



# 10 Ways to Make Your Irrigation System More Efficient

## Quick Irrigation Facts:

- According to the EPA, 80% of the water we put on our lawns, runs off. Taking with it any nearby chemicals or fertilizers.
- Watering one acre of land (43,560 sq. ft.) with 1" of water consumes 27,000 gallons. For reference, a standard swimming pool (16'x20') uses 20,000 gallons when full.
- Watering 5,000 sq. ft. with 1" of water consumes 3,120 gallons. That is enough to fill 5,905 2-liter soda bottles.

**"An irrigation system must be designed, installed properly and maintained regularly to deliver the right amount of water to each plant when it needs it."**

- Ted Moriarty, Certified Irrigation Professional and Owner of Smart Watering Co. (smartwatering.com)

For more resources on sustainable lawncare, check out [greenscapes.org](https://www.greenscapes.org)

# Did you know...

Up to 50% of irrigation water can be lost due to evaporation, wind and/or improper system design, installation or maintenance? That's a lot of water! (*Federal Emergency Management Program*)

Fortunately, irrigation technology has evolved to make irrigation systems much more efficient. Many new products can easily be retrofitted onto your existing system.

- New technology for **Irrigation Controllers** allows you to control watering by zone and also by season. Zones usually have differing needs for water based on soil type, sun or shade, and plantings. Plants also have different water requirements in each season, which means watering at the same rate consistently can result in overwatering, potentially harming them.
- A **Smart Water Controller** adjusts water applied to your landscape based on actual rainfall. You can save 20–50% of your irrigation water usage by using weather-based data received from local weather stations to adjust watering in relation to real time rainfall in your area. “Smart devices” performing this function can also be retrofitted on your existing controller.
- A **rain shut-off switch** will turn off your system automatically when it is raining, with estimated water savings of 15–20%.
- Replace your sprinkler heads with new **high-efficiency nozzles**, estimated to save 30% of your water usage. These nozzles are designed to minimize wind drift and to apply water evenly over the landscape.
- Make sure your system has **working check valves**, which keep water from draining out of the system.
- Replace traditional irrigation systems in planting beds with drip irrigation. **Drip irrigation**, which may include micro-spray jets, micro-sprinklers and bubbler irrigation, is more efficient and targets plants with slow and direct water applications to the roots, minimizing evaporation and runoff.
- Have your irrigation system audited by a **qualified irrigation specialist** at least every 3 years. Irrigation professionals, certified by the Irrigation Association ([irrigation.org](http://irrigation.org)), understand the varying water needs of your landscape plantings and how to maximize efficiency in your irrigation system. The EPA’s Watersense program ([www.epa.gov/watersense](http://www.epa.gov/watersense)) is also a good resource.
- Have your irrigation specialist **check for leaks and water pressure problems**. Leaks are a huge water waster and low or high water pressure can seriously affect sprinkler performance.
- Make sure your system is set to supply plants with water when they can best use the water. **Watering deeply, less frequently** is much better for plants, encouraging them to grow deep roots. Frequent, light watering and overwatering can actually harm plants.
- **Water at dawn**. Watering any other time of the day is not good for the plants. During the day, water evaporating off the plants can actually cause them to be burned. Watering in the evening can encourage fungus and bacteria growth on your plants.