

Quick Points About the Shanes Creek Restoration Project

By Greg Sykes (greg@grsykes.com)

Many neighbors had questions pertaining to the Shanes Creek restoration project. Here are some highlights compiled from various presentations, meetings, correspondences, and field work.

- The reason for this restoration is that Shanes Creek's water quality ranks as "poor" and several sewer/wastewater lines are exposed.
- According to Fairfax County's Department of Public Works and Environmental Services' (DPWES) [March 28, 2022, presentation](#), 4,800 linear feet of stream will be restored to reduce 1,439 lb/total phosphorous, 3,400 lb/total nitrogen, and 462.1 tons of total suspended sediment. This restoration fixes the problem with high-energy storm water causing erosion along the streambank and dumping sediment into Royal Lake. It elevates the streambed so water does not cut deeper into the ground, disperses energy from floods across broader areas, reinforces the streambank, redirects the waterway in some areas, and restores the riparian buffer. However, this work does not address the underlying problem: too many impervious surfaces (e.g., pavement, roofs, decks, extensions) and low absorption areas such as lawn throughout the watershed without adequate compensation. [Encroachment](#), including extending lawns and dumping debris piles, into the natural areas, thereby preventing the native plants to form a riparian buffer for waterways, further degrades the water quality. Some means to abate the runoff that people can do on their property include absorption beds, cisterns, and rain gardens. End private activities at the property line. Reduce or eliminate fertilizer usage and pick up after your pets—bonus points if you clean up the poop from other dogs.
- Meadville Land Service, LLC (MLS) are the contractors who DPWES hired through a bidding process to perform the stream restoration.
- During the restoration, the land is signed over to MLS, so they are the legal owners during the work period. Once construction is finished, the land reverts back to the Fairfax County Park Authority.
- This stream restoration is slated to be a 600-day project.
- Loud machinery will be used between April 2022 through November 2023.
- Noise ordinance allows weekday work to be between 7:00 a.m. through 9:00 p.m.; weekends can be from 9:00 a.m. to 9:00 p.m. However, MLS intends to keep most of the work only on weekdays between 7:00 a.m. through 7:00 p.m.
- The work area, technically within the Limit of Disturbance (LOD), will be fenced off. For everyone's safety, this area is closed to public access during the construction period. There are no plans for gates along the LOD. Please do not damage or hop the fence; there was already vandalism to the welded metal fencing. Such acts require repair, slow the project, and increase the project's cost. While people loving the parks and certain trails is great, this construction is an opportunity to explore other areas if the route usually taken is now closed. Open construction entrances, at Roberts Road and Gainsborough Drive, are for workers and equipment but are closed to the public. The LOD stretches along areas between the two construction entrances and down



Figure 1. The construction entrance at Roberts Road has a staging area (foreground). Wood planks protect the soil from earthmovers traveling along the work zone.

the terminus, which is approximately 500 feet from where Shanes Creek empties into Royal Lake. Some trail access points along Shanes Creek might be open, but they will be dead ends, i.e., the continuous trail from Roberts Road to the lake will be closed. Do not attempt to circumvent the fence because some of the LODs end at private property lines. The Royal Lake main loop trail will remain open.

- The new stream channel will cut through portions of the currently existing trail. The planners designed the waterway modifications along where the creek was headed and, as already seen, some of the original trail was washing out or is on eroded edges. New sections of trail will replace those impacted by the stream restoration. Part of this project is to have a single, good trail that runs from Roberts Road to the Royal Lake trail loop.
- A common concern is tree loss. One of the project planners' goals is to have every tree removal be purposeful. The trees impacted are generally of low quality, meaning that they are early succession, fast-growing trees (e.g., red maples, tulip poplars) in wooded areas that have low biodiversity and high invasive plant density. Biological surveys identified high quality forest with older growth trees (e.g., oaks, hickories), larger amounts of native biodiversity, seeps, and beneficial wildlife habitat for species such as spring peepers as amphibians are indicator species.
- Some of the dead trees will come down, especially if they are within the LOD. Unless there is concern about a dead tree next to the property line or trail, most dead trees are left standing for habitat, such as owls, woodpeckers, and other animals nesting in the hollows. The snags offer wood-eating insects a place to live, some of which become food for birds.
- There were 14 years of habitat restoration, especially invasive plant removal, in this section of park. The planners recognize it and that previous work will help in the post-project habitat recovery. Some sections where volunteer worked will be destroyed—there is no way around it—while other parts were deemed valuable and will be saved. Even in the areas that will be reworked, the volunteer efforts reduced the invasive seed source and subsequent weeds throughout the park, thereby having a net beneficial effect.
- There will be native plantings at the end of the project. Please respect that the cleared land is under habitat recovery and not an open area to keep mowed or used for whatever people want. In the long run, this project helps everyone and wildlife from the Royal Lake watershed to the Chesapeake Bay. Restoring the riparian buffer is crucial and takes decades—each year sees it getting better and better.
- FCPA and its volunteer partners needed to keep the new plantings healthy, monitor encroachments, and continue maintaining the new trail.
- The article leading up to physical construction is [Q/As About Shanes Creek and Royal Lake \(April 2019\)](#). For examples of what happens in stream restorations, please see the article, [Emergency Restoration to Rabbit Branch \(September 2020\)](#).



Figure 2. For everyone's safety, trail closure and "keep out" signs are posted throughout the construction site.



Figure 3. Welded wire fences encircling the LOD are to protect folks from construction activities. This example of vandalism is doubly selfish because it occurred on an unauthorized path away from the main trail.

- The public DPWES presentations and additional information are at <https://www.fairfax-county.gov/publicworks/stormwater/plans-projects/rabbit-branch-tributary-restoration-project-col-lingham-drive?fbclid=IwAR0GdTmcoTbSD-hirqDtthu8nzcY1KTmw30PLY-eIPbVK3i6MUGJ28coJwQ>. Specific questions should go to project manager, Meghan Fellows (Meghan.Noefellows@fairfaxcounty.gov).

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