anaconda water system, the infrastructure is not owned by a local government; however it is operated and maintained by the City of Greenwood and funded (partially or wholly) by utility fees from the residents of Anaconda.

The concept of asset management, as it relates to municipal infrastructure, is a balance between providing an acceptable level of service while minimizing financial implications. This involves:

- ▶ The analysis of existing infrastructure as it relates to current and future servicing demands;
- ▶ The comparison of long term maintenance costs of ageing infrastructure versus the costs for replacement. At a certain point, the cost of ongoing maintenance will out-pace the replacement costs; and
- ▶ The balancing of revenues and expenditures for the system.

Based on our review and understanding of the existing Anaconda water system, it is evident that the majority of the infrastructure is undersized and nearing its life expectancy. We expect that replacements and/or upgrades will be required in the near future. The costs, timing, and funding of this work is discussed further in this report.

3.0 EXISTING WATER SYSTEM

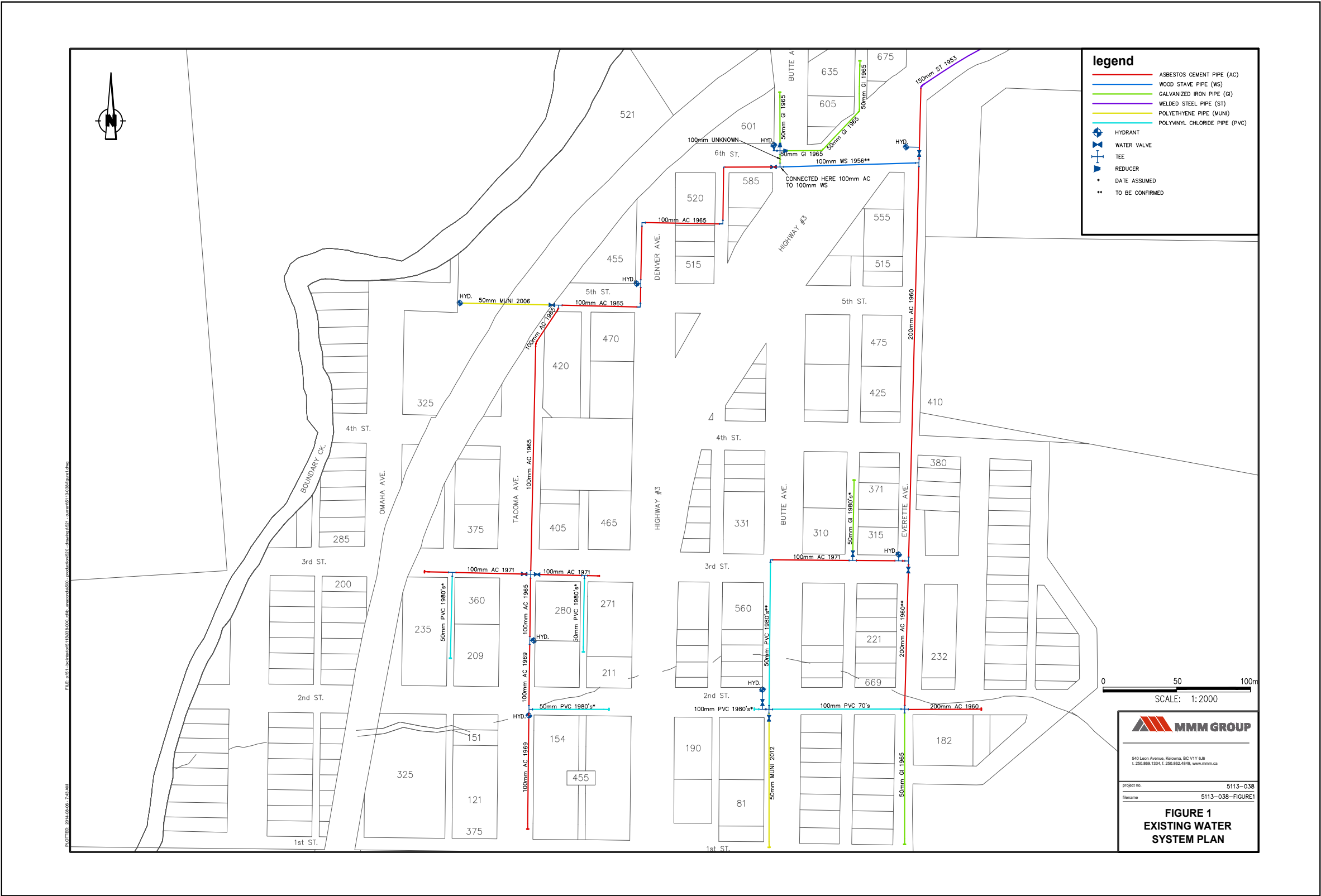
3.1 Water Supply and Storage

The water supply for Anaconda originates from three wells within the City of Greenwood, which is located directly to the north. According to Greenwood's Water Master Plan prepared by CTQ Consultants Ltd. for the City in 2010, the available water supply is adequate to meet the current demands. The Master Plan indicates that the water supply is currently untreated. Although there is minimal concern with water quality, there are recommendations in the Master Plan to implement better means of source protection. It is our understanding that the source protection improvements are currently being undertaken, beginning Fall of 2013. Water from the three wells is pumped to a concrete reservoir at the northeast end of the City. According to Greenwood's Water Master Plan, the reservoir does not have sufficient volume to provide equalization, emergency and fire flow storage. There is also believed to be a connection to the potable water system from an irrigation reservoir in the southeast corner of Anaconda. This cross-connection is a potential major health concern.

3.2 Water Distribution

Water is conveyed from the reservoir to the distribution network via a 250mm diameter watermain. An 800m long, single-feed, 150mm (6 inch) diameter watermain connects the south end of the Greenwood distribution network to the Anaconda system. The community of Anaconda is very sparsely populated, with most of the lots remaining undeveloped and unoccupied. Within Anaconda, the water distribution network is very simple, with two dead-end mains branching off the 150mm single-feed main. Each of these mains has additional dead-ends feeds branching off to service lots as necessary. As such, there is an obvious lack of looping within the Anaconda water system.

The majority of the infrastructure within the Anaconda system is undersized and nearing its life expectancy. Watermains range in size from 50mm (2 inches) to 200mm (8 inches). The original system is believed to have been constructed in 1905 and consisted of wood stave piping. This system has been completely removed or abandoned, and replaced with new pipes. The current system is composed primarily of asbestos cement pipe (AC), with some galvanized iron, welded steel, plastic (PVC/PE), as well as one section of woodstave pipe crossing Highway 3 at the north end of town. These pipes age from the mid-1950's to as recent as 2012. Figure 1 illustrates the existing Anaconda water system including pipe size, material, and date of installation. A detailed description of the existing watermains is provided in Section 3.3. Please note that the information presented is to the best of our understanding. Based on our review of the available records of watermain mapping, it is expected that there may be some missing information. MMM can find no records indicating that the remaining section of wood stave pipe was ever replaced. It is also believed that the section of 200mm AC watermain on Everett Avenue between 2nd Street and 3rd Street may have been removed. As a result it is expected that the 50mm PVC watermain on Butte Ave was extended between 2nd and 3rd. Test pitting should be performed to confirm all of the assumptions above. It is understood that there are existing gas mains within the Anaconda area. Utility locates should be performed prior to any construction.



