Convert **Spray** to **Drip**

Now you are ready to **Irrigate** your landscape.

If you are renovating most of your landscape, or your irrigation system is older than 5 years and was not installed by an irrigation professional, be prepared to start from scratch rather than try to convert from spray to drip. For those newer spray systems, a conversion to drip irrigation is possible using a kit that replaces the sprinkler body.

### You Will Need:
- Tools: trenching shovel, hand trowel, pliers
- Sprinkler caps
- Sprinkler Retrofit Kit
- Compression tees and elbows
- Rolls of drip tubing (1/2" blank or with in-line emitters)
- "U" soil staples
- 1 GPH pressure compensating emitters for on-line, tubing punch

### Sprinklers to Drip Retrofit in Ten Steps

1. **Warm Tubing In Sun** to make it easier to handle. Use 1/2 inch drip tubing either with the emitters built into the tubing or blank so on-line emitters may be added later. Each emitter should not exceed 2 gallons per hour (GPH).

2. **Turn On system.** Mark each sprinkler with a flag. Then identify which sprinkler is the last to receive water on the line. Place 1 additional flag at that one (2 flags total).

3. **Convert Last Sprinkler** on the line (2 flags) to Tattletale (see p. 34).

4. **Choose a Conveniently Located Sprinkler** to install the drip retrofit kit. Place 2 additional flags at this one for a total of 3 flags. Often a drip grid is best run off a corner sprinkler (see p. 35).

5. **Unscrew the Top** of the sprinkler in Step 4 (3 flags). Remove the insides of the sprinkler.

6. **Replace With the Retrofit Kit**, elbow, and a compression tee and adaptor. Note: You may need to replace the entire sprinkler head with parts provided in your kit.

7. **Cap Other Sprinklers** as you find them;
   - For Rain Bird and Hunter sprinklers, unscrew the tops and replace with the Rain Bird caps.
   - For Toro sprinklers, use Toro caps.
   - For all other brands, you’ll need to remove the sprinklers and install PVC caps on the riser.

8. **Push Drip Tubing Into Compression Tee** on both sides. Maximum of 100 feet of tubing with 1 GPH emitters per sprinkler head retrofit and 300 feet of tubing with 1 GPH emitters per valve.

9. **Make a Grid** with the drip tubing using elbow compression fittings to make the 90° turns. For trees, wrap a drip line around the entire tree but leave at least 12” from the trunk.

10. **Replace Existing Sprinkler Valve** with a low flow antisiphon valve and install. Anti-siphon valves are not necessary if a master backflow device currently exists.

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**If You Get Stuck** An irrigation system designer or licensed landscape contractor can help you design and then install the new drip system. You will need to seek the help of a licensed plumber or landscape contractor to convert the typical irrigation valves suitable for spray to low flow valves designed for drip. Consult professional assistance if you must install a backflow prevention device to keep water that has already gone into the landscape from passing back into the household or city water system.

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Images courtesy of City of Santa Monica

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