TO: The George Washington Memorial Parkway Superintendent
FROM: Glenda Booth, President, Friends of Dyke Marsh; info@fodm.org; P.O. Box 7183
Alexandria, VA 22307
SUBJ: George Washington Memorial Parkway South Section and the Mount Vernon Trail.
https://parkplanning.nps.gov/documentsOpenForReview.cfm?projectID=112569&parkID=186

DATE: October 23, 2023

Thank you for the opportunity to provide comments on the July 2023 Assessment of Effects Report, George Washington Memorial Parkway “South Section and Mount Vernon Trail Improvements Plan/Environmental Assessment.”

Our comments largely address changes you propose for the Mount Vernon Trail that affect the Dyke Marsh Wildlife Preserve which the plan designates as Zone 1 “improvements.”

Since Dyke Marsh has been reduced from 180 acres in 1940 to around 60 today and the erosion of the marsh is documented, we urge you to avoid all adverse impacts. Dyke Marsh faces many threats: polluted stormwater runoff, degraded streams entering the marsh, trash, invasive insects like the emerald ash borer, invasive plants, human disturbances, off-leash dogs, noise and light pollution and thefts of FODM equipment, among others.

**Maintain the Historic and Natural Character**

Fortunately, the GW Memorial Parkway has a historic designation.

We fully support the goals of the Organic Act of 1916: To “conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.”

**Recommendations:** Keep the parkway its current footprint and maintain its historic and somewhat natural character. Prioritize conservation and restoration of natural resources.

Do not increase impervious surfaces, harm and destroy mature native trees and native plants; stage construction in the Dyke Marsh Wildlife Preserve without effectively restoring habitat; and addressing other adverse impacts to an already fragile and diminishing wetland complex.

Continue to evaluate all changes “within the context of maintaining the Parkway’s scenic and nationally significant historic character” (page 31). We hope you will consult with FODM on your plans, especially if designs will have adverse environmental impacts.

While your goal to enhance visitor use is laudable, an equal consideration should be the protection and restoration of the natural resources that NPS is charged with protecting.
Respect Nature Study and Surveys

This multi-use trail is not just a transportation structure or a bicycle highway. It has many non-transportation uses. In fact, GWMP is a park with a road and trail going through it.

Recommendations: Acknowledge throughout that the trail is used by many people to observe and study nature; conduct plant, bird and other surveys; host walks; conduct outdoor programs; conduct academic research and other non-recreational purposes. Parents with young walkers and strollers are frequent users. All of these uses should be given equal weight in your plans. In describing trail users on page 19, these uses are ignored or given minimal mention (e.g., page 35, “nature viewing”).

To base widening the trail on recommendations by American Association of State Highway and Transportation Officials (AASHTO) appears to focus solely on bicycling, not the multi-, non-transportation uses we describe above, which are equally and perhaps more important in light of the NPS’s mission, “the rarity of the wetlands in the NPS system and the challenges in Dyke Marsh, including the decline in biodiversity, native plants, birds, insects and other natural resources.

The AASHTO guide (https://nacto.org/references/aashto-guide-for-the-development-of-bicycle-facilities-2012/) says the following:

“This guide provides information on the physical infrastructure needed to support bicycling.” (1-2) Note: “bicycling” only.

On page (1-2), “This guide provides information on how to accommodate bicycle travel and operations in most riding environments. It is intended to present sound guidelines that result in facilities that meet the needs to bicyclists and other highway users.” Note: “bicyclists and other highway users”

“Good design practice involves engineering cost-effective solutions that balance safety and mobility for all transportation modes, along with preservation of scenic, aesthetic, historic, cultural and environmental resources.” While the phrase “along with . . .” is helpful and welcome, it does not include non-transportation users. The “other highway users” is not applicable to non-bicycling, trail users.

This is a guide, not a law, standard or regulation.

Naturalists, students, academics and others use the trail, especially bridge 23, for their studies and surveys. It is a prime area for viewing marsh habitat, tidal activity and wildlife. We question whether AASHTO standards are truly appropriate since AASHSTO is a transportation-oriented organization and their guidelines do not adequately consider non-transportation uses like nature study, natural resources conservation and surveys.
**Bicycling Safety Study Needed**

One rationale for the plan is safety, yet we have not seen a current bicycling safety study. As we pointed out in our January 16, 2023, comments, many bicyclists travel the trail at unsafe speeds which conflicts with and discourages use by many walkers, especially families, parents with strollers, runners, FODM surveyors, citizen scientists and nature walk participants.