3.3 Pipe Age and Condition

Below is a table based on our review of the existing Anaconda water system that summarizes pipe size, material and age:

Material	Size	Length	Date Installed
Asbestos Cement (AC)	200mm (8")	450	1960
Asbestos Cement (AC)	100mm (4")	585	1965
Asbestos Cement (AC)	100mm (4")	210	1971
Galvanized Iron (GI)	50mm (2")	210	1965
Galvanized Iron (GI)	50mm (2")	50	Mid-1980's
Polyethylene (Muni)	50mm (2")	160	2006-2012
Polyvinyl Chloride (PVC)	100mm (4")	110	1970's
Polyvinyl Chloride (PVC)	50mm (2")	280	1980**
Welded Steel (WSP)	150mm (6")	800*	1953
Wood Stave (WS)	100mm (4")	95	1956

*Mainline feed from Greenwood to Anaconda

** Date assumed

With the exception of the plastic pipe, and some newer galvanized iron pipe, the majority of the infrastructure in the Anaconda system is currently in the range of 50 years old. As noted in the Master Plan, the life expectancy of a water system is approximately 60 years; however, different materials and components will have varying expectancies. The table below illustrates the generally accepted life cycles of the materials observed in the Anaconda system.

Material	Life Expectancy
Asbestos Cement (AC)	60 years
Galvanized Iron (GI)	60 years
Polyethylene (Muni)	100 years
Polyvinyl Chloride (PVC)	100 years
Welded Steel (WSP)	80 years
Wood Stave (WS)	40 years

Based on the information above, the majority of the infrastructure in the Anaconda system is nearing or has exceeded its life expectancy. This would suggest that it likely requires replacement. The Master Plan suggests that there is likely significant leakage within the overall system and it is expected that this applies to the Anaconda area as well. Specifically, it is expected that the galvanized iron pipes within the system are a major source of leakage. Galvanized iron pipe is also not recommended for new watermain installations due to health concerns. As noted above, the majority of the Anaconda system is composed of Asbestos Cement (Transite) pipe. This material was used extensively for domestic water systems during the mid-1900's. Its use was discontinued in the 1980's due to health perceptions with asbestos-containing products.

3.4 Water Usage

The population of Anaconda is approximately 100 people. Based on the per capita flow rates applied in the Master Plan, the theoretical water demands for Anaconda are as follows:

- ▶ Average Daily Flow: 900 L/cap/day = 90 m³/day (19,800 gpd)
- ▶ Peak Daily Flow: 2,400 L/cap/day = 240 m³/day (52,800 gpd)
- ▶ Peak Hourly Flow: 4,000 L/cap/day = 17 m³/hour (3,670 gph)

There is currently no means of metering the amount of water that is supplied to the Anaconda system. Metering is a good way of determining usage and leakage, as well as encouraging conservation.

3.5 System Hydraulics

In our review of the system hydraulics, we have utilized the following generally accepted design criteria, which are in agreement with those used in the Master Plan:

- ▶ Pressure Ranges:
 - Maximum Pressure: 700 kPa (100 psi)
 - Minimum Residual Pressure under normal conditions: 280 kPa (40 psi)
 - Minimum Residual Pressure under fire flow conditions: 140 kPa (20 psi)
- ▶ Velocity Ranges:
 - Maximum Velocity under normal conditions: 2 m/s
 - Maximum Velocity under fire flow conditions: 4 m/s
- ▶ Fire Flow Requirements:
 - Single Family Residential: 60 L/s
 - Multi-family Residential, Commercial: 90 L/s
 - Industrial: 200 L/s
- ▶ Hydrant Spacing:
 - Residential: 150m
 - Commercial, Industrial: 90m

The overall water network is comprised of one pressure zone, in which Anaconda is located at the lower end of the elevation range. As such, static pressure within the network is highest within the Anaconda system (as much as 95 psi per the Master Plan). The Master Plan concludes that residential demands for Anaconda can be provided while maintaining acceptable pressure ranges. However, based on the water network model prepared for the Master Plan, sufficient fire flows cannot be provided to the Anaconda area while maintaining the required minimum residual pressure of 20 psi. It is expected that this is due primarily to the single-feed 150mm diameter watermain between Greenwood and Anaconda (approximately 800m). A lack of fire flows is further restricted by the small diameter, dead-end watermain within the Anaconda system.

3.6 Fire Protection

Anaconda is within the City of Greenwood's fire protection boundary, however both the storage and distribution system are inadequate with respect to providing fire protection to Anaconda. As such, it is expected that the residents of Anaconda would pay inflated home insurance premiums with respect to fire damage. The provision of adequate fire protection through infrastructure upgrades could result in significant savings for Anaconda residents on their insurance premiums.

4.0 RECOMMENDED INFRASTRUCTURE UPGRADES

Based on our review and understanding of the Anaconda water system, it is evident that the infrastructure is undersized and is nearing or has exceeded its life expectancy. In general, the system consists primarily of dead-end mains and does not have watermain looping to provide robustness and redundancy. A lack of looping can also create health concerns due to stagnation of water in dead-end mains. As per the Master Plan, it is expected that the system is sufficient to provide domestic water demands, but not the required fire flows. As such, it is recommended that the entire Anaconda system be replaced and/or upgraded, in the fullness of time. This can be done in stages as summarized below and as shown on Figure 2:

