

Outdoor Watering Nerds

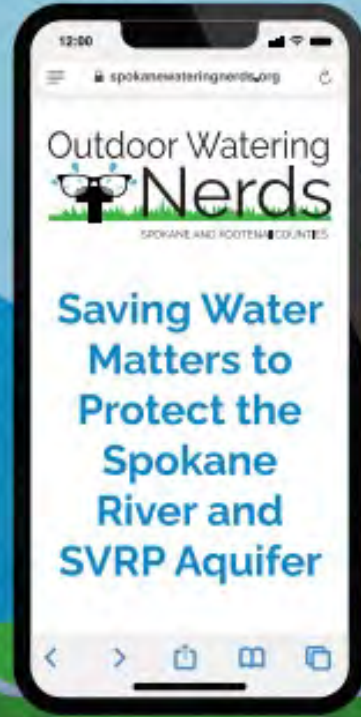
SPOKANE AND KOOTENAI COUNTIES

A Regional Resource Created By



Individual actions make a difference.
Everyone can do their part
to protect our river and aquifer.

Visit
**OUTDOOR
WATERING
NERDS**
Solutions
at Your
Fingertips



spokanewateringnerds.org
kootenaiwateringnerds.org



Saving Water Matters to Protect the Spokane River & SVRP Aquifer >>

Looking for Outdoor Watering Solutions?

Outdoor Watering Nerds can connect you to Professionals and Do It Yourself resources for outdoor leak detection, sprinkler repair and retrofit, and landscape design. The Nerds are excited to bring you how-to videos, water saving tips, rebates, classes, and events in Kootenai and Spokane counties. Saving water outdoors protects your pocketbook, economic growth, the Spokane River, and our sole source of drinking water, the Spokane Valley Rathdrum Prairie Aquifer. Good for you. Good for our future.



Outdoor Leak Detection



Sprinkler Systems



Landscapes



How to Videos

Useful Links

- [Calculate Water Needs](#)
- [DIY Resources](#)
- [Find a Professional](#)
- [How to Videos](#)
- [Irrigation & Landscape Guidelines](#)
- [Rebates](#)
- [Tips to Save Water](#)
- [Help Us Improve Our Site](#)

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Useful Links

Calculate Water Needs

DIY Resources

Find a Professional

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Rebates

Tips to Save Water

Help Us Improve Our Site

49 Webpages
links to 246 external
resources

Videos
69 external
56 embedded
DIY Resources 42
Find a Professional 12
topics and 65 listings

Calculate Water Needs

Wondering how much to water your lawn? In this section you can find out how much water your lawn needs by week or season. After you know how much water your lawn needs, you can measure how much water your sprinklers are applying. Then you can calculate how long to run your sprinklers for a healthy lawn that doesn't waste water.



Daily Calculator



Seasonal Water Needs



Calculate Sprinkler Time

Seasonal Water Needs

Want to do your part to save water? Grass needs much less water in April, May and September. Adjust your lawn watering based on Spokane and Kootenai counties seasonal watering needs. A calendar of watering needs was calculated using daily data from local Agrimet Stations for the years 2015, 2016, 2018, 2019, 2020, and 2021. A three-day running average was calculated to estimate how much water you would need to apply to your lawn if you water every three days. Notice how much less water is needed in spring and fall.

3 Day Average Lawn Watering Needs (inches)



Weekly Average Lawn Watering Needs (inches)



Monthly Average for Daily Lawn Watering Needs (Inches)



