



WHATCOM COUNTY HEALTH DEPARTMENT

NEW OR EXPANDING GROUP B PUBLIC WATER SYSTEM PLAN REVIEW PROCEDURE

509 Girard Street
Bellingham, WA 98225
Phone: 360-778-6000
Fax: 360-778-6001

THIS NOTIFICATION CONFIRMS WATER QUALITY AND QUANTITY ONLY, NOT LEGAL AVAILABILITY. THE LEGAL RIGHT TO USE SUCH WATER IS DETERMINED BY PDS.

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

Other relevant documents can be obtained at our office or found on the website below:

- Group B Public Water Systems WAC 246-291 (DOH Publication #331-071)
- Group B Water System Design Guidelines (DOH Publication #331-467)
<https://fortress.wa.gov/doh/eh/dw/publications/publications.cfm>

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 \$126.00 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.



WELL SITE INSPECTION
PUBLIC WATER SYSTEM
APPLICATION Fee: \$315.00

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

A well site inspection and source approval is required for all new wells for existing, new or expanding public water systems per WAC 246-290-130 and WAC 246-291-125. Do not drill a new well or begin using a new well until it has been approved by the WCHD and/or the WA Department of Health. A well in an unapproved location may be required to be decommissioned. WCHD approvals expire three years from the inspection date.

- 1. Submit a site plan, drawn to scale, with the well site clearly marked. Include a 100 ft. radius and a 600 ft. radius around the well site. Show topography, distances to the well from existing property lines, buildings, and all potential sources of contamination within the 600 ft. radius around the well. Include septic systems, drainfields and indicate any natural or man-made feature that could adversely affect water quality and/or water quantity, such as surface water and/or other wells.
2. Clearly stake or flag the well site location and clear access to the well site (brush cutting as needed).
3. Include a Water Well Report (well log) for existing wells. Well Tag #:
4. Return this application to our office with fee and site plan. An EHS will make contact to schedule an appointment for the inspection. The owner or a representative is required to attend the inspection.

Applicant Information:

Applicant/Owner(s): Phone:
Address: City: State: Zip:
Contact Person: Phone:
Email and/or Alternate Contact:

Water System Information:

Water System Name: PWS ID#:
NEW GROUP B NEW GROUP A ADDITIOINAL WELL
EXPANDING GROUP B EXPANDING GROUP A REPLACEMENT WELL

Well Site Tax Parcel Number (12 digit number):
Well Site Address: Plat/Subdivision Name/Number:

I certify that I have read and examined this application with attachments and know the same to be true and correct. I understand that nothing in this approval shall be construed as satisfying other applicable federal, state, or local, statutes, ordinances or regulations and that information submitted is subject to the Public Records Act RCW 42.56.

Sign: Print: Date:

For Health Department Use Only:

GPS Coordinates:
Notes:

Environmental Health Specialist: Expiration Date:

The subdivision/building permit is located in an area that is governed by chapter 173-501 WAC and in which instream flows are not met and/or are subject to closure. In compliance with ch 58.17 RCW/RCW 19.27.097 the County has determined adequate potable water is available for this subdivision/building permit on the basis of evidence supplied by the Applicant. Other authorities, including courts of competent jurisdiction and the Department of Ecology, exercise jurisdiction over water resources in the state of Washington. Those authorities may determine that the proposed source of water for this project identified by the Applicant is not a valid water right appropriation or is subject to curtailment or seasonal restrictions on availability that could impact its reliability for the intended use. The County's issuance of this subdivision/building permit should not be relied upon by the Applicant or any successor in interest as an assurance, warranty or guarantee of the future availability of water to serve the subdivision/building permit.
March 2017



WHATCOM COUNTY HEALTH DEPARTMENT

509 Girard Street
Bellingham, WA 98225
Phone: 360-778-6000
Fax: 360-778-6001

GROUP B WATER SYSTEM PLAN REVIEW APPLICATION

FEE: \$500.00

THIS NOTIFICATION CONFIRMS WATER QUALITY AND QUANTITY ONLY, NOT LEGAL AVAILABILITY. THE LEGAL RIGHT TO USE SUCH WATER IS DETERMINED BY PDS.

