

REGIONAL DISTRICT OF CENTRAL OKANAGAN

REPORT SUBMITTED BY URBAN SYSTEMS LTD.



Utility Acquisition Policy

REPORT SUBMITTED TO
REGIONAL DISTRICT OF CENTRAL OKANAGAN

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Section 1

Introduction

1.0 INTRODUCTION

Within the boundaries of the Regional District of Central Okanagan (RDCO) there exist a number of water and sanitary sewer utilities which are not owned and operated by the RDCO or its member municipalities. These utilities take various forms, including private systems, improvement districts, strata corporations and other arrangements. In some instances, these utilities desire transition to ownership and operation by the RDCO.

The RDCO wishes to be well-prepared to consider such potential transitions. At a broad level, this preparation must reflect the RDCO's Mission, which is to:

“provide effective and efficient services that meet the needs of our citizens, in a manner that nurtures growth, opportunities, and prosperity, while maintaining and enhancing the unique Central Okanagan lifestyle and environment”

(Strategic Plan, Vision 2020 – Planning for the Future; June 2010)

A number of priorities have been identified within this broad Mission. Two of these priorities which are most closely related to water and sanitary sewer utility management are noted below.

- *“Growth Management – there is a need for a new regional plan. Such a plan should take into account sustainability goals, resource management and transportation, among other issues.”*

Sustaining public health and environmental integrity through proper management of water resources are inherent in this priority.

- *“Intergovernmental Affairs – all member jurisdictions must interact with provincial ministries and agencies and other bodies.”*

The management of water and sanitary sewer utilities within the RDCO requires extensive interaction with agencies such as the Interior Health Authority and BC Ministry of Environment.

The Strategic Plan further articulates the vision for ten years hence which includes the components noted below.

- *“Sustainability – a sustainable region characterized by environmental protection, responsible water stewardship and a ‘green’ ethos.”*
- *“Governance – a region with a governance model that facilitates the vision.”*

Within this context the RDCO wishes to have a policy which sets out a standard process for considering water and sanitary sewer utilities which are candidates for potential acquisition. This policy and process will seek to maximize benefits through ensuring RDCO ownership would:

- yield significant improvements in the quality and reliability of water and/or sanitary sewer services;
- realize economies of scope and scale, therefore reducing costs and improving affordability of user rates.



Reduction of risk and avoidance of liability associated with any aspect of utility management is are key objectives of the RDCO. These will be achieved through:

- ensuring a complete understanding of acquisition candidates is obtained;
- confirming that necessary resources are available to own and properly operate additional systems; and
- providing for long-term financial viability of systems which are acquired by the RDCO.

The remainder of this document sets out the RDCO’s policy regarding acquisition of water and sanitary sewer utilities. It is organized into the following Sections:

Section 2 – discusses Service Delivery, including the Levels of Service which acquisition candidates would have to meet;

Section 3 – sets out Cost Recovery Approaches; and

Section 4 – details the Acquisition Policies and attendant conditions.



Section 2

Service Delivery

2.0 SERVICE DELIVERY

Policy 2.1 – Levels of Service

The Regional District of Central Okanagan (RDCO) will require the provision of base levels of service for water and sanitary sewer utilities as defined in Table 1 on the following pages, and may provide expanded levels of service in consultation with customers on a system-by-system basis.

Policy 2.2 – Treatment Alternatives

The RDCO will discourage the use of point-of-use or point-of-entry (to an individual building) devices as a means of treating water supplied by a community utility system. Boiling water is not deemed acceptable as a long-term water treatment solution, and will be accepted only as an emergency provision.*

The RDCO will discourage pump-and-haul as an approach to removing sanitary sewerage from community utility systems for treatment and disposal at another location.

Policy 2.3 – Water Conservation

The RDCO will require the installation of meters on all water connections served by water and sanitary sewer utilities.

In accordance with Water Systems Fees and Regulations Bylaw No. 1268, the RDCO may suspend or limit the consumption of water from the water utilities, or regulate the hours or days of use, or may further prescribe the manner in which water may be used.

* BC Office of the Ombudsman (2008). Fit to Drink: Challenges in providing safe drinking water in BC.

