

## Drip Tip: Point Source Emitters – The Right Choice for Sparse Plantings

Dripline is most effective in areas where it can be installed on surface with groundcovers and small shrubs, or in a subsurface application for turf. Point source emitters and Root Watering Systems can be the right solution for sparse plantings and a better choice for larger shrubs and trees. When dripline is used and plants are spaced out considerable distances, dripline emitters may not be where plants are located.

Rain Bird has maintained proven reliability and dependability with its unique flow path designs for both the [Xeri-Bug Emitters \(XB Emitters\)](#) and [Pressure-Compensating Module Emitters \(PC Modules\)](#). The XB has emitters with flow rates of 0.5, 1 and 2 gallons per hour (GPH) and PC Module has flow rates of 5, 7, 10, 12, 18 and 24 GPH.

### Using a Higher Flow Emitter

When designing a low-volume irrigation system why would you choose an emitter that distributes more than 1 or 2 GPH? Instead of using multiple lower flow emitters close to the trunk of a large shrub and tree, one higher flow emitter might deliver the needed water requirements more efficiently. Using higher flow emitters reduce the total amount of emitters needed, making the project easier to maintain and manage after installation. When using any emitter in a drip application it is a best practice to triangulate emitters around all sides of the plant's root ball to ensure uniform irrigation.

### Separating Zones by Plant Root Type

To maximize water efficiency and plant health it is important to separate valves by planting type, i.e.



plants with small to medium depth roots vs. those with larger and deeper roots. Separating valves by plant types enables you to schedule the right watering frequency and run times based on root depth averages by zone. Further, the [Root Watering Series \(RWS\)](#) is ideal for larger shrubs and trees. In a University of Arizona study the RWS promoted deeper roots and greater root mass, which lead to better tree survival rates. You can read the results of the study [here](#).

### Point Source Calculator

To help you select the right type of emission devices use our [Point Source Calculator](#). You can simply input plant features, climatic conditions, plant water use factor, and assumed or designed irrigation system efficiency and the calculator determines which emitters to use and how long you should run the system to provide the needed water requirement.

When taking into account plant type and root depths, utilizing point source emitters can provide you with another design option that provides efficient and effective watering.