A vision for a more resilient Iowa

The Iowa Watershed Approach

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- Corn (40.7% - 45.6%)
- Soybeans (31.9% - 27.0%)
- Grassland/Pasture (10.2% - 12.4%)
- Developed/Open Space (6.0% - 5.8%)
- Deciduous Forest (2.7% - 2.5%)
- Developed/Low Intensity (3.1% - 1.7%)
- Woody Wetlands (1.9% - 1.3%)
- Open Water (0.6% - 0.9%)
- Other (2.8% - 2.9%)
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Surface Elevation (feet)
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Map showing different areas and cities such as Winnebago, Shell Rock, Upper Cedar, Mason City, West Fork Cedar, Waterloo, Middle Cedar, and Cedar Rapids.
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[Image of a map showing river systems and cities in Iowa, labeled with cities including Winnebago, Shell Rock, Upper Cedar, Mason City, Waterloo, West Fork Cedar, and Middle Cedar.]

[Graph (a) showing rainfall (inches) from 1903 to 2015 for the Cedar River upstream of CR, with data points indicating variability over time.]

[Bubble graph (b) showing streamflow relative to rain for the Cedar River at Cedar Rapids from 1903 to 2015, with data points forming a trend line.]

[Bubble graph (c) showing baseflow relative to streamflow for the Cedar River at CR from 1903 to 2015, with data points forming a trend line.]

[Logos for IHR Hydroscience & Engineering and Iowa Flood Center at the bottom right.]
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**Historic Crests, Cedar River at Cedar Rapids. Major Flood Stage = 16 ft**

- 31.12 ft on 06/13/2008
- 21.95 ft on 09/27/2016
- 18.30 ft on 05/27/2004
- 18.23 ft on 06/02/2013
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- Beaver Creek at New Hartford
- Waterloo
- Cedar Rapids

NEXRAD Grid

0 10 20 Miles
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[Graph showing streamflow comparison over time for Cedar River at Cedar Rapids and Beaver Creek at New Hartford]
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Preliminary results
Iowa Geological Survey is mapping two quads in the Vinton area

- Surficial geology and bedrock
- Drilling boreholes to characterize shallow sediments
- Logging and mapping bedrock stratigraphic units
- Developing maps and GIS coverages of geologic units, bedrock surface and depth, groundwater vulnerability for the region

- What geologic/hydrogeologic issues are of concern in the Vinton area that can be addressed during the mapping period?
- Are landowners willing/interested in having a shallow test hole or well installed on their land?
- Geologic mapping can inform groundwater availability, aquifer vulnerabilities, land use planning, BMP placement and design criteria, etc.
Vinton and Center Point
NW 7.5' Quadrangles

Surficial Geology
- alluvium
- bedrock
- loamy sediments
- loess
- peat
- sand and gravel
- thin alluvium
- water
- windblown sand
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