

Synopsis

Towson Green Alliance Meeting

February 16, 2018 1:00 pm to 3:30 pm

Larry Fogelson, Green Towson Alliance
Roger Gookin, GTA
Tom McCord, Friend of Towson Run

Theresa Moore, Valleys Planning Council
Ryan Hensler, Councilman Mark's office

Dr. Kevin Brittingham EPS- Watershed Management and Monitoring WMM
Joe Reiley EPS- Watershed Management and Monitoring WMM
(Bacteria Monitoring WMM)

Representing PUBLIC WORKS ENGINEERING

Steve Walsh
Tom Kiefer
Jeff Peluso
David Bayer
Lisa Eicholtz
Bryan Bokey
Glen Keller
Dave Thomas

Tom McCord, Roger Gookin and Larry Fogelson of the Green Towson Alliance introduced themselves. Fogelson was with the Maryland Department of Planning where he reviewed, commented upon and advised on State statutory mandates. Roger Gookin is a retired sewer contractor and Lake Roland resident. He was president of the Anne Arundel County Utility Contractors Association. And Tom McCord, a former CEO, is not a current member of the GTA but “lives downstream.”

Steve Walsh set the scope of the meeting: information sharing about sewers and Lake Roland. The meeting is a venue where everyone can share information but if an impasse is reached, agree to disagree. He asked Dr. Kevin Brittingham to discuss water quality in Lake Roland and the testing standards of his operation.

Stream Water quality testing

Brittingham explained that his office has been monitoring bacteria in the County since 2010 and publishes reports annually (NPDES), available on line. He has looked into Jones Falls for at least two years, including testing for e-coli using in-house analysis. [He produces graphs.]

McCord, speaking for the Alliance, noted that the County Health website shows levels of high bacteria. Brittingham explains that high levels are associated with a high rain event. “Our TMDL (Total Maximum Daily Load) is therefore based on low flow conditions. McCord parried that high flow is what the consent decree is about and asked if the County measured contamination after every rain storm.

Responding, Brittingham noted that tests were from November and the TMDL was based on low flow and seasonal low flow. His office looks at highs in bacteria and passes on the information to the appropriate department. High e-coli does not necessarily mean a sewer leak because dogs, other animals and farm runoff contribute to pollution. McCord quotes a report noting that over 70 percent of the e-coli is human.

Roger Gookin asks Brittingham if there are tests that indicate if sewers are a source of pollution. And McCord remarks that in a *twenty-year-twenty-four-hour storm* event the sewer lines in Lake Roland are at 141 percent capacity.

Brittingham explaining the data and notes that his organization doesn't sample Lake Roland; we don't do *impoundment* waters. However, the data indicates that when there is a sewer line leak Waste Water Management and Monitoring can locate the sewer line leak and differentiate between a leak and a rain event because the ecoli numbers are very high.

Steve Walsh steers the discussion to protocols and Tom Kiefer explains the typical response to an overflow that involves Public Works and other agencies. He then explains changes in environmental testing organization followed by a technical explanation of hydrostatic pressure in sewer lines, psi and the geometric mean.

In conclusion, Steve Walsh notes that there is no consensus of a correlation between water quality data and broken /over capacity sewer lines.

Sewer installed backwards?

The GTA mentioned to the Council that there was an incident in which a sewer pipe was installed backwards. Apparently it was discovered that this was a data problem and a problem with the County's models...the actual construction drawings showed the pipe being installed correctly. McCord is concerned about two locations...manholes: 6883 and 6882. Bryan Bokey from the Bureau of Engineering will check these manholes.