1. Replacement of the watermain crossing Highway 3: It is believed that the existing crossing is woodstave pipe, installed in 1956. This should be verified, and if confirmed the crossing should be replaced. This involves the elimination of approximately 95m of 100mm (4") woodstave pipe and replacement with a new, larger watermain (sizing to be determined by water modelling). As this is a Numbered Provincial Highway, the construction may have to be done by directional drilling. Assuming a unit rate of \$500/l.m. of watermain, this project would have an estimated cost of approximately \$47,500. This upgrade should be undertaken as soon as possible to avoid the possible disruption of service in the event that the existing woodstave pipe fails.
2. Replacement of the Galvanized Iron Pipe at the north end of Anaconda: This involves the elimination of approximately 125m of galvanized iron pipe and replacement with a new, larger main (sizing to be determined by water modelling). Utilizing the unit rate for replacement of \$300/l.m. of watermain (including pavement restoration) as established in the Master Plan, this project would have an estimated cost of approximately \$37,500. The existing galvanized iron pipe in this area is known to be in poor condition and has had issues in the past that resulted in disruption of service to the adjacent properties. As such, this upgrade should be undertaken as soon as possible.
3. Disconnection of the irrigation feed: As noted above, the cross-connection of the irrigation system with the potable water system is a major concern. This project involves locating this connection and removing it to separate the two systems. This upgrade has an estimated cost of \$15,000 and should be undertaken as soon as possible.
4. Replacement of the mainline water feed from Greenwood: This involves the elimination of approximately 800m of 150mm (6") welded steel pipe and replacement with a new, larger watermain (sizing to be determined by water modelling). Utilizing the unit rate for replacement of \$300/l.m. this project would have an estimated cost of approximately \$240,000. This main originates from within Greenwood and provides service to numerous units in Greenwood. As such, both Greenwood and Anaconda would receive benefit from an upgrade to this main and should share in the cost. The nature of this cost sharing will be determined between the RDKB and Greenwood. For the purpose of this report, the entire cost has been carried. This upgrade should be undertaken as soon as possible to provide a more robust water supply to the south end of



Greenwood and to Anaconda. It should be noted that this upgrade was identified and accounted for in the Greenwood Water Master Plan. The Master Plan recommended that the existing 150mm watermain be twinned with a 200mm watermain, which is another option to full replacement.

5. Installation of a water meter and check valve on the mainline feed from Greenwood: This should be done in order to monitor the amount of water being supplied to the Anaconda system and to protect the Greenwood system from any potential cross contamination from the Anaconda system. This project has an estimated cost of \$30,000 and could likely be undertaken in conjunction with the replacement of the mainline feed.
6. Looping at the south end of the system: This involves the construction of a new watermain across Highway 3 to connect the two dead-end mains and provide looping to the system. This watermain would be approximately 100m in length (sizing to be determined by water modelling) and should shortly follow the replacement of the mainline feed. As this is a crossing of a Numbered Provincial Highway, the construction may have to be done by directional drilling. Assuming a unit rate of \$500/l.m. of watermain, this project would have an estimated cost of approximately \$50,000.
7. Replacement of the remaining Galvanized Iron Pipe: This involves the elimination of approximately 135m of existing 50mm (2") galvanized iron pipe and replacement with new, larger watermain (sizing to be determined by water modelling). Using the rate of \$300/l.m. this project has an estimated cost of approximately \$40,500. As noted above, it is suspected that the galvanized iron pipe is a major contributor to leakage in the system and is a health concern. As such, this upgrade should be done as soon as possible.
8. Replacement of the Asbestos Cement Pipe: This involves the elimination of approximately 1,200m of asbestos cement pipe and replacement with new, larger watermain (sizing to be determined by water modelling). The asbestos cement pipe ranges in size from 100-200mm (4-8") and was constructed primarily in the 1960's. Using the rate of \$300/l.m. this project has an estimated cost of approximately \$360,000. This should be completed in the next 10 years, prior to the end of the life expectancy of the asbestos cement pipe.
9. Replacement of the remainder of the Anaconda water system: In the fullness of time, all of the existing watermain within the system should be replaced and upsized. The remainder of the watermain in the system are plastic (PVC/PE) and are well within their life expectancy. However, it is expected that these pipes are undersized with respect to providing fire flows. Based on a length of 550m for the remainder of the system, this upgrade would have an approximate cost of \$165,000. This should be completed within the next 20 years.

In undertaking the above noted upgrades, consideration should be given to replacing existing fire hydrants and providing additional hydrants to supplement the existing hydrant coverage and improve fire protection. It should be noted that all costs, itemized above, are in current (2014) dollars and include restoration. If watermain projects are paired with road upgrades it is expected that the cost of restoration (approximately half of the total cost) could be covered by the roads budget.

5.0 OWNERSHIP

As noted above, the City of Greenwood currently manages and operates the Anaconda water system but does not own it. The intention of this report is to identify the most suitable long-term ownership model for operating and maintaining the system in the future. Below is a description of various options for ownership models:

- ▶ **Status Quo (Anaconda Water Utility un-owned, operated and maintained by Greenwood):** This is the current ownership model in place in which the infrastructure is not owned by any level of government and all O&M is undertaken by Greenwood. In this model, costs for the Anaconda system are funded (partly or wholly) by utility fees paid by the residents of Anaconda to the City of Greenwood. Continuing with this model would be the simplest approach; however it is likely that the City of Greenwood is currently subsidizing Anaconda as administration relating to the water utility is funded by taxes paid by Greenwood residents.
- ▶ **Anaconda remains in the RDKB, but Greenwood takes ownership of the water system:** In this model, Greenwood would have ownership of the overall system, part of which would be located within a different district. Greenwood would continue to maintain and operate the system as it does today, with a more inherent responsibility. The potential for Greenwood to subsidize Anaconda would still exist.
- ▶ **Anaconda becomes part of Greenwood and Greenwood takes ownership of all infrastructure:** In this model, Greenwood would have ownership of the overall system and continue with O&M. The residents of Anaconda would pay water fees and taxes to Greenwood to fund O&M and administrative costs.
- ▶ **RDKB takes ownership of the Anaconda system and provides O&M:** In this model, RDKB would take ownership of the Anaconda system and would collect utility fees from the residents. The revenue from the utility fees would have to fully fund all O&M expenses for the Anaconda system, thus eliminating the subsidy issue. However, this would result in two different entities (RDKB and Greenwood) being responsible for O&M for different parts of the same system. Although this is may be an equitable solution, it is inherently more complicated, and would likely result in higher overall O&M costs.
- ▶ **RDKB takes ownership of the Anaconda system and enters into an agreement with Greenwood for Greenwood to provide O&M:** In this model, RDKB would take ownership of the system and would collect utility fees from the residents. The revenue from the utility fees would be used to pay Greenwood for Anaconda's share of the O&M and administration costs for the water system, thus eliminating the subsidy issue. This is a relatively simple and equitable approach and is our recommended ownership model. Under this ownership model, there would have to be an agreement in place between the two parties to outline the terms and conditions of the arrangement. This agreement should cover the various fees, and the responsibilities of each party. It should include a maximum volume of water that Greenwood is required to provide to Anaconda to protect against excessive growth in the future.

6.0 FINANCIAL PLAN

The objective of the financial plan is to ensure that the fee recovery strategy (water rates, taxes, etc.) is sufficient to fund the anticipated costs for the system (O&M, required infrastructure upgrades, and associated administrative costs). The financial analysis will provide a long-term projection (20 years) to address the financial impact of maintaining the Anaconda water system.

