

Soil & Water Conservation Districts (SWCDs)

There are 98 soil and water conservation districts making a difference in your community. No matter how big or small each of the 102 counties is represented equally. 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 could not thrive!



Illinois' Soil and Water Conservation Districts held their 63rd Annual Meeting July 25-27 and took the time to examine and evaluate their programs, structure, and funding needs. While the results are not yet compiled it is clear that the SWCDs have already cut staff to the extent possible while attempting to maintain services to Illinois' citizens. Any further reductions in staff or funding will result in the loss of programs and the state and federal dollars that fund them.



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Water- Too Much, Too Little

2011 in most of Illinois has been typical of the past four years. In March, April and early 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 spaces allow air to circulate and support 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 some of these problems of

too much or too little soil moisture, urban gardeners often use mulch. The mulch will allow rainfall to infiltrate slowly during wet periods and help 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 instead allow water to slowly infiltrate the soil making abundant moisture available for crop production in the spring and helping retain soil moisture during dry periods that often occur later in the year.

Water management is just one of the many practices that the SWCDs employ to help protect Illinois' natural resources and keep our state among the top producing areas of the world.

Fact: From start to finish it takes SWCD personnel 15 to 20 hours to delineate, design and approve the average soil conserving or water quality improvement practice.



Soil and Water Conservation Districts Work with Landowners as Individuals or as Groups to Solve Often Complex Natural Resource Protection Issues and Problems

- The ability to bring mutual interests together to address local problems is an advantage that the SWCDs have capitalized on for many years.
- Districts have the advantage of being able to use federal funds to augment state cost share funded projects. Federal funds can often be used to help provide complementary practices such as habitat improvement.
- In FY07 SWCDs leveraged \$44.15 million in federal and other funding to assist with water quality issues. In FY10 SWCDs were able to garner just \$6.37 million due to the loss of experienced staff.



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

The \$10 million line in SB0744 will allow SWCDs to be funded at a sustainable level for the first time in 74 years.

PROTECT & CONSERVE

Districts' Spotlight

Tazewell County SWCD:

A stream-bank protection project was constructed along Mud Creek in Tazewell County. 600 feet of bank was protected using the combination of stone toe protection and two rock riffle structures. Peaked stone riprap is a continuous stone dike placed along the toe of the bank. Rock riffle structures are low-head weir structures constructed over the



Rock riffles stabilizing the streambed.

streambed from bank-to bank. Constructed rock riffles are used to stabilize the streambed where down cutting erosion is occurring. The riffles often create small pools and help oxygenate the water which improves habitat for fish and other aquatic animals.



The streambank to be protected is generally left in its natural state.

Peaked stone riprap provides erosion protection.



The Block Chute is used to stabilize grade separation.

Ford County SWCD:

The soil and water conservation district worked with two owners to construct the 5,200 foot waterway. The district used \$22,900 of Partners for Conservation cost share funds to provide 60% of the total cost. The landowners paid an additional \$9,180 making the project's total cost more than \$32,000. The Waterway will control runoff from 420 acres and will reduce erosion by 1,340 tons per year for the expected 20 year life of the practice. Contractors used 2,090 concrete blocks to construct the Block Chute structure which will provide a safe way for the runoff to reach the lower elevation of the outlet.



Right: A heavy rain that fell shortly before the block structure area was seeded caused little damage.

Left: Some of the 2090 concrete blocks used for the grade stabilizing block chute.



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YOUR LAND, YOUR WATER, YOUR ILLINOIS

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