



Source Water Protection & Its Intersection with Agriculture

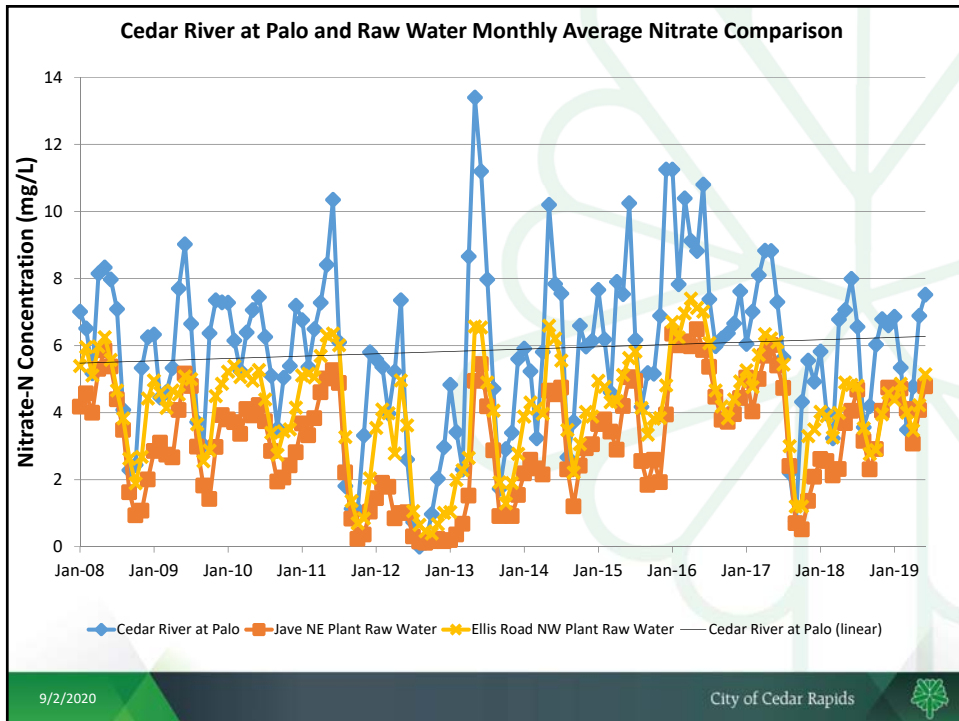
Indiana Water Summit

Thursday, August 13, 2020

Presented by:

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Nutrient Reduction Requirements at Wastewater Plant

Feasibility Study (2019) – reduce nutrients in effluent to the Cedar River

2018 Baseline year N & P
20,866 lbs/day N
3,862 lb/day P

Current reduction: N 28% P 32%

IOWA Nutrient Reduction Strategy
Reduce N 66%
Reduce P 75%



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Within Cedar Rapids

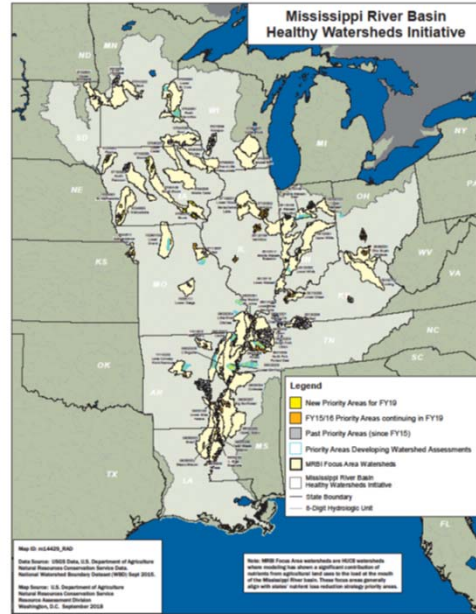
- Stormwater Master Plan
- Watershed Perspective
- Cedar River Flood Control System



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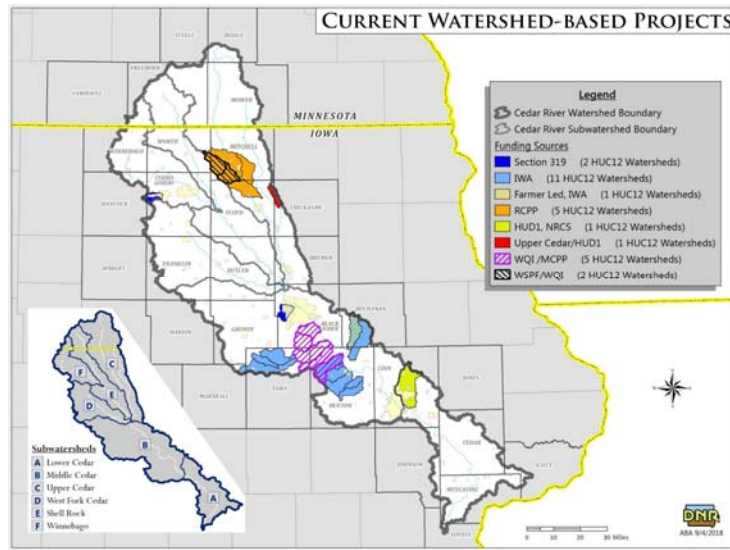