The intention of the analysis is to treat the Anaconda system as a fully independent utility, which is to be fully reliant upon generating its own revenue to offset expenditures. Currently, revenues collected from both areas jointly fund the overall system (Greenwood and Anaconda). Residents of Greenwood and Anaconda pay identical water utility rates, which cover O&M costs; however, the O&M costs for the two systems may not be proportionate to their respective revenues. In addition, it is understood that the administrative costs for managing the Anaconda utility are funded by taxes collected from Greenwood property owners. As such, it is likely that Greenwood is subsidizing the Anaconda water system.

Based upon the recommended ownership model discussed in Section 5.0, RDKB would collect utility fees from the residents of Anaconda to cover O&M of the system. Furthermore, an additional Capital Charge would be collected to fund capital expenditures. This two part rate structure is further discussed below.

6.1 Utility User Fee

As noted above, under the proposed ownership model, the RDKB would collect a utility fee from all users of the water system. This user fee would be made up of two components as follows:

- ▶ Base User Fee which is paid to Greenwood to cover:
 - O&M costs including the Anaconda system and Greenwood's 'trunk' supply system.
 - Administrative costs that are incurred by Greenwood in running the Anaconda system and Greenwood's 'trunk' supply system.
 - Capital expenditures for improvements to the Greenwood system that have some benefit to Anaconda.
- ▶ Allowance Amount which is retained by RDKB to cover its administrative costs.

The amount of the base user fee is to be determined by negotiation between Greenwood and the RDKB and should be based on the actual costs for operating and maintaining the Anaconda system and Greenwood's trunk supply system. Based upon Greenwood's 2013 utility rate of \$292.25 per unit, we expect the base fee to be in the range of \$300-\$350 per unit. We expect that an Allowance Amount of 15% of the Base User Fee (approximately \$50 per unit) should be sufficient to cover RDKB's administrative costs. This would result in a total user fee of \$350-\$400 per unit.

6.2 Capital Charge

In addition to the Base User Fee, the RDKB would collect a Capital Charge to cover the costs of capital expenditures. This charge would be applied to all parcels within the water utility service area, whether they currently draw water or not. In order to determine a suitable rate for the Capital Charge, a proposed phasing plan (including timing) has been applied to the recommended infrastructure upgrades outlined in Section 4.0. All costs are reported in current dollars.

TOTAL CAPITAL EXPENDITURES	\$985,500
Phase 1 - Year 2	\$100,000
1. Replacement of Watermain Crossing of Highway 3:	\$47,500
2. Replacement of Galvanized Iron Pipe at North end of Anaconda	\$37,500
3. Disconnection of the Irrigation Feed	\$15,000
Phase 2 - Year 4	\$270,000
4. Replacement of Mainline Watermain Feed from Greenwood:	\$240,000
5. Installation of Water Meter on Mainline Feed:	\$30,000
Phase 3 - Year 6	\$50,000
6. Looping at the South End of the System:	\$50,000
Phase 4 - Year 8	\$40,500
7. Replacement of Galvanized Iron Pipe:	\$40,500
Phase 5 - Year 10 to 16	\$360,000
8. Replacement of Asbestos Cement Pipe:	\$360,000
Phase 6 - Year 18 to 20	\$165,000
Replacement of Remainder of Anaconda System:	\$165,000

As determined above, the estimated total cost of the recommended upgrades is \$985,000. Section 6.2.1 provides a Rate Structure Analysis for the capital charge.

6.2.1 Capital Charge Rate Structure Analysis

Using the cost estimates and timing of capital improvements as established above, a financial analysis was undertaken to determine a suitable rate structure to fund capital expenditures for the Anaconda water system. This analysis is included in Appendix A. The analysis compares the capital charge that would be required for various levels of funding from the capital program (ranging from 33% to 100%). Other sources of revenue such as grants from senior levels of government would be required to supplement the capital program in all cases other than the 100% funding scenario.

Based on input from RDKB staff, it is expected that the RDKB would borrow 100% of the required funds, up front, and repay the loan over the 20 year period. An annual inflation rate of 3% has been applied to the

cost estimates and the same escalation rate has been assumed for the capital charge. The minimum revenue required has been determined in order to ensure that the RDKB does not have to borrow additional money beyond the initial loan.

Based on review of recent billing records, we understand that there are currently 49 water utility users. By establishing a service area and eliminating all Crown owned land, we have determined that there are an additional 24 parcels that can be readily serviced. This results in a total of 73 parcels that will be required to pay the capital charge. Please refer to Figure 3 for further clarification on the service area. Dividing the total revenue required by the number of parcels results in the capital charge amount per parcel in the first year, as summarized below.

Funding Structure	2014 Capital Charge	
	Total	Per Unit
100% Funding	\$75,645.57	\$1,036.25
66% Funding	\$49,926.74	\$683.93
50% Funding	\$37,823.29	\$518.13
33% Funding	\$24,963.37	\$341.96

Based on input from the RDKB, it is recommended that the Capital Charge be determined based on the 100% Funding Structure. This is the most conservative approach and does not rely on external revenue sources to fund capital improvements. As such, a 2014 Capital Charge of \$1,040 is recommended.

6.3 Rate Structure Summary

As discussed above, the following two part rate structure is recommended for 2014:

- ▶ Utility User Fee: \$350-\$400
- ▶ Capital Charge: \$1,040

All water users would therefore pay a total fee of \$1,390-\$1,440 in 2014. Any additional parcels within the service area that do not draw water would have to pay the Capital Charge only.

If a property owner outside of the service area were to request water service, they would be required to pay a fee to cover the cost required for the connection and for the property's share of capital expenditures.



7.0 CONCLUSIONS

Proper Asset Management and a well-guided Financial Plan are essential to providing sustainable operation and maintenance of a municipal infrastructure system. Currently, the Anaconda water system is not owned by a local government and is not being financially managed in the most suitable fashion. The City of Greenwood operates and maintains the overall system (Anaconda and Greenwood) utilizing revenues collected from both areas. This arrangement raises the concern that Greenwood is subsidizing the Anaconda System. Having examined Greenwood's and Anaconda's financial records, it is MMM's opinion that the tax payers of Greenwood are paying the administrative costs for operating and maintaining the Anaconda water system. As such, a new model for ownership, operation, maintenance and funding of the Anaconda system is required.

Based on our review of the existing Anaconda water system, it is evident that it is in need of significant upgrades. The system has only one feed and consists of numerous dead-end mains with no internal looping. The majority of the pipes in the system are undersized and nearing or beyond their life expectancy. All of these factors result in a system that lacks redundancy, cannot provide sufficient fire flow and is likely to have issues with water quality and leakage. As such, it is expected that the entire system will need to be replaced and upgraded within the next 20 years. This can be done in phases, based on urgency and available funding.

