



## New or Expanding Group B Public Water System Plan Review

WHATCOM COUNTY  
HEALTH DEPARTMENT  
509 Girard Street  
Bellingham, WA 98225  
Telephone: 360-778-6000  
Fax: 360-778-6001

Complete the documents in this packet to satisfy the planning and design requirements for developing a new or expanding Group B Public Water System.

The following documents are attached:

1. Application for Public Water System Source Site Inspection
  2. Group B Water System Plan Review Application
  3. Group B Design Workbook
  4. Restrictive Covenant
  5. Declaration of Covenant
  6. Notice to Property Owners
- Other relevant documents can be found on the following website:  
<https://fortress.wa.gov/doh/odwpubs/Publications/>
  - Group B Water System Design Guidelines (DOH Publication #331-468)  
<https://fortress.wa.gov/doh/odwpubs/Publications/>

**The steps for developing a Group B Public Water System are as follows:**

1. Submit the application and fee for a Public Water System Source Site Inspection to this office. An EHS will contact you to schedule a well site inspection. The applicant or representative is required to meet the EHS on site for the well site inspection. The applicant must receive a written well site approval letter from this office prior to well construction and before the Group B Public Water System Design is submitted to this office.

**Note: As of January 1, 2014, new Group B Public Water Systems must meet the primary water quality standards without treatment (WAC 246-291-170).**

2. Submit the Group B Water System Plan Review Application and fee with a completed Group B Design Workbook to our office. The Group B submittal must include a well site inspection approval letter from this office. The plan review fee covers water system application review and three hours of plan review. Additional plan review is charged at \$132.00 per hour. After our review, you will receive written notice of design approval or a request for additional information.

Keep copies of all information submitted to our office for your own records.

3. Final approval of the new Group B Water System is granted after compliance with all requirements from this office and the WA State Department of Health.



# Group B Design Workbook

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Complete this workbook to satisfy the planning and design requirements needed to get approval for a new or expanding Group B water system.



DOH 331-468  
December 2016



## INTRODUCTION

Completing this *Group B Design Workbook* (workbook) will satisfy the design and planning requirements for a new or expanding Group B water system (WAC 246-291-120 and WAC 246-291-140, respectively). The department's review of your water system design will not confer or guarantee any right to a specific quantity of water. Our review will be based on your representation of available water quantity. If the Washington Department of Ecology, a local planning agency, or other authority responsible for determining water rights and water system adequacy determines that you have use of less water than you represent, the number of approved connections may be reduced commensurate with the actual amount of water and your legal right to use it.

If you're a professional engineer and are not comfortable using this workbook format, you may submit your design in an alternate format of your choosing. However, you must submit all the information referenced in this workbook and required by chapter 246-291 WAC.

Before sending your completed workbook to the reviewing agency, make copies of all plans, design drawings, worksheets, equipment information, operations and maintenance manuals, legal documents, and forms. Keep this information with your other project documents to help you and others successfully manage and operate your new water system.

### Regulations

We suggest you become familiar with Washington's Group B water system rule (chapter 246-291 WAC) before you start your design. The Group B Rule, effective January 1, 2014, is online [doh.wa.gov/CommunityandEnvironment/DrinkingWater/RegulationandCompliance/Rules](http://doh.wa.gov/CommunityandEnvironment/DrinkingWater/RegulationandCompliance/Rules).

### Group B Water System Design Guidelines

Use this workbook with the [Group B Water System Design Guidelines \(331-467\)](#). The guidelines are online at [doh.wa.gov/portals/1/Documents/pubs/331-467.pdf](http://doh.wa.gov/portals/1/Documents/pubs/331-467.pdf).

Even if you are experienced designing small systems, we recommend you read the guidelines before starting your design. We created them to support your goal of preparing a complete submittal that reflects sound water system design practices and established principles of public health protection. They will answer questions such as:

- When can't I develop my own Group B water system?
- When don't I need to get approval before I construct my water system?
- When must a professional engineer design the new or expanding system?
- Which water quality tests must I submit?
- How long must I run the pump test on my well?
- How do Washington's water rights laws affect my design?
- How big an easement should I have for my pipelines?
- What information must I include on the title of customers' properties?

Certain one and two-connection water systems are not regulated. Before submitting your Group B design workbook, see Section 2.1 of the [Group B Water System Design Guidelines \(331-467\)](#) to be sure your project design requires department approval.

### Fees Charged for Workbook Design Reviews

A completed workbook addresses the planning, design report, and construction documents required by WAC 246-291-120 and -140.

- **If the local health jurisdiction is the reviewing authority:**

Ask your local health department about the fees it will charge to review your workbook.

