

Where does water go?

Flush! For the vast majority of people once water has completed its intended use there is not a lot of thought given to where it goes. Most people are aware that sewer lines exist and that sewage flows with in them and they go to some type of facility to be treated. Few, however are aware that a complex system of pumps, wells, and pipes are responsible for it getting from point A to point B.

To begin, once water has gone down the drain in your home it flows by gravity to a pipe referred to as a sewer main. This pipe is larger in diameter than the line coming from your home, in most cases it is an 8" pipe. A lot of times, especially in subdivisions this pipe is located in the middle of the road. You can fairly quickly establish where a sewer line is located by looking for the manhole covers, which are spaced around 250 feet apart. These metal lids cover our access points in the sewer lines so we can locate any potential problems that may occur and fix them. Once a problem has been identified our construction department to takes the appropriate action to fix the problem.

The water continues its journey to a large pit referred to as a wet well through the sewer main, specifically through gravity lines. Gravity lines, just as the name implies rely on gravity for water to move. These pipes are designed so that water will travel a minimum of 2 ft per second to make sure the solids in water do not settle out. If water moves too slow, the solids begin to accumulate and will lead to a clog in the lines. Once in the wet well, water is retained until it reaches a certain height. The level the water must reach before a pump turns on is determined by a float. Once the float is triggered the water is pumped to the next wet well located closer to the wastewater plant through a pipe called a force main. If the level in the well continues to rise even after the first pump has turned on, a second float is triggered causing an additional pump will turn on to help bring the level down. In some cases, there is even a third pump for emergency situations. At some point or another you may have seen one of our pump stations. Most are set off the road and surrounded with chain-link fences with our logo on the front, some also have a masonry building in the middle. Most of these stations also have a large generator next to them for emergency power backup. A pump station consists of at least one wet well, a generator, and two to three pumps.

This system of using gravity and pumps working in conjunction to move wastewater is called a collection system. From this point water flows to the wastewater plant.