

**RE: February 15 & 16, 2023, Lake Accotink Dredge Public Meetings,
Comments of the Friends of Accotink Creek
March 22, 2023**



We urge our fellow citizens to adopt the principles of Harmony, Accord, and Goodwill as we together seek our way out of this muddle. Neighborliness, Charity, and Generosity will lead us to the best possible resolution of the seemingly irresolvable problem that the future of Lake Accotink has become.

In short:

The Friends of Accotink Creek continue to endorse keeping Lake Accotink a lake because:

- It is still the least bad option, and the surest way to keep the last [Accotink Creek mussel](#) population alive. •

Our Reasoning:

We attempt to be the voice of Nature. It is a matter of indifference to Nature whether it is an artificial lake or an artificial wetland that impedes her own plan for a free-flowing creek. It is only the human-generated heavy sediment loads that necessitate this debate and render so difficult any satisfactory solution. That sediment tips the balance in favor of retaining Lake Accotink's sediment capture function.

Out of sight is not out of sediment. The sediment that would no longer be captured by the lake would have known deleterious effects on aquatic wildlife downstream. The impairment of aquatic life in Accotink Creek by excess sediment load is the very premise of the [Accotink Creek Sediment TMDL](#) requiring reduction of that load. Lack of enforcement consequences for allowing the sediment to escape downstream would not equal lack of effect. Lack of enforcement consequences for allowing the last Accotink Creek freshwater mussel population to go extinct would not equal absolution from accountability.

If Lake Accotink were to become a wetland, could it truly become a new Huntley Meadows, with boardwalks meandering amidst attractive open areas? Unlikely, not without a permanent program of extensive annual maintenance. Ironically, such maintenance will almost certainly need to involve some level of dredging.

We need not imagine what the lake will become without such maintenance. The upper end of the lake filled in decades ago. It is a wetland, to be sure, and of value to many forms of wildlife and native plants, but the dominant feature is dense thickets of invasive plant species. If one pictures the time when these thickets eventually spread down to the dam and marina, their lack of appeal to park visitors will be self-evident.

Why may we expect this unappealing outcome? The lake is not designed for flood control, but the water does rise during heavy rain when it can't all get over the spillway as fast as it enters the lake. At these times of higher water, sediment can be deposited above the elevation of the spillway.

These emergent mud bars will become vegetated and further raise themselves above the level of the creek. The creek would then bypass most of what is now the lake area, mimicking the pattern now seen in the already-filled areas. Lacking persistent saturation, the emergent areas would be colonized by shrubs and trees, raising their level still higher as the organic debris accumulated.

Would the lake's current capacity to endure heavy rains not be diminished when it fills with sediment? Would flooding over the seawall and along the earthen portion of the dam not increase? We may theorize it would not, because the volume to be occupied by mud is already occupied by water. But this theory discounts the volume of emergent mud, colonizing vegetation, and woody debris arriving from upstream, all of which would reduce the current capacity to contain floodwaters.

Critics at the public meetings were often unfair, but some were correct in stating the presentations were too sanguine regarding the costs and problems of a wetland solution.



**Huntley Meadows or “Humpy Meadows”, dominated by mounds of Multiflora rose overgrown with Porcelainberry?
Typical view of Lake Accotink’s former open water area – March 2, 2023**



Lake Accotink is half its original size. Continued shrinkage will produce similar emergent terrain.

Our Questions:

The presentations extolled the carbon storage benefit of wetlands. Have we compared carbon storage benefit vs. methane generation? Anyone who has slogged through the deep mud at the bottom of the lake can attest to the dramatic bubbles of anerobic methane released with each step. Would we expect this methanogenic condition to diminish or increase with conversion to wetlands?

The dam has two outlets, the spillway and the gate. Would not a filled lake preclude operation of the gate? With what consequences for dam operations and the future need for draining for dam or sewer maintenance?

In the case of conversion to wetlands, would the flashboards on the dam be removed, accelerating the conversion by lowering the level of the water?

Our Recommendations:

“Give citizens work to do” [to address sediment at the source], said a member of the public at the February 16th meeting. We heartily endorse that request.

Collectively, we can't talk enough about this. We citizens of Fairfax County must focus on eliminating the sediment at its source, which is excessive stormwater runoff from our roads, roofs, and parking areas. Stream restorations, the path of least resistance, will take centuries to control erosion, if ever.

Citizens need to understand what is happening before their eyes, understand what they can do to make things better, and understand what resources are available to help them do their part. This is especially true right now with Lake Accotink. People are ready to listen and learn. The contributions citizens can make should particularly be made a greater part of the ongoing [Long Branch Central Watershed Management Area Project](#) .

Accelerated Area Wide Drainage Improvements to address stormwater runoff at its source should be incorporated into plans for the lake's future. These projects are in in the [Accotink Creek Watershed Management Plan](#) .

The costs to both the taxpayer and the environment constitute an emergency calling for an “Accotink Creek Project” as driven as the Apollo Moon Project.

If the lake is dredged:

A bond issue should be placed on the ballot to allow all Fairfax County citizens to definitively voice their position.

“Send the trucks down the 495 Express Lanes, where the sediment came from.” (A suggestion made humorously by one citizen after the February 16th meeting, but having great merit) The Friends of Accotink Creek documentation of how the construction of the [495 HOT Lanes](#) contributed to sedimentation justifies a substantial contribution to the solutions.



