

# WATERSHED ASSESSMENT IMPLEMENTATION MATRIX UPDATE

December 2025  
Sara Carmichael – Watershed Coordinator



Prairie Valley Preserve Pumped Wetland - 2025

# Agenda

- Review
  - Goals
  - What's happened
  - Who's involved
- Implementation Matrix Update
- Next Steps

# Goal Statement

The Countywide Watershed Assessment Report establishes the County's water quality baseline.

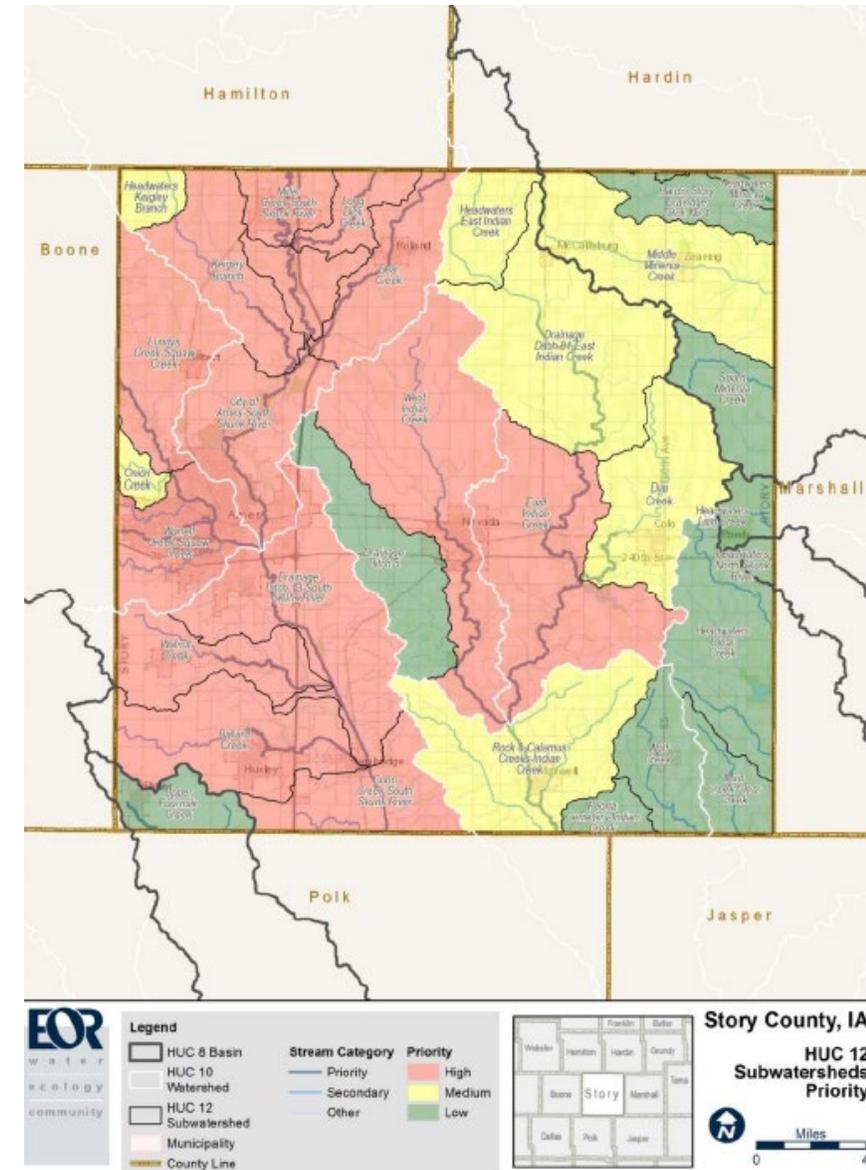
The Watershed Working Group is a mechanism for these individuals to:

- Communicate current and planned efforts to departments + BOS
- Identify gaps
- Coordinate joint efforts

Departments are asked to update matrix to include projects, work plans, and budgets.

