Potowmack Chapter Virginia Native Plant Society

February 18, 2021

Alexandria City Council ALEXANDRIA CITY HALL 301 King Street Alexandria, VA 22314

Members of Council,

The Virginia Native Plant Society (VNPS) Potowmack Chapter opposes the destruction of existing native plant habitats by stream "restoration" projects. We respectfully ask the City to pause all three of its currently scheduled Natural Channel Design (NCD) stream construction projects (Lucky Run, Strawberry Run, and Taylor Run), and work to find alternative solutions to stream stabilization and stormwater management.

The stated goals of these projects are:

- to combat erosion and to meet U.S. Environmental Protection Agency requirements for reducing the load of sediment and nutrients transported to the Chesapeake Bay;
- to restore streams that have been listed as "impaired" by the Virginia Department of Environmental Quality; and
- to improve habitat for stream organisms.

Disturbingly, such projects often cause significant, irreversible damage to native plant communities and introduce and spread non-native invasive species. In addition, these projects adversely impact healthy aquatic habitats and wildlife, and research has shown that they do nothing to improve poor aquatic habitat.

The attempted remedies for degraded streams in the form of stream restoration projects have caused irreparable loss of sensitive and natural native habitats and associated native species. In particular, the NCD approach, currently the preferred method, destroys forest communities and wetlands by wide-scale clearing of canopy trees and forest along stream banks. This is particularly problematic within our region's narrow, heavily wooded stream valleys. Nearby trees, intended to be spared, are often threatened by unintended root compaction caused by heavy equipment, which also disturb the soil and its seed bank and microorganisms. Seepage wetlands are damaged by flood waters that are deliberately directed out of the channel. In particular:

- At least forty-two documented rare plants are imperiled by these three projects: Lucky Run (11), Strawberry Run (3), and Taylor Run (28).

- Several federally protected acidic groundwater seepage wetlands are imperiled by the Lucky Run and Taylor Run projects, including a globally and state rare Acidic Seepage Swamp along Taylor Run, by plans to, impermissibly, convert them into alluvial floodplain wetlands.





- Documented, diverse, and healthy aquatic and streamside forest wildlife, including robust schools of Eastern Blacknose Dace, are locally threatened with extinction by the proposed project at Taylor Run. This in situ aquatic wildlife does not occur upstream or downstream of the project footprint, owing to the highly degraded conditions along the stream in these places. A small population of Eastern Blacknose Dace is documented for the south branch of Lucky Run.

- Nearly 500 native trees, including numerous old-age specimens, and dozens of important forest stands are slated to be removed across all three sites in order to create artificial floodplains where none naturally exist. These canopy trees, a good number of which represent the growth of well over 120 years, are irreplaceable. It will take generations for mature canopy trees to be seen again along any of these streams post-construction, even if the new plantings survive and grow.

Our streams and other wetlands are being seriously undervalued and sacrificed by using them as stormwater management facilities - a purpose decidedly at odds with the original intent and purpose as forested stream valley parks. Vigorous land development upstream is the primary precipitating factor in stream degradation. The substantial increase in storm runoff from man-made impervious surfaces (buildings and roadways), aggravated by heavier rainfall from climate change, creates an overload that a natural stream cannot easily accommodate. The first course of action to remedy this runoff should be to require property owners and developers to implement controls at the source; to hold water on site, infiltrate it to ground water, and release it slowly to receiving streams without causing erosion. NCD does nothing to reduce the volume and severity of the initial runoff.

Destruction of one intact ecosystem for the sake of potentially improving another is highly problematic. Our remnant natural areas in Northern Virginia are fast disappearing in the wake of one construction project after another, and with them go the songbirds and all other creatures associated with their long-established habitats.

We feel it is impossible for humans to recreate an ecosystem once it has been destroyed. Even when plant species are appropriately chosen for the project site, they provide only a fraction of the original diversity upon which myriad complicated flora/fauna relationships depend. Without frequent and expensive long term maintenance, which is rarely implemented, disturbed land immediately attracts invasive introduced plant species which quickly overwhelm the native plantings.

These projects often move forward in the face of vocal opposition by the public and by scientific experts. Ecologists, botanists, and residents are frequently deprived of a voice in decision making around stream restoration projects. These stakeholders need to be included early in discussions so that their expertise and their viewpoints can inform projects and their concerns can be recognized and addressed.

All jurisdictions share the responsibility to steward and preserve their natural resources for present and future generations and the good of the environment. Extinctions begin locally. It is up to all of us to preserve tree canopy and protect the remaining fragments of our struggling ecosystems.

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We stand ready to work with the City in recommending and discussing ecologically sound best practice alternatives to the highly destructive NCD method for these three stream projects. We care about the quality of life in our community, and care about the health of our public lands. Our membership currently includes 79 residents of the City of Alexandria, our chapter represents over 525 citizens of the Northern Virginia region, and the Virginia Native Plant Society has a statewide membership of 1,987.

Sincerely,

Alan Ford, President, VNPS Potowmack Chapter

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CC: Kathie Hoekstra, Chair, Environmental Policy Commission (EPC) Andrew Macdonald, Chair, Environmental Council of Alexandria (ECA)

Our Mission

The **Virginia Native Plant Society** is dedicated to the protection and preservation of the native plants of Virginia and their habitats, in order to sustain for generations to come the integrity of the Commonwealth's rich natural heritage of ecosystems and biodiversity for purposes of enjoyment, enlightenment, sustainable use, and our own very survival.

To this end, we advocate and follow practices that will conserve our natural endowment, and we discourage and combat practices that will endanger or destroy it. We are committed to do all we can to slow the accelerating conversion of natural landscape to built and planted landscape and to reduce its damage to natural ecosystems.



