

Madison Watershed Planning Meeting: *Strategies for Improving Water Resources*

May 31, 2017

6:00—7:30 PM

El Western Conference Center

To view additional meeting materials please visit the “Watershed Planning” page at madisoncd.org

Introductions

Presenter: Ethan Kunard, Madison Conservation District. Attendees introduced themselves.

Meeting Objectives

- Provide an overview of the watershed characterization information that has been covered in previous meetings
- Discuss the priority concerns that have been identified in previous meetings
- Discuss example management strategies that can help address the identified water resource concerns
- Obtain feedback on priority concerns and assess the potential success of the example improvement strategies

Watershed Planning Background

Long-term Goal: To Lead the community in a collaborative effort to develop long-term solutions to our current, and future, water resource concerns. The steps in this process include:

- Identify water resource concerns.
- Identify opportunities to make improvements that mitigate those concerns
- Develop and implement management practices or restoration efforts to reach the desired conditions of community members and water users

An overview of the meetings from January—April was provided to give background information on conditions related to water quality, climate variability, and groundwater in the Madison Watershed. (*information on those meetings can be found at madisoncd.org)

Using feedback compiled from stakeholders, the Madison CD refined the following objectives for this watershed improvement process. Those objectives were presented to the group, which included:

- Maintain and enhance healthy waterways, riparian areas, and wetlands.
- Sustain agricultural productivity.
- Enhance economic viability throughout the community.
- Encourage responsible use of water now and in the future.

Prioritizing Concerns

Using information compiled from previous meetings, guest speakers, and stakeholder feedback, the Madison CD synthesized a broad range of concerns to develop the following list of initial priorities for water resources in the Madison Watershed:

Surface Water

- Timing of runoff and changes in snowpack affecting water use and availability
- Warm water temperatures affecting water quality
- Increased evaporation (and evapotranspiration) with warmer summers
- Changes in form of precipitation affecting water supply
- Insufficient water for instream flows
- Poor water quality

Groundwater

- Insufficient supply for future growth
- Annual snowpack unable to recharge aquifers to current and historic levels
- Septic systems and land management practices affecting quality of water in surrounding wells

Example Strategies

After compiling feedback and input from stakeholders at previous meetings, a list of potential strategies was developed that address each of the above concerns. We briefly discussed each of these strategies, and gave attendees an opportunity to discuss additional strategies and/or practices that we might want to identify in this watershed plan.

Restoration
Maintain and restore riparian areas, and develop streamside buffers
Enhance existing wetlands, and identify opportunity for creating new wetlands
Remove ponds that are no longer providing beneficial services
Restore stream channels to achieve appropriate width to depth ratio and substrate composition
Restore forest health to maintain hydrologic function
Reclaim and restore historic mining sites contributing sediment and metals into waterways
Education
Educate the community about the value of water in the valley, and the concerns that
Educate homeowners on BMPs for water use and irrigation management
Utilize the MBMG groundwater investigation study to inform decisions about groundwater management
Develop recommendations/guidelines for specific audiences, subdivisions, or HOA's on water use that targets site-specific characteristics (available water, aquifer type, etc.)
Educate homeowners, developers, and contractors on proper septic placement and maintenance
Mitigation & Voluntary Agreements
Water rights leasing to improve instream flow
Assess timing for irrigation water rights, and identify changes if necessary
Voluntary water use agreements
Implement split-season flood and pivot irrigation practices
Identify alternative water sources to offset surface water use
Encourage and/or require current and future development to restrict non-essential uses (e.g., lawn irrigation)
Develop water-savings incentive programs
Encourage limited development in non-sustainable recharge areas
Implement community water supply and wastewater treatment systems
Incentive program to homeowners for upgrading failing septic systems (Lewis & Clark County septic loan program)
Utilize newer technology, high filtration, individual wastewater treatment systems (create incentives for installing these systems)

Management Improvements
Improve soil health and encourage upland management practices that reduce runoff and improve infiltration
Selecting appropriate vegetation species that are adapted for our available moisture
Reduce evaporative losses from soil by eliminating bare ground and encourage no-till farming practices
Make improvements to existing water storage facilities
Maintaining roads to reduce runoff of sediment and other pollutants
Efficiency improvements for diverted surface water (conveyance and application)
Implement permeable ground coverings (rain gardens, permeable asphalt, etc.)

At this point, all of the above strategies that have been discussed are purely to provide examples of the types of management measures and practices that might be included in this watershed plan. Additional feedback, analysis, and site specific characteristics must be considered before any of these voluntary measures would be included in the draft watershed management plan.

Next Steps

The Madison CD will be finishing the watershed characterization report by mid-summer, which will provide a thorough assessment of current and future water resource conditions in the Madison. This report will then be used by a select stakeholder group to determine more precisely the priorities (locations and potential improvement measures) that will be focused on for the final development of the watershed management plan this fall.