BNT Groundwater Management Committee

Minutes – Wednesday June 16, 2021

Call to order 7:30 PM, Nockamixon Township Building

In attendance: Stephen Donovan, Todd Stone, Joan Ramage, (by telephone), Riley Murphy, Bill Ballantine, Tom Eckhoff

Call to order 7:30 PM, Nockamixon Township Building

1. Approval of Minutes- The BNTGMC has been meeting in monthly Zoom work sessions since March 2020. No regular meetings have been held.

2. Treasurer’s Report: Starting / transferred balance

$13,884.99 started on March 1, 2021

Keith said that the townships don't want to micromanage within our account, so we are using the combined funds without asking to spend every detail. Once the TWPs gave it to our committee, it's gone from their books.

May expenditure (Davis Instruments, reimbursement to Joan, for PHS Weather Station) $1,730.60

current balance as of June 17: $12,037.79

Pending - Mary's laptop battery reimbursement

3. Old Business

Template Groundwater Management Ordinance-

The Nockamixon Planning Commission reviewed draft ordinance and tasked Township Engineer Steve Baluh and Township Solicitor Maureen to prepare a final draft of ordinance to be distributed to Nockamixon Board of Supervisors. The draft reflects recommendations from Nockamixon Planning Commission and policy direction from BoS. BNTGMC was asked to provide cost estimates for testing protocols. Dr. Donovan has conducted and shared that research. Nockamixon Township Solicitor reports the draft will be completed and presented for Nockamixon BoS July meeting.

Static Water Level Data and Archiving Projects-

Continued data collection and Cloud based archiving of data from 41 monitored wells in three townships. Initial readings from new Palisades well monitor may indicate an anomaly in meter readings. Dr. Donovan and Mary Lennon to follow up with electronic tape and ping reading at Palisades and neighboring monitored well.

Seasonal Variation Monitoring project- Dr. Donovan and Mary Lennon made spring readings.

BNTgroundwater.org: Spring 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. The weather station will be generating data (precipitation, temperature, relative humidity) we can use in our research, as well as enhancing the science curricula at PHS and PALMS.  Many schools have a personal weather station (PWS) installed and have incorporated it into their science classes, science clubs, STEM programs, and school websites.  Part of the BNTGMC mandate is to foster science education related to our environment, thus encouraging the students to play a proactive science-related role now and later in their adulthood. The BNTGMC with encouragement and support of Palisades school board, teachers and administrators, purchased instrumentation and software subscriptions. The weather station has been delivered and PHS is completing installation in July.

Diabase Wells

BNTGMC has been seeking diabase well(s) to add to the network. Two wells have been identified and owners agreed to install logger- Dr. Donovan to follow up.

SWL and Continuous Network Unification and Archival

Recent efforts of Art Baehr re: the unification of the SWL and continuous networks has been documented and transferred to the BNTGMC website. In progress is the adjustment of Spring and Fall SWL synoptic data using continuous network correlations to estimate seasonal high and low groundwater levels. In particular, estimated seasonal lows for the SWL wells will be used in Drought Monitor development. Draft versions of Art Baehr’s files will be uploaded to the shared folder.

Drought Monitor

Dr. Art Baehr’s methodology in creating drought monitor is related to combining synoptics of the SWL and continuous networks and the correlation-based adjustments noted above. He continues to develop the interface with our data with the help of intern.

Stream monitoring

New conductivity meter needs to be re-installed on Rapp Creek- Mary and Dr. Donovan to follow up with new owners of Moss property.

4. New Business

The Tinicum Land Preservation Committee has invited the BNTGMC to make a presentation on our work at an upcoming meeting on the 4th Monday of the month.

      The next regularly scheduled BNTGMC meeting is Wednesday July 21, 2021, 7:30 PM at Nockamixon Township.