Table 1 – Levels of Service

Service Delivery Component	Base Levels of Service	Expanded Levels of Service
Water Quantity	<p>a) Water shall be supplied and utilities designed and constructed in accordance with Subdivision & Development Servicing Bylaw No. 704.</p> <p>b) Under normal operating conditions, adequate water will be supplied to meet the following needs:</p> <ul style="list-style-type: none"> • Indoor domestic • Institutions • Commercial and industrial • Outdoor domestic <p>c) Adequate water is defined as sufficient water to meet the reasonable needs of each user class. Water wastage by any user class will be discouraged.</p> <p>d) Water will be supplied at appropriate pressures for the class uses.</p> <p>e) Under drought conditions, adequate water will be supplied for indoor domestic needs first.</p> <p>f) Household irrigation is currently a base level of service; however, it may be acceptable for household irrigation to fall under an expanded level of service for new water utilities where dedicated irrigation systems are installed.</p> <p>g) Water utilities within Fire Protection Area boundaries must have sufficient infrastructure capacity to provide fire flows in accordance with Fire Underwriters Survey requirements.</p>	There is no expanded service level in this category.
Water Quality	<p>a) Under normal operating conditions, water will be supplied in conformance with the operating permit for the water utility issued and updated by the Interior Health Authority.</p>	Treatment levels over and above those required by the conditions in a water system’s Operating Permit may be provided where the customers are willing to pay the additional costs associated with the infrastructure.

Table 1 – Levels of Service *(continued . . .)*

Service Delivery Component	Base Levels of Service	Expanded Levels of Service
Sanitary Sewer Quantity and Quality	<ul style="list-style-type: none"> a) Sanitary sewer utilities shall be designed and constructed in accordance with Subdivision & Development Servicing Bylaw No. 704. b) Sanitary sewerage shall be treated and disposed of in accordance with Permits, Registrations or Operating Certificates issued under the Environmental Management Act and its Regulations. 	Treatment levels over and above those required by Permits, Registrations or Operating Certificates may be provided where the customers are willing to pay the additional costs associated with the infrastructure.
Water and Sanitary Sewer Utility Reliability	<ul style="list-style-type: none"> a) All systems shall account and provide for predictable failure events with minimal interruption to service delivery. This may include, but not be limited to generator backup power. 	Additional reliability measures may be employed for utilities where customers are prepared to pay the additional costs for the infrastructure. This could include backup water source or sewer treatment and disposal capacity, redundant equipment or other features

Policy 2.4 – Fire Protection

As noted above in Table 1 – Levels of Service, Water Quantity, Item g), water utilities within Fire Protection Area boundaries must have sufficient infrastructure capacity to provide fire flows in accordance with Fire Underwriters Survey and Subdivision and Development Servicing Bylaw requirements.

It is the preference of the RDCO that water utilities located outside of Fire Protection Area boundaries have sufficient infrastructure capacity to comply with the relevant aspects of the Fire Underwriters Survey (FUS) requirements, or that a plan is in place to achieve this compliance. The RDCO will provide flexibility in this regard in recognition that other factors such as availability of trained fire suppression personnel and adherence of structures to Building Code standards are also considered in the context of FUS requirements. The RDCO Board will consider the circumstances of each candidate utility located outside of Fire Protection Area Boundaries in its decision making process.

Policy 2.5 – Asset Management

The RDCO will effectively manage its water and sanitary sewer utility assets to ensure the sustainability of service provision by considering factors such as lifecycle costs, sustainable finance, risk and levels of service.



Policy 2.6 – Supervisory Control and Data Acquisition (SCADA)

All plans for potential acquisition of new water and/or sanitary sewer utilities must include SCADA system components, or accommodate future installation of SCADA systems. These requirements must be confirmed in consultation with the RDCO’s Director of Environmental Services.

Policy 2.7 – Managing Resources Holistically

The RDCO will manage its water and sanitary sewer resources by taking a regional approach that views these resources holistically, and considers a comprehensive set of environmental, social / cultural and economic values.

Policy 2.8 – Co-ordination with Land Use Planning

The RDCO will coordinate land use planning and policy provided through the Regional Growth Strategy, Official Community Plans and Zoning Bylaws with consideration of water and sanitary sewer utility acquisition candidates.

Policy 2.9 – Keeping Policies and Processes Up-to-Date

The RDCO will review this policy and related processes every five years to ensure that the approach to utility acquisition is effective, and that it recognizes current applicable best practices, relevant Bylaws, senior government legislation and regulations, and other factors.

Policy 2.10 – Monitoring and Evaluation

The RDCO will monitor and evaluate the impact of its acquisition policies and processes in terms of improvements to reliability and quality of water and sanitary sewer services provided, and effectiveness of the acquisition process. The results of this monitoring and evaluation work will help to inform the policy updates described above in Policy 2.9.

Section 3

Cost Recovery

3.0 COST RECOVERY

Policy 3.1 - Guiding Principles for Cost Recovery

The Regional District of Central Okanagan (RDCO) will adhere to a set of guiding principles when considering the manner in which costs relating to utility acquisition, as well as ongoing costs incurred by acquired utilities, are recovered. These principles as noted below.