# What has happened since 2018?

- Countywide Watershed Assessment (EOR June 2018)
  - Reviewed data in 32 HUC12 Watersheds
  - Prioritized watersheds + solutions
- Internal Working Group developed implementation matrix (Fall 2018)
- BOS formalized WAWG (Jan 2019)
- County Watershed Coordinator Hired (July 2021)
- WAWG quarterly meetings



# Who's Involved?

Board of Supervisors

Conservation

Planning and Development

Environmental Health

Emergency Management

Engineer's Office

Auditor's Office

GIS

\*Facilities (2023)

# Matrix Review/Update

- Regulatory
- Programmatic
- Capital Improvement

- **High**

- **Medium**

- **Low**

- → Ongoing

- ✓ Completed



loway Creek Clean-Up – May 2025

# Matrix Review – REGULATORY

## Action 1.1 – Adopt and Implement Stormwater Ordinance

- ✓ Adopted September 2019 (\*had to remove due to state rule)

## Action 1.2 – Floodplain Ordinance Modification

- ✓ Prohibit incompatible uses within streams and lake buffers (Effective January 2020: Added restrictions for soils and increased freeboard)

## Action 1.3 – Erosion Control and Stormwater Management Regulations

- ➔ Streamline development permitting processes; engage development community
- ➔ Develop and implement consistent enforcement strategies

# Matrix Review – PROGRAMMATIC

## Action 2.1 – Convene Water Quality Working Group

✓ → Meet quarterly, or as needed

## Action 2.2 – Develop Riparian Area Action Plan and/or Acquire/Protect Critical Riparian Areas

- Investigate means to establish veg. buffers on streams and lakes (State Cost-Share Opportunity)
- ✓ Review current Land Development Regulations (Chp 88) to see how they support or hinder implementation of watershed assessment (Adopted 2023)

# Matrix Review – PROGRAMMATIC

## Action 2.3 – Develop Wetland Mitigation Bank and Acquire/Protect Critical Wetlands

- ✓ Feasibility completed Jan 2024
- ✓ Review current Land Development Regulations (Chp 88) to see how they support or hinder implementation of watershed assessment (Adopted 2023)
- ➔ Map Wetlands (drainage wetlands)

## Action 2.4 – Develop Stream Mitigation Bank and Stabilize Critical Streambanks and Buffers

- ✓ Feasibility completed Jan 2024
- ➔ Identify/prioritize stream erosion sites; work with willing landowners and funding partners

## Action 2.5 – Protect Native Prairie Remnants

- ✓ Special Area Inventory (SAI) completed April 2024
- ➔ Consider rezoning or other protective measures to Chap 88 (Adopted 2023) (still need to identify other prairie remnants not in SAI)

# Matrix Review – PROGRAMMATIC

## Action 2.6 – Sensitive Environmental Areas Enhancement and Protection Program

- ✓ SAI completed April 2024
- ➔ Consider rezoning identified lands to the GB-C Greenbelt Conservation Zone District with willing landowners (case-by-case basis)

## Action 2.7 – Nutrient Reduction and Bacteria Reduction Practice Implementation

- ✓ ➔ Focused on nutrient reduction with edge of field practices (2021-present)

## Action 2.8 – Nutrient Reduction and Bacteria Reduction Outreach

- ➔ Educating landowners about nutrients + bacteria through educational materials



# Matrix Review – PROGRAMMATIC

## Action 2.9 – Drainage District Operational Guidance

- ✓ Review current procedures
- ✓ → Pilot projects for drainage treatment (Prairie Valley Wetland completed May 2025)

## Action 2.10 – Water Quality Monitoring

- Convene group to implement monitoring program (10-year plan 2021-2030)
- Establishing source tracking monitoring program

## Action 2.11 – Municipal Outreach

- Annual ISWEP Membership
- Work with state and federal agencies to investigate ways to incorporate stormwater management in municipal infrastructure projects



# Matrix Review – PROGRAMMATIC

## Action 2.12 – Watershed Management Authority Collaboration

- Fourmile, Headwaters, loway

## Action 2.13 – Erosion Control and Stormwater Management Outreach

- Educate and engage residents regarding impacts of erosion/stormwater management
- Partner with Municipalities and WMAs to conduct outreach on green infrastructure design to implement ordinances. Target schools and homeowners (Geopermit, WMA handouts)

## Action 2.14 – Floodplain Management

- Educate and engage stakeholders about ordinances
- Explore partnerships to protect flood prone properties in unincorporated areas
- Develop substantial damage management plans (as part of the CRS program)

# Matrix Review – PROGRAMMATIC

## Action 2.15 – Feedlot Outreach

→ Providing education to county staff and WQM volunteers

## Action 2.16 – Establish Source Water Protection Plans

✓ Affected cities work with IDNR to conduct site investigations and develop protection plans

## Action 2.17 – Wastewater Management Practices

- ✓ Partner with communities for required facility upgrades
- Identify/promote available cost-share programs: Time of Transfer, Story County Housing Trust, OSWAP loan, public health conferences. ARPA funding for unsewered communities (13 systems)

## Action 2.18 – Update GIS Data

→ Update existing conservation practices

# Matrix Review – CAPITAL IMPROVEMENT

## Action 3.1 – Drainage Districts

- When DD Trustees request an engineering report, analyze all drainage ditch maintenance and improvement needs for water quality practices