Sewer Construction

The Alliance and Public Works engineers discussed sewer construction standards as related to construction under Lake Roland in an attempt to ascertain if there is a data anomaly or a construction inadequacy. Tom Kiefer explained the relationship between slope or grade and pipe diameter. And Steve Walsh noted that the Lake Roland lines were designed according to the standards of their time (1954). The exchange also touched on the three sewer lines that meet

under the Lake which raised questions about rate of flow, sewer shed time of concentration , flow attenuation and whether the current configuration of pipes is substandard. Tom Kiefer noted that the County meters (or measures) flow and Bryan Bokey explained relevant charts, pointing out spikes where additional flows were caused by a repair. The county spent time trying to describe the fact that the pipe under lake Roland is in good condition by showing a recent CCTV of the pipe. Also that it is not uncommon that the model shows parts of the pipe being over 100% capacity in the flow models because the flow would get up into the manholes but would not overflow. Again, the most important fact is that the County meters (or measures) flow by installing flow meters in the pipe.

Longevity of Sewers and Development

McCord stated that the life of a sewer line is 30 to 50 years, and then asked what happens to a pipe which is 60 years old and what are the County's flow projections when growth is reflected (in the model). The consent decree required that peak flows be reported, implying that the County has not disclosed the information. To which Steve Walsh responded that the MDE, with its oversight authority, has made no allegations of non-disclosure vis-à-vis the Department of Public Works. To which Fogelson responded that Baltimore City seems more transparent than the County. "We would like to see more transparency. "And we were told to talk to the lawyer (probably the Law Office) if we wanted more information ... transparency problem ... hard to get data and the straight story." Steve Walsh: "We will certainly provide anything you want"

Unanswered Questions

McCord noted that in late December he presented a list of questions to the MDE and Tom Kiefer asked if the County's SRRR plan (Sewer-shed Repair, Replacement and Rehabilitation) had satisfied those questions. McCord questioned "design storm" and Fogelson added that the water and sewer plan, concerning Jones Falls, is NOT a plan at all and that there's nothing in the water and sewer plan that shows what the County's plans are. "It does not show the growth for TU and Towson Row. And does not demonstrate that the County has done a good job eliminating I&I and illegal connections." McCord noted "you have serious development coming in and the data should reflect that."

David Bayer, in response, noted that, regarding I&I, there are redundant mains costing millions in Cockeysville to address inflow and infiltration. There are also rehabilitation jobs to West Towson, South Towson, Armaugh Village and Rodgers Forge, plus a major valve which has been significant in efforts to remove flow going into Jones Falls. Steve Walsh to the Alliance: "I hear what you say and we have capital projects with maps indicating the work sites... we need to do a better job in telling people what we have done."

Tom Kiefer and David Bayer: We report illegal connections to MDE and we also do smoke and dye tests – but Gookin noted that the County does not follow I&I to house laterals. Responding, Tom Kiefer explained that the County has no authority on private property.

McCord asked if the County can ascertain the percentage of I&I in Towson Run coming from households and are these the major or the minor part of the I&I? Bryan Bokey responded that there is no way to quantify how much comes from homes.

Parallel Sewer Construction and Engineering Considerations

Apropos of sewer construction and planned growth, David Bayer noted that (typically) when designing a parallel line, the County keeps the existing interceptor to avoid an expensive bypass, “We now plan to line six of the sections between Charles and Bellona and part of our mandate is to build relief sewer (discussed since 1991) to address future growth.”

Discussion then quickly moved through a variety of topics. Fogelson noted that some projections of growth and population historically have been exaggerated, which led to a discussion of state nomenclature and a description of Capital Facilities Areas. This was followed by an explanation of the Public Works Design Manual, modeling practices, factoring in storms, an explanation of relief points, eliminating relief points, capacity in trunk lines and attenuation (wherein peak flows are reduced over time), their commensurate impacts on data, hydrostatic pressure and gaskets.

Inspection and Visual Evidence

Video of pipe inspection was introduced after Roger Gookin asked if the pipe in Lake Roland had been inspected. Chief of Sewer Design Glen Keller explained the video (presented on screen) and Steve Walsh noted that there were no fats and that the condition of the line is good.

