



NORTH RED DEER RIVER WATER SERVICES COMMISSION

Regular Meeting

April 13, 2015 @ 9:00 AM

LACOMBE CITY HALL

AGENDA

1. Call to Order
2. Adoption of Agenda
3. Adoption of Minutes
 - a. December 8, 2014 Regular Meeting (*attached*)
4. Presentation
 - a. BDO Canada LLP – Dan Luymes
 - i) Auditor's Report and 2014 Audited Financial Statement
 - ii) 2014 Audit Financial Statements for Approval
5. Reports
 - a. Operations (*attached*)
 - b. Administrator (*attached*)
 - i) Monthly Report
 - ii) Financial - end of February 2015
 - c. Chair
6. Correspondence
 - a. Alberta Government – Improved Regulation of Drinking Water
7. Old Business
8. New Business
 - a. 2014 Allocation of Surplus
9. In Camera
 - a. North Water Transmission Main
10. Next Meeting Date: August 10, 2015 (proposed)
11. Adjournment

NORTH RED DEER RIVER WATER SERVICES COMMISSION
REGULAR MEETING MINUTES
December 8, 2014

In Attendance: Mayor Steve Christie, City of Lacombe
Mayor Rick Bonnett, Town of Ponoka
Mayor Melodie Stol, Town of Blackfalds
Councillor Ken Wigmore, Lacombe County
Councillor Mark Matejka, Ponoka County
Michael Minchin, NRDRWSC Administrator
Jennifer Peterson, Administrator Assistant

Others Present: Norma MacQuarrie, CAO City of Lacombe
Rachel Kunz, CAO Town of Ponoka
Preston Weran, Director of Infrastructure, Town of Blackfalds
Jordan Thompson, Engineering Manager, City of Lacombe
Chris Huston, Utilities Manager, City of Lacombe

1. Call to Order:

Chair Christie called the meeting to order at 9:05 am.

2. Adoption of the Agenda:

MOVED by Councillor Wigmore that the agenda for December 8, 2014 be adopted as presented.

CARRIED

3. Adoption of the Minutes:

MOVED by Mayor Stol that the minutes for November 3 2014 be adopted as presented.

CARRIED

4. Reports

Operator's Report

Mr. Thompson discussed the recent activities.

In summary:

- Responded to 40 Alberta One-Call Locate requests for November, expecting about the same for December.
- Wolf Creek's actuator value needed to be reprogrammed by Summit Valve.
- Lucas UPS battery backup has been replaced with a new one.
- A 10 inch waterline of the City of Lacombe blew out about 3800 cubic meters of water. Contractor to pay for the loss to the City.

Administrator Report

Mr. Minchin presented the Administrator's report.

In summary:

- Red Deer is using a new water rate model to calculate water rates. The changes are more cosmetic and presentation based. The mechanics remain unchanged.
- The Commission received the True-up for 2013 and received a significant refund.
- The meeting in April the Commission will discuss the 5 year budget. Red Deer is showing big fluctuations in their 5 year plan from 5%-9%.
- There will be no rate increase for municipalities for 2015

Mr. Minchin presented the Financial Interim report.

In summary:

- Water sales in most communities are above targeted sales for the year.
- The actual sale for 2014 will be used as the estimated amount for 2015

Chairman's Report

Nothing to report at this time.

MOVED by Mayor Bonnett to accept the reports as information.

CARRIED

5. Information

2015 Water Supply Rate Notification – City of Red Deer

Mr. Minchin advised the Commission that the new water rates from Red Deer will take effect on March 1, 2015. There will be a \$0.03 per cubic metre increase.

MOVED by Councillor Matejka to accept the reports as information.

CARRIED

6. Old Business:

2015 Commission Operating & Capital Budget

Mr. Minchin shared that he has not received any objections to the proposed 2015 Operating Budget from the partnering municipalities and asked that the Commission approve the 2015 Operating and 2015 Capital Budget as presented.

MOVED by Councillor Wigmore to approve the 2015 Operating and Capital Budget as presented.

CARRIED

7. New Business:

True-up 2013 Supply Year

Mr. Minchin explained to the Commission the process on how the True-up is calculated.

- It is determined by matching-up expenses with value of sales. No payment until it true up exceeds 10% variance. This goes both ways.
- Administration will be recommending that the true revenue be transferred to the operating reserve. Reserves have almost reached the capped amount of 1 million dollars.
- Water sales are up due to a dry summer in 2014 and more customers on line in 2014. Blackfalds added 300-400 homes in 2014 and are expecting the same for 2015.

MOVED by Mayor Stol to accept as information.

CARRIED

8. Next Meeting:

Monday, April 13, 2015 at 9 am, City of Lacombe Council Chambers.

9. Adjournment:

MOVED by Mayor Bonnett to adjourn this Meeting at 9:24 am.

CARRIED

Chairperson

Administrator

**NORTH RED DEER RIVER
WATER SERVICES COMMISSION**

**Consolidated Financial Statements
Year Ended December 31, 2014**

NORTH RED DEER RIVER WATER SERVICES COMMISSION
FINANCIAL STATEMENTS
DECEMBER 31, 2014

| | |
|--|----|
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Independent Auditor's Report

**To the Members of the Board of the
North Red Deer River Water Services Commission**

Report on the Consolidated Financial Statements

We have audited the accompanying financial statements of North Red Deer River Water Services Commission, which comprise the Consolidated Statement of Financial Position as at December 31, 2014, and the Consolidated Statements of Operations, Change in Net Assets and Cash Flows for the year then ended, and a summary of significant accounting policies and other explanatory information.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with Canadian public sector accounting standards, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements present fairly, in all material respects, the financial position of North Red Deer River Water Services Commission as at December 31, 2014, and the results of its operations, change in net assets and its cash flows for the year then ended in accordance with Canadian public sector accounting standards.

BDO Canada LLP

Red Deer, Alberta
April 13, 2015

CHARTERED ACCOUNTANTS

**NORTH RED DEER RIVER WATER SERVICES COMMISSION
CONSOLIDATED STATEMENT OF FINANCIAL POSITION
DECEMBER 31, 2014 For the Year Ended**

| | 2014 | 2013 |
|--|---------------------|--------------|
| | \$ | \$ |
| ASSETS | | |
| Cash | 4,013,761 | 2,853,009 |
| Trade and Other Receivables | 645,644 | 656,179 |
| | 4,659,405 | 3,509,188 |
| LIABILITIES AND SHAREHOLDERS' EQUITY | | |
| Accounts Payable and Accrued Liabilities | 336,849 | 347,044 |
| Current Portion of Long-term Debt (Note 5) | 616,323 | 589,444 |
| | 953,172 | 936,488 |
| Long-term Debt, Net of Current Portion (Note 5) | 14,141,535 | 14,757,858 |
| | 15,094,707 | 15,694,346 |
| Net Debt | (10,435,302) | (12,185,158) |
| Non-financial assets | | |
| Tangible Capital Assets | 32,662,244 | 33,127,854 |
| Inventory of Supplies (Note 3) | 67,283 | 63,412 |
| ACCUMULATED SURPLUS (Note 8) | 22,294,224 | 21,006,108 |

Approved on Behalf of the Commission

Chairman

Administrator

The accompanying notes are an integral part of these financial statements.

**NORTH RED DEER RIVER WATER SERVICES COMMISSION
CONSOLIDATED STATEMENT OF OPERATIONS
FOR THE YEAR ENDED DECEMBER 31, 2014**

| | Budget \$ | 2014 \$ | 2013 \$ |
|--|------------------|-------------------|------------------|
| REVENUE | | | |
| Water Sales to Commission Members | 5,134,906 | 5,522,603 | 5,142,826 |
| Service Fees Charged to Commission Members | 134,000 | 138,088 | 136,432 |
| Interest income | 33,000 | 39,863 | 32,623 |
| Rebates & Dividends (Note 10) | 50 | 409,855 | 21 |
| Other Revenue | 1,000 | 2,000 | 750 |
| | 5,302,956 | 6,112,409 | 5,312,652 |
| OPERATING EXPENSES | | | |
| Accounting and Audit Fees | 8,900 | 8,052 | 10,605 |
| Board Remuneration | 4,750 | 3,200 | 3,550 |
| Board Travel | 2,500 | 435 | 260 |
| Communication | 9,389 | 8,697 | 8,787 |
| General Materials and Supplies | 1,100 | 648 | 431 |
| Insurance | 5,500 | 4,386 | 4,480 |
| Interest on Long-term Debt | 685,458 | 683,614 | 714,143 |
| Legal | 500 | - | - |
| Management Fees | 50,202 | 50,286 | 47,440 |
| Office | 250 | - | 20 |
| Operator Costs | 96,300 | 111,125 | 93,139 |
| Other Expenses | 500 | 522 | 799 |
| Other Professional Fees | 47,738 | 59,202 | 20,448 |
| Purchase of Water | 3,114,356 | 3,369,086 | 3,166,327 |
| Repairs and Maintenance | 7,500 | 38,809 | 7,724 |
| SCADA Maintenance | 10,800 | 10,764 | 10,764 |
| Utilities | 5,000 | 3,829 | 4,096 |
| Valves | 5,000 | 6,028 | 5,717 |
| Amortization of Capital Assets | 465,610 | 465,610 | 465,610 |
| | 4,521,353 | 4,824,293 | 4,564,340 |
| EXCESS OF REVENUES OVER EXPENSES | 781,603 | 1,288,116 | 748,312 |
| ACCUMULATED SURPLUS, BEGINNING OF YEAR | 21,006,108 | 21,006,108 | 20,257,797 |
| ACCUMULATED SURPLUS, END OF YEAR | 21,787,711 | 22,294,224 | 21,006,108 |

The accompanying notes are an integral part of these financial statements.

**NORTH RED DEER RIVER WATER SERVICES COMMISSION
CONSOLIDATED STATEMENT OF OPERATIONS
FOR THE YEAR ENDED DECEMBER 31, 2014**

The accompanying notes are an integral part of these financial statements.

**NORTH RED DEER RIVER WATER SERVICES COMMISSION
STATEMENT OF CHANGE IN NET DEBT
FOR THE YEAR ENDED DECEMBER 31, 2014**

| | Budget | 2014 | 2013 |
|---|---------------------|---------------------|---------------------|
| | \$ | \$ | \$ |
| INCOME FROM OPERATIONS | 781,603 | 1,288,116 | 748,312 |
| Amortization of Capital Assets | 465,610 | 465,610 | 465,610 |
| Inventory Supplies | - | (3,870) | - |
| Net Change in Net Debt | 1,247,213 | 1,749,856 | 1,213,922 |
| Net Debt, Beginning of Year | (12,185,158) | (12,185,158) | (13,399,081) |
| NET FINANCIAL ASSETS (DEBT), END OF YEAR | (10,937,946) | (10,435,302) | (12,185,158) |

The accompanying notes are an integral part of these financial statements.

