

Testimony on Royal Farms, Prince George's Zoning Hearing Examiner
Aug. 3, 2022, Friends of Sligo Creek

Good morning, Madame Examiner and all in attendance.

Michael Wilpers, 907 Maplewood Ave, Takoma Park, MD 20912

I am past President and currently Chair of Natural History of the Friends of Sligo Creek, testifying on behalf of the board of directors. We greatly appreciate this opportunity to weigh in on the Royal Farms proposal adjacent to Sligo Creek and Parklawn Park. We are opposed the proposal and believe that a better match for the site should be sought.

My comments will take about 15 minutes and cover four dangers posed to the creek and other habitats in Parklawn Park with regards to stormwater, riparian forest buffer, air pollution, and fish habitat.

QUALIFICATIONS: MW

I earned my bachelor's degree in molecular biology at the University of Wisconsin-Madison and then served as a staff science writer at the university and later for the International Medical News Group. I was a technical editor at the Wisconsin Department of Natural Resources for implementation of the Clean Air Act. In 2010, I received my Certificate in Natural History Field Studies from the Audubon Naturalist Society. I served on the FOSC board from 2008 to 2010 and as President from 2010-2013.

QUALIFICATIONS: FOSC

The Friends of Sligo Creek was founded in 2002 and currently has more than 1,800 members. Our mission is the protection, improvement, and appreciation of the ecological health of Sligo Creek and its surrounding watershed. We fulfill our mission through trash cleanups, non-native invasive plant removals, stormwater management, water quality testing, natural history programs, and advocacy.

Our committee chairs have received awards from Montgomery County for their work in non-native invasive plants and stormwater. For our tenth anniversary, Montgomery Parks recognized FOSC for (quote) "untiring dedication to conservation and stewardship of natural resources in Sligo Creek Park" (unquote).

In Prince George's County, FOSC initiated a joint project with Pepco in 2008 to maintain the powerline corridor adjacent to Sligo Creek as a 17-acre wildflower pollinator meadow, which

also supports several bird species that are in decline statewide. A winding trail through the meadow is frequently enjoyed by neighbors -- and especially their dogs. The meadow project has been certified every other year by the Wildlife Habitat Council. In recent years, we have collaborated on this valuable project with the Carole Highlands Neighborhood Association in Chillum.

THE CREEK

Sligo Creek begins its eight-mile journey in Kemp Mill and traverses Silver Spring, Takoma Park, and Chillum, before merging with the Northwest Branch of the Anacostia near Chillum Community Park. Along the way, Sligo Creek passes directly behind the proposed site for Royal Farms. In fact, the creek's precious waters flow just 100 feet from the south boundary of the property. The Royal Farms project threatens to adversely impact the creek and surrounding wildlife habitats and the opportunity for park users to enjoy its birds, butterflies, foxes, fish and cottontail rabbits.

STORMWATER

Our first area of concern is stormwater a serious challenge in areas like ours, where so much of the land surface is covered by impervious surfaces. Since roads, roofs, parking lots, and sidewalks can't absorb rainwater, it rushes at high speed and high temperature across polluted surfaces into our creeks, where it deposits chemicals and sediments and gouges out the stream banks, all to the detriment of wildlife.

The current proposal does add two stormwater installations, but their ability to handle high impact storms doesn't seem to be described in the available documents. Also missing are the crucial cross-section views that would allow us to see where the outfall pipes for each stormwater feature would send overflow water in high rain events. The building's expansive roof should certainly be designed a green roof, either for solar energy or vegetation

Lastly, a sensible development at this site should greatly **reduce**, rather than maintain, the existing expanse of uninterrupted pavement and rooftop. The Royal Farms plan does add a narrow perimeter of trees but no vegetation to the **interior** of the parking area, something that is required by some jurisdictions. A good parking lot ordinance mandates **landscape islands**, including at least one shade tree. Royal Farms should follow suit.

In sum, to provide modern stormwater management, the county should seek a developer who brings much more green infrastructure to the site, so that the creek habitat is protected as much as possible.

RIPARIAN BUFFER

A second and related reason we oppose this proposal is the very narrow area behind the site for trees and shrubs to act as a buffer against rainwater runoff, with all its pollution and sediments. The Chesapeake Bay Program, in its Guide on Riparian Buffers (that is, streamside woodlands), notes that the more degraded a watershed is – the more it consists of roads and buildings -- the more important the riparian buffer becomes for absorbing stormwater runoff, chemical pollutants, and sediment. The Guide points out that **wider** buffers are recommended for urbanized areas (compared to rural areas) because of the greater need to absorb harmful inputs that can enter our streams and destabilize the stream banks.

Currently, the narrow strip of parkland between the site and the creek is landscaped mostly with turf grass and a few shade trees. The Guide reports that a dense growth of trees and shrubs is **15 times more effective** than turf grass at absorbing stormwater, pollutants, and sediment. The single ring of trees that Royal Farms proposes at the south edge of the site is a start but will hardly compensate for the shortage of woody vegetation overall. The proposed “20-foot landscaped buffer yard” is not described in the proposal so it's impossible for us to evaluate.