3 Day Average Lawn Watering Needs (inches)

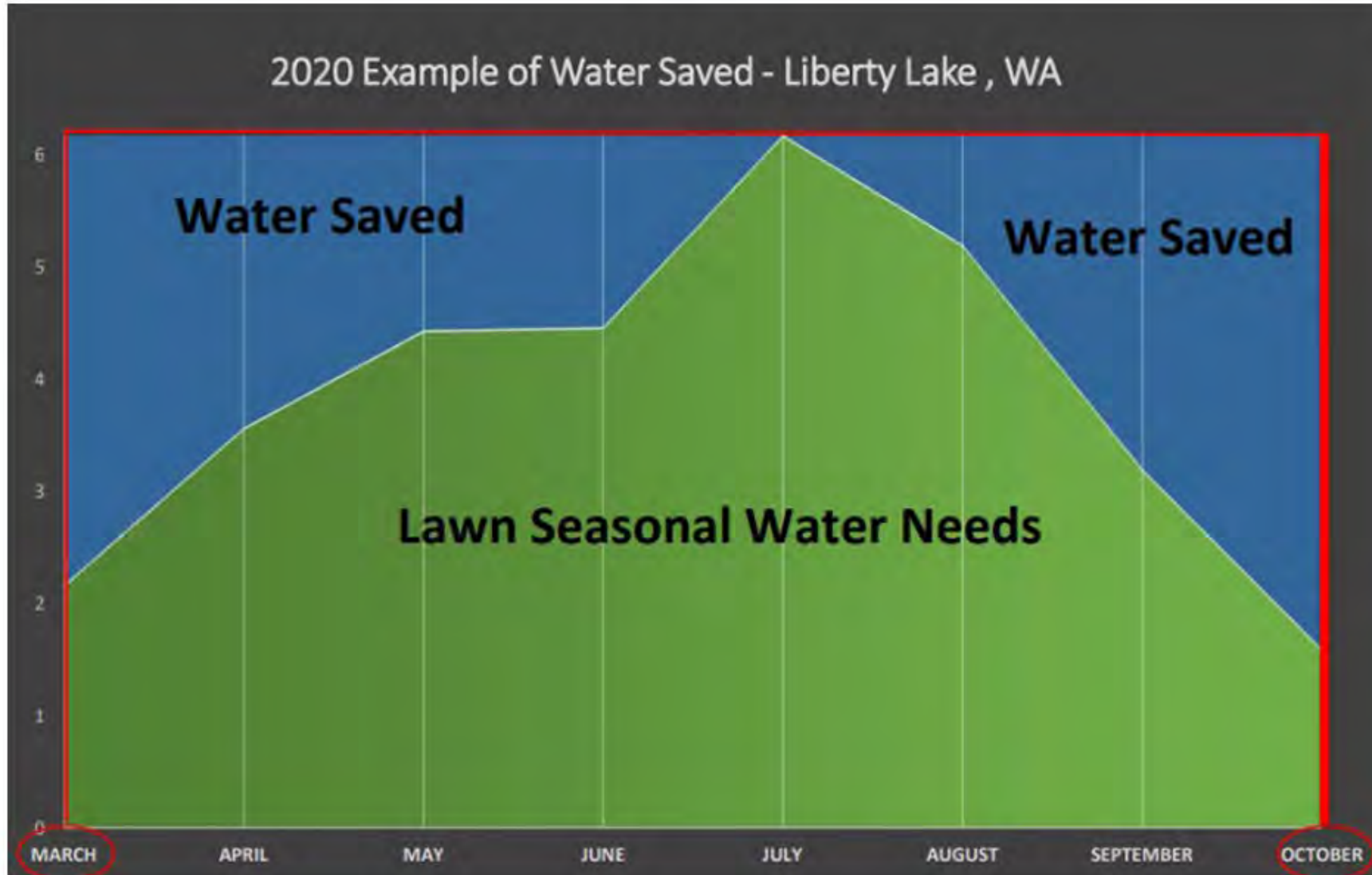
Date (April-May)	3 Day Average Lawn Watering Needs (inches)
3-Apr	0.20
6-Apr	0.18
9-Apr	0.23
12-Apr	0.27
15-Apr	0.27
18-Apr	0.39
21-Apr	0.40
24-Apr	0.38
27-Apr	0.41
30-Apr	0.44
3-May	0.49
6-May	0.52
9-May	0.52
12-May	0.55

Date (June-July)	3 Day Average Lawn Watering Needs (inches)
2-Jun	0.50
5-Jun	0.59
8-Jun	0.49
11-Jun	0.46
14-Jun	0.54
17-Jun	0.51
20-Jun	0.55
23-Jun	0.54
26-Jun	0.60
29-Jun	0.63
2-Jul	0.60
5-Jul	0.65
8-Jul	0.63

Date (Aug-Sep)	3 Day Average Lawn Watering Needs (inches)
1-Aug	0.65
4-Aug	0.57
7-Aug	0.56
10-Aug	0.49
13-Aug	0.50
16-Aug	0.57
19-Aug	0.51
22-Aug	0.53
25-Aug	0.46
28-Aug	0.42
31-Aug	0.45
3-Sep	0.41
6-Sep	0.39

Scheduling in a Box

The red line shows how much extra water you will use if you turn your sprinklers on in March and turn them off in October without adjusting for how much water your lawn needs. To have a healthy lawn and save water, adjust your sprinklers with the changing seasons.



