Friends of the Cabin John Creek

P.O. Box 267, Cabin John, MD 20818

Incorporated 2013

Comments by the Friends of Cabin John Creek (FoCJC)
on the Draft Environmental Impact Statement (DEIS) for Possible I-495/I-270 Expansion

A. Description of Friends of Cabin John Creek (FoCJC)

The Friends of Cabin John Creek (FoCJC) is an incorporated 501(c)(3) entity that works to protect and enhance the Cabin John Creek (CJ Creek) watershed. FoCJC strongly advocates for mitigating impacts of any I-495/I-270 expansion on the watershed. Many of the alternatives have the potential to have both short-term and long-term negative impacts on the watershed. It is our position that the chosen alternative must avoid or mitigate all short- and long-term negative impacts to the health of the watershed. Additionally, because stormwater runoff is the CJ Creek's main enemy, we strongly support the following: (1) the retrofitting of the existing highway system with current best management practices for stormwater management, (2) close adherence to current stormwater management regulations for new public construction, and (3) minimizing the destruction of parkland for highway expansion since that has adverse impacts for the local streams.

The CJ Creek watershed is and will be the most impacted watershed as a result of any changes to I-495/I-270. Both Green Infrastructure (GI) hubs and Targeted Ecological Areas (TEAs) and a large variety of fish species are associated with the Cabin John Creek watershed. This is a watershed where extra effort should be made to protect it.

Unless noted otherwise, all citations below refer to chapters, appendices and pages in the DEIS.

B. Background - Original Construction of I-495/I-270 Disregarded Impacts of Stormwater Runoff

The Beltway (I-495) was constructed between 1961-1964 and I-270 between 1962-1975, a time when there were no stormwater runoff regulations. The actions being considered by the state of Maryland in initiating an I-495/I-270 Public-Private Partnership (P3) Program will likely require actions along all of the 70 plus miles of interstate in Maryland, including the 10 miles or so that falls within the CJ Creek watershed. All of the work will fall within someone's watershed.

C. Current Impacted State of the CJ Creek Watershed

1. Description of the CJ Creek Watershed

The Cabin John Creek Watershed is located in southern Montgomery County, Maryland, just northwest of Washington, DC. The headwaters of Cabin John Creek originate in the City of Rockville. The creek flows south about 10 miles, passing under Interstate 270, through Cabin John

Regional Park, under the Capital Beltway (I-495), and the historic Cabin John Bridge, to its confluence with the Potomac River near the towns of Cabin John and Glen Echo. Old maps refer to the Creek as Captain John's Run, a possible reference to Captain John Smith who explored the Chesapeake Bay and parts of the Potomac River in the early 1600's.

The major tributaries of the creek are: Bogley Branch, Booze Creek, Buck Branch, Congressional Branch, Ken Branch, Old Farm Branch, Snakeden Branch, Thomas Branch (also called Beltway Branch).

The watershed is in Maryland's Piedmont Plateau geologic province, with an area of about 16,022 acres (25 square miles). The watershed has been significantly affected by high-density residential and commercial development. There are parks, trails and natural areas throughout the watershed. In addition to the Regional Park, there are wooded park lands and buffer areas along several miles of the Creek mainstem and tributaries.

Zip code boundaries do not align with watershed boundaries, but the Cabin John Creek Watershed extends into: 20854 - Potomac, 20852 - North Bethesda, 20850 - Rockville, 20818 - Cabin John, 20812 - Glen Echo, 20817 - Bethesda, and 20814 - Bethesda (small portion).

2. Current Environmental Status of the CJ Creek and Watershed

The CJ Creek Watershed contains a large forested stream valley park with valuable environmental resources, including officially designated Targeted Ecological Areas (TEAs), Green Infrastructure (GI) hubs and corridors, a large variety of fish species, etc. Those resources have already been impacted by the original construction of I-495 and I-270.

Surface Water: Four CJ tributaries are within the vicinity of the corridor study boundary. Appendix L, page 49. I-495 was constructed in the center of the Thomas Branch Valley and a large portion of the stream was relocated to accommodate the current alignment of 1-495. Appendix L, page 50. Appendix L enumerates a list of adverse environmental effects suffered by Thomas Branch as a result of I-495, including severe erosion, poor habitat, and bedrock blockages of aquatic life. *Id.* Around 83% of CJ stream miles are assessed as Fair, with the remaining 17% assessed as Poor. *Id.* EPA (and other) water quality recommended levels for surface waters are exceeded for a variety of parameters in Cabin John Watershed, e.g., alkalinity, chloride (both acute and chronic exposure levels), turbidity, nitrogen and phosphorous. Ch. 4, page 63.

