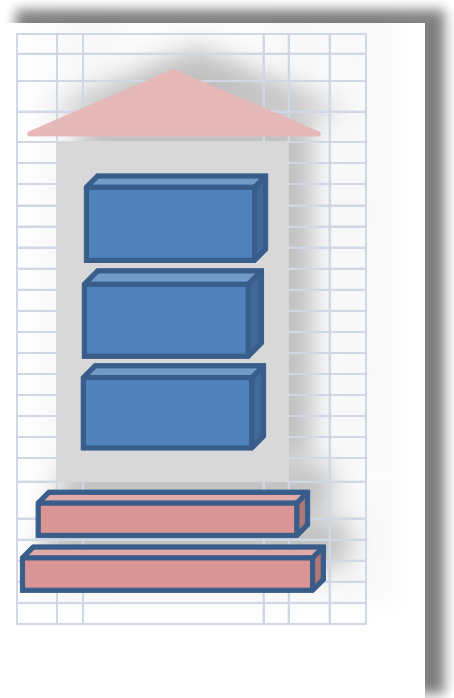


Financial Best Management Practices

for
Small
Community Water Systems
in British Columbia



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Questions

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Please Note

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1 Is this Guide for Me?

This Guide is for owners and operators of small water systems in British Columbia ranging in size from a handful of connections to one hundred or more.

The Guide describes aspects of financial management and provides tools to develop a financial plan for the lifetime of your system. Specifically, it outlines a series of **Best Management Practices** that are practical and proven methods used by successful water systems to operate sustainably. An explanation of terms used is given in Section 1.4 below.

There are six Best Management Practises (BMPs) described in this Guide. They help to:

- BMP A. Create a basic asset inventory
- BMP B. Build an asset management plan
- BMP C. Create a five-year operating plan
- BMP D. Establish a long-term financial plan
- BMP E. Determine sustainable water rates and charges
- BMP F. Develop a communications plan.

You do not have to use all six at once. You may choose to apply one or two to start, and then implement other BMPs when you have the resources. You should encourage the members of your team to look through this Guide.

Your Team

“Your team” as used in this Guide is a flexible term. In some cases it may mean only a small group of volunteers, or even just the owner and family members. In another case it may include volunteers, a part-time operator, trustees, and even a paid staff member.

1.1 Benefits of BMPs

Using BMPs in your water system will provide you with important benefits. For example, they may help you to:

Confidential
Completed worksheets from this Guide could contain sensitive information about your system. Be sure to store these worksheets in a secure place.

- develop water rates that reflect the true cost of service
- justify water rates to users
- budget for infrastructure upgrades, both current and future
- propose reasonable timelines for compliance
- explain future plans to customers and decision-makers
- prepare successful loan applications
- demonstrate due diligence to regulators and lenders
- reduce the possibility of omitting important issues
- save money and improve communication.

1.2 Contents of This Guide

This Guide is divided into these sections:

1. Is This Guide for Me?
2. About Best Management Practices
3. Six Financial Best Management Practices

Part 2 provides an overview of BMPs. Part 3 includes six financial Best Management Practices and provides the tools you need to apply them to your water system. In each BMP you will find links to further information to help in the management of your water system.

1.3 Getting Started

Before you start thinking too much about individual BMPs, it's a good idea to think about overall goals for your water system. For example, you might set as a goal the achievement of long-term financial sustainability. That goal may then lead you to set a quantifiable objective (one that you can measure) such as: *"We will introduce sustainable water rates by 1st January 2014"*. BMP C will help you with goal setting.

Having a quantifiable, measurable, objective will encourage you to identify the actions necessary to achieve the objective, and in turn you can identify any barriers to taking the actions. These barriers may suggest certain skill-building required by your team members. And that encourages learning about individual BMPs.

To get started in the use of BMPs, look through Section 1 of this Guide. Then look through one of the BMPs in Section 2 to get an idea of how they are used. The first BMP: Create a Basic Asset Inventory, is a good one to start.

To use this Guide effectively, you need to take a team approach. Even if you have a very small system, say twelve connections, you can create a team by bringing together interested property owners. Share this Guide with key members of your team so that you have a common understanding of Best Management Practices and their benefits.

It's important to note that the BMPs in this Guide do not cover every aspect of the financial management of small water systems. The BMPs cover certain topics only. They support and enhance financial management tools, such as a statement of income and expenses, that most water systems already have in place. You will find it easier to work with the BMPs if you already have basic financial information available, such as a worksheet showing your annual operating budget.

