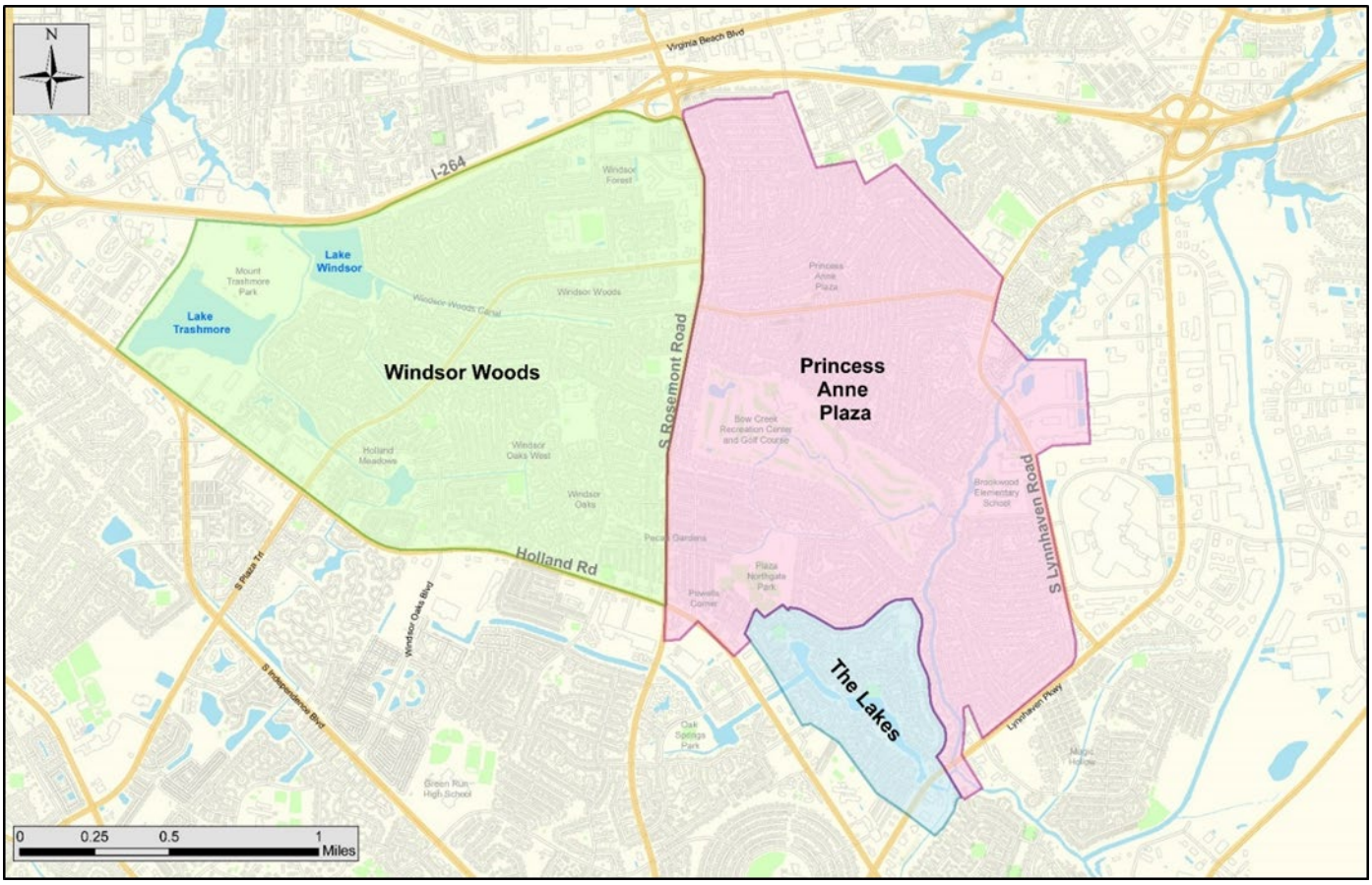
City of Virginia Beach

QUESTIONS AND ANSWERS

Windsor Woods, Princess Anne Plaza & The Lakes Combined Drainage Project

Bow Creek Stormwater Park



Q1. How large is the golf course?

The entire site is 124 acres, of which 104 acres is the golf course, and 20 acres is the Rec Center.

Q2. How many acres or what percentage of the stormwater park will be occupied by stored stormwater?

- Permanent Channel: 32 Acres (37%)
- Floodplain Storage: 14 Acres (16%)
- Upland Storage: 41 Acres (47%)
- TOTAL: 87 Acres (72% of the park), 290 Ac-Ft. during large storm events

The above acres are preliminary estimates subject to change based on detailed engineering.