**NORTH RED DEER RIVER WATER SERVICES COMMISSION
CONSOLIDATED STATEMENT OF CASH FLOWS
FOR THE YEAR ENDED DECEMBER 31, 2014**

| | 2014 | 2013 |
|---|------------------|-------------|
| | \$ | \$ |
| CASH FLOWS FROM OPERATING ACTIVITIES | | |
| Excess of Revenues over Expenses | 1,288,116 | 748,313 |
| Items which do not affect cash: | | |
| Amortization of Capital Assets | 465,610 | 465,610 |
| Net change in non-cash working capital balances: | | |
| Decrease (Increase) in Trade and other Receivables | 9,925 | 684,843 |
| (Increase) in Inventory of Supplies | (3,870) | - |
| Increase (Decrease) in Accounts Payable and Accrued Liabilities | (9,585) | 25,841 |
| | 1,750,196 | 1,924,607 |
| CASH FLOWS FROM INVESTING ACTIVITIES | | |
| CASH FLOWS FROM FINANCING ACTIVITIES | | |
| Repayment of Debenture Debt | (589,444) | (563,737) |
| CAPITAL ACTIVITIES: | | |
| CHANGE IN CASH AND CASH EQUIVALENTS DURING THE YEAR | 1,160,752 | 1,360,870 |
| CASH AND CASH EQUIVALENTS - BEGINNING OF YEAR | 2,853,009 | 1,492,139 |
| CASH AND CASH EQUIVALENTS - END OF YEAR | 4,013,761 | 2,853,009 |

The accompanying notes are an integral part of these financial statements.

NORTH RED DEER RIVER WATER SERVICES COMMISSION
Notes to the Consolidated Financial Statements
December 31, 2014

1. Significant Accounting Policies

a. Management's Responsibility for the Financial Statements

The financial statements of the North Red Deer River Water Services Commission (the "Commission") are the responsibility of management. They have been prepared in accordance with Canadian generally accepted accounting principles established by the Public Sector Accounting Board. The Commission is constituted under the Municipal Government Act and was approved by the Minister of Municipal Affairs on June 8, 2004, for the purpose of constructing, maintaining, controlling, and managing a regional water system. The members of the Commission are the City of Lacombe, Lacombe County, Ponoka County, Town of Blackfalds, and the Town of Ponoka.

b. Budget Amounts

The budget amounts presented on the statement of financial activities are taken from the commission's annual budget.

c. Revenue Recognition

The financial statements are prepared using the accrual basis of accounting. The accrual basis of accounting records revenue as it is earned and measurable. Government transfers are received from third parties pursuant to agreement and may only be used for the completion of specific work or for the purchase of tangible capital assets. Revenue is recognized in the period when the related expenses are incurred, or the tangible capital assets are acquired.

d. Use of Estimates

The preparation of financial statements in conformity with public sector accounting standards requires management to make estimates and assumptions that affect the reported amount of assets, liabilities, and disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amount of revenue and expenditure during the period. Where measurement uncertainty exists, the financial statements have been prepared within reasonable limits of materiality. Actual results could differ from those estimates.

e. Inventories

Inventories of materials and supplies for consumption are valued at the lower of cost or net replacement cost.

f. Tangible Capital Assets

Tangible capital assets are recorded at cost less accumulated amortization. Cost includes all amounts that are directly attributable to acquisition, construction, development or betterment of the asset. Contributed tangible capital assets are recorded at fair value at the date of contribution and are also recorded as revenue.

NORTH RED DEER RIVER WATER SERVICES COMMISSION
Notes to the Consolidated Financial Statements
December 31, 2014

1 Significant Accounting Policies continued

f. Tangible Capital Assets continued

The cost, less residual value, of the tangible capital asset are amortized on a straight line basis over the estimated useful life as follows:

| <u>ASSET CLASS</u> | <u>YEARS</u> |
|--------------------------------------|--------------|
| Buildings | 25-50 |
| Engineered structures | |
| Water systems | 45-75 |
| Machinery, equipment and furnishings | 5-30 |
| Vehicles | 10-25 |

One-half of the annual amortization is charged in the year of acquisition and in the year of disposal. Assets under construction are not amortized until the asset is available for productive use.

2 FINANCIAL INSTRUMENTS

The Commission utilizes various financial instruments. It is management's opinion that the Commission is not exposed to significant interest or currency risks arising from these financial instruments.

The carrying value of these financial instruments approximates their fair value.

3 INVENTORIES OF SUPPLIES

| | 2014 | 2013 |
|-----------------------|---------------|-------------|
| | \$ | \$ |
| Valves | 42,791 | 38,920 |
| Material and Supplies | 8,660 | 8,660 |
| Pipe | 8,513 | 8,513 |
| Couplings | 2,707 | 2,707 |
| Miscellaneous | 4,612 | 4,612 |
| | 67,283 | 63,412 |

NORTH RED DEER RIVER WATER SERVICES COMMISSION
Notes to the Consolidated Financial Statements
December 31, 2014

4 BANK OVERDRAFT

The Commission has an unused overdraft protection agreement with a maximum overdraft of \$1 million and interest charged at lender prime less .25%, Collateral is comprised of a general security agreement specifically pledging all grant proceeds and debenture products. As at year end December 31, 2014 the prime rate was 3%

5 LONG-TERM DEBT

| | 2014 \$ | 2013 \$ |
|---|-------------------|------------|
| 4.46% debenture, repayable \$66,762 semi-annually, due September 15, 2031 | 1,579,456 | 1,640,487 |
| 4.515% debenture, repayable \$570,688 semi-annually, due June 15, 2031 | 13,178,402 | 13,706,815 |
| | 14,757,858 | 15,347,302 |
| Current Portion of Long-term Debt | 616,323 | 589,444 |
| Long-Term Portion | 14,141,535 | 14,757,858 |

Principal and interest repayments are as follows:

| | Principal \$ | Interest \$ | Total \$ |
|------------|-------------------|------------------|-------------------|
| 2015 | 616,323 | 658,578 | 1,274,901 |
| 2016 | 644,428 | 630,473 | 1,274,901 |
| 2017 | 673,815 | 601,086 | 1,274,901 |
| 2018 | 704,542 | 570,359 | 1,274,901 |
| 2019 | 736,670 | 538,231 | 1,274,901 |
| Subsequent | 11,382,080 | 3,346,048 | 14,728,128 |
| | 14,757,858 | 6,344,775 | 21,102,633 |

Debenture debt is issued on the credit of the Commission at large. The Commission has agreed to levy upon the member municipalities, a cubic meter water service fee based on actual use sufficient to provide for annual funds to pay principal and interest due each year on debentures and annual operating costs.

NORTH RED DEER RIVER WATER SERVICES COMMISSION
Notes to the Consolidated Financial Statements
December 31, 2014

6 DEBT LIMITS

Section 3 of Alberta Regulation No. 76/2000 and requires that debt and debt limits for the Commission to be disclosed. The Commission has received approval to borrow up to \$27 million under ministerial orders L:043/05 (\$22,000,000) and L:148/05 (\$5,000,000) to complete the project and as such, has not exceeded its debt limit at December 31, 2014. The debt limit and debt service limit otherwise determined are as follows:

| | 2014 | 2013 |
|----------------------|---------------------|--------------|
| | \$ | \$ |
| Total debt limit | 12,224,818 | 10,625,304 |
| Total Long-Term debt | (14,757,858) | (15,347,302) |
| | (2,533,040) | (4,721,998) |
| Debt servicing limit | 2,139,343 | 1,859,428 |
| Debt Servicing | (1,274,901) | (1,274,901) |
| | 864,442 | 584,527 |

The debt limit is calculated at 2 times the revenue of the Commission (as defined in Alberta Regulation 76/2000) and the debt service limit is calculated at 0.35 times such revenue. Incurring debt beyond these limitations requires approval by the Minister of Municipal Affairs. These thresholds are guidelines used by Alberta Municipal Affairs to identify Commissions that could be at financial risk if further debt is acquired. The calculation alone does not represent the financial stability of the Commission. Rather, the financial statements must be interpreted as a whole.

7 EQUITY IN TANGIBLE CAPITAL ASSETS

Net assets invested in capital assets is calculated as follows:

| | 2014 | 2013 |
|-------------------------|---------------------|--------------|
| | \$ | \$ |
| Tangible Capital Assets | 32,662,244 | 33,127,854 |
| Total Long-Term debt | (14,757,858) | (15,347,302) |
| | 17,904,386 | 17,780,552 |

NORTH RED DEER RIVER WATER SERVICES COMMISSION
Notes to the Consolidated Financial Statements
December 31, 2014

8 ACCUMULATED SURPLUS

| | 2014 | 2013 |
|-----------------------------------|--------------------------|-------------------|
| | \$ | \$ |
| Unrestricted Operating Surplus | 2,056,144 | 1,542,049 |
| Unrestricted Capital Surplus | 233,104 | 233,104 |
| Operating Reserve | 891,421 | 706,845 |
| Capital Reserve | 1,209,169 | 743,559 |
| Equity in Tangible Capital Assets | 17,904,386 | 17,780,552 |
| | <u>22,294,224</u> | <u>21,006,109</u> |

The Capital Reserve is used to provide funds for specific capital equipment purchases to enhance or improve service delivery. Operating Reserves are funds for emergency situations. Both are funded out of year-end surplus and allocated based on Board Policy.

NORTH RED DEER RIVER WATER SERVICES COMMISSION
Notes to the Consolidated Financial Statements
December 31, 2014

9 RELATED PARTY TRANSACTIONS

City of Lacombe, Town of Blackfalds, Town of Ponoka, Lacombe County, and Ponoka County are members of the Commission and, as such, have been identified as related parties.

a. WATER SALES:

Water sales charged to Commission members are as follows:

| | 2014 | 2013 |
|--------------------|------------------|------------------|
| | \$ | \$ |
| City of Lacombe | 2,696,869 | 2,512,928 |
| Town of Ponoka | 1,434,114 | 1,416,189 |
| Town of Blackfalds | 1,376,728 | 1,202,014 |
| Ponoka County | 14,892 | 11,695 |
| | 5,522,603 | 5,142,826 |

b. SERVICE FEES:

Service fees are based on the actual net operating costs of the Commission and are allocated among various Commission members based on earlier agreement. service fees charged to Commission members are as follows:

| | 2014 | 2013 |
|----------------|----------------|----------------|
| | \$ | \$ |
| Lacombe County | 69,044 | 68,216 |
| Ponoka County | 69,044 | 68,216 |
| | 138,088 | 136,432 |

c. OTHER FEES:

The commission is provided accounting, management and operations services by the City of Lacombe for a total cost of \$161,411 (2013 - \$140,559)

Included in accounts receivable are \$632,567 (2013- \$649,937) due from various member municipalities.