Adjust your sprinkler run time from April-September to give your lawn only what it needs.

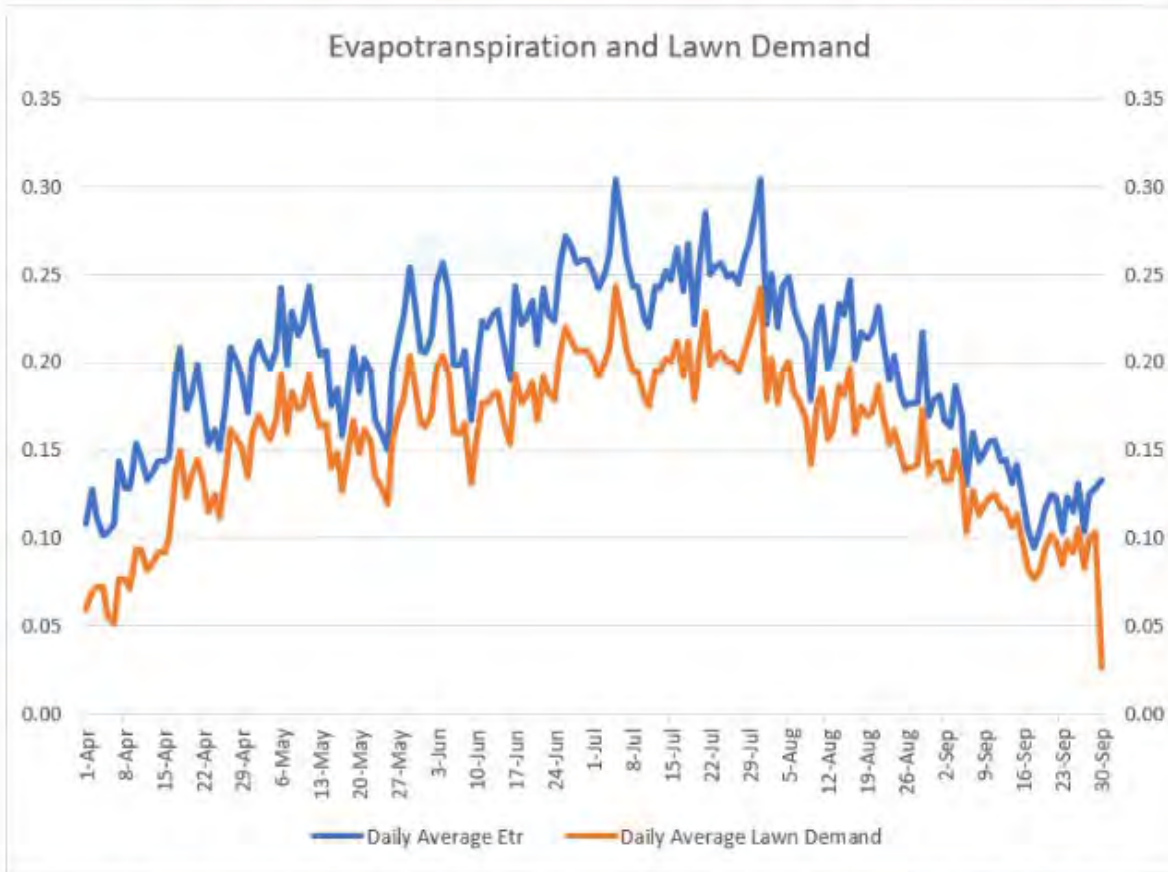


Figure 1. Evapotranspiration (Etr) and Lawn Demand, Daily Average, Spokane / Coeur d'Alene area.

Figure 1 shows the variability in evapotranspiration (ET) and Lawn ET values. Generally, lawn demand is about 70% of the reference ET. (Data is shown in inches).

