



Financial viability for small water systems

Financial viability is the ability to obtain sufficient funds to develop, construct, operate, maintain, and manage a public water system in full compliance with local, state, and federal requirements on a continuous basis. In short, that means you should run your water system like a business.

Water systems should manage their finances to ensure they have enough funds for future needs as well as daily ones. However, many small water systems in Washington struggle with aging and failing infrastructure because their owners and operators did not run them like businesses. When you have enough money, you are better able to ensure safe and reliable drinking water now and in the future.

You can work toward financial viability one step at a time, using the following guidelines.



Five steps to financial viability

1. Develop an operating budget

Develop a six-year operating budget with enough income to pay for all regular maintenance and operations needs. Make sure to factor-in inflation by multiplying each year's line-item costs by a 2 to 5 percent inflation factor. Remember, inflation is cumulative. You should add inflation to each year's costs based on the previous year's costs. To select the most realistic inflation factor for your area, check the

Consumer Price Index that your county or nearest city uses. Your budget should also include debt payments and contributions to your reserves (see steps three, four, and five).

Reserve accounts are a vital part of your water system's financial health. Because all water systems are different, there is no set formula for how much goes toward each reserve account. Your water system's operator and board should decide together how much to contribute annually to each reserve based on the water system's needs.

2. Take another look at your rates

Your rates may be keeping you from being financially healthy. Use your six-year operating budget to decide whether to raise your rates to cover projected costs. Many water systems are not charging enough to pay for basic maintenance and operations, contributions to reserve accounts, and debt payments.



Customers who use more water have a greater financial impact on the water system. Consider a rate structure that encourages customers to use water efficiently. Remember, you should always present rate change proposals to your customers in an open forum. For help developing your rates, see the resources on page four.

3. Create and fund an operating cash reserve

An operating cash reserve is extra money set aside to handle problems with cash flow. When you have enough funds set aside for your water system, you can continue paying your bills even if there is a lag in income. One approach is to fund an operating reserve equal to the amount of cash needed to pay for 30 to 45 days of water system costs.

You can fund your operating cash reserve with a one-time charge to customers, move funds from an existing reserve, or gradually set aside funds over a few years. Then be sure to add funds over time as needed.



4. Create and fund an emergency reserve

An emergency reserve account lets you respond to a true emergency such as vandalism, earthquake, storm damage, or flooding. It should have enough funds at all times to replace the most vulnerable part of the water system. You decide which part is most vulnerable as part of your water system planning. Vulnerable parts of your system include:

- A primary production well or other primary water source.
- Pumping equipment.
- Key transmission lines.

You should not use the emergency reserve to fund capital improvements or deferred maintenance problems. You can fund the emergency reserve the same way as the operating cash reserve, or by pre-qualifying for an emergency loan through a local bank or other lender.

5. Create and fund reserves for capital improvements and equipment replacement

You should have some savings to ensure that aging equipment and infrastructure do not become a financial burden for your water system. Use your capital improvement plan (done as part of your Water System Plan or Small Water System Management Program) to determine how much to save in your capital improvement and equipment replacement reserve.

In your capital improvement plan, you develop a list of equipment and infrastructure you will have to replace within the next six years. Make a “best guess” at how many years remain for each item and its replacement cost. You can use the Short-Lived Asset Component Inventory and Assessment table in the *Small Water System Management Program Guide* (331-134) to make these estimates.

You can use a “straight line depreciation” method to calculate a monthly amount to charge for replacing each item. Just add the totals together to determine monthly and annual contributions to this reserve fund.

1. Start with the item’s improvement or replacement cost.
2. Divide by the years of useful life that remain.
3. Divide by 12 months.
4. Divide again by the number of water system connections.
5. Repeat for all the items on your replacement list.
6. Add the charges together.

You may also consider assessing fees, or applying for grants and loans as part of your financial plan to pay for capital improvements. Be aware that grant and loan funds are becoming more limited, and you will need to have a solid financial foundation to be competitive for these funds. In addition, if you decide to take out a loan, you might need to adjust your rates to repay the loan.

Benefits of financial viability

Predictable funding for capital improvements

Having available funding and a plan for capital improvements will keep your water system running smoothly and efficiently.

Improved system efficiency

Financially healthy water systems have well maintained and regularly replaced equipment that runs better, saving water, electricity, and wear and tear.

Cost savings

Deferred repair or replacement costs are often much higher when you let equipment age and fail.

Eligibility for grants and loans

Most grant and loan programs require water systems to demonstrate sound finances. If you spend time up front improving financial health, you are more likely to receive grants or loans.

Emergency response

Earthquakes, windstorms, electrical outages, flooding, and vandalism are examples of unforeseen emergencies. Water systems must have adequate cash reserves available to pay the costs associated with emergencies, such as providing bottled water to customers and returning to normal operations.

Peace of mind

When water systems have enough funds to pay for daily maintenance and operations, capital improvements, and unforeseen emergencies, their operators, board members, and customers do not have to worry or struggle to find means of payment.

Financial viability resources

Rural Community Assistance Corporation has free *Financial Viability Software* available online at <http://www.rcac.org/home>

The U.S. Environmental Protection Agency (EPA) offers the Check Up Program for Small Systems (CUPSS) (816-K-08-002). A free, easy-to-use, asset management tool for small drinking water and wastewater utilities, CUPSS is online at <http://water.epa.gov/infrastructure/drinkingwater/pws/cupss/index.cfm>

The following Office of Drinking Water publications are online at <https://fortress.wa.gov/doh/eh/dw/publications/publications.cfm>

Small Water System Management Program Guide (331-134)

Water Rates: Paying for drinking water (331-327)

Asset Management for Small Water Systems (331-445)

Setting Small Drinking Water System Rates for a Sustainable Future
(EPA 816-R-05-006)

Department of Health Office of Drinking Water's Regional Offices

- Eastern Region: Spokane Valley 509-329-2100
- Northwest Region: Kent 253-395-6750
- Southwest Region: Tumwater 360-236-3030

Free technical assistance

- [Evergreen Rural Water of Washington](#): 800-272-5981
- [Public Works Board](#): 360-586-4120
- [Rural Community Assistance Corporation](#): 509-860-5846



For people with disabilities, this document is available on request in other formats. To submit a request, please call 1-800-525-0127 (TDD/TTY call 711).