Aquatic Biota: Studies during 2008-2017 within the Creek mainstem and tributaries produced aquatic habitat assessments ranging from Fair to Good and benthic macroinvertebrate assessments ranging from Fair to Very Poor. Appendix L, pgs 122-23. To Mother Nature's credit, the CJ Creek watershed does have 33 documented fish species, more than any other watershed in the study. Appendix L, pg 124. This includes several sensitive/intolerant species indicative of better water quality, and gamefish such as black crappie and bass. *Id.* The CJ Creek Watershed is rated "Fair-Good" for aquatic habitat, but only "Very Poor – Poor/Fair" for benthic invertebrates. (Ch. 4, p. 106)

Terrestrial Wildlife: CJ has a forested stream corridor where 1-495 crosses the Creek and a larger forested area in the 1-270 portion. Many of these areas are designated by MDNR as Green Infrastructure (GI) hubs or corridors, which are important habitats for wildlife. Page 109. CJ Creek park contains Forest Interior Dwelling Species (FIDS) habitat. Ch. 4, p. 110.

Unique & Sensitive Areas: Green Infrastructure (GI) hubs or corridors are identified by the Maryland Greenways Commission and the MDNR Green Infrastructure Assessments (GIA) as "the most ecologically critical undeveloped lands remaining in Maryland." Appendix L, pgs 163-64. Targeted Ecological Areas (TEAs) are "established to protect Maryland's most ecologically valuable natural lands and watersheds" and are "identified by MDNR as conversation priorities for natural resources protection and receive a majority of Maryland's Program Open Space funds." *Id.* Both GIs and TEAs are associated with the Cabin John Watershed. Appendix L, p. 164.

D. Likely Environmental Issues/Impacts Identified by the DEIS Regarding CJ Creek Watershed

The Cabin John Stream Valley and Regional Park is listed as one of the nine largest parks within the CEA Analysis Area. (Ch. 4, p. 19). The CJ Creek watershed is and will be the most impacted watershed as a result of any changes to I-495/I-270. It is one of four MDNR 12-digit watersheds with more than 17,000 LF of potential impact from this project. Appendix L, page 22. Among all the affected watersheds, **"[a]ll Screened Alternatives would add the most impervious surface to Cabin John Creek" Watershed**, between 80.6 acres to 117.7 acres for Alternative 10. Appendix L, pages 80-81. All Screened Alternatives are estimated to have approximately equivalent severe environmental impacts, except the No Build Alternative. See, e.g., Table 2.11-1 on Ch. 4, p. 165. "All Build Alternatives would affect surface waters, surface water quality, and watershed characteristics in the corridor study boundary due to direct and indirect impacts to … stream channels and increases in impervious surface in their watersheds." (Ch. 4, p. 89)

Many acres in the overall project will require off-site stormwater treatment compensatory mitigation, because not all stormwater can be handled on-site. The total for the entire project ranges from 321-434 acres, depending on the Build Alternative. (Ch. 2, p. 38)

Four sections of the Cabin John Stream Valley and Regional Park would be impacted by all the Build alternatives. Impacts in each section would range from 0.3 acre to 7.2 acres. Total area impacted in the CJ stream valley and regional park would be 8.0-10.8 acres. (Ch. 4, p. 20-21). The four sections are: Cabin John Stream Valley Park (Rockville), Cabin John Regional Park, Cabin John Stream Valley Park Unit 2, and Cabin John Stream Valley Park Unit 6.

The DEIS notes that a "removal of trees and landscaping that buffer the park from the study corridors would occur but will be minimized to the greatest extent possible." (Ch. 4, p. 19) It would appear that MDOT proposes to remove trees/forested areas that they, MDOT, planted previously to mitigate impacts from the ICC and for TMDL remediation. Removal of such vegetation would appear to be contrary to the reason for the plantings in the first place. (Ch. 4, p. 99-100)

The DEIS does note various mitigations that are anticipated, such as: potential mitigation for parks includes landscaping and restoring streams. (Ch. 4, p. 22); Thomas Branch - there will be stream relocation and culvert construction along Thomas Branch in Area 4 and Area 28 (Ch. 4, p. 25-26) (we understand that the planners have determined a way to reduce waterway impacts to Thomas Branch by 592 linear feet, so kudos for that), vegetation removal will be minimized and additional landscaping may be incorporated. (Ch. 4, p. 35)

E. Comments

Comment #1 - To give the reader of the EIS a feel for the impact of any highway expansion on the stormwater runoff into CJ Creek, the section dealing with stormwater impacts should provide the following: (1) a calculation of the amount of current impervious surface the two highways have in the CJ Creek watershed, (2) the percentage of impervious surface in the CJ Creek watershed that this represents, and (3) the additional amount of impervious surface that each alternative will add to the existing roadway overall, and particularly in the CJ Creek watershed. Our back-of-the-napkin calculations are as follow:

(a) Impervious Surface Acreage from I-495 and I-270 in the CJ Creek Watershed - I-270 is 211 feet wide., I-495 is 131 feet wide., and there is approximately 4.5 miles of I-495 and 5.5 miles of I-270 in the CJ Creek Watershed. These numbers convert to 71.45 acres of impervious surface tied to I-495 and 140.67 acres of impervious surface tied to I-270. Thus, there is approximately 212.12 acres of impervious surface from those two highways in the CJ Creek watershed. Since the watershed has 16,022 total acres, these two highways currently cover approximately 1.32% of our total watershed. The U.S. interstate highways have standard lines 12 feet wide, so each additional lane will add that much width to the existing impervious surface.

