

## **Bull Run Mountain and Evergreen Water Supply Improvements Program Frequently Asked Questions (FAQ)**

### **1. What is the remaining timeline for this project?**

The timeline depends on the weather and the time required to acquire the appropriate easements for the project. However, the current anticipated schedule is as follows.

- September 2019: Develop test wells, conduct pumping and water quality tests
- December 2019: Convert selected test wells into production wells
- July 2021: Develop preliminary engineering report for well house and piping connection from the new well to the existing distribution system
- Fall 2024: Estimated to complete final design of well house and piping
- Fall 2025: Estimated to begin construction of well house and piping
- Spring 2027: Estimated to conduct system startup and full operation

### **2. Once the project is complete, will I be required to become a Prince William Water customer?**

No one will be required to become a Prince William Water customer or connect to the company's water system.

However, every resident on Bull Run Mountain and in Evergreen could become a Prince William Water customer ***if they so choose***. The process of applying for and obtaining access to Prince William Water's public water system will remain unchanged throughout this project. You can learn more about becoming a Prince William Water customer at <https://www.princewilliamwater.org/service-connection-policy>.

### **3. Once this project is completed, who will have access to Prince William Water's water service?**

This project is designed ***exclusively*** to enhance the existing water supply to Prince William Water customers living on Bull Run Mountain and in the Evergreen (BRM/E) community. Since our BRM/E service area is fed entirely from groundwater, it is a separately permitted water system. Thus, it does not and, by permit, cannot connect to other nearby water systems, such as the Gainesville and Haymarket (including Dominion Valley) water systems, which are supplied with water from different surface water sources.

### **4. What changes to the water supply system will result from this program?**

This Bull Run Mountain and Evergreen Water Supply Improvements Program consists of three primary components:

- Expanding the existing well system to increase the water supply;
- Modifying existing and new wells to enhance water quality; and
- Constructing piped connections between the new wells and the existing distribution system.

Prince William Water customers may experience a very slight change in water taste and smell as the project nears completion due to the introduction of chlorine for water disinfection. The addition of chlorine will not occur until near the end of the project.

**5. Why is Prince William Water conducting this program now?**

As with all groundwater well systems, the chemistry and availability of groundwater change over time; these changes result from numerous possible causes. Among these are changes in underground geological formations, changes in groundwater patterns, and changes resulting from new wells in the area. Prince William Water has operated the wells that supply Bull Run Mountain and Evergreen since 1990, and based on the changes we have observed, this is an appropriate time to move forward with the program.

**6. Is there a problem with our Bull Run Mountain and Evergreen water supply?**

No. The program is designed to make the existing well system even more reliable and resilient to system emergencies, such as water main breaks.

**7. Is there a problem with diminishing yields for wells in the Bull Run Mountain and Evergreen (BRME) area?**

The issue varies by time and location. However, of the 14 wells Prince William Water originally purchased in its agreement to operate the BRME system, only six (6) are still in use.

**8. What is the process for those whose property has been identified for test well sites?**

In the spring of 2019, Prince William Water completed geophysical surveys of groundwater resources in the BRME area. Based on these surveys, Prince William Water selected and prioritized 12 potential sites for the development of test wells. Up to six sites will be drilled as test wells.

Prince William Water has contacted property owners who may be asked to provide access to test well sites. In addition, Prince William Water held a meeting for these owners on August 28, 2019, to answer their questions. Prince William Water's contractor, ERM & Associates, may contact these property owners directly regarding ingress/egress, temporary easements, and other issues related to the test well sites. Prince William Water will only access the property with the owner's permission, with prior notification, and during weekdays between 8 a.m. and 5 p.m. The work on test well sites should only require a few weeks at each location.

**9. Why did I receive a letter from Prince William Water about this project?**

In March 2019, Prince William Water sent letters to more than 1,600 property owners in Bull Run Mountain, Evergreen, and the surrounding area. The letter was intended to inform the broad community area that Prince William Water and its contractors' activity would increase over the next few months. The notification letter was sent to Prince William Water customers and non-customers in this area.

Since then, several letters have been sent to specific landowners who may be impacted by ongoing field activities or access to whose property Prince William Water may need for ongoing, project-related activities.

