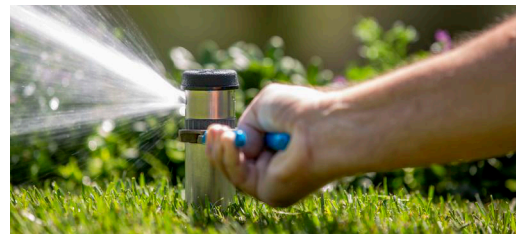


# FIND IT FLAG IT FIX IT

## A CHECKLIST FOR YOUR LANDSCAPE



A simple walk through  
your landscape can help  
you save water outdoors



If you have an in-ground irrigation system, did you know that just one broken or missing sprinkler component could waste as much as 1,000 gallons of water per week? Making repairs to your system could save thousands of gallons of water and hundreds of dollars in water costs over a six-month irrigation season. That's why it is so important to keep your sprinkler system operating in tip-top shape.

This checklist can help you conduct periodic check-ups on your system during the year. If you identify leaking pipes, broken sprinklers, or inefficient irrigation schedules and need help fixing them, seek out an irrigation professional certified by a WaterSense labeled program to audit your system. A certified pro can find and fix leaks, replace broken sprinkler components, ensure even distribution of water, and adjust your irrigation controller schedule to ensure plants only receive water when they need it. Learn more at [www.epa.gov/watersense/irrigation-pro](http://www.epa.gov/watersense/irrigation-pro).



If you update your system, remember that the WaterSense label identifies products that have been certified for water efficiency and performance.

Look for issue	Description	How to check	What to do
<input type="checkbox"/> <b>Leaks</b>	Can occur at irrigation valves, connection points, joints, and sprinkler heads or drip irrigation lines.	Walk through the landscape while the system is running and look for water pooling on the surface or water spraying where it shouldn't.	Flag the location of each leak or break and contact an <a href="#">irrigation professional</a> .
<input type="checkbox"/> <b>Broken or missing sprinklers and drippers</b>	Pedestrians or machinery can damage irrigation components. Damaged sprinklers can cause water to go where it shouldn't.	Run a test of the system and look for missing sprinklers, those that do not pop up fully, drip lines that have been cut or moved out of place, or small geysers.	Flag the broken component and contact an <a href="#">irrigation professional</a> .
<input type="checkbox"/> <b>Sprinklers aimed incorrectly</b>	Sprinklers pointed toward walls and hardscapes miss the landscape and waste water.	Look for sprinklers that overspray or spray water onto areas outside the landscape.	In most cases, you can turn the nozzle to face the correct direction, or flag it for a pro to fix.
<input type="checkbox"/> <b>Poor sprinkler coverage</b>	Can cause over-watering in some areas of the landscape and dry spots in others.	Observe the distance of spray from one sprinkler to another; spray from one sprinkler should reach the adjacent one (known as head-to-head coverage).	Adjust the spray distance and direction of the nozzle to ensure head-to-head coverage or contact an <a href="#">irrigation pro</a> ; sprinkler heads may need to be added or moved.

Look for issue	Description	How to check	What to do
<input type="checkbox"/> <b>Misting</b>	High pressure can cause misting that is easily blown away by wind and not used by the landscape.	Look for a fine mist coming from sprinklers.	Ask your irrigation professional to check the water pressure. If it is too high, they can install <a href="#">WaterSense labeled spray sprinkler bodies</a> with integral pressure regulation.
<input type="checkbox"/> <b>Bad dripper spacing in your microirrigation system</b>	<a href="#">Microirrigation</a> drippers should be placed near the root zone of each plant.	Look for drippers that are on bare soil or not right next to plants.	Move the drip line to the root zone of the plants.
<input type="checkbox"/> <b>Irrigation schedule not adjusted for the seasons</b>	Plant water needs change with the season, and the schedule should as well.	If you use a <a href="#">weather-based controller</a> , it should be set to weather-based mode. If it's a timer, you should have a seasonal schedule to follow.	Select the weather-based mode on the controller if available, or, for timers, post or set a reminder to change the schedule as the season changes.
<input type="checkbox"/> <b>Significant overwatering</b>	Runtimes that are too long or frequent, or irrigating after rain, can keep water from infiltrating the soil.	Check for pooling water or runoff after irrigation.	Shorten runtimes, increase the time between them, or consider a weather-based or soil moisture-based irrigation controller.
<input type="checkbox"/> <b>Soil moisture sensor (if used) is not fully buried</b>	The <a href="#">soil moisture sensor</a> should be buried deep enough in the soil to obtain accurate readings of soil moisture and per the manufacturer's instructions.	Where the sensor is buried, look for soil that has been removed, exposing the sensor.	Contact a <a href="#">certified irrigation professional</a> to reinstall and check for damaged wires where applicable.
<input type="checkbox"/> <b>Erosion on slopes</b>	Steep slopes in the landscape can cause runoff and erosion during irrigation, leaving bare patches in the landscape.	Look for bare soil or empty patches on the slope. You can also look for soil that is eroding on the landscape.	Water at shorter intervals (known as the "cycle-and-soak" method) on steep slopes. <a href="#">Mulch</a> or add plants on slopes to reduce erosion.
<input type="checkbox"/> <b>Dry or dormant plants</b>	Some plants lose their leaves or color as the seasons change; others become dry or brittle when they do not get enough water.	Feel plants or grass to see if they are dry or brittle to the touch.	Consult a landscape professional or plant reference to determine if a plant can go dormant or needs more water. If supplemental water is needed, add mulch or other soil amendments to help retain water and nutrients.