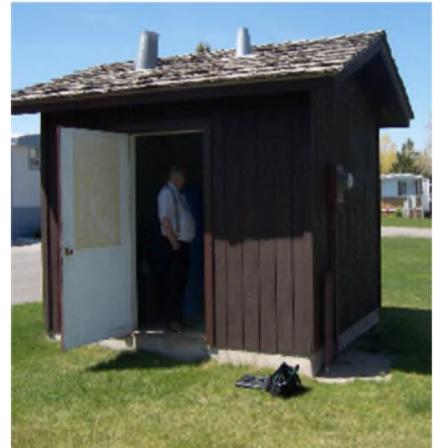
- **If the state Department of Health is the reviewing authority:**

The department will charge applicants each of the following fees for a **new** Group B water system.

**\$138** for a Water System Plan Review (WAC 246-290-990 (1)(a))

**\$205** for a Design Report Review (WAC 246-290-990 (1)(d))

**\$281** for a Construction Document Review (WAC 246-290-990 (1)(f))



**Total fee = \$624**

In addition to the fees above, the department will charge applicants for the following services.

**\$205** for a Well Site Evaluation (WAC 246-290-990 (1)(i))

**Fee varies** for a Secondary Treatment Design Review  
(For amounts, see WAC 246-290-990 (1)(d) and (1)(f)).

**Fee varies** for evaluation of a potential groundwater under the direct influence of surface water source.

### Online Group B Resources

We developed online Group B resources to help you from the pre-submittal stage of your water system design through operation and maintenance.

The [Online Group B Resources](#) include:

- All the forms you need to meet the submittal requirements for a new or expanding Group B water system, including the [Group B Project Approval Application Form](#) and *Water Facilities Inventory Form*.

- Guidance to help you operate and maintain your small system. After you receive written approval of your water system design, you may begin construction of the distribution system, well house, tanks, treatment equipment, and so forth. We urge you to review this information before you begin operating your new or expanded system.

You can view the Group B resources at

[doh.wa.gov/CommunityandEnvironment/DrinkingWater/WaterSystemAssistance/GroupB/Resources](http://doh.wa.gov/CommunityandEnvironment/DrinkingWater/WaterSystemAssistance/GroupB/Resources).

### **Department of Health Contacts**

Before beginning your Group B workbook, we strongly recommend that you contact your local health jurisdiction to find out whether the local or state health department administers the Group B program in your county. In the Group B workbook and in the [Group B Water System Design Guidelines](#), the term "department" refers to the agency responsible for reviewing and approving a Group B water system design in your particular county.

Designers or design engineers with questions or concerns should contact the department. Table 1 presents contact information for the state Department of Health. You can get contact information for your local health jurisdiction from your local phone book.

**Table 1****Office of Drinking Water Regional Offices**

If you have questions about this workbook, the [Group B Water System Design Guidelines](#), the [Online Group B Resources](#), or the [State Board of Health Rules](#) on Group B Public Water Systems, call our regional office or your local health jurisdiction.

<b>Eastern Region</b>	<b>Serving</b>
<p><b>Drinking Water Eastern Regional Office</b>            16201 E. Indiana Ave.            Suite 1500            Spokane Valley, WA 99216</p> <p><b>Phone:</b> 509-329-2100  <b>Fax:</b> 509-329-2104  <b>TDD Relay:</b> 1-800-833-6388</p>	<p>Adams, Asotin, Benton, Chelan, Columbia, Douglas, Franklin, Ferry, Garfield, Grant, Kittitas, Klickitat, Lincoln, Okanogan, Pend Oreille, Spokane, Stevens, Walla Walla, Whitman, and Yakima counties.</p>
<b>Northwest Region</b>	<b>Serving</b>
<p><b>Drinking Water Northwest Regional Office</b>            20425 - 72nd Avenue South            Suite 310            Kent, WA 98032</p> <p><b>Phone:</b> 253-395-6750  <b>Fax:</b> 253-395-6760  <b>TDD Relay:</b> 1-800-833-6388</p>	<p>Island, King, Pierce, San Juan, Skagit, Snohomish, and Whatcom counties.</p>
<b>Southwest Region</b>	<b>Serving</b>
<p><b>Drinking Water Southwest Regional Office</b>  <b>Physical:</b> 243 Israel Road            Tumwater, WA 98501  <b>Mailing:</b> P O Box 47823            Olympia, WA 98504-7823</p> <p><b>Phone:</b> 360-236-3030  <b>Fax:</b> 360-664-8058  <b>TDD Relay:</b> 1-800-833-6388</p>	<p>Clallam, Clark, Cowlitz, Grays Harbor, Jefferson, Kitsap, Lewis, Mason, Pacific, Skamania, Thurston, and Wahkiakum counties.</p>

