

BNT Groundwater Management Committee

Agenda – Wednesday August 17, 2022

Call to order 7:30 PM, Via Zoom

The next regularly scheduled BNTGMC meeting is Wednesday September 21, 2022. 7:30 PM by Zoom

Karl Young has been appointed as Bridgeton representative to BNTGMC.

1. Approval of July 20, 2022 meeting minutes.
2. Treasurer's Report:
3. Old Business

Template Groundwater Withdrawal Ordinance-

At its July 21 meeting, Nockamixon Township Board of Supervisors decided to table vote on ordinance to allow newly seated and absent Supervisors to ask questions about the ordinance. The board has scheduled a work session for the ordinance on October 6 . All questions to Township Engineer and Solicitor are to be submitted by end of September. The ordinance is on agenda for October 20 BoS meeting.

Seasonal Monitoring Project- Spring seasonal readings taken. Dr. Donovan made a revision on Dr. Baehr's map of the network.

Continuous Monitoring Network and Archiving Projects-

The Committee met in work session via Zoom on August 2 to address future data collection protocols and develop roadmap for streamlining our CMN program to maximize efficiency and avoid redundancies .as indicated in Dr. Baehr's study of correlated wells. Bill Ballantine, Karl Young and Dr.Art Baehr also participated.

- *What are the discrepancies in our data due to and adapting a formal QC process going forward which will be drafted.*
- *Data gaps, what the issues have been and how this can be resolved.*
- *Reducing the number of wells being monitored. Adding new wells. What this means for managing data and analyzing data?*
- *(What) Strategy for replacing old equipment with a new system that streamlines monitoring.*

- *Budgeting to modernize and replace equipment, and support human resource needs for current work and new initiatives.*

Deployment of monitors: Mary Lennon has redeployed loggers on Skow and Alex wells after Bill Ballantine made repair on logger.

The Committee is researching the technology to support wi-fi enabled well data loggers to support a real-time community water network. Dr. Donovan has received shipment of Eno Scientific 670 sonic digital logger and is pursuing installation at monitoring well that mirrors Palisades HS monitor. Bill Ballantine researched power options for loggers. Dr. Murphy is developing a low-cost remote well monitor based on Raspberry Pi technology.

The BNTGMC has supported Dr. Baehr proposal to create models of groundwater flow in the Tohickon and Tincum watersheds using MODFLOW software. the USGS standard. Groundwater flow modeling applies solutions of the equations governing groundwater flow to interpret an aquifer system. Water level (head) and flow are predicted given properties of the aquifer. Simulation results can be applied to predict water level decline in response to drought. Other applications include predicting drawdown resulting from groundwater withdrawals, estimating contaminant migration, and determining well contributing areas.

. Drought Monitor - Public outreach prepared by Tom Eckhoff and presented to Nockamixon Township for upcoming Fall Nockamixon newsletter, Deadline Aug. 1- article on ordinance?

Diabase Wells

BNTGMC has installed monitor on a diabase well to add to the network.

Mini Pump Testing Stephen Donovan suggested that the next mini test be conducted on the new deep Diabase well to be added to the monitoring record. This was endorsed by Baehr as it is a good idea to get Transmissivity and Storage coefficients for the Diabase.

BNTgroundwater.org: Readings posted?

Weather station at Palisades: The BNTGMC has purchased and sponsored the installation of a solar powered weather station on the new science wing at PHS. Public outreach?

Stream monitoring

New conductivity meter re-installed on Rapp Creek.

Boorhead Farms - Bridgeton / EPA- BNTGMC continues to advise Bridgeton BoS to

pursue water testing with modern instrumentation and analysis to determine high concentrations of contaminants on site. BNTGMC recommending Bridgeton participate in EPA's Technical Assistance Services for Communities (TASC) to help potentially facilitate that site study. Dr. Donovan attended Bridgeton BoS meeting where they decided to investigate pursuing grant.

4. New Business