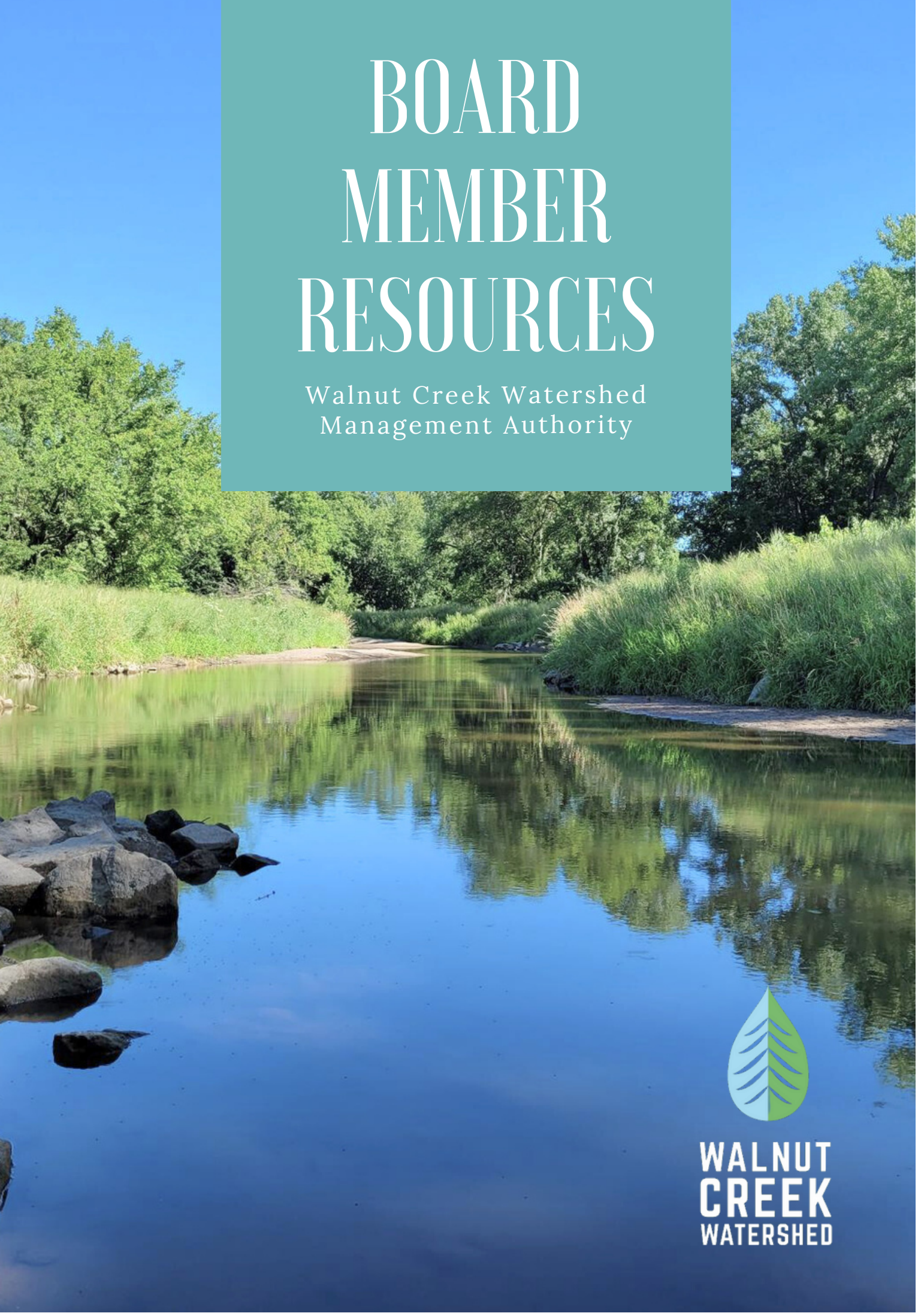
BOARD MEMBER RESOURCES

Walnut Creek Watershed Management Authority



WALNUT CREEK WATERSHED

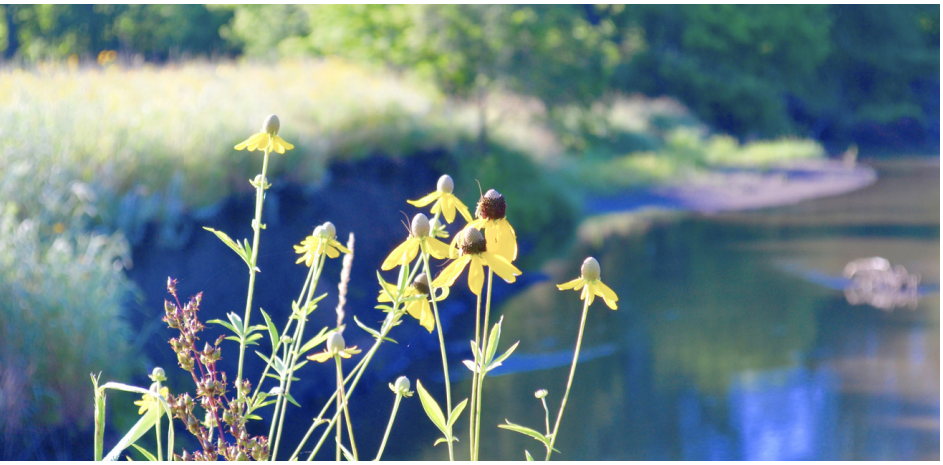


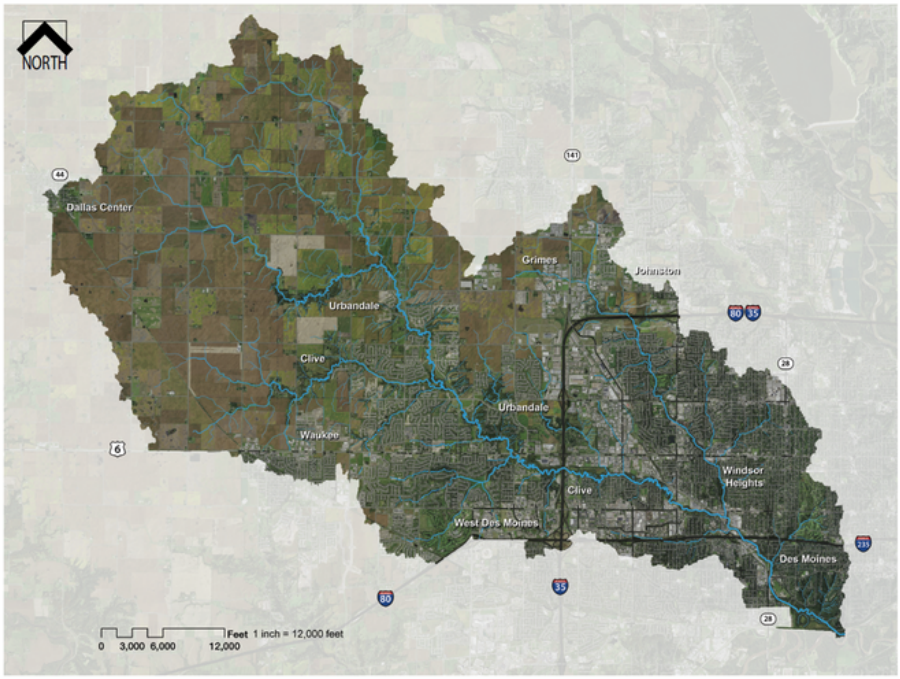
TABLE OF CONTENTS

ABOUT THE WMA

HISTORY

The landscape of the 53,000-acre Walnut Creek Watershed has been changing constantly over the last 150 years. Some big changes have occurred gradually, unnoticed by many who live in or pass through this area. Recently, the rate of change has been more rapid as suburban growth has pushed across hundreds of acres each year. Collectively, these changes have drastically affected the landscape's ability to absorb water, increasing runoff and degrading water quality.