Academy Heights

McCord introduced the case of Academy Heights, a community which experienced sewage in basements – adding that the consent decree’s definition of discharge includes house backups. “In Academy Heights, you didn’t get it right.” he charged. Tom Kiefer explained the history and that past director Ed Adams had offered back flow preventers to homeowners ... only eight people accepted the free back flow preventers from the County. Public Works spent more than a million dollars to stop I&I in the neighborhood but it was not effective because of private connections and the County cannot go on private property. (Cooperation is not universal probably because many are loath to have illegal connections discovered, he remarked.) David Bayer then explained that a relief sewer will now solve the Academy Heights problem.

Consent Decree

The Alliance noted several consent decree requirements which Public Works firmly avowed were not required in the decree. Steve Walsh granted that the Department could do more to be transparent but insisted that Public Works was not operating outside of the consent decree. Fogelson said that Public Works should be doing a development capacity analysis and should be working with the planning department. Public Works responded that the County is in compliance with its mandate and has not been informed of any violation by the MDE.

Cost

McCord asked about the cost of the Towson Row to Belona sewer line, and the cost of new lines in general. And Steve Walsh asked, rhetorically, if it's appropriate that we be financially granular. Fogelson retorted that the ten year plan does require it (granularity). And David Thomas responded that if it were required, the state would say so.

The Ten Year Plan

Fogelson noted that with land use development, the issue of sewers goes beyond engineering. "This is a ten year plan and it needs to show a plan for ten years," he said. Steve Walsh: If we want to improve this document (i.e. the ten year water and sewer plan), we would have to increase the staff and spend more money. Glen Keller then explains budget history and David Thomas explains history of plans, Bay restoration funds and the problem with the lack of a mechanism to use money to solve a problem with laterals.

Design Storm

McCord asks the engineers: What is your design storm for the SSR wet weather table? David Bayer responded that the Consent Decree does not require any specific design storm.

Maintenance issues and Miscellaneous Questions

Steve Walsh leads a short discussion on maintenance, design methodology, attenuation, flushables, choked pumps and grease. David Bayer clarifies for the Alliance that Baltimore County does have an independent sewer and storm drain system and just fixing leaks will create an impact. Also, ingress and egress make problems for repairs. David Thomas explains that Lisa Eicholtz models the system anytime development is proposed. Gookin asks if six additional pieces of sewer, constructed between Charles Street and Bellona, would fix and eliminate the Inflow and Infiltration.

In closing

Steve Walsh promised to address Theresa Moore's questions, and to continue discussion about the transmission line. But, regarding the technical aspects, he explained, people in industry will agree with us [on the technical and engineering aspects of the issue] and, he emphasized, "we're not trying to hide anything."

Our position is as follows:

- The triennial water/sewer plan meets the state requirements. We have addressed all MDE/State Planning comments and the plan has now been posted for 2 weeks. Mr. Thomas has been doing this plan for over 20 years, it has met the requirements in past years and this version is no different. There are no new State requirements for this version.

- We are in compliance with our Consent Decree with the MDE/EPA/DOJ. We employ a team of staff and consultants whose job it is to keep us in compliance. We meet with MDE/EPA/DOJ biannually and they certainly would tell us in writing if we are not in compliance. (they did tell us about a year ago we were a “model” jurisdiction). We put forth a good plan and are implementing our plan.
- Specific questions about development in Towson have been asked and whether there is enough capacity. We look at every project and evaluate for capacity.
- As we currently know, there are no water quality concerns in the Lake Roland because of overflowing sewers. The water quality is affected by many things (including wildlife, pets, and septic systems) and is monitored regularly by EPS. There are programs with EPS designed to find illicit sewer connections to storm drain systems. Dr. Brittingham (EPS) confirmed that based on his monitoring data there are no problems with our sewers currently.
- There is no attempt to undermine the strength of the URDL. The language has been revised.
- There was a statement about DPW not being transparent enough. We will look at the opportunity to improve the information posted on our website and the ease of finding that info, however, as most would agree, DPW provides overall good customer service by answering questions quickly upon request