## Group B Planning and Design Submittal Checklist

### CHECKLIST FOR A NEW OR EXPANDING GROUP B WATER SYSTEM

**Check the appropriate box for each row and submit a completed checklist with workbook**

Planning and Design Submittal Element	Group B Design Guidelines Section	Yes, Included	No, Not Applicable
Completed submittal checklist for a new or expanding Group B system			<b>Always Applicable</b>
Completed project approval application form	Section 2.2		
Property title notice	Section 2.6		
Service area map	Section 2.3		
Demonstrate compliance with SMA requirement <b>Applies to new systems only.</b>	Section 2.5		
Demonstrate compliance with PWS Coordination Act	Section 2.4		
Completed Water Facilities Inventory (WFI) Completing a WFI will expedite the review process.	Section 2.9		
Water users' agreement ( <b>optional</b> )	Section 2.8		
Water right permit or other needed Dept. of Ecology approval	Section 3.0		
Well log	Section 4.1		
Well pump test report	Section 4.1		
Well water quality sampling results	Section 4.2		
Documentation of well site approval	Section 4.3		
Well sanitary control area protective covenants	Section 2.7 and 4.3		
Intertie agreement	Section 4.4		
Well and pump house detailed drawings and specifications	Section 5.2 and 5.3		
Distribution system detailed drawing and specifications	Section 6.10		<b>Always Applicable</b>
Storage tank sizing, detailed drawings, and specifications	Section 7.6		
Booster pump sizing, detailed drawings, and specifications	Section 8.1		
Secondary contaminant treatment design	Chapter 9		
Completed <a href="#"><i>Group B Design Report Workbook</i></a>			<b>Always Applicable</b>

## GROUP B Design Report Workbook

### 1.0 Designer and Owner

Failure to complete all applicable sections of this workbook will result in denial of your application or delay in its approval. Please print all information.

#### 1.1 Water System Designer

Workbook prepared by: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

\_\_\_\_\_

Company Name: \_\_\_\_\_

Day Phone: \_\_\_\_\_

If prepared by a Professional Engineer, apply seal here.

#### 1.2 Water System Owner

Owner's Name: \_\_\_\_\_

Owner's Mailing Address: \_\_\_\_\_

\_\_\_\_\_

Day Phone: \_\_\_\_\_

Owner's Representative Signature \_\_\_\_\_ Date \_\_\_\_\_

## 2.0 Basic Water System Information

### 2.1 Water system name and location.

System Name \_\_\_\_\_

Water System Location \_\_\_\_\_  
(Town or City, County)

Public Water System ID# \_\_\_\_\_  
(Applies only to existing systems seeking approval to expand.)

### 2.2 Basic information.

You **must** submit the following with this workbook.

- Completed Group B planning and design submittal checklist.
- Completed project approval application form.  
The form is online at [doh.wa.gov/CommunityandEnvironment/DrinkingWater/WaterSystemAssistance/GroupB/Design](http://doh.wa.gov/CommunityandEnvironment/DrinkingWater/WaterSystemAssistance/GroupB/Design).
- Property title notice (the notice you intend to record on the title for each property served, see [Group B Water System Design Guidelines](#) Section 2.6).
- Service area map.
- Demonstrated compliance with Satellite Management Agency requirement.  
See [Group B Water System Design Guidelines](#) Section 2.5.
- Demonstrated compliance with Public Water System Coordination Act.  
See [Group B Water System Design Guidelines](#) Section 2.4.

We recommend you include a completed Water Facilities Inventory Form. See [Group B Water System Design Guidelines](#) Appendix E.

### 2.3 Connections and Population

See the requirements for establishing the design service population for each dwelling unit in WAC 246-291-200 (2). See Section 2.0 of the [Group B Water System Design Guidelines](#) for expectations on counting accessory dwelling units as separate connections.

Connections		Service Population	
Dwelling units	Nonresidential	Residential	Nonresidential

Use the space below to describe the basis for estimating your residential and nonresidential service population.

## 3.0 Estimating Water Demands

### 3.1 Complete Worksheet 3-1

#### Summary of Peak Hourly Demand (PHD) and Maximum Daily Demand (MDD) Summary

#### Worksheet 3-1

Line	Group B Design Guidelines Section	Description	Value
A	3.1.1, and 3.3	Total residential MDD, gallons per day	
B	3.1.2, and 3.3	Total residential PHD, gallons per minute	
C	3.2.1, and 3.3	Total non-residential MDD, gallons per day	
D	3.2.2, and 3.3	Total non-residential PHD, gallons per minute	
F-1	3.4	Fire suppression flow required (if any), gpm	
F-2	3.4	Fire suppression flow duration, minutes	

Total area intended for irrigation: \_\_\_\_\_ square feet or acres

Total system MDD (Lines A+C): \_\_\_\_\_ gallons per day

Total system PHD (Lines B+D+F1): \_\_\_\_\_ gallons per minute

Is a **water right permit** or other written Department of Ecology water resource approval required? See Section 3.0 of the [Group B Water System Design Guidelines](#).

\_\_\_\_\_ Yes    \_\_\_\_\_ No

If “Yes,” enclose a copy of the water right permit or other written approval from the Department of Ecology.

