

Minutes of the Meeting of the Metropolitan Area Water Supply Advisory Committee

Wednesday, July 24, 2013

Committee Members Present: Sandy Rummel; Sandy Colvin Roy (Minneapolis); Julie Ekman (DNR); Randy Ellingboe (MDH); Chuck Haas (Hugo); Sharon Kroening (MPCA) Susan Morris (Isanti County); Jamie Schurbon (Anoka County Conservation District); Barry Stock (Savage); Dan Stoddard (Dept of Agriculture); Lisa Volbrecht (Sherburne County);

Committee Members Absent: Elmer Eichelberg (Wright County); Michael Robinson (Chisago); Tom Furlong (Chanhassen); Steve Schneider (Saint Paul Regional Water District)

CALL TO ORDER

A quorum being present, Committee Chair Rummel called the meeting of the Metropolitan Area Water Supply Advisory Committee to order at 10:04 a.m.

APPROVAL OF AGENDA AND MINUTES

It was moved by Schurbon, seconded by Stock to approve the July 24 agenda and the minutes of the May 22, 2013 meeting. **Motion carried.**

EXPLORING THE USE OF GROUNDWATER MANAGEMENT AREAS TO ADDRESS WATER SUSTAINABILITY CHALLENGES

Jason Moeckel, DNR, explained to the committee that the DNR Commissioner recently responded to a request by the White Bear Lake Conservation District to designate an area around WBL as a groundwater management area as part of a comprehensive solution to help restore water levels in the lake. The DNR is interested in hearing from municipal water suppliers and other stakeholders about boundary setting and other considerations.

The DNR is currently in the process of trying to scope how large of an area to include and how to establish the boundaries. Rather than trying to draw lines on a map, DNR wants to figure out the criteria and see what the lines look like. Communities in NE metro are hydro-geologically related to one another. There are community boundaries, but the aquifers don't respect those boundaries.

Not an immediate crisis, but recognition that there are very clear signals from monitoring data that water is not being used sustainably. Drawdown on aquifers is having impacts on surface water resources. "Slow moving crisis" is an appropriate description. Management of water to not impact the lakes is an issue. Historically, permits were issued one at a time, and that model works okay when water is abundant. When dealing with a more scarce supply in some places, that doesn't work very well. DNR has been trying to figure out how to address this more comprehensively. The statutory responsibility of DNR is to manage the water sustainably – water needs to be available for future generations, need to protect water quality, ecosystems, water levels. Relative to groundwater management areas, the DNR commissioner has the statutory authority to designate groundwater management areas to limit the total annual water appropriations and uses within a designated area to ensure sustainable use of groundwater that protects ecosystems, water quality, and the ability of future generations to meet their own needs. Although discussion has centered on White Bear Lake (WBL) and the area surrounding it, Moeckel emphasized that this is not about WBL, it's about the north and east metro area and the challenges in meeting long term water supply needs while also upholding statutory responsibility to protect the ecosystem.

There is a clear relationship between groundwater and surface area water, and it's variable – not the same everywhere.

DNR staff is meeting with communities, Met Council staff, and others. As it becomes more clear about designating the boundary area DNR will begin the process of bringing communities together to understand the magnitude of challenge and begin to set some benchmarks and timeframes for moving forward.

Discussion highlights:

Chuck Haas. Hugo identified that half of the pumping goes for irrigation, and the city is developing policy for using surface water. He suggested getting watershed districts involved in planning.

Barry Stock. Timing is a key consideration. Recession eliminated demand for growth/wells; now things are changing. Encouraged thoughtfulness in how much time to set aside process for determining action plan.

Chuck Haas. Encouraged communication between regulators, i.e. Met Council and DNR. Met Council tells communities how many people communities are expected to serve. Communities are in the middle between one regulator that says please take your share of metro area growth and the other regulators, e.g. DNR, with water supply availability saying maybe we've got water, maybe we don't.

Sandy Colvin Roy. While developing the first groundwater management area with the partners, think about what could be offered as incentives. This group (MAWSAC) has talked some about how changing the overall way that groundwater is managed. It is not only a huge culture change, it will be an expensive infrastructure change. We haven't quite gotten to the point in our discussion of what those incentives could be.

Stock. Needs to be discussed right away in the process. State has to play a role. Rates, equity, etc.

Sandy Rummel asked if a timeline has been mapped out for other communities not part of this management area. Will business go on as usual, or will policies be changed there? Moeckel – intending to use next 6-12 months with NE area to learn from this and try to find what works and what doesn't before we try to tackle some of these other places.

William Moore asked for insight on how boundaries will be established for groundwater management area.

