Bridgeton-Nockamixon-Tinicum Groundwater Management Committee

Tuesday, July 9, 2024

In Attendance: Tom Eckhoff, Bill Ballantine, Karl Young, Mary Lennon, Dr. Riley Murphy, Dr. Stephen Donovan, Dr. Art Baehr

Guests: None

Call to Order @ 7:35 PM via Zoom

The next BNTGMC meeting is scheduled for Tuesday, Aug 13 @ 7:30 PM via Zoom

1. Approval of June 11, 2024, meeting minutes – deferred until the August meeting

2. Treasurer's Report: $5,751.11

3. Public Comment: None

4. Old Business:

    - Posting of Adult Learning Seminars on township websites. Each township has posted the PHS YouTube links in their BNTGMC directory.
    - BNTGMC members, and Dr. Baehr, will make themselves available at the Tinicum Township Supervisor's work session to discuss the groundwater withdrawal ordinance. Tinicum Township will advise the committee when this is scheduled.
    - Additional well-test data is being added to the water quality database for PFAS compounds, pesticides, and Pharmaceutical/Personal Care Products (PPCPs). Test data is from the Penn State Extension study and committee member's private efforts. Dr. Donovan noted that 5 & 6-chain carbon compounds (analogs of PFOA) are not analyzed in

the PFAS standard test. He will follow up the discussion with Eurofins lab.

- Dr. Baehr presented his paper, “Groundwater Interaction With The Delaware River,” on May 23, at the PA Groundwater Symposium in Harrisburg, PA. Future presentations (and possibly published articles) on well water quality results, in the townships, were discussed. As arsenic is a natural contaminant found in the groundwater (there have been several past studies done) we should contact the H2O Base for a summary of arsenic treatment installations in the area (respecting the homeowner's anonymity). It was suggested to present a water quality summary to the Township supervisors as an educational outreach to emphasize the importance of well water testing. We will include a water quality summary in the committee’s annual report to the Supervisors. A future water quality study on the Delaware River contaminant's effect on homeowner wells located in the alluvial region of the river was discussed. Dr. Donovan and Dr. Baehr have already collated some information. Possibly contact local municipalities (Lower Makefield, Yardley, etc.) for their testing results of the Delaware River. Tom Eckhoff will follow up with municipalities.
- Dr. Donovan and Karl Young continue to develop the list of laboratory services, and parameters, for addition to the website. Tom has collated laboratory information from a previous list (by Stephen) and consolidated the list. It will be revised to also include Suburban Labs (Reading, Pa). This list will be available to hand out at the Creek and River Festival.

5. Continuous Monitoring Network (CMN):

- Dr. Donovan continues to monitor the new logger on Rt. 412 adjacent to PHS. This will act as a surrogate for the PHS well. (The logger at PHS has been non-functional for some time.) The logger data from 7/23/2023 to 6/8/2024 shows the daily maximum has not changed

much, from a high of about -103.3 feet on 7/23/2023 to a low of about -104.8 feet on about 2/1/2024, a difference of about 13 inches. The seasonal variation is very small during this short time period. Time will tell for a clearer understanding of the normal seasonal variation for this area. Tom Eckhoff met with Alan Crouthamel, PHS, and thanked him/them for their valuable collaboration with our groundwater monitoring activity at the high school over the years. Since their well logger has failed and will not be replaced (the manhole environment is not friendly to electronics), this monitoring activity will be discontinued.

- For the well on Lodi Hill Road, the 12-volt battery ran out of charge at the end of February. Stephen will keep a closer eye on the voltage until the AC line gets repaired. Also, the internal CR2023 battery in the logger died, they only last about two years. It powers the internal clock. Stephen had difficulty accessing the battery and sent it back to ENO for repair. The unit was returned and is back in operation. These are all good learnings on the operation of the Eno-Scientific WW670 logger.
- Dr. Donovan and Dr. Baehr are continuing their analysis to address the offset value for PHS and MV wells for historical trending and archived data. Dr. Riley has updated the archive files.
- Mary Lennon did the CWL downloads in June. The next download is in August.

6. Static Water Level Network (SWL):

    - Stephen and Mary have completed the Spring "pings."

7. Township Activities:

    - Nockamixon:

        - Ottsville TCE plume: PaDEP is developing a remediation plan to remove contaminated soil from the site. The plume moves

approximately 80 ft. per year. PaDEP will present the final program when it is completed to the Township.
    - PaDEP has sent a notification to Nockamixon Township on the reclassification of Haycock Creek.

- Tinicum:

    - Continue focusing on the groundwater withdrawal ordinance.
    - Township has a new Manager – Judy Danko

- Bridgeton:

    - Boarhead Farm: BNTGMC has advised the BoS to pursue water testing with modern instrumentation and use a modern semi-volatile organic chemical (s-VOC) GC/MS analysis to determine contaminants on site. BoS has requested USEPA to share water testing data or allow the Township to sample its own. Follow-up is needed with USEPA.

8. Ancillary Activities:

- Stream monitoring – The conductivity meter operating on Rapp Creek below the Hanson Quarry went "bad" in December 2023 and is currently not giving good readings. Mary will organize a work party to investigate.
- ECO-Bucks – Continues to support the BNTGMC in educational outreach activities and hardware (logger) deployment.
- The need for a mini pump test on the Diabase well was discussed. Dr. Baehr has reviewed existing well pump test data, provided by the BCDH, and this may replace the need to do the test. Art has written a report "Conductivity Estimates from Permit Well Tests," June 2024, and posted it on the BNTGMC website. We will discuss this during the August meeting.

9. New Business:

- Dr. Baehr has updated the Local Hydrologic Status (formerly Local Drought Monitor) on the website. Currently, we are in the "WATCH" mode due to low rainfall and GWL at the Bucks County USGS/PaDEP observation well in Warrington. This information was given to the Townships and posted on their websites.
- BNTGMC has a display table at the Creek and River Festival, Silver Creek AA, from 10 am to 4 pm, on July 13, 2024.

10. Member Concerns:

- A summary of water testing labs will be available for the C&R Festival in July.
- Art cannot download data from the website and Riley has fixed it.
- Carrie's data has been downloaded and is available on the website. Groundwater level tracks with Delaware River level.
- Stephen will ping Brownstone Road well more frequently. Stephen has identified this well as a good indicator of local GWL as it is a well that is "not in use."

The meeting adjourned at 8:35 pm.