

Client

John K. George and  
Partners

ES Project No.

9191

Location

Goochland and Powhatan  
Counties, Virginia

Key Services Provided

- Freshwater Mussel Survey
- Freshwater Mussel Relocation

Project Duration

November 2016

ES Project Cost

\$8,000

ES Key Staff

Matthew Johnson  
Andrew Zimmerman

# FRESHWATER MUSSEL SURVEY & RELOCATION IN THE JAMES RIVER

Goochland and Powhatan Counties, Virginia



EnviroScience, Inc. completed a freshwater mussel survey and relocation for John K George and Partners for a boat ramp and dock. The proposed boat ramp was built in the James River for a private landowner in Goochland County, Virginia. The James River is inhabited by several state-protected and federal-protected freshwater mussel species. Specifically, the Virginia Department of Game and Inland Fisheries requested that a survey be performed at this site to identify the possible presence of the state-protected Green Floater (*Lasmigona subviridis*) and/or Atlantic Pigtoe (*Fusconaia masoni*) mussels. Additionally, VDGIF requested that a mussel relocation be performed to remove any common mussel encountered during the survey from the proposed construction footprint of the project. EnviroScience quickly coordinated with the VDGIF malacologist in Forest, VA and received approval to complete the requested survey outside of the normally approved field season window.

The team of EnviroScience malacologists and biologists used the Freshwater Mussel Survey Guidelines for Virginia (2015) as a basis to conduct the requested survey and relocation. Site-specific survey buffers were discussed and agreed upon with VDGIF personnel prior to initiating field work. More than 200 Eastern Elliptio (*Elliptio complanata*) were collected and relocated as part of this project.

Although no protected mussels were observed during this project, it demonstrates EnviroScience's ability to quickly coordinate, mobilize, and report as EnviroScience biologists mobilized within hours of receiving client approval and the entire duration of the project was no longer than 2 weeks from receiving the survey request to providing a finalized mussel survey report to the client.