EXECUTIVE SUMMARY: CARVER COUNTY GROUNDWATER PLAN [2016 – 2025]

Purpose

The Carver County Groundwater Plan supports implementation of both the Carver County 2030 Comprehensive Plan and the Carver County Watershed Management Organization (CCWMO) 2010-2020 Comprehensive Water Resources Management Plan (Water Plan). This Groundwater Plan defines Carver County's role in groundwater resource management for the next ten years by identifying goals and actions the County will take over the life of this plan. Contents of the plan address guidance provided for County groundwater plans in Minn. Statute 103B.255.

County Groundwater Resources

Carver County is poised for the fastest rate of population growth in the Twin Cities Metro through 2040. Township land use and zoning policies established in the 1960's will continue to guide growth to Cities and preserve Carver County's rural nature and agricultural economy. Growth in the County's Cities will increase demand on municipal wells that draw water from aquifers deep below the surface. Rural residents will continue to draw water from private groundwater wells located closer to the surface.

Some key characteristics of Carver County's subsurface geology and groundwater supply:

- Aquifers in the County which are useful for domestic water supply include the glacial drift, the Prairie du Chien-Jordan, the Tunnel City-Wonewoc, and the Mt. Simon.
- The County's bedrock geology includes a number of alternating water supplying aquifer layers and confining layers that protect aquifer layers from surface contamination, but also prevent recharge. No layer completely stops vertical water movement.
- Precipitation impacts surface aquifer levels that serve many small private wells.
- Carver County's deep aquifers have very low recharge rates due in part to surficial clay soils that have high runoff potential when thoroughly wet.
- Feedlots are likely to produce runoff contaminated with animal waste, sediment, and other pollutants that can potentially harm surface and ground waters.
- Properly sealing abandoned wells is necessary to prevent contamination from surficial and subsurface contaminants.

The Prairie du Chien and Jordan Aquifers (pictured left) provide about 30% of the County's total drinking water supply. 0 1 2 3 4 5 MILES

Carver County Groundwater Plan – Executive Summary

Carver County's Role

Carver County intends to support established groundwater management stakeholders through limited and strategic involvement focused on addressing identified gaps. The County's role will complement the many existing stakeholders operating at the state, regional, local, and private levels. The County has focused its strategies around four key roles:

- 1. Planning
- 2. Education

- 3. Cost Share
- 4. Research & Monitoring

Goals/Objectives

In line with the County's 2030 Comprehensive Plan, successfully meeting goals depends on "the partnership and collaboration of all of Carver County's stakeholders, Cities and Townships, citizens, and decision-makers working in concert toward a common goal." Carver County has set three overarching goals with supporting objectives, and implementation strategies to focus its groundwater management roles.

The following summarizes goals and objectives.

Goal 1: <u>Prevent groundwater contamination</u> to protect public health, avoid adverse environmental impacts, and provide high quality water resources that support current and future populations and economic activity.

Objective: Coordinate groundwater quality data resources

Objective: Monitor groundwater quality

Objective: Prevent adverse health impacts

Goal 2: <u>Ensure the County's groundwater supply</u> continues to meet current demand without compromising aquifer viability, economic growth and development, and the ability of future generations to meet their water supply needs.

Objective: Coordinate groundwater quantity data resources

Objective: Monitor groundwater quantity

Objective: Preserve water supplies and groundwater dependent natural resources

Goal 3: <u>Protect groundwater dependent natural resources</u> like the Seminary Fen and Assumption Creek from the impacts of groundwater withdrawals and groundwater contamination.

Objective: Increase the County's understanding of groundwater and surface water interactions

Objective: Increase public awareness about groundwater dependent natural resources

Strategies are detailed in the Groundwater Plan for each objective, and define actions the County will implement.



County staff regularly checks monitoring wells in Seminary Fen to gather groundwater data.