



## Technical Advisory Committee

### The Centre at Elgin

(East Conference Room)

100 Symphony Way, Elgin

October 22, 2019

### Meeting Minutes

Present: Peter Wallers, MWCOG/EEI; Tim Zasada, Village of Oswego; Matt Asselmeier, Kendall County; Walt Kelly, ISWS; Cecilia Cullen, ISWS; George Roadcap; Nora Beck, CMAP; Justin Keller, MPC; Jerry Elliott, Sugar Grove Township Water Authority; Jeff Babich, Sugar Grove Township Water Authority; Dan Nagle, Sugar Grove Township Water Authority; Scott Kuykendall, McHenry County; Natalie Karney, Village of South Barrington; Dave Schumacher, City of Aurora; Judith Thomas, USGS; Kevin Fecske, Village of Barrington; Paul Schuch, Retire Kane County; Bob VanGyseghem, City of Geneva; John Dillon, ISAWWA; Jodie Wollnik, Kane County; Janet Agnoletti, BACOG; Danielle Gallet, MPC; Jeff Freeman, EEI.

Peter Wallers called the meeting to order at 10:04 A.M.

**Welcome, Roll Call and Introductions:** Pete (MWCOG) welcomed everyone to the meeting. Introductions were given by those present.

**Agenda Changes and Announcements:** None.

**Approval of September Meeting Minutes:** Scott (McHenry County) made a motion. Dan (SGTWA) seconded. Minutes were approved.

**General Discussion on Current Water Topics in the NWPA Area:** Dave (Aurora) reported the river was at normal levels in Aurora.

**Presentation: *Water Supply Development in the Silurian Dolomite Aquifer – Drawdown, Recovery, and Contamination***, George (ISWS). George is retiring from the ISWS, but plans to stay involved with planning groups. His presentation focused on the third leg of groundwater resources in NE IL – shallow bedrock groundwater. George described a picture of the MWRDGC Thornton Quarry, which was excavated through the limestone. A review of the limestone walls helps identify the geological time periods in the layers of the bedrock. The variability in the limestone makes the ability to develop groundwater wells in the limestone variable.

George reviewed the overall bedrock cross section of NE IL and the location of the Silurian dolomite within the section. The glacial outwash above the limestone can have a significant effect on the hydrology of the dolomite, especially if there are significant sand deposits. The more permeable parts of the limestone are the shallower layers that were exposed to the surface at one time.



There are a number of communities in the southern portion of NE IL that withdraw from the Silurian dolomite. One of the Mokena wells can pump up to 2,000 gpm. There are also some wells in DuPage County, such as Warrenville and West Chicago. Historically, there were a lot of Silurian wells within DuPage County prior to the extension of Lake Michigan water to the majority of the county. The Silurian is typically too thin in Kane County to provide sufficient production for a municipal well.

The hydrology of the Silurian is very local. The ISWS pieced together a number of studies to develop a better understanding of the hydrology throughout the region. A number of the rivers in the area have a hydraulic connection to the Silurian, including the Fox River. The presented potentiometric surface of the Silurian is the first time the ISWS has been able to develop a potentiometric surface across the whole region.

There are generally three groundwater divides across the region – Western Kane, Western Dupage from Will to Western Lake and Northeast Will. There are cones of depression in Northern Cook County and Southern Kendall County. The McCook and Thornton quarries affect the aquifer hydrology, as well. The water level of Lake Michigan is generally at an elevation of 580. The connecting 580 contour generally runs along the west side of Cook County. The potentiometric surface of the Silurian within Chicago is generally lower than 580.

The withdrawals from the Silurian Dolomite in DuPage County doubled from 22 MGD to 45 MGD from 1966 – 1979. From 1979 to 2002, there was significant aquifer recovery in the northern portion of DuPage County. Groundwater levels declined in the Western and Southwestern portion of the county during that timeframe.

While there is a fair amount of clay overlying the Silurian in many cases, the records indicate the contamination potential for the aquifer is high. There are still a lot of individual wells withdrawing from the Silurian within DuPage County. The Lockformer and Ellsworth Industrial Park TCE and PCE contamination plumes in Lisle contaminated the Silurian dolomite and moved quite rapidly through the system. TCE is a dense non-aqueous phased liquid, which means it generally sinks in groundwater. Therefore, TCE generally migrates downward until it reaches an aquitard such as clay. Migration through the clay is inhibited, but it can pass through the clay long term or possibly through wells open above and below the clay. TCE cleanup was accomplished through vapor extraction in the formation above the clay.

The Village of Crestwood was withdrawing water from a contaminated Silurian well and supplementing their Lake Michigan supply. There was 26 feet of clay above the Silurian in the well, but the TCE contamination from the dry cleaner was able to pass through.

