July 2014 UPDATE FROM THE ASSOCIATION
OF ILLINOIS SOIL & WATER
CONSERVATION DISTRICTS

PROTECT & CONSERVE

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Rain — Enough Can Sometimes Be Too Much

Throughout most of Illinois, this spring, with the exception of 2012, has been typical of the past several years. In March, April and May when farmers are trying to get their crops planted and urban gardeners are caring for their perennials and planting new annuals, we have too much rainfall. Then in mid to late summer, it seems that we have too little rainfall.

The abundant rain in the spring does help plants get up and going in a hurry if farmers and gardeners can get them planted.

The abundant rainfall keeps ground water levels high and the plants have all of the soil moisture they need. Unfortunately, during excessive rainfall periods there is often too much groundwater and the levels are often at or near the surface. That condition will cause plants to develop shallow roots. Roots need pore space in the soil. The minute pore spaces allow air to circulate thereby supporting aerobic bacteria which break down nutrients for the plants to use as food.

When soil moisture levels are high, plant roots tend to spread out more and stay near the surface to avoid saturated conditions. Then, when soil moisture levels drop during dry periods, the roots are left in dry soil and the plant suffers and may even die.

To help overcome the problem of too much or too little soil moisture, urban gardeners often use mulch. The mulch allows rainfall to infiltrate slowly during wet periods and helps keep the soil from drying out during dry periods.

Soil and water conservation districts can assist farmers with conservation practices that will help perform this same function. Mulch till and no-till are two practices that help maintain more consistent soil moisture levels for field crops. Both practices leave residue from the previous crop on the soil surface to intercept rain drops before they can hit the soil surface and break loose soil particles that are then washed off the field with the stormwater runoff. These practices hold the water on the field longer which allows it to slowly infiltrate the soil making abundant moisture available for crop production in the spring. In addition, these practices help the soil retain soil moisture for longer periods during dry weather conditions that often occur later in the

A new practice that is gaining popularity with farmers is Drainage Water Management (DWM). DWM requires the installation of subsurface drainage systems which collect surplus water in the soil and provide a means of lowering the water table by draining of the excess water from the field. Crop roots can then grow deeper into the soil and take advantage of nutrients at deeper levels. During dry periods the drainage system can be "shut off" so that ground water will stay for longer periods in the soil profile to retain nutrients and moisture to keep crops growing and healthy.

Surface and subsurface water management practices are among the many tools that the SWCDs employ to help protect Illinois' natural resources and keep our state among the top producing areas of the world.

Soil & Water Conservation Districts (SWCDs)

There are 97 soil and water conservation districts making a difference in your community. No matter how big or small, each of the 102 counties has the services of a SWCD. From educating homeowners on practical utilization of water to helping rural landowners save soil and improve water quality; it takes everyone working together to protect our soil and water! Without these vital resources our communities cannot thrive!



We Need Your Help

SWCDs are an important link to deliver state and federal source programs and funds that directly benefit the local and state economy. The economic benefit the SWCDs provide is far greater than the amount of money that is appropriated for their use by the General Assembly.

Please support legislation that includes increased funding for the SWCDs.

Soil and Water Conservation **Districts Provide** Many Kinds of Services and Assistance.

- The 97 SWCDs are continually involved in implementing the most up-to -date conservation practices to maximize use of available resources while also protecting these essential environmental resources.
- SWCDs provide educational assistance to urban and rural decision makers so that they can make wise choices that will protect people and property in the future
- Through education and the various programs thev administer, and the technical assistance they provide, SWCD's encourage the protection, conservation and wise use of our environmental resources to assure sustainability for future generations.



NOTE: SWCDs DO NOT have taxing authority and must rely on state source funding to employ staff to administer programs.

The Governor's 2015 budget provides level funding for the SWCDs. Your support in maintaining the Governor's recommended appropriation as a minimum is appreciated.

THANK YOU!

PROTECT & CONSERVE

While it is unlikely that flooding from excessive rainfall will ever be able to be stopped, Illinois Soil and Water conservation Districts do have tools available to reduce the severity of many flood events. These pictures taken at various locations throughout Illinois show damages that perhaps could have been minimized or in some cases, even eliminated with the implementation of conservation practices that also help retain rain fall on site and reduce the amount of runoff that ultimately creates flooding conditions.

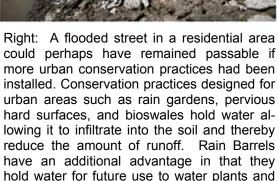


Left: The flooding in this corn field could perhaps have been reduced or eliminated with the installation of a grassed waterway and by utilizing such conservation practices as no -till or cover crops, both of which help the raindrops infiltrate the soil where they land so they don't become stormwater runoff.

Right: A severely eroded field is most likely the result of heavy tillage in the spring prior to planting. The field is adjacent to a stream that overflowed, flooding and scouring off the topsoil from the field. No-till, mulch till, cover crops, grassed waterways and filter strips alone or in combination might have saved this field.



Left: The road has been destroyed by overland flooding resulting from stormwater runoff from impervious and unprotected surfaces. Conservation practices applied to agricultural lands and in urban areas could perhaps have reduced the amount of runoff sufficiently that existing ditches and stormwater conveyances could have saved the road.





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