Loss of topsoil, streambank erosion, construction site pollution, pollutant loading and transport, and flooding implications are all exacerbated by the way agricultural and urban uses have changed the character of this watershed. The goal of this plan is to improve water quality and prevent increases in flooding.



MANAGEMENT PLAN

EXECUTIVE SUMMARY

The Watershed Management Plan (WMP) for Walnut Creek was developed in 2015 with coordination from the Walnut Creek Watershed Management Authority (WCWMA). The development of the WMP occurred over several meetings to discuss the concerns and challenges facing the watershed. Through the information gathered at the meetings, goals and tasks were appointed.

Watershed Characteristics

Roughly half of the 83-square-mile watershed in Polk and Dallas counties is currently developed, with likely significant growth in housing and commercial development in its future. The watershed touches two counties and eight communities, with its outlet into the Raccoon River located less than one mile from the Des Moines Water Works' (DMWW) intake for a public water supply serving nearly one-half million users.

Pollutants

Flooding, nutrient loading, bacteria and eroded soils (sediment) impact public health, reduce habitat and undermine the ability of Walnut Creek to serve as a Central Iowa amenity. Nutrient and phosphorus counts are highest in the upper reaches of the watershed, where agricultural uses dominate. In the lower, developed half of the watershed, bacteria counts and sediment loads provide challenges, along with flooding. The Iowa Department of Natural Resources (IDNR) lists Walnut Creek as an "impaired water body" due to high levels of bacteria.

Stream Assessment

Stream flow data has been collected at a USGS gaging station located near the 63rd Street Bridge on the border between Des Moines and West Des Moines (USGS 05484800). Data collection began in October of 1971 and continues through the present day. At this location, Walnut Creek is collecting runoff from an area of 78.3 square miles (95% of its entire watershed).

Stakeholder Involvement

The stakeholder involvement process involved assigning people to working groups, consisting of an Infrastructure working group and a Policy, Education, and Communication working group. Each group had three meetings independently and discussed their strategies to address issues in the Walnut Creek Watershed. The goals that were identified are below.

Goal 1: Reduce Flooding

Goal 2: Improve water quality, with an emphasis on sediment, nitrate, phosphorus and E.coli reductions.

Goal 3: Enhance recreation and public health.

Goal 4: Deliver enriched conservation education and programming.

Goal 5: Support community vitality and maintain economic health through implementing multi-purpose projects producing benefits in public, natural resources and economic health that can be documented.

Goal 6: Develop ongoing means for collaboration and implementation of effective policies and practices.

Implementation Plan

In the Implementation Plan section, each goal is explained in detail with accompanying recommendations and strategies of how to achieve each one. Each goal was assigned subgoals and tasks to help track milestones and develop a schedule.

Implementation Plan Prioritization

The WCWMA met to discuss the Implementation Plan and prioritize Goals and Tasks under the categories of Urban and Rural Initiatives. The top priorities are listed below.

Budget/Funding

Various technical and financial opportunities will be used to implement a successful plan.

The full plan can be viewed at
www.polkcountyiowa.gov/water-resources

Urban Initiatives

1. Adopt the Iowa Stormwater Management Manual's Unified Sizing Criteria.
2. Buffer streams.
3. Improve planning and enforcement of Stormwater Pollution Prevention Plans (SWPPPs).
4. Improve local ordinances to protect or restore healthy soils in open spaces.

