Lake Accotink Park Master Plan Revision
Lake Management Option Discussion

FREQUENTLY ASKED QUESTIONS

The Park Authority is pleased that there is so much discussion going on in the community regarding the future of Lake Accotink! In many of the comments we have received regarding the options for managing Lake Accotink, we have heard several questions repeated. We hope the following responses to the most frequently asked questions will help you in evaluating your preferred alternative for the management of Lake Accotink. If your questions aren't answered here, please feel free to share them with us by email at Parkmail@fairfaxcounty.gov.

1. ***HAS THE PARK AUTHORITY ALREADY DECIDED WHICH OPTION WILL BE PUT IN PLACE?***
   The Park Authority has not made any decision as to which option will be chosen. Each option presents a variety of opportunities and challenges, such as cost, recreational choices, and environmental issues. *The input from the community is a key factor in the decision process!*

2. ***IS THE PARK AUTHORITY REALLY CONSIDERING THE OPTION OF JUST LETTING THE LAKE SILT IN?***
   The lake management options that have been shared with the community were developed as part of a study to consider a broad range of approaches to what could be done. While we recognize that several of the options are not highly favored by the community, understanding the full range of options allows for a more informed decision to be made.

   The development of the options was prepared by a project team consisting of Park Authority and Department of Public Works and Environmental Services staff in consultation with Wetland Studies and Solutions, a private consultant that is well-versed in restoration science and regulatory compliance issues, and based on conceptual engineering studies prepared by Burgess & Niple Engineering.

3. ***WILL LAKE ACCOTINK PARK GO AWAY?***
   Some have expressed concern that the plan is to remove all park facilities and trails. Some have expressed a concern that if the lake were removed, the intent would be to replace it with an athletic field or even affordable housing. This is absolutely not the case! Lake Accotink Park is well-loved by the community and will continue to provide access to nature and recreational opportunities long into the future

4. ***WHAT WOULD BE THE IMPACTS DOWNSTREAM IF THE DAM WERE TO BE REMOVED?***
   For any of the options that consider removal/modification of the dam or the "no direct management" option that would allow the lake to fill in, we have been and are continuing to work closely with Fairfax County Department of Public Works and

Environmental Services (DPWES) Stormwater Planning to consider the impacts on the stream below the current dam and how that might be handled effectively, should any of those options to be chosen. Any management approach will be addressed in coordination with Stormwater Planning (DPWES) with a perspective of how best to address the entire watershed

5. ***ISN'T OPTION C (DREDGING WITH AN ADDITIONAL FOREBAY) THE ONLY PERMANENT SOLUTION?***

By far, the largest contributor of sediment flowing to Lake Accotink is degrading stream channels as a result of substantial runoff in the contributing watershed. The solution would be to improve the stream channels upstream of the lake to handle the runoff. A key focus area of Fairfax County DPWES Stormwater Planning is to do just that. The Accotink watershed covers a large area with many miles of highly degraded stream channels that will require a significant amount of funding and time to improve to the steams to a condition that would significantly reduce or eliminate sediment depositing in the lake. Additionally, many miles of the stream channels are located on private property, significantly complicating the process.

Option C is a temporary intervention, as is Option B, to address the sediment issue in the interim - which could be 50 years or more. It is a more aggressive option than dredging that has been done in the past, though, and would keep the main body of the lake clearer for a longer period of time. Option C would, however, include smaller, yearly dredges of the forebay area, creating additional cost and impacts to be considered.

6. ***FOR OPTION C, COULDN'T YOU CONSTRUCT THE FOREBAY CLOSER TO BRADDOCK ROAD AND MINIMIZE THE POTENTIAL TRUCKING IMPACTS?***

Option C envisions doing a full dredge of the lake plus installing a sediment forebay to capture much of the sediment before it can enter the lake. The actual location of the sediment forebay has not been determined and would be subject to further engineering and investigation.

Several have suggested the possibility of placing the forebay further north in the park, closer to Braddock Road, providing access to a main roadway and minimizing the amount of truck trips that would be required to traverse neighborhood streets. This is an option that has been considered by the team and would need to be investigated further should the decision be made to proceed with Option C. Placement of the forebay below the point where Long Branch enters Accotink Creek would maximize the sediment capture. The park is quite narrow at this location, however, making it difficult to accommodate the size of forebay that would be needed. The location would need to be such that it would not impact the Dominion Energy facilities that run in a 230'-wide easement across the park. Establishing a forebay in this location would also require the removal of acres of trees, all located behind existing homes, and impacts to wetlands, requiring extensive mitigation. The forebay would require annual dredging in order to continue to protect the lake from sedimentation. Permanent access and working area would need to be established to

address the yearly dredging of the forebay, which would continually appear much like a small construction site. Whereas many forebays can appear as somewhat natural ponds, the yearly dredging that would be required in this case would likely leave this area looking less than attractive.

7. ***HAVE YOU CONSIDERED MAKING USE OF THE RAILROAD TO HAUL THE SEDIMENT OUT OF THE PARK?***

Due to lack of areas within the park or adjoining properties that could be used as disposal basins where the dredged material could be directly pumped from the lake as was the case with previous dredging of the lake we anticipate that sediment removed from the lake as part of a future dredging operation would need to be disposed of off-site. The dredged material from the most recent dredging was pumped directly to the nearby concrete plant property that had a large retention area that was able to accommodate the material. No similar options are available and dredged material will need to be transported off-site to an appropriate disposal location.

The proximity of the Norfolk Southern Railroad that runs along the south side of Lake Accotink Park may provide an option to use the rail to transport dredged material to an off-site disposal location. Staff is investigating the potential for rail transport of dredged material with the Railroad. Disposal of the dredged material may require other transportation options such as trucking the dredged material off-site. Therefore, staff wants to make sure the community understands the potential impacts from trucks related to any of the dredging options.

8. ***HAVE YOU CONSIDERED THE ENVIRONMENTAL IMPACTS OF EACH OPTION?***

As can be seen in the Park Authority's mission statement below, protection of the county's environment and resources is central to what we do.

> *To set aside public spaces for and assist citizens in the protection and enhancement of environmental values, diversity of natural habitats and cultural heritage to guarantee that these resources will be available to both present and future generations. To create and sustain quality facilities and services which offer citizens opportunities for recreation, improvement of their physical and mental well-being, and enhancement of their quality of life.*

The various options considered present a variety of environmental benefits and impacts. Here are some of the factors to be considered.

- Changing from a lake to a stream may favor different types of species, not necessarily better or more important species.
- Dredging the lake will improve water clarity for a period of time, but is in itself, very disruptive to the environment and unnatural.
- Option F would increase the types of habitat available, supporting existing species requiring open water while expanding on stream and wetland habitat.

Ultimately, this would support greater biodiversity as opposed to just a change of habitat types.

- Current sampling indicates that there is no significant difference in the benthic populations that exist above or below the dam, meaning the dam is not creating a drastically different environment.
- Removal or modification of the dam may initially have some negative impacts on species immediately downstream of the dam. Removal of the dam, however, would allow species to spawn more naturally along Accotink Creek.
- The impacts to stream quality and aquatic life as a result of sediment must be addressed with any option.