Quick Start

To make a quick start and build confidence, look through Section I of this Guide. Then review the first BMP in Section II and complete the first simple worksheet. Now you are on your way.

1.4 Terms Used in this Guide

BMP or Best Management Practice	A method which is shown to be an effective and practical means to achieve an objective while making the best use of resources
Building Blocks	The name given to various checklists, schedules and worksheets which together make up the core components of each BMP.
Excel worksheet	An electronic worksheet created using Microsoft Excel software.
Inventory	A list of equipment and other assets owned by the water system
Reserve account or Reserve Fund	A pot of money that is set aside for a specific named purpose such as an “Emergency Reserve.” Reserve accounts are defined in <i>BMP C: Create a Five-year Plan</i>
Stakeholder	A person or group who affects, or can be affected by, the actions of your organization.
Sustainable	Meeting the needs of today without compromising the ability to meet future needs also.
Word document	An electronic document created using Microsoft Word software.

Note: The terms *Capital Reserve* , *Construction Reserve* and *Investment Capital* are sometimes used interchangeably. The terms *Renewal Reserve*, *Replacement Reserve* and *Sustainment Capital* may also be used interchangeably.

Deferred Capacity Reserve Fund (DCRF)

This is another form of Reserve Fund which is sometimes used. It holds money for future upgrades that will be paid for by developers who want the water system expanded to service their new developments.

2 About Best Management Practices

BMPs

This Guide is concerned with financial Best Management Practices. To keep things simple we refer to them as Best Management Practices, or BMPs.

A Best Management Practice (BMP) is simply a method or approach that is shown to be an effective and practical means to achieve an objective while making the optimum use of resources. A "best" practice can evolve to become even better as improvements are discovered. Creating BMPs is an iterative process: do it the first time, implement the BMPs, and then make improvements as experience is gained.

BMPs for water systems can be grouped in three categories:

- Management and Making Decision
- Operations
- Finance.

The BMPs in this Guide are in the Finance category. In future, BMPs may be developed to cover the other categories related to small community water systems in British Columbia. For example, one suggestion received during the pilot phase was a BMP about securing easements and rights-of-way.

You may need to be selective in using the BMPs. For example some very small systems may not have use for all the information provided, and in some cases there may be parts of the worksheet templates that you can delete because they do not apply to your system. Adapt the BMPs to suit your circumstances and resources, in a way that helps you to deliver safe, secure and sustainable water supplies

2.1 Why Start with Financial BMPs

Small water systems in BC will benefit from a range of BMPs covering management, operations and financial topics. We started with financial BMPs for several reasons, including:

- When asked about the challenges facing small water systems, the owners and operators frequently say that their biggest problems are to do with finance.
- Some customers of water systems may think that because rain falls from the sky that water supply should be almost free. They don't realize that there are continuing costs for things like operation, maintenance, and testing.
- Some customers are not aware that infrastructure such as pipes, pumps, and reservoirs all have a limited life, and eventually need renewal and replacement.
- Many water sources are threatened by contamination, and money and resources are required to monitor and manage upstream activities, both natural and man-made, to ensure the water supplied is safe.

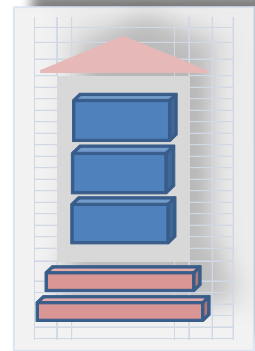
- Water rates in BC, even after significant increases are made to cover the full cost of water, are very reasonable compared to other living costs, and remain low compared to most other parts of the developed world.
- There are advantages to rural living, one of which is avoidance of municipal taxes. However rural living may also mean being responsible for a small water system that is unable to achieve the same economies of scale as found in larger urban systems.

The financial BMPs in this document will help the owners and operators of small systems deal with financial realities and make progress towards sustainable operations over the long-term.

2.2 The Make-Up of a BMP

A BMP may be viewed as a simple structure that is assembled using several “building blocks” To successfully use a BMP in your water system, you also need other things to be in place:

- Sound Leadership
- Effective Planning
- Efficient Organization
- Monitoring and measurement
- Good customer communication.



Some of these topics may be covered in future BMPs.