**10. Will you be coming on my property for the survey work?**

Through the design phase, Prince William Water will only request access to private property to complete field or survey work if necessary. We will not access any private property without obtaining permission beforehand. If we request access to your property for the geophysical surveys, it will be for a very short period, and we will leave the property as we found it, with the potential exceptions of some minor brush clearing and posting of small flags or markers.

**11. Will this program affect Bull Run Mountain or Evergreen's private wells?**

No. This project is specifically designed to avoid impacts to surrounding private potable water wells. A small non-potable well located on Evergreen Country Club notwithstanding, a robust monitoring program demonstrated no impact to nearby monitoring locations during the stress test pumping of the two proposed production wells. Since nearby monitoring points showed no impact, we have confidence that private wells located further away from the proposed wells and our monitoring points will also be unaffected. However, in the unlikely event of such an impact, Prince William Water maintains fund balances to cover such liabilities and maintains a liability insurance policy.

**12. I am concerned about my private well. Will Prince William Water's project cause it to lose capacity?**

The aquifers underlying Bull Run Mountain and Evergreen are regional and interconnected. Every well that draws water from these aquifers has some effect, even very small, on other wells that draw water from the same aquifers. This project is specifically designed to eliminate or significantly mitigate impacts to surrounding wells. Our project involves conducting short- and long-term pumping tests to determine each well's safe yield. This will allow us to set a maximum pumping rate to minimize impacts on surrounding wells. As discussed in the previous question, Prince William Water could not definitively demonstrate "no impact" unless private well owners were to permit us to monitor their wells during our pumping tests.

**13. Will this program impact the existing water distribution system for Bull Run Mountain or Evergreen?**

No. This program will enhance the reliability of the existing groundwater well network and water supply system only. It will not impact the existing water main distribution network.

**14. Will this program impact current water rates for existing Prince William Water customers?**

No. This program will not impact current water rates. Water rates are determined on a three-year cycle based on audit results by an independent, third-party firm. Prince William Water's Board of Directors approves all changes to water rates.

**15. What other options has Prince William Water considered for improving the reliability of the water supply on Bull Run Mountain and at Evergreen? Why was this program selected?**

Prince William Water has evaluated several other options to enhance the water supply and quality on Bull Run Mountain and at Evergreen, and this program has been determined to be the most cost-effective and practical solution.

**16. What is our water quality on Bull Run Mountain and Evergreen?**

Water quality in the Bull Run Mountain and Evergreen service area continues to meet or exceed all Virginia Department of Health standards. This project is intended to ensure that this level of service continues as the existing infrastructure ages. Each year, Prince William Water develops a report that details the water chemistry in our distribution systems. The most recent Water Quality Report for the Bull Run Mountain and Evergreen Distribution System can be found on our website at:

<https://www.princewilliamwater.org/water-quality/water-quality-reports>

**17. How will this project impact the Rural Crescent?**

Prince William Water's project has no bearing on the Rural Crescent. Its purpose is to enhance the drinking water supply and quality available to current and future Prince William Water customers residing within our area of service on Bull Run Mountain and at Evergreen.

**18. Once you complete this project, will I have to become a Prince William Water customer?**

No. The purpose of the project is to enhance the drinking water supply and quality available for current Prince William Water customers on Bull Run Mountain and at Evergreen, as well as for those in our current area of service who may elect to become customers in the future.

**19. Is the intent of this project to expand Prince William Water's service area?**

No. This project does not expand our service area. It is intended only to ensure continued service to our current Bull Run Mountain and Evergreen customers and provide sufficient water for others within our existing service area who decide to become Prince William Water customers.

**20. How much more water capacity is Prince William Water trying to obtain with this project?**

Prince William Water is developing additional water supply sources that will produce an additional 60 gallons per minute of capacity for the system serving Bull Run Mountain and Evergreen Estates and to improve our system redundancy by augmenting the water supply.

**21. Will all personnel working on this project carry identification or drive marked vehicles?**

Yes. Prince William Water employees and our contractors carry identification and will drive commercial vehicles. They will also wear appropriate safety vests and other attire for increased visibility and safety. Again, please remember that we will not come onto your private property without prior permission.

**22. When construction begins, could Prince William Water notify neighbors near construction activities in addition to those directly affected?**

Yes. Prince William Water will notify neighboring properties about planned construction activities as part of its outreach process.