**Recommendation:** We again ask that you conduct a safety and bicycle speed study as you did for the parkway’s vehicles and analyze and make publicly available the current state of safe use of the trail by all users, especially bicyclists.

**Trail Widening**

We support your proposal to not widen the trail to 14 feet in Zone 1. We believe there are many physical and environmental constraints that should discourage you from widening or realigning the Mount Vernon trail from 8 to 9 feet to 10 feet in Zone 1. There are many mature, native trees within a foot of each side of the trail. (See photos at www.fodm.org/TakingAction) Root upheaval under pavement (page 48) is inevitable in a forest. NPS managers and trail users should learn to live with it. It will always happen.

Dyke Marsh’s current trees are threatened by the emerald ash border, climate change, air pollution and other factors.

**Recommendation:** Avoid harming and destroying trees. If tree replacement is conducted (pages 29 and 30), NPS should follow the Chesapeake Bay Riparian Buffer Manual’s guidance and implement a plan to monitor and water new trees for at least two years. New trees should be capable of ultimately replacing the canopy lost.

Complete your forest regeneration study before making final decisions or starting any design or construction work.

**Wetlands Impacts**

The plan acknowledges on page 13 that “construction access in wetlands may be required to rehabilitate/replace trail bridges.”

**Recommendation:** In light Dyke Marsh’s fragility, avoid all adverse impacts and further loss of natural habitat. If your activity disturbs or destroys wetland vegetation, we recommend that you replace it on site and monitor it for its survival.

**Trees and Vegetation**

The plan acknowledges on page 9 that “improvements” “would require disturbance to vegetation, including tree removal” and that several “state-listed rare plants in Dyke Marsh
“could be affected.” That tree removal and other vegetation clearing “could reduce or alter available habitat for wildlife, including several bat and bird species. The plan acknowledges on page 53 that “vegetation removal and the associated loss of habitat” will impact wildlife.

On page 48, the plan indicates that 3.5 acres of forest will be cleared.

The plan proposes "tree pruning and clear vegetation" at places along the trail.

**Recommendations:**

We appreciate your intent on page 29 to conduct tree surveys “to avoid or minimize tree removal.” We assume that the purpose of the surveys is to save trees. Given the loss of trees, including pumpkin ash, oak, potentially beech in the region and in the park, we urge you to avoid destroying trees.

Include as a protective measure preventing heavy equipment from compacting soil and damaging tree roots (page 48).

At a minimum, conduct a thorough tree survey to save trees as mentioned on page 27, document what trees are present and avoid further harm to trees and prepare a complete biological inventory of plants and animals present. The plan should include planting more trees, beyond those impacted by these plans.

Do not start design or construction until the Virginia Tech forestry study is completed, peer reviewed and public.

Update the 1992 Virginia Natural Heritage survey of rare plants and animals.

More impervious surface (which your plan acknowledges) can harm and kill trees and other vegetation, introduce more disturbances and invasive plants, increase stormwater runoff, increase human-wildlife conflicts and deaths and further degrade Dyke Marsh.

If tree replacement is conducted (pages 29 and 30), NPS should follow the Chesapeake Bay Riparian Buffer Manual’s guidance and implement a plan to monitor and water new trees for at least two years. New trees should be capable of ultimately replacing the canopy lost. See [Riparian Buffers Modification & Mitigation Guidance Manual](https://townhall.virginia.gov/L/GetFile.cfm?File=C:\TownHall\docroot\GuidanceDocs\440\GDoc_DEQ_5415_v1.pdf).

**Vegetation**

We appreciate your vegetation inventory (page 44) reporting 1,314 taxa, including 138 species of trees, 148 shrubs, 959 herbs and 25 woody vines and your acknowledgement that 375 are
non-native and your intent to “conduct surveys for rare plants, including river bulrush, rough avens, and where construction or construction access is proposed in wetlands, and would develop alternative designs that avoid identified individuals or populations of any of the state-listed species of concern. The NPS would consult closely with VDCR and the Virginia Department of Wildlife Resources (VDWR) on appropriate survey methods and to identify added measures to avoid and minimize disturbance to rare plants.”