In the following sections of this Guide you will find information that helps create the building blocks that make up the financial BMPs for your water system. A BMP is what it says it is- a “practice” - and practice means to do something again and again to learn to do it well. Best practices can improve over time, and you will experience this as you become more skilled and efficient in BMP use. It’s a good idea to update each BMP at least once a year. Over time you may even find a better way to do a BMP. The important part is to get started!

2.3 Creating Building Blocks

Using Worksheets

Blank worksheets are included that you can complete by hand. Or you can use the electronic versions. In this case a member of your team will need basic experience with using Microsoft Excel or a similar software program.

Building Blocks typically take the form of checklists, schedules, and worksheets. These help you to answer questions related to a specific financial topic. For example, the question “What are our annual income and expenses?” is answered by creating the building block “Statement of Income & Expenses.”

Blank templates for most of the building blocks are included with each BMP. These may take the form of checklists, schedules, and worksheets. You

Note

Your checklists, schedules, and worksheets will need regular updating. Plan to re-visit these building blocks at least annually.

2.4 Six Financial Best Management Practices

The following table summarizes the BMPs outlined in this document.

Table 2.1: The Best Management Practices

Best Management Practice	What It's About	Why You Need It
A. Create a Basic Asset Inventory	<p>This is a list of water system assets with details such as:</p> <ul style="list-style-type: none"> • component manufacturer/model • installation date, • original cost • condition of the asset 	<ul style="list-style-type: none"> • If you don't know what you have, you can't manage it effectively.
B. Establish an Asset Management Plan	<p>The plan is a written document that includes:</p> <ul style="list-style-type: none"> • a basic asset inventory • a priority list for repair or replacement of assets • an annual budget, including estimates for replacement reserves • a schedule for implementation 	<ul style="list-style-type: none"> • Provides useful information to develop options for service delivery • reduces number of loss of service incidents and emergency repairs because of planned replacements • prioritizes needs and allows for cost-effective research • increases customer confidence in ability of system to provide safe, sustainable water. • increases ability to comply with all regulatory requirements
C. Create a Five-Year Operating Plan	<p>The plan is a written document listing the conclusions of a planning process and that shows what you want to do with your water system in the next five years, and how you expect to do it.</p>	<ul style="list-style-type: none"> • Provides context for preparing the annual budget • enables focus on what you want to achieve
D. Establish a Long-Term Financial Plan	<p>The plan forecasts revenues and expenses over a period of at least ten years into the future. Includes provision for:</p> <ul style="list-style-type: none"> • asset replacement & renewal • proposed financing • projected reserves. 	<ul style="list-style-type: none"> • You need to estimate your future financial condition to know how to provide for asset renewal and to establish realistic water pricing today and into the future .

Best Management Practice	What It's About	Why You Need It
E. Establish Sustainable Rates & Charges	Your water rates and charges should cover costs of: <ul style="list-style-type: none"> • regular maintenance • operating costs • planned replacements • contribution to reserve funds • debt repayment 	<ul style="list-style-type: none"> • Sustainable water rates and charges are essential to adequately fund operations safely and effectively in the present and for the foreseeable future.
F. Create a Communications Plan	You should share information, motivate your team, and enlist support of decision-makers, regulators and consumers about the operation of your water system.	<ul style="list-style-type: none"> • Stakeholders, including customers, health officials, suppliers, funders and others, need to know your situation.

2.5 About Reserve Accounts

In the BMPs we use the term “reserve” or “reserve account.” A reserve account is basically a pot of money that you set aside for a specific purpose. There are four types of reserve accounts mentioned in the BMPs. These are: Operating Reserve, Emergency Reserve, Construction Reserve, and Replacement Reserve. In practice some very small water systems may not maintain four separate bank accounts for these purposes. Certain reserve accounts can be set up as “virtual” reserves, and the balance tracked as part of financial record keeping.

The important thing is that everyone knows what these accounts are for, that the money is only used for the purpose intended, and that you manage them effectively. You can accumulate money in the reserve accounts by making contributions from your operating budget. You should make sure you earn interest on these accounts. Before you set up reserve accounts make sure that regulations do not prohibit your category of water system (e.g. *Improvement District, Private Water Utility*) from creating certain types of reserve accounts.

