



Map Data Source: Iowa Department of Natural Resources, "Natural Resources Geographic Information Systems Library," accessed January 2015, <https://programs.iowadnr.gov/nrgislibx/>

### Regional Watersheds

Watersheds are expanses of landscape that are confined by the slope and elevation of the terrain. When in plan view, watershed boundaries show the extent of a drainage area that is flowing to a single outlet. The watershed boundary is defined by the highest ridgelines circling around to the outlet where water flows out of the watershed. The boundary determines whether precipitation is directed into one watershed or an adjacent watershed. It is important to consider scale when identifying and defining watersheds because they are nested features that can be examined at many scales. For example, many sub-watersheds that are smaller than a city block fit together like puzzle pieces to make a watershed encompassing an entire city or more. This puzzle hierarchy builds upward to watersheds that cover thousands of miles, such as the Mississippi River watershed.

Where a community lies within its watershed determines what capacity it has to manage large watershed issues. For example, a community located in a lowland floodplain will have little capacity to reduce the amount of water draining toward it from upland areas. That said, communities always have the power to reduce their contribution to the total runoff production for the watershed.

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## Regional Watersheds & Drainage Patterns

Iowa State University: Julia Badenhope, Sandra Oberbroeckling, Colby Fangman, Miao Fangzhou, Anh Le, Jessica Adiwijaya

Iowa Department of Transportation   Trees Forever   ISU Landscape Architecture Extension   ISU Extension Community and Economic Development