- ***Benefitter Pays***

Those who benefit from the acquisition of a utility by the RDCO should contribute toward the cost of the acquisition.

- ***Fairness and Equity in Cost Allocation***

There may be more than one party that benefits from utility acquisition. Where this is the case, costs should be fairly and equitably allocated in proportion to benefits received.

- ***Transparency***

The recovery of costs related to utility acquisition will be accessible to and understandable by all involved parties.

Policy 3.2 - Accessing Senior Government Grants for Capital Projects

Where possible, the RDCO will apply for senior government grants for capital projects to support water and sanitary sewer utility systems. Grant programs are dynamic. Those which are present at the time of development of this policy (2011 June) include the Federal Gas Tax Agreement delivered in BC through the Union of BC Municipalities and the Ministry of Community, Sport and Cultural Development, and the Federation of Canadian Municipalities Green Municipal Fund.



Policy 3.3 - Accessing Senior Government Grants for Planning and Feasibility Studies

Where possible, the RDCO will apply for senior government grants for planning, feasibility and related projects to support water and sanitary sewer utility systems. As of 2011 June, these programs include the BC Ministry of Community, Sport and Cultural Development's Infrastructure Planning Grant Program, various components of the Federal Gas Tax Agreement delivered in BC through the Union of BC Municipalities and the Ministry of Community, Sport and Cultural Development, and the Federation of Canadian Municipalities Green Municipal Fund.

Policy 3.4 - Loan Authorization Bylaw Where Borrowing Required

Where capital improvements are required for a water or sanitary sewer utility, the RDCO will submit an application for a senior government grant provided a suitable program is available, and will not proceed with a loan authorization bylaw (if borrowing required) until it is known whether the grant has been secured.

The loan authorization bylaw for the total value of capital improvements net of available grants will be advanced for elector assent simultaneously with the service area establishment bylaw.

Policy 3.5 - User Rates

The RDCO will establish user rates which reflect the full cost of providing water and sanitary sewer services. These costs include capital (net of available senior government grants), operation and maintenance, and contributions to reserves for long-term sustainability of a utility's capital assets.

Policy 3.6 - Development Cost Charges

The RDCO may adopt a Development Cost Charges (DCCs) program to help fund applicable water and sanitary sewer utility components and related costs which are required to support new development.

Policy 3.7 – Recovering Costs of Acquisitions

The cost of all studies to assess the feasibility of converting ownership of an **existing** water and/or sanitary sewer utility from its current status as Improvement District, private utility, strata corporation or other governance model to ownership by the RDCO will be financed in accordance with the approaches set out in Table 2.

The costs of all studies to assess the feasibility of a **newly-developed** water or sanitary sewer utility being owned by the RDCO will be financed in accordance with the approach set out in Table 2.

Table 2 – Recovering Cost of Assessments

Type of Candidate System	Stage of Assessment	Cost Recovery Approach
Existing Water or Sanitary Sewer Utility	Preliminary	<ul style="list-style-type: none"> Apply for Provincial Infrastructure Planning Grant If Grant approved, proceed with assessment. If Grant denied, do not proceed unless candidate utility wishes to fund assessment.
	Comprehensive	<ul style="list-style-type: none"> Draw from RDCO Feasibility Fund If acquisition consummated, RDCO recovers cost of assessment from the existing utility. If acquisition is not consummated, costs borne by RDCO. Application may be made for senior government grants to offset costs.
New Water or Sanitary Sewer Utility	Preliminary or Comprehensive	<ul style="list-style-type: none"> Fully funded by developer of utility.

Section 4

Acquisition Policies

4.0 ACQUISITION POLICIES

Introduction

The Regional District of Central Okanagan (RDCO) has developed the policies contained in this section with the following objectives in mind:

- Standardizing the process of considering acquisition of candidate water and sanitary sewer utilities by the RDCO;
- Ensuring the efficiency of this process for all parties concerned – the RDCO, candidate utilities, Provincial agencies and other stakeholders;
- Maximizing the potential benefits for all parties concerned, including quality and reliability of service to utility customers, and possibly improved affordability through realizing economies of scope and scale; and
- Minimizing risks to all parties concerned, including health and environmental risks borne by owners / customers of dysfunctional utilities, and financial risks borne by the RDCO.

