**Sewer Construction Threatens the Flow to Coldwater**

The Minnehaha Creek Watershed District will vote whether to approve a 2-year sewer project as soon as the permit application is complete. The meeting will be soon, on a Thursday evening at 6:45 pm. You can call the watershed office (952-471-0590) with your opinion and to find out when the vote will occur or go to http://minnehahacreek.org/minutes/agenda/. Directions below.

THE PROJECT

A sanitary sewer pipe will be replaced at the north end of Minnehaha Park. It is an underground construction, about 45 to 50 feet below the surface, with two 18-foot diameter access shafts cut through bedrock at either end.

Construction will run from 39th Avenue South, eastward paralleling the parkway to the round-about entrance/exit to Minnehaha Park. Work is scheduled to run for two years from this summer to June of 2017.

A new 1,000-foot pipe would run horizontally below Minnehaha Creek, the Hiawatha Light Rail Transit line and Highway 55 to replace a 1930s-era sanitary sewer pipe.

Both groundwater and deep well dewatering is planned that is, dewatering above the limestone bedrock and below in the sandstone. Daily monitoring at Coldwater is called for.

In addition to the new 5-foot diameter sewer pipe, underground constructions include abandoning in place and grouted (waterproofed): the old 1930s horizontal sewer pipe, two 18-foot diameter vertical access tunnels cut into limestone and sandstone, plus a 44 by 60-foot vault. Groundwater "will just flow around" these subterranean buried structures we were assured.

That is an echo of the assurances by experts who designed the Highway 55 reroute which resulted in the loss of about a third of the flow to Coldwater. MnDOT was court-ordered to monitor the spring flow for 20 months post-construction. Despite the Coldwater protection law a permanent, daily loss of flow of 27,500 gallons was reported.

There was no discussion at the 1/29/15 watershed meeting about the seeps (mini springs) around the top of the Mississippi bluff in Minnehaha and Coldwater parks and the rare black ash seep in the Minnehaha gorge.

THE LAW

Sacred landscape is a reality not common in the dominate world. So it was not surprising when Minnehaha Creek Watershed District (MCWD) board managers wondered why the Coldwater Protection law of 2001 was written so narrowly.

*Section 1.  [PROTECTION OF NATURAL FLOW.]*

*Neither the state, nor a unit of metropolitan government, nor a political subdivision of the state may take any action that may diminish the flow of water to or from Camp Coldwater Springs.  All projects must be reviewed under the Minnesota Historic Sites Act and the Minnesota Field Archaeology Act with regard to the flow of water to or from Camp Coldwater Springs.*

The language of the law is specific, forbidding "any action that may diminish the flow." Not "temporary" dewatering, not permanent dewatering—no "action that **may** diminish."

LEGAL INTERPRETATION

At the MCWD meeting staff attorney Louis Smith delivering a "legal interpretation" said because Coldwater is a mile and a half distance away there would need to be a "direct impact" on the spring. "Remote possibilities are not a violation of the law," "possibilities are fixable" and temporary construction impacts are allowable if "minimized."

During Highway 55 reroute construction a grit chamber was cut into limestone bedrock at Minnehaha Park at about 50th Street, one mile north of Coldwater. The result was dewatering at a rate of 500 gal/min for several months. There was a "measureable reduction of flow to the spring."

That grit chamber cut intercepted the main limestone fracture that leads to Coldwater. The proposed sewer bedrock cuts, at 39th Street, are just 1.5 miles north of Coldwater, a half mile north of the great dewatering cut during Highway 55 reroute construction.

CONTINGENCY PLANS

Consultants at the MCWD meeting admitted that the "contingency plans" are unknown, that conditions are "unforeseeable," that an observer will be on site to come up with "reasonable solutions."

--A 10-20 percent variation in the flow is "hard to tell."

--There is a "low risk of permanent impact to the flow." Planners are "confident" about "restoring" the spring without the evidence of an underground fracture map, without figures on dewatering amounts or duration of dewatering.

A fracture map would show the natural subterranean limestone bedrock cracks that funnel water by gravity. Braun Intertec consultant Kelton Barr said the main fracture could be blocked between construction points.

MCWD Manager Jim Calkins noted, "Once you damage the system it's pretty hard to fix."

GRADUAL DOWNWARD TREND

MCWD engineer Mike Panzer said "There is an appearance of a gradual downward trend in flow over the past 6 or 7 years," (2/05). This is what concerns Friends of Coldwater, a constant degradation of the spring. With every cut Coldwater bleeds water.

The sanitary sewer project has not yet been reviewed under the Minnesota Historic Sites Act and the Minnesota Field Archaeology Act with regard to the flow of water to or from Coldwater Springs.

Within the two week time period between meetings Braun Intertec should execute a ground penetrating radar map to define the main Platteville limestone fracture that funnels some water to Coldwater Springs. This is the bedrock cut that required 500 gal/day dewatering at 50th and Minnehaha Park during highway construction, a mile north of Coldwater. Just a half mile further north is the sewer construction site.

It seems like a backwards process when so much expensive planning has gone into the proposed sewer replacement and it is known to be in close proximity to the main "joint" or limestone fault.

MCWD is normally the last agency to permit a project.

ANCIENT SACRED LANDSCAPE

Coldwater is a "Traditional Cultural Property" that is, a landscape that is not limited in importance to one tribe or one time period, it is generically special land. Coldwater is considered to be at least 10,000 years old. The designation was made by the Minnesota State Historic Preservation Office based on the 2006 Ethnographic Study commissioned by the National Park Service.

Coldwater is also a "Dakota Tribal Sacred Site." The Dakota people were the latest Native group living here in 1803 when the U.S. concluded the Louisiana Purchase. People have been here since the glaciers melted.

A 9,000-year old bison spear point was found at the Sibley House archaeological dig in Mendota (1996). The site was a backwater of the confluence where a bison, twice the size of today's buffaloes, got stuck in the muck, speared and eaten.

Dakota teachers say Un K'te Hi, a powerful spirit of water and the underworld, dwells at Coldwater. It is not just any spring but the spring linked to Taku Wakan Tipi (Something Sacred Dwells Here) a traditional Dakota burial mound at the Veteran's Administration pushed up by Un K'te Hi from an underground water passage (such as a limestone fracture) between Coldwater and the hill.

Religious mythology typically includes a geographic place and a story.

THE ALTERNATIVE

The alternative of replacing the sewer pipe in situ was dismissed as too hard to get to, too expensive. It would involve temporary rerouting of the sewage for the construction period.

What is Coldwater worth? It is the last major natural spring in Hennepin County. It is part of the emergence landscape of the Dakota Oyate (nation/people) and some say the birthplace of the political state of Minnesota. The soldiers who built Fort Snelling lived around the spring and a civilian community gathered to service the fort. Coldwater was used as an emergency drinking water supply for south Minneapolis in the summer of 1976 when city water was putrid with algae.

-—Susu Jeffrey

for [www.FriendsofColdwater.org](http://www.FriendsofColdwater.org)

DIRECTIONS: Minnehaha Creek Watershed District, 15320 Minnetonka Blvd. (basement meeting room) Minnetonka MN 55345, 952-471-0590.

The office is west of I-494 on Minnetonka Blvd. At the traffic light on Minnetonka Blvd. at Williston Road, continue driving west past The March (fitness center). MCWD is in a small shopping center, not well lighted, on the north (right) side of the road. Park in front or behind.