Use the space below to show your calculations of estimated MDD and PHD:

## 4.0 Source of Supply

### 4.1 Well information

If a well will supply water to your system, you must attach the following to your design submittal:

- Well log.
- Pump test report. (See Section 4.1 of the [Group B Water System Design Guidelines](#).)
- Water quality sampling results. (See Section 4.2 of the [Group B Water System Design Guidelines](#) and WAC 246-291-125 (3)(g).)
- Well site inspection report prepared by DOH or the local health jurisdiction.
- Well sanitary control area protective covenants. (Attach a copy of the actual protective covenants filed with the County Auditor for each public drinking water well. See Sections 2.7 and 4.3 of the [Group B Water System Design Guidelines](#).)
- Low yield well water supply contingency plan, if required. (See Section 4.1 of the [Group B Water System Design Guidelines](#).)



### 4.2 Wellhead Protection Inventory

Please indicate whether any of the following are present within 600 feet of your well.

Potential Water Quality Threat	Yes	No	Unknown
Likely pesticide application			
Storm water injection wells			
Other injection wells			
Abandoned groundwater wells			
Landfills, dumps, disposal areas			
Known hazardous materials site			
Another water system with known water quality problems			
Residential development greater than one house per acre			
Residential septic tanks			
Underground storage tanks			
Sewer lines			
Storm water disposal areas			
Surface water – <b>If yes, specify distance from well site: _____ feet</b>			

Use this space to provide more detail of any water quality threat located within 600 feet of your well.

#### **4.2 Intertie information**

If an intertie will supply your system, you must attach a copy of your intertie agreement, and service capacity and hydraulic analyses of the wholesale system. For details about the minimum scope of an intertie agreement, see WAC 246-291-135.

## 5.0 Well Pump, Bladder Tanks, and Pump House

### 5.1 Piping Schematic

Draw a schematic of the piping system below. Begin with the well, continue to the pump house, and on to the distribution system. Include each branch line in the distribution system, and label each branch line junction. These junction points will be referenced in Worksheet 5-1.

(See Example 5-1 in Section 5.0 of the [Group B Water System Design Guidelines](#).)



5.2 Complete Worksheet 5-1 (See Example 5-1 in Section 5.0 of the [Group B Water System Design Guidelines](#).)

Total Dynamic Head Calculation												
Friction Head Calculation								Static Head Calculation, Assume top of well casing elevation is 0 ft.			Min. Pressure Head, ft	Min. Total Dynamic Head, ft
Pipe Segment	From	To	Pump or Flow Rate, gpm	Pipe Size, inches	Friction Loss per 100 ft	Pipeline Length, ft	Pipe Segment Friction Loss, ft	Top of well casing to water while pumping, ft	Ground Elev. at "to"	Elevation difference, ft		
1	Well pump	Top of well casing									69	
2	Top of well casing										69	
3											69	
4											69	
5											69	
6											69	
7											69	
8											69	
9											69	

1. With a simple system consisting of only a well pump and bladder tanks, the well pump is the only pump in the system. Without a storage tank, the well pump must generate enough flow and pressure to supply at least the PHD, and to provide at least 30 psi to each customer connected to the distribution system during PHD conditions.
2. For the segment that includes the well house, **add ten feet of friction loss** to account for losses related to fittings and valves. If you intend to use a cycle control valve, **add additional friction loss** per manufacturer's data (See Section 5.0 of the [Group B Water System Design Guidelines](#)).
3. Total the "pipe segment friction loss" for each pipe segment + "elevation difference" + "minimum pressure head" values. The highest Total Dynamic Head (TDH) is the minimum pressure, expressed in feet of head that the well pump must generate while pumping the peak hourly demand. You may wish to select a pump with a TDH greater than the required minimum.

### 5.3 Summary of Well Pump Selection

Cycle Control Valve (CCV) incorporated in design: \_\_\_\_\_ Yes \_\_\_\_\_ No

Variable frequency drive well pump(s) incorporated in design: \_\_\_\_\_ Yes \_\_\_\_\_ No

<b><u>Pump Design Parameter</u></b>	<b><u>At well pump “on”:</u></b>	<b><u>At well pump “off”:</u></b>	<b><u>Comment</u></b>
Pressure switch settings or Reservoir level control	_____ psi _____ ft	_____ psi _____ ft	If well pumps to bladder tanks If well pumps to atmospheric reservoir
Discharge rate	_____ gpm	_____ gpm	
Total Dynamic Head	_____ feet	_____ feet	

Well pump setting (depth) below top of well casing: \_\_\_\_\_ feet.

Attach well pump catalog information with your design submittal:

- Pump curve (or table showing discharge head and corresponding discharge flow).
- Identify the pump “on” and pump “off” operating points on the pump curve.
- Pump manufacturer and pump model number.
- Pump horse power.

### 5.4 Bladder Tank Selection (for well pump or booster pump)

Follow the design guidance in Section 5.1 of the [Group B Water System Design Guidelines](#) for bladder tank selection. If the design includes a cycle control valve, see the design guidelines Appendix G.

Summarize the bladder tank selection.

Size of bladder tanks \_\_\_\_\_ gallons  
 Number of tanks \_\_\_\_\_ tanks  
 Pre-charged pressure \_\_\_\_\_ psi

Use the space below to show your calculations (Equation 5-2) for selecting bladder tanks.

