11 Compelling Reasons to Embrace Rainwater Harvesting for Sustainable Living



Rainwater harvesting is the practice of collecting and storing rainwater for later use. It can be a key component of sustainable living. If you garden, then you can't help but notice the changes to the earth. As a result, you might feel a drive to live more sustainably. Rainwater harvesting for sustainable living makes a lot of sense. You'll see that there are some really compelling reasons to give it a try at your own home.

What Is Rainwater Harvesting?

As the name explains, this is the process of harvesting rain. In other words, when it rains, you collect that water. Then

you make use of it. Rainwater harvesting <u>includes</u> catching the water, filtering it, storing it, and then using it. Rainwater harvesting is an effective way to conserve water resources, implement <u>integrated urban water management</u> strategies, and promote sustainability.

What Is Sustainable Living?

Sustainable living refers to a lifestyle that aims to minimize one's ecological footprint and promote practices that are environmentally responsible, socially just, and economically viable. It involves making conscious choices and taking actions that reduce the negative impact on the planet and contribute to the well-being of both present and future generations. Rainwater harvesting for sustainable living is just one component of a whole lifestyle. As someone interested in frugal gardening, you may also already embrace many other elements of sustainable living.

Compelling Reasons to Embrace Rainwater Harvesting for Sustainable Living

Here are some of the reasons that you might want to take the leap into rainwater harvesting for sustainable living.

Rainwater Is Great For Your Garden

Rainwater harvesting is commonly used for watering gardens and landscaping. Rainwater is an excellent source of water for plants because it is free of chlorine, fluoride, and other chemicals typically found in tap water. Additionally, rainwater is naturally soft and slightly acidic, which is beneficial for many plants. Since you already garden, why not take advantage of the opportunity to water the garden with rain?

A short list of the benefits of rainwater harvesting for your garden includes:

- Provides a free and abundant water supply for garden irrigation.
- Reduces reliance on municipal or groundwater sources for garden watering.
- Offers a natural and chemical-free water source, beneficial for plant health.
- Helps conserve potable water for essential household needs.
- Reduces water bills and overall water consumption.
- Supports sustainable gardening practices and environmental stewardship.
- Prevents soil erosion and nutrient runoff by controlling the intensity of watering.
- Allows for more efficient water distribution directly to plant roots.
- Improves soil moisture retention, especially in dry climates.
- Reduces the risk of overwatering, which can harm plants and promote disease.
- Promotes self-sufficiency and resilience by providing an independent water supply.
- Can be used for other garden-related activities, such as washing gardening tools or containers.
- Encourages water-conscious behavior and environmental awareness.
- Enhances overall garden health, growth, and productivity.
- Can be integrated with other sustainable gardening practices, such as composting or mulching.

Rainwater Harvesting for Sustainable

Living Helps Earth's Water Situation

Sustainable living is all about being good to the Earth. Water is key on our planet. Water conservation and water scarcity are two aspects that help us reduce water waste and increase water availability around the world. They're similar but also different:

Water Conservation

Water conservation refers to the efficient use and management of water resources to minimize wastage and preserve water for future generations. Rainwater harvesting contributes to water conservation by collecting and utilizing rainwater for various purposes, reducing the need for freshwater from traditional sources. By using harvested rainwater for activities like irrigation, toilet flushing, or washing clothes, you conserve potable water that would otherwise be consumed for those tasks.

Mitigating Water Scarcity

Water scarcity occurs when the demand for water exceeds the available supply, leading to insufficient access to water for human and environmental needs. Rainwater harvesting helps mitigate water scarcity by providing an additional source of water. By capturing and storing rainwater, you reduce the strain on existing water sources, such as groundwater or municipal supply, especially during periods of drought or water shortages. Harvested rainwater can serve as a valuable backup or alternative water source to supplement traditional supplies, thereby increasing water availability and reducing scarcity risks.

Other Environmental Benefits of Rainwater Harvesting for Sustainable Living

In addition to the water benefits of rainwater harvesting,

there are some other important environmental benefits that make for compelling reasons to try rainwater harvesting for sustainable living.

Reduces Strain on Stormwater Management Systems

Rainwater harvesting helps reduce the volume of stormwater runoff entering municipal stormwater management systems. By capturing rainwater from rooftops and other surfaces, you decrease the load on storm drains and sewage treatment plants. This can prevent overflow situations during heavy rainfall, which can lead to pollution of water bodies and strain on infrastructure.

Supports Local Ecosystems

By reducing stormwater runoff, rainwater harvesting helps maintain the natural water balance in local ecosystems. This is particularly important in urban areas where impervious surfaces like roads and buildings dominate the landscape. By allowing rainwater to infiltrate into the ground or using it for irrigation, you help replenish groundwater levels, support vegetation growth, and provide water for wildlife habitats.

Minimizes Erosion and Soil Degradation

Traditional stormwater runoff can cause erosion and soil degradation due to the force and volume of water rushing over surfaces. Rainwater harvesting systems, such as rain gardens or infiltration basins, capture and slow down the flow of rainwater, allowing it to infiltrate into the soil. This helps replenish groundwater and reduces erosion, promoting healthier soil conditions and preserving land integrity.