Rural Initiatives

1. Apply best management practices (BMPs) as outlined in the Nutrient Reduction Strategy, targeting practices with multiple benefits.
2. Use precision business planning to help landowners and tenants identify lands that are least profitable for crop production. These areas could become new wetlands, buffers or CRP lands.
3. Target the application of BMPs to achieve the greatest cost-benefit ratios.
4. Expand available technical assistance and funding sources.
5. Increase stream buffer protection corridors to include the five-year flood plain.
6. Connect rural partners routinely to ongoing research and demonstration.
7. Greatly enhance/expand access to information, including field monitoring.
8. Increase transparency of on-farm work/practices and funding.

STAFFING/ADMIINISTRATION/FUNDING

The Walnut Creek WMA is coordinated by Polk County staff, with assistance from the Polk SWCD.

Polk County

John Swanson, Watershed Management Authority Coordinator- identifying funding opportunities, coordinating projects within the watershed, and organizing quarterly WMA meetings

Cassie Druhl, Water Resources Outreach Coordinator-leading education and outreach activities

Jason Foss, Water Resources Specialist- leading design, survey and construction oversite duties for WMA projects

Polk Soil & Water Conservation District (SWCD)

Jennifer Welch, Urban Conservationist- reviewing designs and construction oversite for urban water quality projects within the WMA

Michael James, Water Quality Initiative Coordinator- serves as the lead staff engaging farmers and rural landowners for water quality improvement projects

Primary WMA Funding Sources:

- **Iowa Department of Agriculture and Land Stewardship (IDALS)** - Staff funding for Polk SWCD and practice funding
- **Iowa Department of Natural Resources (IDNR)** - Staff funding for Outreach Coordinator
- **Natural Resources Conservation Service (NRCS)** - Agricultural Best Management Practices funding
- **WMA Members*** - Staff funding for Watershed Coordination with Polk County

***WMA Member Funding, based on population and area that the member community lies in the watershed.**

Jurisdiction	Amount
Alleman	$ 250
Altoona	$ 6,600
Ankeny	$ 15,895
Bondurant	$ 3,300
Clive	$ 6,000
Des Moines	$ 47,000
Elkhart	$ 250
Grimes	$ 4,500
Johnston	$ 6,600
Mitchellville	$ 250
Pleasant Hill	$ 4,700
Runnells	$150
Sheldahl	$150
Slater	$250
Story County	$175
Urbandale	$16,000
Waukee	$5,700
West Des Moines	$13,500
Windsor Heights	$1,300
Polk County	$98,595
Total	**$ 231,070**

WMA MEETINGS

A Watershed Management Authority is formed when two or more eligible political subdivisions want to work together to engage in watershed planning and management. The political subdivisions can include a combination of cities, counties, and Soil and Water Conservation Districts. The WCWMA was formed in 2015 under a Chapter 28E Agreement. This organization was established to provide a common voice and to facilitate inter-jurisdictional cooperation in working together on watershed issues and opportunities.

The WMA responsibilities may include:

- Assess the flood risk in the watershed
- Assess the water quality in the watershed
- Assess options for reducing flood risk and improving water quality in the watershed
- Monitor federal flood risk planning and activities
- Educate residents of the watershed area regarding water quality and flood risks
- Seek and allocate moneys made available to the Authority for purposes of water quality and flood risks
- Make and enter into contracts and agreements and execute all instruments necessary or incidental to the performance of the duties of the Authority. The Authority shall not have the power to acquire property by eminent domain or having taxing authority, per Iowa Code Chapter 466B.2. All interests in land shall be held in the name of the Party wherein said lands are located.

The requirements of a WMA include being located within a watershed no larger than an 8-digit Hydrologic Unit Code (HUC) watershed, notifying all eligible political subdivisions to participate within 30 days prior to establishing organization, a Chapter 28E agreement filed with the Secretary of State, and a Board of Directors. Membership in the WCWMA was established based on political boundaries in the watershed.

