



### UMJA FERTILE FUEL THE NATURAL ORGANIC FERTILIZER

Upper Montgomery Fertile Fuel is highly processed and monitored fertilizer, which contains more than 50% organic matter. Natural organic fertilizer is the original slow-release fertilizer that many synthetic slow-release fertilizers strive to mimic. This product also features a very low burning potential, micronutrients, and a large amount of organic matter. Natural organic fertilizers typically have a large amount of water insoluble nitrogen (WIN); that is, the nitrogen, along with other nutrients, remains slow-release and are minimally affected by watering or rainfall.

#### Where can I safely use this fertilizer?



#### COME AND GET IT – IT'S FREE!

We have 2 lb. or 15 lb. bags or bring your own containers to fill!  
Pick up at the UMJA Plant 1100 Mensch Dam Road, Pennsburg

### UMJA Office Changes During Covid-19

In an attempt to limit exposure to Covid-19, The Upper Montgomery Joint Authority will be closed to the public until further notice. However, our staff will be available by phone or email Monday-Friday from 7 am - 3:30 pm.

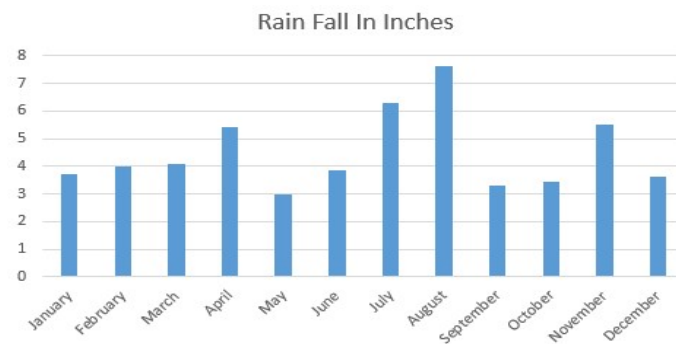
Please use the payment drop box at the main gate for sewer payments. As a reminder **NO CASH** is accepted. Staff will be checking the box frequently throughout the day. Payments may also be made online at [www.acipayonline.com](http://www.acipayonline.com).

### Perkiomen Watershed Stream Clean up 2020



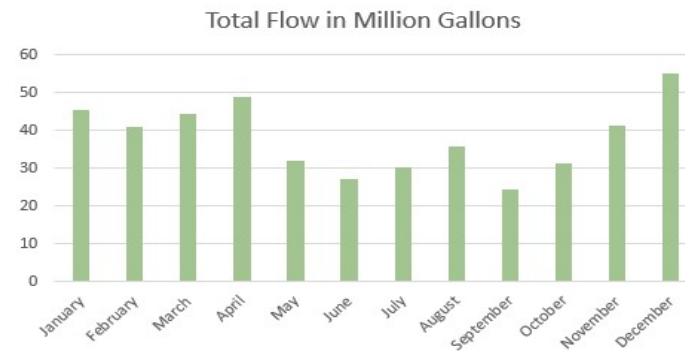
UMJA employees participated in the Perkiomen Watershed Stream Clean Up. Our staff collected 6 bags of trash and recycling, 3 tires, 2 battery, amongst so much more.

## PRECIPITATION



For the year of 2020, the total precipitation was 53.83 inches. The month with the highest precipitation was August with a total of 7.61 inches.

## Flow



In 2020, over 457,000,000 gallons of treated waste water was discharged from the UMJA plant. December had the highest flow at over 50,000,000 Gallons.

### REACH US

Upper Montgomery Joint Authority  
1100 Mensch Dam Road  
Pennsburg, PA 18073  
215.679.5133  
Visit us online @ [www.UMJA.org](http://www.UMJA.org)  
Follow us @ <https://www.facebook.com/UpperMontgomeryJointAuthority>



The Upper Montgomery Joint Authority

# Spring Newsletter

March 1, 2021

## 2021 FINAL COMPLETION OF WASTEWATER TREATMENT PLANT UPGRADES IMPROVE WATER QUALITY IN MONTGOMERY COUNTY, PA

2021 marks a monumental milestone in Upper Montgomery Joint Authority's continued effort to improve and advance their wastewater system. The \$19.3 million-dollar construction project was funded by the United States Department of Agriculture through the USDA Rural Development loan program. This project transformed UMJA's wastewater treatment system and improved multiple facets of the facility, including:

- Eliminated the bypass overflow during storm events
- Implemented both Total Nitrogen and Total Phosphorus removal, while improving water quality of the Green Lane Reservoir
- Made the treatment plant more energy efficient and reliable
- Replaced old worn out equipment
- Improved safety for wastewater treatment plant operators
- Provided technology improvements to increase efficiency of operations



OLD CLARIFIER



OLD TRICKLING FILTER TECHNOLOGY

This new upgrade is a result of many years of work with Woodard & Curran, UMJA, USDA and Pennsylvania DEP, and was made possible through an innovative financing and funding strategy that allows the facility to meet water quality goals in a cost-effective manner while improving the overall reliability of the wastewater treatment system.