Watershed-scale Thinking & Action



City of Cedar Rapids

Beyond Borders: Investing Upstream for Downstream Benefits



Middle Cedar Partnership Project (MCP)



MCP Implementation Achievements

- Nutrient management: 7,813 acres
- Cover crops: 17,629 acres
- Saturated buffers: 2,350 feet
- Bioreactors: 1 planned
- Oxbow Wetland: 1 completed
- Conservation tillage: 11,646 acres



Technical Resources

- State agencies
- NRCS
- Commodity groups: Iowa Soybean, Iowa Corn Growers
- Academic: Coe College, ISU Extension
- Addition of Watersheds & Source Water Coordinator position in 2019



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The Future of Cedar Rapids' Watershed Activities

City-owned land (former agricultural fields) near our Northwest Water Plant, which we plan to convert to prairie / savannah habitat



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Nutrient Reduction Exchange (NRE)

- A framework for registering nutrient reductions achieved in the watershed and using the 'credits' to offset future NPDES permit requirements for nutrient reduction
- MOU with Iowa Department of Natural Resources



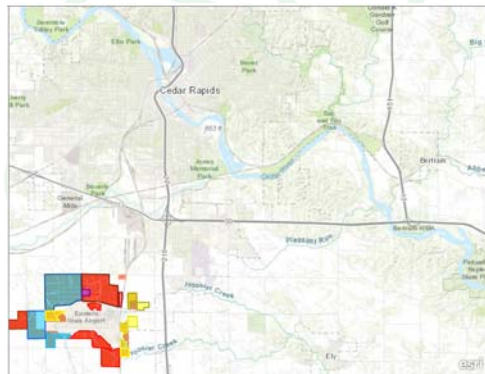
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Nutrient Reduction Exchange: Strategies to Acquire Credits

- Partnership with The Soil & Water Outcomes Fund to purchase nutrient credits achieved from on-farm conservation activities
- Ag conservation on City-owned farmland



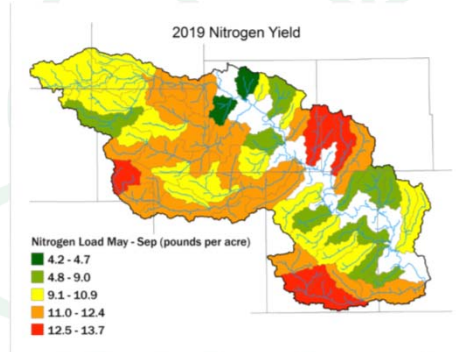
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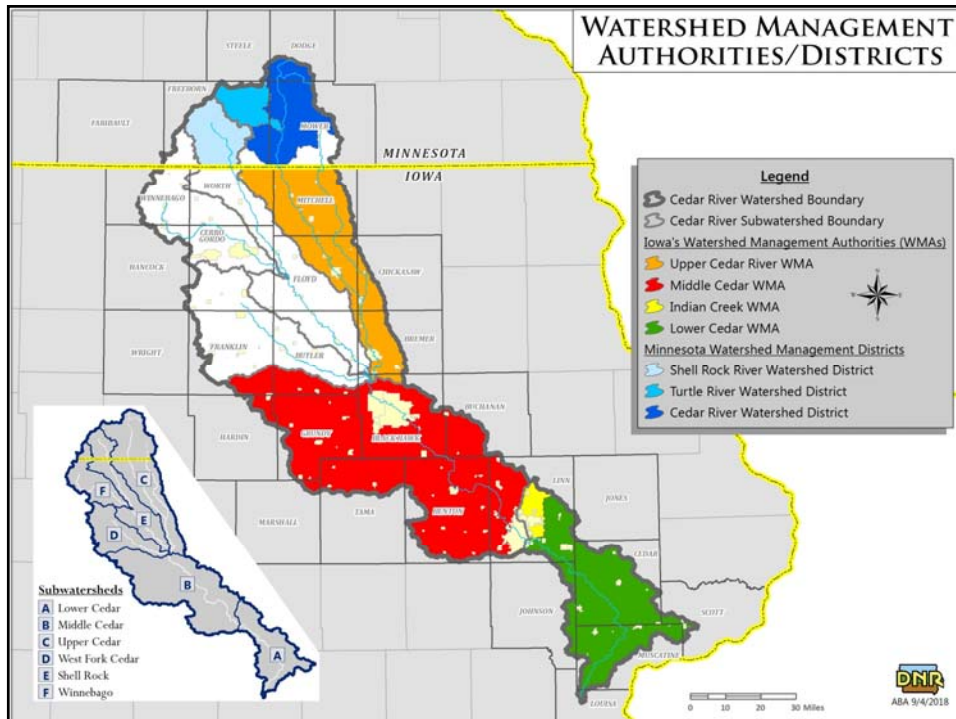


Future Activities

- Upcoming grant opportunities
- Supporting opportunities to partner with ag retail sector to deliver conservation services
- Utilizing our water monitoring data sets to guide & inform our future watershed activities
- Continued partnership with Watershed Management Authorities in the Cedar River watershed



Middle Cedar Nitrogen yield by HUC-12 watershed. Map courtesy Iowa Soybean Association.



Questions?

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