

# Mud, Camp & Spring Creek

MUD | CAMP | SPRING  
**CREEK**  
watershed

## Watershed Characteristics

The Camp, Mud, and Spring Creek Watersheds are located for the most part in the eastern part of Polk County. They also extend into western Jasper and northwest Marion Counties. Characteristics of each watershed are outlined below:

|              | HUC | Drainage Area (AC) | % Rural | %Urban |
|--------------|-----|--------------------|---------|--------|
| Camp Creek   | 12  | 26,063             | 97%     | 3%     |
| Mud Creek    | 12  | 27,350             | 92%     | 8%     |
| Spring Creek | 12  | 11,049             | 86%     | 14%    |
| Totals       |     | 64,462             | 93%     | 7%     |

Urbanization is occurring at a rapid rate, particularly in the Mud and Spring Creek Watersheds, which increases the stormwater runoff and its accompanying pollutants. Flooding, nutrient pollution, and stream bank erosion are the primary concerns in the watershed.

## Watershed Management Authority

The Mud, Camp, and Spring Creek Watershed Management Authority was formed in January 2014 and is made up of the jurisdictions of Polk County, Jasper County, Marion County, City of Altoona, City of Bondurant, City of Pleasant Hill, City of Mitchellville, City of Runnells, Polk SWCD, Marion SWCD, and Jasper SWCD. **This includes 100% of the jurisdictions eligible for the Watershed Management Authority.**

## Summary Of Previous Watershed Activities

An extensive amount of investigations have been completed in these watersheds. These include the following items:

- Mud Creek Drainage Study, 2008
- Altoona Storm Water Quality, 2010
- Camp Creek Land Use Map, 2012
- Spring Creek Land Use Map, 2012
- Mud Creek Land Use Map, 2013
- Mud Creek RASCAL Assessment, 2013
- Camp Creek RASCAL Assessment, 2013
- Mud Creek Watershed Study, 2013
- Mud Camp Spring Creek Watershed Management Authority, 2013-2014
- Mud, Camp, Spring Creek Observed Land Cover, 2014
- Mud, Camp, Spring Creek Sediment Delivery, 2014
- Mud, Camp, Spring Creek Sheet and Rill Erosion, 2014

The most recent work included the mapping of land cover during the 2014 growing season. This information was used to determine sheet and rill erosion and sediment delivery rates for all three watersheds.

|              | Soil Loss - Average Total Sheet & Rill Erosion (t/y) | Sediment Delivery - Average Total Sheet & Rill Erosion (t/y) | Sediment Delivery Ratio (%) |
|--------------|--|--|-----------------------------|
| Camp Creek   | 92,353   | 13,855   | 17.7%                       |
| Mud Creek    | 68,628   | 8,573  | 14.1%                       |
| Spring Creek | 19,896   | 3,373  | 19.9%                       |
| Totals       | 180,877  | 25,801   |                             |

The MCSC WMA applied for a Watershed Planning Grant from the Iowa DNR in the fall of 2014. This application was successful and the WMA has completed consultant selection and is getting the planning process underway.





