



What to do about....

Dry Well Drainage Projects

When looking for solutions for a backyard drainage problem, a dry well often comes to mind because it can be created on one's own property with relatively easy installation. There are a few problems to be aware of when considering this option. First and most importantly, how efficiently a dry well will work depends on the type of soil it will be put in. In many areas of Marion County there are soil types that have a high clay content, are poorly drained, and/or have a seasonally high groundwater table which would not allow the surface water to drain down into the soil.

You can find general soils information by using the USDA Web Soil Survey. Soil types that are well-drained, have gravelly sand to sand in the lower horizon, and have a moderately high to high capacity of the most limiting layer to transmit water, will work best for dry wells. While the soil survey gives us a good idea of what soil types may be found, it may not be completely accurate on a small scale such as a regular neighborhood lot. It is always best to dig a test hole to make sure your soil is suitable for a dry well.

Surface water draining to a dry well will drain quickly into groundwater which could contaminate it with lawn chemicals, automobile fluids, and other pollutants so plan their location accordingly. Don't use lawn chemicals on the surrounding lawn and be sure that driveways or alleyways will not drain into it. Dry wells should be located at least 10 feet away from the house foundation and preferably away from property lines.

Check for underground utilities by calling 811 at least 2 full days before you dig. If underground utilities are nearby choose another location.

There are a few different ways to create a dry well, from simply digging a deep hole and filling it with pea gravel to using landscape fabric and a bottomless, perforated dry well barrel with stone surrounding it. You can find these barrels at your local hardware store or online. Be sure to dig your pit deep enough to get into the sand/gravel horizon. An overflow emitter can be added to the dry well barrel. Determine the dry well size (or multiple dry wells) needed by calculating the drainage area and amount of runoff for at least a typical 1" storm. Then calculate the volume. For a 1" storm: $\text{TOTAL DRAINAGE AREA (ft}^2\text{)} \div 12 = \text{STORMWATER VOLUME (ft}^3\text{)}$ Many of the dry well tanks will hold 50 gallons (6.68 ft³).

Contact the Marion County SWCD for more information – <https://marionswcd.org/contact/> or call 317-786-1776.

**For more information contact the Marion County Soil & Water Conservation District
(317)786-1776 www.marionswcd.org**