NORTH RED DEER RIVER WATER SERVICES COMMISSION
Notes to the Consolidated Financial Statements
December 31, 2014

10 REBATES

Based on the terms of the water supply agreement with the City of Red Deer effective September 1, 2005, annual water rates are based on forecasted consumption volume and costs which are subject to annual reconciliation. A "true-up" transaction, where one party compensates the other for variance in consumption and/or cost, is only applicable when the difference between forecasted and actual consumption and costs results in an actual cost per cubic metre variance greater than 10%. The rebate received in 2014 is a result of the reconciliation of actual annual costs and volumes to annual budgeted costs and volumes completed by the City of Red Deer for the 2013 calendar year and resulted in a rebate of \$409,800 (2013- \$0). The reconciled amount and resulting rebate or payable is not calculated until subsequent to the year end and as a result is recognized in the financial statements when known or received.

11 SIGNIFICANT AGREEMENTS

a. CITY OF RED DEER

The Commission has entered into a 25 year agreement with the City of Red Deer, expiring August 31, 2030, to purchase water. The agreement may be terminated by either party by giving five year's written notice. Under the agreement, the Commission is obligated to purchase an annual quantity of water to be determined by negotiation between the parties at a rate calculated on a cost of service basis utilizing the principles set out in the American Water Works Association manuals of practice dealing with water rates and charges.

b. RELATED PARTIES

The Commission has entered into agreements with the City of Lacombe, Town of Ponoka, Town of Blackfalds, and Ponoka County to supply water. Under the agreement, the Commission is obligated to provide a maximum allocation of water to each municipality for a price determined annually by October 31st of the prior year.

12 SUPPLEMENTARY CASH FLOW INFORMATION

| | 2014 | 2013 |
|----------------------------|---------|---------|
| | \$ | \$ |
| Interest income | 39,863 | 32,623 |
| Interest on Long-term Debt | 683,614 | 714,143 |

13 APPROVAL OF FINANCIAL STATEMENTS

Commission Board and Administration have approved these financial statements.

Schedule 1

| | Cost | | Amortization | | | 2014 | 2013 |
|-----------------------|-------------------|-------------|-------------------|--------------|-----------|------------|------------|
| | Beginning of year | End of year | Beginning of year | Amortization | Disposals | \$ | \$ |
| Engineered Structures | 34,776,820 | 34,776,820 | 3,470,659 | 465,610 | - | 30,840,551 | 31,306,161 |
| Land | 1,821,692 | 1,821,692 | - | - | - | 1,821,692 | 1,821,692 |
| | 36,598,512 | 36,598,512 | - | 465,610 | - | 32,662,243 | 33,127,853 |

M E M O R A N D U M



North Red Deer River Water Services Commission

5432 56th Avenue
Lacombe, Alberta T4L 1E9

Phone: (403) 782-6666
Direct Line: (403) 782-1268
Fax: (403) 782-5655

jthompson@lacombe.ca

April 15, 2015

Attn: NRDRWSC Commission

Re: Operational Report since December 8, 2014 to current

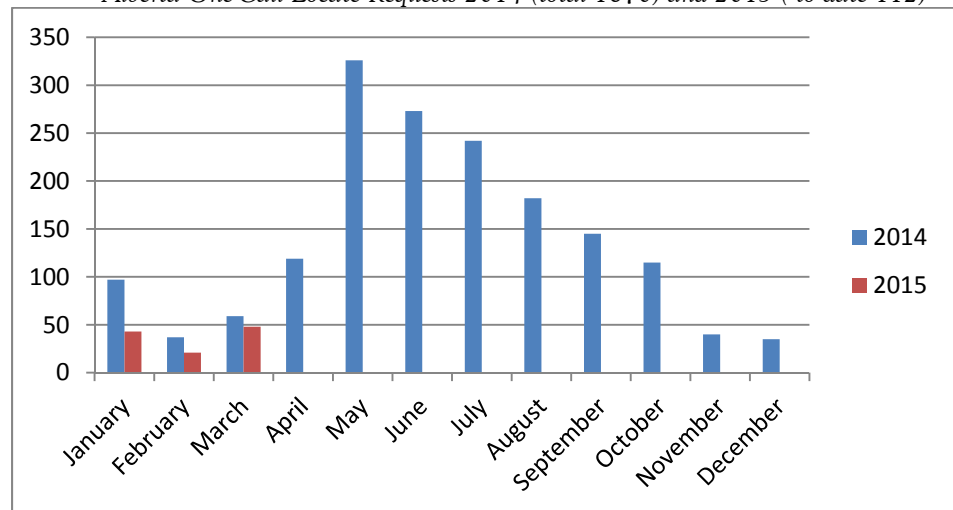
Since the last update provided to members of the Commission (December, 2014), the City of Lacombe has dealt with the following:

GENERAL ISSUES

➤ Alberta One-Call Locate Requests:

- December – 35 locates
- January – 43 locates
- February – 21 locates
- March – 48 locates

Alberta One-Call Locate Requests 2014 (total 1670) and 2015 (to date 112)



Repair response charges:

- Feb. 5 – Trouble with actuator valve at Pump house “C”; valve won’t open, had Summit Valve visit site to reprogram actuator on Feb. 10.
- Feb. 26 – Brian R with Summit Valve installing new 8” v-port ball valve.
- Mar.5 – Brian R, Summit and Phase 3 at 39th Ave to install actuator valve. Back operational from Red Deer to site.
- Mar.10 to 12 – Red Deer shutdown for scheduled maintenance, but changed stop fill set points at the same time, both Lucas and Riverside had high level alarms go off, Brian R talked with Red Deer operators and told them they can adjust start fill points, but not to change stop fill.
- Mar.20 – THM & Lead testing completed at PH “A & C”, 39th Ave, Riverside, Wolf Creek and Railway provided through Infinite Water Resources.

Call-Out:

- Dec. 14 – 39th Ave actuator valve won’t close, Brian R troubleshoot valve and found that the mechanical v-port valve was hard to turn and impossible to close. Talked to Summit Valve and ordered a replacement – 10 week delivery time for the valve.
- Dec.14 to 31 (Dec. 14, 16, 21, 22, 25, 27 & 31 call outs)– open and close 39th Ave valve manually via a butterfly valve located within the reservoir.

- Jan. 1 to 31 (Jan. 7, 8, 10 & 13 call outs)- open/close butterfly valve at 39th Ave manually
- Feb. 1 to 28 (Feb. 4, 8, 10, 11, 16, 18, 19, 23, 25, 27 & 28 call outs)- open/close butterfly valve at 39th Ave manually
- Feb.23 - Red Deer lost control with all sites after their scheduled shut down for maintenance. Need to fill PH"A & B", Lucas and Broadway.

Crossing/Proximity Agreements -

- Blackfalds roundabout -Engineering reviewed Alberta Transportation's design drawings and required an existing access be maintained so that Commission operators have access to isolation valves in the area. The roundabout design was revised and engineering services has no further objections.

If you have any questions or comments regarding the operations described above please don't hesitate to call or email me.

Sincerely,

A handwritten signature in black ink, appearing to read 'Jordan Thompson', with a stylized flourish at the end.

Jordan Thompson, CET, PMP
Engineering Services Manager



**North Red Deer
Regional Water
Services
Commission**

5432 56th Avenue
Lacombe, Alberta
T4L 1E9

Memorandum

TO: Commission Board Members
FROM: Michael Minchin, Administrator
DATE: April 9, 2015

RE: Administrator's Report – 1st Qtr 2015

REF: 47/117
(2015)

The following is a summary of items Administration has been working on since the Board's last meeting:

1. Administration has completed the annual audit and preparation of the 2014 audited financial statements. The financial information return is also complete and will be filed with the Province at the conclusion of the Board Meeting.
2. Administration has deferred the preparation of the 2016-2020 operating projects as the City of Red Deer is currently working an update 5 year operating plan and rate estimate. This item should be ready in time for the Commission's next meeting.
3. Administration participated in an operational survey conducted by Alberta Municipal Affairs. One item of note came from that review. Municipal Affairs is recommending that the Commission adopt an annual rate bylaw. I am currently waiting an opinion back from the Financial Services branch of Municipal Affairs as to what that bylaw would actually look like. The Commission's Bylaw #1 already outlines the calculation method and approval methodology for the setting of rates.
4. Administration has reviewed the changes to the Municipal Government Act that were approved in March. The only item that applies to the Commissions is the provision for open meetings. These are the same rules that have been added for municipal Councils.
5. In light of on going subdivisions within the area, Administration is requesting that all municipalities within the Commission add the Commission to their notification list for subdivision applications.



5432 56th Avenue
Lacombe, Alberta T4L 1E9

Memorandum

TO: Commission Board Members
FROM: Michael Minchin, Administrator
DATE: April 9, 2015

RE: February 2015 Variance Report

REF: 13/860
2015

Attached is the February, 2015 variance report for the regional water commission. The report includes transactions to the end of February. March water sales and purchases have not yet been received so 1st Quarter statements could not be prepared.

Strong water sales have continued and mean that the Commission remains on target to meet its budgeted surplus. A few items of note:

1. Water sales for most of the communities are at or above target sales for the year.
2. Valve expenses for the year are already over budget. This is identified in the Operations report for the 1st quarter. This valve costs relate to the replacement of the mechanical portion of the 8 inch valve at the 39th Avenue Reservoir in Ponoka. As long as water revenues remain on track, this expense should not be a concern.
3. All other expenses remain on target.