8.0 RECOMMENDATIONS

Based upon our review and analysis of the existing Anaconda water system with respect to O&M, capital replacement, funding and ownership, we recommend that:

- ▶ An adequate level of Asset Management be employed now and in the future to ensure that the Anaconda water system is operating in a sustainable manner;
- ▶ The RDKB take ownership of the Anaconda water system and enter into an agreement with Greenwood for Greenwood to provide O&M. RDKB is to collect suitable revenue from the residents to fund Anaconda's share of the O&M costs and long term capital replacement costs of the Anaconda system. This agreement should also specify a maximum volume of water that Greenwood is required to provide to Anaconda;
- ▶ Infrastructure upgrades to the existing system be performed as outlined in Section 4.0 and Section 6.0 (or as urgency and funding dictate);
- ▶ The rate structure outlined in Section 6.0 be employed to ensure that the residents of Anaconda are wholly funding the O&M of the Anaconda system; and
- ▶ The RDKB seek out senior government grant funding opportunities so that improvements can be completed with less financial impact to the Anaconda rate payers.

APPENDIX A – RATE STRUCTURE ANALYSIS

MMM GROUP

06/08/2014

Project: Anaconda Water System Assessment
Project No: 5113-038-000

Summary of Rate Structure Analysis

2014 Rates:

Funding Structure	User Fee			Capital Charge	TOTAL
	Base	Allowance	Total		
100% Funding	\$ 300.00	\$ 45.00	\$ 345.00	\$ 1,036.25	\$ 1,381.25
66% Funding	\$ 300.00	\$ 45.00	\$ 345.00	\$ 683.93	\$ 1,028.93
50% Funding	\$ 300.00	\$ 45.00	\$ 345.00	\$ 518.13	\$ 863.13
33% Funding	\$ 300.00	\$ 45.00	\$ 345.00	\$ 341.96	\$ 686.96

Notes:

1. The Base User Fee is to be collected and paid to Greenwood to cover operation, maintenance, and administration for the overall system and for capital expenditures for improvements to the Greenwood system that have some benefit to Anaconda. This amount is to be determined by negotiation between Greenwood and the RDKB and should be based on the actual costs for operating and maintaining the Anaconda system and Greenwood's trunk supply system. For our purposes it has been assumed to be \$300 based on Greenwood's 2013 water utility rate of \$292.25 per unit.
2. An Allowance of 15% has been added to the base user fee and is to be retained by the RDKB to cover administrative costs.
3. The Capital Charge is to cover capital expenditures for improvements to the Anaconda system. An annual rate increase of 3% has been assumed.

Project: Anaconda Water System Assessment
Project No: 5113-038-000

Rate Structure Analysis

100% Funding Rate Structure Analysis

Amount Borrowed (Year 1): \$1,248,248.09

	Year																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Opening Reserve Balance	\$1,248,248.09	\$1,232,046.39	\$1,114,952.06	\$1,102,024.27	\$796,338.52	\$785,112.03	\$718,363.80	\$711,542.64	\$657,553.16	\$655,624.75	\$186,833.51	\$186,033.76	\$188,275.89	\$193,681.81	\$202,377.42	\$214,492.66	\$230,161.72	\$249,523.13	\$0.00	\$24,452.47
Less Loan Repayment	-\$104,330.76	-\$104,330.76	-\$104,330.76	-\$104,330.76	-\$104,330.76	-\$104,330.76	-\$104,330.76	-\$104,330.76	-\$104,330.76	-\$104,330.76	-\$104,330.76	-\$104,330.76	-\$104,330.76	-\$104,330.76	-\$104,330.76	-\$104,330.76	-\$104,330.76	-\$104,330.76	-\$104,330.76	-\$104,330.76
Less Capital Expenditures	\$0.00	-\$103,000.00	\$0.00	-\$295,036.29	\$0.00	-\$57,963.70	\$0.00	-\$49,809.89	\$0.00	-\$469,718.35	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	-\$272,719.86	\$0.00	\$0.00
Plus Interest Earned	\$12,482.48	\$12,320.46	\$11,149.52	\$11,020.24	\$7,963.39	\$7,851.12	\$7,183.64	\$7,115.43	\$6,575.53	\$6,556.25	\$1,868.34	\$1,860.34	\$1,882.76	\$1,936.82	\$2,023.77	\$2,144.93	\$2,301.62	\$2,495.23	\$0.00	\$244.52
Plus Rates Collected	\$75,646.57	\$77,915.97	\$80,253.45	\$82,661.05	\$85,140.89	\$87,695.11	\$90,325.97	\$93,035.74	\$95,826.82	\$98,701.62	\$101,662.67	\$104,712.55	\$107,853.93	\$111,089.54	\$114,422.23	\$117,854.90	\$121,390.55	\$125,032.26	\$128,783.23	\$132,646.73
Closing Reserve Balance	\$1,232,046.39	\$1,114,952.06	\$1,102,024.27	\$796,338.52	\$785,112.03	\$718,363.80	\$711,542.64	\$657,553.16	\$655,624.75	\$186,833.51	\$186,033.76	\$188,275.89	\$193,681.81	\$202,377.42	\$214,492.66	\$230,161.72	\$249,523.13	\$0.00	\$24,452.47	\$53,012.96

Number of Parcels: 73
Charge per Parcel (2014): \$1,036.25

66% Funding Rate Structure Analysis

Amount Borrowed (Year 1): \$823,843.74

	Year																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Opening Reserve Balance	\$823,843.74	\$813,150.61	\$735,868.36	\$727,336.02	\$525,583.42	\$518,173.94	\$474,120.11	\$469,618.14	\$433,985.09	\$432,712.34	\$123,310.12	\$122,782.28	\$124,262.09	\$127,830.00	\$133,569.09	\$141,565.16	\$151,906.74	\$164,685.26	-\$0.00	\$16,138.63
Less Loan Repayment	-\$68,858.30	-\$68,858.30	-\$68,858.30	-\$68,858.30	-\$68,858.30	-\$68,858.30	-\$68,858.30	-\$68,858.30	-\$68,858.30	-\$68,858.30	-\$68,858.30	-\$68,858.30	-\$68,858.30	-\$68,858.30	-\$68,858.30	-\$68,858.30	-\$68,858.30	-\$68,858.30	-\$68,858.30	-\$68,858.30
Less Capital Expenditures	\$0.00	-\$67,980.00	\$0.00	-\$194,723.95	\$0.00	-\$38,256.04	\$0.00	-\$32,874.53	\$0.00	-\$310,014.11	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	-\$179,995.11	\$0.00	\$0.00
Plus Interest Earned	\$8,238.44	\$8,131.51	\$7,358.68	\$7,273.36	\$5,255.83	\$5,181.74	\$4,741.20	\$4,696.18	\$4,339.85	\$4,327.12	\$1,233.10	\$1,227.82	\$1,242.62	\$1,278.30	\$1,335.69	\$1,415.65	\$1,519.07	\$1,646.85	-\$0.00	\$161.39
Plus Rates Collected	\$49,926.74	\$51,424.54	\$52,967.28	\$54,556.30	\$56,192.98	\$57,878.77	\$59,615.14	\$61,403.59	\$63,245.70	\$65,143.07	\$67,097.36	\$69,110.28	\$71,183.59	\$73,319.10	\$75,518.67	\$77,784.23	\$80,117.76	\$82,521.29	\$84,996.93	\$87,546.84
Closing Reserve Balance	\$813,150.61	\$735,868.36	\$727,336.02	\$525,583.42	\$518,173.94	\$474,120.11	\$469,618.14	\$433,985.09	\$432,712.34	\$123,310.12	\$122,782.28	\$124,262.09	\$127,830.00	\$133,569.09	\$141,565.16	\$151,906.74	\$164,685.26	-\$0.00	\$16,138.63	\$34,988.55