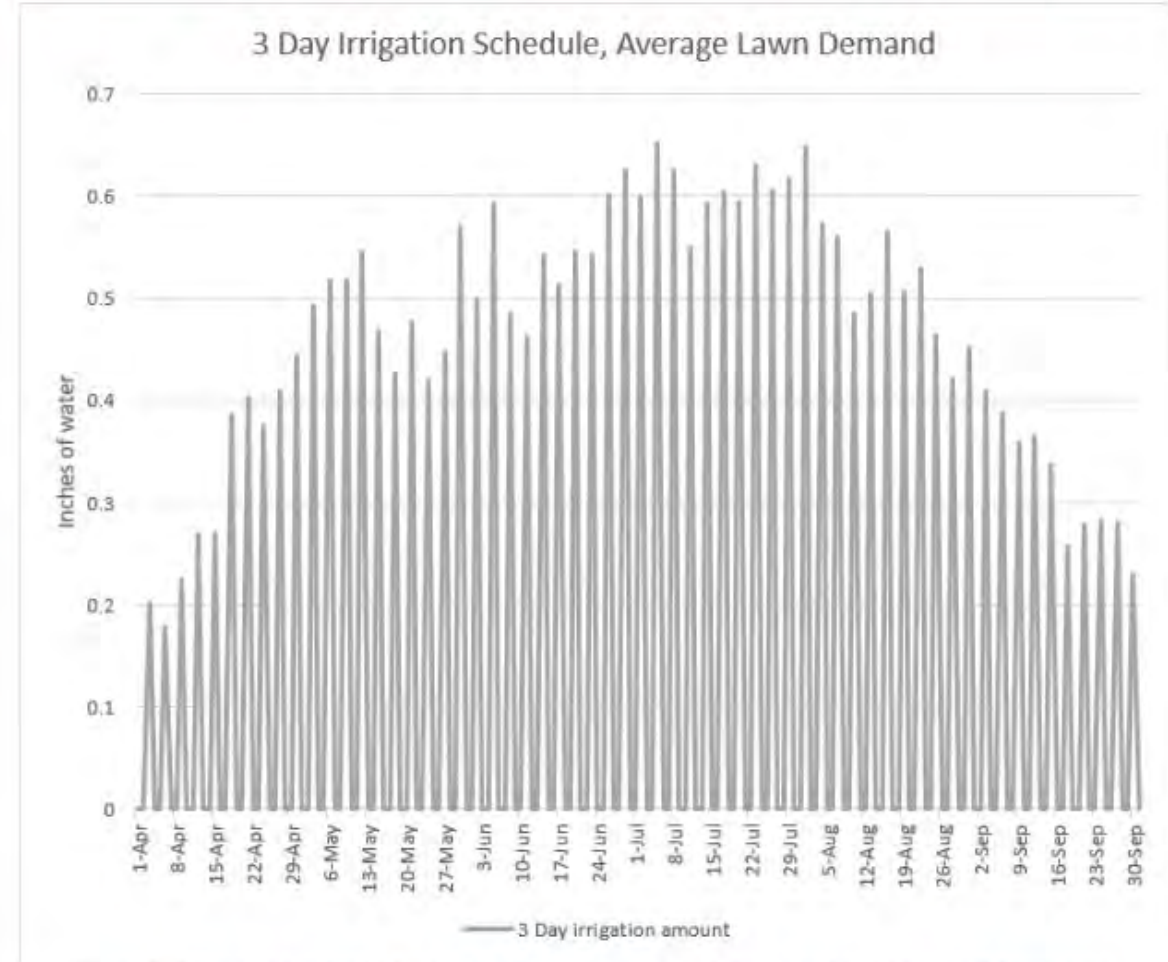



Figure 2. Amount of water to be applied if watering every 3 days, Spokane / Coeur d'Alene area.

Figure 2 shows the 3-day watering needs of lawn crop. In only a few cases should a lawn crop demand an amount in excess of 0.6 inches in one watering event.

DIY Resources

Listing of professionals does not include a recommendation or certification.

Choose from the list of DIY resources below by checking the boxes to narrow your search.

