

NOTICE: That a regular meeting of the Public Works and Development Committee will be held at the District Hall, 4936 Barriere Town Road, Barriere, B.C. on January 19, 2010 at 6:30 p.m. for the transaction of business listed below.

Wayne Vollrath, Chief Administrative Officer

AGENDA

1. ADOPTION OF AGENDA

That Council approve the January 19, 2010 Public Works and Development Committee Agenda.

2. WATER UTILITY

- a. Status of wells – No new information to report
- b. 2009 Water consumption – Table attached
- c. 2009 water main breaks – Report to council attached
- d. Water utility 2010 budget – 2009 budget attached

Budget items to be considered

- i. Installation of District SCADA system
 - ii. Fire Hydrant replacement program
 - iii. Water use rates
 - iv. Purchase of backhoe
 - v. Mileage for water utility employees
 - vi. Hydrant needs to be installed at Bradford and Barriere Town Road.
- e. Water conservation plan (policy)

The District will need to have in place a water conservation plan if we want to receive future Federal and Provincial Infrastructure Grants.
 - f. Building Canada Fund – Project

3. ENVIRONMENTAL DEVICES 2010 BUDGET
(Garbage Collection)

This section will be renamed Public Works to encompass other items.

- a. Road assessment
 - i. CTQ Part 1 \$4,000 – overview
 - Part 11 further consultation cost
 - ii. Focus \$13,000
 - iii. TRUE Consulting \$7800
- b. Line painting for 2010
- c. Leonie Creek Dam

The Province is requiring a Dam Safety Review to be done by a qualified professional Engineer.

4. TRANSPORTATION SERVICES 2010 BUDGET

5. SEPTAGE

With the closing of the Barriere Dump there will be no septage disposal site in the Barriere area.

The TNRD Staff wants to meet with the District to discuss the potential development of a new facility.

6. CORRESPONDENCE

- a. Letter from John Slater, MLA, Parliamentary Secretary for Water Supply and Allocation

7. TOWNS FOR TOMORROW – Shelf Ready Project

8. OTHER BUSINESS

9. NEXT MEETING

10.ADJOURNMENT

Barriere Water Consumption - Monthly

Month	2009	2008	2007	2006
January	8,228,800	8,515,280	10,341,728	9,192,825
February	8,666,900	7,328,727	11,366,219	7,371,602
March	11,768,800	9,796,731	8,815,042	7,579,964
April	10,906,600	10,272,251	14,703,249	15,335,458
May	26,501,260	18,827,791	24,058,670	19,470,990
June	27,949,090	28,682,838	20,415,974	18,269,040
July	28,624,600	34,120,661	35,735,947	46,549,771
August	37,856,685	30,283,306	26,477,583	14,966,611
September	21,686,334	17,825,100	17,337,280	19,062,722
October	12,333,808	9,187,800	7,541,492	12,022,164
November	12,055,396	9,352,900	7,726,349	8,147,196
December	<u>8,340,062</u>	<u>8,228,800</u>	<u>10,367,737</u>	<u>11,214,368</u>
	214,918,335.00	192,422,185.00	194,887,270.00	189,182,711

DISTRICT OF BARRIERE

REPORT TO: Public Works Committee FOR: Regular Committee Meeting
PRESENTED: January 4, 2010 FILE:
FROM: Finance Department, Nora Johnson
SUBJECT: Water System Repairs & Maintenance

Purpose: Provide the Committee with information regarding the 2009 Water System Repairs due to breaks.

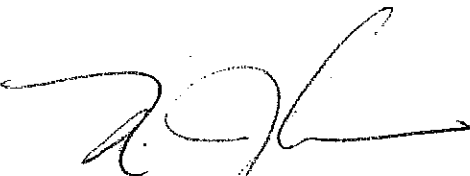
Background: The following is a comparison of the water system breaks for 2008 and 2009.

2009	2008
Bradford Road - July 2009	Fouquet Road
Barriere Parks - Sept 2009	Lilly Road
Dunsmuir Road - May 2009	Fas Gas Location
Lodgepole Road - Nov 2009	
Dunn Lake Road - Dec 2009	
Dunn Lake/Barriere Lakes/BTR corner- April 2009	
Yellowhead Highway - March 2009	
Oriole Way - April 2009	
Saul/Bartlett Streets – May 2009	

Department Comments: Nil

RECOMMENDATION:
REPORT to committee for information purposes.

Alternatives to Staff Recommendation:



Nora Johnson, Finance Officer

Attachments: None

2010 BUDGET

Description	2008 Actual	2009 Budget	2009 YTD Actual	2009 Budget Remaining	Proposed 2010 Budget
Water Works					
Salaries & Wages	81,670.47	116,000.00	119,930.95	(3,930.95)	
Employer Contributions	13,064.39	21,500.00	18,362.50	3,137.50	
Workshop & Seminars	2,603.00	3,500.00	1,030.67	2,469.33	
Mileage & Subsistence	6,930.80	7,000.00	9,481.10	(2,481.10)	
Freight, Postage	1,826.76	2,000.00	2,594.19	(594.19)	
Advertising & Printing	0.00	0.00	1,098.48	(1,098.48)	
Subscriptions & Membership	1,578.45	1,800.00	1,249.83	550.17	
Professional & Consulting Fees	28,479.29	43,000.00	30,161.34	12,838.66	
Contract Work	29,907.17	0.00	5,785.00	(5,785.00)	
Building Repairs/Maintenance	1,163.58	1,500.00	89.94	1,410.06	
Water System R/M	22,340.44	34,652.17	67,148.09	(32,495.92)	
Hydrant Maintenance	5,957.42	6,000.00	6,386.90	(386.90)	
Snow Removal	120.00	200.00	662.50	(462.50)	
Safety Gear/Uniforms	0.00	500.00	235.45	264.55	
Insurance & Bond Payments	0.00	5,000.00	4,956.60	43.40	
General Supplies & Services (Misc)	292.86	300.00	2,498.21	(2,198.21)	
Office Supply & Stationery	151.42	200.00	0.00	200.00	
Chemicals & Salts ect	9,084.66	10,000.00	11,830.92	(1,830.92)	
Water Testing Fees	1,700.00	4,000.00	2,900.16	1,099.84	
Utilities - Electrical	25,782.22	27,000.00	26,276.25	723.75	
Utilities - Phone/Internet	3,448.16	3,500.00	3,994.65	(494.65)	
Transfer to Reserve	26,587.34	0.00	0.00	0.00	
Transfer to Capital Function	5,347.21	2,000.00	11,695.00	(9,695.00)	
Discount Water	21,206.71	10,700.00	11,681.58	(981.58)	
Transfer to Development Cost Charges	1,503.32	0.00	0.00	0.00	
* TOTAL Water Works	290,745.67	300,352.17	340,050.31	(39,698.14)	
MFA Issue #61 Interest Payments	25,200.00	25,200.00	25,200.00	0.00	25,200.00
MFA Issue #61 Principal Payments	19,052.83	19,052.83	19,052.83	0.00	19,052.83
* TOTAL Debt Financing	44,252.83	44,252.83	44,252.83	0.00	
New Projects					



Our File: 55.010.08

Your File:

June 11, 2008

District of Barriere
Box 219
Barriere, BC V0E 1E0

Att: Nora Johnson, Finance Officer

Re: District SCADA System - Budget Costs

Dear Ms Johnson:

As requested, we have investigated the requirements for a SCADA system for the water system. This system would be as follows;

District Office

- A new Dell SCADA server computer
 - mirrored harddrives
 - 20" monitor
 - access to SCADA network
 - Control Maestro SCADA software
 - real time monitoring
 - historical trending (graphs) for multiple variables
 - alarm monitoring
 - setpoint control
 - future capabilities for web access for operators at home

Deep Well Pumping Station

- Convert radios to provide internet access (programming change only)
 - Control Maestro SCADA software (view station with same capabilities as District office)
 - reuse existing PC (recommend replacement in the future)

The software would be programmed at the office of ICI Electrical & Control Consulting Ltd. and debugged prior to installation. The system would be capable of viewing, trending and alarm

reporting for up to 500 different variables in the system. A network version (view station) would be used for operator access at the deep well and would have the full capabilities of the server at the District office.

The existing hardware at the reservoir and shallow well would not require any upgrading, as these sites are presently SCADA ready.

This system would be supported via the existing VPN and using remote desktop.

Costs

SCADA server	\$ 1,879.00
Microsoft Office	\$ 500.00
Control Maestro SCADA Software	\$ 8,343.45
Control Maestro View Station	\$ 1,990.00
Kepware (driver software)	\$ 750.00
Re-configure radios	\$ 500.00
Program Kepware	\$ 1,500.00
Program Control Maestro	\$ 4,500.00
Onsite startup and training	<u>\$ 1,200.00</u>
Subtotal	\$21,162.45
+ Contingency & Engineering (10%)	<u>\$ 2,116.25</u>
Total	\$23,278.70

We therefore recommend a budget of \$25,000 for this project. Note that the above costs do not include GST.

A similar installation is at the Village of Burns Lake. Reference: Paul Carver @ 250-692-7587. This software is also operating on the City of Dawson Creek's SCADA system. Reference: Rod Harmon @ 250-784-4073.

Should you have any questions, please don't hesitate to contact the undersigned.

Yours truly,

per
ICI Electrical & Control Consulting Ltd.

