

RDN: Water Purveyors Working Group
SMALL SCALE WATER TREATMENT OPTIONS AND FINANCING WORKSHOP – June 2012

Financing Water Treatment

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Sustainable Infrastructure Society
www.WaterBC.ca

Sponsors:
Regional District of Nanaimo
Coastal Water Suppliers Association
Sustainable Infrastructure Society

Contents of Presentation

Purpose:

1. Overview of Loan Application
2. Example of long-term financial planning
3. Introduce full-cost pricing

Slides:

1. Background
2. Loan Applications
3. Long-Term Financial Planning
4. Full Cost pricing



Sustainable Infrastructure Society



Function

We help you operate effectively by creating resources...

- Access to Insurance Coverage
- Access to Financing

Background

- Incorporated in 2005 as a non-profit society.
- Support from the BC Ministries

Mandate

Provides programs and resources for building the managerial, financial, and operational capacity ... community infrastructure....in BC

Web Site

www.WaterBC.ca

Newsletter

WaterBC News

Loan Approvals: Information

Please obtain the following information:

- Copies of financial statements for last 3 years
- Description of user base
- Outline of current & proposed water rates
- List of Board of Trustee members
- Copy of any land leases
- Summary of proposed infrastructure upgrades: type, schedules, costs, approvals etc.

Application Checklist

Use this checklist when assembling information for a loan application.

Some applications may be less complicated ...

Do you have property?

Preliminary Checklist for Loan Application

When approached concerning a loan for water system improvements, the lending institution may request information including the following:

1	Description of business: age, services provided, type of organization etc.	
2	Name and related experience of manager	
3	Value of property and value of improvements	
4	Existing mortgages & other debts	
5	Copies of financial statements: last three years	
6	Annual revenues	
7	Annual expenses	
8	Average charge per connection: 2012, 2011, 2010, 2009, 2008	
9	Planned average charges per connection 2013, 2014, etc	
10	Planned rate structure in future years	
11	Schedule of water system assets showing age & condition	
12	Estimated future replacement costs	
13	Outline of upgrading plans & costs	
14	Projected revenues and expenses	
15	List of owners (or trustees or directors)	
16	Character of customer base (residential, commercial, institutional etc.	
17	Copy of any leases and encumbrances	
18	Copy of Operating Permit provided by health authority	
19	Copy of insurance coverages, including liability insurance	
20	Other 1:	
21	Other 2:	
22	Other 3:	

Loan Application Form

Preliminary Loan Application Form

Last Update: 28-Feb-12



Using This Form

1. Please answer all questions. Type an X into the box where applicable. If any question does not apply, please indicate with N/A.
2. If space is insufficient, attach additional sheets of paper.
3. Have this preliminary application completed by an authorized representative of the Water Supply System (WSS)
4. Please note that this is a preliminary application only. Further information may be required at a later date.
5. Please also provide an outline cash flow statement for your WSS using the attached Excel worksheet
6. Where you check "Other" in the following, please provide further explanation in the space provided. **PLEASE SEE ALSO THE APPENDIX (SEE TAB AT BOTTOM)**
7. Please contact us if you have questions, using the contact information below. We will be happy to help.