Spokane & Kootenai Counties 

- Drip Irrigation (13)
- Hardscape (11)
- Landscape Design Architect (1)
- Native Plant Nursery (19)
- Sprinkler Timer (13)
- Web Supplier (11)
- Education (5)
- Landscape Design (7)
- Leak Detect & Repair (3)
- Sprinkler Repair & Repair (14)
- Topsoil, Bark, & Gravel (13)


[Clear filters & show all](#)

Found 42 Results Page 1 of 1

Find a Professional

Listing of professionals does not include a recommendation or certification. Want to verify a business license or endorsement? In WA go to the [Department of Revenue](#). In ID go to the [Secretary of State](#).

Choose from the list of professionals below by checking the boxes to narrow your search.

Spokane & Kootenai Counties 

- Arborist (17)
- Drip Irrigation (5)
- Landscape Design (16)
- Leak Detect & Repair (10)
- Native Plant Nursery (3)
- Sprinkler Repair & Retrofit (23)
- Backflow Assembly Testers (Listed by Water Provider) (1)
- Education (2)
- Landscape Design Architect (11)
- Maintenance (14)
- Professional Installation (12)
- Sprinkler Timer (15)

[Clear filters & show alphabetical list of all professionals](#)

Found 64 Results Page 1 of 1

Below are useful tips on how you can save water

How do I know if I have a leak? +

Why has my water bill increased? +

Is there a best time to run my sprinklers? +

How often should I water? -

Adjust your watering frequency and length based on temperature and rainfall. For sprinkler systems, install rain shut-off devices that will automatically shut off your sprinklers when it rains or weather-based irrigation equipment that adjusts run times based on real-time weather data. [Install a Weather Based Irrigation Timer that will adjust watering based on weather data.](#) Look for the EPA Water Sense logo.

Water your lawn once every three days during the summer. Even during the hottest part of the year, most lawns do not need to be watered every day. By watering only once every three days, you promote deeper root growth and that makes your lawn more water efficient.

Here are three tests to determine if water is needed:

1. Push a 6" long screwdriver shaft into the ground. If it goes in easily, don't water.
2. If your lawn has a grayish cast or appears to dull green, it needs water.
3. Walk on your lawn. If your footprints don't disappear quickly, the grass blades don't have the needed moisture to spring back and need water.

From October 1st to March 31st lawns in our area go dormant and do not need watering. A brown lawn is not a dead lawn. See [Calculate Water Needs](#).

What type of sprinkler head is best? +

How long should I water? +

Saving Water Matters

Explore our Story Map to learn how water quality and water quantity are both essential to the SVRP Aquifer, Spokane River, and our quality of life. Want to become a Water Nerd? The Aquifer Atlases and videos are filled with amazing facts and details about the river and aquifer.

In the summer months as we are pumping more water from the aquifer to water our lawns, the Spokane river flow is at its lowest. It is during this time that the river needs water the most to maintain a healthy environment for fish, wildlife, and recreation. It takes all of us doing our part to protect our aquifer and river by using water wisely and finding ways to reduce water waste.



Aquifer and River Story Map



Aquifer Atlases



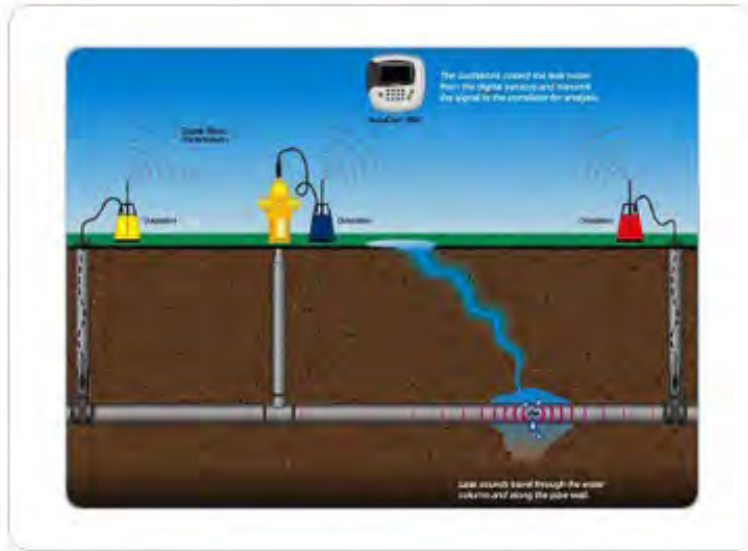
Videos

Outdoor Leak Detection

Wondering how to find a water leak? Let Outdoor Watering Nerds help you find and fix leaks before they damage your property and cost you money. In this section you'll find out how a water meter and other technologies can help you detect, locate, and repair leaks.



