# Penn Township Water Survey - MWAAT and Water Well Maintenance

### **Municipal Water Source:**

Penn Township conducted a Water Survey to understand the existing developments, residents' freshwater needs, and willingness to tap in if an affordable public water solution is developed.

Penn Township received 353 responses for the 649 surveys sent to residents in existing developments. A response of 54.4% were returned.

The Water Survey questions are summarized as follows:

- Water quality 148 good, 100 poor, and 83 excellent.
- Filtration and Treatment system 307 yes and 12 no.
- o Sufficient volume 303 yes and 29 no.
- o Existing well accessible 276 yes and 38 no.
- o Public water interest 217 yes and 97 no. Interest in 1 2 years 185 and 106 no. Interest in 2+ years 119 yes and 81 no.
- Water well runs dry 310 no and 22 yes.

Some of the survey response questions raised are as follows:

- Will the existing wells be used for outdoor use? The answer is yes. A separation of public and private water piping is required.
- Will the Saxonburg Area Authority (SAA) public wastewater treatment be based on water use if the resident taps into the public water service? Penn Township met with the SAA to determine if the wastewater treatment service will be changed from flat to metered rates. The flat rate for Penn Township residents will not be changed to a metered rate. All new customers, including those in the Saxonburg area, will be charged the flat rate.
- What are the cost expectations for the public water service, including tap-in fees and service line extensions? Refer to the current MWAAT expenses listed below.
- Are there financing options for the public water service? Penn Township will investigate financing options. Can we use CDBG funds for low-income residents? Penn Township has committed CDBG funds to the Harcrest Park Handicap Accessible trail to the gazebo for the next three years. Will Butler County and local banks have low-interest loans available?

Penn Township addresses can be served from the existing Municipal Water Authority of Adams Township (MWAAT) service lines along Route 8, the extension line to the Pittsburgh-Butler Regional Airport, the extension line on airport property, and the extension line to Larchwood along Route 8, including addresses on the opposite side of the road from the service lines.

Pennsylvania and Penn Township do not have a mandatory water service tap-in requirement.

MWAAT is now preparing to serve the Port-O-Call development along the east side of Route 8. The Mandell Trails owner will pay for the new water service extension and amortize it in their rental fees. Port-O-Call residents will pay their MWAAT monthly water service directly at the current rates.

MWAAT is now preparing to serve the Shadow Ridge development along the north side of Penn Drive. Penn Partners Development will pay for the water service line extension and include this cost in the lot sales price. Shadow Ridge residents will directly pay for their MWAAT monthly water service at the current rates.

MWAAT has reviewed the number of service connections for the original service lines in the first two years of service and will not charge the "debt service" surcharge to existing and new customers.

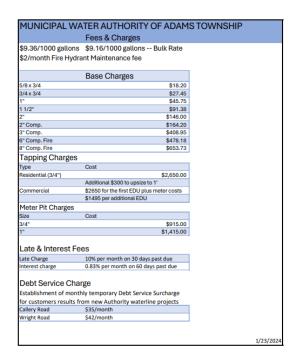
MWAAT has analyzed the continued rising costs of operating and maintaining the water distribution system. Due to the financial impact, the Authority instituted a 7% water rate increase effective January 1, 2024. The "average" customer bill increased by \$6.00 to \$7.00.

Residents may contact MWAAT representative Matthew Cranmer to arrange a water service connection. The current MWAAT rates will apply, and there will be no construction debt service charges.

## The anticipated MWAAT Costs are:

0	Tap-in	\$2,650.00
0	Turn-on fee	\$25.00
0	Approximate service line extension	\$3,000.00 to \$5,000.00
0	No "Debt Service" charge	\$0.00/month

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MWAAT has reviewed the Water Survey results. MWAAT can only offer a municipal water service for residents in existing developments with grant assistance.

#### **Private Water Wells:**

Penn Township has also considered maintenance on existing water wells. Search the internet for local professional service companies that may help resolve some water quantity and quality issues.

## Water testing:

- Bacteria The water samples will be taken as a "first draw" in the morning from an interior tap for Total Coliform, E. coli, and iron-oxidizing bacteria. Return the test bottles to the testing agency before 4:00 p.m. that same day, Monday through Thursday.
  - The testing agency will provide test containers:
    - Small, sterile bottle E-Coli and iron-oxidizing bacteria.
    - Medium bottle with red lid Lead.
    - Large 100 ml bottle Hardness, iron, and manganese.
  - Coliform bacteria can be removed from drinking water using chlorine, ultraviolet, or ozone treatment systems, which act to kill or inactivate the E. coli bacteria. Coliforms primarily exist in feces and <u>are a threat to human health</u>.
  - Iron-oxidizing bacteria are tiny living organisms naturally occurring in water wells, soil, shallow groundwater, and surface waters.
    - These bacteria combine iron (or manganese) and oxygen to form deposits of "rust" and a slimy material that sticks the bacteria to well pipes, pumps, and plumbing fixtures.
    - Disinfectants are the most common chemicals used to treat iron-oxidizing bacteria. The most common disinfectant is household laundry bleach, which contains chlorine. **Contact a licensed well contractor to disinfect your well.**
    - Iron-oxidizing bacteria do not need air or light to grow, are found in water wells, and have no threat to human health.
    - Iron-oxidizing bacteria in well water can cause stains and deposits in plumbing fixtures, leading to unpleasant odors and taste.
- Hardness
- o Iron
- o Lead Test interior piping for the lead only as the first draw in the morning. Copper pipe solder fittings contain lead.
- Manganese

### Well water system replacement, including pumps and tanks:

## Well water conditioning:

- Is your treatment system providing soft, clear, good-tasting, and odorless drinking water? Are your fixtures stained? If not, have you correctly maintained your treatment system? Perhaps you should consider having your water tested and checked by a professional.
- Treatment systems have a wide range of costs, from a basic system for filtering and softening only to the additional equipment required to treat iron-oxidizing bacteria.

## Water well drilling:

**On-lot wastewater treatment system maintenance:** Have your septic tank pumped out every three or four years. Treat it monthly with a product like Ridex.

We trust this information will be helpful. If you have specific questions or need more information, contact local professional services.

Respectfully submitted,

Samuel M. Ward, Supervisor