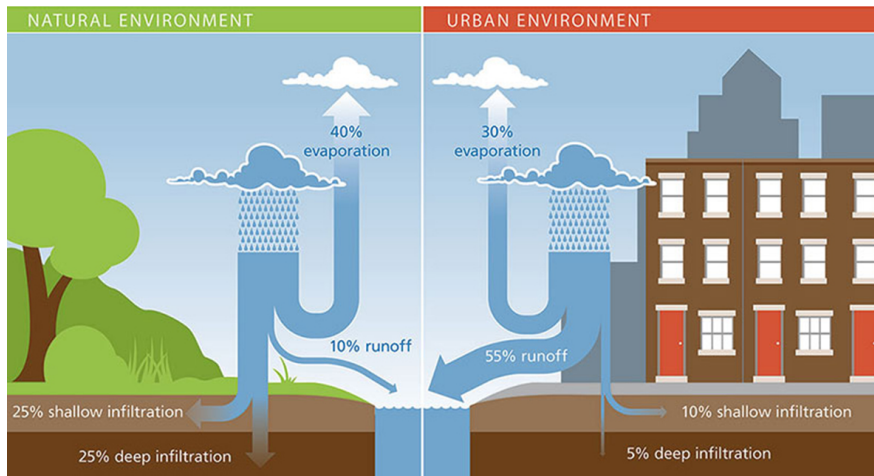


# Orem's Storm Water System

The City of Orem at one time was full of orchards, farmland, and some dirt roads. As the City has developed we now have a network of public streets, businesses, and pointedly a huge increase in



hard surfaces. Where rain could once fall and infiltrate into soils, we now have impervious surfaces and rain water or “run-off” flows on top of these surfaces. That water needs to go somewhere in order to protect infrastructure and buildings all over Orem.

This is where a storm water system comes into play. A storm water system is a network of drains, pipes,

and holding areas strategically placed all around an area to help channel, utilize, and treat storm water. For Orem, this storm system is separate from any sewer infrastructure and does not receive the same extensive treatment before being discharged into the ground or other bodies of water. Through the storm water system we can directly or indirectly discharge storm water into water bodies such as the Provo River or Utah Lake.

For discharging into the ground, certain soil conditions need to be present to allow quick movement of water (percolation) through soils. Orem's rocky soils that make excavation a hassle, are fortunately a huge asset for storm water management. Rocky soils are ideal for high percolation rates and the City employs a structure called a *sump* or *dry well* all over the city. Pictured to the right is an image of a sump, the sump is buried underground with a gravel envelope around it to increase water holding capacity as well as increase the rate of water discharge into the soil. These structures save space and mimic pre-development conditions in which water stays on site and does not run off. This preserves natural groundwater levels as well as balances the historic water movement in the area. Another benefit is the decreased reliance on pipe systems to transport water off site which ends up being a large cost savings to anyone who is able to utilize sumps in Orem.



Other structures are also utilized to effectively manage storm water volumes and quality. The WaterWatch February edition goes into why we have storm water catch basins in public areas such as parks. For more information about Orem's storm water system and storm water management please visit [stormwater.orem.org](http://stormwater.orem.org).