2.6 BMP “Road Map” and Linkages

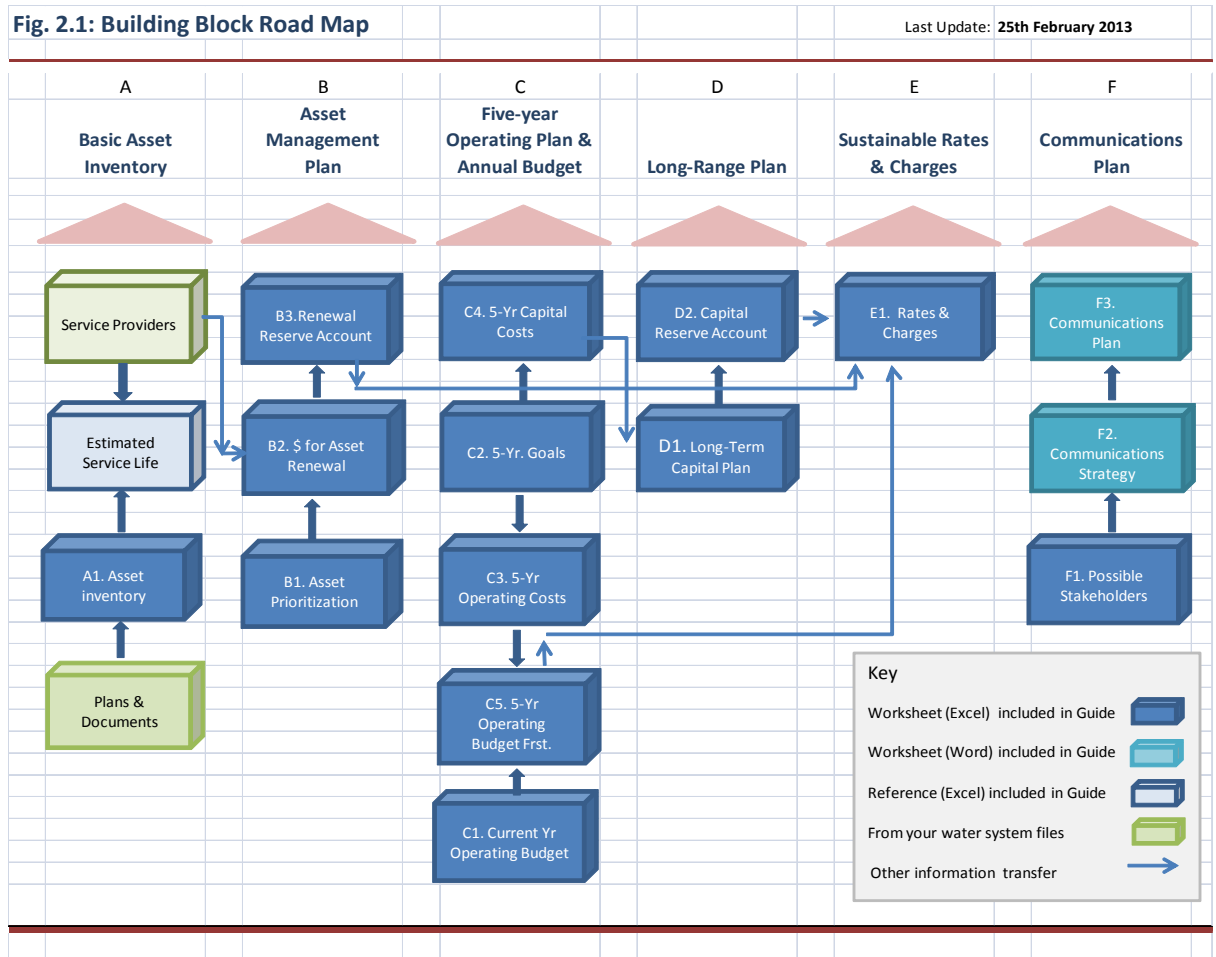
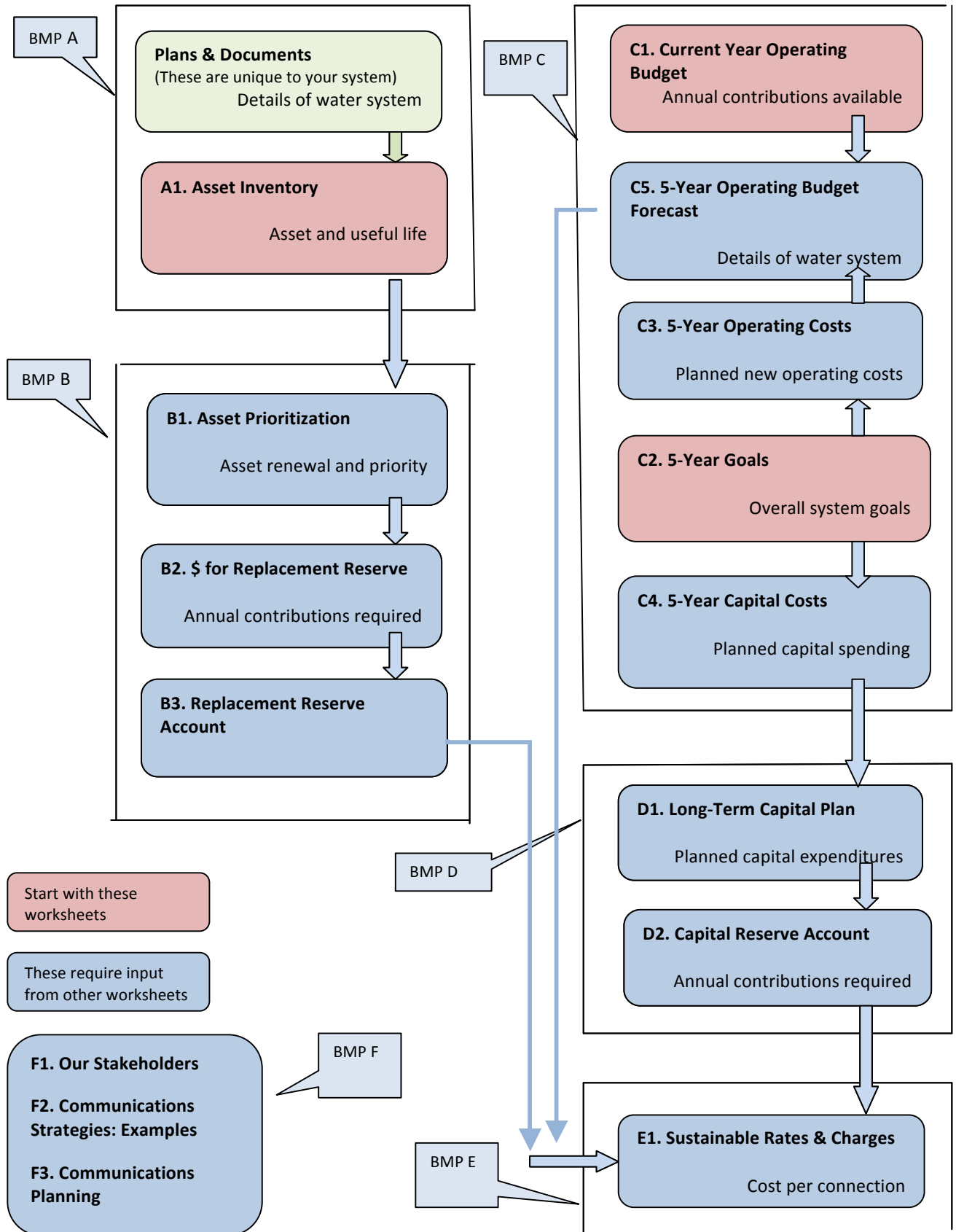


Fig. 2.1 shows all the building blocks that make up the six BMPs outlined in this document. This figure may be viewed as a ‘Roadmap’ that can be used to navigate through financial BMPs.

Fig.2.2 on the next page, also shows the building blocks, and highlights the linkages between each block. If you are creating all the BMPs, start with the building blocks shown in the figure. In many cases you require the output from one building block as the input to another building block.

In the next section of this document you will find descriptions of the Best Management Practices. Each BMP consists of text and figures and several worksheets (which are mostly in the form of Excel documents). Each BMP has blank versions (as well as the versions with Notes) of the worksheets appended, which you can fill in with information about your water system to create your building blocks.

Fig. 2.2: Linkages Between Worksheets



3 Six Best Management Practices

Please see separate files for all BMPs and worksheets:

- BMP A: Create a basic asset inventory**
- BMP B: Build an asset management plan**
- BMP C: Create a five-year operating plan**
- BMP D: Establish a long-term financial plan**
- BMP E: Determine sustainable water rates and charges**
- BMP F: Develop a communications plan.**