R.J. Dickey C.Tech
RJD/bd

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Barriere Hydrant Inspection Report 2009-09-21

The hydrants are functioning well with the preventative maintenance program initiated by the District. Many of the hydrants have had their internal parts upgraded during the program. Some of the underground shut off valves have problems with leaking when exercised. There are only a few that consistently leak when operated. These shut offs still respond to being shut down carefully over a period of several hours. The underground shut off at hydrant # 45 is very hard to operate. This hydrant is also leaking water from under the bonnet when turned on. The flow tests are not showing any major changes over previous years. The 7 Macavity hydrants have gone through their first year without requiring any internal parts upgrades. These hydrants are still the weakest design of all the hydrants owned by the District. The Fire Hydrants are in good working condition and will have an indefinite life span.

Regards

Brad Smith

Cedardale Enterprises Ltd

250-318-7053

Barriere Improvement District

Hydrant Flows & pressures

Test Flow & Capacity in L.P.M.

Residual & Static Pressures in K.P.A.

Hyd #	Residual	Static	Test Flow	Capacity
(1)	430	370	3874	9071
(2)	480	70	1685	1523
(3)	500	360	3822	6364
(4)	530	440	4225	9326
(5)	500	400	4028	8045
(6)	540	370	3874	6150
(7)	560	440	4225	8310
(8)	560	440	4225	8310
(9)	540	420	4128	7908
(10)	540	400	4028	7101
(11)	540	440	4225	8931
(12)	620	460	4320	7818
(13)	620	300	3489	4342
(14)	600	110	2112	2042
(15)	580	420	4128	7128
(16)	540	340	3714	5400
(17)	560	460	4320	9376
(18)	560	360	3822	5705
(19)	580	420	4128	7128

Hyd #	Residual	Static	Test Flow	Capacity
(20)	560	340	3714	5266
(21)	580	380	3926	6010
(22)	580	380	3926	6010
(23)	600	400	4028	6316
(24)	560	280	3370	4195
(25)	660	310	3546	4391
(26)	640	200	2848	3052
(27)	660	170	2626	2712
(28)	640	360	3822	5227
(29)	690	100	2014	1939
(30)	670	270	3310	3854
(31)	680	360	3822	5069
(32)	690	270	3310	3828
(33)	700	200	2848	3028
(34)	680	340	3714	4768
(35)	700	60	1560	1452
(36)	460	300	3489	5072
(37)	460	260	3248	4186
(38)	420	180	2702	2937
(39)	420	260	3248	4393
(40)	420	240	3120	3961
(41)	540	440	4225	8931

Hyd #	Residual	Static	Test Flow	Capacity
(42)	480	280	3370	4489
(43)	610	360	3822	5374
(44)	660	380	3926	5485
(45)	500	400	4028	8045
(46)	430	360	3822	8233
(47)	390	240	3120	4111
(48)	500	400	4028	8045
(49)	630	390	3978	5848
(50)	370	270	3310	5189
(51)	700	160	2548	2598
(52)	680	320	3603	4644
(53)	700	280	3370	3937
(54)	580	420	4128	7128
(55)	580	440	4225	7841
(56)	560	440	4225	8310
(57)	580	440	4225	8310
(58)	580	380	3926	6010
(59)	580	330	3659	4965
(60)	520	400	4028	7507
(61)	500	400	4028	8045
(62)	700	340	3714	4715
(63)	660	140	2383	2383

Hyd #	Residual	Static	Test Flow	Capacity
(64)	450	380	3926	8769
(65)	640	340	3714	4894
(66)	500	370	3874	6715
(67)	500	380	3926	7106
(68)	560	420	4128	7471
(69)	540	380	3926	6440
(70)	560	440	4225	8310
(71)	560	440	4225	8310
(72)	560	330	3659	5065
(73)	560	330	3659	5065
(74)	580	380	3926	6010
G/S sawmill (1) Terminal City H M 100	620	170	2431	2517
(2) Macavity HM 360	760	560	4613	8498
(3) Macavity HM 340 (beside terminal city)	760	630	4483	10,422
(4) Canada Valve (yard)	760	500	4504	7201

(5) Canada Valve (deck)	760	500	4504	7201
Sunset Park Upper	280	140	2383	2383
Sunset Park Lower	300	160	2548	2738

DISTRICT OF BARRIERE

BYLAW NO. 0057

A BYLAW TO AMEND BARRIERE WATER SYSTEM RATES BYLAW

The Council of the District of Barriere in open meeting assembled enacts as follows:

1. This Bylaw may be cited as "District of Barriere Water System Rates Amendment Bylaw No. 0057, 2009"
2. Bylaw No. 0046 is hereby amended as follows:
 - a) Schedule A of Bylaw No. 0046 is hereby repealed and the attached Schedule A is inserted in its place.

READ A FIRST TIME this 16th day of November, 2009

READ A SECOND TIME this 16th day of November, 2009

READ A THIRD TIME this 16th day of November, 2009

ADOPTED this day of , 2009

Mayor Mike Fennell

2009 Revenue \$ 268,025

2010 Revenue 285,770

Wayne Vollrath, CAO

District of Barriere
By-law No. 0057
Schedule "A"

Schedule "A"
Rates and Charges
Barriere Water System

1. FLAT RATES

	(Monthly) Proposed	Current
a) Residential	\$27.50	(\$26.25)
b) Commercial and Industrial		
Each Store, Office, Institution or business unless otherwise specified.	\$25.00	(\$23.90)
Post Office	\$37.90	(\$36.10)
Police detachment building	\$103.30	(\$98.40)
Service Stations (additional for other services)	\$28.80	(\$27.50)
Laundromats	\$11.30/washer	(\$10.80/washer)
Restaurants	\$55.40	(\$52.80)
Hotels and Motels		
- units	\$13.60	(\$13.00)
- living quarters	\$27.50	(\$26.25)
- restaurants	\$55.40	(\$52.80)
- bars and lounges	\$22.70	(\$21.70)
Campgrounds (for the period May to September, Inclusive)	\$8.30/w.room	\$7.90/washroom
Car and/or Truck Washes		
- with open hose outlets	(\$62.50	\$59.60)
- with pressurized bays	\$31.20/bay	(\$29.80/bay)
Sawmills	\$267.30	(\$254.60)

c) Institutional and Non-Profit Schools	\$17.50/ occupied classroom (\$16.70/occupied classroom)	
School District Maintenance Shops	\$63.20	(\$60.20)
Churches	\$25.	(\$23.90)
Non-Profit Organizations	\$25.	(\$23.90)
Health Centres and Group Homes	\$80.20	(\$76.40)
Homes for the Elderly	\$38.00	(\$36.20)
d) Specific:		
Argo Road Maintenance (567093 & 567102 BC Ltd.)	\$75.60	(\$72.00)
School Sprinkler Systems	\$4.90/sprinkler head (\$ 4.70/sprinkler head)	

2. **WATER CONNECTION AND TURN ON/CONNECTION FEES:**

a) Turn on/Service Call	\$42.00	(\$40.00)
b) Turn off/Service Call	\$42.00	(\$40.00)
c) Connection	\$210.00	(\$200.00)

2009 CONTRACTED EQUIPMENT

	<u>Hours</u>	<u>Rate</u>	<u>Contractor Total</u>	<u>TOTAL</u>
TRI SERVICE				
Backhoe	70.00	\$ 95.00	\$ 6,650.00	
Skidsteer	24.50	\$ 65.00	\$ 1,592.50	
Dump Truck	25.00	\$ 95.00	\$ 2,375.00	
Water Truck	2.00	\$ 75.00	\$ 150.00	\$ 10,767.50
CRAIG MANN				
Backhoe	290.50	\$ 90.00	\$ 26,145.00	\$ 26,145.00
BARRIERE BACKHOE				
Backhoe	8.00	\$ 90.00	\$ 720.00	
Trucking	5.00	\$ 90.00	\$ 450.00	\$ 1,170.00
LUISON & SON				
Mini Excavator	3.00	\$ 68.00	\$ 204.00	\$ 204.00
TED SCOTT				
Backhoe	14.00	\$ 75.00	\$ 1,050.00	\$ 1,050.00
FENNELL CUSTOM				
Excavator	9.50	\$ 125.00	\$ 1,187.50	\$ 1,187.50
				\$ 40,524.00

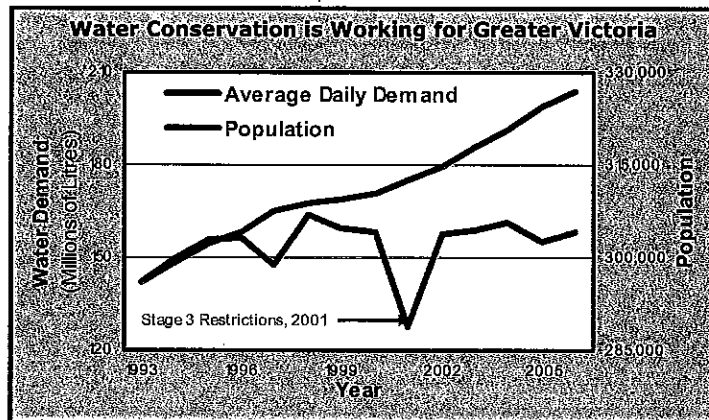
Water Conservation Programs

Do we need to conserve water in our climate?

