

# Drip Irrigation Efficiency



Drip irrigation comes in two designs:

- **Inline drip** is designed for uniform watering, featuring pre-installed, low-flow emitters embedded directly inside the tubing at fixed intervals.
- **Point source drip** delivers water via separate emitters (installed individually) that allow targeted watering application directly to each plant. The customized placement of the emitters allows for precise low-application rates that reduce water waste.

## The Challenge

The common perception in the landscape and irrigation industry is that drip irrigation uses significantly less water than spray regardless of design and watering times.

Inline emitters installed in a grid are less efficient when used with lower plant density. Drip irrigation installed with 0.9 gph inline emitters at 12" x 12" spacing and laid out in a grid may have precipitation rate as high as spray zones (1.4"/hr).

## The Solution

Replacement of existing inline emitters with point source drip emitters reduced consumption.



Note: Illustration shows drip before it is buried.

## Case Study: Point Bluff HOA

### Project Summary

Over 40,000 square feet of bed areas were converted to custom cut point-source drip emitters, including approximately 11,300 linear foot of subsurface drip tubing. Point source emitters are installed only at plant material and blank drip line is between plant material.

The average annual consumption over the last six years is 2.8M gallons, a 55% reduction from 2019.

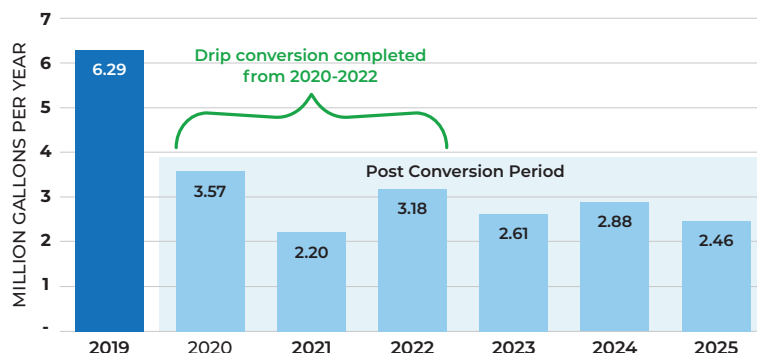
**Best Practice:** TCEQ-licensed Landscape Irrigator (LI) installed the tubing sub-surface with copper shield drip emitters in all of the HOA common area planting beds.

The conversion to point source drip was part of an overall water management strategy that also included regular maintenance and repairs, the permanent removal of irrigation where not necessary and the installation of smart irrigation systems that allow for remote connectivity with central control and flow monitoring.

Customer benefits include lower water bills, easier maintenance, better plant establishment and less runoff.

## Point Bluff HOA

Gallons per Year



For more information on the specifics of this project, contact Point Bluff HOA or SAWS Conservation at (210) 704-SAVE.