The policies are set out in five parts:

- Part 1** Initiating the Acquisition Process: describes the manner in which the acquisition process is initiated by the candidate utility, or the RDCO;
- Part 2** Preliminary Assessment: provides the criteria used by the RDCO to conduct a preliminary assessment of the feasibility of utility acquisition;
- Part 3** Comprehensive Assessment: details the full list of considerations used by the RDCO to complete a comprehensive assessment of the viability of utility acquisition;
- Part 4** Conditions of Acquisition: sets out conditions which must be fulfilled if the RDCO is to acquire the utility; and



Part 5 Prioritizing Acquisitions: lists priorities to be used in ranking acquisition efforts in the event the RDCO does not have the resources to address all concurrently.

Part 1 – Initiating the Acquisition Process

Policy 4.1 – Initiating the Process

The RDCO will entertain requests to initiate the utility acquisition process for existing or newly-developing water or sanitary sewer utilities from:

- Utility customers; and/or
- Utility owners (including developers);

provided that the Electoral Area Director and the Board conclude that there is sufficient support for the potential acquisition. This support may be demonstrated through an informal petition signed by customers requesting that the RDCO investigate the feasibility of acquiring the utility. If utility customers do approach the RDCO directly to request initiation of the acquisition process, the RDCO will consult with the utility owner to obtain their consent before proceeding.

Alternatively, the RDCO may initiate the utility acquisition process if the owner of the existing or newly-developed utility agrees, and such an acquisition would:

- Result in measureable quality and reliability of service provided by the utility;
- Likely be supported by users of the utility;
- Enable the RDCO to realize economies of scope or scale; and/or
- Support broader RDCO objectives.



Part 2 – Preliminary Assessment

Policy 4.2 – Conducting the Preliminary Assessment

Following initiation of the acquisition process through the means described in Policy 4.1, the RDCO may conduct a preliminary assessment of the feasibility of acquiring a candidate water or sanitary sewer utility. This assessment will proceed if the following are in place:

- RDCO Feasibility Funding Availability: the RDCO will determine whether sufficient funds are available to conduct the preliminary assessment, in accordance with policies in Section 3;
- Freedom of Utility from Legal Entanglements: the RDCO will not proceed with the preliminary assessment if the utility is involved in legal action with its customers, owners / governance body, property owners within its service area, senior government agencies, suppliers or other parties. If the RDCO Board wished to exercise some flexibility with respect to this policy requirement, there is a mechanism to deal with legal issues through the letters patent by which assets and liabilities of utilities are transferred to the RDCO; and
- RDCO Capacity to Conduct Preliminary Assessment: the RDCO will assess the availability of relevant staff to be involved in the preliminary assessment work. This could include staff guiding consultants in doing the work.

The RDCO will also consider the location of the candidate water or sanitary sewer utility relative to similar utilities situated nearby and owned/governed by member local governments or other bodies. Where these circumstances exist, the RDCO will request that the candidate utility initiate discussions regarding potential acquisition by that local government or other body.



If these conditions are met, the RDCO will have a preliminary assessment completed by staff and/or qualified professionals. This assessment will address the following topics:

- Overview of capital works required to bring utility into conformance with applicable RDCO and senior government standards. This overview will be based on existing utility reports, drawings and records, extensive dialogue with the Interior Health Authority, discussions with other regulatory authorities, and a site visit;
- Capital cost estimates at a Class C or D level;
- Operation and maintenance cost estimates (including RDCO staff costs); and
- Preliminary range of fees and charges required to fund capital and operation / maintenance costs. Calculation of these fees and charges may be done with and without an assumed value of senior government grants, if there is an intention to apply for such grants.

The results of this preliminary assessment will be communicated to the RDCO Board, utility owner, and utility customers. Responses from these individuals and parties will be used to gauge whether or not the comprehensive assessment described below in Part 3 is warranted.

Part 3 – Comprehensive Assessment

Policy 4.3 – Conducting the Comprehensive Assessment

Following the initiation of the acquisition process through the means described in Policy 4.1, and the completion of the preliminary assessment set out in Policy 4.2, the RDCO may conduct a comprehensive assessment of the candidate water or sanitary sewer utility. The preconditions noted in Policy 4.2 must be in place –



RDCO feasibility funding is available, the utility is free from legal entanglements, and RDCO staff have the capacity to conduct or guide the assessment.

The comprehensive assessment must be carried out by qualified professionals, and must address the following topics. Terms of Reference for water utility comprehensive assessments are provided in Appendix A, and for sanitary sewer utilities in Appendix B.