Greater Victoria enjoys some of the best quality drinking water in the world at a reasonable cost, but maintaining this critical resource requires each of us to use water wisely. Although our region is famous for its beautiful gardens, we do not live in a rain forest. In fact, our climate is very similar to the northern Mediterranean, having wet winters and very dry summers. We need to store and conserve winter rains to meet our water needs for the whole year, including irrigation of gardens, parks, fairways and food crops in addition to indoor water uses. And even with our wet winters, there is a 40 percent chance that we will not receive enough rain to completely refill the Sooke reservoir in any given year.

Efficient use of water has economic, social and ecological benefits:

- **Lower water and energy bills** by reducing metered use, and by deferring the need to expand water infrastructure
- **Protection of drinking water quality** by maintaining higher levels in the Sooke reservoir
- **Reduced environmental impact** by deferring the disruption of habitats for new water supplies, and by reducing the energy and materials required to treat and deliver water



Since conservation programs were introduced in the 1990's, total annual water use has not increased although population continues to increase. Every litre of water saved is a litre of new supply capacity that doesn't need to be built.



Residential Water Conservation Programs

More than 70 percent of our municipal water supply is used for residential purposes. And like most North Americans, Greater Victoria residents use about 300 litres of water per day in and around our homes, which is twice the European average. The main differences are toilets, showerheads, washing machines and gardens that typically use much more water than necessary in North America. However, we can conserve water in our daily routines.

CRD residential water conservation programs encourage residents to install efficient fixtures and appliances, and to use water efficiently both indoors and outdoors.

Rebates

The CRD offers rebates to Greater Victoria homeowners for installing efficient toilets, showerheads, washing machines, irrigation controllers and rain sensors. As a condition of the rebates, old toilets and washing machines must be dropped off at an approved facility for recycling.

Grade 2 Learning Resource

Every public school and most private elementary schools in Greater Victoria teach Grade 2 students about water conservation using a toolkit provided by the CRD. The toolkit includes video and audio materials, a booklet for students, a water supply system map, and items for distribution to students and their parents.

Workshops and Public Events

The CRD regularly offers free workshops on efficient irrigation practices and native plant gardening. Every year, water conservation staff attend and distribute educational resources and program information at more than 60 public events, reaching more than 20,000 people annually.

Water Conservation Bylaw

More than a quarter of the total annual water supply to Greater Victoria is used for irrigating lawns and gardens. The Water Conservation Bylaw establishes watering schedules, and prohibits wasteful water uses such as irrigating paved surfaces. The Bylaw is supported by a comprehensive awareness program that includes print and bus board advertising and bicycle patrols.



Programs for Business and Industry

Nearly thirty percent of municipal water in Greater Victoria, about 15 billion litres per year, is used by the industrial, commercial and institutional (ICI) sectors. Water uses differ greatly between sectors. For example, golf courses and parks use water mostly for irrigation while in restaurants most water use is associated with food preparation, dish washing and cooling. ICI water conservation programs are designed to address this diversity of needs.

Audits and Technical Services

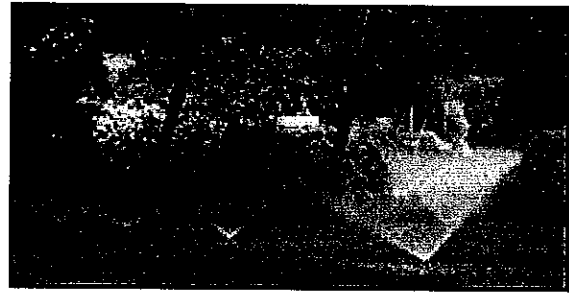
The CRD offers free water use and efficiency audits to businesses in Greater Victoria, and provides assistance with measurement and cost-benefit analysis of various measures to conserve water. This program includes access to specialized instruments and expertise.

Industry Education

Water conservation education for Greater Victoria businesses includes specialized workshops, displays at trade shows, talks at industry events, publications, and information on the Internet (www.crd.bc.ca/water/conservation). Key program targets include food service facilities and landscape irrigation.

For Further Information

Capital Regional District Water Services, 479 Island Highway, Victoria, BC V9B 1H7
250.474.9684



Publications and Website

Several fact sheets, manuals and brochures and a website (www.crd.bc.ca/water/conservation) have been developed to support the CRD water conservation programs. These resources enable Greater Victoria residents to access the best advice from local and international experts in water efficiency and conservation.

Grants and Rebates

Grants are provided annually to Greater Victoria schools for water conservation retrofits, and rebates are available for eliminating once-through cooling systems that waste large volumes of clean municipal water. In 2007, a toilet rebate program is being pilot tested for the ICI sectors.

Research

The CRD monitors water use trends in Greater Victoria, and participates in product and technology research in partnership with other utilities. This research is used to ensure that our conservation programs provide excellent value to the community.



The Cost of Water Waste

Water is our most precious resource. Doing everything in our power to prevent water waste helps to conserve this vital resource while saving money. Two main sources of water waste are leaks and the over-watering of lawns and gardens.

LEAKING TOILETS

High volume water leaks often come from toilets. They are hard to detect and are usually caused by worn or misaligned parts. A toilet that continues to run after flushing could be wasting 20-40 litres per hour - that's 175,000 to 350,000 litres per year, enough water to fill a swimming pool. Leaks can cost you up to \$355 per year.



FINDING A TOILET LEAK

To check for a toilet leak, use a dye tablet or food colouring. Carefully remove the toilet tank lid. Place a dye tablet or some food colouring in the tank. Wait about 15 minutes without flushing. After 15 minutes check the water in your toilet bowl. If the water is coloured, you've got a leak. Toilet repairs may require the assistance of a plumber. To get a dye tablet, call the CRD Water Department at 474-9684.



WATER SAVING TOILETS

For additional water and dollar savings replace your water guzzling toilet(s) with a 6-litre or less model. A family of four can save up to 80,000 litres of water a year. Call CRD's Demand Management Information Line at 474-9684 for information about the Fixture Replacement Program.

FAUCETS & SHOWERHEADS

Leaking faucets and showerheads are also big water wasters but they are easier to detect than toilet leaks. Worn washers or seats are the most likely cause of leaks in these fixtures. Repairing leaky faucets is usually a straightforward and inexpensive job, but well worthwhile because a little drip can waste lots of water and dollars.



A LITTLE DRIP CAN MEAN A LOT!

An intermittent drip from your faucet or showerhead can waste more than 35,000 litres of water or (35 cubic meters) a year, costing up to \$35. This amount of wasted water would fill a bathtub 184 times! The costs can add up quickly!



Remember if dripping water is hot water your energy dollars are also going down the drain!

LEAKING PIPES

A leaking service line or pipe in your home can add up to serious water waste. A small hole in a pipe (1.5mm) wastes 280,000 litres of water in a three-month period. Continual leaking from this size hole could cost you about \$285 in that three month time period. This is enough water to do about 900 loads of laundry!

WATER SYSTEM LEAKS

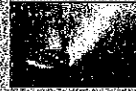
Whether you use an in-ground system or a single oscillating head, check it carefully for leaks. The average garden hose delivers 27 litres of water a minute, so a split in the hose or a poor coupling could be wasting large amounts of water. Make sure the outdoor faucet is turned off after each use, even small drips add up to big waste. Use garden water as wisely as possible. Consider using drip irrigation, and use a watering can wherever possible.

A leak in your in-ground system is less noticeable than one in a hose, and can waste even greater amounts of water. If you think your in-ground system may have a leak, check for wet patches in your lawn that do not dry. Contact your irrigation contractor for a system check-up.



AVOID OVER-WATERING

In-ground sprinkler systems are convenient and if properly installed and maintained they can provide efficient irrigation. Sprinkler systems do use a lot of water. Most spray or rotor sprinkler heads use between 7 and 11 litres of water per minute, per head. These systems should operate for a maximum of 10 minutes – twice a week – on permitted watering days.



A single oscillating head uses 27 litres a minute. Watering your lawn for an hour uses about the same amount of water as 5 dishwasher loads. If you run your sprinkler for 5 hours a week the cost is about \$35 per month.

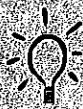
BE A LEAK DETECTIVE



The best way to check for overall leaks is to use your water meter. Follow these simple steps to determine if you have a leak.

1. Shut off all your water-using appliances and fixtures, including the automatic icemaker in the fridge.
2. Remove the lid from your meter box. * It is usually concrete or metal – about 10x15 inches. Take care not to damage the wires!
3. For new meters, watch the triangle in the middle of the meter for a few minutes. In older meters watch the 10 gallon hand. If neither moves, you don't have a leak.
4. If you have a leak, you will need to play detective to find the source. The most likely culprits are toilets, faucets, showerheads, service lines and sprinkler systems.

***PLEASE NOTE: CRD ASSUMES NO LIABILITY FOR DAMAGE OR INJURY RESULTING FROM THE REMOVAL OF METER LIDS; CUSTOMERS DO SO AT THEIR OWN RISK!**



For more great water saving ideas call or visit:

CRD Water Department

479 Island Highway - Victoria, B.C. V9B 1H7

Phone: (250) 474-9684

Visit us on-line at - www.crd.bc.ca/water





Utility Services COMMITTEE REPORT

TO: Drinking Water and Utilities Committee **DATE:** November 12, 2009
FROM: Director of Environmental Services
SUBJECT: TNRD Water Conservation Plan

RECOMMENDATION(S):

That the Drinking Water and Utilities Committee recommend to the Thompson-Nicola Regional District Board of Directors that a TNRD Water Conservation Plan be carried out with funding from either Federal Gas Tax Communities Work Funds or from Electoral Area Administration in the amount of \$10,000.

