# Comments of the Friends of Dyke Marsh on the George Washington Memorial Parkway's Safety Study

# August 7, 2019

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### The NPS Mission

It is always useful to review the National Park Service's plans and actions in the context of the agency's mission:

"The National Park Service preserves unimpaired the natural and cultural resources and values of the National Park System for the enjoyment, education, and inspiration of this and future generations. The Park Service cooperates with partners to extend the benefits of natural and cultural resource conservation and outdoor recreation throughout this country and the world."

From 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."

Former U. S. Department of Interior Secretary Dick Kempthorne further stated in a June 19, 2006 proclamation, "When there is a conflict between conserving resources unimpaired for future generations and the use of those resources, conservation will be predominant."

The parkway's 2014 Foundation Document on page 14 states, "In a world of diminishing biological diversity and threatened natural resources, George Washington Memorial Parkway preserves islands of refuge in an urban environment and provides opportunities to make the public aware of the importance of the values and issues relating to these islands."

#### **FODM Comments and Recommendations**

The Friends of Dyke Marsh share the following concerns and recommendations:

## **Maintain Its Historic Character**

Congress authorized the construction of the Mount Vernon Memorial Parkway to celebrate the bicentennial of George Washington's birth. The first segment was completed on time in 1932. The Parkway is listed on the National Register of Historic Places.

The Parkway's planners envisioned a unique roadway to preserve and enhance the Potomac River valley, to keep the shoreline in public ownership and to honor Washington by creating a grand gateway to his home, Mount Vernon, at the road's southern terminus. Lt. Col. Peter Hains, who conducted the first land survey told Congress that the parkway should "have the character of a monumental structure, such as would comport with the dignity of this great

nation . . . and the grandeur of character of the man to whom it is dedicated. . . It should be such a work as no American need feel ashamed of."

Recommendation: Maintain the parkway's historic character. Widening the road by, for example, creating more lanes could impair its historic character.

## **Keep It Green**

Congress and the parkway's planners intended that NPS feature natural areas, preserve scenic vistas, integrate the road's design with the undulating terrain, follow natural contours and have gentle curves.

To highlight its natural features, signs and lights are minimized; billboards are barred. Most of the bridges consist of reinforced concrete faced with hand-laid, rough-cut stone for a natural look.

Over 250,000 trees, shrubs and vines have been planted over the years. The parkway's natural areas are especially rich in biodiversity for an urban park, as documented at <a href="https://www.nps.gov/gwmp">www.nps.gov/gwmp</a>. The parkway is a road within a park.

Despite management efforts, non-native plants comprised at least a disturbing 29 percent of the total several years ago.

GWMP has an extensive planting plan, first created in 1931, designed to keep it "green" consistent with Congress's and the planners' intent. GWMP's 2014 Foundation Document indicates a need for planting more appropriate vegetation for shoreline stabilization and for both shoreline and vegetation management plans.

Recommendation: Fully implement the planting plan, plant more native trees and plants and expand invasives species control. Some areas of the parkway, including some parts of the Dyke Marsh Wildlife Preserve, represent some of the Washington, D.C.-area's last, surviving biodiversity as sprawl and development continue to destroy more native habitat.

Increase maintenance staff to manage vegetation so that it does not impair drivers' visibility and vehicles' turning.

Ensure that a biologist or tree expert evaluate the options for any diseased or dead trees if maintenance personnel are considering destroying trees. Plant at least two trees for every tree that GWMP cuts down or impairs.

Do not widen the road. Widening it could destroy and harm habitat.

# Save Dyke Marsh

As documented by two U.S. Geological Survey studies, Dyke Marsh will be gone by 2035 without action. USGS concluded that the marsh is losing 1.5 to two acres a year and the rate of erosion is accelerating. Fortunately, GWMP prepared an environmental impact statement and restoration plan and restoration efforts are underway.

Recommendation: Do not implement any changes that will contribute to or exacerbate the erosion of Dyke Marsh, such as destroying trees and expanding impervious surfaces that increase the volume or velocity of stormwater runoff.

## **Protect Wildlife**

Wildlife like turtles, deer and raccoons crossing the parkway can be a safety hazard. Vegetation and natural habitat are an integral part of the parkway and reflect designers' intent. Inevitably, this habitat attracts and is home to wildlife, wildlife that does not "respect" human-created boundaries or infrastructure.

Recommendation: Evaluate the feasibility and implications of creating wildlife passageways under the parkway, such as those constructed on Fort Belvoir and some interstate highways.

