



FREQUENTLY ASKED QUESTIONS

WHERE DOES WESTMINSTER GET ITS WATER?

Westminster's water comes from two main sources: the surface water from the Cranberry and Hull Creeks that merge to form the west branch of the Patapsco River, and from groundwater wells.

The City of Westminster owns and operates two community water systems serving the city and areas beyond the corporate limits. The existing and planned service area is located in central Carroll County and covers approximately 8,554 acres. The water systems consist of the main Cranberry System, which includes the main treatment plant and 10 wells located throughout the service area, and the Wakefield System, a satellite treatment plant supplied by two wells.

The City's 121.8-million-gallon raw water reservoir – a small lake constructed to hold water from Cranberry Creek, a tributary of the west branch of the Patapsco River, when water levels are high enough – is used to supply water during rain events and to supplement existing sources during times of reduced flow.

Additionally, a pump station and transmission line were constructed in 2008 to supply water from the Medford Quarry if needed for emergency purposes during extended dry periods.

WHAT DEPARTMENT MANAGES WATER FOR THE CITY OF WESTMINSTER?

The Public Works Department manages water services for Westminster. Among other responsibilities, the Department is charged with acquiring new water sources for the city to meet the needs of the community during drought conditions.

IS THE WATER THAT COMES FROM MY TAP SAFE TO DRINK?

Yes. The City tests its drinking water continuously with online instruments to ensure it is in full compliance with state and federal safety regulations.

HAVE PFAS BEEN FOUND IN WESTMINSTER'S WATER SUPPLY, AND IF SO, HOW IS THAT BEING ADDRESSED?

Per- and polyfluoroalkyl substances, known as PFAS, are a group of manmade chemicals that are persistent in the environment. Westminster tests for PFAS as part of its monitoring of its water supplies, and the City was proactive when it found one well with levels exceeding the federal limit. That well was taken offline as soon as it was over the limit and there are currently remediation/treatment studies underway.

DO WE NEED NEW WATER SOURCES, AND IF SO, WHY?

Yes. Westminster, like many other cities across the United States, is experiencing increased, recurring drought conditions. Westminster faced an extreme water shortage during the drought of 2002 and had to truck water into Westminster from a nearby quarry to meet customer water needs. Another result of the 2002 drought is that the Maryland Department of the Environment (MDE) has begun to test water systems in the state for "drought hardiness," or the water system's capability to meet water demands during extended drought conditions. It was determined that Westminster and some other municipalities in Carroll County and beyond could not meet this criterion, resulting in development moratoriums due to lack of water

resources. The Mayor and Common Council recognize the critical importance of ensuring water reliability now and in the future, so the City is developing a new local water supply: PUREWater Westminster.

WHAT IS PUREWATER WESTMINSTER?

PUREWater Westminster is a new initiative by the City of Westminster that will use proven technology to purify reclaimed water to provide a safe, sustainable, and drought-resistant drinking water supply for our community.

WHAT IS RECLAIMED WATER?

Reclaimed water is wastewater that has been cleaned several times so it meets regulatory and safety standards for non-drinking uses such as irrigation of landscaping, parks and playing fields, industrial applications such as cooling towers or manufacturing processes, agricultural irrigation, and more.

Water that has been used in homes and businesses goes down drains to the sewer or wastewater system, and from there it is piped to a water reclamation plant where it is cleaned through a series of treatment steps. Just as items such as bottles, cans or paper are recycled so that the materials can be used again, water can also be recycled, or reclaimed. In a sense, all water on Earth is reclaimed water: water moves through the hydrosphere in a cycle.

DOES WESTMINSTER ALREADY RECLAIM WATER?

Yes. Currently, reclaimed water in the city is used for fire suppression and cooling tower water for frozen food manufacturing, but we can do much more with reclaimed water. PUREWater Westminster will allow us to maximize our local water sources.

CAN'T WE CONSERVE MORE WATER TO MAKE SURE THERE IS ENOUGH FOR EVERYONE?

Water conservation is always an important first step for ensuring water supply sustainability. However, based on water use projections, conservation alone

is not enough to ensure adequate water supplies for the long term.

WHAT ABOUT OTHER TYPES OF WATER PROJECTS TO PROVIDE ADDITIONAL WATER SUPPLIES?

The City adopted a Strategic Plan for 2018-2021 that includes ensuring water and sewer capacity for future generations. The Plan recognizes that the future economic growth and vitality of Westminster is directly tied to water availability. The Strategic Plan includes the development of an intergovernmental strategy to implement a water reuse project that could secure approval from MDE. A water reuse project like PUREWater Westminster is the type of water project that made the most sense for Westminster.

WHAT ARE THE BENEFITS OF THE PUREWATER WESTMINSTER PROJECT?

PUREWater Westminster will help Westminster keep local control of its water supply and costs, as well as provide a pathway for economic growth, business and commercial development, and continued quality of life for the Westminster community.

WHAT ARE THE STEPS OF THE WATER PURIFICATION PROCESS THAT WESTMINSTER IS TESTING?

Westminster is testing a three-step process: membrane filtration, reverse osmosis, and advanced oxidation with ultraviolet light.