Q3. Why close the golf course?

Stormwater storage is necessary to capture and manage a large amount of rainfall from significant storm events. Without creating the required amount of stormwater storage, flood mitigation cannot be achieved.

The golf course is the only large area of public land available within the project boundaries. If private property were to be used, it would require the City to acquire approximately 376 parcels of land (homes) for an estimated cost of $120M. Acquiring 376 parcels of land would take multiple years and then all homes acquired would need to be demolished, streets, water lines, sanitary sewer lines, storm drain pipes, telephones and cable lines, and natural gas and electric lines would need to be removed before construction of the stormwater storage facilities could be initiated.

The golf course is ideal since its City-owned (which reduces cost) and is located in one of the most flood-prone, low-lying areas of the City. Storage is critical to mitigating the flooding. An added benefit of converting the golf course into a Stormwater Park are the recreational amenities that will be available for all the public to enjoy.

Q4. Why not dredge London Bridge Creek for stormwater storage?

The conversion of the golf course provides the bulk of the storage volume required per the engineering analysis performed for The Lakes and Princess Anne Plaza areas. In addition to this storage, the proposed tide gates and pump station (that are part of the overall improvements) are utilized to retain and release the water downstream as required into London Bridge Creek.

Widening London Bridge Creek and the resulting impacts on the area were considered. However, it is was deemed unfeasible due to overall cost, property impacts, permitting considerations, and the additional time added to the Project. The necessary and required stormwater storage cannot be obtained in London Bridge Creek. Such an effort would require the City to acquire many homes adjacent to London Bridge Creek. Residential properties along the creek are very close to the existing top of bank (generally within 100 feet). So even if homes were acquired (either through voluntary acquisition or condemnation), minimal area could be gained. To provide the required storage (4,700,000 Cubic Feet), London Bridge Creek would have to be widened from the existing 100 feet width to 800 feet between the south tide gate and the north tide gate. Environmental impacts would be very challenging. Acquiring state and federal permits would be time-consuming and potentially unsuccessful. An Environmental Impact Assessment (EIA) would also likely be required, which would take years to complete and significantly delay the overall Project.

Q5. When will the golf course be closed?

It is anticipated the golf course will close in the Winter 2022.

Q6. Will the Bow Creek Recreation Center close?

No. The recreation center will remain open during construction and when the stormwater park is in operation.

Q7. How will the stormwater park be funded? Will it affect my taxes?

The proposed work is being funded by the City's Capital Improvement Program (CIP), which is supported by the stormwater utility fee. Based on funding availability and the size of the project, the work will be constructed in sections over multiple years.

Q8. How much funding has been authorized by the City?

The City has developed a 10- to 20-year flood mitigation program. The FY20-27 CIP budget allocates $42.3 M to the Bow Creek Stormwater Park project.

Q9. How long will it take for the new stormwater park to be built?

The estimated time is approximately ten years.

Q10. What is the cost of the new Stormwater Park?

The cost is estimated to be in the range of $60M to $80M. Market conditions will impact the cost.

Q11. What about the noise and dust from the construction?

Dust Suppression & Noise Attenuation conditions will be incorporated in the construction contract.

A buffer zone around the perimeter of the site is approximately 80 feet and contains a variety of trees, shrubs, forbs, and other types of groundcover. Buffer plantings were recently installed around the perimeter of the golf course to allow time to become established and growing before the excavation efforts begin. This work was coordinated with adjacent homeowners.

Q12. Will trucks be driving through my neighborhood?

Construction access to Rosemont Road will be provided via Country Club Circle.

Q13. What is the schedule for building the Bow Creek Stormwater Park?

Tentative Schedule:

- Design began in 2020
- Buffer enhancement planting was completed Fall 2020
- Close golf course in Winter 2022
- Initiate construction in the Spring 2023
- Construction to begin on east side of the stormwater park and work west
- Work to be built in sections based on available funding
- Sections will be open to the public when they are completed

Q14. Will the closed golf course area be available for residents to use (for walking, riding bikes, etc.)?

Areas within the park boundary (the golf course boundary) where construction is occurring will be closed to the public. Accommodations will be made to temporarily utilize portions of the park area not under construction to be used by the public for walking, etc.

Park hours are anticipated to be from dawn until dusk.

Q15. Will new parking be provided?

