

BROOK FLOATER HABITAT & FRESHWATER MUSSEL SURVEYS

Prince William County, Virginia



Client

Ecology and Environment, Inc.

Williams Transcontinental Gas Pipe Line Company

ES Project No. 8707

Location

Prince William County, Virginia

Key Services Provided

- Freshwater Mussel Survey
- VDGIF Coordination

Project Duration

July 2016

ES Project Cost

\$10,000

ES Key Staff

Matthew Johnson
Mary Mahoney

EnviroScience, Inc. completed a freshwater mussel survey for Ecology and Environment, Inc. and Williams Transco for a proposed natural gas pipeline expansion as part of the Atlantic Sunrise Project in Prince William County, Virginia. The proposed expansion includes two stream crossings of Dawkins Branch, a direct tributary of Broad Run, within an existing pipeline right-of-way easement near Manassas Regional Airport. Broad Run is known to historically have been inhabited by state-protected freshwater mussel species, including the brook floater, *Alasmidonta varicosa*. Because of the historic presence of state-protected species in the receiving stream, the Virginia Department of Game and Inland Fisheries (VDGIF) requested that stream habitat assessments, freshwater mussel surveys, and relocations be performed prior to initiating in-stream construction activities. To accommodate the construction schedule, EnviroScience quickly coordinated with the client and the VDGIF malacologist to determine the appropriate sampling methodologies and completed the work upon approval.

A team of EnviroScience malacologists and biologists used the Freshwater Mussel Guidelines for Virginia (2015) to conduct the survey. The proposed construction footprint for the pipeline expansion spanned the width of the two existing right-of-way easements plus 20m (66ft) upstream and 80m (262ft) downstream buffer areas at each crossing. We assessed habitats for suitability by Brook Floater and searched for the presence of live freshwater mussels. No suitable Brook Floater habitat or protected mussels were observed during this project. We observed live Eastern Elliptio and Giant Floater mussels at each crossing and relocated them to upstream habitats where they would not be impacted by construction activities.