



# Irrigation System Maintenance

## General Principles for Irrigation Maintenance on the Gold Coast:

Maintaining a garden irrigation system in Queensland, especially in a coastal area like Gold Coast, is crucial for both water efficiency and plant health. The climate's intense sun, high humidity, and distinct wet and dry seasons mean your system needs regular attention to perform optimally and prevent waste.

Here's a comprehensive guide to irrigation system maintenance:

## I. Why Regular Maintenance is Essential in Queensland:

- **Water Conservation:** Leaks, clogged emitters, or misaligned sprinklers waste vast amounts of water, which is especially important during dry periods or water restrictions.
- **Plant Health:** An efficient system delivers water precisely where and when it's needed, preventing both underwatering (stress, stunted growth) and overwatering (root rot, fungal diseases, nutrient leaching).
- **System Longevity:** Regular checks prevent minor issues from becoming costly repairs. Sediment build-up, UV degradation, and wear and tear can all shorten your system's life.
- **Cost Savings:** Reduced water waste and fewer major repairs translate to lower bills.

## II. Seasonal Maintenance Checklist for Gold Coast:

### A. Year-Round / Ongoing (Weekly/Fortnightly during active watering, Monthly during cooler months):

#### 1. Visual Inspection:

- **Leaks:** Walk your garden while the system is running. Look for puddles, unusually wet spots, geysers, or water spraying where it shouldn't be (e.g., paths, fences, walls). Check all connections and joints.
- **Damaged Pipes/Hoses:** Look for cracks, kinks, or signs of rodent damage.
- **Sprinkler Heads:**
  - Are they popping up fully?
  - Are they clogged with debris (grass, soil, sand)?
  - Are they broken or tilted?
  - Is the spray pattern even and directed at plants, not hard surfaces?
  - Are they adjusted correctly for plant growth (e.g., taller plants might block spray)?
- **Drip Emitters/Lines:** Check for blockages, kinks, or breaks. Ensure each emitter is dripping consistently.
- **Valves:** Listen for unusual sounds or visible leaks around valve boxes.

## 2. **Filter Cleaning:**

- If your system has a filter (usually near the main water source or pump), clean it regularly. Debris can clog emitters and sprinklers. Frequency depends on water source quality.

## 3. **Controller/Timer Check:**

- **Programming:** Verify your watering schedule is still appropriate for the current weather and plant needs. Adjust run times and frequencies as seasons change.
- **Rain Sensor/Moisture Sensor:** Ensure it's clean and functioning correctly. Test it by wetting the sensor to see if it stops the cycle.
- **Backup Battery:** Replace the backup battery in your controller annually (or as needed) to prevent loss of programming during power outages.

## 4. **Water Pressure:**

- Too high pressure can cause misting and waste; too low results in inadequate coverage. If you notice issues, consider a pressure gauge or regulator.

### **B. Pre-Wet Season (Late Spring/Early Summer - around October/November in Yeppoon):**

The wet season is about to kick in, so you'll want to ensure your system is ready for heavy rainfall and potentially less manual watering.

- **Reduce Watering Schedules:** Start easing back on irrigation times as humidity increases and the likelihood of rain grows.
- **Check Rain Sensor:** Ensure your rain sensor is fully operational. This is critical to prevent your system from running during or immediately after rainfall.
- **Clear Gutters/Drainage:** While not strictly irrigation, ensure your property's drainage is good to handle heavy downpours, preventing waterlogging of garden beds.
- **Inspect and Clean:** A thorough check for any blockages or minor leaks before the consistent rain makes detection harder.

### **C. Post-Wet Season / Pre-Dry Season (Autumn - around March/April in Gold Coast):**

As the wet season tapers off and drier conditions approach, you'll start to rely more on your irrigation system.

- **Increase Watering Schedules:** Gradually increase watering frequency and duration as the weather dries out and temperatures remain warm.
- **Thorough System Flush:** Run each zone to flush out any sediment or debris that may have accumulated during periods of inactivity or heavy rain.
- **Check for Pest Damage:** Termites or other pests can be more active in wet, warm conditions and may damage underground pipes. Look for unexplained wet spots.
- **Assess Coverage:** Ensure all areas are receiving adequate water after any plant growth or changes in the garden. Adjust sprinkler heads as needed.

### **D. Winter (June - August in Yeppoon):**

Unlike colder climates that require "winterization" (blowing out water from pipes to prevent freezing), Gold Coast generally doesn't experience hard freezes that damage underground pipes. However, maintenance is still important:

- **Reduced Watering:** Plants generally require less water in cooler months. Drastically reduce irrigation times, or switch to manual control if only occasional watering is needed.
- **System Integrity Check:** Even if not actively running, periodically check for visible leaks or damage.

- **Battery Check:** Ensure your controller battery is fresh.
- **Off-Season Repairs:** Winter can be a good time to make any major repairs or upgrades as the system is used less frequently.

### III. Common Issues and Troubleshooting:

- **Uneven Water Distribution:**
  - **Cause:** Clogged nozzles, broken sprinkler heads, incorrect pressure, mismatched heads within a zone, or plant growth obstructing spray.
  - **Fix:** Clean/replace nozzles, repair/replace heads, check pressure, ensure all heads in a zone have similar precipitation rates, prune plants.
- **Leaks:**
  - **Cause:** Cracked pipes, loose fittings, damaged O-rings, faulty valves.
  - **Fix:** Identify the source and repair/replace affected components.
- **No Water/Low Pressure in a Zone:**
  - **Cause:** Clogged filter, main water shut-off partly closed, faulty solenoid/valve, broken pipe upstream, controller issue.
  - **Fix:** Check filter, ensure water supply is fully open, troubleshoot valve/solenoid, check for major pipe breaks.
- **System Running When It Shouldn't:**
  - **Cause:** Faulty rain sensor, controller programming error, sticky valve.
  - **Fix:** Check/replace rain sensor, reprogram controller, manually open/close valve.
- **Fungus Gnats (Indoor/Outdoor Pots with Drip):**
  - **Cause:** Overwatering, continuously damp potting mix.
  - **Fix:** Allow soil to dry out between waterings. Use a potting mix that drains well.

### IV. When to Call a Professional:

While many maintenance tasks are DIY-friendly, consider calling a qualified irrigation technician for:

- **Complex Diagnostics:** If you can't find the source of a persistent leak or pressure issue.
- **Major Repairs:** Burst main lines, extensive valve replacement.
- **System Upgrades:** Installing smart controllers, adding zones, or converting to a drip system.
- **Pump Issues:** If your irrigation relies on a pump and it's malfunctioning.
- **Annual System Audit:** A professional can assess your system's efficiency and recommend improvements.

By following a consistent maintenance schedule, your garden irrigation system in Gold Coast will operate efficiently, saving you water, money, and ensuring your plants remain healthy and vibrant year-round.