

The old irrigation system



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Overview:

In the December 2007 annual meeting, Fenway Garden Society President, Tim Horn, targeted three major capital improvements as part of his agenda, including revamping the crumbling irrigation system. Now, the new irrigation project is complete, and ready to hook up this spring.

With the help of a grant from the New England Grass Roots Environmental Fund, and generous member contributions, the Fenway Garden Society has completely replaced the obsolete underground cast iron irrigation water main system with a modern, modular system that will save hundreds of thousands of gallons of water and thousands of dollars in city expenses.

In addition, the FGS now has a state of the art irrigation system designed by EPA certified engineers, with all new components expected to

last 20-30 years or more, and accompanied by a 5 year warranty.

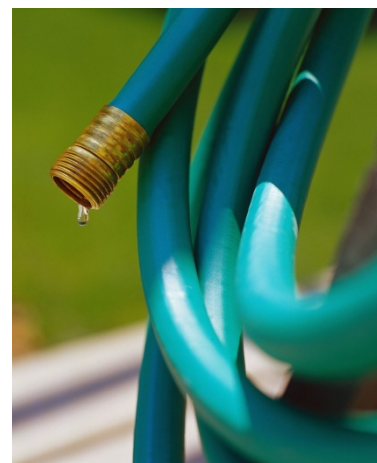
Buried well below harms way, heavy equipment is free to roam. Trash pickups, bulk order deliveries, tree trucks, and fire engines alike can drive through and will not damage the new water main system.

The new system has a box for almost every row, and every row has its own shut off valve. Each section has an isolation valve as well. This means that if there is ever a leak within one row, that row can be individually shut down while repairs are made to the 'push and clamp' black irrigation row pipes. Most rows have an extra feed in their box so gardeners in a row with a problem can use the row's spare valve, right off of the main, without hiking to the flag-pole.

Water Savings and Cost Savings:

Based on a water usage study from Boston Water and Sewer Commission meter records, taking a 3-month peak season water reading comparison from before and after the timer was installed in the gardens that shuts off all water to the leaky mains at night when the park is closed, showed a savings of 343,455 gallons. This is enough water for the average U.S. family of 4 for over 4 years.

In addition, at the municipal rate that the city pays for water usage, there was a savings to the city of Boston of \$1805.72 just during the peak months of July – September 2008 vs. 2007. Because the municipal metering rate is so much lower than residential metering rates, as a comparison the equivalent savings, had this quantity of water been conserved in a residence, would have been approximately \$6,869.



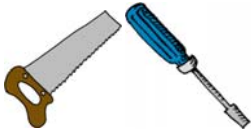
Replacing the current main line system is estimated to save approximately 200,000 gallons in lost water per season or more, or enough to meet the water needs for the average U.S. family of 4 for over 2 years. In addition, the savings to the city of Boston in water bill payments is estimated to be an additional \$1,000 per season or more. Over the coming years, the value to the city and community will grow exponentially.

Will there still be leaks?

The new system has been pressure tested and passed. It will be pressure tested and hooked up to each row in the spring. We anticipate no leaks to the new main distribution system, period. If there are leaks, engineers will repair them at first notice this spring at no cost to the FGS.

Each row fed from the main will still have the push and clamp, black irrigation pipes which can essentially be fixed by any gardener. If this black row pipe springs a leak, go to the end of the row and shut off the row valve in the green box and notify your area director or section coordinator.

To make the repair to black row pipe yourself, you need:



Tools -

1. Any saw in most cases.
2. A screw driver in all cases.

Parts –

1. Length of black pipe
2. Barbed coupling, “L” or “T” or boiler drain
3. Hose clamps

How To –

1. Shut off the row, using the valve in the green box at the end of the row.
2. Unscrew the hose clamp on each side of the bad pipe and remove black pipe from barb.
3. Cut black pipe with a hand saw if removal at join is not practical.
4. Place a hose clamp over the end of the new piece of black pipe.
5. Push black pipe over barb and tighten hose clamp.



6. Turn on water at row valve to be sure you fixed the leak.

Here is a great tip for pin-hole leaks! - All you need is “Gorilla Glue”.

1. Turn off the row valve.
2. Put a drop of Gorilla Glue on the hole.
3. Wait 2 hours - The residual water in the pipe reacts to cure the glue.
4. Turn row valve back on and confirm repair was successful.