Number of Parcels: 73
Charge per Parcel (2014): \$683.93

50% Funding Rate Structure Analysis

Amount Borrowed (Year 1): \$624,124.05

	Year																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Opening Reserve Balance	\$624,124.05	\$616,023.19	\$557,476.03	\$551,012.14	\$398,169.26	\$392,556.02	\$359,181.90	\$355,771.32	\$328,776.58	\$327,812.38	\$93,416.76	\$93,016.88	\$94,137.94	\$96,840.91	\$101,188.71	\$107,246.33	\$115,080.86	\$124,761.56	\$0.00	\$12,226.23
Less Loan Repayment	-\$52,165.38	-\$52,165.38	-\$52,165.38	-\$52,165.38	-\$52,165.38	-\$52,165.38	-\$52,165.38	-\$52,165.38	-\$52,165.38	-\$52,165.38	-\$52,165.38	-\$52,165.38	-\$52,165.38	-\$52,165.38	-\$52,165.38	-\$52,165.38	-\$52,165.38	-\$52,165.38	-\$52,165.38	-\$52,165.38
Less Capital Expenditures	\$0.00	-\$51,500.00	\$0.00	-\$147,518.15	\$0.00	-\$28,981.85	\$0.00	-\$24,904.95	\$0.00	-\$234,859.17	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	-\$136,359.93	\$0.00	\$0.00
Plus Interest Earned	\$6,241.24	\$6,160.23	\$5,574.76	\$5,510.12	\$3,981.69	\$3,925.56	\$3,591.82	\$3,557.71	\$3,287.77	\$3,278.12	\$934.17	\$930.17	\$941.38	\$968.41	\$1,011.89	\$1,072.46	\$1,150.81	\$1,247.62	\$0.00	\$122.26
Plus Rates Collected	\$37,823.29	\$38,957.99	\$40,126.73	\$41,330.53	\$42,570.44	\$43,847.56	\$45,162.98	\$46,517.87	\$47,913.41	\$49,350.81	\$50,831.34	\$52,356.28	\$53,926.96	\$55,544.77	\$57,211.12	\$58,927.45	\$60,695.27	\$62,516.13	\$64,391.61	\$66,323.36
Closing Reserve Balance	\$616,023.19	\$557,476.03	\$551,012.14	\$398,169.26	\$392,556.02	\$359,181.90	\$355,771.32	\$328,776.58	\$327,812.38	\$93,416.76	\$93,016.88	\$94,137.94	\$96,840.91	\$101,188.71	\$107,246.33	\$115,080.86	\$124,761.56	\$0.00	\$12,226.23	\$26,506.48

Number of Parcels: 73
Charge per Parcel (2014): \$518.13

33% Funding Rate Structure Analysis

Amount Borrowed (Year 1): \$411,921.87

	Year																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Opening Reserve Balance	\$411,921.87	\$406,575.31	\$367,934.18	\$363,668.01	\$262,791.71	\$259,086.97	\$237,060.05	\$234,809.07	\$216,992.54	\$216,356.17	\$61,655.06	\$61,391.14	\$62,131.04	\$63,915.00	\$66,784.55	\$70,782.58	\$75,953.37	\$82,342.63	-\$0.00	\$8,069.31
Less Loan Repayment	-\$34,429.15	-\$34,429.15	-\$34,429.15	-\$34,429.15	-\$34,429.15	-\$34,429.15	-\$34,429.15	-\$34,429.15	-\$34,429.15	-\$34,429.15	-\$34,429.15	-\$34,429.15	-\$34,429.15	-\$34,429.15	-\$34,429.15	-\$34,429.15	-\$34,429.15	-\$34,429.15	-\$34,429.15	-\$34,429.15
Less Capital Expenditures	\$0.00	-\$33,990.00	\$0.00	-\$97,361.98	\$0.00	-\$19,128.02	\$0.00	-\$16,437.26	\$0.00	-\$155,007.05	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	-\$89,997.55	\$0.00	\$0.00
Plus Interest Earned	\$4,119.22	\$4,065.75	\$3,679.34	\$3,636.68	\$2,627.92	\$2,590.87	\$2,370.60	\$2,348.09	\$2,169.93	\$2,163.56	\$616.55	\$613.91	\$621.31	\$639.15	\$667.85	\$707.83	\$759.53	\$823.43	-\$0.00	\$80.69
Plus Rates Collected	\$24,963.37	\$25,712.27	\$26,483.64	\$27,278.15	\$28,096.49	\$28,939.39	\$29,807.57	\$30,701.80	\$31,622.85	\$32,571.54	\$33,548.68	\$34,555.14	\$35,591.80	\$36,659.55	\$37,759.34	\$38,892.12	\$40,058.88	\$41,260.65	\$42,498.47	\$43,773.42
Closing Reserve Balance	\$406,575.31	\$367,934.18	\$363,668.01	\$262,791.71	\$259,086.97	\$237,060.05	\$234,809.07	\$216,992.54	\$216,356.17	\$61,655.06	\$61,391.14	\$62,131.04	\$63,915.00	\$66,784.55	\$70,782.58	\$75,953.37	\$82,342.63	-\$0.00	\$8,069.31	\$17,494.28

Number of Parcels: 73
Charge per Parcel (2014): \$341.96

MMM GROUP

06/08/2014

Project: Anaconda Water System Assessment
Project No: 5113-038-000

Rate Structure Analysis - Parameters and Assumptions

Capital Improvements

Year	Cost	
	Current	Inflated
1	\$ -	\$ -
2	\$ 100,000	\$ 103,000
3	\$ -	\$ -
4	\$ 270,000	\$ 295,036
5	\$ -	\$ -
6	\$ 50,000	\$ 57,964
7	\$ -	\$ -
8	\$ 40,500	\$ 49,810
9	\$ -	\$ -
10	\$ 360,000	\$ 469,718
11	\$ -	\$ -
12	\$ -	\$ -
13	\$ -	\$ -
14	\$ -	\$ -
15	\$ -	\$ -
16	\$ -	\$ -
17	\$ -	\$ -
18	\$ 165,000	\$ 272,720
19	\$ -	\$ -
20	\$ -	\$ -
Total:	\$ 985,500	\$ 1,248,248