NAME OF WATER SYSTEM _____

ADDRESS OF WATER SYSTEM _____

NAME OF OWNER _____ PHONE _____

MAILING ADDRESS _____

DESIGN ENGINEER _____ PHONE _____

ENGINEERING FIRM _____

MAILING ADDRESS _____

NEW GROUP B WATER SYSTEM **EXPANDING GROUP B WATER SYSTEM**

Please write a brief summary of the intended use of the proposed Group B Water System. Include the number of connections, population, types of services such as residential or commercial and any other unique characteristics pertaining to this water system.

IMPORTANT: ALL MATERIALS ARE REQUIRED AT TIME OF PLAN SUBMITTAL. FAILURE TO DO SO MAY RESULT IN DELAYS TO THE PROJECT AND ADDITIONAL FEES MAY BE APPLIED.

Office Use Only

Additional Hours Invoiced _____ Invoice Paid _____

DOH ID# _____ EC ID# _____ System Activation Date _____

Rec'd by: _____
Rec'd date _____

Group B Design Workbook



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

This workbook supports the Group B Rule that goes into effect January 1, 2014.

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).

If you're a professional engineer, and you are not comfortable using the 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 because it will 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, revised in 2012 and effective January 1, 2014, is online at

<http://www.doh.wa.gov/CommunityandEnvironment/DrinkingWater/RegulationandCompliance/Rules.aspx>

Group B Water System Design Guidelines

Use this workbook with the *Group B Water System Design Guidelines* (331-467). The guidelines are online at <https://fortress.wa.gov/doh/eh/dw/publications/publications.cfm> To order the design guidelines on CD, click "Add to cart." Due to budget constraints, we don't have paper copies of the guidelines available for distribution.

Even if you have a lot of experience 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 these 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

<http://www.doh.wa.gov/CommunityandEnvironment/DrinkingWater/WaterSystemAssistance/GroupB/GroupBResources.aspx>

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.

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

Group B Planning and Design Submittal Checklist

CHECKLIST FOR A NEW OR EXPANDING GROUP B WATER SYSTEM

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			
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 <u>Applies to new systems only.</u>	Section 2.5		
Demonstrate compliance with PWS Coordination Act	Section 2.4		
Completed Water Facilities Inventory (WFI)*	Section 2.9		
Water users' agreement	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: Coliform Bacteria & Complete IOC	Section 4.2		
Documentation of well site approval	Section 4.3		
Well sanitary control area protective covenants: Declaration of Covenant & Restrictive Covenant (if needed)	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		
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 <i>Group B Design Report Workbook</i>			

* Completing a *Water Facilities Inventory Form* will expedite the review process. The department cannot approve a Group B design workbook for a new or expanding Group B water system without receiving information contained on a completed WFI.

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

21 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)

22 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

<http://www.doh.wa.gov/CommunityandEnvironment/DrinkingWater/WaterSystemAssistance/GroupB/GroupBResources.aspx>

- 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.

23 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

31 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 Dept. 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 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 - If yes, specify distance from well site: feet			

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

51 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*.)



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 10 feet of friction loss to account for losses related to fittings and valves. If you intend to use a CSV, 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.

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

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, *1 1/2 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 cross connections?

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

No

64 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

71 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

81 Booster pump selection

Summarize the following booster pump design information:

Number of booster pumps: _____

Cycle Stop Valve (CSV) 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

82 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*.

TOTAL EXPENSES	1st Yr.	2nd Yr.	3rd Yr.	4th Yr.
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)	\$	\$	\$	\$
TOTAL REVENUE FROM SOURCES OTHER THAN WATER RATES				
13. Hook Up and Other User Fees	\$	\$	\$	\$
14. Interest Earned	\$	\$	\$	\$
15. Other Revenue	\$	\$	\$	\$
16. Total Revenue (Add lines 13 to 15)	\$	\$	\$	\$
WATER RATE CALCULATIONS				
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.

