Bridgeton-Nockamixon-Tinicum Groundwater Management Committee BNTGMC Chairman – Tom Eckhoff email - arrigetch@epix.net



Bill Ballantine - Eco-Bucks

Todd Stone

Tom Eckhoff

Riley Murphy

Karl Young

Carrie Manfrino

Stephen Donovan



Mary Lennon
Data Collection



Art Baehr Hydrology Consultant

BNTGMC - Earth Day 2024

Understanding that a safe and adequate water supply is a critical planning issue that transcends municipal boundaries, the Bridgeton-Tinicum-Nockamixon Groundwater Management Committee (BNTGMC) was established through a joint ordinance in September 1999. The founding members were CC Hopf (Chair), Bob Stanfield (Vice Chair), Diane Alex, and Steve Sears. Here is a memorial to founding member Bob Stanfield: In Memory of Bob Stanfield.pdf.

BNTGMC consists of volunteers from the three townships, working together to study and advise on decisions impacting the quantity and quality of our water resources.

The BNTGMC conducts scientific studies, regulatory reviews, and educational programs. By addressing the interrelated watersheds, recharge areas, and aquifers within our municipalities, we can facilitate coordination among programs that ensure safe, reliable, and sustainable water supplies for intended uses, while respecting the limits of our natural groundwater resources. Financial support for BNTGMC activities is generously provided by ECO-Bucks (https://ecobucks.org/).

Specific activity includes:

- Groundwater Ordinance review, development and advocacy.
- Groundwater level monitoring currently at 40 well locations.
- Regular reporting of local hydrologic conditions and a drought monitor.
- Quantifying hydrologic cycle budgets for the Tohickon Creek Watershed.
- Water quality data assembly and analysis.
- Education Seminars
- Establishment of a weather station at Palisades High School.
- Reports including an annual report and results of studies.

The BNTGMC has developed and proposes a groundwater withdrawal ordinance to replace the existing Tinicum Township Ordinance of 2015. After a decade of discussions and revisions, the Nockamixon Twp. Board of Supervisors approved this update to their Groundwater Ordinance in September 2023. The ordinance seeks to amend existing regulations to enhance the protection of our water resources, addressing both the quality and quantity of our groundwater. By placing scientific-based criteria to evaluate the sustainability of new groundwater withdrawals the ordinance aims to balance development and sustainability. In particular, criteria for permittable withdrawal density have been revised to better evaluate land use proposals. BNTGMC also endorses adoption of the ordinance in Bridgeton Township. This ordinance applies to applications for subdivisions, land developments, conditional use permits, variances, and special exceptions. This data provided a scientific basis for the above-mentioned groundwater withdrawal ordinance, particularly for the allowable drawdown at a neighboring well caused by a proposed withdrawal.

The BNTGMC has developed a water watch monitor to provide regular updates on the relevance of local groundwater levels, precipitation, and flow in the Tohickon Creek. Residents are kept informed to understand their water supply in the context of watershed budget.

Quantifying hydrologic cycle budgets for the Tohickon Creek Watershed provides understanding of the variability of recharge that governs the evolution of groundwater level. As mentioned in the Hydrologic Cycle section historic watershed budgets provide a basis for drought management planning and detailed understanding of the water resource.

After two decades of monitoring water levels, the BNTGMC launched a new initiative to emphasize water quality testing and awareness. This is an important step in the committee's work. A comprehensive database of water quality testing results has been mined from the Bucks County Department of Health, Penn State Extension Agricultural Laboratory, and published USGS reports. See the Water Quality section. Based on this initiative, BNTGMC can advise on which parameters and at what frequency homeowners should be testing their water. For example, there are recognized water quality issues in the Township notably naturally occurring arsenic and radon. BNTGMC presented this initiative at educational seminars and compiled a list of local certified laboratories that test water quality.

We encourage the township to endorse the BNTGMC in organizing regular public seminars and educational initiatives. These efforts will aim to inform residents about the importance of groundwater protection, water quality, and sustainable resource use. The BNTGMC continually updates its website with local groundwater data, scientific articles, and information on sustainable groundwater management.