

Needham Water Conservation Program



Soil Moisture Sensor:

A soil moisture sensor (SMS) is a device people can use to measure moisture levels in soil for purposes like irrigation control. This equipment can use a number of different techniques to detect soil moisture, including measuring capacitance or impedance. SMS measure soil moisture at the root zone and regulate the existing conventional irrigation system. SMSs function similarly to rain sensors by measuring bypassing irrigation events under rainy conditions, but by measuring soil moisture at the root zone they are more effective at minimizing irrigation when plants do not need additional water.



In addition to conserving water, soil moisture sensors can also prevent issues like fertilizer runoff and will protect surrounding waterways.