Read Your Water Meter



Underground System Leaks



Leak Detection Videos

Read Your Water Meter

Step 1. Locate your meter

The water meter is generally located in the ground near the curb in front of your house.



The meter box will often have a metal or plastic lid with "Water Meter" marked on top.



Step 2. Open the meter box

To read the meter, remove the lid of your water meter box. Be careful! Lids can be heavy. And sometimes, bugs and small animals hide inside the meter boxes. Replace the lid each time you finish looking at the meter to avoid a safety hazard.



Step 3. Identify your meter

There are many types of water meters. The one you have is based on who provides your water. Your meter may measure water in cubic feet (CF) or in gallons (GAL).

Analog Dials



Digital Dials

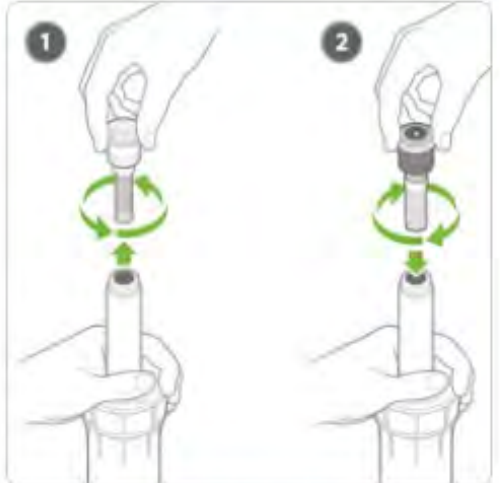


Sprinkler Systems

Wondering how to maintain, repair, or retrofit your sprinkler system? In this section you'll find a sprinkler system checkup, how to videos, links to professionals and DIY resources for every part of your sprinkler system. Find out how a backflow device can protect your drinking water.



Sprinkler System Checkup



Repair and Retrofit



Smart Controllers and Sensors



Drip Irrigation & Soaker Hoses



Backflow Protection



Sprinkler System Videos

Sprinkler System Checkup

Repair and Retrofit

Smart Controllers & Sensors

Drip Systems & Soaker Hoses

Backflow Protection

Sprinkler System Videos

Repair

Repair Common Sprinkler System Problems – Explore [DIY Resources](#) or [Find a Professional](#).

Why do my sprinklers produce uneven coverage or poor spray patterns?



Why is my lawn soggy?



Why do I have brown or dry spots in my lawn?



Why do I have moss and fungus in my lawn?



Why doesn't the sprinkler head pop up all the way or retract?



Why are some of my sprinkler heads putting out a mist?



Why are my sprinklers over spraying onto the street and sidewalk?



Why are my sprinklers constantly leaking?



How do I stop erosion and runoff on slopes and landscape contours?



Why isn't my drip system working?



- Low head drainage – install check valve
- Debris in valve diaphragm
- Sprinkler body cap issues

Low Head Drainage

The most common reason why a sprinkler will leak water when the system is off is called "Low Head Drainage." Low head drainage occurs when the lowest head on a zone allows water to drain from the lateral piping, out of the sprinkler. If it is low head drainage, residual water will stop flowing after all the water has left the pipe.

The solution is to install check valves on sprinklers at the lowest points in a zone. Check valves are a device inside a sprinkler head that prevents water from leaking out after the zone turns off. This keeps water in the underground pipes and prevents gravity from pushing the leftover water out of the lowest heads in a zone. When purchasing a new head, be sure to look for models that have built-in check valves.

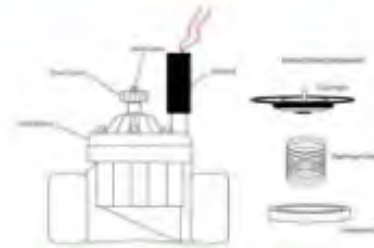


Debris in Valve Diaphragm

Water may leak through the zone valve. A check valve in the sprinkler will not fix this leak. There may be debris obstructing the valve's diaphragm. If the zone valve for a particular zone is diagnosed as the problem then the solution is:

1. disassemble the valve
2. rinse all the parts with clean water
3. re-assemble the valve.

