

# 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 [includes](#) catching the water, filtering it, storing it, and then using it. Rainwater harvesting is an effective way to conserve water resources, implement [integrated urban water management](#) 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 non-potable 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](#)
  - [5 Plants That Easily Grow in Water](#)
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# 5 Ways to Reduce Water Usage in the Garden





5 WAYS TO REDUCE

# Water Usage in the Garden

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Reducing your water usage in your garden is almost always a positive thing.



It will lower your water bill and produce healthier plants.

## **Why Reduce Your Water Usage in Your Garden?**

Overwatering is a common mistake among gardeners. However, the truth is that plants have adapted to require less water than most people assume.

And when you reduce your water usage, you will find your soil and plants are healthier.

## **Signs of Overwatering**

One of the most obvious signs that you are overwatering your garden is standing water or puddles. If you've noticed this in your garden, it's time to take a closer look at your watering habits.

Check these other signs that you're giving your plants too much water.

### **Split Fruit**

If you pick a lot of split fruit, you are probably overwatering. This is very common with things like tomatoes.

### **Soft and Rotting Stems**

When a plant absorbs too much water, this can cause damage to the parts of the plant cells that help support it and keep its shape. This causes the plant stems to become soft and start to rot.

### **Root Rot**

This degradation of the roots is caused by fungal or bacterial infections that thrive in wet soil.

## Changes in Leaves

Sometimes the plants will drop leaves to signal a problem like overwatering. The fallen leaves can be green, brown, or yellow.

Another sign of watering is brown spots on the edges of leaves, which can be an infection of the leave.

## Fungus

Fungus appears as white or gray patches of powdery or hair-like structures stretching across the dirt around the plants. Sometimes, it can be on the plant, like [powdery mildew](#).

## How to Reduce Your Water Usage in the Garden

There are thousands of ideas for reducing water usage in the garden, but here are a few low-cost, easy-to-implement suggestions.

### Mulch

Adding some kind of mulch will keep the ground cooler and reduce water loss due to evaporation.

There are tons of mulch available commercially. If you buy commercial, just make sure to buy some that are safe for vegetable gardens.

But if you don't want to buy commercial mulch, you can also use compost spread evenly across your topsoil. This will give you the bonus of improving soil quality as well.

Some other popular natural mulches include leaves, grass clippings, pine needles, or straw.

## Newspaper

Some people use layers of newspaper to achieve the same effect as mulch.

## Plastic Sheeting

You can buy plastic sheets that do double the duty of reducing evaporation and preventing weed growth.

## Water at Cool Times

Watering early in the morning, late in the evening, or at night will give the soil and plants plenty of time to absorb water so you can water less.

## Drip Irrigation Systems

Drip irrigation systems are composed of hoses with holes along the bottom that release water along the entire line but very slowly, a drip at a time. You can build your own or buy one with options like timers or automatic start.

## Conclusion

Reducing water usage in your garden is a great way to save money and produce healthier plants and tastier food.

[5 Cheap Ways to Self Water Plants](#)

[4 Frugal DIY Drip Irrigation Systems](#)

[Protect The Garden From Excessive Rainfall: Frugal Tips](#)

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# Protect The Garden From Excessive Rainfall: Frugal Tips



Farmer in rubber boots standing on muddy dirt road in countryside, feet from above

While it's not necessarily a problem in all locations, many people have to worry about protecting their garden from excessive rainfall.

Plants love [water](#)! Too little, and they'll wither away. But too much water can also cause problems.

Plants that are stuck drowning in waterlogged soil can succumb to root rot.

These days, [unpredictable weather](#) is more and more

commonplace. Periods of drought followed by flash floods are not unheard of. And this wild weather can have negative consequences for your home garden.

So how can you protect your garden from excessive rainfall? Here are a few tips.

## **How to protect the garden from excessive rainfall**

Here's what to do to keep your plants from drowning after a rainstorm.

### **Plan ahead.**

I'm not talking about checking the weather. I'm talking about being particularly careful during the garden planning process. Avoid starting a garden in an area where water pools. After heavy rainfall, plants in these areas are more likely to die due to root rot.

And make sure the soil drains well. Add organic matter to the soil to improve its condition and drainage capabilities.

### **Stop walking on the soil.**

Make sure you can reach all areas of your garden plot without having to walk on the soil. Walking on soil compacts it and can make it more likely to become waterlogged in the future.

