MEMORANDUM

To: MCWD Board of Managers

From: Tiffany Schaufler

Date: March 14, 2016

Re: Hennepin County Request for Easements on District Property for Weather Stations

Purpose:

At the March 17, 2016 Planning and Policy Committee (PPC) staff will be seeking a Committee recommendation on a potential partnership opportunity with Hennepin County to install weather stations on two District properties.

Background:

During the 2014 flooding, Hennepin County Emergency Management (HCEM) was a valuable resource to the District to help identify flood risks, provide direct emergency response and assist in disseminating flood information. Post 2014 flooding, HCEM and the District continue to coordinate to discuss opportunities to improve flood preparedness and resiliency across the District. During recent discussions, HCEM inquired if the District would be willing to grant Hennepin County easements on District property to install two weather stations as part of their Hennepin West Mesonet network. These weather stations would track temperature, humidity, pressure, rainfall, solar irradiance, soil temperature, soil water content, soil conductivity, soil permittivity, wind speed, wind gust, and wind direction.

The Hennepin West Mesonet is the only system in the nation that receives data every single minute. That local data feeds directly into the National Weather Service (NWS) local forecast models which allows the local forecasts to be better refined. The NWS and District recently coordinated to develop a hydrologic forecast model for Lake Minnetonka. Through this coordination the NWS has tested their ability to utilize the existing District XP-SWMM model to input weather forecasts in an effort to predict total inflow into Lake Minnetonka. If the District allowed Hennepin County to install these two weather stations, the NWS would have real time data along Painter Creek and Six Mile Creek which would help refine local forecasts and the Lake Minnetonka hydrologic forecast model.

March 17 Meeting:

Staff will facilitate a discussion on the potential partnership opportunity with Hennepin County to install two weather stations on District property and the potential benefits to the District in facilitating this work via easements.

If there are questions in advance of the meeting, please contact Tiffany Schaufler at 952-641-4513 or tschaufler@minnehahacreek.org.