

## FRESHWATER MOLLUSK CONSERVATION SOCIETY 1417 HOFF INDUSTRIAL DR. O'FALLON, MO 63366 HTTP://MOLLUSKCONSERVATION.ORG/

April 26, 2016

Dear Federal Energy Regulatory Commission and U.S. Fish and Wildlife Service:

The Freshwater Mollusk Conservation Society (FMCS) is dedicated to the conservation and advocacy of freshwater mollusks, North America's most imperiled animals. FMCS is an international professional scientific society made up of state, federal, academic, and private scientists and conservationists, many of whom work directly with the more than 200 endangered and threatened freshwater mollusks found worldwide. Our members are considered experts in the conservation and recovery of freshwater mollusks.

We write to you to express our deep concern over two projects that could have a devastating impact on several species of Federally Endangered freshwater mussels. The Mountain Valley Pipeline (MVP - FERC Docket No. PF15-3-000) and Atlantic Coast Pipeline (ACP - FERC Docket Nos. PF15-5-000 & PF15-6-000) would both cross numerous rivers and streams that provide some of the last remaining refuge areas for imperiled freshwater mollusks.<sup>1</sup> FMCS is concerned that the construction of these projects could potentially jeopardize the continued existence of these sensitive species, including the Dwarf Wedgemussel (*Alasmidonta heterodon*), James Spinymussel (*Pleurobema collina*), Clubshell (*Pleurobema clava*), and Tar River Spinymussel (*Elliptio steinstansana*).

Building the proposed MVP and ACP pipelines would require clearing a 300-500 mile x 125foot-wide swath of land, digging a 10-foot-deep trench, and leaving a permanent right-of-way. Construction activities at stream crossings have the potential to adversely impact habitats for freshwater mollusks from runoff and erosion, and contamination of waterbodies through spills of natural gas or other substances. Such impacts to endangered species have occurred during other pipeline construction projects, such as Indian Creek in Virginia and Little Red River in Arkansas.

<sup>&</sup>lt;sup>1</sup> This includes: Little Kanawha River, L. Fork Holly River, Elk River, Birch River, Gauley River, Hominy Creek, Meadow River, Greenbrier River, Indian Creek, Stony Creek, Craig Creek, N. Fork Roanoke River, Roanoke River, Blackwater River and Pig River for the MVP; West Fork River, Buckhannon River, Back Fork Elk River, Greenbrier River, Back Creek, Jackson River, Cowpasture River, Calfpasture River, Middle River, Christians Creek, South River, Fishing Creek, Swift Creek, Tar River, and Little River for the ACP.

Freshwater mussels are highly susceptible to excess sedimentation. Studies have shown that one of the most ubiquitous factors that may adversely affect mussel populations is excessive sedimentation. Excessive amounts of sediments, especially fine particles that wash into streams, affect mussels through multiple mechanisms. Fine sediments lodge between coarse grains of the substrate, forming a hardpan layer and inhibiting interstitial water flow, thereby reducing available habitat. Silt and clay particles can also clog the gills of mussels, impeding filter feeding. Mussels may be indirectly affected by turbidity-induced light reduction and the coincident loss of primary productivity, decreasing food availability for mollusks. In addition, many contaminants preferentially bind to silt particles, potentially increasing contaminant effects on mollusks.

The proposed MVP and ACP routes pose a high risk of harm to imperiled mussel species. We, therefore, urge you to fully assess the potential impacts that these projects may have on the federally protected species. This should include thorough surveys, not only of the waters that will be directly impacted by the proposed Project activities, but also an analysis of the downstream effects of the planned activities and possible spills along the pipeline routes. These impacts may be far-reaching and long-term. FMCS implores FERC and the FWS to prevent activities that would cause further harm to these fascinating and ecologically important species, which hover on the brink of extinction.

Sincerely,

W. Dregory Cope

W. Gregory Cope, Ph.D. Past President Freshwater Mollusk Conservation Society