# FROM THE DESK OF JENNIFER LEISTER EXECUTIVE SUPERINTENDENT

## Planning for the Future

As a facility with significant challenges and risks, UMJA needed to find a creative solution to comply with the plant's NPDES permit, which required a capital improvement plans to eliminate a wet weather bypass, and therefore provide treatment for all flow entering the plant. In addition to wet weather bypass elimination, UMJA also planned for the future, by providing and implementing an advanced tertiary treatment process capable of achieving more stringent water quality standards, likely to be imposed in the future. This upgrade will allow the facility to cost effectively meet stringent nutrient limits, while handling wet weather flows.

Aerial view 2011  
before construction



Aerial view 2020  
completed project



Activated Sludge  
Aeration Tank



New  
Bar Screens



Fuzzy Filters

Tertiary Treatment

## This project included upgrades to:

- The plant's influent pump station
- Replacement of influent screening equipment (including odor control treatment, building enclosing the treatment)
- Construction of a variable operating mode biological nutrient removal process. This new aeration process will allow for operational flexibility and resiliency. Normal operation will provide a high level of treatment and nutrient removal, while wet-weather mode allows the plant to continue to meet permit limits while protecting biomass and enabling a quick return to normal operation
- The aeration system includes an innovative approach to odor control for the pretreatment zones of this process
- Upgrades to the gas chlorination system for wastewater disinfection
- A new tertiary treatment filtration system
- Instrumentation and control improvements

These improvements will not only increase the lifespan of the facility, but improve water quality of the Green Lane Reservoir as well as preparing for the future.

### Project Partners:

FUNDED BY



ENGINEERED BY



GENERAL CONTRACTED BY



# MESSAGE FROM THE BOARD

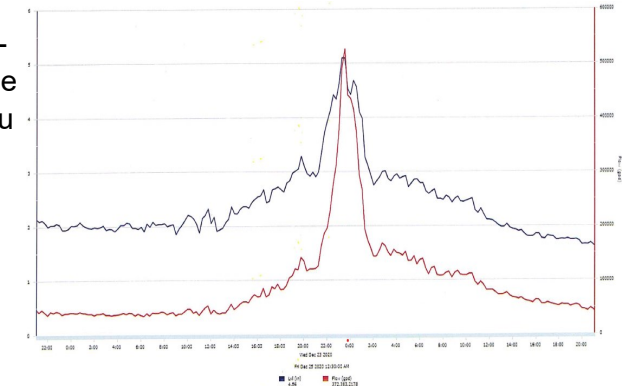
## Illegal Connection Inspections

At the November 10, 2020 board meeting, the UMJA Board approved Trained Eye Home Inspections, LLC to begin inspections of properties connected to UMJA's sewer system for illegal sewer connections. The regulations provide that if illegal hookups exist or leaks are present, the owner must remove the illegal connection(s) and/or repair the leaks.



These illegal connections consist of sump pumps, french drains, rain gutters, downspouts and any other connection that allows rainwater and ground water to enter the sewer system. All these connections are illegal and can cause serious damage to UMJA's sanitary sewer conveyance system and treatment facility. They can also cause backups to occur, flood customer basements and roadways, contaminate streams, creeks, crops, vegetation, and release pathogens into the environment.

Disconnecting these illegal connections and/or repairing the leaks will significantly reduce the flow of rainwater and ground-water to the sanitary sewer system. This in return will lessen the amount of water that must be conveyed and treated, saving you and your neighbors money.



UMJA has launched several flow meters within the collection system which helps identify potential inflow and infiltration. As you can see the flow meter recorded a significant spike in flow during a storm event that occurred in December of 2020. This spike in flow is indicative of illegal connections or leaks.

Please contact the office to schedule your connection inspection.

## Plant distancing to protect your pipes

Trees should be planted at least 10 feet from your sewer lines. Follow this rules regardless of the species you choose. Trees with large, spreading root systems should be planted at least 100 feet away from your sewer lines as to not allow immediate damage. Thirsty tree roots naturally grow towards any leaks in your water or sewer lines, they invade your pipes. This causes water flow blockages, pipe damage and unhealth conditions and often costly repair bills.

**This picture was taken by UMJA staff during an inspection that was recently performed. As you can see, roots caused wipes and other debris to get caught in the pipe. This can eventually lead to a backup inside a person's home.**

