

A well-functioning irrigation system delivers water to plants only when needed and in the right amount, without overspray, runoff, or unnecessary deep watering.

Proper irrigation maintenance helps extend the life of the system, conserve water while supporting a healthy, attractive landscape, and reduce costs from water use, damage to hardscape and structures, and potential stormwater runoff fines.

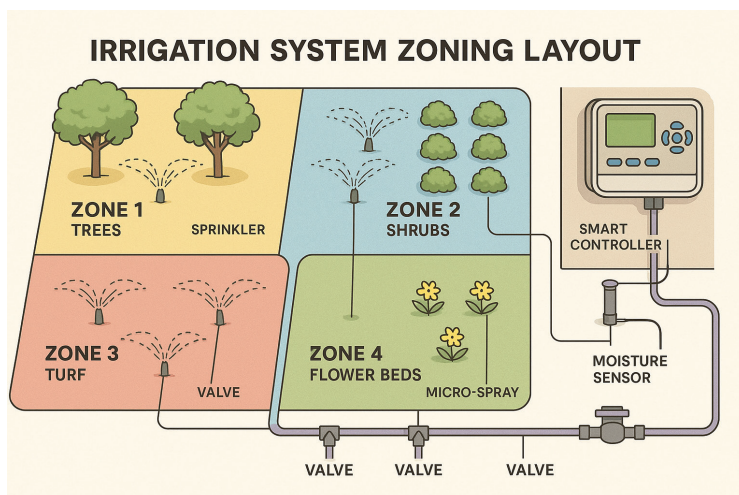
This guide is intended to support Landscape Optimization Service (LOS) Participants and Property Managers in overseeing irrigation maintenance by a landscape contractor partner. Reference this guidance when:

- > Establishing or updating landscape maintenance contracts,
- > Conducting routine seasonal irrigation reviews, and
- > Evaluating irrigation systems after the landscape has transitioned from establishment to long-term maintenance.

This guide provides general irrigation maintenance guidance and does not replace site-specific irrigation plans, manufacturer requirements, or local code.

## What is in Your Irrigation System?

Understanding these components helps you verify maintenance and quickly recognize problems before they become costly.



### Controller / Timer

Tells the system when and how long to water



### Valve

Opens and closes water flow to specific zones



### Emitter / Drip Line / Micro-Spray

Delivers water slowly to plant roots



### Overhead Spray

Applies water above ground through spray heads or rotors



### Master Valve and Flow Sensor

Monitors system flow and can automatically shut off water if leaks are detected



### Filter (System or Emitter-Level)

Prevents debris from clogging lines



### Backflow Prevention (Reduced Pressure Zone or Anti-siphon Valve)

Prevents contaminated water from flowing backward



### Pressure Regulators (Point of Connection, valve, spray body)

Maintains consistent and safe water pressure

Photos provided by the County of San Diego

## Roles and Responsibilities

While landscape contractors typically maintain irrigation systems for large properties, property owners play a critical role in setting priorities and supporting successful outcomes. This section outlines the key irrigation management responsibilities of both the property owner and the landscape contractor. In general, the landscape contractor is responsible for performing irrigation maintenance tasks, while the property owner or manager is responsible for verifying that these tasks occur and for setting priorities.

### Owners Verify and Set Priorities; Contractors Perform the Work

#### Landscape Owner / Property Manager Actions

- > Maintain a budget for irrigation maintenance, upgrades and repairs.
- > Ensure required inspections are completed.
- > Review water bills for unusually high usage monthly.
- > Observe and report visible breaks or leaks.
- > Verify contractor reports or photos.
- > Keep a record of significant events such as mainline breaks.
- > If smart control is not used, ensure an appropriate seasonal schedule has been set.

#### Landscape Contractor Actions

- > Provide proposals to address infrastructure issues and improve irrigation efficiency.
- > Inspect and repair irrigation components.
- > Check controller operation monthly and adjust schedule seasonally, document changes.
- > Flush drip lines and filters bi-annually.
- > Perform seasonal irrigation system audits.
- > Adjust irrigation to prevent overspray or blocked spray patterns.
- > Report leaks or system inefficiencies immediately.
- > Ensure flow sensing equipment is connected and functional.