A. General Information

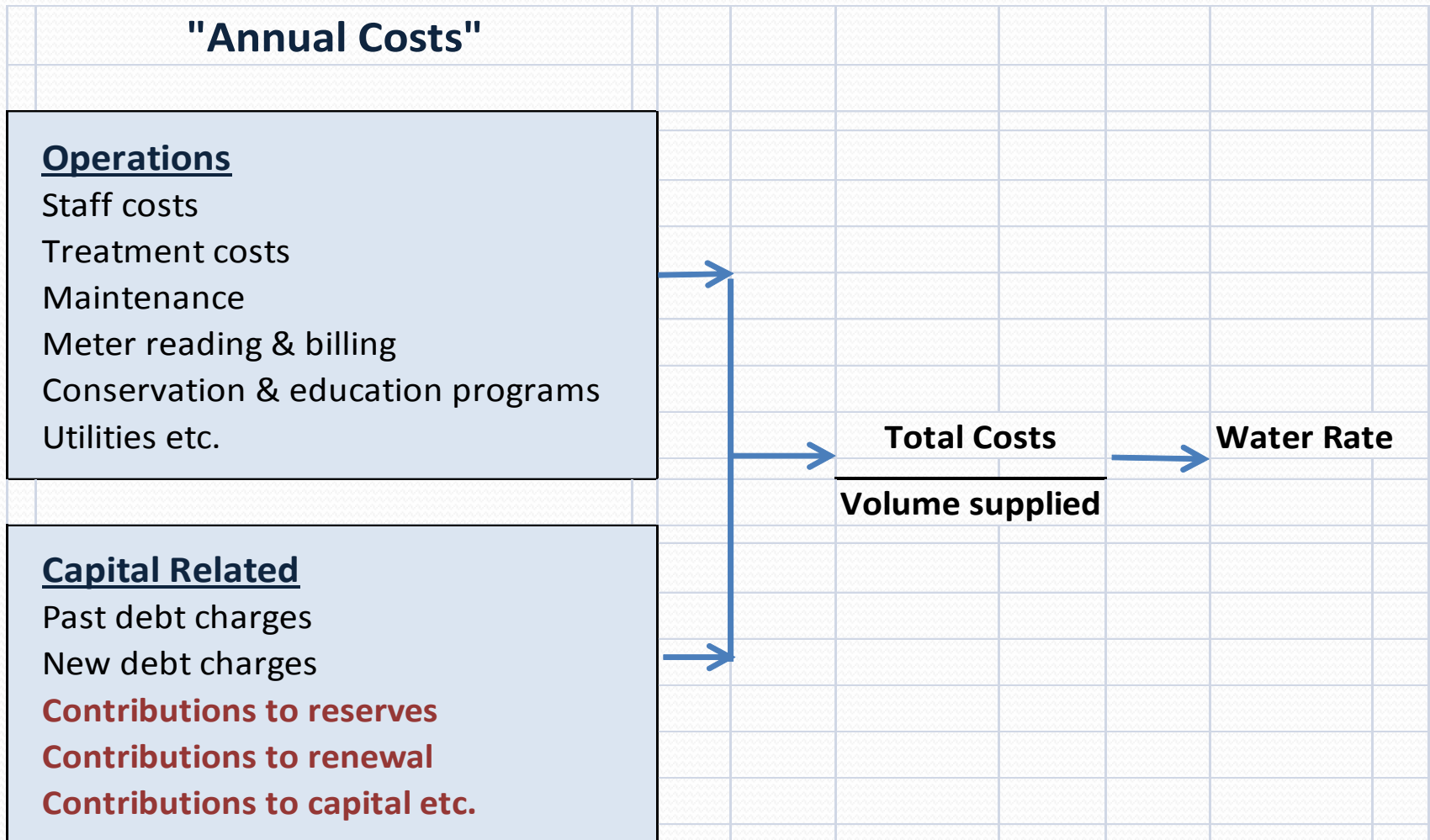
1 Name of WSS	<input type="text"/>	Website address	<input type="text"/>
2 Address (Street & PO Box)	<input type="text"/>		
City	<input type="text"/>	Province	<input type="text"/>
		Postal Code	<input type="text"/>
3 Telephone number	<input type="text"/>	4 Fax number	<input type="text"/>
5 Contact Name & Title	<input type="text"/>		
6 Email address	<input type="text"/>	7 How many connections do you have?	<input type="text"/>
8 How long has WSS been in operation	<input type="text"/>	years	
9 WSS is a:	Improvement District <input type="checkbox"/>	Water Users Community <input type="checkbox"/>	Other: <input type="text"/>
	Water Utility <input type="checkbox"/>	Private Water Supply System <input type="checkbox"/>	