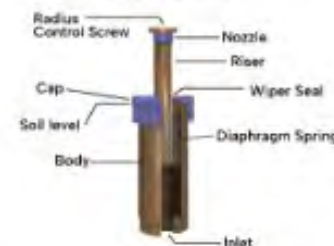
You may need to replace the diaphragm assembly if there is visible damage.



Sprinkler Body Cap Issues

The sprinkler body cap may be broken or cracked, missing the wiper seal, or there is debris between the body and the cap.

Anatomy of a Sprinkler Head – Diagram Illustrating the Parts of a Sprinkler Head



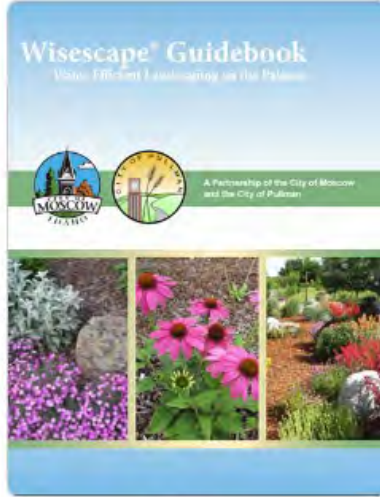
Wondering how to use native and drought tolerant plants to save water while adding beauty and drought resistance to your landscape? In this section you can explore landscape design ideas and demonstration gardens, find rebate programs that will help you shift turf to native plants, and learn how to safely use lawn chemicals.



Landscape Designs



SpokaneScape



WiseScape



Drought Tolerant and Native Plants



Fertilizers, Pesticides, & Herbicides



Landscape Videos

Landscape Design

SpokaneScape

WiseScape

Drought Tolerant & Native Plants

Fertilizers, Pesticides and Herbicides

Landscape Videos

SpokaneScape

Turf Replacement Program

City of Spokane Water customers can earn up to a \$500 credit towards their utility bill after removing lawn and replacing it with water wise plants and mulch. For more information visit WaterWiseSpokane.org or contact the Water Wise Spokane Team at waterwise@spokanecity.org.

SpokaneScape turf replacement rebates are only available to residents of the City of Spokane, but anyone can use and adapt the great idea ideas and resources provided by SpokaneScape to reduce outdoor water consumption.

Removing turf grass is one of the most water conscious adjustments a homeowner can make to reduce their water usage and associated costs. A well-designed SpokaneScape will beautify your property, protect our natural resources and the environment; and will inevitably reduce yard maintenance.

- [Spokane Scape 2023 Guidebook](#) (PDF 10.6 MB)
- [Drought Tolerant Plant List](#) (PDF 3.2 MB)
- [Simple Drip Irrigation Diagram](#) (PDF 497 KB)
- [Noxious Weed List](#)
- [SpokaneScape Webinar](#)
- [SpokaneScape 101 Presentation](#) (PDF 7.0 MB)



Before



After





UI Extension – Landscaping with Native Plants: Curb Appeal and Low Water Use.

Authors Jim Ekins and Iris Mayes feature 5 native plants and where they might fit your landscape design and water conservation plans. A Native Plant Design Checklist is included along with a variety of suggested readings and resource links. 12 pages. 2022.

NATIVE PLANT LANDSCAPING

Drought Tolerant and Native Plants

UI Arboretum Botanical Garden Xeriscape Garden Plant Inventory



21 page pdf



IWAC Media Campaign April

**SAVING
WATER
MATTERS**

[CLICK TO LEARN HOW](#)



Outdoor Watering Nerds 
Spokane and Kootenai County

SAJB Media Campaign April

Looking to save? It's time for a

SPRINKLER SYSTEM

CHECK UP

CLICK TO LEARN HOW

Outdoor Watering
Nerds
Spokane and Kootenai County

- Controller
- Sprinkler Heads
- Main Tap
- Valve Box

IWAC Media Campaign May

Access Meter Reading
& Testing Resources For

DETECT LEAK ON

Outdoor Watering Nerds
Spokane and Kootenai Counties

CLICK TO LEARN MORE

SAJB Media Campaign May

Access DIY Resources to

REPAIR AND RETROFIT

Your Sprinkler System

[CLICK TO LEARN MORE](#)

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Please help us get the word out.

Add a Nerds link on your website.

