

Southwest Michigan Water Resources Council Concept

The group will be facilitated by Mr. Fred Henningsen, a Sturgis resident with over 30 years of experience with Michigan State University Extension. The meetings will be held in Southwest Michigan. The study is projected to last two to three years with quarterly council meetings.

Mission Statement:

To provide a refined analysis of the water resources in the St. Joseph and Kalamazoo River watersheds and to review the application of Michigan's water withdrawal screening tool and assessment process at this regional scale. The study will incorporate the region's unique hydrogeology and water flow and include the regional characteristics of farmland irrigation.

Desired Outcomes:

- Develop a local decision-making process for water withdrawals operating within the scope of current state law.
- Provide a regional assessment of groundwater use, availability, and its relationship to surface water.
- Promote an understanding of sustainable water use in Southwest Michigan that considers economic, social, and environmental concerns.
- Enhance the interrelationship between water users and water use interests in the region.

Topics the Regional Council Should Address:

Part 1 - Regional Background

- How much water is available for large-scale water development, such as agricultural irrigation, within the framework of the water withdrawal legislation?
- How does current water use affect groundwater levels and stream flow characteristics?
- How much water is consumptively used, and how much is return flow in agricultural irrigation, as practiced in Southwest Michigan? How should these be considered in the water withdrawal assessment process?

Part 2 - Operation of the Water Withdrawal Assessment Tool

- Does the current water withdrawal assessment tool adequately function as a "screening tool" to automatically authorize withdrawals that are not likely to cause adverse resource impacts (ARI) in Southwest Michigan? If not, what are the key aspects that require scientific review or policy changes?
- What data and tools are required to provide improved accuracy in the site-specific review process?

Part 3 - Current and Future Impacts

- How is water use projected to change over the next 10, 20, and 30 years?
- Are conflicts likely to develop between water users? What types of conflicts (e.g., between irrigators, or between irrigators and domestic water supplies) are likely to develop?
- If conflicts are projected, how will they be mediated within the framework of the current water withdrawal legislation? Is policy or regional mechanisms needed to facilitate conflict resolution?

- Are current and projected water developments likely to cause ARI, as defined in the water withdrawal legislation?
- How would an extended drought, such as experienced during the 1930s and 1960s, affect the regional water resources and water users?
- Is water availability likely to become an impediment to regional economic development?

Part 4 - Integration and Recommendations

- Given the current and projected water use and availability in Southwest Michigan, what can be done to ensure ecological protection as required by the statute and sustainable economic development? Are there water use best management practices, or water development patterns, that can be followed to avoid ARIs and allow sustainable economic development within the region?

Potential Groups to be Represented on the Council (approximately 15 people):

1. Seed Corn Irrigators
2. Other Agricultural Irrigators
3. Seed Corn Company
4. Local Government/Municipal Water Supplier
5. Conservation or Natural Resource Interest Group
6. Environmental/Watershed Group
7. Land Conservancy Group
8. Well Drillers
9. Economic Development Group
10. Non-Agricultural Business (self-supplied water user)
11. Foundations/Nonprofit
12. University Researcher
13. State Agencies (Department of Natural Resources, Department of Agriculture and Rural Development, and Department of Environmental Quality)
14. Federal Agencies (United States Geological Survey)