Approximately 90 parking spaces are currently designated for the golf course. These spaces will become available for use in the new stormwater park. Additional parking will be provided by an expansion of the existing parking for the Recreation Center. Opportunities for additional parking will be considered during detailed engineering.

Q16. What will you be doing to address increased traffic in the neighborhoods?

It is anticipated that additional traffic/parking needed to support the park will utilize the existing Recreation Center entrances primarily. An "exit only" driveway to Club House Road may be added (utilizing the existing maintenance access location at Barcelona Ln). There is a possibility that some trailhead parking (approximately 20 cars maximum at each) may be explored if there is a demand. These may be located within the park but accessed from Hannibal (at Country Club Circle) and Club House Road (at the terminus of Lee Highlands Boulevard).

The priority of the park is to serve the people living in the adjacent neighborhood (approximately 8,000 people live within a half-mile of the park).

Q17. Why not keep a nine-hole golf course?

During site analysis, it was concluded that having a nine-hole golf course limited the amount of space need for stormwater storage. Due to the remaining constrained area, golf was deemed non-viable and an incompatible use.

Q18. Will there be a buffer area between my home and the new Bow Creek Stormwater Park?

Yes, the existing vegetation within approximately 80 feet of the Park's boundary will be maintained (between the Stormwater Park and resident's rear property line). Planting enhancements were accelerated ahead of the construction throughout the buffer. This initial work was completed in December 2020.

Q19. Will scooters be allowed?

Pedestrian pathways and trails are to accommodate only non-motorized vehicles (except for emergency and maintenance vehicles).

Q20. What about safety? Will the park be monitored, patrolled, etc.?

As with other City Parks, law enforcement will include the park in their patrol route. Accommodations will be made for law enforcement to drive through the site as needed, etc. Video surveillance is also being considered throughout the park.

There has been focus on design to maintain clear site distances as much as possible. Furthermore, statistics show that park facilities that are frequently used result in crime reduction (eyes on trails). For this reason, visibility into the park from adjacent neighbors can provide a great benefit, in addition to providing the opportunity for residents to have views into the natural landscape of the park.

Q21. Will there be a fence around the stormwater park, or will it be open to adjacent yards?

A fence is not proposed, which is similar to other City parks. Residents can access the park directly from their property if they choose.

Q22. Will having a park within proximity to my property increase my property values?

Studies show that property within close proximity to a park increases property values.

Q23. Will the proposed project promote snakes?

The project is being designed as a functional ecosystem. As such, there will be habitat for snakes. However, this habitat will also support natural predators of snakes such as large birds, raccoons, and foxes. Furthermore, snakes serve a vital role in natural systems controlling rodent populations such as mice, voles, and moles. Out of 34 species of snakes found in the Virginia Beach area, only three are venomous. According to the Virginia Herpetological Society, 99 out of 100 snakes seen are non-venomous.

Q24. Since you are creating a wetland, will there be an increase in mosquitoes?

The project is being designed as a functional ecosystem which will involve wetlands, so there will be mosquitos. However, mosquitos thrive in wet areas where the habitat doesn't support natural predators, such as the low-lying wet areas which

currently exist. The proposed project will support natural mosquito predators such as bats, birds, fish, frogs and tadpoles, turtles, dragonflies, and damselflies. We are also exploring innovative findings on natural mosquito suppression.

Q25. Will there be odor?

Odors associated with salt marsh and wetland areas is caused by the growth of bacteria in the soil formed from decaying plant material, predominantly in the mud flats. The park is being designed to limit the amount of mud flats, to drain after events, and the water is being aerated to reduce stagnant water, so conditions that lead to hypoxia will be minimized.

Q26. Will it be manicured, or wild?

Designated areas, such as paths, and use areas will be regularly maintained, however there will be areas that will intentionally grow naturally which supports ecosystem function and improves habitat.

Q27. How will the hawk population that lives in the trees on the golf course be handled?

The tree (and immediately surrounding ones) in which the primary resident hawk(s) has a nest will be preserved to the greatest extent possible. In addition to providing a better habitat for hawks, the additional plantings recently placed within the perimeter in late 2020, which will help with the establishment of the canopy. Ultimately, the hawk habitat will be improved on the site as each section of the project is completed.

Q28. How will the geese population be handled?