A handwritten signature of Peter Hughes, P.Eng., in black ink.

PETER HUGHES, P.Eng.
Director of Environmental Services

A handwritten signature of the CAO in black ink.

Approved for
Board Consideration
CAO

BACKGROUND:

At the Drinking Water and Utilities Committee meeting of April 23, 2009, the committee unanimously carried the following motion:

That the Drinking Water and Utilities Committee recommend to the Board of Directors that staff research having an updated Water Conservation Plan completed.

DISCUSSION:

The TNRD retained NDLea to prepare a Drought Management Strategy in 2005 at a cost of \$10,000. The report was subsequently adopted by the Board. Although not specifically considered a conservation plan, the report recommended conservation measures that could be implemented by the TNRD. Since then, the document has been utilized by staff and we have

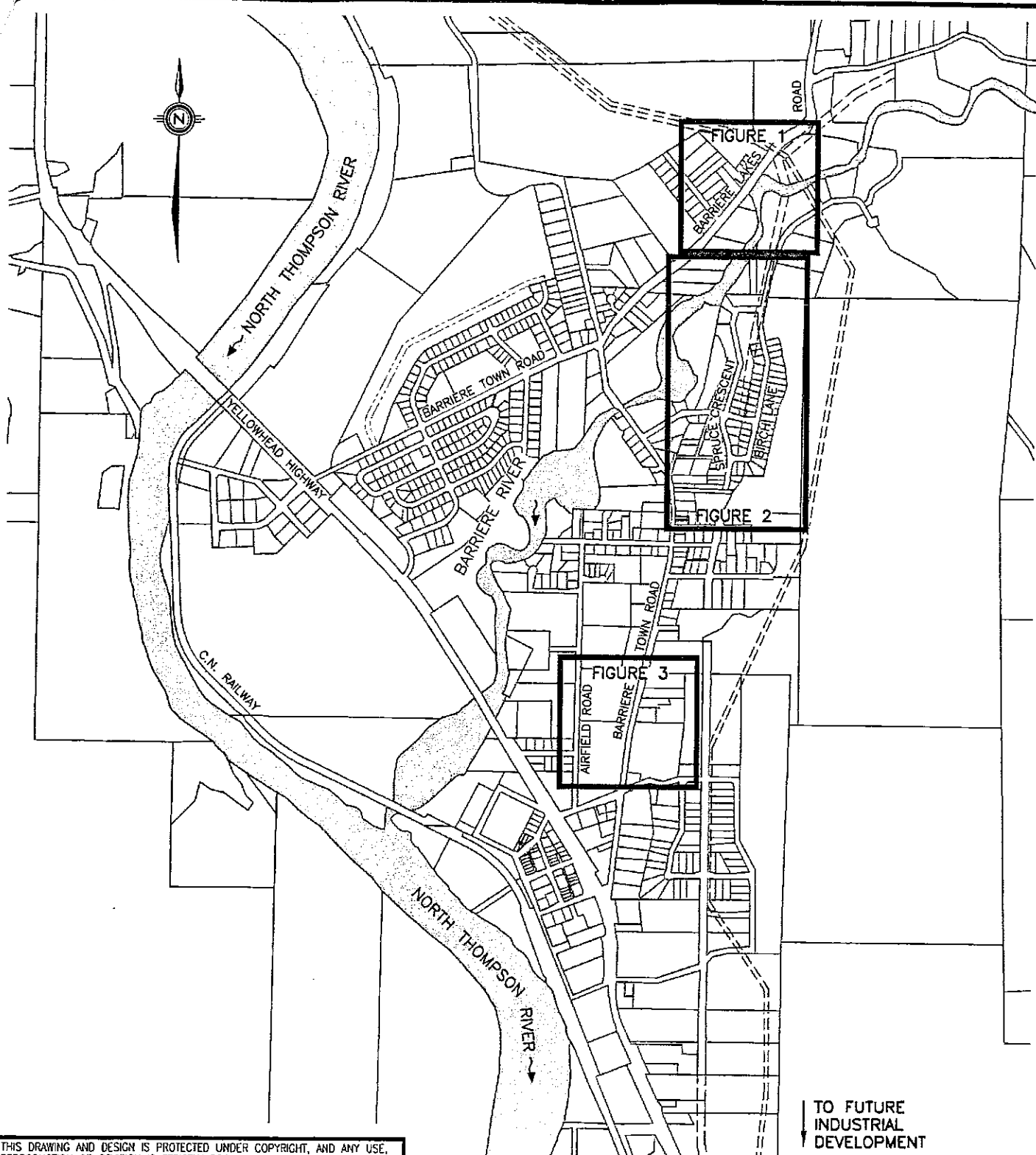
implemented some of the strategies, most notably water restrictions during summer months. The study was also used as supporting information for applications to both the Municipal Rural Infrastructure Fund and Building Canada Fund. The contribution agreements for both MRIF and BCF require adoption of a Board endorsed conservation plan. We have been advised by the Ministry of Community and Rural Development that the drought management strategy is not adequate for this purpose and that claims for re-imbursement of funds for the MRIF and BCF projects currently underway will not be approved until a Conservation Plan is in place. Based on these conditions it is imperative that a plan be developed as soon as possible.

Staff contacted MMM Group (formerly NDLea) to provide a proposal and cost estimate to prepare a conservation plan using the drought management study as a template. The scope of work would be to update the existing study to include recent system acquisitions and re-structure the report as a conservation plan. The estimated cost to update and modify the study was \$10,000. In June 2009 staff submitted an application for an infrastructure planning grant to partially fund the work (\$7,500). To date we have not received word on whether the grant application was successful. In the event the grant application is unsuccessful other potential funding sources for the conservation plan are Federal Gas Tax Communities Work Fund or contributions from the Electoral Area Administration.

CONCLUSION:

A Water Conservation Plan is required as part of the contribution agreements for both the MRIF and BCF infrastructure programs, and will also be a requirement for any future grant programs. A Water Conservation Plan will also allow environmentally sustainable management of TNRD owned water systems.

N:\030300283\20_PHASE1\030300283\wd1.dwg Plotted 20 April 2009



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CONCEPTUAL 2009-04-17

FOCUS

ENGINEERING • PLANNING • GEOMATICS
#420-301 VICTORIA STREET, KAMLOOPS, BC, V2C 2A3
PHONE (250) 374-5252 FAX (250) 372-8336

DISTRICT OF BARRIERE

BARRIERE GRANT APPLICATION

KEY PLAN

REV. No.

A

2009-04-17

OFFICE No.

0303

DRAWING No.

00283-20-FIG.0



420 - 300 Victoria Street, Kamloops, BC V2C 2A3
Telephone (250) 374-5252 Facsimile (250) 372-8336

03030283

2009-Apr-19

Summary

CLASS C COST ESTIMATE SUMMARY

Location: District of Barriere Water Supply Infrastructure

Barriere Lakes Rd W/M Upsizing	\$228,171.25
Spruce Cres W/M Upsizing	\$249,987.50
Airfield Rd. Connector	\$49,387.50
Subtotal	\$527,546.25
Estimated Engineering Cost (15%)	\$79,131.94
Subtotal	\$606,678.19
30% Contingency	\$182,003.46
Total Cost of Works	\$788,681.64

2010 BUDGET

Description		2008 Actual	2009 Budget	2009 YTD Actual	2009 Budget Remaining	Proposed 2010 Budget
Environmental Services	Salaries and Wages	31,482.55	32,100.00	32,040.18	59.82	
	Employer Contributions	2,410.03	2,500.00	7,010.77	(4,510.77)	
	Mileage & Subsidence	0.00	0.00	105.50	(105.50)	
	Freight, Postage	0.00	0.00	193.90	(193.90)	
	Advertising & Printing	757.72	700.00	545.47	154.53	
	Contract Work	140.00	0.00	0.00	0.00	
	TNRD Dumping Fees	0.00	35,000.00	17,202.88	17,797.12	
	Snow Removal	60.00	250.00	75.00	175.00	
	Safety Gear/Uniforms	0.00	0.00	225.56	(225.56)	
	Vehicle R/M - Garbage Truck 1997 Ford	8,236.20	3,000.00	1,827.08	1,172.92	
	Vehicle R/M - Garbage Truck 2008 F550	711.47	4,000.00	1,068.50	2,931.50	
	Insurance - Garbage Truck 1997 Ford	1,448.00	1,100.00	1,798.00	(698.00)	
	Insurance - Garbage Truck 2008 F550	553.00	2,200.00	1,848.00	352.00	
	Fuel - Garbage Truck 1997 Ford	7,386.09	3,000.00	2,164.97	835.03	
	Fuel - Garbage Truck 2008 F550	565.29	7,000.00	3,001.63	3,998.37	
	General Supplies & Services (Misc)	560.45	9,000.00	8,682.94	317.06	
	Office Supply & Stationary	0.00	0.00	0.00	0.00	
	Utilities - Phone/Internet	0.00	0.00	426.10	(426.10)	
	Garbage Discount	6,259.73	3,150.00	3,504.48	(354.48)	
	Transfer to Surplus	655.00	0.00	0.00	0.00	
	Transfer to Capital Function	112,257.98	0.00	0.00	0.00	
	* TOTAL Environmental Services	173,483.51	103,000.00	81,720.96	21,279.04	
New Projects						



