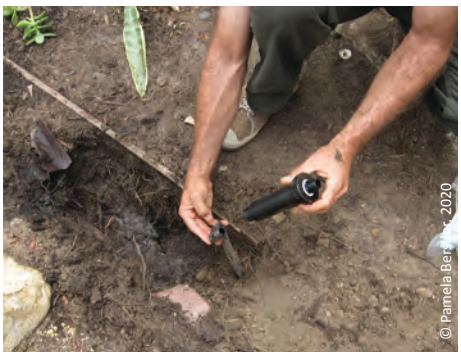
Convert **Spray** to **Drip**

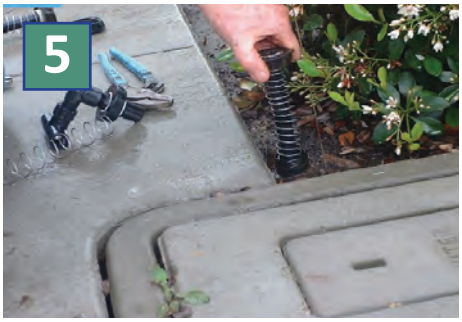
Now you are ready to **Irrigate** your landscape.

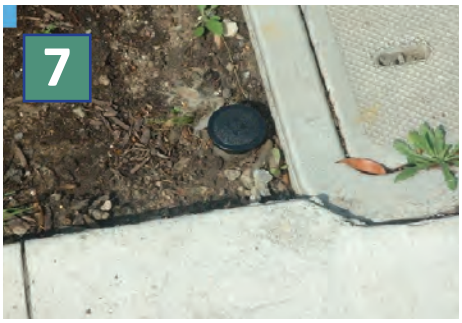
If you are renovating most of your landscape, or your irrigation system is older than 5 years and was not installed by an irrigation professional, be prepared to start from scratch rather than try to convert from spray to drip. For those newer spray systems, a conversion to drip irrigation is possible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





Images courtesy of City of Santa Monica

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.

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.