

LCMR Ground Water Tour Agenda – October 27, 2005

(unless otherwise noted, the discussion will be led by Minnesota Ground Water Association members)

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NOTE: Times and Locations are Tentative and Subject to change.

Purpose of the Tour – to build a foundation of knowledge about the art and science of ground water and the role ground water plays in our water supply especially in the Twin Cities Metro but also throughout the state.

- 8:30 AM Bus departs State Office Building (mile 0)
Turn right on John Ireland Blvd toward the cathedral. Turn left on Kellogg Blvd and continue to the Science Museum of Minnesota. Assemble at front/north entrance.
- 8:45 AM Stop 1. (mile 1) Science Museum of Minnesota – flowing well in the Big Back Yard
Welcome & introductions – Laurel Reeves
Science Museum of Minnesota – Patrick Hamilton - View flowing well and discuss ground water display.
Bob Tipping & Dale Setterholm - Overview of the hydrology of the Twin Cities basin including an explanation of artesian conditions and ground water discharge. Relate ground water to Mississippi River.
- 9:30 AM Depart to the northwest metro
Proceed east on Kellogg Blvd to Minnesota Street, turn left (north) toward the entrance to North 35E. Turn right on 11th Street, move to the left lanes in order to enter North I35E/US 10. At mile 7 prepare for left exit to I694/US 10. Where I694 and US10 diverge, follow US10 to the northwest (right - exit only lane). US10 merges briefly with I35W, follow I35W/US10 to the right. Take Exit 30 to US10 west. Continue on US10 which becomes US10/US169. At about mile 31.8, turn left on Traprock Street, a gravel road (Diamonds sports Bar is located on the southwest corner of this intersection) and take the first left off of Traprock Street (there is no street sign) to the Husby homestead about 0.4 mile.
- En route Discussion leaders – Bob Tipping & Dale Setterholm -Observe the urban/suburban growth, changing and additional water uses. Announce the boundaries of major aquifers as we travel over them and note the lack of surface expression. See the geomorphic change from till plain to sand plain and explain how this affects surface water features and ground water sensitivity.
- 10:15 AM - Stop 2 (mile 32.4)– Mississippi West Regional Park - Ramsey
Discussion of Mississippi W. Regional Park – John Vondelinde, Anoka Parks & Rec.
Northwest Metro Water Supply Work Group – Chris Elvrum;
City of Ramsey - Brian Olson, City Engineer – will discuss consideration of surface water treatment due to ground water limitations
Pat Bloomgren - proposed use of aquifer storage and recovery at Elk River and other communities. Discuss wellhead protection and impact of land use on ground water quality.
- 11:00 AM Board bus and depart for lunch
Return to US10/US169 and backtrack east to south US169 (North Ferry Street in Anoka). Keep right on US169 in Champlain. Proceed to about mile 63, east on Old Shakopee Road (1) to Bush Lake Rd. (County 28) left turn North – 1 mile to Park Entrance turn right to Visitor Center.
- En route or as time allows elsewhere Again note growth and geomorphic change as we cross the Miss. River out of the sand plains onto the till; dramatic surface changes vs. ground water change; discuss ground water influence on lakes such as Pulaski and conversely ground water use's effect in lowering lake levels; ground water interference and ground water withdrawals issues; discuss naturally occurring contaminants and potential limitations. Action and reaction: the question of economic growth and the presence of an adequate water supply; discuss drought and limitations on river and ground water; how ducks swim in ground water.

- Noon Lunch (mile 63.9) – Hyland Lake Park Reserve – Visitor Center (south entrance)
Address: 10145 Bush Lake Road, Phone: 763-694-7687
- Alternate directions for people meeting for lunch:
From I-494, go south on Normandale Blvd. To 84th Street. Turn right and follow 84th Street which becomes East Bush Lake Road. Follow Bush Lake Road to 2nd entrance – Hyland Visitor Center.
- 1:00 PM Board bus and travel to Stop 3
Return to South US169. After crossing the Minnesota River exit right to Savage and Minnesota 13. Follow Minnesota 13. Turn to the right in Savage at light where 13 turns up the hill away from the Minnesota River. Turn right on 126th Street (about one long block). Proceed west, cross Eagle Creek (road is now named 125th Street) about 0.8 mile. Turn left on Ensign, follow to Independence and curve left to the pullout for Boiling Springs at yet another crossing over Eagle Creek about 0.6 mile.
- 1:30 PM Stop 3 (mile 68.2) – Boiling Springs/Eagle Creek, Savage
Southwest Metro Ground Water Work Group – Chris Elvrum
Barry Stock, City of Savage - discuss SW Metro issues; discuss the issues surrounding protection of significant gw/sw features;
Mark Nemeth, MN DNR Fisheries – prairie restoration work, trout abundance along Eagle Creek;
View this unique ground-water dependent surface-water feature;
Further discussion of ground water/surface water interaction and known or suspected anthropogenic impacts on ground and surface water; effects of encroachment of roads and other development on these features.
- 2:00 PM Board bus and travel to Stop 4
Continue east/southeast on Independence Ave, turn left on Preserve Trail, keep left at fork with Falcon's Way and turn left on Eagle Creek Parkway/128th Street, follow as it curves east. Cross Minnesota 13 (cross traffic does not stop) and continue straight ahead to Savage Fen. Stop at fence at the end of the road.
- 2:15 PM Stop 4 (mile 70.0) –Savage Fen & ground water level monitoring wells
Jennie Leete - What's a fen? Why is it important? Ground-water dependent surface-water features;
Laurel Reeves - discuss the varieties of ground water monitoring; observe water level monitoring; why one well is seldom useful for all or many purposes and explain how data are used
- 2:45 PM Board bus and proceed to Stop 5
Turn the bus around and return to Minnesota 13, turn right and right again at the 101/13 intersection. Follow Minnesota 13 about 4 miles to County Rd 5, turn left at light, then right on 126th St, left on Dupont and rightish on Cliff Road to the offices of Kraemer Quarry – 1020 Cliff Road. BEWARE – heavy, heavy truck traffic in this area.
- 3:30 PM Stop 5 (mile 75.6) - Kraemer Quarry -
Dave Edmunds, Edward Kraemer & Sons
Tour quarry; see an aquifer- discharge of ground water from the Prairie du Chien aquifer, discuss quarry effects on ground water discharge to the river; discuss use of quarry water for drinking water supply
- 4:15 PM Wrap up questions; Board bus and return to State Office Building;
Continue east on Cliff Road, cross under I35W and proceed to I35E about 5 miles. Turn left and merge into I35E. Take Exit 106C toward the State Capitol and 11th Street. Turn left on Wabasha, left on 12th Street toward Rice Street, turn right on Rice Street. Right on University and right again to State Office Building.
- 5:00 PM Arrive at State Office Building (mile 95.3)

The Minnesota Ground Water Association (MGWA) is a non-profit, volunteer organization dedicated to the following primary objectives:

- Promotion and encouragement of the scientific and public policy aspects of ground water;
- Establishing a common forum for scientists, engineers, planners, educators, attorneys, and other persons concerned with ground water;
- Education of the general public regarding ground water resources;
- Dissemination of information on ground water through meetings of the membership

MGWA publishes a quarterly newsletter and annual directory, and sponsors two conferences each year on timely issues concerning policy and scientific aspects of ground water. The newsletter and directory reach a membership of about 550 persons, which include prominent members of pertinent federal, state, and local agencies; environmental and engineering consulting firms; universities and colleges statewide; and other groups concerned with ground-water and environmental issues.