### **5.5 Well and pump house detailed drawings and specifications**

Attach a copy of the well and pump house detailed drawings and specifications. The minimum scope of this information is in Sections 5.2 and 5.3 of the [Group B Water System Design Guidelines](#).

## 6.0 Piping and Distribution System

### 6.1 Summary of pipe design

Distribution system pipe size and material specified.

(For example, *1½ to 3-inch ASTM D 1785 Schedule 40 PVC.*)

Minimum pipeline depth of bury specified.

(For example, *No less than 48 inches from finished grade.*)

Pipeline hydrostatic pressure testing specification.

(For example, *APWA/WSDOT (2012) Section 7-11 ... minimum 200 psi.*)

Pipeline disinfection specification.

(For example, *APWA/WSDOT (2012) Section 7-11.*)

Private property easements required?

Required (design drawings must identify the location and dimension of these easements).

Not required.

### 6.1 Service meters

Service meters:

Provided at each connection.

Not provided at each connection.

### 6.3 Cross connection control

Are there any existing or proposed customer connections that pose a high health risk if a cross connection occurred between the drinking water system and a contaminant source originating from the consumer's property? (See Section 6.8 of the [Group B Water System Design Guidelines](#)).

Yes (if yes, attach a description of the cross connection and how the cross connection will be controlled or eliminated.)

No.

#### **6.4 Distribution system detailed drawings and specifications**

Attach a copy of the distribution system detail drawings and specifications (see Section 6.10 of the [\*Group B Water System Design Guidelines\*](#)).

## 7.0 Atmospheric Storage Tank

### 7.1 Determining need for an atmospheric storage tank

If any of the following conditions apply to the design of the new or expanding Group B water system, an atmospheric storage tank must be provided (check all that apply).

- Yes      The peak hourly demand is greater than the selected well pump can deliver at the pump “on” setting.
- Yes      The local fire authority requires the Group B water system to provide fire suppression capacity, and the source of supply cannot match the needed fire flow.
- Yes      The location of the Group B water system is subject to the Public Water System Coordination Act, it must provide a minimum fire flow, and the source of supply cannot match the needed fire flow.
- Yes      The designer wishes to provide standby storage or fire suppression capacity.

Use the space below (or a separate sheet of paper) to show your calculations for sizing the storage tank and establishing the elevation of the tank bottom and tank overflow. See Chapter 7 and Equation 7-4 in the [Group B Water System Design Guidelines](#).

Operating storage.

Equalizing storage.

Standby storage.

Fire suppression storage.

Dead storage.

## **7.2 Storage tank detailed drawings and specifications**

Attach a copy of the storage tank detail drawings and specifications. (See Section 7.6 of the [Group B Water System Design Guidelines](#).)

## 8.0 Booster Pumps

### 8.1 Booster pump selection

Summarize the following booster pump design information.

Number of booster pumps: \_\_\_\_\_

Pump Cycle Control Valve (CCV) incorporated in design.

\_\_\_\_\_Yes                      \_\_\_\_\_No

Variable frequency booster pump drive pump(s) incorporated in design.

\_\_\_\_\_Yes                      \_\_\_\_\_No

#### Booster Pump 1

<u>Pump Design Parameter</u>	<u>At well pump “on”:</u>	<u>At well pump “off”:</u>
Pressure switch pressure setting	_____ psi	_____ psi
Discharge rate	_____ gpm	_____ gpm
Total Dynamic Head	_____ feet	_____ feet

Attach booster pump catalog information with your design submittal:

- Pump curve (or table showing discharge head and corresponding discharge flow).
- Identify the pump “on” and pump “off” operating points on the pump curve.
- Pump manufacturer and pump model number.
- Pump horse power.

#### Booster Pump 2 (if applicable)

<u>Pump Design Parameter</u>	<u>At well pump “on”:</u>	<u>At well pump “off”:</u>
Pressure switch pressure setting	_____ psi	_____ psi
Discharge rate	_____ gpm	_____ gpm
Total Dynamic Head	_____ feet	_____ feet

Attach booster pump catalog information with your design submittal:

- Pump curve (or table showing discharge head and corresponding discharge flow).
- Identify the pump “on” and pump “off” operating points on the pump curve.
- Pump manufacturer and pump model number.
- Pump horse power.

## **8.2 Booster pump station detailed drawings and specifications**

Attach a copy of the booster pump station detailed drawings and specifications. (See Sections 5.2, 5.3, and 8.0 of the [\*Group B Water System Design Guidelines\*](#).)

## 9.0 Secondary Contaminant Treatment Design

If treatment for a secondary contaminant (such as iron or manganese) is required, provide the following information.