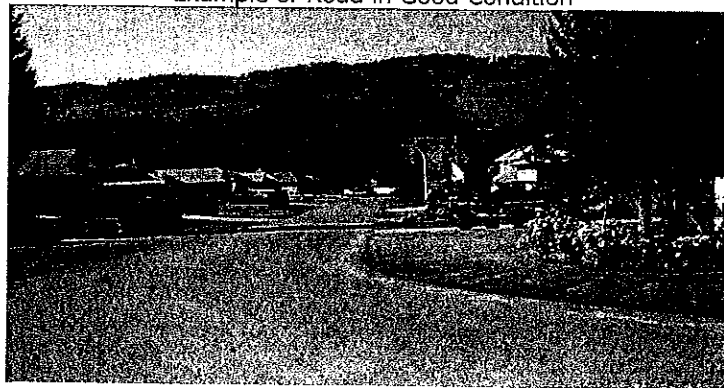
Road Assessment

The Terms of Reference for the Barriere Incorporation Study called for an assessment of the condition of roads within the area proposed for incorporation. Given the resources available to complete this work, an overview-level assessment was completed in September 2006. This work was conducted by a senior engineering technologist with Urban Systems, and entailed the following:

- Drove all roads in the community to get a general sense of road surface conditions, and to calibrate standards as good, fair or poor. These standards reflect the degree to which road surfaces are cracked, subject to depressions (ie. potholes), and affected by rutting along wheel travel routes. The results of this assessment are summarized below, followed by photographs which illustrate good, fair and poor road conditions. Once the road condition rating was established, all roads were visually inspected to determine their condition. The results of this work are shown on the following map.

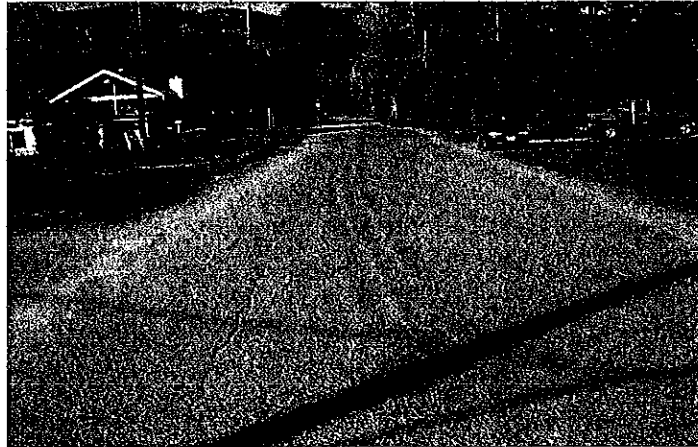
Barriere Road Condition Overview Assessment (by Urban Systems)														
	Paved KM's of Road					Gravel KM's of Road				Overall Total KM's of Road				
	Good	Good (MOT Resurfacing)	Fair	Poor	Total	Good	Fair	Poor	Total	Good	Good (MOT Resurfacing)	Fair	Poor	Total
Barriere Study Area	11.1	5.2	5.0	4.1	25.5	0.0	2.3	0.9	3.2	11.1	5.2	7.3	5.1	28.7

Example of Road in Good Condition

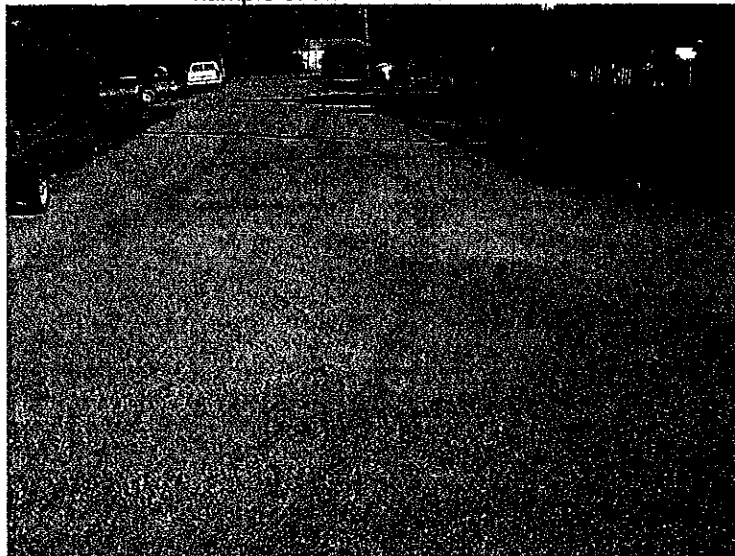




Example of Road in Fair Condition



Example of Road in Poor Condition





lease and supply, and other general supplies), fire and liability insurance, grants to community organizations, professional fees, election and advertising expenditures, and a contingency.

5.2.2 Road Maintenance

An average annual maintenance cost of \$3,500 per km has been projected. Although this is higher than the average current maintenance expenditures (see Appendix B) provided by the Ministry of Transportation (MOT), this figure is more in line with the experience of other municipalities. With 29km of study area roads that would transfer to municipal jurisdiction, this results in annual road maintenance costs of about \$102,000. There are additional annual maintenance costs of approximately \$8,000 for the Barriere Town Bridge. As a result, total annual road maintenance expenditures are projected to be \$110,000. As the Ministry of Transportation maintains responsibility for road maintenance for an initial five year phase-in period upon incorporation, this expense is not incurred until Year 6, in the multi-year budget.

5.2.3 Capital Expenditures for Roads

Starting in Year 6, an annual allowance of \$150,000 is suggested for annual capital expenditures on roads. The approach taken in determining an annual allowance for capital expenditures on roads can be summarized as follows:

1. Conducted an overview-level analysis of the condition of paved roads within the Barriere area. The results of this analysis are contained in Appendix C.
2. Determined the length of roads which were deemed to be in poor condition. As a general guide, roads in poor condition should be resurfaced within the next 5 – 7 years, those in fair condition within the next 7 – 15 years, and those in good condition need not be resurfaced for in excess of 15 years. Within the study area, it was determined that approximately 5 km of road are in poor condition. It should be noted that these are mainly low-use local roads, and there may be some flexibility in the general timelines stated above.
3. Estimated the cost of resurfacing roads. Based on market conditions prevalent in 2006, an allowance of \$150,000 to \$200,000 per kilometer is suggested
4. Estimated the total cost of resurfacing roads which are deemed to be in poor condition. Using the information provided above (5 km of road at \$150,000 to \$200,000 per km), an estimate of \$750,000 to \$1 million was derived.

7.0 VARIABLE FACTORS

7.1 Overview

As discussed, the tax impacts in Section 6 will vary depending on decisions made by a municipal Council relating to service levels, budget priorities, and tax policies. In addition to these, there are a number of other factors that could impact the financial analysis in this study. These include the following.

7.2 Future Capital Spending on Roads

As discussed previously, the generalized multi-year budget builds a reserve over the first five years of incorporation. This reserve is then expended over the next nine years, to cover the capital expenditures required to resurface Barriere roads over this period. By Year 14 of incorporation, in the scenario that has been developed for the purposes of this study, the roads capital reserve will be exhausted. At this time, tax rates would either increase to support continued capital spending on roads, the municipality could pursue grant monies to offset potential tax increases, or the municipality could slow down the level of investment in capital roads projects, in order to minimize potential tax rate increases.

7.3 Gas Tax Revenue-Sharing

An incorporated Barriere would be eligible for guaranteed Gas Tax Revenue-Sharing funds of approximately \$73,000 in 2008/2009 and \$122,000 in 2009/2010. The federal government recently extended its commitment to this program for another four years beyond 2010. If a significant proportion of funding could be used to help offset capital roads expenditures, Barriere's municipal purposes tax rate may be significantly reduced. Nevertheless, as it is expected that most gas tax revenues would be used for new capital projects that have not been identified in this study, it is unlikely that this impact would be reflected in the multi-year budget that has been prepared. As outlined previously, capital projects using gas tax revenues are intended to help meet sustainability targets, such as decreasing Greenhouse Gas emissions, and providing cleaner air and water.

