

Simple Solutions

Rainwater collects on land because of soil types, location, and upstream issues. For many drainage problems that do not threaten a structure there may be some alternatives to more costly engineering solutions. These alternatives reduce the amount of stormwater going to streams as well. In the future these options will become more popular as we are forced to decrease runoff to downstream areas. Below are some practical and natural options for eliminating extra water. Possible solutions vary from property to property and with landowners' expectations.

Plant trees tolerant of wet soils in wet spots.

Trees can reduce the amount of water running into streams or puddling in wet spots. For example, a mature oak tree can take up about 300 gallons of water a day during the growing season. Additional rainfall is retained on the leaf surface and evaporates before it can even reach the ground. The right trees need to be planted in the right spots. Contact OSU Extension or a local nursery to find out what trees like or tolerate wet soils.





Encourage water-tolerant species.

If grass is not growing in wet spots on your lawn, consider planting water-tolerant species, such as amaranthus and bulrush. This will reduce lawn maintenance cost and attract wildlife. For information you can contact OSU Extension or a local nursery for the right plants. Check with Ohio Department of Natural Resources Division of Natural Areas and Preserves for the most up to date information on native and invasive plants. A small depression or swale may give you the opportunity to install a mini-wetland. If the area is 20,000 square feet or more you may be eligible for design assistance from our office.

Cisterns.

These are containers used to trap water from rooftops. Historically they were used for bath and washing waters, but you could use them to water your garden in times of dry weather. Cisterns come in a variety of forms from barrels to plastic containers to the traditional underground concrete tanks, and are beginning to become more popular. To find out more about cisterns look in the gardening and agricultural sections of a library or bookstore. Concrete manufacturers carry pre-cast cisterns for underground installation.





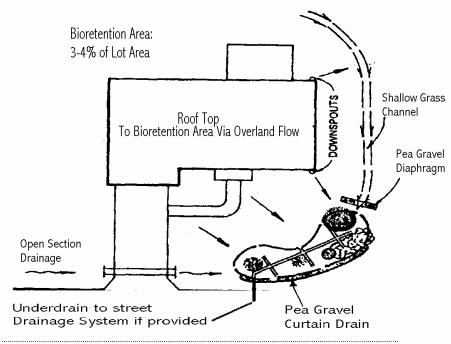
Make a Natural Water Feature.

If there is a wet spot in your yard consider creating a water feature. Consult with a local nursery, landscaper, library, or Franklin Soil and Water Conservation District for this information.

Keep Structures out of Flood Zones.

Many people build on areas known as floodplains (the first place water goes when a stream floods) and 100 year flood plains (a storm event that has a 1% chance of happening ever year) not realizing the danger these structures are in. With the increase of impervious surfaces like blacktop and concrete these floodplains now have a higher than 1% chance of being flooded every year. There are programs available to officially set up protection in these areas such as conservation easements that have potential tax benefits. Call the District for more information.

Residential On-lot Bioretention Area



Residential Street

Divert Downspouts.

Water from gutters is often diverted down a driveway or a spot near the corner of a house. You need to make sure these are directed away from the foundation of your house. Instead of running it to the nearest storm sewer, a stormwater garden, or bioretention area, can be constructed; see figure above. A stormwater garden functions by directing your downspouts downhill to a shallow grass channel or ditch, then to a collection of contained pea gravel meant to slow down and spread out the water into the garden. Once in the garden, the plants uptake the retained water filter out pollutants. These areas can be an attractive feature while protecting stream water quality. Check out the "Better Site Design" handbook, available through the Center for Watershed Protection website www.cwp.org.

References and Resources:

Picture taken from <u>Better Site Design: A Handbook for Changing Development Rules in Your Community</u>, Center for Watershed Protection, August 1998, which was captioned from <u>Design of Stormwater Filtering Systems</u>, Claytor and Schueler, 1996.

OSU Extension, web site: ohioline.ag.ohio-state.edu or call 462-6700. Others are previously listed in the brochure.

The Franklin SWCD and NRCS Field Office strive to serve all people equally.

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