FAQs About the Healthy Watersheds Forest/TMDL Project

1. **What is the project?**

The project is a Virginia led, multi-year, landscape-scale effort that is now in phase III. Phase I focused on quantifying the value of retaining forestland for meeting water quality objectives to build the case for crediting forestland in the Chesapeake Bay TMDL model. In phase II, Pennsylvania partnered with Virginia to determine what from the perspective of local leaders were the economic and policy incentives needed to prioritize forestland retention as a land use planning option. Phase III began in April 2018. Its scope was broadened to create the policy and financial infrastructure needed to facilitate forest and agricultural land conservation/retention on a landscape scale, long-term, sustainable basis.

2. **Who have been the Virginia project partners?**

The project sponsors in phase I, II, and III have been the Department of Forestry and the Rappahannock River Basin Commission. Virginia project partners have been: the Virginia Department of Environmental Quality (phases I & II); the George Washington Regional Commission (phases I & II); the Water Resources Center at Virginia Tech (phase I); the Virginia Tech Land Use Education Program (phase II); The Chesapeake Bay Commission (phases I & II); The Nature Conservancy (phase I), The Berkley Group (phase III), Working Lands Investment Partners, LLC (phase III); and Conservation+ (phase III). Project grant funding has come from the Chesapeake Bay Program (phases I, II & III); the US Endowment for Forests and Communities (phases I, II & III) and the Virginia Environmental Endowment (phase II). The Rappahannock River Basin was selected as a proxy for the Chesapeake Bay watershed and has been the study area for all three phases. It is important to note that Virginia project team members intend that lessons learned and incentives developed be applicable across all of Virginia not just the Chesapeake Bay if it is advantageous for the Commonwealth to do so.

3. **What were the project's phase I and II results/outcomes?**

Although forest cover is recognized as one of the best land uses for achieving Chesapeake Bay water quality outcomes, localities and particularly MS4 jurisdictions, long maintained that unless TMDL credit was given for retaining forestland, there is little local incentive for doing so. This project addressed that issue. An objective was to determine the economic value implications of the reduction in nitrogen, phosphorus, and sediment loads of alternative land-use change scenarios and pass that value on to localities as a forestland credit in the TMDL model to create an incentive for local officials and private land owners to retain more high-conservation-value forestland. In phases I and II, the project quantified the contribution of forestland toward achieving Chesapeake Bay cleanup goals in economic terms; and worked extensively with localities and stakeholders throughout the RRBC study area to determine what could be done to incentivize forestland retention so that contribution was maximized. The project's findings contributed significantly to the decision in December 2017 of the Chesapeake Bay jurisdictions' Principal Staff Committee to credit forestland retention in the Bay TMDL model. The Phase II stakeholder engagement revealed that success depended on identifiable financial benefits for both landowners and localities with success equaling landowners retaining forests and localities effecting beneficial policies.

4. **What is the scope of work for Phase III?**

Phase III has two programmatic tasks. Task 1 is to work with two Rappahannock river basin localities to develop and implement plans, policies and ordinances to foster high quality (HQ) forest and HQ agricultural land retention drawing from the "tool box" of options identified in Phase II. Task 2 is to develop, model and pilot long-term funding mechanisms supported by the private sector that may be scaled up and implemented on a landscape scale.

5. **How is Phase III, task 1 being implemented?**

Two counties, Essex in the lower basin and Orange in the upper basin have agreed to participate in the project and have committed to work with project team members in a public process to review and revise their comprehensive plans and other policy documents with the goal of prioritizing forest retention and to encourage landowners to work with task 1 & 2 teams to develop the baseline of information needed to design and pilot the project's financial model.

6. **What is the objective for the Phase III, task 2 Financial Model and how is it being designed?**

The objective is to design and pilot a model that incentivizes landowner action, facilitates economic development for the community and attracts large-scale private investment. Studies reviewed by the HWF/III team showed there is considerable private investment capital looking to invest in forest conservation as an offset for environmental impact. Through their interviews with landowners, they also found there is significant interest among forest landowners to access this investment capital as another income stream. The barrier is the scale mismatch. Institutional investors need to make investments at a minimum project size of $50 million because it takes them the same due diligence to do a billion-dollar deal as it does a few million. The key therefore, is to create a mechanism that can aggregate individual landowner interests and bundle them at a scale large enough to attract private capital on a return on investment rather than a philanthropic basis. To address the scale and market convenience requirements needed, the team has begun focusing on using "carbon values" of existing forests (forest retention) as a proxy for water quality benefits. The advantage is the potential for bundling or aggregation of various acquisitions to be offered at scale and with the market convenience required to attract large-scale private capital investments. The second challenge has been to design an aggregating mechanism. A review of the Code of Virginia to assess what options might be available found that amending the Industrial/Economic Development Authority (IDA/EDA) Act structure could allow an EDA to be utilized as a means of aggregating landowners in one or more localities. This is the objective of HB 2485 that passed the Assembly and awaits action by the Governor. Using carbon as a water quality proxy also capitalizes on the potential to provide additional income streams and incentives for farm or forest landowners, including those who have not participated in, or who do not qualify for existing federal programs to offset the loss of agricultural land resulting from retaining or installing riparian forest buffers.