B. Governance, Decision Making & Customer Base

10 How is your WSS governed?

Board of Trustees	<input type="checkbox"/>	Management Group	<input type="checkbox"/>
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Calculating the Water Rate



Worksheets for Preliminary Asset Management & Financial Planning

Asset Replacement Schedule

		Inflation factor	1.5%		Interest Rate	4.5%						
Asset Description	Current Cost	Year of Replacement										
		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Submersible pump	\$ 850	-\$850	-\$863	-\$876	-\$889	-\$902	-\$916	-\$929	-\$943	-\$958	-\$972	-\$986
Alarm system	\$ 1,250	-\$1,250	-\$1,269	-\$1,288	-\$1,307	-\$1,327	-\$1,347	-\$1,367	-\$1,387	-\$1,408	-\$1,429	-\$1,451
Reservoir valving	\$ 2,300	-\$2,300	-\$2,335	-\$2,370	-\$2,405	-\$2,441	-\$2,478	-\$2,515	-\$2,553	-\$2,591	-\$2,630	-\$2,669
Pressure tank	\$ 1,600	-\$1,600	-\$1,624	-\$1,648	-\$1,673	-\$1,698	-\$1,724	-\$1,750	-\$1,776	-\$1,802	-\$1,829	-\$1,857
Pipework 50 mm. 26 meters	\$ 450	-\$450	-\$457	-\$464	-\$471	-\$478	-\$485	-\$492	-\$499	-\$507	-\$515	-\$522
Replacement cost & year incurred >			-\$457		-\$889		-\$2,478		-\$1,776		-\$1,429	

Replacement Reserve Fund

		Annual Amounts										
Opening balance	\$ 1,000	\$ 1,672	\$ 1,897	\$ 2,609	\$ 2,425	\$ 3,161	\$ 1,341	\$ 2,028	\$ 891	\$ 1,558	\$ 762	
\$600 Contributions	\$ 600	\$ 600	\$ 600	\$ 600	\$ 600	\$ 600	\$ 600	\$ 600	\$ 600	\$ 600	\$ 600	\$ 600
Deductions	\$ -	-\$ 457	\$ -	-\$ 889	\$ -	-\$ 2,478	\$ -	-\$ 1,776	\$ -	-\$ 1,429	\$ -	\$ -
Net Contributions	\$ 600	\$ 143	\$ 600	-\$ 289	\$ 600	-\$ 1,878	\$ 600	-\$ 1,176	\$ 600	-\$ 829	\$ 600	\$ 600
Closing Balance b/f in	\$ 1,600	\$ 1,815	\$ 2,497	\$ 2,320	\$ 3,025	\$ 1,283	\$ 1,941	\$ 853	\$ 1,491	\$ 729	\$ 1,362	
Interest Paid	\$ 72	\$ 82	\$ 112	\$ 104	\$ 136	\$ 58	\$ 87	\$ 38	\$ 67	\$ 33	\$ 61	
Closing balance	\$ 1,672	\$ 1,897	\$ 2,609	\$ 2,425	\$ 3,161	\$ 1,341	\$ 2,028	\$ 891	\$ 1,558	\$ 762	\$ 1,423	

Need \$600 annual contribution to stay in the black; assumes contributions and deductions made at beginning of year.

Best Management Practices

Q: How do you enable the sustainable delivery of services?

A: By implementing Best Management Practices

“Best management Practices (BMPs) can help you achieve gains and lessen pains”

A BMP is simply an expression of an approach or method used by the best-performing organizations

What is a BMP?

BMP: method or approach that is shown to be an effective and practical means to achieve an objective while making the optimum use of resources. It may be associated with a *Benchmark* of performance.

A "best" practice can evolve to become better as improvements are discovered.