Moeckel. That's part of what needs to be looked. Have come up with 6-12 things that could help define a line, but don't want to decide that too quickly until we've had a chance to talk. Hydrogeology seems to be a primary base. Possibilities include: major rivers, hydrologic boundaries. Could look at where the water use is in these various aquifers and try to figure out how that might factor into a boundary. Could look at some of the water resources and see how that might help. Political boundaries, city & township boundaries.

Jamie Schurbon. One of the things that's happening now with new appropriations permits is that some water conservation districts are asked to prepare a conservation plan that the applicant has to comply with, and I'm sensing that there is probably a lot of inconsistency between different counties and even between different users - whether it's a golf course or a townhome association or agricultural operation that has this new permit/well. Needs to be addressed in a way that's equitable and fair and consistent.

Haas. During the time MAWSAC put together the water supply plan, we came up with a conservation tool box, and one of the items is a conservation rate structure, and I would suggest that you look at your criteria in your management areas that you look at the rate structure of the cities within that area because I think when the policymakers set those rates they're telling you what they believe about sustainability and conservation. Secondly, a

consideration of cities in your areas that may have responded to the direction of the Met Council to the growth forecasts and made some infrastructure improvements to accommodate that future growth and if that future growth is not going to happen that there is some consideration given for the expenses that cities have incurred.

In response to a question on conservation rate structure, specifically what Hugo's experience has been with how that may have contributed to water conservation. Haas said it has made a difference. One of the things we've realized is that there are about 15% who use 30% of the water. Since the rate structure was instituted, the winter/summer rate scale ratio has dropped quite significantly.

City of Woodbury recently completed study and found that you couldn't frankly price water high enough for the people who are just going to use the amount of water that they're going to use. It's disposable income for them, and water's really cheap. For most people what goes to the state for water management is about \$.50 - \$1.00 per year per household for domestic household use.

Haas said some insight may be gained from White Bear Township. For years they had a flat rate. Last year they went to a rate structure so people are now getting charged for what they actually use to a certain extent.

Lisa Volbrecht. One of the things we look at most often is the peaking factor. A lot of towns/communities don't have that information as an individual user so there is definitely research that could go into that. She asked if the DNR envisions that a groundwater management area will be similar to a watershed district.

Moeckel: In some respects yes and, in fact I think several of the folks in this group here are part of the interagency groundwater drinking water group and we've talked about how we bring information about groundwater availability/groundwater protection/groundwater use at the scale of a watershed. Aquifers don't necessarily follow surface watersheds either, but at the same time if we look at a watershed we can often analyze information we have about groundwater in that area and bring that to a local comprehensive watershed planning effort. But in terms of the governance of it, that's up in the air.

Prior to moving to the next agenda topic, the chair recognized a member of the public who asked to speak.

Timothy Figg, Ravena Township, asked about the status of the lawsuit, WBL / DNR. He also commented on the nitrate content in groundwater, and said there should be better regulation of nitrates. He encouraged agencies to get more active.

DNR response: can't comment on ongoing lawsuit. Working its way through process.

MDH response: a number of efforts in the works right now are intended to address concerns about nitrogen, and nitrates from a drinking water standpoint. Working with public water supplies at MDH in our drinking water protection section. Working directly with public water supplies when they need to provide treatment. MN Dept of Ag has a number of efforts going on right now in regard to the nitrogen issue in particular (nitrogen fertilizer management). Between work being done by Dept of Ag on nitrogen management and intending to see better practices across MN, the work going toward groundwater management, it's appropriate that these issues of groundwater use and nitrogen impacts across the state be linked. The PCA has just come out with a report on nitrogen in MN, and is working with a group of stakeholders to put together a strategy for nitrogen issues. While not all of the work is done in regard to nitrogen, particularly in relationship to its impacts on Minnesota, there are various efforts ongoing.

Dept of Agriculture response: Extremely difficult problem to address, because nitrogen is required in order to grow a crop. It is monitored across the state, and do find that somewhere on the order of 6-12 % of the wells, depending upon location in state, in shallow areas do

exceed the health standard. Clean Water Legacy has provided additional funding and are in the process of revising the state nitrogen water management plan.

GROUNDWATER CONDITIONS IN TWIN CITIES AQUIFERS

Lanya Ross, Principal Environmental Scientist, summarized the other groundwater sources available, other aquifers water use and highlights potential issues.

The Prairie du Chien-Jordan (PDJ) map illustrates the serious need to change course if sustainable water supplies are to be achieved. Focusing on PDJ however, misses the true magnitude of the challenge. It's only one of the aquifers regularly used in the metro area. Other important groundwater sources include the Quaternary aquifer – a combination of sand and gravel layers deposited by glaciers, the Tunnel City-Wonewoc aquifer (formerly known as the Franconia-Ironton-Galesville or FIG), and the Mt. Simon-Hinckley aquifer.

