Legislative Water Commission

Barb Huberty, Director

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November 21, 2017
Meeting Minutes

Members Present:

House	**Senate**
Representative David Bly	Senator Charles Wiger
Representative Peter Fischer	Senator Rich Draheim
Representative Clark Johnson	Senator Paul Anderson
Representative Paul Torkelson	Senator Bill Weber
Representative Glenn Gruenhagen	
Representative John Poston	

Members Excused:

Senator Jason Isaacson
Senator Kent Eken

Stakeholders Present:

Organization	**Representative**
Barr Engineering	Bryan Oakley
Chamber of Commerce	Tony Kwilas
Coalition of Greater MN Cities	Marty Seifert
League of MN Cities	Heather Corcoran
Metropolitan Council	Sam Paske
MN Center for Environmental Advocacy	Darrell Gerber
MN Environmental Partnership	Trevor Russell
Freshwater Society	Carrie Jennings
MN Pollution Control Agency	Rebecca Flood
MN Public Facilities Authority	Jeff Freeman
MN Rural Water Association	Tim Hagemeier
University of MN	Laura Babcock
Tonka Water	Ryan Godfrey

Stakeholders Absent: MN Environmental Science and Economic Review Board

A quorum being present, Chair Wiger called the meeting to order at 9:30 a.m. on November 21, 2017. Sen Wiger welcomed everyone to the meeting and asked the stakeholders, members, and audience to introduce themselves.

Director Huberty noted the following correction would be needed for the 10/17/17 meeting minutes: MCEA ~~supports trading; they~~ worked on the first point source-nonpoint source Rahr Malting trade and looks forward to working on trading. Sen Weber moved approval of the 10/17/17 meeting minutes. THE MOTION PREVAILED.

Mr Charlie Peterson (Sr. Management Consultant with the MN Management and Budget Office, Management, Analysis and Development Department) gave an overview of the logistics, ground rules, and outcomes for the meeting.

Next, Director Huberty explained that input from the October meeting resulted in the identification of the top priority problem: how to fund aging wastewater infrastructure upgrades and control rising costs. Ms Huberty then took all the "parked" solutions from the October meeting and associated them with the other top priority issues, after which they were organized under the primary funding topic based on possible short-, mid-, and long-term timeframes. The matrix provided was reviewed and attendees made several suggestions to add solutions, switch or split issues and solutions into different timeframes, and clarify wording.

Ms Flood felt the idea for a state-wide prescription drug take-back program would better fit as a mid-term solution because of the time it would take to develop and implement it. Ms Huberty noted it was placed as a short-term item because a proposed bill was already in the legislative que and take-back programs at sheriff's offices have already been started.

Both Representatives Torkelson and Gruenhagen noted that some of the permitting solutions were appropriately listed as mid-term actions, but asked if some of them could be started sooner, perhaps next session. Rep Gruenhagen was particularly interested in identifying those that unnecessarily delay the permitting processes without water quality improvement.

Rep Johnson agreed that most permitting solutions looked to be mid-term items, but that identifying opportunities for regionalization could be done as a short-term action. Regarding the other permitting solutions, he did not think they had developed close positions on them yet, based on last year's results.

Mr Kwilas indicated that the already developed [MPCA] Commissioner Orders (for peer review and chloride discharges) could be addressed as a short-term action.

Mr Seifert concurred that institutionalizing guidance memos and identifying opportunities for regional facilities could proceed. He wondered if some regionalization work had already been done by PFA, knowing that there were some iron range cities where economies of scale were still possible.

It is Rep Gruenhagen's goal that the LWC develop 3 to 5, bipartisan, unified recommendations for 2018 legislation that result in a more efficient permitting process.

Ms Flood asked for an additional solution to be listed in the short-term category: creating a program for unsewered communities where home values are less than the cost of a septic system to install holding tanks and contract with the counties to pump them every 3 years.

Mr Godfrey asked that a permitting item be added: monitor federal actions related to permitting, as they may relate to state actions. There is discussion at the federal level that permitting changes may be part of their infrastructure package.

Mr Gerber suggested that another compliance tool be added, that of source reduction upstream of wastewater treatment facilities (WWTFs) to reduce inputs to the WWTFs, similar to Met Council's recent work on pre-treatment and WLSSDs work with mercury reduction. Ms Huberty suggested it would be more appropriate to add that suggestion to the operations and maintenance (O&M) solutions as pollution prevention/pre-treatment.