**23. Will this project's drilling process involve using chemicals?**

No. Unlike the process known as "hydraulic fracturing" or "fracking," the drilling for this project involved an air rotary drilling process, a method used to drill boreholes in rock formations. No chemicals are involved. Fracking, on the other hand, is a process used to create small fractures in the rock to facilitate the release of gases trapped in the rock itself.

**24. How likely will Bull Run Mountain and Evergreen will be tied into the public water system at Dominion Valley?**

Highly unlikely for several reasons. First, Prince William Water recognizes citizens' concerns about the "Rural Crescent." Construction of utilities within the Rural Crescent may be viewed as encouraging development, contrary to Prince William Water's policy of "growth pays for growth." Second, Prince William Water has performed a preliminary analysis on connecting Bull Run Mountain and

Evergreen to its central system through Dominion Valley. The costs associated with additional easement acquisition, construction, and operation of the piping, pumping, and storage systems are exorbitant on a “per customer” basis. Finally, cost considerations notwithstanding, such a piping network could potentially lead to water quality problems by the time water from our central system reaches customers on the mountain.

**25. Will the water obtained through these new wells be used anywhere besides the Bull Run Mountain and Evergreen Water System?**

No. The water obtained from this project will serve only those customers in our defined area of service on Bull Run Mountain and at Evergreen.

**26. Will this project serve the new Catholic Church on Route 15?**

No. St. Katherine Drexel Parish and School will use a private well and septic system.

**27. Will Prince William Water use County bond financing for this project?**

No. Prince William Water is an independent authority that is not part of the Prince William County government. We do not receive Prince William County tax revenue and rarely rely on State-backed bonds or loans (e.g., State Revolving Fund). We are a fee-for-service entity and will utilize Prince William Water's funds for this project.

**28. Will there be a new water tower associated with this project?**

No. This project will only add new wells, associated well houses, and additional piping to connect any new wells to our existing distribution system.

**29. What will the well houses for the new wells look like?**

We cannot provide that information until later in the process. Depending on the size and location of the well, it could have a simple, marked wellhead or a more formal well house.

Examples of the wells in our current system are located near Evergreen Country Club. One well is just to the left of the 12<sup>th</sup> fairway, not far from the tee box. Another well is off Berkeley Drive near the pond directly east of the main complex parking lot.

**30. With all the rainfall we have had in the past year, why haven't Prince William Water's existing wells been refilled?**

Wells are impacted not only by the volume of water in the aquifer but also by the rate at which the water moves through the aquifer, which is termed the “transmissivity” of the aquifer. In other words, an aquifer can contain a lot of water, but if it has low transmissivity, the rate at which water can be pumped from the aquifer is quite limited.

Two significant factors are affecting the yield of our existing wells, and recent rainfall amounts do not impact these factors:

- All wells have a “safe yield” pumping rate, which is the rate at which water can be extracted from the aquifer over a long period without producing unacceptable effects. As the geology has changed over time, the yields of our wells have decreased, possibly due to declining aquifer transmissivity.
- Some of our wells are more than 40 years old, and their yields have been impacted, in part, by the development of other private wells around them.

**31. What is Prince William Water's standard availability fee?**

Fees for connecting to water and sewer service are separate. Prince William Water posts its rates and fees in its Customer Handbook at <https://prince-william-water.dcatalog.com/v/Customer-Handbook/?page=16>.

**32. Will this program disturb our roads or affect emergency access?**

No. This program will not cause disturbances to existing roads or emergency access.

**33. I am concerned about noise. What noise impact will this program have on Bull Run Mountain or at Evergreen?**

This program will have some minor noise impacts in a later phase, as some small excavating and boring equipment will be required to complete the work. However, this work will only occur on weekdays between 8 a.m. and 4 p.m. and will likely happen in locations buffered from residential areas.

**34. Where can I find more information on this program?**

Prince William Water maintains and regularly updates a project page for this program on its website, located at <https://www.princewilliamwater.org/brme-project>. In addition, Prince William Water will conduct public information meetings to provide updates about the program and allow residents to ask questions. Finally, if you have specific questions, call 703-335-7980 during regular business hours.