The [University of Delaware Cooperative Extension](#) has some helpful tips on how to avoid soil compaction.

### **Quit watering!**

This is an obvious one, but it's something people forget to do. Keep an eye on the weather forecast and turn off your sprinklers and irrigation systems before a rainstorm. And I

know the weather seems nice right now, but unless your plants are dying of thirst, skip hand watering when a storm is brewing.

## **Clean your gutters.**

Grab a ladder and clean out your gutters to protect your garden from excessive rainfall. Clogged gutters can cause water runoff and flood your garden beds.

## **Pick plants wisely.**

If flooding is an inevitability where you live, choose plants that can tolerate moist, humid conditions. Select disease-resistant varieties that aren't as likely to pick up fungal or viral infections brought on by very wet weather.

## **Use raised beds.**

Raised beds and containers (with drainage holes) are less likely to become waterlogged than in-ground beds. You can find one on [Amazon here](#). They're also great for areas where the soil isn't super fertile. Bonus: No more kneeling and way less bending over!

## **Add a French drain to your yard.**

DIY this helpful drainage solution called a French drain to improve drainage on your property.

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# **4 Frugal DIY Drip Irrigation Systems**



4 FRUGAL DIY

# Drip Irrigation Systems

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Buying a fancy drip irrigation system is one way to go. But it'll cost you. Instead, consider a DIY drip irrigation system. Either way, you'll need to spend time installing

irrigation, so why not save a few bucks, too?

## Benefits of drip irrigation

You've got a hose or a sprinkler, so why invest time and effort into building a DIY drip irrigation system?

Here are the advantages of this type of watering system:

- **Less water waste.** Water doesn't evaporate as readily with a drip irrigation system.
- **Targeted watering.** Because the tubing is close to plant roots, water gets right to where it needs to go—which means less waste and higher efficiency watering.
- **Less disease spread.** With drip irrigation, water is unlikely to splash onto plant foliage. That means fewer chances for contaminated soil to spread pathogens.
- **Easy watering.** Once installed, an irrigation system makes watering incredibly easy. No more lugging around a heavy hose. You can even install a timer and have the system work completely on its own.
- **Fewer weeds.** Because water goes right to plant roots, weeds are less likely to grow between plants.

## DIY drip irrigation systems

You'll need to spend a bit of money on materials to build your DIY drip irrigation system, but the initial cost is worth it, considering how much time you'll save down the line.

Here are some ideas for creating DIY drip irrigation systems:

- **PVC pipes:** Modern Farmer has a great [step-by-step tutorial](#) for creating this kind of drip system.
- **Soda bottles:** This is an easy drip irrigation system for the frugal gardener that costs next to nothing. It's a

great option for small space gardeners. Here's a video on how to use soda bottles to create a cheap drip irrigation system:

- **Rain barrel system:** Here's a video that shows you how to use a rain barrel in a drip irrigation system to minimize water waste:
- **Bucket:** Got a bucket? You're in luck! You can build a simple DIY drip irrigation system easily. This video shows how you can pair drip tape or tubing with buckets to create a low-tech irrigation system that doesn't require a hookup to a nearby water source:

This setup is even simpler:

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## 5 Factors That Affect Plant Growth





Many factors affect plant growth. Plants have a few basic needs. Having these needs unmet will cause them to perish. There are also factors outside of a gardener's control that

can impact how well a plant grows. While some variables are out of your control, there are things that you *can* influence.

## **What affects plant growth?**

Plants need several things to stay happy. If you have the ability to control these variables, doing so can help your plants thrive.

### **Sunlight**

Sunlight is the lifeblood of a plant. Without it, plants die. Sunlight enables photosynthesis, which is the process that allows plants to process nutrients. Without sunlight, they can't properly take up nutrients. Some plants need more sunlight than others and providing your plants with the right amount of sunlight is key. Giving plants like lettuce too much sun can cause them to wilt, bolt prematurely, and wither. Not giving enough sun to plants, like eggplant, can stunt their growth and diminish overall yields.

### **Water**

Honestly, this is probably the most confusing task for gardeners to get right. Even the most experienced gardeners sometimes over or under water their plants. It's one of the important factors that affect plant growth. When you're gardening outside, Mother Nature does some of the work for you. Indoors, it's all you, baby. Either way, watering is a bit of an art. Without water, plants will eventually die—even the most drought tolerant. Outside, mulch is a helpful way to retain moisture. Irrigation systems can also help you water deeply and consistently—and waste less. Inside, I highly recommend getting an app that reminds you to water on a schedule or creating a makeshift calendar of your own. Watering plants that have different moisture needs on the same schedule is a recipe for disaster.