In compensation for removing the playground in Parklawn Park, Royal Farms has “proffered to make improvements” to the entire Park. If the applicant’s proposal is approved, these commitments should be made explicit and dramatically expanded. They should guarantee that the full width of the area between Royal Farms and the creek is planted with a true buffer of trees and shrubs, to the maximum degree that the paved trail will allow. The county should also require a widening of the entire forest buffer along the creek from Riggs and East-West Highway, even though it means a slightly narrower playing field (which is already smaller than a regulation soccer field). The plan for an “auxiliary playing field,” behind the residential properties, should instead be forested, to increase an additional buffer against runoff from East-West Highway, while providing privacy for the adjacent homeowners.

BENZENE POLLUTION

Air pollution is a third serious issue, for both humans and wildlife. The gas station’s proximity to the creek and the heavily used hike-biker trail will mean greatly elevated exposure to the invisible toxic fumes released in the ordinary course of gas station operations. These gasses include benzene, a known carcinogen. In addition to its spread as a gas, benzene is also deposited by snow and rain on soil, plants, and creek water, providing another avenue by which wildlife can be subjected to its toxic effects, which have been demonstrated on insects and mammals.

For these reasons, many jurisdictions, including Prince George’s County, impose a minimum distance of 300 feet between gas stations and natural areas or gathering places, though jurisdictions differ on their lists of such places. The county’s code pertains only to (quote) “a school, outdoor playground, library, or hospital” (close quote). The Royal Farms proposal avoids this requirement by offering to destroy the outdoor playground in Parklawn. Fortunately for Royal Farms, but not so for residents and wildlife, the county’s prohibition **does NOT** apply to

parks, which many jurisdictions include. The ordinance allows gas stations near its parks, even when they include outdoor play areas, such as lawn-like grassy fields, which are these promoted on county websites. The distance from the proposed gas pumps to the nearest open grassy area, at the southwest corner of the site, is only 285 feet. The paved trail, also traversed by children, is less than 100 feet from the gas pumps. The Parklawn Recreation Building is slightly further, at 340 feet, which is hardly reassuring those who rent the space for events.

Making matters worse, a 2018 study conducted by the Columbia University School of Public Health throws serious doubt on the effectiveness of the 300-foot requirement so commonly used. The study shows that toxic vapors released from gas stations are (quote) “10 times higher than estimates used in [current] setback regulations [that] determine how close schools, playgrounds, **and parks** can be situated” (close quote). The study shows that the **300 foot** distance is severely inadequate to protect people from benzene. If a Royal Farms gas station is allowed here, it would not be unreasonable for Parks to feel obligated to install signage along the paved trail and next to play areas warning, “High Benzene Zone.” Sadly, such signs would be unintelligible to wildlife, who would suffer the consequences.

In Montgomery County, the code requires new gas stations that sell high quantities of gas to be located at least **500 feet** from any (quote) “dwelling unit; public or private school; park; playground; day care center; any outdoor [areas for] civic, institutional, or recreation and entertainment use; or **any wetland, stream, river, [or] flood plain**” (close quote).

Since public amenities in Parklawn, as well as Sligo Creek itself, are closer than 300 feet, shown to be inadequate, the gas station should be disqualified for approval. Residents of Prince George’s County, and the wildlife in its parks, deserve at least as much protection from airborne carcinogens as Montgomery County provides. We believe this is a question of environmental justice.

FISH PASSAGE

A fourth and final reason to oppose this development, on environmental grounds, is so that the county doesn’t interfere with its own ambitious project to enable migratory fish to return to their historical spawning grounds. This project, in which the county is investing more than \$17 million, will be carried out by the Army Corps of Engineers in cooperation with the Park Planning and Development Division and the county Department of the Environment, pursuant to the Anacostia River Watershed Restoration Plan, a multi-agency endeavor.

By removing blockages to fish, this exciting project will reopen four miles of streams to migratory River Herring and Alewives, who travel from the Atlantic Ocean up small streams in the Mid Atlantic to spawn every spring. In Chillum, the Corps will remove fish blockages from more than 2,000 feet of lower Sligo Creek, from its southern end up to Balfour Drive, that is, about halfway to Riggs Road. With these barriers gone, our migratory fish should once again be able to utilize the full extent of their traditional spawning grounds in Sligo, which reach the western edge of the Coastal Plain at Carole Highlands.

Working against this tremendous effort, the Royal Farms proposal risks creating a bottleneck in the creek by worsening an already poor habitat through polluted stormwater, an overly narrow forest buffer, and pollution from benzene and other toxic gasses. The migratory fish may find themselves in trouble when they encounter these degraded conditions, discouraging them from reaching the upper extent of their spawning grounds.

The barrier removal in Sligo is ranked among the top five priorities of all such projects by the Metropolitan Washington Council of Governments. The County is currently slated to cover half of the \$34 million cost for removing all the fish barriers in the Anacostia watershed. It would be fiscally irresponsible, and environmentally tragic, if a new gas station along Sligo is allowed to undermine this ambitious effort to return migratory fish to their former spawning grounds in Sligo Creek.