Mr Godfrey noted that there are some cross-linkages between solutions, such as an integrated, skilled workforce being tied to O&M, as well as the potential to link funding criteria to future O&M costs.

Rep Torkelson asked for more detail on the LCCMR optimization project and whether it could be completed sooner. Ms Flood indicated that $779,000 was requested for the 3 year project and that $700,000 was recommended. Partners include MPCA, the U of MN, MN Rural Water, Met Council and St Cloud Wastewater Utility. Joel Peck, MPCA, indicated that the full project is designed to provide for 5 pilot projects involving both ponds and mechanical systems and that looking at pond options will take longer because they only discharge intermittently each year. If the work focused on mechanical WWTFs, the timeline could proceed faster. If approved by the legislature this coming session, the money would be available for FY 2019 (July 1, 2018), but they are already strategizing on how to proceed, basing their planning on programs developed in Montana and Tennessee, but modifying the approaches based on MN receiving water needs and WWTF designs.

Rep Gruenhagen noted that he had already introduced a bill to address "flushable" wipes, which is an expensive issue for rural WWTFs and across the state. He is hopeful that the LWC can make a compromise recommendation on this issue for the 2018 legislative session. Rep Gruenhagen also asked that, with respect to the prevailing wage, the word eliminate be changed to waive, especially as it applies to small, rural communities.

Ms Huberty restated the matrix changes for which there was consensus and the modified matrix addressing these discussions is attached at the end of these minutes.

Ms Jennings asked for clarification on the difference between the mid-term solution for water quality trading on a watershed scale and that of source reduction. The source reduction in the addition suggested by Mr Gerber refers to working on pre-treatment with industries. Ms Jennings indicated there are watersheds, perhaps in the metro area, that are ready to talk about nutrient trading, similar to the models in the Yahara Watershed (WI) and Oregon. Pollution prevention will be added as a short-term O&M solution and trading will be left as a mid-term solution.

Jeff Freeman, Director of the Public Facilities Authority (PFA), then gave an overview of their responsibilities to complete the financial review and fund management for drinking water and wastewater infrastructure programs, as well as to coordinate with the USDA Rural Development program. MPCA and MDH provide technical reviews and establish the project priority lists (PPL) for the wastewater/stormwater and drinking water revolving loan fund programs, respectively. The projects are listed on PPL using rules to objectively rank projects based on age, condition, environmental and public health factors, and project readiness. For example, the PPL has about 300 projects on it, but if a lower ranked project is ready for construction, it may get funded before higher ranked projects. The funding structure is based on low interest loans available to cities of all sizes and targeted grants based on water

quality goals (Point Source Implementation Grants; PSIG) or affordability (Water Infrastructure Funding; WIF) criteria. There are no population limits on any of the PFA programs; however, grants tend to focus on smaller communities because they have the more serious affordability needs. PFA also works with USDA Rural Development, which has loans and grants for small rural communities for these types of projects. Also, grants from the DEED Small Cities Development Program can include some water/wastewater infrastructure. The affordability criteria for the WIF grant program are based on 1.4% of median household income (MHI) for wastewater ($48/mo for avg non metro MHI) and 1.2% of MHI for drinking water ($41/mo for avg non-metro MHI). USDA project can get WIF funding as a matching grant for up to 65% of the grant. WIF grants can be used for wastewater or drinking water projects. PSIG grants are tied to meeting more stringent treatment requirements and the grant can cover up to 80% of the eligible project costs, up to $7M. The Small Community Wastewater Treatment Program is for small unsewered communities and it consists of small (up to $60,000) technical assistance (TA) grants to help conduct site evaluations and feasibility studies, as well as construction loans up to $2M to replace individual septic systems with a community soil based system. Sometimes these TA evaluation help identify feasible private fixes that avoid the need for a public system with higher administrative and technical responsibilities. Sometimes, Ag BMP loans and county money is available to help with private fixes.

Rep Torkelson asked whether the holding tank option proposed earlier would be eligible for the small community wastewater treatment program. Mr Freeman said the installation of the tank would be an eligible capital expense, but the ongoing pumping is an O&M cost that they don't fund.