CITY OF LACOMBE
GL Department Report



GL5330

Page : 1

Date : Apr 10, 2015

Time : 12:21 pm

Year : 2015

Period : 2

Budget : FINAL BUDGET

| Account No. | Description | Current | Year To Date | Budget | Variance | % Used |
|---|----------------------------------|-----------------|-----------------|-------------------|-------------------|-----------|
| REGIONAL WATER REPORTING | | | | | | |
| 6 REGIONAL WATER COMMISSION | | | | | | |
| 1 REVENUES | | | | | | |
| 47 Regional Water Revenues | | | | | | |
| 06-1-47-35110 | Water Sales - City of Lacombe | -208,997 | -434,538 | -2,613,223 | -2,178,685 | 17 |
| 06-1-47-35120 | Water Sales - Town of Ponoka | -109,772 | -225,257 | -1,445,462 | -1,220,205 | 16 |
| 06-1-47-35130 | Water Sales - Town of Blackfalds | -101,299 | -212,078 | -1,332,594 | -1,120,515 | 16 |
| 06-1-47-35140 | Water Sales - Ponoka County | -887 | -1,916 | -16,319 | -14,403 | 12 |
| 06-1-47-42200 | Line Crossing Fee | 0 | 0 | -1,750 | -1,750 | |
| 06-1-47-55100 | Interest Revenue | -3,120 | -6,933 | -37,530 | -30,597 | 18 |
| 06-1-47-55500 | Rebates & Dividends | 0 | 0 | -50 | -50 | |
| 06-1-47-85140 | Lacombe County Contribution | 0 | 0 | -67,000 | -67,000 | |
| 06-1-47-85150 | Ponoka County Contribution | 0 | 0 | -67,000 | -67,000 | |
| 47 Regional Water Revenues | | -424,075 | -880,722 | -5,580,927 | -4,700,205 | 16 |
| 1 REVENUES | | -424,075 | -880,722 | -5,580,927 | -4,700,205 | 16 |
| 2 EXPENSES | | | | | | |
| 47 Regional Water Operating Expenditures | | | | | | |
| 06-2-47-11110 | Board Wages-City of Lacombe | 0 | 0 | 1,400 | 1,400 | |
| 06-2-47-11120 | Board Wages-Town of Ponoka | 0 | 0 | 600 | 600 | |
| 06-2-47-11130 | Board Wages-Town of Blackfalds | 0 | 0 | 600 | 600 | |
| 06-2-47-11140 | Board Wages-Lacombe County | 0 | 0 | 600 | 600 | |
| 06-2-47-11150 | Board Wages-Ponoka County | 0 | 0 | 600 | 600 | |
| 06-2-47-21110 | Board Travel-City of Lacombe | 0 | 0 | 500 | 500 | |
| 06-2-47-21120 | Board Travel -Town of Ponoka | 0 | 0 | 500 | 500 | |
| 06-2-47-21130 | Board Travel-Town of Blackfalds | 0 | 0 | 500 | 500 | |
| 06-2-47-21140 | Board Travel-Lacombe County | 0 | 0 | 500 | 500 | |
| 06-2-47-21150 | Board Travel-Ponoka County | 0 | 0 | 500 | 500 | |
| 06-2-47-21400 | Membership Fees | 0 | 0 | 200 | 200 | |
| 06-2-47-21500 | Postage & Freight | 0 | 0 | 150 | 150 | |
| 06-2-47-21700 | Telephone - Office | 25 | 50 | 305 | 255 | 16 |
| 06-2-47-21701 | Telephone - Operations | 669 | 1,338 | 9,084 | 7,746 | 15 |
| 06-2-47-23000 | Management Fees | 4,267 | 8,534 | 52,230 | 43,696 | 16 |
| 06-2-47-23100 | Accounting and Auditor Fees | 0 | 0 | 8,000 | 8,000 | |
| 06-2-47-23200 | Legal Fees | 0 | 0 | 500 | 500 | |
| 06-2-47-23900 | Other Professional Services | 120 | 342 | 40,300 | 39,958 | 1 |
| 06-2-47-25300 | Equipment Repair & Maintenance | 0 | 0 | 7,500 | 7,500 | |
| 06-2-47-25301 | SCADA Maintenance | 897 | 1,794 | 10,800 | 9,006 | 17 |
| 06-2-47-27400 | Insurance & Bond Premiums | 0 | 0 | 5,500 | 5,500 | |
| 06-2-47-34200 | Administration | 796 | 1,592 | 9,744 | 8,152 | 16 |
| 06-2-47-35100 | Purchase of Water | 291,962 | 578,958 | 3,374,201 | 2,795,243 | 17 |
| 06-2-47-35200 | Operations | 12,385 | 20,263 | 107,580 | 87,317 | 19 |
| 06-2-47-51000 | Miscellaneous Expenses | 0 | 0 | 500 | 500 | |
| 06-2-47-51100 | Meeting Supplies | 0 | 0 | 250 | 250 | |
| 06-2-47-51400 | Office Supplies | 0 | 0 | 250 | 250 | |
| 06-2-47-52400 | General Materials & Supplies | 0 | 21 | 500 | 479 | 4 |
| 06-2-47-54400 | Utilities-Electricity | 275 | 687 | 5,000 | 4,313 | 14 |
| 06-2-47-56400 | Valves | 13,356 | 13,356 | 5,000 | -8,356 | 267 |
| 06-2-47-81400 | Bank Charges & Interest | 20 | 20 | 0 | -20 | |
| 06-2-47-83100 | Debenture Interest | 0 | 0 | 658,578 | 658,578 | |
| 06-2-47-83200 | Debenture Principal | 0 | 0 | 616,323 | 616,323 | |
| 06-2-47-99000 | Amortization | 0 | 0 | 465,610 | 465,610 | |

CITY OF LACOMBE
GL Department Report



GL5330

Page : 2

Date : Apr 10, 2015

Time : 12:21 pm

Year : 2015

Period : 2

Budget : FINAL BUDGET

| Account No. | Description | Current | Year To Date | Budget | Variance | % Used |
|--------------------------|--------------------------------|---------|--------------|-----------|-----------|--------|
| REGIONAL WATER REPORTING | | | | | | |
| | 47 Regional Water Operating Ex | 324,772 | 626,956 | 5,384,405 | 4,757,449 | 12 |
| | 2 EXPENSES | 324,772 | 626,956 | 5,384,405 | 4,757,449 | 12 |
| | Surplus/(Deficit) | -99,303 | -253,766 | -196,522 | 57,244 | 129 |
| | 6 REGIONAL WATER COMMISSION | -99,303 | -253,766 | -196,522 | 57,244 | 129 |
| | REGIONAL WATER REPORTING Total | -99,303 | -253,766 | -196,522 | 57,244 | 129 |



Consultation on Improved Regulation of Drinking-Water for Alberta: Overview of Proposed Changes – selected issues*

***This is a summary of the consultation documents was drafted by Environment and Sustainable Resource Development specifically for municipal elected officials and senior staff.**

For the full consultation package please contact: water@auma.ca

February 2015

Overview of Consultation

The Government of Alberta is consulting on proposed changes to Alberta's regulatory framework for drinking-water quality. Alberta Environment and Sustainable Resource Development is leading the review related to the *Potable Water Regulation* and *Environmental Protection and Enhancement Act*. This document outlines the proposed changes, sets out the various consultation points, describes the rationale for proposing the change and discusses the pros and cons of each proposed change.

This consultation represents one step in the process of developing the revised regulatory framework which is being done in conjunction with Alberta Health. Feedback received will be considered as changes to Alberta's regulatory framework for drinking-water quality are prepared for Government in 2016.



There are three main 'theme' areas to the consultation:

1. Drinking-water Regulation
2. Drinking-water Quality Standard
3. Drinking-water System Standard

1. Introduction

In Alberta, the oversight of the delivery of drinking-water¹ services is the responsibility of Alberta Health under the *Nuisance and General Sanitation Regulation*, *Public Health Act*, and Alberta Environment and Sustainable Resource Development under the *Potable Water Regulation* and *Environmental Protection and Enhancement Act*. Alberta Health and Alberta Health Services directly oversee approximately 2650 small drinking-water systems and Environment and Sustainable Resource Development has direct responsibility for over 650 drinking-water systems.

The regulatory framework that has evolved under the *Environmental Protection and Enhancement Act* is highly complex, inconsistent in application across the province, difficult to interpret and places a costly and disproportionate burden on smaller systems. The regulatory requirements under the *Nuisance and General Sanitation Regulation* are minimal and inadequate to consistently assure the delivery of potable water in public places. So why is the Government reviewing these regulations? Both regulations are slated for review in accordance with regulatory review. Scientific understanding and society's expectations have moved on considerably in the intervening years and the regulations need to reflect those changes.

The revisions to the regulatory framework being considered were developed with the assistance of technical experts from Environment and Sustainable Resource Development (ESRD), Alberta Health, Alberta Health Services and Municipal Affairs and also on the recommendations of an independent Drinking-Water Expert Panel² commissioned to review the current Environment and Sustainable Resource Development Standards for Municipal Waterworks. These proposed revisions are intended to make the regulation of drinking-water more protective of public health; more proportionate in terms of how the regulations affect different types of systems (not the current 'one size fits all' approach); and more practical in their application. **Protective, proportionate and practical are the values that lie behind the proposed revisions.** These principles support a desired outcome of a 'systems approach' that provides seamless/coherent oversight for all (2650) drinking water service providers in Alberta.

What could the new protective, proportionate and practical regulatory framework look like? In contrast to the current regulatory framework, Figure 1 shows the high-level concepts being proposed which include:

- A single, Drinking-water Quality Standard that sets the quality of drinking-water that everyone in the province should be consuming;

¹ In this document and related documents the convention adopted is to use the hyphenated term 'drinking-water' for the substance and drinking water for the act of consuming it.

² Full details of the panel and the report are provided as Consultation Package – Supporting Document 3

- A single, streamlined Standard for Drinking-water Systems that supplements the regulation and sets out specific technical requirements for all types of systems based on size of population being served; and
- Rescinding the *Potable Water Regulation* and Part 2 of the *Nuisance and General Sanitation Regulation* and creating a single, over-arching Drinking-water Regulation made jointly under powers from the *Public Health Act* and the *Environmental Protection and Enhancement Act* that adopts an outcomes-focus regulatory approach and manages risk using a drinking water safety plan approach (that is already in-place for around 650 drinking-water systems presently regulated under the Environmental Protection and Enhancement Act).

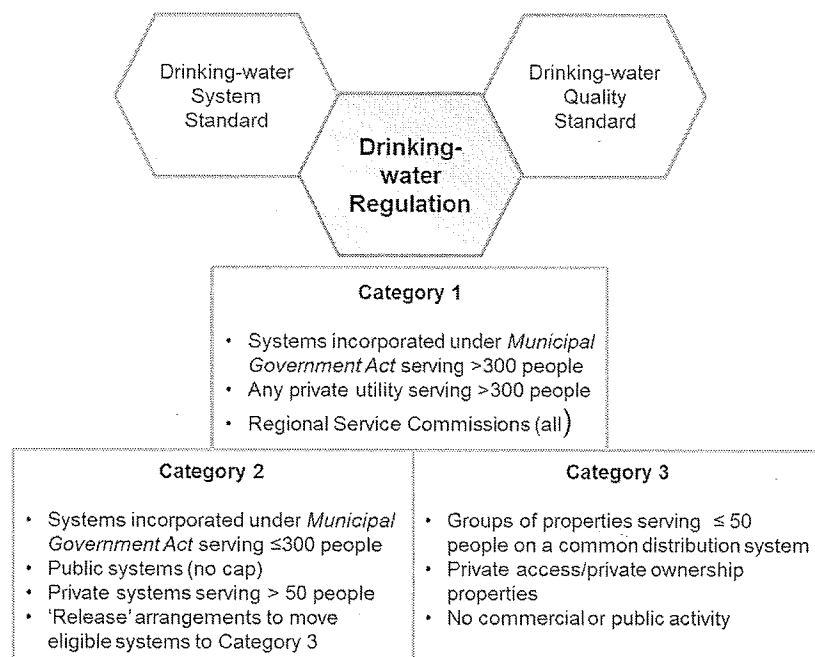


Figure 1 - Framework of the proposed drinking-water regulation

Environment and Sustainable Resource Development's targeted consultation on the proposed changes is being undertaken simultaneously with Alberta Health. This document has been developed by Environment and Sustainable Resource Development with Environment and Sustainable Resource Development's specific targeted consultees in mind. Additionally, Alberta Health has developed a complementary consultation package tailored to their targeted consultees' needs. When complete, the two sets of responses from the separate targeted

consultations will be combined into a single consultation analysis for the Government of Alberta, which will form the basis of proposed regulatory changes.