CONCLUSION

In sum, the proposed development by Royal Farms is a very poor fit for this site in terms of the inevitable environmental damage caused by its proximity to Sligo Creek and Parklawn Park. Any of the four reasons I've mentioned are environmental justice concerns and should be enough to disqualify the Royal Farms proposal.

To reduce stormwater impacts to the creek, the county should seek a developer who will dramatically decrease the 100 percent impervious surface through tree islands and a green roof. To prevent toxic benzene fumes from affecting people and wildlife, the county should eliminate a gas station as an option from any proposal. And to avoid undercutting the county's important investment in enhancing fish habitat, the county should look for a developer who will advance, rather than retreat from, the goals of a healthier Anacostia watershed for people and wildlife, alike.

I am happy to provide sources for the information in my testimony.
Thanks again for the opportunity to comment on this proposal.

SOURCES

Stormwater

Inadequacy of diagrams (FOSC board member):

"Slide 10 has two treatment features (SWM-1 on the left and SWM-2 toward the bottom). SWM-1 is a bioswale that appears to be connected to the impervious surface through a series of rip-rap traps. SW-2 is called an underground facility and drains a large portion of the site through a series of surface drains and 12-inch HDPE pipes. These may be adequate but no detail is provided. One would expect a drawing showing a cross section of these materials and

containing ESDv calculations that would show compliance with state (and possibly PG) standards. Of course, none of this would take into account the impact of a petroleum spill, only the management of water.”

Interior parking lot vegetation:

https://las.depaul.edu/centers-and-institutes/chaddick-institute-for-metropolitan-development/programs/mdrn/Documents/Glenview_Design_Guidelines--Parking_Lots.pdf#:~:text=Parking%20lots%20with%2020%20or%20more%20proposed%20parking,lot%20spaces%20and%20shall%20also%20abide%20by%20%238

<https://nepis.epa.gov/Exe/ZyNET.exe/P100D97A.TXT?ZyActionD=ZyDocument&Client=EPA&Index=2006+Thru+2010&Docs=&Query=&Time=&EndTime=&SearchMethod=1&TocRestrict=n&Toc=&TocEntry=&QField=&QFieldYear=&QFieldMonth=&QFieldDay=&IntQFieldOp=0&ExtQFieldOp=0&XmlQuery=&File=D%3A%5Czyfiles%5CIndex%20Data%5C06thru10%5CTxt%5C00000031%5CP100D97A.txt&User=ANONYMOUS&Password=anonymous&SortMethod=h%7C-&MaximumDocuments=1&FuzzyDegree=0&ImageQuality=r75g8/r75g8/x150y150g16/i425&Display=hpfr&DefSeekPage=x&SearchBack=ZyActionL&Back=ZyActionS&BackDesc=Results%20page&MaximumPages=1&ZyEntry=1&SeekPage=x&ZyPURL>

Benzene

PG Code

Section 27-358 states: A Gas Station may be permitted, subject to the following: . . . The Subject Property shall be located at least three hundred (300) feet from any lot on which a school, outdoor playground, library, or hospital is located. [“outdoor playground” appears not to be defined;]

2018 Columbia Univ. study:

<https://www.sciencedaily.com/releases/2018/10/181004110021.htm>

Deposit by rain and snow:

<https://www.washingtonpost.com/news/morning-mix/wp/2016/01/22/snow-is-beautiful-please-dont-eat-it/>

Uptake:

<https://www.ecologycenter.us/population-dynamics-2/uptake-and-metabolism-of-benzene.html>

Toxicity on beetles & absorption by plants:

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5486353/>

Ordinances (national): <https://www.postpump.org/>

MoCo ordinance:

<https://www.postpump.org/assets/img/montgomery-code.png>;

https://codelibrary.amlegal.com/codes/montgomerycounty/latest/montgomeryco_md_zone2014/0-0-0-2044

Gallons sold per year: The MoCo ordinance applies to gas stations dispensing more than 3.6 million gallons per year. The average sales of gasoline per retail outlet in the U.S. is about 1.2

million gallons per year. Approximately 115,000 stations sell 135 billion gallons of fuel annually.
<https://www.infocomm.ky/blog/17737/how-many-gallons-of-gas-does-a-gas-station-sell-monthly>

Forest Buffers

Chesapeake Bay Program: https://www.chesapeakebay.net/issues/forest_buffers
MD DNR on buffers: <https://dnr.maryland.gov/forests/pages/publications/Sink.aspx>

Fish Passage Barriers

Army Corps summary:

<https://www.nab.usace.army.mil/Missions/Environmental/Anacostia-Watershed-Restoration/>

Army Corps press release

<https://www.nab.usace.army.mil/Media/News-Releases/Article/784867/corps-of-engineers-seeks-comment-on-plan-to-restore-aquatic-habitat-in-prince-g/>

Army Corps appendix C:

https://www.nab.usace.army.mil/Portals/63/docs/Environmental/Anacostia/Appendix_C_Environmental%20Compliance_Dec2018.pdf

Army Corps appendix D:

https://www.nab.usace.army.mil/Portals/63/docs/Environmental/Anacostia/Appendix_D_PublicInvolvement_Dec2018.pdf