Contaminant(s) to be treated: \_\_\_\_\_

Treatment device: \_\_\_\_\_

Manufacturer's name: \_\_\_\_\_

Model: \_\_\_\_\_

Capacity (gpm): \_\_\_\_\_

Capacity (gpd): \_\_\_\_\_

Removal efficiency: \_\_\_\_\_

Concentration in well: \_\_\_\_\_ mg/l

Expected concentration after treatment: \_\_\_\_\_ mg/l

Attach a copy of the following information:

- Treatment process and maximum daily treated water production capacity.
- Hydraulic considerations and headloss calculations.
- Manufacturer's catalog information showing the treatment system is appropriate for removing the contaminant, based on the untreated water sample information from the well.
- A complete set of water quality data necessary to assess and confirm the effectiveness of the proposed treatment, based on the unique water quality characteristics of the well to be treated.
- Residual disposal volume, disposal permit(s) (if required), and plan for residual disposal.
- Manufacturer's recommended operations and maintenance procedures.
- A list of all chemicals needed for normal operation and maintenance (if any).
- Materials safety data sheet information on all chemicals needed.
- Manufacturer's recommended field water quality testing (if any).

## 10.0 Financial Viability

### 10.1 Financial Viability Worksheet

The goal is to establish plans, policies, and procedures that give the system owner(s) the ability to obtain enough funds to cover the total cost of operating and maintaining a safe, reliable water system on a continuing basis. Rates and other revenue should be adequate to cover all anticipated expenses. See Chapter 10 of the [Group B Water System Design Guidelines](#).

<b>TOTAL EXPENSES</b>	<b>1<sup>st</sup> Yr.</b>	<b>2<sup>nd</sup> Yr.</b>	<b>3<sup>rd</sup> Yr.</b>	<b>4<sup>th</sup> Yr.</b>
1. Wages & Benefits (Incl. SMA costs)	\$	\$	\$	\$
2. Electricity & other utilities	\$	\$	\$	\$
3. Chemical & Treatment	\$	\$	\$	\$
4. Monitoring Costs	\$	\$	\$	\$
5. Materials & Supplies	\$	\$	\$	\$
6. Repairs and Parts	\$	\$	\$	\$
7. Emergency Reserve Contribution	\$	\$	\$	\$
8. Asset Replacement Reserve Contribution	\$	\$	\$	\$
9. Principal & Interest Payments (For outstanding loans)	\$	\$	\$	\$
10. Taxes and Assessments	\$	\$	\$	\$
11. Insurance and Misc. Expenses	\$	\$	\$	\$
12. Total Expenses (Add lines 1 to 11)	\$	\$	\$	\$
<b>TOTAL REVENUE FROM SOURCES OTHER THAN WATER RATES</b>				
13. Hook Up and Other User Fees	\$	\$	\$	\$
14. Interest Earned	\$	\$	\$	\$
15. Other Revenue	\$	\$	\$	\$
16. Total Revenue (Add lines 13 to 15)	\$	\$	\$	\$
<b>WATER RATE CALCULATIONS</b>				
17. Remaining Revenue Required (Line 12 minus Line 16)	\$	\$	\$	\$
18. Number of Connections	\$	\$	\$	\$
19. Average Water Rate (Line 17 divided by Line 18)	\$	\$	\$	\$

**RETURN DOCUMENT TO:**

Whatcom County Health Department  
509 Girard Street  
Bellingham, WA 98225

Use dark black ink and print legibly. Documents not legible will be rejected per RCW.

**Document Title(s):**

Restrictive Covenant Public Water Supply

**Grantor(s):**

Page number where additional grantor(s) can be found:

**Grantee(s):**

Page number where additional grantee(s) can be found:

**Abbreviated legal description:** (lot, block, plat name or; qtr/qtr , section , township & range or; unit, building and condo name).

Page number where complete legal description can be found:

**Assessor's Parcel Number:**

After recording, return to:  
Whatcom County Health Department  
509 Girard Street  
Bellingham, WA 98225

**RESTRICTIVE COVENANT  
PUBLIC WATER SUPPLY**

GRANTOR(S): \_\_\_\_\_  
GRANTEE(S): \_\_\_\_\_  
LEGAL DESC.: \_\_\_\_\_  
TAX PARCEL #: \_\_\_\_\_

The grantor herein is (are) owner(s) of (an interest in) the following described real estate situated in Whatcom County, State of Washington, to-wit: **(NEIGHBOR'S LEGAL, PARCEL NUMBER AND ADDRESS)** \_\_\_\_\_

The grantee(s) herein, \_\_\_\_\_ is (are) the owner in fee simple of (an interest in) the following real estate situated in Whatcom County, State of Washington, to-wit: **(WELL OWNER'S LEGAL, PARCEL NUMBER AND ADDRESS)** \_\_\_\_\_

on which the grantee owns and operates a well and waterworks supplying water for private use located on said real estate, to-wit: **(PINPOINT THE ACCURATE LOCATION OF THE WELL SITE, FOR EXAMPLE, 125 FEET OF THE SOUTH PROPERTY LINE AND 100 FEET EAST OF THE WEST PROPERTY LINE)** \_\_\_\_\_

which well and waterworks are in close proximity to the land of the grantor(s), and said grantee(s) is (are) required to keep the water supplied from said well free from impurities which might be injurious to the public health.