7.4 Phase-In Period for Tax Rate Adjustments

The projected multi-year budget assumes that the tax rate increases attributed to incorporation would apply immediately. However, it is possible that a new Council could phase in tax rate increases over a number of years. This would produce fewer surplus dollars in the early years of incorporation, and as a result, there would be fewer dollars available to put into reserves. The

Barriere Area Road Maintenance Costs

Number	Road Name	Length	Summer	Winter	Combined Cost	Avg /KM Cost
525	AGATE BAY	6.261	4	C	\$28,544.53	\$4,559.10
526	AGATE BAY ACCESS	0.045	6	D	\$125.03	\$2,778.40
535	AIRFIELD RD	1.000	5	C	\$4,027.80	\$4,027.80
540	ALBERT LANE	0.083	8	F	\$0.00	\$0.00
590	ANNESTY	0.238	6	D	\$661.26	\$2,778.40
605	ARMOUR	0.087	5	D	\$315.68	\$3,628.48
662	BANNISTER	0.162	6	D	\$450.10	\$2,778.40
670	BARKLEY	0.468	5	C	\$1,885.01	\$4,027.80
690	BARRIERE BUSINESS	0.129	3	C	\$662.62	\$5,136.60
697	BARRIERE LAKES	1.991	4	C	\$8,019.35	\$4,027.80
708	BARRIERE TOWN	3.855	3	C	\$19,801.59	\$5,136.60
715	BARTLETT	0.188	6	D	\$522.34	\$2,778.40
817	BIRCH LANE	1.325	6	D	\$3,681.38	\$2,778.40
909	BORTHWICK AVENUE	0.329	6	C	\$1,045.47	\$3,177.72
945	BRADFORD	0.457	5	C	\$1,840.70	\$4,027.80
1121	CARLSTROM	0.202	6	F	\$278.11	\$1,376.76
1160	CHIP	0.200	8	D	\$280.33	\$1,401.64
1255	CONNER	0.688	5	C	\$2,771.13	\$4,027.80
1290	CORRIGAN	0.100	8	F	\$0.00	\$0.00
1318	CREEKSIDE RD	0.400	6	D	\$1,111.36	\$2,778.40
1330	CREST	0.200	8	F	\$0.00	\$0.00
1436	DEEJAY	0.732	5	C	\$2,948.35	\$4,027.80
1553	DIXON CREEK	7.412	5	C	\$29,854.05	\$4,027.80
1560	DIXON MOUNTAIN	2.023	6	C	\$6,428.53	\$3,177.72
1562	DIXON-SARGENT CREEK	0.500	6	F	\$688.38	\$1,376.76
1651	DUNN LAKE	1.272	5	C	\$5,123.36	\$4,027.80
1654	DUNSMUIR	0.685	6	C	\$2,176.74	\$3,177.72
1719	ELLIS LANE	0.116	8	F	\$0.00	\$0.00
1856	FOUQUET	0.111	5	C	\$447.09	\$4,027.80
1964	GENIER	0.184	6	D	\$511.23	\$2,778.40
1967	GENIER LAKE	2.820	6	D	\$7,835.09	\$2,778.40
1985	GIBBS	0.313	5	C	\$1,260.70	\$4,027.80
1990	GILBERT DRIVE	0.574	6	C	\$1,824.01	\$3,177.72
2003	GLENACRE	1.095	6	C	\$3,479.60	\$3,177.72
2009	GLENGROVE PLACE	0.290	7	D	\$722.67	\$2,491.96
2010	GLENGROVE	3.471	5	C	\$13,980.49	\$4,027.80
2012	GLENTANNA	0.199	6	D	\$552.90	\$2,778.40
2030	GORDON CREEK	2.000	7	D	\$4,983.92	\$2,491.96
2082	GRAY PLACE	0.095	6	D	\$263.95	\$2,778.40
2101	GREENWOOD	0.090	8	F	\$0.00	\$0.00
2135	HAGGARD	0.506	6	D	\$1,405.87	\$2,778.40
2144	HAIGH	0.301	6	D	\$836.30	\$2,778.40
2162	HALL	0.429	6	D	\$1,191.93	\$2,778.40
2255	HART	0.185	6	D	\$514.00	\$2,778.40
2517	JACKPINE DRIVE	0.270	8	F	\$0.00	\$0.00
2631	KAMLOOPS STREET	0.382	6	D	\$1,061.35	\$2,778.40
2706	KIVI CRESCENT	0.120	6	D	\$333.41	\$2,778.40
2899	LEONIE CREEK	1.002	6	D	\$2,783.96	\$2,778.40

Number	Road Name	Length	Summer	Winter	Combined Cost	Avg /KM Cost
2926	LILLEY	0.243	5	C	\$978.76	\$4,027.80
2960	LODGEPOLE RD	0.322	6	D	\$894.64	\$2,778.40
2996	LOUIS	0.300	8	F	\$0.00	\$0.00
3000	LOUIS CREEK	1.125	5	C	\$4,531.28	\$4,027.80
3134	McLEAN	0.467	6	D	\$1,297.51	\$2,778.40
3207	MacKENZIE LANE	0.100	8	F	\$0.00	\$0.00
3250	MARSHALL LANE	0.154	8	F	\$0.00	\$0.00
3310	MILL	0.200	8	F	\$0.00	\$0.00
3376	MOUNTAIN	1.602	6	C	\$5,090.71	\$3,177.72
3438	NELSON	0.200	7	D	\$498.39	\$2,491.96
3447	NEWBERRY	0.144	6	D	\$400.09	\$2,778.40
3525	NORTH	1.105	6	D	\$3,070.13	\$2,778.40
3593	ORIOLE WAY	0.809	6	D	\$2,247.73	\$2,778.40
3634	PARADISE LAKE	0.600	7	D	\$1,495.18	\$2,491.96
3650	PARK	0.078	7	D	\$194.37	\$2,491.96
3724	PETERSON-BETTS	3.532	6	D	\$9,813.31	\$2,778.40
3816	POWER	1.862	6	C	\$5,916.91	\$3,177.72
3935	RAILWAY AVENUE	0.794	6	D	\$2,206.05	\$2,778.40
4074	ROBIN DRIVE	0.609	5	C	\$2,452.93	\$4,027.80
4170	RUSSELL STREET	0.170	6	C	\$540.21	\$3,177.72
4204	SALLE LANE	0.104	8	F	\$0.00	\$0.00
4205	SALLE	0.182	6	D	\$505.67	\$2,778.40
4244	SARGENT CREEK	0.347	7	D	\$864.71	\$2,491.96
4253	SAUL	0.095	6	D	\$263.95	\$2,778.40
4279	SAWMILL	0.500	8	F	\$0.00	\$0.00
4385	SHAVER	0.107	6	D	\$297.29	\$2,778.40
4403	SHOOK	0.414	6	D	\$1,150.26	\$2,778.40
4484	SPRUCE CRESCENT	0.735	6	D	\$2,042.12	\$2,778.40
4503	STAINES	0.196	6	D	\$544.57	\$2,778.40
4530	STATION	0.497	5	C	\$2,001.82	\$4,027.80
4575	STONE	0.396	6	D	\$1,100.25	\$2,778.40
4600	SUMMER	0.172	6	D	\$477.88	\$2,778.40
4611	SUMMERS	0.076	6	D	\$211.16	\$2,778.40
4905	VISTA POINT	1.969	6	D	\$5,470.67	\$2,778.40
5018	WESTSYDE	1.548	4	C	\$6,235.03	\$4,027.80
5091	WOLSEY	0.782	6	C	\$2,484.98	\$3,177.72
5110	YARD	0.700	5	C	\$2,819.46	\$4,027.80
	TOTAL	68.821			\$139,110.03	\$2,021.33

Bridge Maintenance Costs for Barriere

Number	Structure		Total Cost
257	Barriere Town		\$7,567.58

Note: Road maintenance expenditures provided by MOT are for the Barriere area in general, and they do not precisely reflect the total length of road that would be maintained by a new municipality. Appendix B details the length of road that would be maintained by a new municipality.

Wayne Vollrath

From: Brock Nanson [bnanson@ctqconsultants.ca]
Sent: Friday, December 18, 2009 2:26 PM
To: Wayne Vollrath
Subject: Re: Road Assessment
Attachments: bnanson.vcf

Hi Wayne,

OK, then I can see this going in one of two ways... or more likely, a combination of the two:

1. You have a report already and simply want it updated to describe the present state of roads, using the level of effort provided previously.
2. You would like a report that determines what roads need to be upgraded/repaired with an explanation of why, and how this should best be accomplished.

As you note, it is generally cheaper to overlay than let the road fall apart to the point of needing complete replacement. Damage snowballs as potholes appear and get pounded larger. However, if the road is failing because the materials below are inadequate, or there is a drainage problem with the soils, overlaying would only buy you more time, not solve the problem.

I suggest that you go with this in two parts:

1. An update of the report you already have, with comments made about possible causes of deterioration or damage noted.
2. Using the information provided in the updated report, commission the necessary testing to determine the causes of the damage (water, thin asphalt and/or structure etc.)

The second report would provide the recommendations you'll need to come up with a repair program that doesn't simply toss good money after bad.

We can look after Part 1 for you for \$4,000. This assumes that the previous report will be made available so that we can comment on how trouble spots have fared over the intervening years. The report would contain a map of the roads and an itemized list of problem areas with photographs. Comments as to the probable causes of the failures would also be noted.

I trust this is what you're looking for?

Regards,

Brock

Wayne Vollrath wrote:

Hi Brock,

12/18/2009



Engineering - Geomatics - Planning

December 15, 2009

File No. 030300429P

District of Barriere
PO Box 219, 4936 Barriere Town Road
Barriere, BC VoE 1E0
Ph: (250) 672-9751
E-mail: wvollrath@districtofbarriere.com

Attn: Wayne Vollrath, CAO

**RE: District of Barriere Roads Assessment and Cataloging
PROPOSAL TO PROVIDE ENGINEERING SERVICES**

Thank you for contacting Focus Corporation ("Focus") with regard to the above noted project. We are pleased to provide our proposed Engineering Services Agreement for consulting and professional services.

PROJECT UNDERSTANDING

From recent correspondence, we understand that the District of Barriere is looking to upgrade their existing municipal roads inventory database.

