

# Pinery Pipeline

March/April 2007

Pinery Water & Wastewater District – 303.841.2797



We promise. . . Spring is just around the corner!

*This issue of the Pinery Pipeline is dedicated to providing tips and strategies to our customers in*

*preparation for your spring time watering needs!*

## Did your system “survive” the winter?

Picture this . . . The long, cold, barren days of winter have finally melted away. Yes, it's springtime! You now realize that it's time to fire up your lawn irrigation system. You open wide the supply valve; turn on the timer, and then stand back in horror watching as a geyser erupts in the middle of your yard! Before this truly happens, remember that if it's predictable, it's preventable:



- Before actually "recharging" your irrigation pipes, use a shovel to confirm that the soil is frost-free to a full 12" below the surface. Don't rush things!
- When it is truly time to start up your system, begin filling the system very slowly, this will minimize surge pressure and let you check many of the various system functions. You may even want to remove sprinkler heads at the top of each zone, which allows air to be pushed out of the system.
- As each zone is operated, check the area around the valves and sprinkler heads to be sure that there are no leaks or breaks in the system and that all sprinklers are level with the ground and spraying correctly. Yes, you may get wet during this exercise!
- Water that constantly seeps from a sprinkler head may indicate a leak in a control box valve. Now is the time to check it out!
- Finally, if you have an automatic controller, replace the batteries that are used to preserve your settings (if the timer uses them).
- While you're in the spring check mode, consider checking out your garden hoses for cracks and leaks; winter cold and our dry climate can take a toll on the rubber!

## Managing your water:

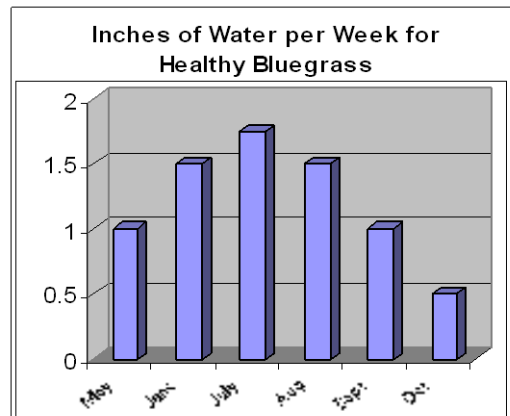
Changing sprinkler system settings is an easy water-saving change to make. If applicable, set zones to apply the amount of water needed by specific plant types. Different plants have different water needs.

Secondly, consider changing controller run times to meet seasonal plant needs. Plants require less water in cool spring and fall periods, and more water in the heat of summer. Seasonal adjustments not only conserve water, it results in healthier plants by matching water to plant needs. Too much water is often applied which can damage the plant's root system. Applying the right amounts of water produces healthier, deeper roots.

To determine how long a cycle should last, start up the sprinklers and time the number of minutes until water runs off the ground. The minutes will vary with each zone depending on the degree of slope, soil type, soil compaction, and other factors. Use this number as the maximum time to water and fill in the chart below.

Maximum Minutes per Watering Cycle						
	May	June	July	Aug	Sept	Oct
Zone 1						
Zone 2						
Zone 3						

Alternative measuring method: Set four identical cans at various distances from the sprinkler within its spray pattern. Turn on the sprinkler for 15 minutes. Combine the water collected into just one can. With a ruler, measure the depth of water in the can. This is the amount of water your sprinkler delivers in an hour. Based on this number (inches per hour), determine how long the sprinkler must run to provide your lawn with the amount of water it needs.



## Pop up or Rotor head?

There are two basic types of in-ground, clock controlled irrigation system sprinkler heads: pop-ups and rotors.

- Pop-up spray heads deliver an average of 1.5 to 2 inches of water per hour in a fan-shaped spray.
- Rotor spray heads (also called “impact heads”) deliver an average of 0.5 inches of water per hour in a rotating jet of water.



Pop-up Spray Head

Pop-up systems that spray a steady fan of water can provide water four times as fast as rotor systems. But, most soils in the Denver Metro area can only absorb 0.5 inches of water per hour.

If the application rate is more than the absorption rate, water will run off the landscape and be wasted.

Specifically, running pop-up spray heads for an hour provides water too fast and increases waste.



Rotor Spray Head

The bottom line . . . this costs you water and money! Adjust your watering schedule accordingly.

---

---

## What about “manual” watering??

There are three basic kinds of hose-end sprinkler attachments:



- Oscillating sprinklers, which roll back and forth, spraying vertically waste water due to evaporation. These can be useful in small areas when keeping the water level low.
- Impact sprinklers, which spin slowly around or from side to side, apply water at a slower rate than oscillating sprinklers. They also lose less to evaporation.
- Sprinklers that never move while applying water can irrigate more quickly than some soils can handle, regardless of the spray pattern. These sprinklers should be moved and re-aimed frequently to avoid over-watering and wasting water.

TIP: With manual watering, consider setting a timer each time you direct the sprinkler to a new part of your yard.

---

---

## Coming to your mailbox soon!

The Douglas County Water Resources Authority, which includes the Pinery Water District, takes water conservation seriously!

With that cause in mind, copies of an educational DVD will be mailed to all Douglas County residents. Expenses will be covered through a \$64,800 water efficiency grant awarded to the Authority by the Colorado State Water Conservation Board. *Watch your mail for “What Every Douglas County Resident Needs to Know About Xeriscaping.”*

### **Thin Ice on Bingham Lake!! –**

A reminder to be careful at Bingham Lake. The ice is thin and unstable. Watch your pets on the ice as well.

## Summing it all up:

- The average home landscape uses the majority of the total water consumed in a given household.
- Cost-effective irrigation requires a quality system design, regular system maintenance and a desire to manage your water usage.
- Tune ups of home sprinkler systems greatly improve water coverage resulting in improved plant growth and savings on your water bill.
- Seasonal and monthly adjustment of irrigation controllers provides substantial water savings.
- New technologies are continually being designed with the goal of improving water management and conservation.
- An irrigation system “audit” may direct you to where water savings can be achieved.
- Water leaks waste water and cost you money; watch for signs and symptoms!!!!