We appreciate your intent to avoid harming rare plants and your willingness to consult with VDCR (presumably the Natural Heritage Program) and the Virginia Department of Wildlife Resources (VDWR) to minimize disturbance to rare plants.

To describe “adverse impacts from vegetation removal required to implement the proposed improvements would be relatively minor” is troubling. Please define “minor.”

Recommendations:

**Rare Plants:** Provide funding, organize, schedule and conduct an update of the 1992 Virginia Natural Heritage program’s 1992 survey.

**Invasive Plants:** We appreciate on page 48 “The NPS would also require the construction contractor clean vehicles and equipment offsite, and to use weed-free construction materials, to prevent the transport of invasive plant seeds, propagules, and other weed seeds, into the Parkway. Disturbed areas would be stabilized with native vegetation immediately following construction to prevent invasive species establishment.”

Conduct a complete biological inventory of all natural resources. Prepare and fund a plan to address invasive plants on the entire GWM Parkway.

**Wetland Migration, Flooding**

As expressed on pages 7 and 16, NPS plans to rehabilitate the bridge over Hunting Creek.

Since the trail is located in a tidal wetland and floodplain at many points, ponding (page 29) and flooding are inevitable. NPS and trail users should live with it.

**Recommendations:** Consider designs that allow for marsh migration landward, in light of the rising river levels.

Accept flooding as a reality in a flood zone and areas near tidal water.

**Wildlife**

The plan states the following: “Impacts to wildlife from Plan implementation would primarily be caused by vegetation removal and the associated loss of habitat. A total of approximately seven acres of natural forest communities, 0.5 acre of wetlands and successional vine-shrublands, and two acres of forested open space lies within the conceptual level limits of disturbance along the
edge of the Parkway and Trail. The NPS anticipates that adverse impacts to wildlife from vegetation removal and associated habitat loss required to implement the proposed improvements would be minimal, since impacted trees and shrubs would be replaced on a one-to-one dbh ratio to the extent practicable. As such, the acreage of habitat loss would be small compared to the amount of habitat within the Parkway.”

The “minimal loss” (your term) for one species of wildlife could mean all of that species in the preserve if there are few present. Replacement and mitigation are not adequate replacement of mature, native trees and vegetation. For example, it takes decades for a new tree to provide the ecological services of a mature tree.

**Recommendation:** Analyze this habitat loss by wildlife species that use it. Some bird species, for example, require very specialized habitat, including dead trees. The marsh wren has essentially disappeared from Dyke Marsh.

Do not take actions that reduce or impair habitat.

**Birds**

The plan’s data is not current and is incomplete.

Your “23 migratory bird species of concern” on page 50 appears to be out-of-date data. The Friends of Dyke Marsh have been submitting breeding bird data to GWMP for over 30 years. These data are of excellent quality and are specific to the marsh area that may be impacted by the GWMP plans. One of the purposes of the surveys is to inform management’s planning for activities such as the parkway changes. We are puzzled and disappointed that GWMP appears to not be using the data we collected for which you have repeatedly approved permits.

Our survey shows that prothonotary warblers are not “potential” breeders within the GWMP National Park. They have successfully bred at Dyke Marsh for several years. As for flycatchers, there are no empids mentioned. Acadian flycatchers have bred at Dyke Marsh in the past and willow flycatchers have established territory and bred many years ago. Solitary sandpipers, pectoral sandpipers and other shorebirds are not mentioned in your plan. Winter wrens and swamp sparrows are found regularly in Dyke Marsh and along the Haul Road trail during the winter. Your data are incomplete.

On page 52, on bald eagle nests, referencing six nests between Alexandria and Mount Vernon and citing the Center for Conservation Biology’s Virginia Eagle Nest Locator, the plan states that “it is unknown if the nests are active.” We have confirmed and reported to GWMP active bald eagle nests in Dyke Marsh for many years.