A new visual inspection and assessment of all the District's roads is to be undertaken, followed by the creation of a detailed database outlining the condition of the roads. The database would be utilized for the following purposes:

- Written and mapped inventory of Barriere's existing road infrastructure
- Identify timelines and methods for the maintenance and renewal of District roads to minimize the long-term expenditure of maintenance funds
- Prioritize projected road maintenance based on the community's needs, taking efficiencies into consideration

We understand that an existing cursory road condition inventory is available and would be provided to Focus should we be engaged to perform the work.

ENGINEERING SERVICES

With the acceptance of this proposal, the agreement shall be as follows:

The District of Barriere ("the Client") will retain Focus to:

- Perform a detailed visual inspection of Barriere's approximately 25.4 km of paved roads and 3.1 km of gravel roads
- Prepare a road conditions matrix, identifying the condition of Barriere's roads identified above
- Prioritize future road maintenance/renewal based on the importance of each road, its present condition, and the anticipated costs of the renewal work
- Further prioritize future road maintenance/renewal based on the time vs. cost relationship for each section that is anticipated to require renewal

and Focus agrees to provide these services to the Client .

PROJECT TEAM AND RATES

The Project Team and their associated rates we propose for this assignment consists of the following key members:

Project Manager	Mike Wolfson, PEng	\$105
Senior Technologist	Loris Pellizzon, ASCT	\$95
CAD Technologist	Rob Howell	\$110
Administrator	Marilee I. Fletcher	\$90

The visual road assessment, analysis and database preparation is to be performed by Loris Pellizzon, who performed this service for many years for the City of Kamloops. His experience and expertise in this area will prove an extremely valuable asset to the undertaking of the work.

FEES & DISBURSEMENTS – FIXED FEE

For the engineering services described above, we propose a **Lump Sum Fee of \$13,000.00 including disbursements**, plus G.S.T. Hourly rates for personnel involved in the project will be as per 2010 Fee Schedule. Any work beyond 2010 will be subject to a new rate schedule to be approved by the Client.

Disbursements to be charged include the following:

- Equipment charges
- Deliveries, courier, postage
- Document reproduction
- Vehicle mileage
- Travel expenses
- Plotting of drawings

The Client may, during the course of the project, without invalidating this agreement, make changes in the scope of services to be provided by Focus. Additional services as requested will be provided at hourly rates as set out above and the schedule will be changed as is reasonably necessary to allow for the changes in the scope of services.

It should be noted that the services provided and the associated fees for this project do not include the following:

- Geotechnical assessment or testing of road structure
- Design of any roadworks

SCHEDULE

We anticipate that the visual inspection of the road would take place in the Spring of 2010 after the snow has melted. Approximately three to six weeks would be required to prepare the database following the commencement of the visual inspection.

GENERAL PROVISIONS

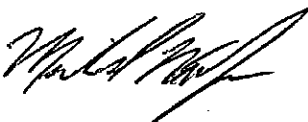
The terms of agreement for the provision of engineering services are set out in this proposal and in Terms of Engagement as appended to this proposal.

If the Client accepts Focus' offer to provide engineering services, then this proposal and the Terms of Engagement constitute the entire agreement between the parties respecting the project and no understandings or agreements, oral or otherwise, exist between the parties except as expressly set out herein.

We thank you again for the opportunity to propose our services and we look forward to working with you.

Sincerely,

FOCUS CORPORATION



Mike Wolfson, P.Eng.
Project Manager



Rick McCallum
Thompson-Okanagan Regional Manager

ACCEPTANCE OF PROPOSAL

The Client accepts Focus' offer to perform the services on the terms and conditions noted in this proposal and the Terms of Engagement by signing and returning a copy of this proposal to Focus.

District of Barriere

Date

FOCUS

TERMS OF ENGAGEMENT

1. GENERAL

Focus Corporation ("Focus") shall render the Services, as specified in this proposal, to the Client for this Project in accordance with the following terms of engagement. Each party shall designate a representative who is authorized to act on behalf of that party and receive notices under this Agreement.

Focus will confirm in writing before proceeding with additional services as required by the client. Rates will be either hourly or on a task specific basis.

2. COMPENSATION

Fees for Services provided are due and payable upon invoicing. Accounts in excess of 30 days from date of invoice are surcharged with carrying charge interest at 2% per month, compounded monthly (26.8% per annum) on overdue amounts. Obtaining agency approvals is not a prerequisite for payment for Services rendered.

3. TERMINATION

Either party may terminate this engagement without cause upon thirty (30) days' notice in writing. On termination by either party under this paragraph, the Client shall forthwith pay to Focus all charges for the Services performed, including all expenses and other charges incurred by Focus for this Project.

If either party breaches this engagement, the non-defaulting party may terminate this engagement after giving seven (7) days' notice to remedy the breach. On termination by Focus under this paragraph, the Client shall forthwith pay to Focus all charges for the Services performed to the date of termination, including all fees and charges for this Project.

4. ENVIRONMENTAL

Focus' field investigation, field testing and engineering recommendations will not address or evaluate pollution of soil or pollution of groundwater. Focus will cooperate with the Client's environmental consultant.

5. PROFESSIONAL RESPONSIBILITY

In performing the Services, Focus will provide and exercise the standard of care, skill and diligence required by customarily-accepted professional practices and procedures normally provided in the performance of the Services contemplated in this engagement, at the time when, and in the location which, the Services are performed.

6. INSURANCE

As required under the policies of the Association of Professional Engineers and Geoscientists of BC, Focus hereby informs the Client that they carry Professional Liability Insurance with ENCON Insurance Managers Inc. and General Liability Insurance with Continental Casualty Company.

7. LIMITATION OF LIABILITY

Focus shall not be responsible for:

- (a) The failure of a contractor, retained by the Client, to perform the work required in the project in accordance with the applicable contract documents;
- (b) The design of, or defects in, equipment supplied or provided by the Client for incorporation into the Project;
- (c) Any cross-contamination resulting from subsurface investigations;
- (d) Any damage to subsurface structures and utilities which were identified and located by the Client;
- (e) Any Project decisions made by the Client if the decisions were made without the advice of Focus, or contrary to, or inconsistent with, Focus' advice;
- (f) Any consequential loss, injury or damages suffered by the Client, including, but not limited to, loss of use, earnings and business interruption;

- (g) The unauthorized distribution of any confidential document or report prepared by or on behalf of Focus for the exclusive use of the Client.

For the purposes of the limitation of liability provisions contained in the Agreement of the parties herein, the Client expressly agrees that it has entered into this Agreement with the Consultant, both on its own behalf and as agent on behalf of its employees and principals.

The Client expressly agrees that the Consultant's employees and principals shall have no personal liability to the Client in respect of a claim, whether in contract, tort and/or any other cause of action in law. Accordingly, the Client expressly agrees that it will bring no proceedings and take no action in any court of law against any of the Consultant's employees or principals in their personal capacity.

The total amount of all claims the Client may have against Focus under this engagement, including, but not limited to, claims for negligence, negligent misrepresentation and breach of contract, shall be strictly limited to the extent of the Focus fees under this agreement, such liability, shall not exceed the total fee charged to the Client. No claim may be brought against Focus in contract or tort more than two (2) years after the Services were completed or terminated under this engagement.

8. DOCUMENTS

All of the documents, including digital information, prepared by Focus or on behalf of Focus in connection with the Project are instruments of service for the execution of the Project. Focus retains the property and copyright in these documents, whether the Project is executed or not. These documents may not be used on any other project without the prior written agreement of Focus.

In the event the Client furnishes Focus with any documents, information, surveys, and reports, Focus shall be entitled to rely on their accuracy and completeness. Any contracts for the provision of such documents, information, surveys, and reports shall be considered direct contracts with the Client unless explicitly provided otherwise.

9. FIELD SERVICES

Where applicable, field services recommended for the Project are the minimum necessary in the sole discretion of Focus, to observe whether the work of a contractor retained by the Client is being carried out in general conformity with the intent of the Services. Any reduction from the level of Services recommended will result in Focus providing modified certifications for the work.

10. DISPUTE RESOLUTION

If requested in writing by either the Client or Focus, the Client and Focus shall attempt to resolve any dispute between them arising out of or in connection with this agreement by entering into structured, non-binding negotiations with the assistance of a mediator on a without prejudice basis. The mediator shall be appointed by agreement of the parties. If a dispute cannot be settled within a period of thirty (30) calendar days with the mediator, the dispute shall be referred to and finally resolved by arbitration under the rules of procedure of the British Columbia International Commercial Arbitration centre.

DEC 29 2009

December 22, 2009

Proposal

District of Barriere
Box 219, 4936 Barriere Town Road
Barriere, B.C.
V0E 1E0

Attention: Wayne Vollrath, C.A.O.

Dear Sir:

RE: *District of Barriere – Municipal Roadway Assessment*

TRUE Consulting Group (TRUE) understands that the District of Barriere would like to complete a detailed assessment of its municipal road network. We understand that a cursory review of the existing roadway conditions was completed recently, however the District would like to complete a more detailed assessment of its infrastructure in order to identify and strategically implement future improvements.

TRUE Consulting Group appreciates the opportunity to prepare this letter proposal for the District of Barriere. TRUE has technical personnel based from its Kamloops office that are experienced in the assessment of municipal roadway infrastructure. As such, we feel that we are qualified to complete this assessment on behalf of the District.

