



NRCA, P.O. Box 3242, Alexandria, VA 22302

April 19, 2021

Mayor Justin Wilson
Vice Mayor Elizabeth Bennett-Parker
Councilmember Canek Aguirre
Councilmember John Taylor Chapman
Councilmember Amy Jackson
Councilmember Del Pepper
Councilmember Mo Seifeldin
City of Alexandria, Virginia

Subject: Taylor Run

Dear Mayor Wilson, Vice-Mayor Bennett-Parker, and City Council Members:

North Ridge Citizens' Association has reviewed the April 12, 2021 letter from a group of concerned City residents to the City Council (copy enclosed) that offers a number of ways the City could meet its Chesapeake Bay pollution reduction mandates without proceeding with the proposed Taylor Run stream reconstruction project.

We believe that Taylor Run, with its rare wetland and concentration of Alexandria-rare plant species, has exceptional ecological value that would be damaged or destroyed by the reconstruction project. We also are skeptical that the proposed project would achieve the levels of pollution reduction claimed.

Accordingly, we urge the City to explore alternative ways of meeting its pollution reduction goals, including those set forth in the April 12 letter.

Sincerely,

John Fehrenbach
President, NRCA

Enclosure

cc: Mark Jinks
Jesse Maines
Yon Lambert

April 12, 2021

Mayor Justin Wilson

Vice Mayor Elizabeth Bennett-Parker

Councilmember Canek Aguirre

Councilmember John Taylor Chapman

Councilmember Amy Jackson

Councilmember Del Pepper

Councilmember Mo Seifeldein

Dear Mayor Wilson, Vice Mayor Bennett-Parker and Councilmembers Aguirre, Chapman, Jackson, Pepper, and Seifeldein:

This responds to recent statements by the City in the press and in an April 2 budget memo, claiming that there are no feasible alternatives to the proposed Taylor Run stream reconstruction project to allow the City to achieve its mandated Chesapeake Bay pollution reduction goals. While it shouldn't be the responsibility of Alexandria's citizens to find alternatives to a flawed and deeply unpopular proposal, we have prepared a list of real, workable alternatives which in combination will allow the City to meet its goals for no additional cost.¹

Background

The Taylor Run project would require clearcutting an area 80 feet wide by 1900 feet long, running the length of Chinquapin Park and through much of the First Baptist woodlands. The stream bed would be raised three to eight feet (by adding sediment fill) to change the flow pattern of the stream and to allow the stream to overflow its banks during heavy rains.

¹ Responses to specific claims made in the April 2 Budget Memo are included in the Appendix to this letter.

There is broad and deep citizen opposition to the City's proposal. Dozens of citizens have filed comments questioning the project, as have the Environmental Council of Alexandria, the local chapter of the Sierra Club, the Virginia Native Plant Society, Potowmack Chapter, and several civic associations. The City's own Environmental Policy Commission has also decided unanimously that the City should not pursue the project and should "explore multiple promising alternative[s]" to satisfy the City's Chesapeake Bay pollution reduction obligations.

Most of the concerns that have been raised remain unresolved.

First among these is whether the project will actually reduce pollution to the extent claimed by the City. Soil samples taken from the stream banks show that the banks contain less than one quarter of the amount of phosphorus that the City claims exists.

Second, there is a question about the effect of the project on the rare seepage swamp wetland and the many Alexandria-rare plant species near the stream. Raising the stream bed significantly will cause the stream to flow over the wetland during heavy rains. The City botanist says this will be harmful to the wetland and plants. The City's outside consultants say that the overflows would be beneficial to the wetlands and the plants. A group of civic associations has been asking for months that the City get its botanist and consultants together with a "neutral" expert to assess these completely opposing views, but that meeting has not happened yet.

Third, there is a question about whether the so-called "natural channel design" technique the City plans to use is an effective reconstruction method. The one place in the City where this technique was used in the City – Strawberry Run in 2010 – seems to have been a failure.

There is also strong empirical evidence that Taylor Run cannot be “fixed” more than temporarily unless the City addresses the stormwater runoff caused by the extensive impervious surfaces in the stream’s watershed.