Rep Torkelson asked whether the $48 and $41/month affordability criteria represent the total water + wastewater bill. Mr Freeman indicate that water and wastewater projects are looked at separately and that they don't just look at rates; they look at system costs per household (O&M + debt service on prior debts + debt service on the new project debt) in comparison to the median household income.

Rep Gruenhagen noted his appreciation for having the costs broken down by household and asked where the funding was described on the chart. Mr Freeman noted that the cost criteria are not on the chart; rather, they are described on the 2nd page of the narrative under the WIF description. Rep Gruenhagen would also like to see what MN costs are compared to neighboring states. Mr Freeman said that having meaningful comparisons is difficult because the geophysical conditions between towns and receiving waters can be so different. Also, comparing sewer bills is not useful because bills don't explain whether enough revenue is being gathered for operations plus retained earnings to pay for debt or save for future construction. Also, it is more expensive to provide services for fewer users.

Mr Freeman then gave a side-by-side comparison of the factors associated with each infrastructure funding program, along with past funding and future funding needs for each program. For 2018, there were $360M in requests for the Clean Water Revolving Loan Fund, and they approved 70-80 eligible projects in the fundable range of $301M, if they complete the technical process and are ready for construction by the end of the fiscal year. This is above the $94M/yr average lending capacity shown, but projects can get delayed and many carry construction over more than one year. They can leverage federal and state funds by selling revenue bonds that generate additional loan funds and provide flexibility to fund ready projects. WIF funds were quickly used by projects in the queue. More than twice as many projects as applied and ready to start for the PSIG program than were able to be funded. Two TA grants are in process.

Rep Torkelson asked how much inflation from material costs, labor or increased regulations has been seen over their 5 year estimation period. Mr Freeman said he didn't have a specific answer to that. Inflation has been less in recent years than during the mid-2000's housing boom when costs were higher. The recession and its recovery has reduced that problem. Recent project bids saw a lot of bidders with less than expected costs. Now is a good time to bid projects.

Ms Huberty asked for clarification on the meaning of average lending capacity. Mr Freeman stated that this is the average annual amount available in the revolving loan fund if there are no further state or federal appropriations. Although there is significant capacity at $94M, there is more demand and therefore a need to build capacity. He also clarified that IUP stands for the intended use plan, which is the official public document required by EPA to be published; it describes how the fund assets are being managed and it includes the list of projects in the fundable range.

Mr Godfrey noted that in manufacturing they have seen an inflation rate of about 2.5% due in part to the federal requirement to buy American steel, which has caused 10-20% increases on some specific projects. They will be following steel prices as a way to estimate inflation. Also labor rates can be expected to increasing as unemployment declines or when there are shortages of specialized labor.

Mr Russell asked whether any changes in federal funding for the revolving loan programs is anticipated. Mr Freeman said that there has been a slight decline over the years, but in general the funding has been relatively steady. Mr Russell then noted that based on lending capacity and 20 year projected needs, it would take 44 years to complete the wastewater projects (minus material and labor inflation) and 185 years to complete the drinking water projects (minus material and labor inflation).

Mr Gerber asked whether the big problem is in dealing with permitting and new water quality regulations or old infrastructure and Ms Jennings noted that showing 5 year averages can hide trends and wanted to know whether there are trends that aren't being met or balloons of expenses are forthcoming.

Mr Freeman indicated that the 5 year projection is based on specific projects that have a description and that the majority are "rehab" projects to replace aging infrastructure that is beyond its design life. Ms Flood shared that about 75% of the need is to replace aging infrastructure (pipes and plants), treatment upgrades are about 5-7%, and about 15% is for new development.

Rep Fischer asked how today's standards compare to the 1970's standards. Ms Flood said it varies by standard, but that today's standards are generally more stringent because many of the 1972 standards were "standards secondary". He then asked how phosphorus, nitrates and chloride standards compare to today. Ms Flood noted that the first phosphorus standard began in the 1970's just for the Lake Superior basin, then the lake eutrophication standard (P) was adopted in 2008 and the river eutrophication (P) standard in 2014. There is no nitrogen standard, but there are ammonia criteria so it is not toxic to aquatic life. The chloride standard has been in place since 1990, but the data on chloride concentrations in wastewater discharges is recent. Many facilities may need chloride effluent standards added to their permit, but since treatment is expensive, MPCA will use a variance approach to defer implementation. Variances aren't free passes; municipalities still have to work to reduce discharges until more affordable technologies become available. Staff have been directed to adopt the Commissioner's Order regarding the recommendations of the chloride work group into the permitting process.