This is not “unknown.” Our 2023 survey confirmed two active bald eagle nests in Dyke Marsh, both of which fledged young. The results of the 2023 survey as well as for prior years have been provided to NPS. (Nests FF1801 and FF1402 on the Center for Conservation Biology Virginia
Eagle Nest Locator). Again, we question why NPS states that it does not know if any of the eagle nests are active. The presence of active nests is well known by visitors to Dyke Marsh and is documented in our annual surveys.

We are also aware that one of the six bald eagle nests between Alexandria and Mount Vernon has come down recently with the demise of its tree (FF1402 on the Center for Conservation Biology Virginia Eagle Nest Locator). The eagle pair using that nest will be looking for a new nest site. If they find a site, that new nest may or may not be closer to the construction area than their former site. What is NPS going to do to identify any new nest sites?

The rest of the paragraph on p. 54 reads "...the NPS would restrict construction within the primary and/or secondary buffers of any nest during the breeding season from December 15 to July 15 in accordance with USFWS requirements. Additional measures and/or restrictions may be identified through coordination with USFWS, VDCR, and VDWR. Using conservation measures, the NPS anticipates that the proposed improvements would not disturb bald eagles or their nests."

**Recommendations:** Because there are in fact nesting eagles in the area, please specify what additional measures or restrictions NPS will use to avoid disturbing nesting bald eagles.

Use more current data and FODM data submitted to you before reaching conclusions and doing designs and construction.

Describe how and when NPS will identify whether the FF1402 bald eagle pair have established a new nest with buffer areas overlapping the construction locations.

Monitor bald eagle activity in December 2023 through July 15, 2024, for courtship, mating, nest building and other breeding and parenting activity.

**Seasonal Limitations**

On page 30, the plan indicates that “tree removal and proposed bridge repairs/rehabilitation (when applicable) would be restricted from April 1 to November 14 or as determined through consultation with USFWS, to minimize potential effects to bats and/or migratory bird species.

**Recommendation:** Impose seasonal limitations on construction starting March 1 and include effects on all wildlife, including spawning of anadromous fish, amphibian egg laying and other wildlife breeding and raising of young. Comply with the Bald Eagle Protection Act, Migration Bird Treaty Act and the Endangered Species Act. See also our preceding comments and recommendations on birds.

**Restrooms**

On page 15, NPS plans to build a new "comfort station" at Gravelly Point and make amenity improvements along the trail (benches, drinking water, racks for bikes).
**Recommendation:** We continue to urge upgrading the restrooms at Belle Haven Park and make them available in all seasons and to make the Belle Haven Marina restroom open to the public, at least 9 a. m. to 5 p.m. daily.

**Parkway Drainage**

Improving drainage could presumably make driving easier and safer.

**Recommendations:** Avoid changes that send more stormwater runoff (pages 28-29) into Dyke Marsh or the Potomac River. Retain more stormwater onsite and urge Fairfax County and other jurisdictions to implement measures that retain and treat more stormwater onsite, to prevent it from flowing into the marsh and river. Mitigate any adverse impacts of expanding impervious surfaces.

**Management, Monitoring**

“The NPS would implement an appropriate level of monitoring throughout the construction process to help ensure that protective measures are properly implemented and are achieving their intended results.”

**Recommendation:** Define “appropriate level,” especially light of NPS contractors’ destruction of tagged pumpkin ash trees that FODM financed for treatment and NPS maintenance staff’s indiscriminate mowing of plants along the Haul Road Trail. Clearly, stronger management approaches are needed.

**Parkway Road Improvements, Crosswalks**

The Friends of Dyke Marsh support in general the safety improvements planned for the parkway, including changes to reduce speeds and to provide safe crosswalks. While not in Dyke Marsh, these will benefit our members and other Dyke Marsh visitors as they come and go.

Improving pedestrian crosswalks (page 9-10) and turns off the parkway could make Dyke Marsh and other areas more accessible and safer for many users.

**Recommendation:** Create marked pedestrian crosswalks, especially at the Marina Road, and explore “other traffic calming and safety measures” that “may include … where appropriate, rectangular rapid flashing beacons (RRFBs). . . “(page 23). Solar-powered RRFBs are a critical safety feature to prevent accidents.