

Molly Joseph Ward
Secretary of Natural Resources

Clyde E. Cristman
Director



Joe Elton
Deputy Director of Operations

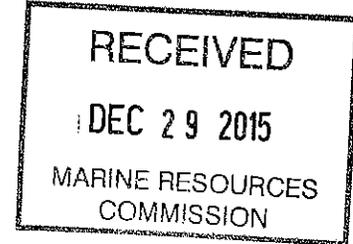
Rochelle Altholz
Deputy Director of
Administration and Finance

David Dowling
Deputy Director of
Soil and Water and Dam Safety

COMMONWEALTH of VIRGINIA
DEPARTMENT OF CONSERVATION AND RECREATION

MEMORANDUM

DATE: December 29, 2015
TO: Randy Owen, MRC
FROM: Roberta Rhur, Environmental Impact Review Coordinator
SUBJECT: MRC ~~15-0340~~ 14-0343, JAMES RIVER WATER AUTHORITY



Division of Planning and Recreation Resources

The Department of Conservation and Recreation (DCR), Division of Planning and Recreational Resources (PRR), develops the *Virginia Outdoors Plan* and coordinates a broad range of recreational and environmental programs throughout Virginia. These include the Virginia Scenic Rivers program; Trails, Greenways, and Blueways; Virginia State Park Master Planning and State Park Design and Construction.

This project is along the James River, a potentially designated scenic river and established water trail. For this reason, we recommend the intake structure installation minimally disturb the river bank and the project area along the river be restored using native plant material. Please contact Lynn Crump, PRR Planner at 804-786-5054 or Lynn.Crump@dcr.virginia.gov with any questions.

Division of Natural Heritage

The Department of Conservation and Recreation's Division of Natural Heritage (DCR) has searched its Biotics Data System for occurrences of natural heritage resources from the area outlined on the submitted map. Natural heritage resources are defined as the habitat of rare, threatened, or endangered plant and animal species, unique or exemplary natural communities, and significant geologic formations.

According to the information currently in our files, the Rivanna River to Mouth at James Stream Conservation Unit (SCU) is within the project site. SCUs identify stream reaches that contain aquatic natural heritage resources, including 2 miles upstream and 1 mile downstream of documented occurrences, and all tributaries within this reach. SCUs are also given a biodiversity significance ranking based on the rarity, quality, and number of element occurrences they contain. The Rivanna River to Mouth at James SCU has been given a biodiversity significance ranking of B3, which represents a site of high significance. The natural heritage resources of concern associated with this SCU are:

<i>Elliptio lanceolata</i>	Yellow lance	G2G3/S2S3/SOC/NL
<i>Lasmigona subviridis</i>	Green floater	G3/S2/NL/LT

The Yellow lance occurs in mid-sized rivers and second and third order streams. To survive, it needs a silt-free, stable streambed and well-oxygenated water that is free of pollutants. This species has been the

subject of taxonomic debate in recent years (NatureServe, 2009). Currently in Virginia, the Yellow lance is recognized from populations in the Chowan, James, York, and Rappahannock drainages. Its range also extends into Neuse-Tar river system in North Carolina. In recent years, significant population declines have been noted across its range (NatureServe, 2009). Please note that this species is currently classified as a species of concern by the United States Fish and Wildlife Service (USFWS) however, this designation have no official legal status.

The Green floater, a rare freshwater mussel, ranges from New York to North Carolina in the Atlantic Slope drainages, as well as the New and Kanawha River systems in Virginia and West Virginia (NatureServe, 2009). In Virginia, there are records from the New, Roanoke, Chowan, James, York, Rappahannock, and Potomac River drainages. Throughout its range, the Green floater appears to prefer the pools and eddies with gravel and sand bottoms of smaller rivers and creeks, smaller channels of large rivers (Ortman, 1919) or small to medium-sized streams (Riddick, 1973). Please note that this species has been listed as state threatened by the Virginia Department of Game and Inland Fisheries (VDGIF).