## Action 3.2 – County Infrastructure

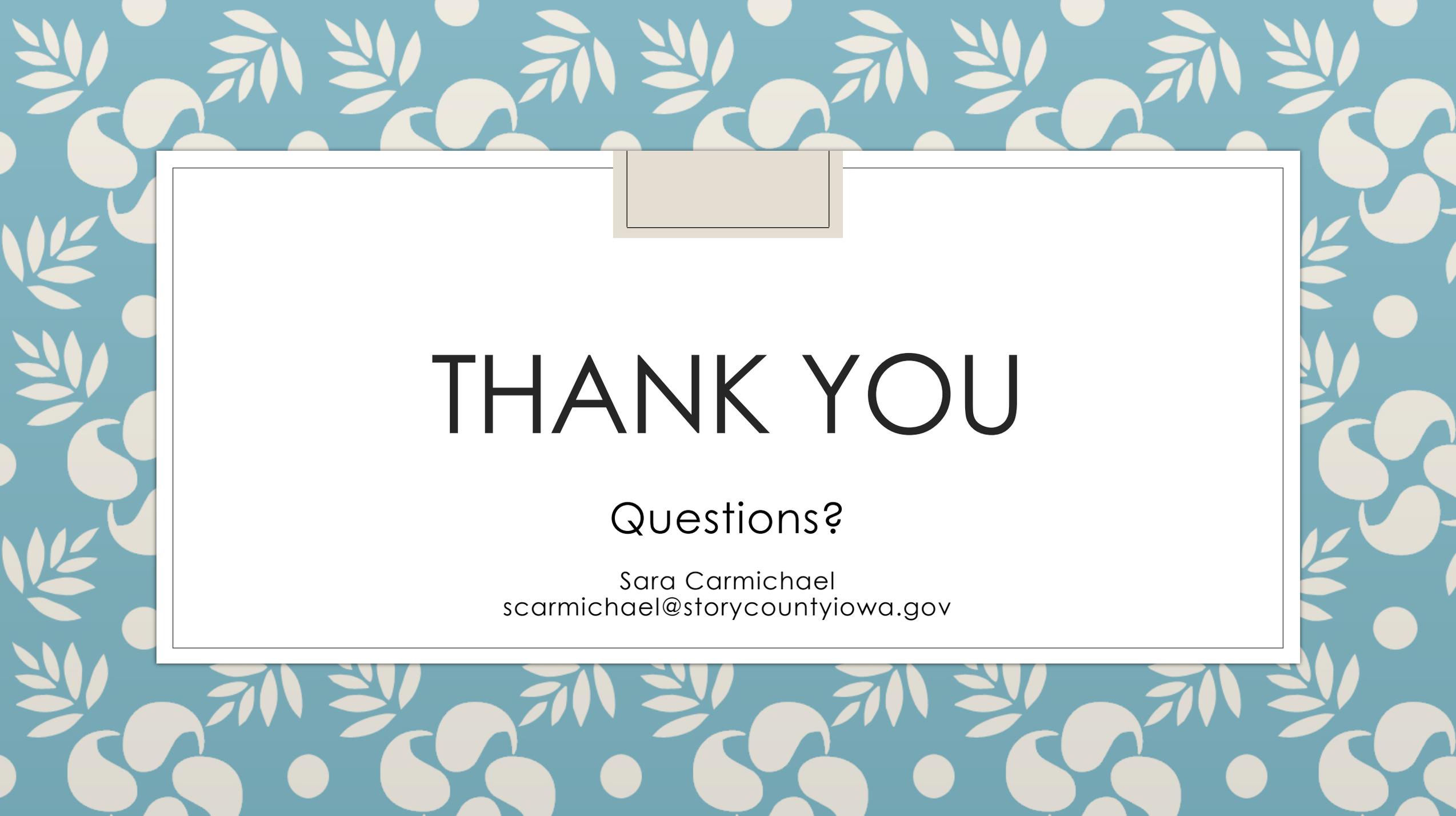
- Ensure capital projects have a positive or neutral effect on water quality



Macroinvertebrate Training – Fall 2022

# Next Steps

- Continue with
  - Water Monitoring (source tracking, PFAS, etc)
  - WMA Meetings
  - Landowner Conservation
  - Trainings/Education Opportunities
    - Conservation, EH, P&D
    - Relationship Building
- Focus on Bacteria Reduction + Education
- Update Maps
- Coordinate with Climate Action Plan and Go Green Team



THANK YOU

Questions?

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