It is our understanding that the District of Barriere's road inventory consists of a total length of 30 km and that this inventory includes paved and gravel surfaced roads.

In order to complete this assignment, TRUE's technical personnel would conduct a visual assessment of each road segment within the District's boundary. The visual assessment and observation would involve the following components:

- Surface Conditions
- Drainage
- Distortion
- Sub-base Conditions
- Deterioration
- Overall Riding Quality

Upon completion of the field assessment works, TRUE would summarize its findings in an inventory report. The report would include a list of all roadway assets and associated characteristics based on filed observations. The report would also identify the Useful Life Remaining for each aspect of the District's road network. The estimated useful life remaining of each road segment would be calculated on the basis of the road classification and the road conditions (pavement serviceability rating).

.../2

The proposed inventory report would also identify the estimated replacement cost for each segment. Road network replacement costs would be calculated based on current square metre costs and current unit prices for sidewalk, curb, gutter, etc.

TRUE's estimated consulting costs/fees associated with this project is \$7,800 + GST in accordance the following summary of estimated fees and disbursements.

Field Assessment

Senior Technician:	24 hrs @ \$95/hr	= \$2,280
Junior Technician:	24 hrs @ \$70/hr	= \$1,680
Disbursements (travel): allowance		= <u>\$340</u>
Subtotal: Field Assessment		= \$4,300

Project Reporting

Professional Engineer:	8 hrs @ \$100/hr	= \$800
Senior Technician:	24 hrs @ \$95/hr	= \$2,280
Clerical:	8 hrs @ \$55/hr	= <u>\$440</u>
Subtotal: Reporting		= \$3,500

Total Fees and Disbursements (excl.GST): = \$7,800

The schedule associated with this project is largely dependent on weather and ground surface conditions. In order to conduct a meaningful assessment of the District's road network, the roadways must be free from snow and ice. Consequently, TRUE's proposed schedule is to commence with road network assessment works as soon as ground conditions permit.

We trust that this proposal adequately communicates our understanding of the District's requirements as it relates to an evaluation of its road network system and addresses specific requirements of the District of Barriere. Please do not hesitate to contact the undersigned should there be any questions regarding this proposal or should additional information be required.

Yours truly,

TRUE CONSULTING GROUP



Dave Underwood, P. Eng.

DU/mb



**WE CURRENTLY HAVE OPENINGS TO
COMPLETE YOUR LINE PAINTING
PROGRAM BEFORE JUNE 30TH**

Please include Aardvark Pavement Marking Services in your 2010 ITQ, RFQ or BC BID Multi Year Services Contract.

We provide the following services:

Centre Line Painting
Handwork Painting (Crosswalks, Arrows, Curbing etc.)
Durable Markings (incl. Thermo & System 400)
Power Sweeping (Mechanical and Vacuum Sweepers)
On-Site Consulting Services

CALL 250-862-0813 FAX 250-451-9750

EMAIL: stephmartin@telus.net

2010 BUDGET

Description	2008 Actual	2009 Budget	2009 YTD Actual	2009 Budget Remaining	Proposed 2010 Budget
Transportation Services					
Mileage & Subsistence	0.00	0.00	88.50	(88.50)	
Contract Work	0.00	0.00	457.50	(457.50)	
General Supplies & Services (Misc)	68.33	100.00	736.71	(636.71)	
Equipment, Machines, Parts & Supplies	0.00	0.00	0.00	0.00	
Construction & R/M	78.75	0.00	330.00	(330.00)	
Utilities - Street Lighting	22,609.69	24,000.00	16,607.07	7,392.93	
Street Light Discounts	2,792.70	1,450.00	1,501.92	(51.92)	
Transfer to Reserve	137,214.00	235,500.00	235,500.00	0.00	
* TOTAL Transportation Services	162,763.47	261,050.00	255,221.70	5,828.30	
New Projects					

Legislative Office:
East Annex, Parliament Buildings
Victoria, B.C. V8V 1X4
Phone: 250 953-4869
Fax: 250 387-9091

Constituency Office:
8312 - 74th Avenue
P.O. Box 1110
Osoyoos, B.C. V0H 1V0
Phone: 250 495-2042
Toll-Free: 1 877 652-4304
Fax: 250 495-2077
e-mail: john.slater.mla@leg.bc.ca
website: www.johnslatermla.bc.ca



**Province of
British Columbia**
Legislative Assembly



John Slater, M.L.A.
Burnaby-Similkameen
Parliamentary Secretary
for Water Supply and Allocation

December 17, 2009

Mayors, Councillors and Regional District Chairs:

Living Water Smart is the provincial government's plan to keep our water healthy and secure for the future. A key commitment in the plan is to consider amendments to the *Water Act* to improve the protection of ecological values, provide for more community involvement and provide incentives to be water efficient.

Over the coming months, we will be using a new *Living Water Smart* blog to encourage water stewardship in BC, share ideas and stories and celebrate our water smart successes. The blog will also be used to support dialogue on modernizing the *Water Act* and will complement a public discussion paper and a series of regional meetings to be announced early in 2010. You and your staff can access the blog at www.livingwatersmart.ca.

We recognize that water touches many aspects of local government's business and responsibilities. We will engage with you directly to gather your views and feedback on proposed policy options. We will be working with UBCM and following up with you in the New Year with details on engagement opportunities.

If you require further information please contact Ted White, Ministry of Environment, Water Stewardship Division at 250-356-2791.

I look forward to working with you on this important initiative.

Sincerely,

John Slater, MLA Boundary-Similkameen
Parliamentary Secretary for Water Supply and Allocation

Attachments: - Summary of Living Water Smart Commitments related to *Water Act* Modernization
 - Water Act Modernization Backgrounder

cc: Honourable Bill Bennett, Minister of Community and Rural Development
Jared Wright, UBCM

Wayne Vollrath

From: Inquiry
Sent: Thursday, December 24, 2009 8:56 AM
To: Wayne Vollrath
Subject: FW: Email from UBCM
Attachments: Dec 23 - Slater letter to local govt - WAM.pdf

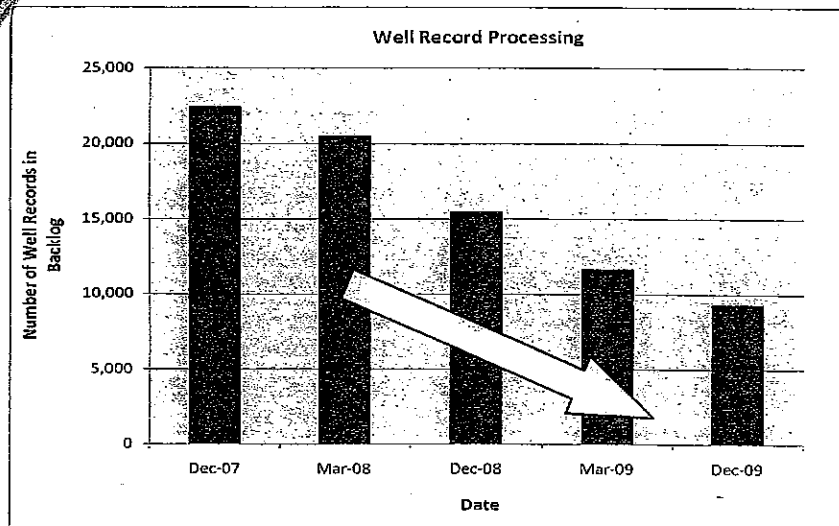
From: radamson@ubcm.ca [mailto:radamson@ubcm.ca]
Sent: Wed 12/23/2009 12:05 PM
To: Inquiry
Subject: Email from UBCM

Dear

Attention: Chief Administrative Officers

Please find enclosed a message from John Slater, Parliamentary Secretary for Water Supply and Allocation regarding the engagement and consultation strategies for proposed policy options under the Living Water Smart plan. Please distribute the message to mayors, councillors, directors and chairs, as well as relevant staff.

12/24/2009



We continue to see good progress at reducing our backlog of water well records (see graph).

Since December 2007 to December 2009 there has been an overall decrease in the backlog by 58%.

Living Water Smart & Water Act Modernization (WAM)

The Ministry of Environment is doing business differently so British Columbia can be Living Water Smart.

As part of *Living Water Smart*, The Government's vision and commitment to ensure our water stays healthy and secure, the Ministry is now reviewing options for modernising Water Laws. The existing Water Act was initially passed 100 years ago. The Province has changed dramatically since then and the impacts of climate change, our growing population and expanding economy mean that we need modern water laws to be Living Water Smart.

Reforms to our water laws will focus on:

- Protecting stream health
- Improving water governance
- Flexibility and efficiency in water allocation
- Regulating ground water

The *Water Act* modernisation process has begun and we want your help to get British Columbia Living Water Smart.

The *Living Water Smart* blog will provide regular updates on the modernization process and provide a forum for discussion on options and potential solutions. Early next year the Ministry plans to release a public discussion paper and hold a series of regional meetings with First Nations and stakeholders across British Columbia to complement the Blog forum.

Help us be Living Water Smart today - register now for email updates by contacting livingwatersmart@gov.bc.ca or watch our website (<http://www.livingwatersmart.ca/>) for information about our blog and how you can get involved.

We look forward to hearing your ideas and suggestions!

From The Living Water Smart Team.