Demonstrating the Value of Retaining Forestland in the Chesapeake Bay Watershed

Helping Localities Reduce the Offset Requirements of Development











Project Objective

- Design and implement a phased, multi-year, landscape level, pilot demonstration project to:
 - determine if forest retention actions by localities, private land owners and others will result in a decrease in actual load over the 2025 projected TMDL load allocation land cover for test region
- If results prove beneficial, information learned could be used by EPA to modify the Chesapeake Bay TMDL model to credit localities for retaining existing forestland.
- This would address a principal concern localities have in meeting the 2014 CBWA goals and outcomes and the 2025 TMDL Requirements

First Project Module Objectives

- Funding provided by GIT 4 to:
 - Assess growth trends in pilot region to determine rates of conversion for agriculture and forests and the mix of pervious and impervious lands resulting from conversion
 - Conduct literature review to evaluate spatial variability of forest ecosystem service value
 - Demonstrate how alternative development methods that increase high value forest retention can help reduce offset requirements of development.
 - Share findings with localities and state officials to inform land use planning and decision making
 - Provide information to EPA for consideration in 2017
 TMDL model revisions

Alignment with 2014 CBWA Outcomes & Management Strategy Goals/Activities

- Land Conservation
 - > Protected Lands
 - > Land Use Methods and Metrics Development
- Protect and Restore Water Quality
- Nutrient and Sediments
- Activity Categories
 - Regulation, Program Management, Information Management, Technical Support, Management Tool Development, TMDL Development, Enforcement, Assessment

Project Partners

- Virginia Department of Forestry
- Virginia Department of Environmental Quality
- Chesapeake Bay Commission
- The Nature Conservancy
- The Rappahannock River Basin Commission
- The George Washington Regional Commission
- Virginia Tech
- Experts from the financial community

Project Site

Rappahannock River Basin



Reasons for Choice:

Basin mirrors most attributes of CB watershed

- Headwaters to coast
- Forest/Agriculture/Urban
- Area of high density development
- 100% in VA CBW so demonstration can be better controlled
- First module will focus on GWRC geographic area

Timeframe

- First module funded
 - Work will begin in 2015, end in 2016
 - Goal is to be able to provide date in timely fashion for consideration in 2017 TMDL model adjustments
- Second phase not yet funded
 - Would build on first module and concentrate on infield implementation of alternative land use options over two year period through collaboration with localities in basin
 - Lessons learned would be captured and a tool box developed to assist other CBW localities to implement

For further information

- Greg Evans, Virginia Department of Forestry gregory.evans@dof.virginia.gov
- James Davis-Martin, Virginia Department of Environmental Quality

James.Davis-Martin@deq.virginia.gov