- General Description of Utility
 - Location, History and Service Area
 - Governance
 - Administration
 - Risk Management
 - Permits, Licences, Registrations and Certificates
- Assessment of Utility Infrastructure - Current Condition, and Conformance with RDCO and Senior Government Requirements.
 - Water
 - Source
 - Source Protection
 - Intake (if surface source)
 - Well (if groundwater source)
 - Treatment
 - Storage
 - Distribution System (including pumps and pressure reducing valves)
 - Communications Systems



- Sanitary Sewer
 - Collection System (including pumps)
 - Treatment
 - Disposal
 - Biosolids Management
 - Communications Systems
 - Protection of Infrastructure by Easements / Rights-of-Way
- Financial Status
 - Revenue
 - Expenditures
 - Asset Value
 - Reserves
- Operation and Maintenance Considerations (including RDCO staff costs)
 - Maintenance Activities
 - Sampling and Reporting
 - Emergency Response Procedures
- Land Use Plans and Growth Projections
 - Official Community Plan
 - Zoning Bylaw
- Future Plans and Programs to Meet RDCO and Senior Government Requirements
 - Infrastructure Upgrading Plan
 - Operations and Maintenance Plan



Policy 4.4 – Financial Plan Emerging from Comprehensive Assessment

Once the comprehensive assessment called for in Policy 4.3 has been completed, the RDCO will prepare a financial plan for the water or sanitary sewer utility which may be acquired by the RDCO. This plan will include the following:

- Five year capital plan for required utility infrastructure upgrading;
- Annual operation and maintenance cost estimates (including RDCO staff costs);
- Reserve fund requirements; and
- Implications for fees and charges.

Policy 4.5 – Confirmation of RDCO Capacity to Manage Additional Systems

The RDCO will assess its administrative, operational and financial capacity to acquire additional water or sanitary sewer utilities as a component of the comprehensive assessment process. If required, potential acquisitions will be phased-in over multiple years.

Part 4 – Conditions of Acquisition

Policy 4.6 – Financial Viability of Utilities

The RDCO will acquire only those water or sanitary sewer utilities expected to be financially viable to own and operate, and with a proven plan in place to achieve this viability. This plan will emerge from the work conducted in the comprehensive assessment, including Policy 4.4. This will include formal acceptance of the method of cost recovery, including the maximum amount that may be requested for the service by the electors within the service area.



Policy 4.7 – Elector Assent Required for Acquiring Utilities

The RDCO will assume ownership of a water or sanitary sewer utility only upon completion of a successful elector assent process. The process will address two key issues – establishment of the service area boundaries for the utility, and levying of costs on property owners within that service area to support a financially-viable utility as contemplated in Policy 4.6.

Where capital improvements are required, the RDCO may submit an application for a capital grant (if a suitable program is in place), and will not proceed with the elector assent process until it is known whether the grant has been secured. This provision may be waived if property owners are willing to proceed on the basis of receiving no grants.

Policy 4.8 – Payment for Utilities

The RDCO will pay no more than a consideration of \$1.00 Canadian for the acquisition of any water or sanitary sewer utility.

Policy 4.9 – Transfer of All Financial Assets, Easements / Rights-of-Way, Permits / Licences and Related Instruments at Conversion

The transfer of a water or sanitary sewer utility to RDCO ownership will require the transfer of all financial assets relating to the utility including all reserve and trust funds, performance reserve funds amassed as a requirement of the Comptroller of Water Rights, bonds or other securities, and any pre-servicing or other prepaid commitments. Easements and rights-of-way protecting and providing access to utility infrastructure must also be transferred to the RDCO. The RDCO must also have transferred to it all permits, licences, operating certificates and similar instruments issued by senior government agencies.



Policy 4.10 – Transfer of Utilities Not Holding Valid Permits or Licences

The RDCO will not acquire a water or sanitary sewer utility if it is determined that the utility does not hold valid permits, licences or similar instruments issued by senior government agencies, and there is sufficient risk that the RDCO will not be able to secure such instruments to allow proper utility construction, operation and maintenance.

Policy 4.11 – Constructed Works Protected by Easements, Rights-of-Way or Other Methods

The RDCO will not acquire a water or sanitary sewer utility where constructed works are not located within registered easements or rights-of-way held by the owner of the system, or within legal parcels held in fee simple by the utility owner.

The Board may choose to waive this requirement if it is deemed that the RDCO, rather than the current owner, is in a better position to acquire the required easements, rights-of-way or legal parcel.

Policy 4.12 – Existing Utility Debt and Reserves

A water or sanitary sewer utility's existing debt and reserves will remain with that utility if it is converted to ownership by the RDCO, and not pooled with other utilities owned by the RDCO.



Policy 4.13 – Tangible Capital Asset Information

For newly-developed water or sanitary sewer utilities, tangible capital asset information will be provided to the RDCO by the utility owner as a condition of acquisition at no cost to the RDCO. For existing utilities, the cost of assessing the system’s tangible capital assets will be borne by the existing utility as part of the cost of ownership conversion.