Enforce anti-littering laws. Food wrappers, scraps and other litter attract birds and other wildlife.

# **Reduce Speeding**

NPS's 2019 statistics show that from 70 to 85 percent of drivers speed on the south parkway which creates many dangers to vehicles, bikers, walkers, vegetation and wildlife. The GWMP 2014 Foundation Document states, "Speeding is a problem."

Speeding can also create a hazard to people visiting Dyke Marsh when they are crossing the parkway on foot, turning their vehicles or bicycles onto Marina Road or onto the parkway.

The parkway was designed to be a slow-speed thoroughfare, an array of units combining the natural, historic and recreational sites with over 7,000 acres of parkland along its 40 miles mostly paralleling the Potomac River shoreline. The first part built, the pre-World War II, the Mount Vernon Memorial Parkway, was designed for vehicles to travel at 35 to 45 miles per hour.

Recommendation: Do not increase the speed limit. Increase enforcement of speed limits with more patrols and with speed cameras mounted in a way compatible with the natural and vegetated areas of the parkway.

#### **Reduce Noise**

Noise from vehicles, boats, airplanes and human activity have adverse environmental impacts all along the parkway.

The NPS Natural Sounds and Night Skies Division (<a href="https://www.nps.gov/subjects/sound/effects-wildlife.htm">https://www.nps.gov/subjects/sound/effects-wildlife.htm</a> ) website examines the impact of noise on parks' wildlife and states,

"In general, a growing number of studies indicate that animals, like humans, are stressed by noisy environments (Shannon et al. 2015) . . . When these effects are combined with other stressors such as winter weather, disease and food shortages, sound impacts can have important implications for the health and vitality of wildlife populations within a park (Ware et al. 2015).

"These findings are especially significant because national parks are under increasing noise pressure. Noise levels in park transportation corridors today are many times the natural level (Mennitt et al. 2015). Air transportation can also affect life on the ground. . . The result is as much as a 70% reduction in the size of an area in which predators can hear their prey (Barber et al. 2009). Increasingly, careful consideration of the impacts of human-generated noise on wildlife is a critical component of management for healthy ecosystems in our parks.

"Reducing speed limits on roadways and increasing enforcement of speed limits is often the most effective and cost-efficient means of reducing noise. For example, reducing vehicle speeds from 40 to 30 mph is as effective as removing one half the vehicles from the roadway."

Recommendation: Do not increase speed limits or make road surface or other changes that increase noise. Enforce speed limits.

## Stormwater

During heavy precipitation events, stormwater can create large puddles on the road's edge, requiring vehicles to slow down. Spray from vehicles passing through these puddles can impair drivers' visibility.

Recommendation: Prepare options for addressing measures to reduce puddling during heavy downpours, but avoid solutions that could cause more erosion in Dyke Marsh or other shoreline areas. Consider approaches that retain rainfall onsite. Forested areas, for example, can be effective in retaining stormwater.

## **Reduce Light Pollution**

Currently lighting along the parkway is minimal, consistent with its design. At night, human-caused light can adversely affect many wildlife species. Some argue that, for example, female

fireflies are unable to see the male firefly flashes. Artificial light can attract and disorient moths, frogs, birds and hatching turtles and can lead to habitat loss if the light serves as a barrier to some species such as rodents and bats.

Recommendation: Do not increase lighting.

## **Resiliency Planning, Shoreline Flooding**

During some storms, sections of the parkway along the Potomac River act as "dams" and can help block flooding of the parkway and upland areas. However, storms, tides and flooding are natural events and rivers need floodplains and wetlands to help absorb floodwaters. Climate change is resulting in more frequent and more severe storms and more flooding. Development and human disturbance have modified many natural processes.

Recommendation: Identify upland areas for wetland migration and floodplains. Complete the restoration of Dyke Marsh.

### **Fort Belvoir Traffic**

There is anecdotal evidence that because of the 2005 the Base Realignment and Closure Commission (BRAC) actions which added hundreds of new jobs to Fort Belvoir, traffic volume increased significantly on the south parkway because of employees going to and from work there.

Recommendation: Ask the Department of Interior officials to work with Department of Defense officials to create more transportation options for Fort Belvoir employees. Support extending the Metro subway lines to accommodate Fort Belvoir employees. Urge the Trump Administration to advocate for increased Metro subway funding to extend subway lines and shuttle buses to Fort Belvoir to reduce traffic on the parkway.