The target audiences for the consultation process are all drinking-water service providers, however any Albertan could review and provide input.³

What is the purpose of this consultation? The Government of Alberta (through Environment and Sustainable Resource Development and Alberta Health) have a number of proposals that will affect the way drinking-water quality is regulated in Alberta and the Government is seeking input from Albertans on the proposals to allow informed, evidence-based policy decisions to be adopted as the process moves forwards.

2. Background

The Guiding Principles used to develop proposed revisions

This document presents proposals for the revision of both the *Nuisance and General Sanitation Regulation*⁴ and the *Potable Water Regulation*.⁵ The proposals take full account of the *Government of Alberta Guiding Principles of Regulation*.⁶ Any proposed revisions to drinking-water regulations will incorporate the six principles of:

- Necessity
- Effectiveness
- Proportionality
- Transparency
- Accountability, and
- Consistency

These principles have been adopted throughout, along with the values – **protective**, **proportionate** and **practical** – so that any proposed revisions ensure the regulation of drinking-water is more protective of public health; more proportionate in terms of how the regulations affect different types of systems (not the current ‘one size fits all’ approach); and the regulations will be more practical in their application.

³ Comment on the consultation package will also be sought from other jurisdictions outside Alberta to ensure we have had access to the best possible advice. This will include neighboring jurisdictions (Saskatchewan, British Columbia, North West Territories); federal bodies including Health Canada and international organizations, principally the World Health Organization (WHO) through their Regulator’s Network initiative

⁴ http://www.qp.alberta.ca/documents/Regs/2003_243.pdf

⁵ http://www.qp.alberta.ca/documents/Regs/2003_277.pdf

⁶ <http://alberta.ca/albertacode/images/RedTapeReductionReport.pdf>

Foundations of an outcomes-based approach to drinking-water regulation in Alberta

Traditionally Environment and Sustainable Resource Development's approach to regulation has been predominantly to use a prescriptive approach. Prescriptive regulations are technology-based or standards-based such as the *"Standards and Guidelines for Municipal Waterworks, Wastewater and Storm Drainage Systems"*, which set out the requirements with regulated parties having little or no choice regarding how they complied with them.

Prescriptive regulation is not the only means of achieving regulatory oversight and over recent years Environment and Sustainable Resource Development has stated its intention to move to outcome-based regulations wherever possible. Under this approach the required outcome or level of performance is written into regulation. The onus of how the outcomes are achieved is left up to the individual systems, allowing for innovative solutions to be customized based on local factors.

Environment and Sustainable Resource Development has developed systems-based approaches to regulation for municipal drinking-water systems regulated under the Potable Water Regulation. In April 2012, the introduction of the Drinking Water Safety Plan requirement highlights such a systems-based approach and represents a significant step towards managing risk (adopting international best practices). Drinking-water systems are required to develop valid internal risk management plans and Environment and Sustainable Resource Development verifies that the plans are properly and effectively implemented. Systems-based regulation is entirely compatible with an outcomes-based regulatory framework.

Outcome-based regulation puts an emphasis on specific and measurable outcomes versus prescriptive provisions. This requires clear definition of the outcomes in regulation (the what), and how compliance will be measured. Regulated parties choose methods to achieve the outcome (the how) and inspectors use the performance measures to verify that compliance approaches are effective.

There are two main benefits from an outcomes-based approach – (a) increased due diligence and (b) flexibility.

(a) Increased due diligence

- Proactive/preventive – regulated parties focus on achieving outcomes rather than fulfilling prescribed behaviours:
 - No oversimplified checklists for what to do, and
 - Compliance assurance – need to evaluate whether the outcomes are consistently achieved
- Reporting on outcomes – Department would seek performance data from regulated parties to inform:
 - Risk-based prioritization of inspection activities,

- Auditing the integrity of the inspection system, and
- Examination of trends

(b) Flexibility (bolsters innovation)

- Provides flexibility for regulated parties to introduce new technologies, processes, procedures that enhance safety and/or reduce costs,
- Allows the regulator to adjust to changing science, technology, and economic conditions more easily, and
- Holds promise in establishing comparability with safety regimes in other jurisdictions based on similar outcomes

What happens at present?

Alberta Health Service's environmental health officers currently have direct responsibility for around 2,200 drinking-water systems in locations such as campgrounds, restaurants and smaller co-operative developments using high-quality groundwater.

The drinking-water systems Environment and Sustainable Resource Development regulate are typically those systems that take their raw water (water that has not been treated to drinking-water standards) from sources that are more likely to be contaminated or require sophisticated treatment before the water is fit to drink.

Large municipal systems

Drinking-water systems regulated under the *Potable Water Regulation* have to meet very high standards for the design and operation of the system and must have trained operators who are responsible for the operation of the system. These arrangements are well suited to larger municipal water systems and have led to Alberta having one of the lowest rates of water advisories in Canada, an indication of the very high level of public health protection being provided by these drinking-water systems.

Smaller municipal systems

However, many of the drinking-water systems that have fallen under the umbrella of the *Potable Water Regulation* are very small (over 400 such systems each providing drinking water to less than 500 people). These smaller systems face significant challenges when trying to comply with the *Potable Water Regulation*. The cost of designing, building, operating and maintaining small systems is proportionately higher when compared to larger systems. This is because there are fewer people supporting the small system through local taxes or water-use charges. This "economy of scale" effect means that larger systems can spread the costs over more people and so charge proportionately less per person than smaller systems.

Some of the drinking-water systems currently being regulated by Alberta Health Services should be required to meet the *Potable Water Regulation* based on the current regulatory framework (which is driven primarily by source-type and size of distribution system). These systems are typically very small, for example a roadside restaurant using a well that could be flooded with surface water. While the protection of public health always remains the most important consideration, if the full requirements of the existing *Potable Water Regulation* were imposed on such a system then the financial burden would be enormous. A more effective and transparent system needs to be implemented that ensures all drinking-water systems are properly regulated and supported in a more proportionate and consistent manner that protects public health but is sensitive to the needs and capacity of individuals impacted by regulation.

Small public systems with high-quality groundwater

There are over 2,200 small public drinking-water systems regulated solely under the *Nuisance and General Sanitation Regulation*. In a study undertaken in 2011 by Alberta Health/Alberta Health Services it was found that many operators of these small public systems have limited awareness of their systems; sampling for drinking-water quality was limited and in many cases insufficient; and source waters were inadequately protected from contamination either from other humans, animals or from chemicals in the environment (either naturally-occurring or anthropogenic).

3. The proposed changes

Note: To remain consistent with the broader consultation documents, the same consultation point numbering has been used. Consultation point numbering in the following sections is not consecutive as some points have been removed in this abbreviated document. For the complete Consultation Package – Supporting Document 1, please email water@auma.ca.

Consultation point 1.0 - Single 'Drinking-water Regulation'

Rationale:

The current division of responsibilities for the regulation of drinking-water systems between the *Public Health Act* and the *Environmental Protection and Enhancement Act* presents a number of challenges. For example, should a system be regulated by Environment and Sustainable Resource Development under the *Potable Water Regulation* or should Alberta Health Services be responsible? The lack of transparency and consistency results in issues of accountability that can leave drinking-water system owners and operators confused about which organization they should be approaching over the regulation of their activities.

Work undertaken jointly between Environment and Sustainable Resource Development, Alberta Health and Alberta Health Services suggests that the most practical way to tackle the issues over responsibility for drinking-water systems is to revise the present arrangements into a 'seamless' regulatory framework. The most effective way of achieving this desired outcome is to have a single drinking-water regulation that covers all drinking-water systems from the very largest city to a single property.⁷ By placing all drinking-water systems under a single, common regulation the aims of being protective, proportionate and practical will be more efficiently achieved without disputes over jurisdiction between government entities.

As well as addressing issues of transparency and consistency, having a single drinking-water regulation also 'de-clutters' the regulatory landscape by simplifying the complex regulatory arrangements.

The single drinking-water regulation will ensure that:

- No drinking-water system in the province will fall outside the purview of regulation;
- Regulatory requirements are graduated and differentiated based on the risks posed to public health by each drinking-water system; and
- Regulations are necessary, effective, proportionate, and transparent and provide accountability along with a consistency of application by all government actors.

⁷ The *Government Organization Act* allows for regulations to be made and administered under shared Ministry mandate.

Strengths:

- The unified regulatory approach ensures no 'gaps' for drinking-water systems to fall into and be missed or 'hide' in;
- Allows a 'one window' regulatory approach to be established and developed; and
- Avoids confusion over who is responsible for drinking-water systems and their regulation.

Weaknesses:

- None perceived.

Consultation point 1.1 - All outcome-based requirements for drinking-water systems will be housed in one regulation.

Rationale:

The proposed single drinking-water regulation will shift the regulatory approach away from the current heavily input-driven methodology to an outcomes-based approach. The core approach will be based around risk assessment and risk management which will inform actions that are required to be taken to protect public health through maintaining drinking-water quality in a proportionate and practical manner. This is a logical extension of the current approach being used for *Environmental Protection and Enhancement Act* regulated systems through the use of the drinking water safety plan and is an approach that has been utilised in many other jurisdictions (including Australia, New Zealand, United Kingdom, Ireland and Iceland).

Strengths:

- Outcome-based regulation allows a more proportionate approach to be developed and applied while always protecting drinking-water quality and hence public health.
- Focusing on real risks being faced by drinking-water systems will enable practical steps to be taken to minimise, mitigate to eliminate the risks posed to drinking-water quality in a more efficient and responsive manner than the current ridged, input-driven regulatory framework allows.

Weaknesses:

- This approach requires a change in thinking and action i.e. culture change, both within the government bodies charged with regulating drinking-water quality and with drinking-water system owners and operators and those supporting them e.g. consultants. Overcoming natural human barriers of skepticism and fear of the 'new' are

potential weaknesses in the acceptance of the proposed package. The benefits to both users and operators of drinking-water systems are perceived to be positive.

Weaknesses:

- Requires a change in the current way of doing things i.e. culture change – overcoming natural human barriers of skepticism and fear of the ‘new’ are potential weaknesses in the acceptance of the proposal. The benefits to both users and operators of drinking-water systems are perceived to be positive.

