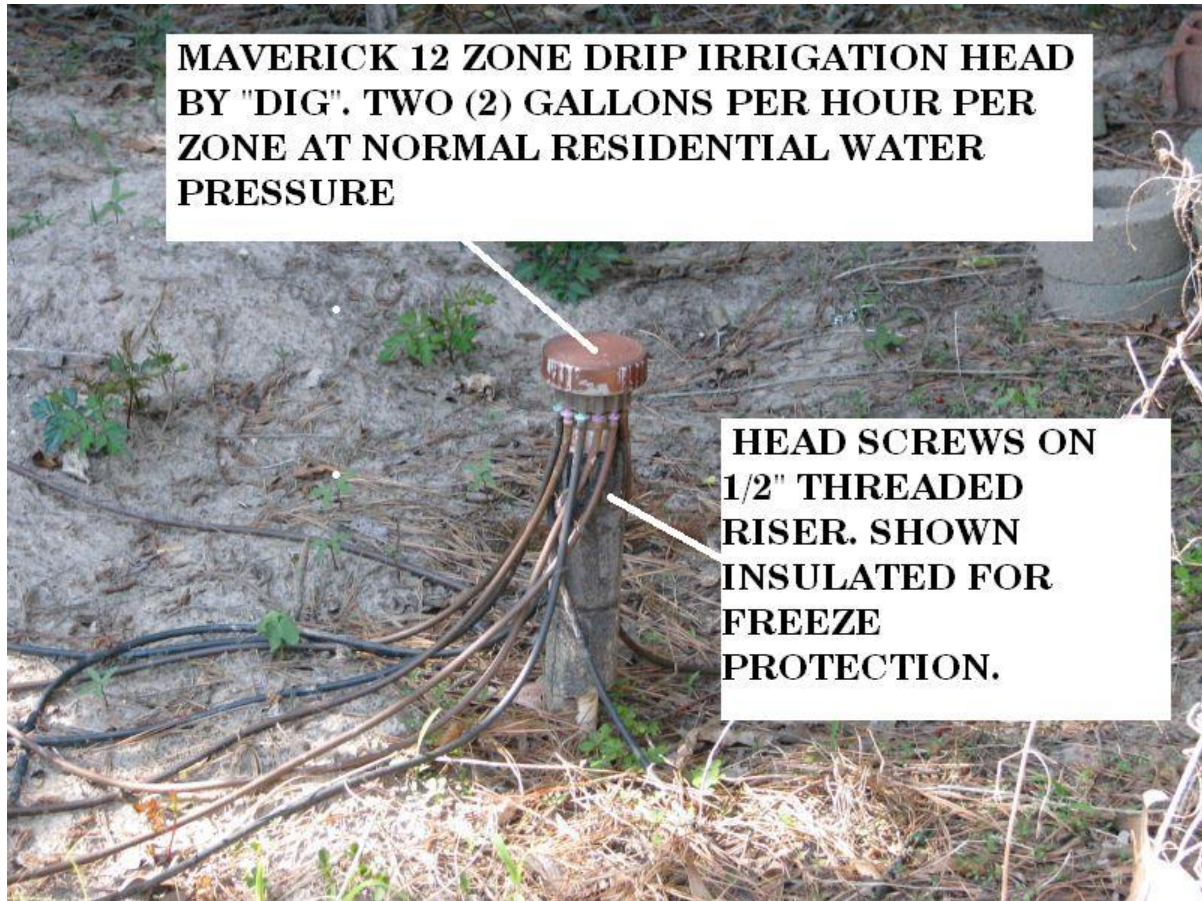


HOW YOU MAY SAVE YOURSELF MONEY AND REDUCE WATER FOR IRRIGATION – MAVERICK DRIP IRRIGATION – PART 5

The Maverick drip head is a 12 outlet distributor head which allows you to use 1/8" or 1/4" tubing to water individual plants with or without drip regulators. Rated at 2 gallons/per hour per tube at normal residential water pressure (45 psig). Available in box stores and via internet.



This unit is packaged with all you need to install, including 1/8 inch tubing. Cost is about \$20.00; however, we recommend you buy a small roll of 1/4 inch black or brown plastic tubing as it is easier to use and allows you some additional flexibility on placement of tubes (zones). We also recommend you spray paint the head after attaching to 1/2 inch riser to prevent Ultra Violet light spectrum damage to plastic head. Failure to paint may result in old faithful in your garden after about six months.

You should also buy some foam pipe insulation sleeves to insulate your riser and other PVC pipes during winter months.

This method of irrigation is recommended for individual plants and flower pots around patio and yard. It can be installed to water various bushes such as azaleas but we don't recommend it for watering large areas of shrubs and bushes. A drip system for large areas is discussed in the

conversion to soaker hose from spray head irrigation article. Another advantage to drip watering is the lack of water available to weeds which noticeably reduces the amount of weed maintenance.

Six tomato plants can be watered off one distributor head. It would take four pop up heads at 1 1/2 gallons per minute to water these plants for about 10 minutes or 60 gallons per cycle, Since about 50 % of spray head water is lost to evaporation, only 30 gallons make it to the ground and only about 20 % of this waters the tomato plants with rest going to weed watering. Estimated effective water to plant root system is $60 \times .5 \times .2 = 6$ gallons to the six plants or 1 gallon per plant.

The maverick system can deliver this 1 gallon per plant in 30 minutes or less (depends on number of tubes used and water pressure) with 100 % delivery to plant root system. No weed watering, loss to evaporation or wet plants encouraging disease, fungus, mold or insects. Savings = 56 gallons per water cycle. Estimate two water cycles per week for 4 1/3 weeks per month for three months = ~1,500 gallons saved for watering these six tomato plants. How many pot plants in your yard can benefit from this type of system?

A single Maverick distributor and 1/4 inch tubing cost about \$22.00 and it takes about 30 minutes to install on an existing 1/2 inch riser with existing sprinkler control system. Annual savings in projected 2009 water cost is approximately $\$2.68 \times .5 = \sim \4.00 . At projected cost in 2015, savings = ~ \$ 5.00 and in 2060 = ~ \$15.00. Not much but it's a start and probably conservative in savings.

Water saved = ~ 1,500 gallons per year.

In addition to tomato plants, Maverick systems automatically water pot plants and flood water an angel trumpet flowering bush. We estimate these drip systems are used for seven months out of the year and save an additional ~ 7,000 gallons of water per year.

Total savings of about **8,000 gallons per year** using the maverick systems **versus spray head irrigation**. These plants could be watered by hose and the savings would probably be about 1/3 this much. On the other hand, we have decided convenience and freedom to do something else, other than manually water plants, is worth the modest investment of an automatic system.

Thanks for your interest and consideration.

MUD 8 Directors and Operating Staff.

Data provided in this series of articles is believed to be accurate; however, MUD 8 & MUD 9 assume no responsibility for guaranteeing savings or cost projected herein. It is the responsibility of the customer to implement changes to save water and associated cost.