Sen Weber asked whether the costs to replacement aging infrastructure also include costs for new requirements. Ms Flood said cities are asked to split out the costs for pipes and plants vs those for meeting new requirements because of the different funding sources.

Mr Freeman then spent some time explaining how they get to the needs figures. He noted that these are systems owned and operated by cities and that they spend a lot of money on construction, operations and maintenance, using either pay-as-you-go funding or their own bonding. Growth is funded by themselves. $4.2B in need is not just a federal and state responsibility. Mr Freeman shared his opinion that the 20-year needs projection numbers should be taken with a grain of salt because it is so hard to anticipate costs 10-15 years from now. Until the need is converted into a project (demand), the cost estimates are too abstract. Cities have to be willing to fund the preliminary design and raise rates before a project can begin. He thinks the real state need is about $300M/year (all programs), therefore, the existing PFA framework is good and should be continued, with a slight increase in appropriation targets for each program (see the last page of his handout). These targets could change if cities had more projects ready.

Rep Fischer asked whether projects are spread out or do they get lumped together. Mr Freeman said big spikes were seen in 2010 and 2011 when the federal stimulus money (primarily grants) was provided. Grants are the limiting factor in getting things built. From 2012-2015, there was less construction, likely due to slower city recovery from the recession.

Rep Gruenhagen reiterated his concern that MPCA requirements artificially inflate costs without sufficient water quality improvements and asked Mr Freeman's opinion on that. Mr Freeman said he is not qualified to speak to that.

Mr Freeman noted that the federal iron and steel requirement may affect certain projects. In general, they have not seen it as a huge issue, but it varies based on the size of the project. EPA has made strides in clarifying the iron and steel requirements so they are easier to administer and those requirements exclude the high tech equipment used in WWTFs. Also, Federal prevailing wage laws apply to revolving fund programs (they receive federal money) and streamlining the administration of differing state and federal wage rates is being worked on.

After a 15 minute break, Rep Johnson asked what could be accomplished with a robust bonding bill and what the capacity is that is ready to go. Mr Freeman referred everyone to the last two lines of his chart (the $300M target and the appropriations needed to get there). Loans and grants need to work together. In the past, the current cut-off is for projects ranked 40 points or more. There are good projects below this that are ready to be constructed. Additional loan capacity could allow projects in the 20-30 point range to be added. It is important to remember that this is a long-term effort. At this time, the state match is 20%, but in 2006, it was a 50% match because the federal appropriation was lower. Rep Johnson agreed that stable funding is important, but asked how the legislature can assure funding so that over the long term, communities can depend on the money. Mr Freeman said the cities' ability to plan ahead is very important. Cities front the expensive cost of pre-construction planning and design activities and this process can take several years. They can be reimbursed for this expense once they get a construction award, but they need to have confidence that their investment will become a fundable project. The loan funding helps provide stability; PFA tries to maintain the 40 point cut-off year to year so cities can plan. Predictability in grant funding is also important. The increase in WIF grant funding in 2017 was significant, as was the PSIG grant cap increase from 50% to 80% of the cost for treatment upgrades (not total project cost). Engineers segregate the cost to replace aging infrastructure vs those for treatment upgrades.

Rep Torkelson asked whether grants and loans are driven by new development. Mr Freeman said the loan program can fund growth because treatment infrastructure is planned with a 20 year design life, which includes growth over that 20 years. WIF grants are only to meet current needs and do not cover growth. PFA does not fund loans for sewers serving new development, but loans can be made for sewer extensions to existing homes with failing septic systems.

Rep Gruenhagen commented that it is the private sector that pays the bills and that, according to MMB, the private sector economy grew about 1.5% in 2016, with the same growth rate projected for 2017. Averaging a 3-4% private sector growth rate/year will generate billions more in tax revenue that can pay for this. Streamlining approvals for oil pipelines and mining projects is needed to unleash private sector tax money and new technologies are available to support these businesses without the type of pollution there has been in the past. Non-peer reviewed science is not acceptable and the permitting process needs to be streamlined (he gave the example of a metro dam requiring 70 permits). Reform the government system is needed.