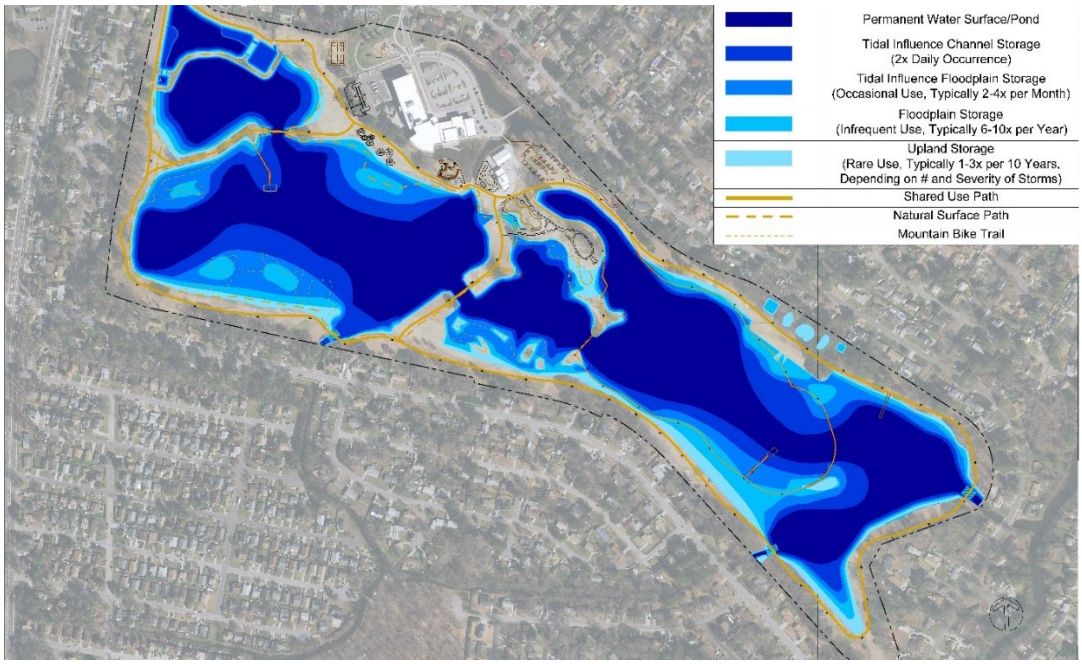
There will be plantings located immediately adjacent to the waterways, which will help deter geese.

Q29. Where will the soil being removed go?

The specific location is unknown at this time. However, the City is performing a separate evaluation of City-owned properties where the material could potentially be placed, as well as, investigating other potential uses for the material.

Q30. Will the stormwater park and storage areas always have some water or only with heavy rains?

The main Bow Creek channel will always have water. The areas adjacent to the channel will consist of floodplains and uplands that will contain water at different times due to rain events and tide levels. See the flood inundation map below.



Q31. Who is going to clean and maintain the waterways and park?

The City will operate and maintain all elements of the park. The waterways, detention areas, storm drain outfalls, and trails will be regularly maintained by the City.

Q32. Will there be any fees associated with use these areas or park amenities?

No. The park will be free and open to the public.

Q33. Will the ponds include fountains to prevent stagnant water?

Low maintenance aerators (i.e., bubbler systems) are being considered for areas that may be subject to stagnant water.

Q34. What will become of the golf course club house/cart storage buildings?

Re-use of the existing club house is currently being considered by the City. The existing cart storage building is anticipated to be demolished.

Q35. Will there be outdoor restroom facilities?

Restrooms throughout the site are not proposed. There is potential, however, for public restroom access in the existing club house building. This will be further considered during the detailed design.

Q36. Is there an opportunity for a botanical garden?

Though there may not be enough space available for a formal botanical garden, there could be an opportunity to showcase and educate the public on the unique habitat and vegetation that will be created in the various flood storage areas. The project will have an extensive landscape plan.

Q37. Will there be a dog park?

No. A dog park is not a compatible use for a stormwater park due to the pollution runoff into the waterways. The stormwater park is intended to promote clean water. However, dogs will be allowed in the park on a leash and waste pickup stations provided throughout the trails. In addition, the City currently has three dog parks located at Bayville, Red Wing and Woodstock Parks and has plans for three more at Marshview, Salem Woods, and Level Green Parks in the future.

Q38. Will you try to keep as many trees as possible?

Yes. In addition to preservation, we are working to improve the existing perimeter of the site prior to construction. Since this is a significant flood mitigation project, however, the majority of the interior trees on the course will have to be removed to create stormwater storage. Tree mitigation (replacements) will occur according to City standards, which will likely increase the tree canopy/coverage over existing trees.

Q39. How do residents in the project area contact the City?

Please contact:

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Please also see the project webpage: www.vbgov.com/BowCreekSWPark