Consultation point 1.4 - Drinking-water systems serving less than 50 people (Category 3) with no commercial or public activity would be expected to meet the Alberta Drinking-water Quality Standard but will have no formal regulatory oversight or obligations. These systems may register their system and request support and advice from Alberta Health Services.

Rationale:

Small systems with approximately 15 connections (less than 50 people) or less are similar to private water systems which are unregulated at present. The regulatory requirements place a large burden on the small population at risk which owns and directly uses the water. Category 3 (recall Figure 1) drinking-water systems would exclude high-risk premises such as food businesses or daycares. Where Alberta Health Services determines that an activity is not high-risk (such as a community hall) then that activity will be discounted from the assessment and the drinking-water system will remain Category 3. No discount will be available for commercial activities.

If the system, such as a water co-op, changes to include a public facility such as a day care, then the individual business(es) would be required to provide a potable water source and carry the regulatory burden of the shift from Category 3 to Category 2.

Category 3 systems would continue to have access to water testing service (free of charge), assistance with interpretation or technical information through Alberta Health Services as needed.

Strengths:

- Reduces the regulatory burden on small systems currently regulated under the *Environmental Protection and Enhancement Act*.

- Provides choice for small systems to 'opt in' to registering their system to ensure appropriate and timely advice can be provided in times of emergency e.g. flooding.
- Ensures that a proportionate approach to regulation is established and maintained.

Weaknesses:

- None perceived.

Consultation point 1.5 – Drinking-water systems serving more than 300 people (>300) will be regulated as Category 1 drinking-water systems with Environment and Sustainable Resource Development taking the lead role as the regulatory body.

Rationale:

The use of the definition "300 or more" aligns the proposed Category 1 (recall Figure 1) cut-off with the definition of "village" in the Municipal Government Act.⁸ This alignment is intended to avoid confusion over what constitutes a Category 1 drinking-water system.

Strengths:

- By aligning the definition in the proposed regulation with existing regulatory definitions this creates a more 'joined-up' regulatory framework ensuring consistency and transparency.

Weaknesses:

- None perceived.

Consultation point 1.6 – Drinking-water systems that are categorised as neither Category 1 nor Category 3 shall be classified, by default, as Category 2 drinking-water systems. These systems will include drinking water systems serving more than 50 people but less than 300 people or where the drinking-water system serves 50 people or less but includes a public or commercial activity.

Rationale:

⁸ <http://www.qp.alberta.ca/documents/Acts/m26.pdf>

The allocation of a drinking-water system to Category 2 is by exclusion – that is they do not qualify to be either a Category 1 or a Category 3 drinking-water system and so must be Category 2. The arrangements whether these systems are regulated by Environment and Sustainable Resource Development or Alberta Health Services will be determined on a case-by-case basis as part of implementation criteria that will be developed and agreed between the regulatory parties. For the purposes of consultation, a very loose ‘rule of thumb’ may be applied that those systems currently regulated under the *Environmental Protection and Enhancement Act* will retain Environment and Sustainable Resource Development as their lead regulatory authority with the rest having Alberta Health Services as their lead regulator.

Strengths:

- Establishing this category and the criteria for allocating lead regulatory oversight ensures that any drinking-water system serving the public through a commercial or public activity or serving 50 or more people will have appropriate supervision from the appropriate regulatory agency.
- Confirms which regulatory agency will have the lead responsibility for each Category 2 drinking-water system providing clarity for the owner/operator of these systems.

Weaknesses:

- Allocation of drinking-water systems between Environment and Sustainable Resource Development and Alberta Health Services may identify resourcing challenges for either (or both) organizations.

Consultation point 1.7 - A Category 1 or Category 2 drinking-water system may apply for an ‘undertaking’ (a legal ‘promise’) to allow time to comply with new Drinking-water Quality Standards or operational standards, subject to approval from Environment and Sustainable Resource Development and Alberta Health Services.

Rationale:

How would the revised regulations deal with a drinking-water system that cannot immediately meet the requirements of the Drinking-water Quality Standard? An outcomes-based regulatory framework needs to have mechanisms within it that allow for deviations from the requirements while remaining protective of public health. Installing new treatment processes or practices take time and so the drinking-water system would be given the opportunity to apply for an ‘undertaking’ in the event that they are, or are likely to be, in contravention of the Regulations

but where that contravention is deemed to have negligible impact on public health for the duration of the infringement.

An undertaking would be a legal 'promise' made to the government that the drinking-water facility will take steps to allow it to meet the requirements. This undertaking would be limited to a maximum of five years (to link with the proposed life-time of the Drinking-water Quality Standard) with a maximum of no more than three undertakings per individual issue for each facility (i.e. a total of 15 years to meet the requirements).

Two examples of when an undertaking would be acceptable are (i) where one or more of the drinking-water quality standards are not being met but have been deemed not to pose an immediate risk to public health; and (ii) a drinking water safety plan is not going to be completed by the specified date. This proposal follows the outcome-based approach adopted by the State of Victoria, Australia^{9,10} and the European Union's Drinking water Directive.¹¹

Strengths:

- The provision adds to the proportionate nature of the proposed regulations.

Weaknesses:

- Will require accurate records and diligent maintenance of these records which will be a challenge for both regulatory bodies.

Consultation point 1.8 - A Category 1 or Category 2 drinking-water system may apply for an 'exemption' from a standard in order to deal with exceptional operational conditions, if public health is not compromised and with approval from Environment and Sustainable Resource Development and Alberta Health Services.

Rationale:

An exemption would release a drinking-water system from the requirement to meet a specified quality standard for a period of time but would not release the system from the obligation to minimise any risks to the public. Similarly an exemption would not release a water supplier from the obligation to monitor for the specified parameter during that period.

⁹

[http://docs.health.vic.gov.au/docs/doc/297F9BB7EA50D2B8CA257AAF00125E38/\\$FILE/Undertakings%20Application_GN3.pdf](http://docs.health.vic.gov.au/docs/doc/297F9BB7EA50D2B8CA257AAF00125E38/$FILE/Undertakings%20Application_GN3.pdf)

¹⁰

[http://docs.health.vic.gov.au/docs/doc/458DD7043F5B08EFCA257AAF001288FF/\\$FILE/Undertaking%20application%20form_GN3.pdf](http://docs.health.vic.gov.au/docs/doc/458DD7043F5B08EFCA257AAF001288FF/$FILE/Undertaking%20application%20form_GN3.pdf)

¹¹

<http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:31998L0083&from=EN>

For example, if a natural disaster such as a forest fire were to occur in a watershed from which the drinking-water system receives its water, the system could apply for an exemption from meeting the turbidity standard until such time as elevated sediment levels have passed through the system provided other treatment elements were in place to protect public health. During the exemption period the drinking-water system would be obligated to continue to monitor for turbidity.

These arrangements would apply to all Category 1 and Category 2 drinking-water systems.

Strengths:

- The provision adds to the proportionate nature of the proposed regulations.

Weaknesses:

- Will require accurate records and diligent maintenance of these records which will be a challenge for both regulatory bodies.

Consultation point 1.9 - All Category 1 and Category 2 drinking-water systems will require a 'Letter of Authority' issued by the lead regulatory authority to allow them to operate.

Rationale:

For drinking-water systems overseen by Alberta Health Services there is currently no formal approval mechanism for the drinking-water system; for drinking-water systems overseen by Environment and Sustainable Resource Development there is currently a requirement to complete and submit an application to the Department (<http://esrd.alberta.ca/water/forms-applications/drinking-water-and-wastewater-facility-approvals-and-registrations-process.aspx>).

The regulation will establish a simplified application process and set approval criteria for Category 1 and 2 drinking-water systems to be granted a 'Letter of Authority' to operate. Each drinking-water system would be reviewed and approved prior to development.

For systems regulated under the *Public Health Act* (Alberta Health Services):

- The applicant would complete the components of the 'Approval to operate' application which would include information regarding the drinking water safety plan, compliance with related legislation, and source protection such as setback distances, well construction, water well driller information etc.

- The executive officer under the *Public Health Act*, would have the authority to review the application and issue the 'Letter of Authority' similar to permits under the *Swimming Pool, Wading Pool and Water Spray Park Regulation*.

For systems regulated under the *Environmental Protection and Enhancement Act*:

- A streamlined 'Letter of Authority' will be designed to reduce significantly the regulatory burden on applicants by focusing on achieving the public health outcomes (through the drinking water safety plan and sampling risk assessment.)
- The authority of a Director under the *Environmental Protection and Enhancement Act* would be retained to issue the 'Letter of Authority' to operate but the expense and significant time lines required to complete, apply and process an approval would be minimized.
- The detailed requirements for the components of an application will be specified in an 'Approval to operate' application guide – specifically evidence that the applicant has the necessary withdrawal and discharge agreements in place to operate the drinking-water plant at the maximum design capacity; that all local planning approvals are present; that the Drinking Water Safety Plan and associated documents are completed.¹²
- The revised Drinking-water Regulation will reduce the administrative burden on highly qualified ESRD technical staff and provide them with more time to monitor water quality and assist owners and operators of water systems.

Existing systems will have time to complete the application process depending on their current approval period. These transitional arrangements are an administrative necessity to ensure sufficient resources are available to manage properly the transition process.

For existing systems and those under construction, there will be transitional arrangements in the Drinking-water Regulation. The following is proposed:

- New Category 1 and 2 systems – 6 months from coming into force date of regulation to apply for a 'Letter of Authority'.
- Existing Category 1 and 2 operating under the *Public Health Act*: 1 year from coming into force date to apply for 'Letter of Authority'.
- Existing Category 1 or 2 systems operating under an *Environmental Protection and Enhancement Act* approval with 3 or less years left until expiry: 6 months to apply for 'Letter of Authority' from coming into force.

¹² Comprising the Emergency Response Plan, the Operations Manual and the Distribution Operations and Maintenance Manual (DOMS)

- Existing Category 1 or 2 systems operating under an *Environmental Protection and Enhancement Act* approval with 4-6 years left until expiry: 3 years from the coming into force date to apply for 'Letter of Authority'.
- Existing Category 1 or 2 systems operating under an *Environmental Protection and Enhancement Act* approval with more than 6 years left until expiry: 6 years from the coming into force date to apply for 'Letter of Authority'.

Strengths:

- Reduces the costs incurred by drinking-water systems e.g. no longer a regulated requirement to have professional engineer-stamped drawings submitted as part of an application process.
- Streamlines processing requirements and hence time for applicants to receive the proposed 'Letter of Authority'.
- Releases highly-qualified staff resource within Environment and Sustainable Resource Development away from processing applications to assisting clients with practical advice.

Weaknesses:

- Places a greater responsibility on applicants and their agents to ensure that the proposed drinking-water systems will provide the required drinking-water quality.

Consultation point 1.13 - Drinking-water systems regulated under *Environmental Protection and Enhancement Act* have their Drinking Water Safety Plan monitored by *Environment and Sustainable Resource Development* compliance staff. Staff resources are such that detailed analysis of the Drinking Water Safety Plan cannot be achieved within existing resource limits.