Primary BMP: a management approach that is typically concerned with a broad and long-term activity; such as *Prepare an Asset Management Plan*.

Secondary BMP: concerned with a method or technique that is required in order to support a primary best management practice; such as an *Prepare an Asset Inventory*.

Benefits of BMPs

Use BMPs for these benefits:

- **Water Suppliers:** Guidelines that contribute to effective & sustainable operations
- **Consumers:** Safety of water supplies may be improved.
- **Customers:** Communication about need for changes is more effective: such as rate adjustment.
- **Property Owners:** Community image is enhanced and values may increase
- **Regulators:** Ability to comply with operating permit is increased
- **Lenders:** Financial management is strengthened: they feel more comfortable about lending you money.
- **Government:** Framework for consistent & effective inter-ministry approach

BMPs & Borrowing Money

Demonstrate credit-worthiness: Governance, Finance, Risk Management

P: Ensure the governance process is effective & sustainable

- Use a recognizable corporate structure (E.g. PWU; non-Profit Society; Imp Dist)
- Implement an effective decision-making process
- Ensure a succession plan is in place

P: Monitor key financial indicators

- Ensure operating revenues are sufficient to cover all day-to-day expenditures (excluding depreciation and amortization (Operating Cost Coverage).
- Ensure that revenues exceed the day-to-day expenditures plus payments of principal and interest on existing long-term debt (Debt Servicing).
- Ensure that operating revenues exceed the day-to-day expenditures plus depreciation of capital assets (Cost Recovery)

BMPs & Raising Water Rates

P: Implement Full-Cost Water Pricing

- Ensure that revenues exceed the day-to-day expenditures plus payments of principal and interest on existing long-term debt (Debt Servicing).
- Establish an Asset Management Budget to pay for asset renewal projects, to service debt related to renewal and to make contributions to an asset replacement fund (Asset Management) .
- Assess new capital projects by reviewing the total cost of ownership over the life of the assets, including future renewal and replacement costs and new operating and maintenance costs (Life Cycle Costing) .

P: Establish Reserve Funds

- Maintain an Interest Rate Reserve fund to protect against changes in interest rates
- Maintain an Emergency Reserve fund to protect against unforeseen emergencies

Primary Best Management Practice: **Implement Full-Cost Pricing**

A publication in the series: “**Best Management Practices for Community Water Suppliers**”



Hand-Out: RDN WPWG, **Quality Inn, Parksville**

Date: **27th June 2012**

Note: This Hand-Out is in DRAFT and is for general guidance and comment only.

Sponsors of Initial Development:

Coastal Water Suppliers Association

Regional District of Nanaimo

BC Ministry of Health



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Implement Full Cost Pricing

3. Implementing Full Cost Pricing: Key Questions & Secondary BMPs

You can implement Full Cost Pricing by systematically answering a series of questions. The answers are developed in the process of implementing a series of Secondary BMPs. To implement these secondary BMPs you can make use of the tools shown.

3.1 What are our annual costs?

The first step in setting rates that reflect the true cost of delivering safe drinking water is determining how much it costs to operate your system every year (your annual costs). In determining your costs, you need to consider all aspects of your system, such as physical equipment, replacement needs, staff, outstanding loans, and mortgage payments. Knowing what your costs are and understanding how they have changed in the past and can change in the future is the key to knowing how much money you will need to collect from your customers every year.

Supplementary Questions	Secondary BMPs	Tools
<ul style="list-style-type: none">• How much do we spend on salaries & wages?• How much do we spend on non-personnel costs?• How much do we spend on debt servicing?	<ul style="list-style-type: none">• Keep full records of operating and maintenance costs and terms of loans• Consider contracting out self-contained activities such as billing, meter reading and processing to a third party where prudent.• Ensure adequate insurance coverage is in place.• Lease items such as vehicles if prudent.	<ul style="list-style-type: none">• Worksheet for Annual Revenues and Costs.• TBD.

Summary

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