Policy 4.14 – Infrastructure Renewal Funding for Newly-Developed Utility

As a condition of acquisition of a newly-developed water or sanitary sewer utility, the RDCO will require the developer to provide ten percent (10%) of the value of the utility or \$50,000, whichever is greater. This amount will be deposited into a reserve fund to allow infrastructure renewal through capital replacement. The RDCO may consider allowing the developer to make payments in instalments over time, and/or as thresholds of utility installation or use are achieved.

Part 5 – Prioritizing Acquisitions

The RDCO may encounter situations where one water or sanitary sewer utility acquisition initiative must be weighed against another, and priorities established. Examples of these situations include multiple requests for acquisition coming to the RDCO concurrently from candidate systems, or limited availability of senior government grant programs.

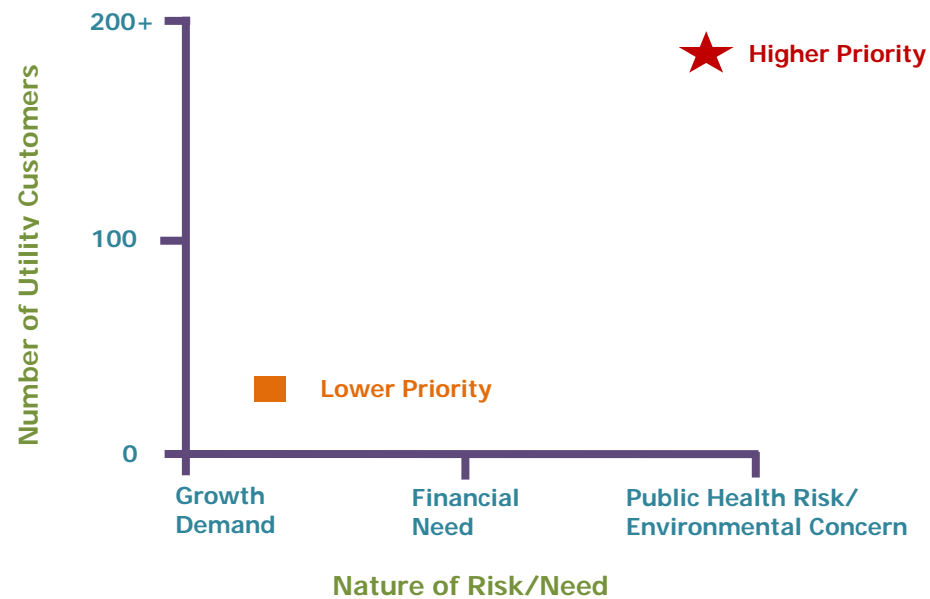
Policy 4.15 – Priority Setting Framework

The RDCO will prioritize the allocation of resources to water or sanitary sewer utility initiatives which will provide the greatest benefit to the greatest number of people. In fulfilling this policy, the RDCO will consider the following:

- Public health impacts and risks (such as unsafe drinking water);
- Environmental concerns (such as malfunctioning on-site septic systems near water body);
- Financial need (such as that due to extensive capital upgrades required and associated costs);
- Potential to secure senior government grants.

This priority setting framework is illustrated in Figure 1.

Figure 1 – Priority Setting Framework



Appendix A

Terms of Reference for Water Utility Comprehensive Assessments



Terms of Reference for Water Utility Comprehensive Assessments

Background

Assessments provide an important basis for discussions regarding potential acquisition of a water utility by the RDCO. For this reason, they need to be comprehensive, and should be carried out by professionals who can be held accountable for the quality and accuracy of the analysis. An assessment process can have a variety of intentions. For example:

- To ensure regulatory compliance and develop plans for water system upgrades;
- To evaluate water system security and vulnerability;
- For asset management purposes;
- For source water protection;
- For risk management; and
- For public health protection.

This terms of reference contains a list of topics to be addressed in an assessment of the suitability of a water system for RDCO acquisition. The list does not address all assessment requirements of the *Drinking Water Protection Act*. The goals of this assessment process are to:

- Provide a description of the existing water system, including general information regarding the system and the existing infrastructure, as well as operational, management and financial information;
- Assess the water system to determine whether it meets current legislation, RDCO requirements, and best practices. This includes implications for water quality, system reliability, current/future needs, administrative/operational/maintenance activities;
- Identify implications for RDCO risk; and

- Determine the financial implications for both the RDCO and its water users through the development of a plan for system upgrades, and an assessment of the financial viability of the system.