[495 Hot Lanes](#) construction mud piling up on the banks of Accotink Creek, on its way to the lake.

Brookfield Park pond now features water purifying floating wetlands. Lake Accotink should have them also.

The seemingly inevitable loss of seven acres of quality forest in Wakefield Park for a dewatering site is ironic, since deforestation directly contributes to the very problem of excess sedimentation. We must look for other opportunities to replace the lost woods, although forested habitat cannot truly be replaced. Nearby cleared floodplain parcels could be an opportunity for acquisition and reforestation. Even better would be currently paved areas.

It is unfortunate that Nature must bear the brunt of dewatering. Is Highland Street truly the only route out of the Southern Drive dewatering site? Trucks could exit via circuitous routes to share the nuisance among all those neighbors who most directly benefit from the lake. This would include routes through the park to meander along the streets on the north side on the way to Braddock Road. Alternatively, a truck route could be threaded through the industrial parks or alongside the railroad tracks.



Alternate truck route through industrial parks, avoiding residential streets

Norfolk Southern is unable to accommodate sediment removal by railcar , but why not [road-rail trucks](#) as are seen every day crossing the trestle in the park? Such vehicles could travel in convoys accommodating train timetables, and switch from rail to road at the next industrial park. Political pressure could persuade Norfolk Southern of the practicability of this option.

At the February 16th meeting, Supervisor Cook's point about slower dredging is one Friends of Accotink Creek have put forward before. Annual, or even continuous dredging, would reduce the scale of dewatering (island option?) and the truck traffic pressure on neighbors. Lake Barcroft offers a nearby example of annual maintenance dredging, lakeside dewatering, and trucking (of an admittedly smaller quantity) without complaints from the posh neighbors.

Indeed, the smaller amounts of sediment from slow dredging could just be pumped over the dam to flow downstream, sparing expense, sparing neighbors, and sparing the forest of Wakefield Park. Permitting should be a nonissue, since the quantity of pumped sediment would equal what is proposed to flow over the dam as the lake fills, so what's the difference? The only losers would be the downstream freshwater mussels, whose fate would be sealed anyway without dredging.



Smaller dredges? Smaller equipment? Smaller cost? [IMS Dredges](#) are one example.

If the lake is not dredged:

The full implications and costs of not dredging must be sufficiently analyzed before committing to this course of action. Localized flooding, rampant invasive vegetation, wetland maintenance costs, impact on downstream aquatic life, and loss of aesthetic appeal, as discussed above, are likely not the only factors that could prove daunting. Any boardwalk or similar infrastructure added to a future wetland needs also to be evaluated for both positive aspects and negative, such as ongoing costs and flood damage risk. The fears of mosquitos and rats expressed by some neighbors seem improbable, but should be evaluated in a manner that will be convincing.

A wetland maintenance protocol must be established, funded, strictly maintained, and adjusted over time to maintain efficacy.

A nature center and extensive interpretive signage for public appreciation of the wetland must be features of the near future of Lake Accotink Park.

Whether the lake stays or goes:

Naturalistic and attractive fish/eel passage should be provided

A publicly available study of the impact of the dam on downstream aquatic wildlife should be completed (but not by Wetland Studies and Solutions, whose affinity for the goals of developers has left a bad taste in the mouths of local conservationists). This study should include a specific focus on the last population of [freshwater mussels](#) in Accotink Creek, kept alive by the sediment capture function of the lake.

The Flag Run stream restoration, the Long Branch Central Project, and others should incorporate design features that will provide suitable refugia habitat for mussels.

Repair of the Upper Settling Basin, installed as part of the 1980's dredge, should be undertaken without further delay. The basin's three drains are all compromised, sending the 1980's sediment right back into the lake, and threatening catastrophic failure of the historic railroad bed.

Park facilities should serve as showcases for watershed-friendly practices, providing inspiring examples for property owners to follow, thus serving as a multiplier for County sediment reduction expenditures.

Make the developed areas of the park into a rainscaping showpiece of stormwater controls, following the example of the [Highland Beach RainScaping Park](#) in Annapolis and [Historic Fourth Ward Park](#) in Atlanta - "*Turning stormwater infrastructure into successful public places*"

A proposal has been floated to add a decorative element of public art to the blank retaining wall at the western end of the dam. Water itself might be the art by incorporating a cascade or fountain effect. Such a structure might even do double duty as a fish ladder/eelway.

Recap:

- Our prediction is that the passion of the neighbors will carry the day and the lake will be retained. •
- The Friends of Accotink Creek concur that retaining the lake is the least bad option now available. •
- A bond issue should be placed on the ballot to allow all Fairfax County citizens to definitively voice their position. •
- The situation constitutes an emergency calling for an "Accotink Creek Project" as driven as the Apollo Moon Project. •

"The Mussel's Creed"

If when I stand before the seat of final judgment I can say:

- I accepted life without complaint,
- I harmed no fellow living thing,
- I lived each day in service to all around me,
- And perhaps once in a great while, I brought forth a pearl,
- ...I will be almost as worthy to enter as these lowly river mussels.

Let us not let these fellow creatures be sent to that judgment before their times.

- Care about Accotink Creek.

Friends of Accotink Creek

: www.accotink.org :

><(((°>`.,.,.~`.,.><(((°> "Find just one other person who cares." ><(((°>`.,.,.~`.,.><(((°>`.,.,.~`.,.><(((°>