It is the purpose of these grants and covenants to prevent practices herein after enumerated in the use of the said grantor(s) land which might contaminate said water supply.

NOW, THEREFORE, the grantor(s) agree(s) and covenant(s) that said grantee(s), its successors and assigns, said covenants to run with the land for the benefit of the land of the grantee(s), that said grantor(s), his (her) (their) heirs, successors and assigns will not construct, maintain, or suffer to be constructed or maintained upon the said land of the grantor(s) and within 100 (one hundred) feet of the well herein described, so long as the same is operated to furnish water for public consumption, any potential source of contamination, such as septic tanks and drain fields, sewer lines, underground storage tanks, roads, railroad tracks, vehicles, structures, barns, feed stations, grazing animals, enclosures for maintaining fowl or animal manure, liquid or dry chemical storage, herbicides, insecticides, hazardous waste, or garbage of any kind or description.

These covenants shall run with the land and shall be binding to all parties having or acquiring any right, title, or interest in the land described herein or any part thereof, and shall inure to the benefit of each owner thereof.

WITNESS my hand this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

\_\_\_\_\_  
\_\_\_\_\_  
Grantor  
Grantor

State of Washington )  
County of Whatcom County )

I, the undersigned, a Notary Public in and for the above named County and State, do hereby certify that on this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_, personally appeared before me \_\_\_\_\_ to me known to be the individual described in and who executed the within instrument, and acknowledge that he (they) signed and sealed the same as \_\_\_\_\_ free and voluntary act and deed, for the uses and purposes therein mentioned.

GIVEN under my hand and official seal the day and year last above written.

\_\_\_\_\_  
Notary Public in and for the State of Washington  
Residing at:\_\_\_\_\_

(SEAL or STAMP)

FILING:  
Whatcom County Auditor (Recording Department)  
311 Grand Avenue  
Bellingham, WA 98225  
(360) 778-5100

**RETURN DOCUMENT TO:**

Whatcom County Health Department  
509 Girard Street  
Bellingham, WA 98225

Use dark black ink and print legibly. Documents not legible will be rejected per RCW.

**Document Title(s):**

Declaration of Covenant **Public Water Supply**

**Grantor(s):**

Page number where additional grantor(s) can be found:

**Grantee(s):**

Page number where additional grantee(s) can be found:

**Abbreviated legal description:** (lot, block, plat name or; qtr/qtr , section , township & range or; unit, building and condo name).

Page number where complete legal description can be found:

**Assessor's Parcel Number:**

After recording, return to:  
Whatcom County Health Department  
509 Girard Street  
Bellingham, WA 98225

**DECLARATION OF COVENANT  
PUBLIC WATER SUPPLY**

GRANTOR(S): \_\_\_\_\_

GRANTEE(S): \_\_\_\_\_

LEGAL DESC.: \_\_\_\_\_

TAX PARCEL #: \_\_\_\_\_

The grantor(s) herein is (are) owner(s) of (an interest in) the following described real estate situated in Whatcom County, State of Washington, to-wit: \_\_\_\_\_

\_\_\_\_\_ on which the grantor reserves an area to own and operate a future well and waterworks supplying water for public use located on said real estate, to-wit: (PINPOINT THE ACCURATE LOCATION OF THE WELL SITE, FOR EXAMPLE, 125 FEET OF THE SOUTH PROPERTY LINE AND 100 FEET EAST OF THE WEST PROPERTY LINE) \_\_\_\_\_

\_\_\_\_\_ and grantor(s) is (are) required to keep the water supplied from said well free from impurities which might be injurious to the public health.

It is the purpose of these grants and covenants to prevent certain practices herein after enumerated in the use of said grantor(s) water supply.

NOW, THEREFORE, the grantor(s) agree(s) and covenant(s) that said grantor(s), his (her) (their) heirs, successor(s) and assigns will not construct, maintain, or suffer to be constructed or maintained upon the said land of the grantor(s) and within 100 (one hundred) feet of the well herein described, so long as the same is operated to furnish water for public consumption, any potential source of contamination. such as septic tanks and drain fields, sewer lines, underground storage tanks, roads, railroad tracks, vehicles, structures, barns, feed stations, grazing animals, enclosures for maintaining fowl or animal manure, liquid or dry chemical storage, herbicides, insecticides, hazardous waste, or garbage of any kind or description.

These covenants shall run with the land and shall be binding on all parties having or acquiring and right, title or interest in the land described herein or any part thereof, as long as said well or waterworks is used for the purpose of supplying potable water.

WITNESS my hand this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_  
\_\_\_\_\_  
Grantor  
Grantor

State of Washington )  
County of Whatcom County )

I, the undersigned, a Notary Public in and for the above named County and State, do hereby certify that on this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, personally appeared before me \_\_\_\_\_ to me known to be the individual described in and who executed the within instrument, and acknowledge that he (they) signed and sealed the same as \_\_\_\_\_ free and voluntary act and deed, for the uses and purposes therein mentioned.