Considered good indicators of the health of aquatic ecosystems, freshwater mussels are dependent on good water quality, good physical habitat conditions, and an environment that will support populations of host fish species (Williams et al., 1993). Because mussels are sedentary organisms, they are sensitive to water quality degradation related to increased sedimentation and pollution. They are also sensitive to habitat destruction through dam construction, channelization, and dredging, and the invasion of exotic mollusk species.

In addition, the James spiny mussel (*Pleurobema collina*, G1/S1/LE/LE) has been historically documented in the Rivanna River. The James spiny mussel is a freshwater mussel endemic to Virginia and North Carolina and is known from the James and Roanoke River watersheds. It occurs in a variety of substrata, ranging from sand and silt mixtures to gravel and sand mixed with rubble, and in a variety of flow regimes (Clarke & Neves, 1984; Hove & Neves, 1994). It is now restricted to small headwater streams of this watershed (Neves, 1991).

Threats to the James spiny mussel include competition with the exotic clam (*Corbicula fluminea*), erosion and sedimentation from logging, road construction, and livestock grazing, sewage effluent, and water quality degradation (Neves, 1991). Please note that this species is currently classified as endangered by the USFWS and the VDGIF.

The Rivanna River, which is within the project site, and the James River, which is within and downstream of the project site, have been designated by the VDGIF as "Threatened and Endangered Species Waters". The species associated with the Rivanna River is the Atlantic pigtoe (*Fusconaia masoni*, G2/S2/SOC/LT) and the Green floater. The species associated with the James River are the Brook floater (*Alasmidonta varicosa*, G3/S1/NL/LE), the Atlantic pigtoe, and the Green floater.

There is potential for the Northern Long-eared bat (*Myotis septentrionalis*, G1G3/S3/LT/NL) to occur within the project area. The Northern Long-eared bat is a small insect-eating bat characterized by its long-rounded ears that when folded forward extend beyond the tip of the nose. Hibernation occurs in caves, mines and tunnels from late fall through early spring and bats occupy summer roosts comprised of older trees including single and multiple tree-fall gaps, standing snags and woody debris. Threats include white nose syndrome and loss of hibernacula, maternity roosts and foraging habitat (NatureServe, 2014). Due to the decline in population numbers, the Northern Long-eared bat has been federally listed as "threatened" by the USFWS.

To minimize adverse impacts to the aquatic ecosystem as a result of the proposed activities, DCR recommends the implementation of and strict adherence to applicable state and local erosion and sediment

control/storm water management laws and regulations. Due to the legal status of the Atlantic pigtoe, Green floater, Brook floater, and the James spiny mussel, DCR recommends coordination with the USFWS and Virginia's regulatory authority for the management and protection of these species, the VDGIF, to ensure compliance with the Virginia Endangered Species Act (VA ST §§ 29.1-563 – 570). Finally, DCR recommends coordination with the USFWS regarding potential impacts upon federally threatened Northern Long-eared bats associated with tree removal. DCR supports measures to conserve water and to restrict withdrawal rates during low flow conditions.

Under a Memorandum of Agreement established between the Virginia Department of Agriculture and Consumer Services (VDACS) and DCR represents VDACS in comments regarding potential impacts on state-listed threatened and endangered plant and insect species. The current activity will not affect any documented state-listed plants or insects.

There are no State Natural Area Preserves under DCR's jurisdiction in the project vicinity.

New and updated information is continually added to Biotics. Please re-submit project information and map for an update on this natural heritage information if the scope of the project changes and/or six months has passed before it is utilized.

The VDGIF maintains a database of wildlife locations, including threatened and endangered species, trout streams, and anadromous fish waters that may contain information not documented in this letter. Their database may be accessed from <http://vafwis.org/fwis/> or contact Ernie Aschenbach at 804-367-2733 or Ernie.Aschenbach@dgif.virginia.gov.

The remaining DCR divisions have no comments regarding the scope of this project. Thank you for the opportunity to comment.

CC: Troy Anderson, USFWS
Ernie Aschenbach, VDGIF

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