Mr Gerber, MCEA, briefly explained contents of the handouts he provided regarding the funding approaches, including the additional fee used in the Chesapeake Bay region and the use of additional general fund dollars in New York.

Mr Kwilas asked whether they had other funding sources, like MN's WIF funding. Besides revolving loan and rural development funding, Mr Gerber was not aware of additional sources, nor was Mr Freeman.

Mr Gruenhagen said we all want clean water and understand there is a price to pay for it, but because we are already a high tax state, he won't support more costs to taxpayers unless there is system reform to reduce taxes first.

Rep Bly noted that government may hinder the private sector in some ways, but that the private sector economy also benefits from government intervention. The private sector is very complex and many businesses rely on clean water. In looking at reducing costs, agriculture must be considered. Even though it is an important sector that needs to prosper, it is a polluting part of the economy. Many farmers are trying many things, but the whole system needs to be looked at. Poisoning soil and water has been allowed to increase yields, without looking at the cost of consequences, so now it is a huge problem, but because it affects people's livelihoods, it is a difficult system to change.

Mr Gerber indicated the importance of looking at the bigger picture of aging infrastructure, not the small sliver of permitting. Addressing aging infrastructure is an economic development issue; no community can thrive with failing wastewater systems.

Rep Gruenhagen replied that no one wants dirty air and water, but that eventually technology prevails. He also said it is important to remember that the federal government subsidized tiling and plowing from fence row to fence row, thereby incentivizing the problems we are dealing with today. No one is against updating aging systems, the most cost effective ways to meet the needs must be found.

Rep Bly indicated that a lot of technology solving today's problems came from government regulations. Rep Gruenhagen disagreed.

Next, Mr. Peterson gave participants a sheet describing the various reasons for setting priorities and then each stakeholder and LWC member was given 6 dots to affix to the issues/solutions matrix to

identify their top priorities. After voting was completed, the issues were ranked. Those ranks are shown in the two matrices inserted below.

After dot allocation, Mr Peterson gave a quick overview of the solutions receiving the most dots and then he opened the discussion to identify the who, what, and how of tackling the top ranked solution: *providing independent, quantified cost-benefits analysis and peer review of standards*. In synthesizing the wide-ranging discussion, the possible actions discussed can be summarized as follows:

- reintroducing the related language that had been in last year's omnibus bill
- incorporating the Commissioner's order regarding peer review into legislative language
- quantifying the costs of projects as well as their benefits, remembering that benefits will vary across the state
- finding a cost benefit threshold (e.g., Osakis $11M for 0.001% P reduction, Rochester $206M for 2% reduction)
- using solid scientific methods to develop standards
- separating the issue of cost-benefit from that of peer reviewing the science used to develop the standard
- defining who does the peer review or cost benefit work; possibilities include:
    - MESERB (to estimate costs); a comment was made that MESERB is made up of wastewater service providers so their involvement would not be independent; it should not be MPCA or CGMC
    - the U of MN – Institute on the Environment, Water Resources Center (to estimate benefits)
    - an independent out-of-state party or engineering firm without MN clients
    - the Environmental Initiative
    - the Office of the Legislative Auditor (an entity trusted by the legislature)
- doing nothing because the peer review processes are already in place and costs/benefits are determined through implementation
- evaluating how standards apply in differing situations using MPCA's discretionary authority
- applying standards on a watershed basis with the value/return on investment/point of diminishing return to the receiving water understood

Rep Johnson said there is a disconnect between the MPCA statement that 5% of infrastructure costs are to address new treatment and CGMC's Osakis and Rochester examples of poor cost-benefit. That needs to be reconciled. Ms Flood indicated that Osakis can currently meet the water quality standard assigned to the facility.

Having run out of time for further discussion, the meeting adjourned at 12:30.

Legislative Water Commission Summary of Wastewater Issues, Solutions and Priorities

(by rank order, 11/21/17)

What municipal wastewater problems need solving?