The assessment process can often be limited by a lack of information regarding the system, including a lack of design/construction/operational records. This is further exacerbated because water system infrastructure is mainly buried and therefore not readily visible for inspection.

The level of detail required in the assessment process therefore needs to be balanced with the benefit that will be gained by the assessment. For example, in cases where the existing infrastructure does not appear to meet RDCO standards and/or current best practices, then the physical assessment process does not need to be extensive.

It is therefore recommended that the assessment process consider the following topics.

General Description of Utility

Location, History and Service Area

- Location of the system;
- History of system;
- Service area; and
- Number and Type of Connections (existing/build-out), Population Served, Range of Users Served.

Governance

- Ownership of system (Improvement District, private utility, other);
- Bylaws;
- Method of representation/elections; and
- Public accountability provisions.

Administration

- Staffing and organization of staff;
- Certification of operators and EOCP classification of water system;
- Salaries and benefits of staff; and
- Office facilities, works yards and ownership.

Risk Management

- Nature and extent of insurance coverage;
- Underwriter;
- Premiums; and
- Emergency response plans.

Permits and Licenses

- Construction Permit (IHA);
- Operating Permit (IHA) – Conditions of Permit;
- Water License(s) (MoE);
- Highway Permit (MoT);
- CPCN (if Private Utility);
- Easements; and
- IHA Boil Orders or Advisories – Incidence, Duration.

Assessment of Utility Infrastructure

- Description of design standards used in analysis (Note: Standards in the RDCO's Subdivision and Development Servicing Bylaw must be used).
- Assessment of source based on existing and projected future demand:
 - Adequacy of watershed protection plans and measures (surface source);
 - Adequacy of groundwater protection plan (groundwater source);
 - Source water quality (past trends, existing quality);
 - Security of well (groundwater);
 - Risk to well from flooding or seepage/impact by adjacent stream or lake (groundwater); and
 - Adequacy of source to supply existing and projected future demand.
- Assessment of condition and adequacy of intake works (intake, pump station) to meet existing and projected future demand (surface).
- Condition and adequacy of existing treatment facilities including level of treatment achieved and consistency with BC Drinking Water Protection Regulations and Canadian Drinking Water Standards.
- Condition and adequacy of storage facilities to meet existing and projected future demand.
- Condition and ability of pumping facilities and pressure reducing valves to provide for existing and projected future demand.
- Condition and adequacy of existing distribution system to meet existing and projected future demand.
- Condition and adequacy of operator safety equipment and review of what is required to meet WCB legislation.
- Condition and adequacy of communications systems (supervisory control and data acquisition – SCADA).
- Protection of system facilities by required easements, rights-of-way, fee simple ownership or other arrangement.

Financial Assessment

General

- Current Annual Budget
- Capital Plan
- Past Financial Statements

Revenue

- Sources of Revenue and Methods of Cost Recovery (taxes, charges, fees, development charges, etc.)

Expenditures

- Administrative, Capital, Operations and Maintenance, Debt Servicing, Other.

Assets

- Nature and Value of Physical Assets (equipment, land, supply, inventory, etc.)
- Reserves, Trusts and Other Financial Assets.

Operation and Maintenance Considerations (including RDCO staff costs)

- Samplings, testing and reporting protocols – frequency, methods.
- Emergency response procedures.
- Standards and specifications for infrastructure and operations.
- Maintenance planning and maintenance activities.
- Contracting – existing contracts, types of activities contracted out.

Land Use Plans/Regulations and Growth Projections

- Official Community Plan
- Zoning Bylaw
- Projected Growth Over Ten year Period in Utility Service Area.

Future Plans and Programs

Infrastructure Upgrading Plan

- Identification of upgrading required to bring water system into conformity with RDCO standards and specifications, IHA operating permit, WCB requirements for operator safety equipment, and other relevant standards. The deficiencies noted in the assessment should be addressed by the recommended works. The plan should include the preparation of capital cost estimates and a recommended phasing plan (in consultation with the RDCO).

Operations and Maintenance Requirements

- Recommended resources and skills needed to operate and maintain the system in consideration of RDCO capacity.
- Calculation of operation and maintenance cost for proposed upgraded system.
- Recommended training program for operator(s).

Appendix B

Terms of Reference for Sanitary Sewer Utility Comprehensive Assessments



Terms of Reference for Sanitary Sewer Utility Comprehensive Assessments

Background

Assessments provide an important basis for discussions regarding potential acquisition of a sanitary sewer utility by the RDCO. For this reason, they need to be comprehensive, and should be carried out by professionals who can be held accountable for the quality and accuracy of the analysis. An assessment process can have a variety of intentions. For example:

- To ensure regulatory compliance and develop plans for sanitary sewer system upgrades;
- To evaluate sanitary sewer system security and vulnerability;
- For asset management purposes;
- For disposal environment protection;
- For risk management; and
- For public health protection.

