

October 8, 2020

Michael S. Rolband
Resource Protection Group, Inc.
c/o Wetland Studies and Solutions, Inc.
5300 Wellington Branch Drive, Suite 100
Gainesville, Virginia 20155

Dear Mike,

This letter constitutes my first quarterly report for work on RFP #01 – Mussel Introduction into an Urban Stream Environment during July 1 to September 30, 2020. Work on this project during the first quarter was largely focused on planning activities for the anticipated Fall stocking of mussels at the two restored streams in Reston. These activities included a site visit to assess suitable locations for stocking mussels, developing prototypes of alternative designs for mussel enclosures and finalizing permitting requirements. Our original plan was to stock 200-300 individually-tagged juvenile Alewife Floater mussels (50-75 individuals per enclosure x 4 enclosures at each stream) and to monitor their growth and survival over a 10-month period from October 2020 to July 2021. We propose to revise the stocking plan for the two Reston streams as follows: (1) we will pit tag and translocate approximately 100 adult Elliptio mussels during October 2020, (2) we will concurrently deploy 3 types of enclosures containing approximately 20 juvenile Alewife Floater mussels in each stream (120 total), and (3) we will defer the larger stocking of juvenile Alewife Floater mussels (for assessment of growth and survivorship) to April 2021 for a 9-month study concluding December 2021. Our rationale for the proposed changes to the stocking plan is based on several factors. First, given the shallow and cobble-dominated nature of the restored streams, we were concerned that the potential over-winter mortality of juvenile mussels in enclosures may not be indicative of survivorship for adult, free-ranging mussels in these streams. We feel that stocking and subsequent census of translocated adult mussels would provide a better basis for assessing the over-winter suitability of this habitat. Second, the growth and survivorship of juvenile mussels may depend in part on flow and water quality conditions. As it is anticipated that flow and water quality monitoring will begin in April 2021, we feel that it would be beneficial to align our growth and survivorship monitoring with the availability of these data. Lastly, deferring the larger-scale stocking to Spring will provide an opportunity to test alternative enclosure designs that may be better suited for the shallow and cobble-dominated habitat found in the restored streams.

Please let me know if you are amenable to the proposed changes in the stocking plan and we will proceed accordingly. It is my understanding that VCU and RPG have agreed on a quarterly fixed-cost invoicing schedule. I will provide a copy of this report to our Contracts office and you should receive a separate invoice. We are still working to resolve issues with establishing the sub-award to the US Fish and Wildlife Service (Rachel Mair, co-PI), but do not anticipate that this will delay our Fall stocking plans.

Please contact me if you have any questions or concerns.

Sincerely,

A handwritten signature in black ink that reads "Paul A. Bukaveckas". The signature is written in a cursive, slightly slanted style.

Paul A. Bukaveckas