#1 ***Find solutions to fund aging wastewater infrastructure upgrades and control rising costs.***

Key: issues ranked highest at the October meeting
parked solutions raised at the October meeting
= "dot-mocracy" rank from the November meeting

Term	Issues	Solutions	Rank
M	permitting	independent, quantified cost-benefits analysis & peer review of standards	19
M	trading	pilot a watershed-scale program (follow Oregon model?) and involve ag in the planning	17
S	O&M	provide I/I funding for public and private lines	10
S	O&M	identify opportunities for regional cooperation for administration and O & M	9
S	O&M	change flushable labels on personal care wipes	8
S	funding	continue/increase PFA loan/grant funding (@ lest $121M/biennium)	8
S	funding	find a new funding source (such as the Chesapeake Bay model)	8
M	permitting	streamline the regulatory process	7

Legislative Water Commission Summary of Wastewater Issues, Solutions and Priorities				
(as modified on 11/21/17)				
What municipal wastewater problems need solving?				
#1	***Find solutions to fund aging wastewater infrastructure upgrades and control rising costs.***			
	Key:	issues ranked highest at the October meeting		
		parked solutions raised at the October meeting		
		# = "dot-mocracy" rank from the November meeting		
		* = top 8 priorities		
SHORT TERM OPTIONS (meet immediate needs)				
	compliance tools (tech assistance, variances, compliance schedules, fee waivers, optimization, with equity for businesses)			
		develop statewide prescription drug takeback program	5	
	operation and maintenance (cost increases with technical complexity, I/I, flusahble wipes)			
		provide I/I funding for public and private lines	10	*
		facility optimization (LCCMR pilot project proposed)	1	
		fund research to improve operations	0	
		change flushable labels on personal care wipes	8	*
		educate consumers (drug disposal, wipes disposal, softener operations/salt use); watershed-wide P2 education	1	
		identify opportunities for regional cooperation for administration and O & M	9	*
		industrial pretreatment/source reduction	4	
	skilled workforce (recruitment incentives, competetive salary, ongoing training, pooled staff); *tied to O & M*			
		develop operator workforce, researchers, and industry leaders	3	
		create pool of O & M expertise	1	
		create student loan forgiveness program	0	
		change licensing requirements to allow for contracted/shared private sector services	0	
	funding (unsewered communities, towns under 1000, towns over 1000)			
		balanced PFA loan/grant funding	4	
		continue/increase PFA loan/grant funding (@ lest $121M/biennium)	8	*
		build USTDA best value procurement recs into grant/loan processes	0	
		change funding criteria - *tied to O & M*	0	
		support asset management and long-term/capital planning using life cycle costs	1	
		find a new funding source (such as the Chesapeake Bay model)	8	*
		develop public-private partnerships	0	
		promote use of design-build options	0	
		waive the prevailing wage in rural communities	5	
		holding tanks for unsewered communities eligible for funding	3	
	permitting (appropriateness of stds, C:B assessments, peer review, cumulative effects, individual vs watershed approach)			
		institutionalize guidance/commissioner memos into statute (peer review, variance fee waivers, etc.)	0	
		identify opportunities for regionalization of facilities	4	
		monitor federal actions	0	
MID TERM OPTIONS (foundation already in place)				
	availability of trading processes/partners (PS and/or NPS)			
		allow for credit swaps	4	
		pilot a watershed-scale program (follow Oregon model?) and involve ag in the planning	17	*
	permitting (appropriateness of stds, C:B assessments, peer review, cumulative effects, individual vs watershed approach)			
		independent, quantified cost-benefits analysis & peer review of standards	19	*
		develop better estimates of regulator costs	2	
		develop guidance on C:B rations for PS vs NPS treatment shares	0	
		set thresholds for cost of upgrades	1	
		collective effect of permits on water quality at regional/watershed scale	1	
		create appropriate and predictable standards consistent with border states	1	
		streamline the regulatory process	7	*
LONG TERM OPTIONS				
	integrated water management planning (avoid shifting the burden from wastewater to water supply); reuse			
		write a MN 5-15 year integrated water plan with overarching principles (e.g., collaboration, meet local values)	5	
		financial incentives for resource recovery (energy, nutrients, water)	1	
		create centers of excellence for integrated water management across the state	3	
		educate consumers (conservation, reuse)	0	
	affordability/availability of technologies (existing, emerging, innovated, combined, hybrid, diverse)			
		base decisions on technical expertise	0	
		research to spawn innovative technologies (better, cheaper, address CECs…)	1	