Membrane filtration removes particles from water as small as one thousandth the diameter of a human hair and even down to the molecular level in some cases. Solids and bacteria are caught in the membrane fibers and removed. During reverse osmosis, high-pressure pumps force water through a semi-permeable membrane that transmits water but stops dissolved salts and other contaminants. The advanced oxidation step uses ultraviolet light, similar to concentrated sunlight, in conjunction with oxidant chemicals like hydrogen peroxide to break apart and neutralize any remaining contaminants in the water.

ARE THERE PHARMACEUTICALS AND OTHER CONTAMINANTS IN THE PURIFIED WATER THAT WOULD BECOME PART OF OUR DRINKING WATER SUPPLY?

No. This is not contaminated water. The water produced as part of Westminster's system will be treated to such a level as to be identified as "advanced treated water." It is very clean and safe and can be used in many beneficial ways.

IS THIS TOILET-TO-TAP?

No. This project is best described as "indirect potable reuse." The water goes through numerous steps that purify it, including the natural treatment it receives when it is added to a reservoir. The water is also subject to additional treatment and strict U.S. Environmental Protection Agency (EPA) water quality requirements before it can be part of the drinking water distribution system. All forms of municipal water are highly regulated and monitored to ensure safety.

HOW LONG WILL THE PILOT FACILITY OPERATE AND WHERE?

The pilot facility will operate for eight months to test the water purification technology that could be used for a potential full-scale project. The city has worked closely with the Maryland Department of the Environment (MDE) to determine testing standards, identify a laboratory facility, and purchase or lease facility equipment. The pilot project will be located at the Westminster Water Reclamation Plant, which will provide the source water for the project.

WHY NOT WAIT UNTIL THERE IS ANOTHER MAJOR DROUGHT TO SPEND MONEY ON THIS PROJECT?

The City is being proactive by pursuing this project now. It will be too late to develop and construct a project such as PUREWater Westminster when there is another major drought. Long-range planning to ensure there is a reliable water supply

source is an important part of a city's responsibility, and planning for such a complex project takes a significant amount of time prior to construction. Alternative water supply sources such as PUREWater Westminster are encouraged both from a regulatory perspective and a practical perspective, in that water generated by the project would be highly drought-resistant, safe, and reliable.

HOW DO I KNOW THIS WATER IS SAFE? HAS A PROJECT LIKE THIS BEEN DONE BEFORE?

The City tests its drinking water continuously to ensure it is in full compliance with state and federal safety regulations. This alternative water supply will be treated to the same standards as our current water supply. The City is fully committed to securing a safe, reliable, drought-resistant, water supply.

Reclaimed water has been in use for more than 100 years in the United States and there have been – and continue to be – significant improvements in the treatment processes to make sure they comply with the regulations imposed by the EPA. Water treatment agencies across the country and around the world are already purifying reclaimed water to produce safe, reliable drinking water supplies. In fact, agencies in Virginia, Texas, Georgia, Florida, California, Singapore, Australia and more have already implemented or are planning on implementing similar types of water treatment technologies as those being tested in Westminster. In addition, these agencies have conducted extensive testing and monitoring over many years that prove the water is safe and meets all drinking water standards. Some reports on similar projects can be found at these links: www.ocwd.com/gwrs/annual-reports/ and at www.watereuse.org.

ARE THERE OTHER CITIES IN MARYLAND OR ON THE EAST COAST DOING SIMILAR PROJECTS?

Water reuse projects have been widely and successfully implemented in the southeast, southwest and western areas of the country, including current projects in Virginia and Georgia.

Westminster is a pioneer for water reuse in Maryland, as it is the only city in Maryland planning to do indirect potable reuse using what is known as “surface water augmentation,” or adding the purified water to a reservoir. PUREWater Westminster is an important step for improving water sustainability in Westminster and can serve as a model for other cities in Maryland and beyond.

WHY NOT HAVE A DEVELOPMENT MORATORIUM AGAIN SO THE WATER WE HAVE NOW WOULD BE ENOUGH FOR US?

While development moratoriums have been implemented previously, having a development moratorium to stop growth is not the appropriate answer to address long-term water supply needs. In a dry year we need additional local sources of water regardless of whether there is growth or not. Population growth and increased demand for water will occur with ongoing economic growth. Reliable local water supplies are essential for local businesses to grow and prosper, and finding ways to enhance our existing water sources is prudent to provide water supply stability for the region.

HOW MUCH WILL THE PROJECT COST AND HOW WOULD IT BE PAID FOR?

Once the pilot study has been completed and deemed effective, a full-scale project would need to be reviewed and approved by the Mayor and Common Council. If approved, a full-scale PUREWater Westminster project would be paid for with a combination of grants and Enterprise Utility Funds.

WHO NEEDS TO APPROVE THIS PROJECT FOR IT TO BECOME A REALITY?

Regulators from the Federal and State level will all have roles in the approval process, as do the Mayor and Common Council and users of the system.

WHEN SHOULD I EXPECT THIS WATER TO BECOME PART OF OUR DRINKING WATER SUPPLY?

Results of the pilot study must be obtained and evaluated prior to any “next step” in the process. Provided the study results meet regulatory expectations, it is possible for construction to begin in the next two to three years.

WHERE CAN I FIND MORE INFORMATION ABOUT PUREWATER WESTMINSTER?

More information about the project is available on the City’s website: www.westminstermd.gov/purewater.

WHERE CAN I FIND MORE INFORMATION ABOUT RECYCLED OR RECLAIMED WATER?

For more information about water reuse and where it is being done, visit www.watereuse.org.