Consultation point 1.14 - A third-party compliance audit of the Drinking-water Safety Plan will be developed and adopted within 3 years of the coming into force date of the Regulation.

Rationale:

Drinking Water Safety Plans have been developed by a number of water treatment operators, however, there is limited information as to how well they are being developed and if management strategies are being implemented. Environment and Sustainable Resource Development worked with the University of Alberta and Water Futures to investigate how best to assess how well drinking water safety plans are being developed and implemented. The results are provided in the Consultation Package – Supporting Document 1 (email water@auma.ca if you would like a copy of this document).

Given that a Drinking-water Safety Plan is intended to form the heart of 'what is required' by an operator, the role and approach of the regulatory agency needs to be considered. There are a range of options, however there are current constraints applying to the lead regulatory agencies (Environment and Sustainable Resource Development and Alberta Health Services), and the proposed option 3 set out in the section "The oversight role of the regulator" is the favoured option. This option requires the establishment of an accredited training program for third-party auditors who would then be employed by the drinking-water system to audit their drinking water safety plan. The audit report would form the basis of the compliance checks that the facility had properly completed the drinking water safety plan and was properly managing the risks identified.

Strengths:

- Allows the establishment of a new 'market' for suitably trained and accredited drinking water safety plan auditors.
- Ensures that vagaries of staff retention/training and resource allocation within government have a minimal detrimental impact on the assurance of drinking water safety plan quality and performance.

Weaknesses:

- This approach will require allocation of appropriate resources within Environment and Sustainable Resource Development to ensure that the third-party audit process is properly developed and maintained.

Consultation point 1.15 - Category 1 and Category 2 drinking-water systems shall implement the Water Treatment Security Standard.

Rationale:

Currently there are minimum requirements for the security of drinking-water systems set out in the Standards and Guidelines for Municipal Waterworks, Wastewater and Storm Drainage Systems. These are no longer adequate to deal with the threats posed to such systems.

There is a need to ensure that all drinking-water systems are protected as much as possible against potential malicious or criminal actions. The introduction of security requirements will ensure that Alberta's drinking-water systems meet minimum acceptable security standards for the 21st century.

A comprehensive listing of security provisions required on drinking-water systems was developed by TOCRA Inc. for Environment and Sustainable Resource Development to update the current requirements set out in the existing Standards and Guidelines for Municipal

Waterworks, Wastewater and Storm Drainage Systems, Part 2 Guidelines for Municipal Waterworks. These revised requirements are provided Consultation Package – Supporting Document 2.(email water@auma.ca if you would like to receive a copy of this document) A self-assessment form was also developed as part of this contract and will be provided as part of the finals regulatory package.

In addition, specific advice for the protection of electronic devices (Cyber security) will be issued by Environment and Sustainable Resource Development covering all drinking-water systems utilising any form of electronic reporting, recording or monitoring such as on-line continuous monitoring or SCADA (*Supervisory Control And Data Acquisition*) system. There is a need to ensure that all sizes of drinking-water systems are protected as much as possible against potential malicious or criminal actions. Simplified security requirements, appropriate for the size and setting and the transmission of data will be developed and implemented to improve the security of the water.

These will be integrated into the Drinking-water System Standard but as their requirements will be a regulated requirement they are being consulted on as part of this section.

Strengths:

- Ensures that security standards appropriate to counter 21st century threats are in place.

Weaknesses:

- Requires the Government of Alberta to dedicate appropriate resources to the development of a standard to protect against cyber threats in a timely manner to be available within the stated timelines.

Consultation point 1.17 - Drinking-water system operators will develop and maintain a distribution operation and maintenance strategy (DOMS).

Rationale:

No matter how well raw water is treated at a treatment plant, if it is contaminated or has its quality reduced in some other way through the conveyance of the treated water to consumers, then this will pose more risk. The enhancement of the requirement to actively manage the distribution system will improve the quality of drinking-water supplied to consumers. At present there are minimal requirements to consider the operation and maintenance of the drinking-water distribution system. Guidance and appropriate templates will be developed using best practice from around the world – this guidance and associated templates will be provided to operators by the Government of Alberta.

Strengths:

- Despite the distribution network (pipes, valves, pumps, meters, etc.) for most drinking-water systems being the largest asset in terms of physical scale and in terms of monetary value the operation and maintenance of this valuable capital asset can be highly variable; this proposal will help to ensure that best practices are brought to bear on the distribution system ensuring drinking-water quality and also assuring longevity of the assets.

Weaknesses:

- This will require additional training for drinking-water operators which will require appropriate lead times to allow the training to be developed and provided.

Consultation point 1.18 - The owner shall develop and maintain an emergency response plan and response procedures specific to their system within 3 years.

Rationale:

Similar to the Operations Manual, an emergency manual clearly outlines responsibilities, steps and actions during operational upset conditions so that the owner/staff have clear steps as to what to do in times of emergency. The complexity will vary depending on the type and size of operation. Environment and Sustainable Resource Development systems currently have a requirement to prepare and implemented an emergency response plan, and now systems under Alberta Health will be required to prepare a similar but simplified plan. Support will be provided to Alberta Health systems (Category 2) drinking-water system agents to assist them to develop an emergency response manual and emergency response procedures for the drinking-water system.

Strengths:

- Ensures that all Albertans can have confidence that should something go wrong with their drinking-water system appropriate thought and planning has been undertaken ahead of time to minimise the effects of the incident and return their drinking-water supply back to full service as soon as possible and as safely as possible.

Weaknesses:

- Will require additional training for drinking-water operators which will require appropriate lead times to allow the training to be developed and provided

Consultation point 1.19 - If a water order (such as a boil water order) is in place for more than 72 hours, an alternative source of drinking-water must be provided by the owner.

Rationale:

Water Orders, such as Boil Water Orders, are necessary tools to protect public health when drinking-water systems experience possible contamination. Evidence shows that the level of compliance with such Orders diminishes over time as people struggle to deal with the requirements and so their effectiveness in public health protection is of limited practical value after just a few days. It also becomes very difficult for homeowners to cope without water for more than a few hours. The limit of 72 hours is based on the Federal government advice that each household in Canada be prepared to deal with an emergency situation for up to 72 hours.

It is proposed that there will be a condition on each Water Order such that if they are in place for more than 72 hours then an alternative source of drinking-water must be provided in sufficient quantity and in such a manner that it is available to each household. Depending on the nature of the business, the business may need to close until potable water is restored.

The goal is to return the drinking-water system back to an operational state where safe, clean drinking-water is once again available for people to consume without concern.

Strengths:

- Ensures that customers/users of drinking-water systems can have proper assurance that appropriate support will be provided to them in the event that their drinking-water supply remains affected for more than three days.

Weaknesses:

- None perceived.

Consultation point 1.29 - Samples must be taken in an appropriate manner, stored and shipped in accordance with laboratory requirements and handled to ensure a chain of custody.

Rationale:

Sample handling and sample transport protocols are ill-defined with breaches of 'best practice' requirements leading to uncertainty over analytical results.

Sampling procedures can affect results and lead to false information and unnecessary or inadequate actions or false sense of security that the water quality is satisfactory. Sampling protocols are being developed by Environment and Sustainable Resource Development, in consultation with Health and Alberta Health Services to standardize the steps and improve the accuracy of the results.

Strengths:

- The importance of having accurate and reliable results from drinking-water analysis cannot be over emphasised; there is no point in having world-class laboratories analysing samples that have been contaminated or altered due to the handling and transport of the samples – this is a waste of time, money and valuable resource.

Weaknesses:

- None perceived.

Consultation point 1.31 - Category 1 drinking-water systems shall continue to be responsible for full costs of chemical sampling and analysis; Category 2 drinking-water systems shall be responsible for full costs of chemical sampling and analysis.

Rationale:

At present, drinking-water systems regulated under the *Environmental Protection and Enhancement Act* pay for their sampling and analytical costs for all chemical parameters associated with drinking-water. This would now apply to both Category 1 and 2 drinking water systems.

Microbiological parameters are analysed at the Provincial Laboratory for Public Health at no direct charge to the drinking-water system. This would continue for Category 1 drinking-water systems and now apply to all Category 2 drinking-water systems.

Category 3 drinking-water systems, considered private, would continue to have access to testing via environmental health officers from Alberta Health Services for specific microbiology and chemistry parameters through the Provincial Laboratory for Public Health and the Alberta Centre for Toxicology at no cost.

Strengths:

- This provides for a consistent arrangement of laboratory costs across Category 1 and Category 2 drinking-water systems.

Weaknesses:

- For some systems the additional changes incurred for chemical analysis will be new.

Consultation point 2.0 - Drinking-water Quality Standard for Alberta

Rationale:

Under the existing legislative arrangements the individual parameters used to determine drinking-water safety differ between the *Public Health Act* and the *Environmental Protection and Enhancement Act*. Alberta generally recognises and adopts Health Canada's *Guidelines for Canadian Drinking Water Quality* (<http://www.hc-sc.gc.ca/ewh-semt/water-eau/drink-potab/guide/index-eng.php>). However, drinking-water systems throughout the province are at varying stages of meeting these requirements. This means that there is a lack of consistency in the quality of water being provided and a lack of transparency in the present arrangements. Through a process of continuous review and improvement, Health Canada constantly revises the *Guidelines for Canadian Drinking Water Quality* and it is difficult for operators to meet the changing requirements.

Under an outcomes-based system there is a need for specific and measurable outcomes versus prescriptive provisions. This requires clear definition of the outcomes in regulation (the what), and how compliance will be measured. With this goal in mind, it is proposed that a single Drinking-water Quality Standard is adopted which will apply throughout the province which will allow anyone to see what constitutes safe, clean drinking-water in Alberta for any drinking-water system (the what). The Drinking-water Quality Standard would be updated on a rolling 5-year revision timetable.

The introduction of a Drinking-water Quality Standard (Standard) will provide specific and measurable drinking-water quality targets that protect public health. In addition, the Standard will set out the monitoring requirements for assessing water quality.

It is proposed that the Drinking-water Quality Standard, while based on the *Guidelines for Canadian Drinking Water Quality*, would for the first time establish a clear, level playing-field for all drinking water in Alberta, which would be measured and required to meet the Drinking-water Quality Standard.

Strengths:

- Provision of a drinking-water quality standard is a necessary to ensure the effectiveness of the proposed drinking-water regulation; having the single quality standard will ensure consistency across the province in a transparent and accountable manner.

Weaknesses:

- None perceived.

Consultation point 2.3 – Point-of-compliance will be at the point within premises or an establishment at which the drinking-water emerges from the taps that are normally used for human consumption.