Inflation Rate for Improvements: 3.0%

Interest Rates

Interest Rate on Long Term Loan: 5.0%
Interest Rate on Short Term Loan: 2.5%
Interest Earned on Reserve Funds: 1.0%

Capital Charge

Annual Rate Increase: 3.0%

Number of Parcels for Capital Charge:

Currently Receiving Service:	49
Additional within Service Area	24
Total:	73

User Fee

Base Fee to Greenwood: \$ 300.00
Allowance amount to RDKB: 15%

		MEMORANDUM	
TO:	Director Ali Grieve, Area "A"		
FROM:	Beth Burget - Financial Services Manager		
RE:	Grants-In-Aid 2014		
Balance Remaining from 2013			\$ 9,860.00
2014 Requisition			\$ 31,467.00
Less Board Fee 2014			\$ (1,167.00)
Total Funds Available:			\$ 40,160.00
RESOLUTION #	DATE	RECIPIENT	AMOUNT
49-14	Jan-14	CFDC - Greater Trail - Junior Dragons' Den	\$ 500.00
74-14	Feb-14	J.L. Crowe - In Memory of Fallen Firefighters - scholarship	\$ 500.00
74-14		B.V. Communities In Bloom	\$ 2,500.00
110-14	Mar-14	BV Cross Country Ski Club - equipment garage floor repair	\$ 500.00
110-14		Village of Montrose - Montrose Family Fun Days	\$ 500.00
110-14		B.V. NiteHawks Hockey Club - jersey advertising	\$ 1,500.00
110-14		BV Golf & Recreation Society - replace bridge approaches	\$ 3,000.00
110-14		Champion Lakes Golf Course - tee box advertising	\$ 224.00
110-14		Beaver Valley May Days - sponsorship	\$ 4,000.00
154-14	Apr-14	Western Financial Group - fund raising	\$ 100.00
154-14		Father's Day Charity Golf - Golf Hole sponsorship	\$ 600.00
154-14		BV Citizen of the Year - award & reception	\$ 100.00
154-14		B.V. Age Friendly Committee - promotion of programs	\$ 1,000.00
154-14		BV Lanes - Marketing & promotions	\$ 500.00
154-14		Zone 6 - BC Seniors Games - participation in Langley	\$ 400.00
154-14		Bike to Work - Week of May 26 - June 1	\$ 1,000.00
154-14		KBRH Health Foundation - Critical Care Campaign	\$ 1,000.00
154-14		LCCDTS - 2014 support	\$ 1,584.00
190-14	May-14	J.L. Crowe Grad Committee - grad activities	\$ 500.00
190-14		Take A Hike Youth at Risk Foundation - support for program	\$ 1,000.00
310-14	Aug-14	City of Trail Communities in Bloom- provincial conference	\$ 500.00
Total			\$ 21,508.00
BALANCE REMAINING			\$ 18,652.00

C:\Users\lking\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.Outlook\KDQKMJOK\2014 Grant in Aids.xlsx

03/09/2014

**Regional District of Kootenay Boundary
Status Report - Gas Tax Agreement
August 29, 2014**

**ELECTORAL AREA 'A'**

	Description	Status	Allocation	
--	-------------	--------	------------	--

Revenue:

Per Capital Allocation of Gas Tax Grant:

Allocation to Dec 31, 2007	Received	\$ 96,854.94
Allocation to Dec 31, 2008	Received	46,451.80
Allocation to Dec 31, 2009	Received	91,051.00
Allocation to Dec 31, 2010	Received	89,796.00
Allocation to Dec 31, 2011	Received	89,788.04
Allocation to Dec 31, 2012	Received	87,202.80
Allocation to Dec 31, 2013	Received	87,168.00
Allocation to Dec 31, 2014	Estimated	84,209.00

TOTAL AVAILABLE FOR PROJECTS

\$ 672,521.58

Expenditures:

Approved Projects:

2009	Columbia Gardens Water Upgrade	Completed	\$ 250,000.00	v
2011	South Columbia SAR Hall	Completed	2,665.60	
451-13	Beaver Valley Arena	Approved	69,000.00	
26-14	LWMP Stage II Planning Process	Funded	805.88	

TOTAL SPENT OR COMMITTED

\$ 322,471.48

TOTAL REMAINING

\$ 350,050.10

**Regional District of Kootenay Boundary
Status Report - Gas Tax Agreement
August 29, 2014**

ELECTORAL AREA 'B' / LOWER COLUMBIA/OLD GLORY

	Description	Status	Allocation	
--	-------------	--------	------------	--

Revenue:

Per Capital Allocation of Gas Tax Grant:

Allocation to Dec 31, 2007	Received	\$	69,049.93
Allocation to Dec 31, 2008	Received		33,116.46
Allocation to Dec 31, 2009	Received		64,912.00
Allocation to Dec 31, 2010	Received		64,017.00
Allocation to Dec 31, 2011	Received		64,010.00
Allocation to Dec 31, 2012	Received		65,936.00
Allocation to Dec 31, 2013	Received		65,907.00
Allocation to Dec 31, 2014	Estimated		63,670.00

TOTAL AVAILABLE FOR PROJECTS

\$ 490,618.39

Expenditures:

Approved Projects:

8547	GID - Groundwater Protection Plan	Completed	\$	10,000.00
11206	GID - Reducing Station (Advance)2008	Completed		16,000.00
2009	GID - Reducing Station (Balance)	Completed		14,000.00
2009	GID - Upgrades to SCADA	Completed		22,595.50
2009	Casino Recreation - Furnace	Completed		3,200.00
Phase 1	GID - Pipe Replacement/Upgrades	Completed		60,000.00
Phase 2	Looping/China Creek	Completed		18,306.25
2012	Rivervale Water SCADA Upgrade	Completed		21,570.92
2013	Rossland Trail Country Club (Pump)	Funded		20,000.00
261-14	Rivervale Water & Streetlighting Utility	Approved		20,000.00
262-14	Genelle Imp. District - Water Reservoir	Approved		125,000.00
263-14	Oasis Imp. District - Water Well	Approved		35,000.00

TOTAL SPENT OR COMMITTED

\$ 365,672.67

TOTAL REMAINING

\$ 124,945.72

**Regional District of Kootenay Boundary
Status Report - Gas Tax Agreement
August 29, 2014**



ELECTORAL AREA 'C' / CHRISTINA LAKE

	Description	Status	Allocation	
--	-------------	--------	------------	--

Revenue:

Per Capital Allocation of Gas Tax Grant:

Allocation to Dec 31, 2007	Received	\$ 69,877.75
Allocation to Dec 31, 2008	Received	33,513.49
Allocation to Dec 31, 2009	Received	65,690.00
Allocation to Dec 31, 2010	Received	64,785.00
Allocation to Dec 31, 2011	Received	64,778.00
Allocation to Dec 31, 2012	Received	65,746.00
Allocation to Dec 31, 2013	Received	65,718.00
Allocation to Dec 31, 2014	Estimated	63,488.00

TOTAL AVAILABLE FOR PROJECTS

\$ 493,596.24

Expenditures:

Approved Projects:

11207	Christina Lake Community and Visitors Centre	Advanced	\$ 50,000.00
2009	CLC&VC	Advanced	25,000.00
2010	CLC&VC	Advanced	25,000.00
2010	Living Machine	Advanced	80,000.00
2010	Kettle River Watershed Study	Remaining	3,040.14
2012	Kettle River Watershed Study	Funded	5,000.00
2013	Kettle River Watershed Study	Funded	9,959.86
417-13	Kettle River Watershed (Granby Wilderness Society)	Funded	2,000.00
2011	Solar Aquatic System Upgrades	Completed	7,325.97
418-13	Christina Lake Chamber of Commerce (Living Arts Centre Sedum/Moss Planting Medium)	Approved	20,697.00
106-14	Christina Gateway Community Development Association	75% Funded	20,000.00
264-14	Christina Lake Solar Aquatic System Upgrades	Approved	5,000.00

TOTAL SPENT OR COMMITTED

\$ 253,022.97

TOTAL REMAINING

\$ 240,573.27

**Regional District of Kootenay Boundary
Status Report - Gas Tax Agreement
August 29, 2014**

**ELECTORAL AREA 'D' / RURAL GRAND FORKS**

	Description	Status	Allocation	
--	-------------	--------	------------	--

Revenue:

Per Capital Allocation of Gas Tax Grant:

Allocation to Dec 31, 2007	Received	\$ 154,656.26
Allocation to Dec 31, 2008	Received	74,173.40
Allocation to Dec 31, 2009	Received	145,389.00
Allocation to Dec 31, 2010	Received	143,385.00
Allocation to Dec 31, 2011	Received	143,370.00
Allocation to Dec 31, 2012	Received	150,634.00
Allocation to Dec 31, 2013	Received	150,571.00
Allocation to Dec 31, 2014	Estimated	145,460.00

TOTAL AVAILABLE FOR PROJECTS

\$ 1,107,638.66

Expenditures:

Approved Projects:

8549	City of GF - Airshed Quality Study	Completed	\$ 5,000.00
2010	Kettle River Watershed Study	Remaining	23,100.34
2010	Kettle River Water Study	Funded	25,000.00
2012-1	Kettle River Watershed Study	Funded	15,000.00
2012-2	Kettle River Watershed Study	Funded	10,000.00
2010	Boundary Museum Society - Phase 1	Approved	13,000.00
2011	Boundary Museum Society - Phase 2	Completed	30,000.00
2012	Boundary Museum Society - Phase 2	Completed	8,715.00
2011	Phoenix Mnt Alpine Ski Society	Completed	63,677.00
2012	Phoenix Mnt Alpine Ski Society	Completed	1,323.00
2012	Phoenix Mnt Alpine Ski Society	Additional	12,600.00
2012	Grand Forks Curling Rink	Completed	11,481.00
2013	Kettle River Watershed Study	Funded	24,899.66
417-13	Kettle River Watershed (Granby Wilderness)	Funded	2,000.00
27-14	Boundary Museum (Solar)	Funded	77,168.50
2014	Kettle River Watershed Study	Funded	309.47

TOTAL SPENT OR COMMITTED

\$ 323,273.97

TOTAL REMAINING

\$ 784,364.69

29/08/2014

J:\gg\GGardner\My Documents\Gas Tax Agreement.xls

**Regional District of Kootenay Boundary
Status Report - Gas Tax Agreement
August 29, 2014**

E

ELECTORAL AREA 'E' / WEST BOUNDARY

	Description	Status	Allocation	
--	-------------	--------	------------	--

Revenue:

Per Capital Allocation of Gas Tax Grant:

Allocation to Dec 31, 2007	Received	\$ 108,785.28
Allocation to Dec 31, 2008	Received	52,173.61
Allocation to Dec 31, 2009	Received	102,266.68
Allocation to Dec 31, 2010	Received	100,857.14
Allocation to Dec 31, 2011	Received	100,846.00
Allocation to Dec 31, 2012	Received	93,112.00
Allocation to Dec 31, 2013	Received	93,074.00
Allocation to Dec 31, 2014	Estimated	89,914.00

TOTAL AVAILABLE FOR PROJECTS

\$ 741,028.71

Expenditures:

Approved Projects:

283	Greenwood Solar Power Project	Completed	\$ 3,990.00	
8548	Kettle Valley Golf Club	Completed	20,000.00	
8546	West Boundary Elementary School Nature Park	Completed	13,500.00	} 28,500.00
8546E	2010 WBES - Nature Park (expanded)	Completed	15,000.00	
2009/10	Kettle Wildlife Association (heatpump)	Completed	35,000.00	
2010	Rock Creek Medical Clinic (windows/doors)	Completed	18,347.56	
2010	Kettle Valley Golf Club (Pumps)	Completed	24,834.63	} 41,368.00
2011	Kettle Valley Golf Club (Pumps)	Completed	10,165.37	
2011	Kettle Valley Golf Club (Pumps)	Completed	6,368.00	
2010	Rock Creek Fairground Facility U/G	Completed	14,235.38	} 44,000.00
2011	Rock Creek Fairground Facility U/G	Completed	22,764.62	
2011	Rock Creek Fairground Facility U/G	Completed	7,000.00	
2010/11	Beaverdell Community Hall Upgrades	Completed	47,000.00	
2010	Kettle River Watershed Study	Remaining	70,000.00	
2010	Kettle River Water Study	Funded	25,000.00	
2012-1	Kettle River Watershed Study	Funded	15,000.00	
2012-2	Kettle River Watershed Study	Funded	40,000.00	
2013	Kettle River Watershed Study	Funded	49,799.31	
417-13	Kettle River Watershed (Granby Wilderness Society)	Funded	2,000.00	
145-14	Rock Creek & Boundary Fair Association (Electrical Lighting & Equipment Upgrade)	75% Funded	35,122.00	
2014	Kettle River Watershed Study	Funded	618.95	

TOTAL SPENT OR COMMITTED

\$ 475,745.82

TOTAL REMAINING

\$ 265,282.89

29/08/2014

J:\gg\GGardner\My Documents\Gas Tax Agreement.xls