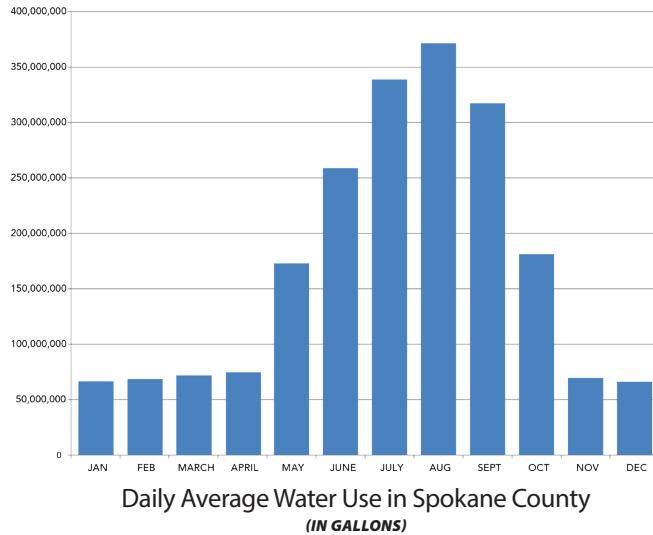


# OUR WATER. OUR FUTURE.



## Why do we need Irrigation and Landscape Standards?

Landscape irrigation is the single largest use of potable water in the U.S. during summer months. Outdoor water use creates peak demand on existing water supplies and system capacity.

- Water purveyors must increase supply to meet irrigation needs, sometimes as much as 3-4 times the amount used for domestic needs during the winter.
- Local forecasts show population increases by 31% by 2040 in Spokane County and 81% in Kootenai County by 2045.
- As much as 50% of water used for irrigation is wasted due to evaporation, wind, and overwatering caused by inefficient irrigation methods and systems.

## IWAC MEMBERS

- Avondale Irrigation District
- Bar Circle S Water Company
- City of Coeur d'Alene Water Department
- City of Post Falls Water and Water Reclamation
- City of Spokane Water Department
- Consolidated Irrigation District No. 19
- East Greenacres Irrigation District
- Hayden Area Regional Sewer Board
- Hayden Lake Irrigation District
- Liberty Lake Sewer & Water District No. 1
- Millwood Municipal Water District
- Model Irrigation District No. 18
- Modern Electric Water Company
- North Kootenai Water & Sewer District
- Spokane Aquifer Joint Board
- Spokane County Water District No. 3
- Spokane County Environmental Services
- Vera Water and Power
- Whitworth Water District No. 2

## Idaho Washington Aquifer Collaborative

- President,** Terry Pickel
- Vice President,** BiJay Adams
- Secretary,** Rob Lindsay
- Treasurer,** Ron Wilson



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## EFFICIENT IRRIGATION & LANDSCAPE STANDARDS

A MENU OF OPTIONS FOR PREPARING AND ADOPTING AN ORDINANCE OR STANDARDS



**OUR WATER.  
OUR FUTURE.**

**Idaho Washington Aquifer Collaborative**

[iwac.us/irrigation-and-landscape-guidelines](http://iwac.us/irrigation-and-landscape-guidelines)

# IRRIGATION DESIGN



Landscape irrigation industry lacks national or international standards for construction and operation and most jurisdictions in Kootenai and Spokane Counties do not have strong provisions for water efficiency within their landscape codes.

Most water purveyors, drawing water from the SVRP aquifer, have no regulatory authority except for the cost of water.

“This guide provides the recommended elements that an ordinance or design standard should include, to ensure new or rehabilitated landscape projects are designed with water efficiency in mind.”

IWAC developed a regional Model Efficient Irrigation and Landscape Design Standards guidance document to provide local jurisdictions, agencies, and water purveyors with an understanding of the importance of designing, installing, and maintaining landscapes.

**If irrigation system efficiency was doubled, peak demand could be reduced by 30%**

## Irrigation Design Criteria: Distribution Uniformity

Sprinklers are efficient when the spray heads are matched, properly spaced and designed to spray head to head.

Below is an image of poor distribution uniformity. If an irrigation system is 50% efficient (common for most systems) it will take twice as much water to keep a lawn looking green and healthy.



## LANDSCAPE DESIGN



Lawns are thirsty and require a lot of water to grow in our climate and require time-consuming maintenance. Consider installing a water wise landscape to save water, time and money.

### Simple Retrofit Solutions



Traditional Spray Head  
Flow (GPM) = 0.1 to 5.52

**Example:**  
A 73% reduction in GPM used was achieved by removing traditional spray heads (**1.85 X 20 min = 37 gal**) and retrofitting them with MP Rotator heads (**0.50 X 20 min = 10 gal**).



MP Rotator  
Flow (GPM) = 0.17 to 1.01

**GPM: gallons per minute.**

- Choose drought tolerant and native plants that thrive in our climate with little to no additional watering.
- Group plants that have similar watering needs together.
- Install a 3" minimum layer of mulch. Mulch keeps soil moisture and temperatures consistent to help keep plant roots healthy. It greatly helps to suppress weeds and will cut down the time you spend maintaining your landscape.