The City’s request for alternative projects available to the City to achieve its pollution reduction goal

In response to these concerns City Manager Mark Jinks is reported by the *Alexandria Times* to “have insisted that the city has yet to hear * * * ‘alternative, feasible project[s] that will * * * meet the state’s 2028 mandate that we be at 100% of our state-set pollution reduction goals.’”

Alternative, feasible projects are available to the City to achieve its pollution reduction goals

As the Environmental Policy Commission suggested, there are several ways of reducing water pollution that, in combination, should allow the City to meet its state-mandated goals. We will identify a few here.

It’s important to remember at the outset that *the City has already achieved approximately 70 percent of its total reduction obligations* for the three pollutants in question (phosphorus, nitrogen and suspended sediments). See Alexandria Phase 2 Chesapeake Bay Action Plan for 40% Compliance, page 3, Table E3.

The City’s remaining obligations to be achieved are: phosphorus at 287 lbs./yr.; nitrogen at 2,374 lbs./yr.; and suspended sediments at 280,879 lbs./yr. Id.

Stream Restoration of Lucky Run

If the City undertakes the proposed Lucky Run stream project, the City *by its own numbers* will achieve the following pollutant reductions:

phosphorus at 257 lbs./yr.; nitrogen at 658 lbs./yr.; suspended sediments at 489,818 lbs./yr. (See Action Plan, page 24, Table 11.) In other words, the Lucky Run project alone will get the City 174 percent of its remaining 2028 suspended sediments requirement and 90 percent of its remaining phosphorus requirement.

Credits from AlexRenew

According to a March 5 email to EPC Chair Kathie Hoekstra from Sheeva Noshirvan, Outreach Program Manager of RiverRenew, once the City's combined sewer outfall (CSO) project is completed in 2025, there are expected to be, on an average basis, pollution reduction credits that "the City can use to assist them in meeting their Bay TMDL stormwater goals." The "expected available CSO nutrient credits" are: phosphorus – 500 lbs./yr.; nitrogen - 1,500 lbs./yr.; and suspended sediments – 30,000 lbs./yr. Added to the Lucky Run pollution reduction credits, the AlexRenew credits would get the City 280 percent of its remaining 2028 requirement for phosphorus, 185 percent of its remaining suspended sediments requirement, and 90 percent of its remaining nitrogen requirement.

Tree Planting Project

If the City undertook the tree planting project that has been proposed by a group of citizens, we believe that for \$2 million – less than the \$2.25 the City has budgeted for Taylor Run - it could achieve an annual phosphorus reduction of 45.6 lbs./yr. and a nitrogen reduction of 185 lbs./yr. Those numbers are based on the pollution credit guidelines of Virginia's Department of Environmental Quality (DEQ) and research showing that \$2 million can buy 10,000 high quality native trees that can be planted in forest-like density. Under the DEQ pollution credit guidelines for reductions by planting trees, that could achieve 33 acres worth of credits – the numbers stated above. Tree planting is a

recognized way to achieve credits, and City Council should request the City Arborist to work with DEQ to develop the strongest possible plan that can be achieved. While the tree planting does not generate the same pollution reductions per dollar as Lucky Run, coupled with Lucky Run and Alex Renew, it would bring the City's nitrogen reduction level to 2,343 lbs./yr. – 99 percent of the City's remaining 2028 requirements – and help meet several of Council's Eco-City goals.

Purchasing nutrient credits

Any small nitrogen shortfall left by either a combination of Lucky Run and Alex Renew (216 lbs.), or Lucky Run, Alex Renew and the tree planting (31 lbs.), could be made up by purchasing nitrogen credits on the nutrient trading market. While the exact cost of purchasing permanent nitrogen credits is generally confidential, based on our research we are confident that the cost of the needed credits would not result in any additional expense beyond that currently budgeted by the City. We believe the City already knows that purchased nutrient credits can be a cost-efficient part of a pollution reduction package, but we would be happy to work with the City to identify such purchase options.