(b) Percentage of Impervious Cover - According to Montgomery County's 2012 Cabin John Creek Implementation Plan, there were 3,402 acres of impervious cover in the CJ Creek watershed at that time. The current 212 acres of I-495/I-270 highway equals 6.23% of the impervious cover. <u>The opportunity to address not only any new pavement but such a sizeable portion of the watershed's existing impervious surface is unique and should be seized upon and not be wasted.</u>

Comment #2 - the EIS should clearly state the major requirements affecting stormwater runoff, which we understand to be the following: (1) there can't be any increase in "total" stormwater coming off of I-495/I-270 as a result of adding new lanes, and (2) since this is a "re-development" project, there must be a 50% treatment/improvement in the quality of stormwater coming off existing impervious surfaces. If our understanding of the requirements is incorrect, the relevant section in the EIS needs to clarify why that is the case.

Comment #3 - the EIS should reflect the threat to three specific parts of the CJ Creek watershed. Two sections of the watershed have been identified as "priority catchments" by Montgomery County and border I-270 and the I-495 spur. The streams here are already in need of restoration. One section of the watershed has been identified as a "priority conservation catchment" by the County and it is adjacent to I-495 in Cabin John. This area contains critically significant, extremely significant, and highly significant conservation areas.

Comment #4 - the EIS should state how the I-495/I-270 proposal relates to the state's commitments under the EPA's MS4 permit and the Chesapeake Bay cleanup plan. The document needs to illustrate the plan to accomplish less stormwater runoff and less roadway pollution going into the streams in CJ Creek watershed, which subsequently runs into the Potomac River, and finally into the Chesapeake Bay.

Comment #5 - The DEIS should address and analyze the current and potential future impacts of I-495 & I-270 on wildlife and recreational connectivity. Both highways currently form essentially impenetrable barriers for many species of native terrestrial wildlife which inhabit the Cabin John Creek and other impacted watersheds, preventing them from reaching potential new territories and mates, thus reducing genetic diversity. Likewise, these highways restrict or prevent recreational connectivity through publicly owned parkland in Cabin John Creek (and Watts Branch as well), making it impossible to fully experience the entire watershed as one connected entity. The mitigation section of the DEIS should carefully analyze potential approaches to restore wildlife connectivity under (or over) I-270; these approaches should also analyze opportunities to connect recreational trails as well.

Comment #6 - The DEIS should address the impact of invasive species that will thrive in any area disturbed by the project that is not paved over or made impervious in other fashion. There will obviously be a great deal of :disturbed area" as a result of the project.

Comment #7 - in evaluating the amount of stormwater runoff that will result from any expansion of 495/270, the EIS should base estimates on rainfalls that are likely to increase in density as a result of climate change. We have seen the density of thunderstorms increase in the recent past, resulting in larger amounts of rain per hour. The EIS will be flawed if it bases stormwater runoff amount estimates solely on past data without looking ahead to what is the likely scenario in the future.

Comment #8 - Flood Plains: There are a number of laws governing development within floodplains. A Finding of No Practical Alternative may be required for crossing the FEMA 100-yr floodplain of Cabin John Creek.

Comment #9 - FoCJC should be mentioned in the list of relevant community organizations. (Ch. 4, p. 37). We have been advocating officially on behalf of the CJ Creek since incorporating in 2013 and receiving our 501(c)(3) status in 2014. We provided comments regarding the initial pre-DEIS proposal on June 14, 2019.

F. FoCJC Positions

1. We are opposed to the taking of public open space that protects creeks. In Cabin John CEA Analysis Area, the project will require partial right-of-way acquisition of 5 acres from 3 parks. (Appendix E, p . 172 in the PDF – also labeled as Technical report, Appendix D, p.6). As noted in the DEIS, we would expect MDOT to make "every reasonable effort" to avoid wetlands, waterways and parklands.

2. We support retrofitting the existing roadway with stormwater management facilities to slow the water down, settle out the sediment, and increase the amount of water that goes into the ground rather than rushing into the stream. This is a unique opportunity to benefit the CJ Creek watershed. Why not take the opportunity to ensure that the existing roadway meets current stormwater runoff control standards?

3. Any new construction must adhere to the most current stormwater regulations and be continuously monitored and updated in order to minimize impact to the surrounding natural landscape. Storm Water Management must be emphasized regardless of whatever alternative is selected, and this project viewed as an opportunity to exceed legal minimums.

4. We are especially concerned about the threat to three parts of our watershed as mentioned in Comment #1 above.

5. The No Build Alternative should be strongly considered, due to the following factors: (a) high probability of a long-term decrease in traffic and need for road expansion due to the "new normal" of massively increased telework due to Covid-19, (b) urgent threats posed by man-induced global climate change, (c) the DEIS itself admits that "opportunities for avoidance and minimization of impacts to roadside resources are limited due to the fixed nature of the highway corridor." Appendix L, page 165.

6. Green Infrastructure (GI) hubs and corridors should be maximized to promote both wildlife and human enjoyment

Thank you for considering our comments and concerns.

Sincerely,

Sandy Laden
FoCJC - Vice President