



Irrigation Troubleshooting Checklist -

"What's changed?"

Symptom	Possible Causes	Possible Cures
Water not coming on any zones from controller	System not dewinterized	Dewinterize - call the Jobline for Plumbing
	Rain sensor activated	Use rain sensor bypass button
	Controller has no power	Call the Jobline for an Electrician
Water not coming on one zone from controller, but does on others	Zone is manually shut off	Visually inspect, if off, probably for a reason - work with crew and Plumbing to find out why and when it might be turned back on
	Solenoid on valve has problems	Call the Jobline for an Electrician; if it needs to go to a Plumber, the Electrician will contact them
	Valve is oversized for actual flow; diaphragm is worn; internal ports not working	See above (Electrician will contact Plumbing)
Water not coming on as planned	Schedule doesn't have days or start times, or run times	Check controller schedules; if Maxicom, Sr. Gardener checks programming
Water not coming on fully or head not popping up	Clogged nozzle, head not rotating, head needs raising	Locate, clean and adjust heads or nozzles
Dead or dry plants but water is coming on	Poor coverage Plants grew and blocked water	Knowledgeably change nozzles, relocate head or add riser; Prune plants
Dry patches	Coverage blocked by topography (or see other related symptoms)	Adjust head height, angle or nozzles for best coverage
"Green doughnuts" (green turf rings around each head)	Soil/sprinkler height change over time Pressure for the system (PRV, pump), or pressure or flow at a particular valve	Clean heads and correct height issues Call the Jobline for a Plumber to check and/or adjust pressure
Watering during the day, running through stations	Irrigation schedule wrong	Check timer for start times, run times, days, water budget, etc.
Water not turning off, one or more zones running constantly	Controller malfunction and is sending power when it shouldn't (rare)	Try unplugging power to the controller - if the water stops, but comes back on when you plug it back in - call the Jobline for an Electrician.
	Valve malfunction: diaphragm damaged or worn	If it keeps running without power, it is not electrical, call the Jobline for a Plumber.
Water pooling or problematic wet area	Overwatering, zone running too long, cracked or broken sprinkler head, broken pipe, buried head, mis-adjusted head, low head drainage	Adjust schedules; Locate, adjust (height, angle, orientation), repair sprinkler heads, use heads with check valves in the stem
	Poor drainage Low collection spot	Install drain(s) or drainage underlayer
Valve takes a very long time to shut off	Valve needs adjusting to better match flow from heads; or valve could be wearing out.	Call the Jobline for a Plumber to inspect and/or repair valve.

Leak Sleuthing Checklist

Origin of report of possible leak: ☐ Hill bill ☐ Water visible in landscape ☐ Fixtures leaking in building

- ☐ If fixtures are visibly leaking in building, call the Jobline for the Plumbing Shop, and STOP here.
- ☐ If high bill, or water visible in the landscape, go to the next steps to confirm a leak on site. Through the next steps, you will determine if it is active, intermittent or no leak found.
- ☐ Find the site water meter. It is typically at a property edge, and may be near the irrigation backflow. If you see an irrigation submeter, typically downstream of the backflow, this will help identify if a leak is on the irrigation system or not.

Is the site or irrigation water meter spinning, indicating active use? ☐ Yes ☐ No

If YES, go to Active Leak section.

Intermittent Leak

If NO, then there is not an active leak. In which case the high use may be intermittent or may have been a one-time problem. Stop. Think. Consider the time of year, the facility type and what the possible uses may be.

- ☐ Are there restrooms or drinking fountains?
 - Check the fixtures for signs of leaks when used.
- ☐ Is site water use limited to irrigation or quick coupler use?
 - Check any irrigation controllers to make sure they are working according to schedule.
 - Run through the system to look for signs of a leak that only happens while a zone is running.

If correction work requires a Plumber, call in a service request to the Jobline.

Assess the scale of the problem and act. Characterize how the meter is spinning:

Active Leak

- ☐ Very slow and stops and starts
 - this may be normal operation - a toilet flushing, drinking fountain use
 - OR a very tiny leak that is just dripping
- ☐ Slow and steady, you can slowly count the rotations
 - this may indicate a slow leak, like an irrigation valve "leaking by"
- ☐ Continuous, medium to very fast spinning
 - these leaks are usually visible unless there is really good drainage

If the leak is not already visible, walk around the site and look for signs in the landscape. If a high flow, it should be fairly visible. If a low flow, it may be hidden. In that case, locate site irrigation or plumbing plans to help narrow the search. For irrigation, check in all valve boxes for a leaking valve. If you see a leak coming out of the ground, dig out around it until you see the source.

ALWAYS Call the Jobline first to report the leak. The Plumbing Shop will decide if they need to send someone right away, or if there is action you can take on site at that time and notify you, or if it can be scheduled for later repair. Some leaks will require more coordination between District staff and the Plumbing Shop to uncover, repair and restore.

Resources:

- Maintenance Request Line / Jobline: 206-684-7250, PKS_Work_Order_Desk@seattle.gov
- Plumbing Shop Acting Crew Chief Tony Flynn: anthony.flynn@seattle.gov, Shop phone: 206-684-7070
- Sustainable Operations Karen Galt: karen.galt@seattle.gov cell 206-661-4332
- Plans:
 - Parks Engineering, Elliott Bay Office Park has all archive plans. Westbridge has a subset.
 - Inweb site: <http://fmweb/parksplans/Facilities.aspx>
 - Sharepoint site: <https://seattlegov.sharepoint.com/sites/PKS-PARKive/drawings/ALTERNATE%20TEST%20Dwg%20Archive/Forms/byProject.aspx>