The following chart summarizes how pollution reduction credits could be achieved by the proposed alternatives to the Taylor Run reconstruction project.

PROPOSED ALTERNATIVE NUTRIENT REDUCTION PROJECTS									
		col A	col. B	col. C	col. D	col. E	col. F	col. G	col. H
		Remaining Required Reductions by 2028 (lbs./yr.)	Reductions from Lucky Run Stream Project (lbs./yr.)	Remaining Required Reductions (lbs./yr.)	Expected Annual Nutrient Credits from River Renew (lbs./yr.)	Remaining Required Reductions (lbs./yr.)	Expected Credits from Tree Planting (lbs./yr.)	Remaining Required Reductions (lbs./yr.)	% of Required Reductions Achieved
Row 1	Suspended Sediments	280,879	(489,818)	surplus - 208,939	(30,000)	surplus - 238,939	NA	surplus -238,939	185%
Row 2	Phosphorus	287	(257)	30	(500)	surplus - 470	(46)	surplus - 516	280%
Row 3	Nitrogen	2,374	(658)	1,716	(1,500)	216	(185)	31	99%

Note: Only 31 Nitrogen credits would be need to be purchased with tree planting or 216 Nitrogen credits without tree planting

Conclusion

In sum, the City does not need to reconstruct Taylor Run (or Strawberry Run) to meet its Chesapeake Bay pollution reduction obligations. *Moreover, the City will not need to spend more money than is currently budgeted to fulfill those obligations.*

We therefore ask the Council to direct that the Taylor Run reconstruction project not proceed, and that \$2 million of the funds budgeted for the project be reallocated to a tree planting program to be developed by the City arborist, and that the remainder be reallocated for nutrient credit purchases and/or stormwater or Taylor Run maintenance projects.

Sincerely,

Russell Bailey
Jeremy Flachs

Carter Flemming
Rawles Jones

cc: Mark Jenks Jesse Maines Kathie Hoekstra
Yon Lambert Bob Williams Kathryn Chiasson
Bill Skrabak John Marlin

Appendix

On April 2, 2021, the City issued a set of “Budget Questions and Answers” on alternatives to the proposed Taylor Run stream reconstruction. The City generally asserts that alternatives are too expensive or too uncertain to be viable. The City also asserts that the alternatives do not account for maintenance of the sanitary sewer line that runs along Taylor Run and would require diversion of City Funds from stormwater projects or increases in the stormwater fee. As discussed below, each of these assertions is demonstrably wrong. They are incorrect primarily (though not exclusively) because they are based on two erroneous assumptions: 1) that each alternative must independently achieve the full amount of pollution reduction that the Taylor Run project is assumed to achieve,² and 2) that the City can do no stream reconstruction project to help the City meet its objectives. By starting from these false premises, the City arrives at grossly inflated costs of what are in fact, quite viable alternatives to Taylor Run.

The City’s contentions are addressed below in the order they appear in the budget memo. Each contention and response should be examined remembering that (a) several efforts can be combined to achieve the needed credits and (b) the planned Lucky Run project will go a long way toward accomplishing that goal.

1. Green infrastructure and other best management practices (BMPs)

City Claim: BMPs to substitute for Taylor Run would cost between \$26 million and \$66 million and would add between \$41 and \$89 to the annual stormwater fee for the majority of homeowners in the City.

Our response: BMPs are not included in our proposed package of alternatives, so their costs and benefits need not be debated here. We would note, however, that we strongly support credible, well-designed BMPs and that such BMPs will be put in place over the next several years, the cost of which will be included in various re-development projects such as Landmark, Minnie Howard and Upper King Street. These projects will each result in pollution reductions over and above the reductions proposed here. The City will not incur additional stormwater costs and stormwater fees will not be increased as a result of these BMPs being constructed.

2. Tree planting

City claim: The City would need to plant between 421,000 and 687,000 trees at a cost of \$84 million to \$206 million. This would add between \$113 and \$287 per year to the stormwater utility fee for the majority of homeowners in the City.