<p>Document Title(s):</p> <p>Restrictive Covenant Public Water Supply</p>
<p>Grantor(s):</p> <p>Page number where additional grantor(s) can be found:</p>
<p>Grantee(s):</p> <p>Page number where additional grantee(s) can be found:</p>
<p>Abbreviated legal description: (lot, block, plat name or; qtr/qtr , section , township & range or; unit, building and condo name).</p> <p>Page number where complete legal description can be found:</p>
<p>Assessor's Parcel Number:</p>

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

**RESTRICTIVE COVENANT
PUBLIC WATER SUPPLY**

GRANTOR: _____
GRANTEE: _____
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 is 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 or waterworks free from impurities which might be injurious to public health.

It is the purpose of these grants and covenants to prevent certain practices hereinafter enumerated in the use of the said grantors land which might contaminate said water supply.

NOW, THEREFORE, in consideration of One Dollar (\$1.00) in hand paid and other good and valuable consideration received by said grantor(s), the grantor, agree(s) and covenant(s) with the grantee, its successors and assigns, said covenants to run with land for the benefit of the land of the grantee, that said grantor, its (their) heirs, successors and assigns will not construct, maintain, or suffer to be constructed or maintained upon the said land of the grantor and within **100 feet** of the well on the land of the grantee, any potential source of contamination (per Whatcom County Drinking Water Ordinance 24.11 and WAC's 173-160, 246-290 and 246-291) including but, not limited to any easements for ingress and egress, sewer main, privy, sewage or manure lagoon, railroad tracks, manure pile, drainfield or any other receptacle for the disposal of sewage, storm water facility, roads, underground fuel tank, structure for the storage of liquid or dry chemicals, application or storage of herbicides or pesticides or ponds or lakes.

These covenants shall run with the land and shall be binding on all parties having or acquiring any 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.

<p>Document Title(s):</p> <p>Declaration of Covenant Public Water Supply</p>
<p>Grantor(s):</p> <p>Page number where additional grantor(s) can be found:</p>
<p>Grantee(s):</p> <p>Page number where additional grantee(s) can be found:</p>
<p>Abbreviated legal description: (lot, block, plat name or; qtr/qtr , section , township & range or; unit, building and condo name).</p> <p>Page number where complete legal description can be found:</p>
<p>Assessor's Parcel Number:</p>

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

**DECLARATION OF COVENANT
PUBLIC WATER SUPPLY**

GRANTOR: _____
GRANTEE: _____
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: _____

_____ 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 said grantor is required to keep said well or waterworks potable.

It is the purpose of these grants and covenants to prevent certain practices hereinafter in the use of the said grantors land which might contaminate said water supply.

NOW, THEREFORE, the grantor(s) agree(s) and covenant(s) that said grantor its (their) heirs, successors and assigns will not construct, maintain, or suffer to be constructed or maintained upon the said land of the grantor and within **100 feet** of the well on the land of the grantor and potential source of contamination (per the Whatcom County Drinking Water Ordinance 24.11 and WAC's 173-160, 246290 and 246-291) including but not limited to a septic tank and drainfields, sewerlines, 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, application of herbicides or insecticides, hazardous waste, ponds or lakes, storm water facilities, any type of surface water 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.

<p>Document Title(s):</p> <p>Notice to Property Owners</p>
<p>Grantor(s):</p> <p>Page number where additional grantor(s) can be found:</p>
<p>Grantee(s):</p> <p>Page number where additional grantee(s) can be found:</p>
<p>Abbreviated legal description: (lot, block, plat name or; qtr/qtr , section , township & range or; unit, building and condo name).</p> <p>Page number where complete legal description can be found:</p>
<p>Assessor's Parcel Number:</p>

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)

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

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