From:	(b) (6)
To:	(b) (6)
Cc:	(b) (6)
Subject:	[URL Verdict: Unknown][Non-DoD Source] ESSLog# 42210_22-084F_Metropolitan DC Coastal Storm Risk
Date:	Thursday, July 28, 2022 1:01:30 PM

Ms. May,

We have reviewed the project that proposes constructing a floodwall and stoplog closure in Arlington County as well as a levee and floodwall system with pump stations in Alexandria. In the Arlington project area, Four Mile Run and the Potomac River are designated confirmed anadromous fish use streams known to support several species of anadromous fish. In the Alexandria project area, Cameron Run is a designated potential anadromous fish use stream and the Potomac River is a designated confirmed anadromous fish use stream. We also document Bald Eagle nests from the Alexandria project area.

To best protect anadromous fish in the Arlington and Alexandria project areas, we recommend a time of year restriction on any instream work from February 15 through June 30 of any year in Four Mile Run and/or the Potomac River as well as any tributaries in which work sites are located within one rivermile upstream of Four Mile Run and/or the Potomac River.

While we are recommending protections for the aforementioned species and resources, from the immediate impacts of construction activities associated with this project, we are also concerned about longer-term impacts that the altered hydrology and sedimentation patterns, resulting from the installed coastal stormwater infrastructure, might have on resources under our jurisdiction. These concerns extend to wildlife resources in the Arlington and Alexandria project areas as well as those in connected systems. We recommend continued investigation into any such impacts, particularly those upon wetland and riverine systems in the Potomac watershed, and application of the best available science on the ecological impacts of coastal stormwater management infrastructure (still in early development) to project plans and implementation.

We recommend conducting any in-stream activities during low or no-flow conditions, using non-erodible cofferdams or turbidity curtains to isolate the construction area, blocking no more than 50% of the streamflow at any given time (minimal overlap of construction footprint notwithstanding), stockpiling excavated material in a manner that prevents reentry into the stream, restoring original streambed and streambank contours, revegetating barren areas with native vegetation, and implementing strict erosion and sediment control measures. We recommend that instream work be designed and performed in a manner that minimizes impacts upon natural streamflow and movement of resident aquatic species. If a dam and pump-around must be used, we recommend it be used for as limited a time as possible and that water returned to the stream be free of sediment and excess turbidity. To minimize potential wildlife entanglements resulting from use of synthetic/plastic erosion and sediment control matting, we recommend use of matting made from natural/organic materials such as coir fiber, jute, and/or burlap. To minimize harm to the aquatic environment and its residents resulting from use of the Tremie method to install concrete, installation of grout bags, and traditional pouring of concrete, we recommend that such activities occur only in the dry, allowing all concrete to harden and cure prior to contact with open water. Due to future maintenance costs associated with culverts, and the loss of riparian and aquatic habitat, we prefer stream crossings to be constructed via clear-span bridges. However, if this is not possible, we recommend countersinking any culverts below the streambed at least 6 inches, or the use of bottomless culverts, to allow passage of aquatic organisms. We also recommend the installation of floodplain culverts to carry bankfull discharges.

The Alexandria project site is located within close proximity of historic and/or active bald eagle nests. To ensure protection of bald eagles in compliance with the Bald and Golden Eagle Act, we recommend using the Center for Conservation Biology (CCB) <u>Eagle Nest</u> <u>Locator</u> to determine if any active eagle nests are known from the project area. If active bald eagle nests have been documented from the project area, we recommend that the project proceed in a manner consistent with <u>state and federal guidelines for protection of bald eagles</u>; including coordination, if indicated, with the U.S. Fish and Wildlife Service regarding possible impacts upon bald eagles or the need for a federal bald eagle take

permit.

To minimize overall impacts to wildlife and our natural resources, we offer the following comments about development activities: we recommend that the applicant avoid and minimize impacts to undisturbed forest, wetlands, and streams to the fullest extent practicable. Avoidance and minimization of impact may include relocating stream channels as opposed to filling or channelizing as well as using, and incorporating into the development plan, a natural stream channel design and forested riparian buffers. We recommend maintaining undisturbed naturally vegetated buffers of at least 100 feet in width around all on-site wetlands and on both sides of all perennial and intermittent streams. We recommend maintaining wooded lots to the fullest extent possible. We generally do not support proposals to mitigate wetland impacts through the construction of stormwater management ponds, nor do we support the creation of in-stream stormwater management ponds.

We recommend that the stormwater controls for this project be designed to replicate and maintain the hydrographic condition of the site prior to the change in landscape. This should include, but not be limited to, utilizing bioretention areas, and minimizing the use of curb and gutter in favor of grassed swales. Bioretention areas (also called rain gardens) and grass swales are components of Low Impact Development (LID). They are designed to capture stormwater runoff as close to the source as possible and allow it to slowly infiltrate into the surrounding soil. They benefit natural resources by filtering pollutants and decreasing downstream runoff volumes.

We recommend that all tree removal and ground clearing adhere to a time of year restriction (TOYR) protective of resident and migratory songbird nesting from March 15 through August 15 of any year.

We recommend adherence to erosion and sediment controls during ground disturbance. To minimize potential wildlife entanglements resulting from use of synthetic/plastic erosion and sediment control matting, we recommend use of matting made from natural/organic materials such as coir fiber, jute, and/or burlap.

In addition to the listed species and wildlife resources mentioned above, a number of species designated as Species of Greatest Conservation Need in Virginia's Wildlife Action Plan are likely to occur, if suitable habitat exists, in and around the project area. We recommend that the Virginia Wildlife Action Plan (available through <u>www.bewildvirginia.gov</u>) be reviewed to determine what threats are known to these species, what constitutes suitable habitat for these species, and how to best protect them and their habitats from harm.

This project is located within 2 miles of a documented occurrence of a state or federal threatened or endangered plant or insect species and/or other Natural Heritage coordination species. Therefore, we recommend coordination with VDCR-DNH regarding protection of these resources.

Assuming strict adherence to best management practices for erosion and sediment control is maintained, we find this project to be consistent with the Wildlife and Inland Fisheries and Commonwealth Lands Enforceable Policies of the Coastal Zone Management Program.

Thank you,



Lee Brann

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