² As stated above in our letter, the City’s pollution reduction assumptions for Taylor Run appear to be 400% too high.

Our response: Even after the parameters of the tree planting proposal were twice explained in writing, the City insists on assuming, incorrectly, that the proposal is to have a planting replace all the pollution reduction credits that would be lost if Taylor Run does not go forward. In fact, the tree planting would be part of a package of alternatives that would achieve 100 percent of the City's pollution reduction goals. The City also makes what we believe to be erroneous claims about the cost of trees (too high), the numbers that would have to be planted to be a meaningful part of a package of reductions (way high), and the pollution reduction value that can be achieved by a planting that aims to maximize that value (way low). We are not impressed by the mathematical slight-of-hand that converts a proposal to spend no more than \$2 million into a program that could cost forty to one hundred times that much. Given that the tree planting that is proposed as part of the package would cost less than is budgeted for Taylor Run, it could not, and would not, result in raising the stormwater fee.

3. Purchase of pollution reduction credits

City claim: The market rate for phosphorus credits is \$35,000/lb. Purchasing the 295 pounds of phosphorus credits that would be lost if the Taylor Run project is not done would cost \$10.3 million ($\$35,000 \times 295$ lbs. of phosphorus). This would add \$14 a year to the average homeowner's stormwater utility bill.

Our response: Implementing our package of alternatives would put the City well over its final phosphorus reduction goals. In other words, *the City would not need to purchase any phosphorus credits on the nutrient market to reach its goal.* What the City may need to acquire is a small number of nitrogen credits (between 31 and 216 pounds, depending on whether the tree planting is done or not). The cost of nitrogen credits is much less expensive than the cost of phosphorus credits, and there are many ways nitrogen credits can be acquired. If the tree planting takes up \$2 million of the \$2.25 the City has budgeted for Taylor Run, that will leave \$250,000 available to buy the 31 pounds needed. We have talked to a number of individuals involved in the nutrient credit market. While they do not want to be quoted publicly on price of nutrients, we are assured that \$250,000 will do the trick with money left over for other projects. If the City does not do the tree planting it will then have, of course, the \$2.25 million freed up by Taylor Run to purchase nitrogen credits and to do other projects. We would be happy to work with the City to find nutrient credit sellers if you wish. Purchasing sufficient credits to meet the City's stormwater goals will not require the stormwater fee to be raised.

4. Receiving nutrient credits from Alexandria Renew

City claim: Trading credits with Alex Renew following completion of the combined stormwater outfall (CSO) remediation project may be an option, if allowed by DEQ. There are considerable risks to meeting the state 100% pollution reduction mandate associated with this approach. The nature of wastewater is such that the capture and treatment of the CSO flows does not generate many total suspended solids or sediment credits, leaving the City well below its mandated reduction. It would cost around \$10 million to purchase sediment credits.

Our response: Alex Renew has given the Environmental Policy Commission a written estimate of how many nutrient credits are likely to be available to the City to use to meet its pollution reduction goals once the CSO comes online and those credits are generated. We understand that DEQ has no objection to Alexandria taking advantage of those credits, and that DEQ, in fact, expects that the City will do so. Indeed, the City already plans to use these credits! See the City's Phase 2 Chesapeake Bay Action Plan (at p. 26). As discussed elsewhere, under our package proposal more than 100% of Alexandria's sediment reduction mandate will be achieved by projects other than Alex Renew, so there will be no "sediment shortfall" and no sediment credit purchases necessary.

City claim: If the Taylor Run reconstruction is not done the sanitary sewer stabilization will still need to be done. Early estimates are that this would cost \$400,000 to \$600,000.

Our response: DEQ grants for stream restoration are to help achieve Chesapeake Bay pollution reductions, not to support sewer maintenance. Sewer maintenance was not a stated purpose of the Taylor Run reconstruction in either the grant application to DEQ or in the memo asking for Council approval of that application. Necessary sewer maintenance will be done whether or not the Taylor Run reconstruction project proceeds and should be funded out of the regular budget sources for the sanitary sewer system.