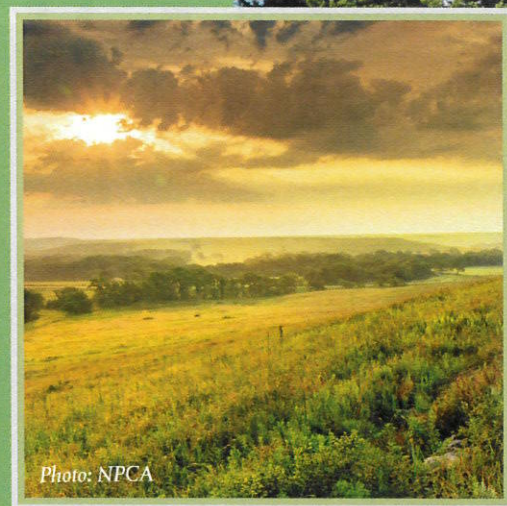


From tallgrass prairie and wetlands, to row crops and subdivisions

When it rained on the tallgrass prairies that once covered Iowa, most of the rain soaked into the soil creating little runoff. Streams were fed by cool, clean groundwater. Soil had high organic matter content and pore space. This acted as a sponge to hold water and make it readily available to plants. Wetlands provided natural buffers, purified and stored water, and provided wildlife habitat.

Now, the majority of the natural landscape in Iowa has been converted to row crop agriculture. Elsewhere, cities have created hundreds of square miles of impervious surfaces through streets, driveways, and heavily compacted lawns. These changes have caused water quality issues in our streams and lakes. Flooding in these areas causes devastating damage to crops, homes, and other structures.



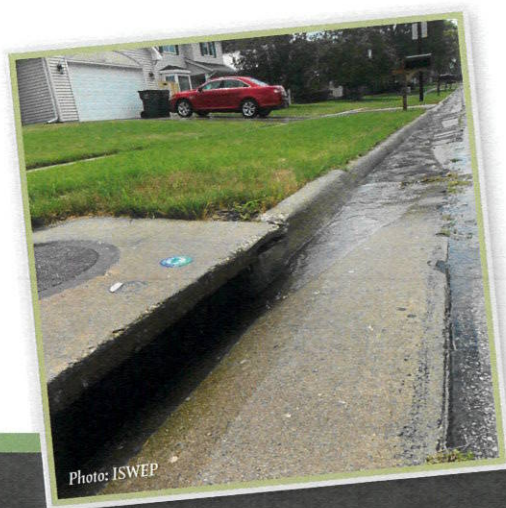
Flooding and stormwater pollution are urban and rural issues.

Watershed Management

Urban Concerns

When it rains water can't soak into impervious surfaces such as buildings, streets, sidewalks and parking lots. The stormwater runoff generated from these surfaces travels over landscapes and into storm sewers that are connected to an underground pipe system. The concern with impervious surfaces and stormwater is the amount of runoff generated during a rainfall event and speed at which it reaches local streams. This can cause local flash flooding and streambank and channel instability.

As stormwater moves across urban surfaces it collects pollutants. Some of these include vehicle fluids, pet waste, and excess fertilizers. Unlike wastewater, stormwater is not treated and is released directly to local waterways.



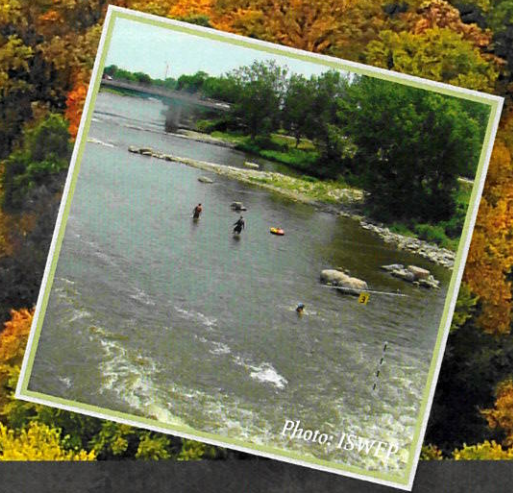
Turf grass makes up a significant amount of land in residential areas. While green grass may appear natural, subsurface soils are typically heavily compacted and lacking in organic matter. This means more water and fertilizer are needed to sustain the turf. Urban soils are increasingly unable to soak up rainfall, resulting in more stormwater runoff.

Agricultural Concerns

Agricultural production has created a heavily altered landscape. Similar to urban development, drainage management in rural areas seeks to move water off the landscape quickly. Extensive underground drainage systems effectively drain the soil. However, they contribute to increases in stream discharge and peak flows that causes localized flooding.

Learn More: [V](#)

Watersheds Need Our Protection



All land sheds to water

Everyone lives in a watershed. A watershed is the area of land that drains, or "sheds" rainwater to a stream, river, or lake. Watersheds can be as small as an area that discharges to a grassed waterway on a farm to as large as an entire region like the Mississippi River Basin.

Watersheds do not follow traditional boundaries, like cities or counties. Thinking on a watershed scale enables us to understand that water issues are solved across jurisdictions. Protecting and improving our water resources is vital to ensuring Iowa's future generations can enjoy the benefits of clean streams and lakes and minimized flood risks.

Photo: Emily Martin

**Iowa is bordered by two great rivers, the Mississippi and the Missouri.
Rivers are part of Iowa's heritage, and they deserve protection.**