## ADDITIONAL TIPS

### Promote Water-Smart Landscaping

When updating your landscaping, [choose plant varieties that require less water](#), such as drought-tolerant plants or species that are native to your region. Once established, native and low water-using plants require little water beyond normal rainfall. Find a section of your landscape that is suitable for these plants to reduce watering requirements in that zone. And remember, sometimes plants will go dormant, but they should come back to life in the next growing season.

### Feed Your Soil

A healthy soil can hold more water and provide important nutrients for plants. Aerating and mulching are great ways to loosen the soil and retain nutrients in the soil. Healthier soil means that you will not have to irrigate as often. Organic and inorganic soil amendments can be mixed into the soil and increase how much water the soil can hold.

### Get in the Zone

Your irrigation system may have different zones so that it can provide water to plants that have similar water needs (i.e., hydrozones). The plant and soil type in each zone will determine how long the system should run. Establishing different hydrozones in the landscape prevents different plant types from receiving too much or too little water. Get to know your zones by testing them one by one on the controller, so that you can adjust a particular zone.

### Get Control of Your Watering Habits

In an automated watering system, the irrigation controller activates each irrigation zone. A clock-timed irrigation controller can be set with a repeatable schedule, but since it does not connect to any weather service or weather device, you need to remember to change the schedule with the seasons. To automate seasonal schedule changes, consider installing a [WaterSense labeled weather-based irrigation controller](#). These controllers connect to a local weather service or have an onsite weather sensor to adjust the irrigation schedule based on local weather, allowing watering schedules to better match plants' needs.

### Know Your Irrigation Rate

Your local water utility or extension service may recommend irrigating your landscape a specific number of inches of water per week for your region. To know how long to run your system to reach that requirement, determine the flow rate of your system by consulting information available from the manufacturer. If you want an estimate based on the actual flow rate, follow these tips: Save several empty cans, such as tuna cans, and make a mark 1/2 inch from the bottom of each can. Place the empty cans around your lawn while you're watering, and time how long it takes to collect 1/2 inch of water. Based on that time, you can determine how long to run your system to reach the recommended watering amount. If you need help, a certified irrigation professional can help you make sure your yard is getting the water it needs.

### Cycle and Soak

Give this a try if you see water pooling during irrigation: Run a single irrigation zone and see how long it takes for water to pool on the surface. Split your total runtime into shorter cycle intervals that will add up to the total runtime, and spread out irrigation events to allow the water to soak into the soil. For example, if it takes 15 minutes to reach your recommended watering amount, set the system to water three times for 5 minutes. Allow about 30 minutes between cycles to let the water soak into the landscape. Repeat with the other zones in your landscape. If you have a sandy soil and notice water does not pool on the surface, only irrigate long enough for the plants to get their required water.

### For More Information

- WaterSense labeled irrigation products: [www.epa.gov/watersense/watersense-products](http://www.epa.gov/watersense/watersense-products)
- Find an irrigation professional: [www.epa.gov/watersense/irrigation-pro](http://www.epa.gov/watersense/irrigation-pro)
- Microirrigation: [www.epa.gov/watersense/microirrigation](http://www.epa.gov/watersense/microirrigation)
- Landscaping tips: [www.epa.gov/watersense/landscaping-tips](http://www.epa.gov/watersense/landscaping-tips)
- Water wisely: [www.epa.gov/watersense/watering-tips](http://www.epa.gov/watersense/watering-tips)



Learn more at [www.epa.gov/watersense/outdoors](http://www.epa.gov/watersense/outdoors).