Editors Contact: Lynn Laws
515-244-1194, x210
Cell: 515-490-1428
lynnlaws@iaenvironment.org

FOR IMMEDIATE RELEASE
April 13, 2011

New Report: Iowa Losing Topsoil at Alarming Rate

A new report, which includes video images, shows that across wide swaths of Iowa our rich, dark agricultural soil is being swept away at alarming rates, which in some areas are 12 times higher than average soil loss estimates from national studies conducted by the U.S. Department of Agriculture's Natural Resource Conservation Service.

The new report, *Losing Ground*, released today by Environmental Working Group (EWG), is based on data collected and assessed by Iowa State University scientists, who have been tracking soil erosion in Iowa after every rainstorm that hits the state, a method that produces an unprecedented degree of precision in soil erosion estimates.

A USDA national study reported that erosion in Iowa in 2007 *averaged* 5.2 tons per acre per year, only slightly higher than the national "tolerable loss" rate of five tons per acre per year for most Iowa soils. But the USDA report does not consider the effect of extreme rainfall events that cause most erosion.

In May 2010, EWG, a nonprofit research organization based in Washington, DC, set out to corroborate the ISU scientist's alarming findings with aerial surveys over Marshall County in Iowa. They found that soil erosion and runoff are likely far worse than even the ISU studies report, because researchers' current models do not account for the soil loss from widespread 'ephemeral gullies.' These gullies are created by heavy rains and form in the same place every year, and are simply "plowed in" by farmers each season.

As shown in the report's video images many gullies empty directly into streams or ditches, becoming direct pipelines carrying polluted runoff to waterways.

Polluted runoff from crop fields is one of the leading causes of water pollution in Iowa and the nation. Farm runoff carries with it a stew of fertilizers, pesticides and sometimes bacteria (*E. coli*) from livestock manure that pollutes local creeks and streams and eventually flows into the Mississippi river. Ultimately it ends up in the Gulf of Mexico, generating the notorious Dead Zone that forms each year, depleting oxygen and suffocating marine life.

Voluntary conservation measures not working

Provisions in the 1985 farm bill require farmers who accept crop subsidies to implement soil conservation measures on their most vulnerable cropland, but official reports and anecdotal evidence show that enforcement has waned. According to the EWG report, "chronically underfunded voluntary conservation programs are failing."

While conservation compliance reduced soil erosion on highly erodible cropland by 40 percent between 1982 and 1997, those gains were short-lived.

"Enforcement of conservation requirements were weakened and in 1996 went off the rails altogether" when Congress began phasing out enforcement of conservation requirements. The few federal conservation programs in place are chronically underfunded and inadequate to counter the damage caused by federal policies that push farmers to plant their crops fencerow to fencerow," the report said.

The report stresses the need to go back to what we know what works—full enforcement of the 1985 conservation compliance law, which requires farmers to protect soil and water in return for the billions in income, production and insurance subsidies that taxpayers put up each year.

Paul W. Johnson, an Iowa farmer and former Chief of U.S. Department of Agriculture, Natural Resource Conservation Service provided some comments for the EWG report, lamenting that…

> "…the age-old problem of poor farming persists. Drive down any back road in Iowa today and chances are good that within a few miles you'll see some of the finest conservation and then some of the worst… We are conservation planning for averages, not extremes. But nature doesn't seem to work that way… One of the saddest sights I've seen was during springtime in southeastern Iowa a couple of years ago. Field after field had dozers working up and down hills to fill in the deep gullies formed by the unusually hard spring rains. Last year, I drove through the same area and saw precious few well-constructed waterways [a conservation practice that slows runoff]. It's as if the farmers have decided that their one-in-a-hundred-year flood was past and they don't have to worry for another 99 years…
>
> Frankly, I don't think our soil erosion problems need to be what they are. Many farmers do well but are not praised for it. On the other hand, the careless ones and those who might be termed outright vandals no longer get their knuckles rapped… Our compliance laws can still work, too, but they need to be universal—applied to all cropland—and enforced."

Simple, proven practices recommended

The EWG report does not suggest that farmers try new or untested technologies. Rather, it demonstrates that it's important to return to and enforce simple common-sense conservation techniques that have worked for farmers for generations.

One simple and highly effective soil conservation technique is the use of buffers—strips of grass or trees within or along the edges of crop fields. Studies have found that properly designed and placed buffers reduce the speed and volume of runoff, trapping or assimilating 41 to 100 percent of the sediment runoff. Specifically designed buffers within crop fields, often referred to as grass waterways, are a proven conservation practice to prevent gullies from forming by slowing the water and stopping the water from cutting down into the field and eroding away the soil. Riparian stream buffers between crop fields and waterways are the last line of defense filtering pollutants before water runs into a stream or river.

Because these practices are a high priority to control erosion and protect water quality, financial assistance from USDA to help farmers install riparian stream buffers, grass filter strips and grass waterways is readily available through the continuous signup Conservation Reserve Program.

Iowa's most precious asset is its rich topsoil. This study demonstrates that one badly timed storm event, when the land is bare and vulnerable, can sweep tons of topsoil off of the landscape

and into our waterways. Over time this process robs our land of its fertility at rates that exceed its capacity to regenerate and will ultimately leave it barren.

“When Iowa “loses ground” everyone loses—farmers, all Iowans, people who live downstream and people who depend on Iowa for food,” said Marian Riggs Gelb, executive director for the Iowa Environmental Council.

###