An additional Silurian contaminated area reviewed was the area upgradient of the Village of Montgomery Well No. 13. Pete provided a summary of the history of tracking VOCs within Well No. 13. He pointed out that the levels found within Well No. 13 are below drinking water standards. In addition, the Village has an air stripper at their Water Treatment Plant, which removes VOCs within the water. Pete also provided a history of some of the private well testing upgradient of the Well No. 13 that had measurable levels of VOCs, but all below the drinking water standard. The Village of Montgomery helped switch residents from the Silurian to the Village's Water Works System.

Additional Silurian contamination areas George summarized were in Hanover Park, Sauk Village and Southeast Chicago.



The water quality of the Silurian is highly variable. In some areas, the iron content is high. In other areas, there can be high sulfate concentrations, and/or high chloride levels.

While the Silurian can be highly productive in some areas, the potential for its contamination should be closely reviewed.

**Presentation: Draft 2020-2025 Strategic Plan:** Nora (CMAP) Over the past 6 months, NWPA has been conducting a strategic planning effort. We have accomplished our goal of a streamlined, to the point plan. We are keeping the mission and vision statement. We did make some changes to the goals. Following receipt of comments on the goals, we will finalize the plan and submit to the Executive Committee.

Goal 1 – Develop sustainable water policy practices; The comments are:

- A2 water conservation – Does exploring additional strategies apply to private wells; The plan will be open to considering private wells.
- A3 reporting water withdrawals – There is an existing law that requires it. Will we be advocating for reporting on an annual or monthly basis? Pete reported on IWIP improvements for digital submission and with that process the ability to obtain monthly data.

Goal 2 – Inform decision makers and public about NWPA issues and best practices; The comments are:

- B1 – IEPA should be added as a partner.
- B1, 3 – Add MPC as partner for best practices resources
- B3 – Consider bringing NWPA voice to Springfield to affect policy

Goal 3 – Improve the scientific understanding of NWPA supplies; No comments were provided.

Goal 4 – Build organizational capacity; The comments are:

- How do we develop summaries that can be provided to the general public? Do we have the resources to be able to do that? Can we have presenters develop summary bullets, and/or a caption for the technical presentations at the TAC meetings?

John (ISAWWA) motioned to approve the strategic plan and Scott (McHenry County) seconded. The motion passed unanimously.

**Sensible Salting Committee (SSC) (Update):** Scott (Chair) reported that Phil Sexton is reviewing the document. We are hoping to have the edits back in November. We will then add graphics and pull it together. Scott is receiving positive feedback on the four step process. The McHenry County sensible salting workshop filled up within weeks of the first advertisement.

**CMAP (Update):** Nora (CMAP) reported that CMAP is going through NWPA members to identify who has adopted the water conservation ordinance. CMAP is also publishing the monthly newsletter. Any ideas for newsletter information should be forwarded to Nora. CMAP closed their LTA process. There were 80 applications, a number of which are from the NWPA area. There are a lot of water supply and stormwater



planning submittals. CMAP is working on obtaining continuing education credits for the technical presentations at the TAC.

**ISAWWA (Update):** John (ISAWWA) and Jeff reported on some upcoming ISAWWA events include the Annual Regulatory Update on Thursday, October 24<sup>th</sup>, No Water No Hockey on Sunday, October 27<sup>th</sup> and No Water No Beer on Tuesday, October 29<sup>th</sup>

**MPC (Update):** Danielle (MPC) thanked NWPA, BACOG and Sugar Grove Water Authority for Water 1, 2, 3 sponsorships. The technical assistance applications submitted by February are under review. Looking for communities who may be interested in additional lead service line replacement education. Also looking for communities who have a water supply master plan who are interested in working with MPC to integrate the goals into the land use plan. MPC is working on a water rate affordability review. The release will be in the first quarter of 2020. Danielle introduced Justin Keller and the work he will be doing at MPC.

**ISWS (Update):** Walt (ISWS) reported that ISWS is finishing up a project with UIC and the health department on lead levels in homes with private wells. There are three new hydrogeologists who have been hired, including Cecelia Cullen. The ISWS advisory group met recently. A main focus was on climate change. There also was discussion about the Bulletin 70 changes.

**IDNR (Update):** No Report.

**USGS (Update):** Judith (USGS) reported that they will be launching a new study with IEPA to test for PFAS in public utilities in the coming year. IEPA is designing the sampling study; USGS will follow-up with the initial sampling with resampling to verify and detect changes. Amy Gahala will be presenting at an upcoming BACOG meeting on Pharmaceuticals in drinking water on 11/5/19. They are continuing their work with chloride monitoring and the project at Three Oaks as well as discussion with the Sugar Grove Township Water Authority.

**Executive Committee (Update):** Pete (EEI) stated the next meeting will be held on November 14<sup>th</sup>.

**Other Business:**

IDPH Amendments – they are still going through the process.

The next meeting will be held on November 26, 2019 at the Centre at Elgin.

The meeting was adjourned at 12:00 PM.

Submitted by \_\_\_\_\_ Jeff Freeman, EEI / Nora Beck, CMAP