GIVEN under my hand and official seal the day and year last above written.

\_\_\_\_\_  
Notary Public in and for the State of Washington  
Residing at: \_\_\_\_\_

(SEAL or STAMP)

FILING:

Whatcom County Auditor (Recording Department)  
311 Grand Avenue  
Bellingham, WA 98225  
360-778-5100

**RETURN DOCUMENT TO:**

Whatcom County Health Department  
509 Girard Street  
Bellingham, WA 98225

Use dark black ink and print legibly. Documents not legible will be rejected per RCW.

**Document Title(s):**

Notice to Property Owners

**Grantor(s):**

Page number where additional grantor(s) can be found:

**Grantee(s):**

Page number where additional grantee(s) can be found:

**Abbreviated legal description:** (lot, block, plat name or; qtr/qtr , section , township & range or; unit, building and condo name).

Page number where complete legal description can be found:

**Assessor's Parcel Number:**

**Informational Notice to Titles on Property Served by a Group B Water System**

Water System Name \_\_\_\_\_ ID# \_\_\_\_\_

Water System Address \_\_\_\_\_

Water System Contact \_\_\_\_\_ Phone \_\_\_\_\_

The Washington State Department of Health and local health jurisdictions share administration of drinking water regulations. Contact your local health jurisdiction to determine which agency has administrative responsibility.

This property is served by a Group B public water system that received design approval under WAC 246-291 from the Whatcom County Health Department.

All parcels numbers approved to be served by this water system:

1.	6.
2.	7.
3.	8.
4.	9.
5.	10.

There are legal limits on the volume of water that can be withdrawn from the ground, and there may be limits on the total area that can be irrigated from this water system. Based on the design of this water system, each of the above parcels is permitted to irrigate no more than \_\_\_\_\_ square feet of lawn and garden. This limitation runs with the land and is not transferable to another property.

This water system has been granted one or more exceptions from specific provisions of the regulations, or a waiver (check all boxes that apply):

- No exceptions or waivers were granted
- A reduction in sanitary control area from 100 feet to \_\_\_\_\_ feet was approved
- An exception or waiver was granted (describe): \_\_\_\_\_

The capacity of the water supply for this water system was tested and (check the box that applies):

- Determined to yield more than 5 gallons per minute
- Determined to yield 5 gallons per minute or less, and a low water supply contingency plan is available for review.

Some small water systems are required by the local fire authority to provide fire suppression capacity.

This water system (check box that applies):

- Is designed and constructed to provide fire suppression
- Is not designed and constructed to provide fire suppression

Ownership and/or operation and management by a Satellite Management Agency (SMA) were required at the time this water system was approved, provided an SMA was available at the time of approval (check box that applies).

The SMA is: \_\_\_\_\_ Phone \_\_\_\_\_

No SMA was available when this water system was approved. This requirement may be applied at any time in the future.

When this water system was approved, the financial plan indicated the following water rate structure would be implemented (check all boxes that apply):

All customers are metered

Water will be billed based on metered use

Water bills will be issued every \_\_\_\_\_ months.

The water rate will be \$ \_\_\_\_\_ every billing cycle, plus \$ \_\_\_\_\_ per \_\_\_\_\_ 1,000 gallons/100 cubic feet (circle one)

The method for establishing the annual water system budget is attached.

The process for funding a water system reserve account is attached.

Other

Routine water quality sampling is encouraged, but not required. At the time of approval, the owner of the water system (check box that applies):

Intends to conduct the following routine water quality sampling:

Analyte and Location	Frequency	Reporting Results
<i>e.g., coliform bacteria in the distribution system</i>	<i>e.g., every three months</i>	<i>e.g., by phone within 24 hours</i>

Does not intend to conduct any routine sampling

When this water system was approved (check box that applies):

The source is not treated for a secondary contaminant (i.e., a contaminant that impacts the aesthetic quality of the water, but is not known to affect human health, such as iron or manganese).

The source is treated for a secondary contaminant. The secondary contaminant being removed from the well water is:

---

When this water system was approved, a water users' agreement (check box that applies):

Exists and a copy can be obtained from \_\_\_\_\_

Was not prepared

Describe the public notification procedure(s) that will be used to communicate with customers:

- By phone or email (assumes the maintenance of an accurate phone or email list)
- By posting to each customer's property (door hanger)
- Other:

WITNESS my hand this \_\_\_\_\_ day of \_\_\_\_\_, 20 \_\_\_\_\_.

\_\_\_\_\_  
Grantor  
\_\_\_\_\_  
Grantor

State of Washington )  
County of Whatcom County )

I, the undersigned, a Notary Public in and for the above named County and State, do hereby certify that on this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_, personally appeared before me to me known to be the individual described in and who executed the within instrument, and acknowledge that he (they) signed and sealed the same as free and voluntary act and deed, for the uses and purposes therein mentioned.

GIVEN under my hand and official seal the day and year last above written.

\_\_\_\_\_  
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