

System Looping Project

SIRWA is making upgrades to our current system in order to supply consistent pressure during peak water usage times.

SIRWA's piping system largely consists of tree and branch type of connections. This is where a main "trunk" of piping comes from the tower and in turn branches out into several "limbs" of service lines which are servicing hundreds of customers. These branches eventually lead to dead ends which are then flushed periodically.

Installing these small loops ties the branches back into itself. By creating these small loops within the existing tower service area gives the water an alternate (parallel) flow path to increase maximum instantaneous capacity; these are being proposed as we encounter areas of very high use in remote locations where low pressures exist. Some parts of our system, some of which were engineered over 15 years ago, have now exceeded the original growth that was expected.

There are two types of loops that SIRWA is creating in order to alleviate the pressure problems being experience at this time due to the substantial growth in different areas of our current system. One of which is an interconnection system that ties in two separate systems. One instance of this would be the Winterset Emergency Interconnect. This loop, or interconnect, was a cost shared upgrade to connect SIRWA with the City of Winterset. This interconnect will provide both systems with an available back up to avoid outages for short term situations.

Another type of loop would be created if one side of a service area grew more rapidly than an adjacent service area which is being fed from the same service tower. Connecting these two service areas would equalize the pressure between the two areas providing more adequate pressure to all customers involved. This was apparent in the service area around Hopeville. The East side of the Grand River, to the South of Hwy 34, has not grown as rapidly as the service area to the West of the Grand River. These two legs were tied together in order to supply a better rate of pressure to both areas.

There is approximately 12 to 15 miles of pipeline that will be installed in these upcoming system loops and interconnects. Currently, we are working with Garden and Associates, an Engineering firm, to determine which systems to address first. In order to install these loops our Easement Coordinator is preparing and gathering the needed easements in order to complete these upgrades.