A vision for a more resilient Iowa

The Iowa Watershed Approach

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The Iowa Watershed Approach
How can I partner with the WMAs?

How will we be updated on projects?

How will the built projects be monitored?

Will the PowerPoint from the meeting be made available on the watershed website?
Welcome!

The Iowa Watershed Approach:
Reducing Flooding and Advancing Water Quality

HUD Disaster Resilience Grant to Iowa: $96.0 million
The Iowa Watershed Approach (IWA) is a vision for Iowa’s future that voluntarily engages stakeholders throughout the watershed to achieve common goals, while moving toward a more resilient state.

Nine Participating Watersheds:
- Clear Creek Watershed
- Dubuque/Bea Branch Watershed
- East Nishnabotna Watershed
- English River Watershed
- Middle Cedar Watershed
- North Raccoon Watershed
- Upper Iowa Watershed
- Upper Wapsipinicon Watershed
- West Nishnabotna Watershed

http://www.iihr.uiowa.edu/iwa/
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Next steps

- Qtr. 4 2016 – Flood resilience program overview
- Qtr. 1 2017 – Hydrologic assessment update & sensor deployments
- Qtr. 2 2017 – Flood resilience program update
- Qtr. 3 2017 – Draft of hydrologic assessment
- Qtr. 4 2017 – Hydrologic assessment complete
Flooding trends In Iowa and across the Midwest

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Trends in floods and heavy rainfall events
Trends show more floods in recent decades
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Trends show more frequent floods and heavy rainfall

- Increased flooding
- Increased heavy rainfall
Conclusions

• An increase in frequency, not magnitude, of flood events is detectable from observational records.

• Similar results are found when analyzing discharge and rainfall.

• However, directly attributing changes in discharge, precipitation, and temperature to human impacts on climate is very challenging to do using only observational records.
Physically-based Modelling
Monitoring
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Monitoring

WATER QUALITY GAUGE

City, State: Cedar Rapids, IA
River: McLeod Run
Station ID: WQS0052
Drainage Area: 1 sq mi
Last Reported: Thu, Oct 27, 2016 09:00 am
Last Reading: 2.0 mg/L
Variables: Nitrate + Nitrite as N

IFC STREAM GAUGE

City: Cedar Rapids
River: Dry Creek
Station ID: DRYCRK01 (IFC)
Sensor Elevation: 824 ft 8 in
Forecast: Experimental IFC Model
Last Reported: Thu, October 27, 2016 9:00 am
Last Reading: 811 ft 1 in

Nitrate + Nitrite as N (mg/L)

Clear | Clear | Mostly Cloudy | Rain | Cloudy | Partly Cloudy

Sat, Oct 22 | Sun, Oct 23 | Mon, Oct 24 | Tue, Oct 25 | Yesterday | Today

Solar
Water Stage: 82

Action Level: 81.2 ft
Flood Level: 81.3 ft
Moderate Level: 81.7 ft
Major Level: 82.0 ft
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Existing BMPs
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Existing BMPs

- Water and Sediment Control Basin
- Terrace
- Pond Dam
- Stripcropping
- Contour Buffer Strips
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Agricultural Conservation Planning Framework: Staff Creek Watershed

Conservation Practices:
- Drainage Water Management
- Grassed Waterways
- Buffer Strips
- Water and Sediment Control Basins (WASCOBs)
- Nutrient Removal Wetlands
- Saturated Buffers

Further Information:
http://northcentralwater.org/acpf/
Grassed Waterways
Nutrient Removal Wetlands
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