Property owners should expect documentation or confirmation from the contractor for completed inspections, repairs, and seasonal adjustments. Refer to the recommended inspection frequency found in the table found on Page 4.

## How to Monitor and Evaluate Contractor Performance

Managing contractor performance is essential for protecting a community's investment in its landscape.

Consistent oversight helps ensure the contractor follows best practices, keeps plants healthy, and maintains an attractive environment.

It also holds the contractor accountable to the terms of their contract—making sure the work promised is the work delivered. Strong performance management ultimately saves the community money by preventing costly problems, improving efficiency, and ensuring the landscape receives the quality care it needs to thrive.

### Questions to Review at Contractor Meetings:

**“What adjustments were made for the season?”**

**“Were any leaks or dry spots identified?”  
and “How was this corrected?”**

**“Were any areas of overspray identified?”  
and “How was this corrected?”**

**“How many controllers are operational?”  
and “Are the flow sensors connected and functional?”**

**“What recommendations or proposals does your  
irrigation team have for us to consider?”**



**Tip:** Ask for controller photos, site inspection documentation, screenshots, or water use logs.

## Key Irrigation Maintenance Practices

The following basic irrigation maintenance practices should be covered in every contractor agreement and identified in a site-specific maintenance schedule. Refer to the table below for the frequency of these practices.



**System Checks:** Run each irrigation zone to check for leaks, overspray, clogged or misaligned emitters, and dry or overwatered areas. Additionally, look for system pressure problems such as misting overhead spray, a symptom of high pressure and a cause of irrigation system breakage. Low pressure can be identified by weak streams of water and dry areas. Document issues and make adjustments or repairs as needed to maintain uniform coverage and system performance.



**Field Inspections:** Walk the site to evaluate plant health and soil conditions, using a soil moisture probe where drip irrigation is present. Bring a station map to document observations that will inform controller adjustments.



**Controller Settings:** Review run times and seasonal adjustments against the LOS-provided baseline schedule and check for alerts or water window conflicts that prevent regular irrigation. Use field observations and station maps to make appropriate programming adjustments.



**Sensors:** Ensure rain or weather sensors and smart controller flow sensors are connected, functioning properly, and are not obstructed or bypassed. Verify that sensor inputs are correctly communicating with the controller and interrupt irrigation as intended.



**Master Valve and Flow Sensor:** When installed, learn flow rates for each station and set controller high- and low-flow thresholds to automatically shut down the master valve. Monitor alerts daily so leaks are addressed promptly, and the system can be restored to normal operation after repairs.



**Irrigation Zone Filters and Flushing:** Clean valve zone filters and flush drip tubing regularly. Clean overhead spray nozzles when clogged. After any line break or mainline repair, flush all valves and irrigation lines to remove debris before returning the system to scheduled irrigation.



**Point of Connection (POC) Filters and Reduced Pressure Zones (RPZ):** Ensure compliance with local, agency and State requirements which may include annual inspections, certifications and repairs. Perform preventative maintenance on wye and basket strainers per manufacturer recommendations.



**Repairs:** Make prompt repairs using like-for-like components and reference the most recent irrigation system plans. In newer, high-efficiency irrigation areas, proper filtration and pressure regulation are critical to system performance.



**Recycled Water Systems:** Any community or project utilizing recycled water is subject to regulatory oversight from the water purveyor and the County of San Diego Department of Environmental Health and Quality (DEHQ), including site inspections, cross connection testing, and plan review. The property owner or property manager should contact their water purveyor for specific requirements.





## Recommended Inspection Frequency

This quick reference table shows several key irrigation tasks and the recommended inspection frequency.

Task	Frequency	Responsible Party
Check system zones	Monthly	Contractor
Adjust controller for current weather and check sensors	Monthly	Contractor
Review water use	Monthly	Contractor/Property Manager
Flush drip lines, service filters	Bi-annually	Contractor
Review alerts and water bills	Daily (alerts) and Monthly (water bills)	Landscape Owner / Property Manager

## Seasonal Adjustment Guidelines

Use the seasonal adjustment guidelines below to modify irrigation schedules throughout the year based on weather patterns, plant needs, and local evapotranspiration (ET).

