

The suggestion is made that we try to change our Castle Rock Water supply line from a 1.5-inch supply to a 1-inch supply. This change would be made at our water meter on Elegant St. No other changes need to be made.

There are a few concerns:

- It is unclear what the cost might be for the change.
- All our drip zones should be easily supported with this change.

Currently, our fixed costs for water supply are based on the size of our supply line. The 1.5-inch supply has fixed costs of about \$262/month, every month, winter and summer. A 1-inch supply carries a monthly fixed cost of about \$143. A change to the supply could save as much as \$1430/year, every year. It is also expected that Town water rates will continue to increase, and future savings might increase somewhat beyond that amount.

The minimum design specification for our irrigation system is the ability to supply 40 gallons per minute (gpm) at typical pressure. A 1-inch supply line will provide about half the water of a 1.5-inch line. Our irrigation system has low water demand for all the drip zones. According to the original landscape plans, all drip systems are rated for an output of 4 gpm or less. The entry on Elegant Street has sod area rated at 28 gpm (both sides of the street water at the same time), while the Dairyhide entry irrigation is rated at 22 gpm. If we reduce the size of our water supply line, we would look at removing a few sprinkler heads and reducing sod area would reduce the 28 gpm requirement.

All our irrigation zones are attached to a 2.5-inch PVC supply line that encircles the neighborhood. According to plan specification, reducing Ts tap off of the main line to feed 1-inch pipes. Each branch line first has a manual ball-valve in-line, followed by an electric valve. The ball valve should be in the "shut" position for zones that are not in use and the electronic valve should never be operated. (We originally had 46 active valves in our system; since our native grasses have been established, we now have only two sod zones, and ten drip zones.)