Polk County, Iowa
City of Clive, Iowa
City of Des Moines, Iowa
City of Johnston, Iowa
City of Waukee, Iowa
City of Dallas Center, Iowa
City of Grimes, Iowa
City of Urbandale, Iowa
City of West Des Moines, IA
Polk SWCD
Dallas SWCD

The Walnut Creek WMA meets quarterly, and agendas and minutes can be accessed online at https://www.polkcountyiowa.gov/public-works/water-resources/walnut-creek-watershed-management-authority/

WMA BOARD MEMBERS

WMA BOARD MEMBERS

The Walnut Creek Watershed Management Authority exists to gather communities and agencies within the watershed to discuss issues described in the Management Plan and to find ways to achieve solutions through partnerships.

Each partner community/agency designates up to three representatives (primary, alternate, second alternate) to ensure attendance at each quarterly meeting*. These members are chosen to be the connection between their community and the WMA. They are encouraged to come ready to share any of their community's watershed concerns with WMA members, and alternatively report back to their community about WMA activities. Additionally, if a special committee is needed to work with WMA staff on a project outside of WMA meetings, they are encouraged to join in order to move projects forward and to achieve goals outlined in the Management Plan.

***Board Member Roles:**
A primary Board member can make motions or vote to approve/disapprove motions. If the primary is absent, the alternate is expected to take these actions, or the second alternate in the absence of both. Non-voting members can not make motions or vote. See the Board Meeting Guidelines at the end of this packet for more information.

BOARD MEMBER LIST

*Voting Member

DALLAS SOIL & WATER CONSERVATION DISTRICT

Eric Wessels, SWCD Commissioner*
Neil Hamilton, SWCD Commissioner
Veronica Lack, SWCD Commissioner

POLK COUNTY

Rachel Conrad, Assistant County Engineer*
Aaron Putnam, County Engineer

CITY OF CLIVE

Susan Judkins, Council Member*
Srikant Mikkilineni, Council Member
Doug Ollendike, Community Development Director

CITY OF DES MOINES

Patrick Beane*
Jonathan Gano
Dan Pritchard

CITY OF JOHNSTON

David Wilwerding, Community Development Director*
Mike Pogge-Weaver, City Administrator

CITY OF WAUKEE

Rudy Koester, Public Works Director*
Sara Kappos, Asst. Public Works Director of Engineering
Tim Royer, Asst. Public Works Director of Operations

CITY OF WEST DES MOINES

Isaac Svoboda, Engineering Tech*
Jeff Behan, Associate Engineer
Nick Rentel, Principal Engineer

CITY OF DALLAS CENTER

Inactive

CITY OF GRIMES

Inactive

CITY OF URBANDALE

Patricia Boddy, Council Member*
Mike Dunagan, Engineering & Stormwater Technician
Kristin Brostrom, Assistant Director of Engineering

POLK SOIL & WATER CONSERVATION DISTRICT

Paul Gibbins, Commissioner*
Michael James, WQI Coordinator
Jennifer Welch, Urban Conservationist

WMA CONTACT

John Swanson
Water Resources Supervisor
Polk County
515-875-5880
johnathan.swanson@polkcountyiowa.gov

WMA GOALS

IN 2022, THE WALNUT CREEK WMA ESTABLISHED A SET OF GOALS FOR THE WATERSHED FOR 2023 AND BEYOND.

1.Agricultural wetlands/IDALS partnership- Identify every potential wetland site, complete targeted outreach to landowners

2.Improve cost share programs

3.Walnut Creek Watershed Festival + 2 public events

4.Stormwater creek restoration-Headwaters of Little Walnut Creek

5.Have all watershed communities adopt a Stream Buffer Ordinance

6.Pilot program for offering 100% cost share for BMPs in new road project

7.Incorporate projects into hazard mitigation plans

8.Complete Drake study report and implementation recommendations

9.Identify top 10 streambank restoration reaches

10.Waukee Wetland and Finley basin- acquire land and fully fund

2024 WMA MEETING DATES

LOCATION TBD

- January 16
- April 15
- July 15
- October 21

APPENDIX

OTHER RESOURCES

Bylaws
Board Meeting Guidelines