



**Resource Protection Group, Inc. – Reston Stream Monitoring
PROGRESS REPORT**

For Period Oct 1, 2024 through Dec 31, 2024

PROJECT NUMBER: GC24LM00TZA0000

PERSONNEL: Brendan M. Foster

COOPERATOR: Resource Protection Group, Inc.

START DATE: October 1st, 2020

END DATE: September 30th, 2027

OBJECTIVES:

This monitoring program seeks to measure and evaluate system-wide hydrologic, water-chemistry, and ecologic responses to enhanced stream restoration practices, with a focus on the stream environments and practices employed in Snakeden Branch and The Glade, in Reston, Virginia. Specifically, this program will:

1. Initiate and conduct precipitation, air temperature, streamflow, water-quality, and ecological monitoring at multiple locations in Snakeden Branch and The Glade through September 30, 2027.
2. Make all monitoring data available to other researchers and the public expeditiously via the USGS National Water Information System Web Interface (NWISWeb; <https://waterdata.usgs.gov>) and other formal data outlets; and
3. Provide peer-reviewed documentation of the findings of the monitoring program at end of study.

PROGRESS DURING PERIOD:

SITES:

1. Continuous hydrologic and water-quality measurements continue to be collected and transmitted in real-time at all monitoring stations with minimal issues or fouling.

2. Routine servicing (cleaning and calibration checks of all equipment) were completed at all stations.
3. Discrete water sampling continued at Snakeden Branch and The Glade. Samples were sent to the USGS National Water Quality Laboratory and USGS Kentucky Sediment Laboratory for analyses.
4. Completed 2024 fish survey.
5. Completed fall 2024 benthic macroinvertebrate sampling and habitat surveys.
6. Completed second (and final) longitudinal water quality survey for 2024.

DATA:

1. Real-time continuous provisional data continues to be served in near real-time on NWISWeb.
 - Site ID 0164578734 Snakeden Branch above Lake Audubon:
<https://waterdata.usgs.gov/monitoring-location/0164578734/#parameterCode=00065&period=P7D>
 - Site ID 0164579522 The Glade near Howland Drive:
<https://waterdata.usgs.gov/monitoring-location/0164579522/#parameterCode=00065&period=P7D>
 - Site ID 385536077204401 Meteorological station at Glade Rec Area:
<https://waterdata.usgs.gov/monitoring-location/385536077204401/#parameterCode=00045&period=P7D>
2. Stream monitoring cameras continue to serve imagery of Snakeden Branch and The Glade:
 - Site ID 0164578734 Snakeden Branch above Lake Audubon:
https://apps.usgs.gov/hivis/camera/0164578734_VA_Snakeden_Br_above_Lake_Audubon_Reston
 - Site ID 0164579522 The Glade near Howland Drive:
https://apps.usgs.gov/hivis/camera/0164579522_VA_The_Glade_nr_Howland_Dr

MISCELLANEOUS:

1. Met with members of RPG board and discussed sediment and nutrient load models.

PLANS FOR NEXT QUARTER:

1. Continue servicing trips for Reston stream monitoring stations and precipitation gage.
2. Continue discrete water sampling including storm sampling.
3. Work with mussel team to coordinate activities.