

Rainwater collection

Rainwater collection, including the use of rain barrels, has become more popular as a supplemental source of water. In 2009, we issued a [rainwater use interpretive policy](#), which clarifies that you may use water collected from your rooftop without a water right permit. However, there are rules on using rainwater as a potable (drinkable) water source.

Some counties in Washington may allow rainwater collection for drinking water; however, many counties do not. Collected rainwater often has significant contaminants that must be removed before the water is considered safe for consumption. For regulation purposes, the Washington Department of Health's Office of Drinking Water considers rainwater to be surface water subject to the requirements of the [Surface Water Treatment Rule](#). If you want to use rainwater as your sole water supply when building a new home, contact your local county planning department.

I want to...

- [View weather data from the National Weather Service](#)
- [Read the rainwater interpretive policy](#)
- [Read the Water System Design Manual \(Department of Health\)](#)

When does rainwater collection require a permit?

Under our current policy, you don't need a water right permit to collect rainwater, with a few conditions:

- Rainwater must be used on the property where it is collected.
- Rainwater can only be collected from existing structures that have another purpose other than collecting rainwater.
- If we find that rainwater collection is negatively affecting existing water rights in an area, local restrictions may be developed to govern new systems. However, we do not expect the collection of harvested rainwater to cause problems.
- If you are planning to use rainwater as your primary drinking water source for new building construction, you'll need to check with your county to see if it is allowed.

Benefits of rainwater collection

Rainwater harvesting can have multiple benefits, such as [reducing stormwater runoff](#) that can sweep pollutants into streams and cause erosion and flooding. It can

lessen the strain on combined sewer systems during rain events, helping reducing the risk of system overflows running directly into streams, lakes, or marine waters.

In some areas of the state, such as the San Juan Islands, rainwater may be the only viable water supply for new construction.

Some municipalities reduce stormwater utility fees for commercial buildings that incorporate rainwater harvest systems.

While rainwater collection might not replace your primary water supply, it can help keep your gardens green, while diverting water away from your house, and depending on how much you reduce your public water use, you may see savings on your water bill.

Sizing your system

The size and cost of your rainwater collection system depends on what you plan on doing with the water and how much water you need to store at one time.

- Simple rain barrels are relatively inexpensive and can be used to reduce the use of potable (drinkable) water for irrigation.
- Water collected for in-home use requires approval from your local building department. Plumbing systems are strictly regulated through the Uniform Plumbing Code (UPC). To meet full in-house water supply needs, if permitted, a larger cistern and treatment would be needed to ensure the water is safe to drink.
- To supply water for more than minimal irrigation, an even larger cistern is necessary.

We created a [rainwater harvesting calculator](#) to help you size your system based on the typical amount of rain in your area, the size of your roof, and how you plan to use the water. The calculator includes rainfall data for 29 Washington communities. If you live outside these communities, [data from U.S. Climate Data](#) can give you annual rainfall averages to use.

Please note that annual average rainfall varies greatly and may not supply all of your water needs every year. Depending on your water needs, a back-up supply is recommended.

Rain barrels

You can buy a rain barrel at most local hardware stores, garden centers, or recycling centers; you can even [make one yourself](#). Some cities and counties offer a discount or rebate. Using a rain barrel is a low-cost option for managing water that would otherwise end up in the storm drain. Here are some tips:

- Ensure that your clean barrel is placed on a level, elevated base. The base needs to be sturdy because a full barrel can hold several hundred pounds of water.
- Choose a rain barrel with a removable top for easy cleaning, and a drain plug so you can empty it if needed.
- Rain barrels are especially effective in the rainy spring months. Some people leave their barrels dry over the winter, so that they don't freeze when the temperature dips.
- Contact companies that store bulk food items to see if they may have a barrel they aren't using. They might let you take their "recyclable" off their hands, or sell it to you at a discount.
- You can find faucet attachments and downspout re-routing pieces at your local hardware store.

If you want to build your own rain barrel:

- **IMPORTANT:** If you build a rain barrel with recycled materials, don't use one that has ever contained toxic materials, including acids and oils — even if it was pressure-washed, since some residue and odors can remain. Ones that contained food-quality materials are best. Keep yourself and your plants healthy!
- A number of good videos are posted online. Just search "Making rain barrels video."
- Your local library can help you find how-to books.

<https://extension.wsu.edu/skagit/mg/rain-barrel/>

Information sources

King County

- [RainWise program in King County](#) — information about rain gardens, cisterns, and more

Seattle

- [Rainwater harvesting](#) — from Seattle Public Utilities
- [Rain barrel user's guide](#) — calculate how much rain you can gather and store
- [Rainwater harvesting for beneficial use](#)

Tacoma

- [Green stormwater infrastructure](#)
- [Rain gardens](#)