This terms of reference contains a list of topics to be addressed in an assessment of the suitability of a sanitary sewer system for RDCO acquisition. The goals of this assessment process are to:

- Provide a description of the existing sanitary sewer system, including general information regarding the system and the existing infrastructure, as well as operational, management and financial information;
- Assess the sanitary sewer system to determine whether it meets current senior government legislation, RDCO requirements, and best practices;
- Identify implications for RDCO risk; and
- Determine the financial implications for both the RDCO and its system users through the development of a plan for system upgrades, and an assessment of the financial viability of the system.

The assessment process can often be limited by a lack of information regarding the system, including a lack of design/construction/operational records. This is further exacerbated because sanitary sewer system infrastructure is mainly buried and therefore not readily visible for inspection.

The level of detail required in the assessment process therefore needs to be balanced with the benefit that will be gained by the assessment. For example, in cases where the existing infrastructure does not appear to meet RDCO standards and/or current best practices, then the physical assessment process does not need to be extensive.

It is therefore recommended that the assessment process consider the following topics.

General Description of Utility

Location, History and Service Area

- Location of the system;
- History of system;
- Service area; and
- Number and Type of Connections (existing/build-out), Population Served, Range of Users Served.

Governance

- Ownership of system (Improvement District, private utility, other);
- Bylaws;
- Method of representation/elections; and
- Public accountability provisions.

Administration

- Staffing and organization of staff;
- Certification of operators and EOCP classification of sanitary sewer system;
- Salaries and benefits of staff; and
- Office facilities, works yards and ownership.

Risk Management

- Nature and extent of insurance coverage;
- Underwriter;
- Premiums; and
- Emergency response plans.

Permits and Licenses

- Permit, Operational Certificate, Registration or other instrument issued under the Environmental Management Act/Regulations by BC Ministry of Environment, Health Authority or other Agency.
- Highway Permit (MoT); and
- Easements and Rights-of-Way.

Assessment of Utility Infrastructure

- Description of design standards used in assessment (note: standards in the RDCO's Subdivision and Development Servicing Bylaw must be used for all applicable utility components).
- Condition and adequacy of existing collection system (including lift stations if applicable) to meet existing and projected future demand.

- Condition and adequacy of existing treatment and disposal facilities including level of treatment achieved, relationship between effluent quality / quantity and capacity of the receiving environment, and conformance with applicable Regulations under the BC Environmental Management Act, Federal Fisheries Act, and the Federal Wastewater Systems Effluent Regulations.
- Current approach to biosolids management, and adequacy of that approach.
- Condition and adequacy of operator safety equipment and review of requirements to meet WCB legislation.
- Condition and adequacy of communications systems (supervisory control and data acquisition – SCADA).
- Protection of system facilities by required easements, rights-of-way, fee simple ownership or other arrangement.

Financial Assessment

General

- Current Annual Budget
- Capital Plan
- Past Financial Statements

Revenue

- Sources of Revenue and Methods of Cost Recovery (taxes, charges, fees, development charges, etc.)

Expenditures

- Administrative, Capital, Operations and Maintenance, Debt Servicing, Other.

Assets

- Nature and Value of Physical Assets (equipment, land, supply, inventory, etc.)
- Reserves, Trusts and Other Financial Assets.

Operation and Maintenance Considerations (including RDCO staff costs)

- Sampling, testing and reporting protocols – frequency, methods.
- Emergency response procedures.
- Standards and specifications for infrastructure and operations.
- Maintenance planning and maintenance activities.
- Contracting – existing contracts, types of activities contracted out.

Land Use Plans/Regulations and Growth Projections

- Official Community Plan
- Zoning Bylaw
- Projected Growth Over Ten year Period in Utility Service Area.

Future Plans and Programs

Infrastructure Upgrading Plan

- Identification of upgrading required to bring sanitary sewer system into conformity with RDCO standards and specifications, Permits/Operating Certificates/Registrations, WCB requirements for operator safety equipment, and other relevant standards. The deficiencies noted in the assessment should be addressed by the recommended works. The plan should include the preparation of capital cost estimates and a recommended phasing plan (in consultation with the RDCO).

Operations and Maintenance Requirements

- Recommended resources and skills needed to operate and maintain the system in consideration of RDCO capacity.
- Calculation of operation and maintenance cost for proposed upgraded system.
- Recommended training program for operator(s).