Rationale:

The primary function of drinking-water quality regulations is the protection of public health; as the public consume their drinking-water from taps within premises, the regulatory assurance should be taken from that point of consumption i.e. taps within premises which provide drinking-water to consumers. The drinking-water system owner/operator would not be responsible for any deterioration in drinking-water quality that may arise as a result of the domestic distribution system (i.e. plumbing system occurring after the corporation stop/boundary valve for the property).

Strengths:

- The alignment of the point of compliance to the point of consumption strengthens the public health protective value of the proposed regulatory revisions and also orientates the regulations to the outcomes-focus objective of the revision process.

Weaknesses:

- The need to investigate, record and report on drinking-water samples that have failed due to internal plumbing issues is a new requirement for operators and appropriate training (linked to sample training consultation point 3.30) will need to be developed and delivered which will require a phasing-in of this requirement to accommodate capacity development amongst operators.

Consultation point 2.6 – Place-based risk assessment will be used to determine water quality sampling and frequency.

Rationale:

The present adoption of a 'one size fits all' approach to monitoring requirements is costly, time-consuming and does little to assure drinking-water quality. The proposed approach is to target resources on known and credible risks to the drinking-water system and to monitor for those parameters. With very few exceptions the health risk posed by chemical parameters at concentrations typically found in natural waters is very low with the guideline value in the *Guidelines for Canadian Drinking Water Quality* being set to combat risks based on 70 years of consumption of a drinking-water with a parameter in excess of the guideline value. This means

that with adequate review periods operating to ensure no changes in chemical composition of the natural waters, it is appropriate to limit sampling and analysis to those compounds which are known to be present in source water which can pose an immediate risk to human health and for the microbiological parameters. The chemical parameters that would fall into this category would include (but may not be limited to) nitrate/nitrite, lead and arsenic.

The details of how site-specific, place-based risk assessment would inform the sampling requirements for a drinking-water system are details in Annexes A and B. The result of this approach will be that each drinking-water system will have a unique drinking water safety plan 'signature' that will be reflected in the suites of verification, inspection and safeguard parameters identified for routine monitoring.

Strengths:

- The proposed approach targets resources at known and credible risks to human health arising from a drinking-water system based on the risk assessment approach inherent in the drinking water safety plan approach. This proposal allows proportionate, place-based solutions to be implemented based on the outcomes-based philosophy for the regulatory framework.

Weaknesses:

- Current data management resources will need to be adapted/improved to manage, track and record site-specific sampling requirements.

Consultation point 2.9 - At a minimum, every well shall have disinfection requirements to ensure 4-log (99.99%) inactivation of viruses within 60 months of the regulation coming into force.

Rationale:

This is a new requirement for systems regulated under Alberta Health Services. In the past, wells with high quality groundwater did not require any treatment as the water was considered safe. The current advice from Health Canada¹³ requires a minimum of a 4-log reduction (99.99% reduction) of viruses regardless of the source water type. There is a growing body of evidence around the occurrence of human pathogenic viruses in groundwater systems. While there is still uncertainty over probable virus survival times in groundwater and over viral travel times/distances/pathways even when conservative tracers are used, there is also evidence in the literature that confined aquifers do not afford levels of protection from viruses that have

¹³ <http://www.hc-sc.gc.ca/ewh-semt/pubs/water-eau/enteric-enterovirus/index-eng.php>

been previously assumed. Traditional “high quality” groundwater systems may be at risk from human pathogenic viruses.

Strengths:

- This incorporates the virus reduction requirement from Health Canada’s *Guidelines for Canadian Drinking Water Quality* into the Alberta Drinking-water Quality Standard to defined the required outcome rather than incorporating the requirement into the Drinking-water Systems Standard which could be perceived as making it more of an input-focused requirement.

Weaknesses:

- None perceived – enshrines current *Guidelines for Canadian Drinking Water Quality* requirements into the provincial drinking-water quality standard.

Consultation point 3.0 – Replace the Existing Standards and Guidelines for Municipal Waterworks with a single Drinking-water System Standard.

Rationale:¹⁴

The Drinking-water System Standard is an integral part of having both a single Drinking-water Regulation and a Drinking-water Quality Standard. The Drinking-water System Standard describes the ‘how’ elements of the outcomes (the ‘what’) set out in the Drinking-water Regulation. The Standard will mirror the building blocks of the Regulation by having general requirements (dealing with issues such as sampling and analysis for parameters in the Drinking-water Quality Standard) and then specific requirements for each of the three categories of drinking-water systems. The drinking water safety plan model will be used as the basis for each of these sections with Category 1 and 2 systems having distinct drinking-water plan templates that recognise the differences in the two categories. The section for Category 3 systems would deal with the issues of voluntary registration and self-assessment of risks to the drinking-water supply. In addition, specific requirements around security for drinking-water systems will be included in the Standards requirements using a risk assessment approach that complements the existing drinking water safety plan approach.

In preparation for this consultation, in 2013 Environment and Sustainable Resource Development contracted the Canadian Water Network to convene an international expert panel to provide recommendations for the revision of the *Standards and Guidelines for Municipal Waterworks, Wastewater and Storm Drainage Systems*. The full report is provided as Consultation Package – Supporting Document 3.

Consultation point 3.30 – Recognised sampler training must be taken every 5 years.

Rationale:

There are certain activities that we engage in that are so important, so vital to maintain that, if we profess to have the skills to undertake those activities we must also be retrained at a frequency that ensures we are as competent and up-to-date as possible. An example of this from everyday life would be first aid training where after a longer initial training those who wish to remain recognised as first aiders must take refresher courses every three to five years. Similarly, for sampling of drinking-water – this activity is so core, so essential to the assurance of the drinking-water quality that it is appropriate to require those engaged in the sampling of drinking-water for compliance with the drinking-water regulation to undertake an initial sampler training course and to maintain that knowledge and skill-base by refreshing the

¹⁴ Note – no strengths or weaknesses are detailed for the section based on the Expert Panel Report as there is a full discussion of each recommendation within the body of the report.

sampler training at least once every five years as part of the on-going continuous professional development required to maintain operator certification.

Strengths:

- Ensuring that drinking-water samples are taken in an appropriate manner that they will provide reliable and consistent information on the quality of water being consumed is a core requirement of any regulatory system. This proposal will ensure that those charged with taking such samples have the necessary knowledge and skills to undertake these tasks with confidence and diligence and that this knowledge and skill-set is maintained over time.

Weaknesses:

- The development and provision of training capacity may limit the ability to introduce this requirement immediately; with that in mind a phased introduction will be developed as part of the implementation of the proposed regulatory package.

Consultation point 3.31 – A provincial Water Hygiene Card to be introduced within 5 years of the coming into force of the Standard.

Rationale:

In the UK a National Water Hygiene scheme has been developed at the request of Water UK, the body representing the water supply companies across England, Wales, Scotland and Northern Ireland. The blue National Water Hygiene card was introduced in January 2006 to replace all water company specific hygiene schemes and removes the need for workers to undergo separate testing, health screening and to carry several separate cards for each water authority.

Any person working on a restricted operations site such as service reservoirs, pumping stations, treatment works, wells, spring and boreholes and working on the network of water mains and service pipes must be in possession of a National Water Hygiene card. The same training package is delivered to both direct employees of water companies, and all contractors that work on the restricted operations sites including self-lay organizations working on new developments.

A health screening element is carried out to ensure that operatives holding the National Water Hygiene card are not carriers of any waterborne diseases on date of training and are aware of their responsibilities towards the potable water supply. Throughout the training the emphasis will be put on the individual that it is their duty to protect public health. They are responsible

for ensuring that they inform their line manager if they come into contact with any disease that has the potential to cause harm.

A National Water Hygiene card lasts for three years from date of training and provides on-site evidence that an individual has demonstrated an appropriate level of knowledge and awareness with regards to hygiene issues. The scheme is not designed to provide any job specific training. It is also a prerequisite for many other EUSR registration schemes. Further details of the UK scheme can be found at <https://www.eusr.co.uk/directory/scheme/30095>.

It is proposed that a similar scheme be initiated in Alberta to be in place within five-years of the coming into force of the Drinking-water Systems Standard. Having such a scheme in place provides an additional level of security around drinking-water systems and those who are working on providing drinking-water to Albertans. The scheme would be mandatory for all drinking-water operators, contractors, government personnel (including regulators – compliance, inspectors, drinking water operations specialists, environmental health officers etc.) or others who have occasion to work in or be present in drinking-water restricted operational areas. Time-limited, site-specific exemptions to the requirement may be granted under specific circumstances e.g. open house, visit by mayor and council, school trips. Applications for such exemptions will be considered on a case-by-case basis by the lead regulatory authority. Category 3 system operators can participate on a voluntary basis; category 3 operators should be encouraged to only employ contractors who conform to the requirements of the provincial water Hygiene Card.

Strengths:

- Requiring that everyone who has access to restricted operational areas on a drinking-water system has the appropriate training to understand the hygiene risks involved is a fundamental pre-requisite for any person who has such access.

Weaknesses:

- The development and provision of training capacity may limit the ability to introduce this requirement immediately; with that in mind a phased introduction will be developed as part of the implementation of the proposed regulatory package.



**North Red Deer
Regional Water
Services
Commission**

5432 56th Avenue
Lacombe, Alberta T4L 1E9

Memorandum

TO: Commission Board Members

FROM: Michael Minchin, Administrator

DATE: April 10, 2015

RE: Allocation of 2014 Operating Surplus

REF:
47/860/2015

In accordance with the Commission's capital and operating reserve policy (see attached), annual surpluses are to fund contributions to the capital and operating reserves in the following amounts:

1. Capital – equal to the annual amortization expense (for 2014 that is 465,610)
2. Operating – equals 100% operating surplus until such time as the reserve reaches the equivalent of 90 days of the cash operating expenses. The 2014 operating surplus (after amortization and less debt payments) for 2014 was 698,871. This amount included a one-time true up rebate of \$409,800.

Based on these amounts, the Commission can reach its 2014 operating reserve target of \$1,220,086 by contributing the 2013 true to the operating reserve. Administration is recommending that an amount equivalent to the 2014 amortization and the remaining operating surplus of \$288,871 be transferred to the capital reserve.

Based on these recommendations, the reserve balances would look as follows:

| | |
|-----------------------------------|--------------------------|
| Capital Reserve Opening Balance | \$1,209,169 |
| 2014 Capital Surplus | \$ 465,610 |
| 2014 Operating Surplus | <u>\$ 288,871</u> |
| 2015 Balance | \$1,963,650 |
| Operating Reserve Opening Balance | \$ 891,421 |
| 2013 True Up | <u>\$ 409,800</u> |
| 2015 Balance | \$1,301,221 |
| Target (as of 2014) | \$1,220,086 |

Once the Commission receives the water projections from the City of Red Deer, Administration will provide recommendations on whether to apply reserve balances to future budgets to even out water rate increases.

Administration is recommending that the Board approves these transfers to reserves as presented.