59 communities in the metro area do not have a municipal water supply system. Residents and businesses in these communities rely on private wells from a variety of sources. These communities are not currently required to develop a local water supply plan and are not required to develop wellhead protection plans (unless a community water supply for a small residential development or a school is present in the community). Many private individuals also rely on private wells. The management concerns highlighted apply to all public and private users.

The Metro Model predicts that, under business as usual, we see declines in the glacial sand and gravel aquifer across the metro. Where these aquifers are connected to surface waters, those surface waters are likely to see declines as well.

Business as usual is not sustainable, and we are in the process of charting a new course.

Our solution must address not only the Prairie du Chien-Jordan aquifer, but the other important aquifers connected to it. Each one has its own unique package of challenges that communities must wrestle with.

In some communities, we still have very little information about the aquifer water level fluctuations or quality.

In others, land use decisions that change recharge and lead to increased pumping impact specific aquifers and all the aquifers they are connected to.

WATER SUPPLY AND A THRIVING REGION

William G. Moore, ES Deputy General Manager, and the committee reviewed the water supply issues that were discussed in the MAWSAC meeting on 5/22/2013. Comments/suggestions in *italics*.

Summary of water supply issues discussed in MAWSAC meeting 5/22/13

- MC role should be as active participant as facilitator, advisor, collaborator creating partnerships - not as active manager and regulator
- Focus should be optimized water supply management system
 - Cost of alternative water supplies: Surface water, storm water, Wastewater
 - Equity: State financial role

Haas- Are we going to talk about the ownership of water? Who 'owns' water, stormwater, etc? Sometimes PCA says city owns water when it's impaired and we have to clean it up. Who's going to tell us maybe we don't own the water if we decide to clean it up and keep it and use it? These might be some future questions that will come up. If I'm downstream of somebody and they use all of the water and we don't have it anymore, I'm going to question their ownership of it. Moore said this topic will be put on worklist; don't know that it will make it into the policy – it's a significant question and probably requires legislation. Julie Ekman, DNR – don't have 'ownership'

of water; have reasonable use of water. So anyone who has access to water has reasonable use of that water as long as they don't impact somebody else's ability to use water.

- Water is factor, but not determining factor in terms of development.

Sufficient water in region to support growth, should not need to restrict growth based on lack of water. Schurbon: water doesn't prevent development, but it may shape that development. Colvin – don't want to say "should" affect development – use "can" affect development. Stock: somebody shouldn't be telling a community that water is the factor – if my community wants to make an investment in an alternative water supply source, it might be very, very costly, but that's the decision we want to make in order to grow, we should be able to make that decision. Ellingboe – coming from well head protection standpoint we have issues related to supply and sustainability. We also know that communities wrestle with how to protect their sources and often there may be competing interests in adjacent communities. As we're thinking not only about the sustainability of the supply we also need to be thinking about what the land use is and how that affects communities in terms of comprehensive thinking about water use. Think comprehensively about how land use has an impact on water. This bullet will be reworded.

- Comprehensive long-term look at water supply planning. *Somehow link with the population distribution that the metropolitan council is suggesting*
- Collaborations and partnerships (best mechanisms to achieve regional goals).
- Do not need single direction for the region. Do not need top-down regional regulations. *Revise to: Do not need single solution for the region.*
- Protecting recharge areas
 - How to develop differently
 - How to compensate communities for sacrifices made in passing development opportunities *to benefit the region's water supply*
- Incorporation of groundwater management area concept in planning

This will be brought back to the committee one more time, then they'll be forwarded to as comments from this advisory committee to different policy groups in the Met Council as input to Thrive and the Water Resources Policy Plan.

DRAFT TECHNICAL WORK PLAN FOR 2013-2015

Ali Elhassan, ES Water Supply Manager, explained that going forward, two of the main regional planning activities are:

1. the Metropolitan Council's regional development framework –the Thrive MSP 2040 Plan, and
2. the regional Water Resources Management Policy Plan. This effort has just begun and will continue through early 2014.

The council will then develop a system statement for each community. A system statement is a document that is required by state law and intended to help communities amend, if necessary, their local comprehensive plans. This is mainly for the wastewater, transportation and parks. It will provide general guidance regarding water resources management and water supply.

This will occur along with update of the master plan – particularly the community profiles.

The water supply unit will contribute significantly to each of these planning activities.

We will continue working with other departments in the council to update regional policy plans and the master water supply plan.

Our tools and technical information will support updating policies and strategies of the Metropolitan Council's regional development framework –the Thrive MSP 2040 Plan, the regional

Water Resources Management Policy Plan, and provide general policy input for water supply guidance in the system statements.

In addition, as we update community profiles to be incorporated in the master plan, we will continue developing and enhancing technical information and tools and assisting communities to address emerging water supply issues.

ADJOURNMENT

Business completed, the meeting adjourned at 12:00 p.m.

Susan Harder
Recording Secretary