### **Air**



Plants are a lot like people. They don't like being squeezed together like sardines. Pack them too close, and you can encounter problems like stunted growth, pests, and disease. Space plants accordingly to prevent overcrowding. Keeping them spaced apart helps improve air circulation, which will reduce instances of disease. It'll also give your plants plenty of room to grow. If you're a patient person, you can try an experiment. Plant squash close together instead of following seed packet spacing guidelines and plant them in another area where they have plenty of room to breathe. You'll see a noticeable difference in how they grow.

## **Temperature**

Out of all the factors that affect plant growth, this one can be tricky to control—especially outdoors. The weather can be unpredictable. Sometimes, even the most diligent gardeners end up with dead or sickly plants on their hands because an unexpected frost occurs. You can use crop protection and other tricks to play around with [temperature](#), but when it gets really cold, there's nothing you can do to stop the freeze. When [starting seeds](#), getting the temperature right is key. Tomato and pepper seeds, for instance, won't even germinate if the soil is too cold.

## **Nutrients**

Plants need food to survive. Often, good quality soil that's amended yearly contains plenty of [nutrients](#) to get you through a vegetable gardening season. However, that's not always the case. Poor nutrient uptake can happen for several reasons, including inadequate pH and environmental conditions. Without the right nutrients, plants can become diseased and stunted and provide a diminished or non-existent yield.

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# Harvesting Rainwater for the Frugal Gardener



*HARVESTING RAINWATER*  
*for the Frugal  
Gardener*

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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 [water](#), 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**

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# **5 Plants That Easily Grow in Water**





5 PLANTS THAT  
*Easily Grow in  
Water*

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Potting up plants is a messy business. Even when I'm being careful, I manage to get soil everywhere.

One of my favorite plants in my home, though, requires no soil at all. I bought the plant at the grocery store several years ago for about \$3 and today, it's almost as tall as me! All it needs is water to flourish.

Sounds too good to be true, right?

But I'm absolutely serious. It's possible to grow plants without soil. This is something that air plant enthusiasts already know. There are a host of plants that grow in water.

## Plants That Grow in Water

Most people think of houseplants as soil-bound creatures, but not every plant needs the earth to survive. Many plants actually thrive in water. Here are five plants that grow in water.

### Lucky Bamboo

My [lucky bamboo](#) plant is my pride and joy. I brought it home several years ago and never thought it would become as big as it has. I simply filled up a vase with rocks and pebbles, set the bamboo inside, and topped it off with water. The plant has been growing like a weed ever since! While some sources might caution against using regular ole' tap water to satisfy a bamboo plant's thirst, my plant has gotten by just fine with it.

Did you know that lucky bamboo is also pet safe? It's an ideal low-maintenance plant that's non-toxic to dogs, cats, and birds.

### Pothos

Also known as Devil's Ivy, this trailing plant grows exceptionally well in water. Unlike bamboo, though, pothos plants require some fertilization. Any all-purpose liquid

fertilizer should do the trick. In my experience, pothos plants don't need too much attention, so they're another excellent choice for busy plant lovers.

## Philodendron

My heart-leaf [philodendron](#) is one of my favorite houseplants because it requires so little care. It's a stunning hanging plant that does well in water. If you plan to grow it in water, though, make sure to change the water frequently and check for algae growth.

## Dracaena

This woody-stemmed plant is also well suited for growing in water. Filtered water is best, and it should be changed frequently to prevent algae growth. It's a fairly big plant, so pick out a large vessel to support it.

## English Ivy

It's possible to grow English ivy cuttings in a glass jar or vase. It'll take a long time before the plant is ready to transplant into soil. It's a quick-growing trailing plant, so it's great for hanging planters. Add ivy to the top of a bookshelf and let the vine trail down for a wild effect.

## Propagation

You can also propagate many indoor plants using water. This entails taking cuttings from an existing plant and rooting the piece in water. It can take some time for the roots to develop, but once they do, you just need to plant the piece in soil.

It's an easy way to create more greenery for your home. You can also propagate new plants to [share](#) with friends and family. Some people also like to swap cuttings by mail.