

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

1. 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.

Service Authority 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.

2. Why is the Service Authority conducting this program now?

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

3. Is there a problem with our water supply on Bull Run Mountain and Evergreen?

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

4. 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 the Service Authority originally purchased in its agreement to operate the BRME system, only six (6) are still in use.

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

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

The Service Authority has contacted property owners who may be asked to provide access for test well sites. In addition, the Service Authority held a meeting for these owners on August 28, 2019, to answer their specific questions. These property owners may be contacted directly by the Service Authority's contractor, ERM & Associates, with regard to ingress/egress, temporary easements and other issues related to the test well sites. The Service Authority will only access 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.

6. What is the remaining timeline for this project? (Asked in August 2019)

The timeline is dependent on weather, successful drilling efforts and other factors but here is the general schedule:

- *September 2019*: Develop test wells, conduct pumping and water quality tests
- *Late 2019*: Convert test wells into production wells
- *2020*: Design well houses for production wells and piped connections to existing distribution system
- *2021*: Construct well houses and piping systems
- *2022*: System startup, testing and full operation

7. Why did I receive a letter from the Service Authority about this project?

In March 2019, the Service Authority sent letters to more than 1,600 property owners in the Bull Run Mountain, Evergreen and surrounding area. The letter was intended to inform a broad area of the community that activity by the Service Authority and its contractors would be increasing over the next few months. The notification letter was sent to both Service Authority customers and non-customers in this area.

8. Will you be coming onto my property for the survey work?

The Service Authority will only request access to private property if necessary to complete the geophysical survey work. We will not access any private property without obtaining permission beforehand. If we do 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 used to identify faults and other surface features that are common to potentially good groundwater sources.

9. Will this program affect private wells on Bull Run Mountain or at Evergreen?

No. This project is specifically designed to eliminate or greatly mitigate impacts to surrounding wells. However, the Service Authority would not be able to definitively demonstrate “no impact” unless private well owners were to give us permission to monitor their wells during our long-term pumping tests.

10. I am concerned about my private well. Will the Service Authority’s project cause my private well 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 if very small, on other wells drawing water from the same aquifers. That said, this project is being specifically designed to eliminate or greatly mitigate impacts to surrounding wells. Our project will involve conducting both short- and long-term pumping tests to determine each well’s ultimate yield. This will allow us to set a maximum pumping rate so as to minimize impacts on surrounding wells. As discussed in the previous question (#7), the Service Authority would not be able to definitively demonstrate “no impact” unless private well owners were to give us permission to monitor their wells during our pumping tests.

11. 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.

12. Once the program is complete, will I have an opportunity to become a Service Authority customer?

Every resident on Bull Run Mountain and in Evergreen currently has the opportunity to become a Service Authority customer. The process of applying for and obtaining access to the Service Authority's public water system will remain unchanged through the course of this program. You can learn more about this at <https://www.pwcsa.org/service-connection-policy>.

13. Will this program impact current water rates for existing Service Authority 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. The Service Authority's Board of Directors approves all changes to water rates.

14. What other options has the Service Authority considered for improving the reliability of the water supply on Bull Run Mountain and at Evergreen? Why was this program selected?

The Service Authority has evaluated a number of other options to enhance the water supply and water quality on Bull Run Mountain and at Evergreen, and this program has been determined to be the most cost-effective and practical solution.

15. What is the quality of our water 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 into the future as the existing infrastructure ages. Each year, the Service Authority 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.pwcsa.org/water-quality/water-quality-reports>

16. How will this project impact the Rural Crescent?

The Service Authority'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 Service Authority customers residing within our area of service on Bull Run Mountain and at Evergreen.

17. Once you complete this project, will I have to become a Service Authority customer?

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

18. Is the goal of this project to expand the Service Authority's service area?

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

19. How much more water capacity is the Service Authority trying to obtain with this project?

The Service Authority is looking to locate wells that will provide a total of 40 to 100 gallons per minute of capacity for the system serving Bull Run Mountain and Evergreen Estates and to improve our system redundancy by augmenting water supply.

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

Yes. Both Service Authority employees and our contractors carry identification and will be driving 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.

21. When drilling begins for the test wells and permanent well(s), could the Service Authority notify neighbors near the drilling location in addition to those directly affected?

Yes. As part of its outreach process, the Service Authority will notify neighboring properties about planned drilling activities for test well sites and test site(s) selected for further production well development.

22. Will the drilling process for this project involve the use of chemicals?

No. Unlike the process known as "hydraulic fracturing," or "fracking," the drilling for this project will involve an air rotary drilling process, which is 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 rock to facilitate release of gases trapped in the rock itself.

23. What is the likelihood that Bull Run Mountain and Evergreen will be tied into the public water system at Dominion Valley?

Highly unlikely, for several reasons. First, the Service Authority recognizes citizens' concerns related to the "Rural Crescent." Construction of utilities within the Rural Crescent may be viewed as encouraging development, which goes counter to the Service Authority's policy of "growth pays for growth." Second, the Service Authority 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 and 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 reached customers on the mountain.

24. Will the water obtained through these new wells be used anywhere other than 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.

25. Will this project serve the new Catholic Church at Route 15?

No. St. Katherine Drexel Parish and School is planning to use a private well and septic system.

26. Will the Service Authority use County bond financing to pay for this project?

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

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

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

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

We will not be able to provide that information until later in the process. Depending on the size and location of the well, it could range from a simple, marked well head to a more formal well house. Examples of our wells in our current system are located near Evergreen Country Club. One well is located just to the left of the 12th fairway, not far from the tee box. Another well is located just off Berkeley Drive near the pond directly east of the main complex parking lot.

29. With all the rainfall we have had in the past year, why haven't the Service Authority's existing wells refilled?

Wells are impacted not only by the volume of water in the aquifer, but 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 major factors are affecting the yield of our existing wells and these factors are not impacted by recent rainfall amounts:

- All wells have a "safe yield" pumping rate, which is the rate that water can be extracted from the aquifer over a long period of time 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.

30. What is the Service Authority's standard availability fee?

Fees for connecting to water and sewer service are separate. The Service Authority posts its rates and fees for connection to both water and sewer service on our website at <https://www.pwcsa.org/rates-and-fees>.

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

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

32. I am concerned about noise. What noise impacts 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 more than likely occur in locations that are buffered from residential locations.

33. Where can I find more information on this program?

The Service Authority maintains and regularly updates a project page for this program on its website, located at <https://www.pwcsa.org/brme-project>. In addition, the Service Authority will be conducting public information meetings to provide updates about the program and give residents an opportunity to ask questions. Finally, if you have specific questions, you can call 703-335-7980 during regular business hours.