 <b>Winter</b>	Low Demand (25%). Match irrigation to plant water needs and local ET. Minimize watering to utilize rainfall and prevent oversaturation and unnecessary runoff.
 <b>Spring</b>	Moderate Demand (50%). Gradually increase run times as weather patterns bring warmer weather and longer days.
 <b>Summer</b>	Peak Demand (100%). Set the controller program for this schedule and adjust seasonally using smart control or a manual percent setting. Contractor to provide supplemental watering if needed for warming conditions.
 <b>Fall</b>	Moderate Demand (50%). Match irrigation to plant water needs and local ET, reducing water where possible for dormancy.

## Common Irrigation Red Flags to Watch For

If these conditions are observed, notify the landscape contractor and request evaluation and documentation of corrective actions.

### 1. Overspray onto hardscape or structures

Overspray onto pavement indicates misaligned heads and wasted water.



### 2. Uneven coverage

Dry patches may indicate clogged equipment, a broken irrigation line or another reason for poor water coverage.



### 3. Heavily saturated soil and sub-surface ponding

Persistent wet areas can indicate leaks, overwatering, or poor drainage.



### 4. Broken Irrigation Equipment

Cracked, broken, or leaking drip irrigation and sprinkler heads can cause irrigation runoff, water waste, and pressure loss for the hydrozone.



## 5. Irrigation Pressure Problems

Fine droplets indicate adequate pressure, misting is a symptom of high pressure.



A rotor wide spray pattern indicates adequate pressure. A single, weak stream is a symptom of low pressure.



## Additional Resources



**Metropolitan Water District of Southern California:** Irrigation scheduling tool and practical water-conservation tips, tools, and rebate info for outdoor landscapes. [bewaterwise.com](https://www.bewaterwise.com)



**Water Use Classification of Landscape Species (WUCOLS):** Plant water-use ratings to help you pick appropriate plants for your region. [WUCOLS](https://www.wucols.com)



**Coachella Valley Water District:** Lush and Efficient, Chapter Two - Water efficient irrigation systems. [Lush & Efficient](https://www.cvwwd.com/Lush-and-Efficient)



**Irrigation Association (IA):** Irrigation resources, professional training and a directory to find local irrigation specialists and water auditors. [Irrigation Association](https://www.irrigation.org)



**California Landscape Contractors Association (CLCA):** Resources and a directory to find qualified California landscape contractors and professional education. [CLCA San Diego Chapter](https://www.clca.org/San-Diego)



**Qualified Water Efficient Landscaper (QWEL):** A directory to find qualified California landscape contractors and professional education. [QWEL](https://www.qwel.org)

## Sample Contract Language for Irrigation Maintenance

The following sample contract language is provided to help LOS participants confirm that key irrigation and landscape maintenance expectations are clearly addressed in their maintenance agreements.

Review your existing contract to ensure these elements are included or use this language as a starting point when developing or updating your agreement.

- > The entire irrigation system including all components from a connection at meters shall be always maintained in an operational state. This coverage shall include but not be limited to the following: all controllers and remote-control valves, gate valves, and backflow devices. The contractor's responsibility for main lines shall consist of continual monitoring and any necessary repairs.
- > All irrigation systems shall be tested and inspected per the Inspection Frequency table and a written tracking report submitted quarterly in accordance with the schedule submitted at the start of the contract showing the location, day of week, and time of day that each system will be tested. Any changes shall be submitted for approval prior to enactment.
- > All irrigation systems shall be tested and inspected as necessary when damage is suspected, observed or reported.
- > All systems shall be adjusted in order to:
  - a. Provide adequate coverage of all landscape areas.
  - b. Prevent excessive runoff and/or erosion.
  - c. Prevent watering roadways, walkways, trails, fences and private property.
  - d. Match precipitation rates.
  - e. Limit hazardous conditions.
  - f. Prevent "flood irrigation," over-irrigating one area to account for coverage deficiency in another area.
  - g. Maximize seasonal water efficiency and plant health.
- > All system malfunctions, damage, and obstructions shall be recorded and reported to the owner. Timely corrective action shall be taken.