Reduces Demand on Energy-Intensive Water Treatment

Rainwater harvesting decreases the demand for water from centralized systems, which often rely on energy-intensive treatment processes. By utilizing harvested rainwater for nonpotable uses like irrigation or toilet flushing, you reduce the need for water treatment, pumping, and distribution. This indirectly lowers the energy consumption and associated carbon emissions of water treatment facilities, contributing to a greener and more sustainable infrastructure.

Mitigates Urban Heat Island Effect

The urban heat island effect occurs when urban areas experience higher temperatures than surrounding rural areas due to the concentration of buildings, pavement, and lack of vegetation. Rainwater harvesting, when combined with green infrastructure practices, such as green roofs or rain gardens, can help mitigate this effect. Vegetation and green spaces associated with rainwater harvesting systems help cool the environment through evapotranspiration, shading, and reducing heat radiation, creating a more comfortable and sustainable urban environment.

Self-Sufficiency

By collecting rainwater, you become less reliant on external water sources. Therefore, you experience a greater degree of self-sufficiency. This is particularly advantageous in rural areas. It's also important during emergencies when access to water may be limited. Having a rainwater harvesting system in place ensures a more reliable and independent water supply.

Community Sustainability Education

Implementing rainwater harvesting systems in your home can serve as an educational tool for your family and community. It raises awareness about water conservation, sustainability, and the importance of utilizing alternative water sources. You can inspire others to adopt similar practices, fostering a more environmentally conscious community. If you participate in community gardens then you know how much this type of education benefits everyone.

Collecting Rainwater Saves You Money

Finally, sustainable living also means living within your financial means. Using rainwater for various household needs can lead to significant cost savings over time. Depending on your location and water usage, rainwater harvesting can help lower your water bills by reducing the amount of water you consume from traditional sources. This is particularly beneficial in areas with high water costs or where water metering is in place.

Read More:

- Harvesting Rainwater for the Frugal Gardener
- 4 Frugal DIY Drip Irrigation Systems
- <u>5 Plants That Easily Grow in Water</u>

Harvesting Rainwater for the Frugal Gardener



Gardening requires quite a bit of water. For many gardeners

that means an increase in their water bill during the hot summer months. Statistics show that lawn and garden watering make up at least 40% of our total household water use. Frugal gardeners, however, can take advantage of rainwater by bringing back an age-old, low-tech system of collecting water from roofs and gutter systems into rain barrels, or cisterns as they have been called. By harvesting rainwater, you can keep your little corner of the world green, decrease stormwater runoff, and cut costs all at the same time.

Harvesting rainwater

One inch of rain on a 1,000 square foot roof will produce 600 gallons of water. Capture just some of that chemical-free rain in a container of any kind and you'll be able to keep your veggie garden thriving and your flowers blooming all season, with no added expense. Your plants will thrive with the natural rainwater compared to water from municipal systems and the chemicals they typically add. Rainwater is a free source of soft water and also excellent for your houseplants.

Most rain barrels now come with the fittings for hooking up a hose, so getting harvesting rainwater is as simple as locating a barrel under a gutter and screwing in your hose. If you have a very small garden plot, or only use small containers, you can opt for a simpler system. Locate a barrel under a downspout and just dip your watering can in when you are planning to water your plants and containers. Each time it rains, you can store water up for the dry days or days you can't water due to summer rationing schedules.

Due to the amount of water coming off a roof, it is important to have a plan for overflow. It's important to have a valve to switch tanks. You can also go low tech and manually move the downspout away from the already full barrel to keep from having a mini Niagara Falls next to your buildings' foundation.

As with anything that holds water, be sure your system has a child-proof, secure lid to prevent accidents. You might also want to screen the opening to your container, not only keeping debris out of the water but discouraging mosquitoes from breeding.

Where to get a water barrel?

Here's a list of a few of the companies that carry water barrels and supplies to help you set up a water storage system. Remember, your system for harvesting rainwater can be as simple or as complex as you have time and money for. Just the savings from setting up one downspout and a barrel will make a difference. What frugal gardener doesn't want to tap into a free resource?

- Clean Air Gardening
- NE Design
- Midwest Internet Sales
- Spruce Creek Rain Saver
- Garden Water Saver

Check local regulations

Before purchasing anything, be sure to check with the water department where you live to see if they are sponsoring a Rain Water Harvesting project. Many cities encourage the installation of rain barrels as a method of conservation. They may offer the barrels at a reduced price or give rebates if you purchase your barrel elsewhere. Some towns even offer workshops and supplies to build your own systems.

Rain barrels are one of the simplest, cheapest ways to conserve <u>water</u>, allowing you to treat rainwater as a resource and not a waste product. Harvesting rainwater on your property can help make your garden a more environmentally friendly space.

Installing a Rain Barrel

Rain Water Harvesting