

STAC Workshop

Exploring the Environmental Effects of Shale Gas Development in the Chesapeake Bay Watershed

April 11-12, 2012, State College PA

The Chesapeake Bay Scientific and Technical Advisory Committee is hosting a workshop on "**Exploring the Environmental Effects of Shale Gas Development in the Chesapeake Bay Watershed**" which will be held in State College PA on April 11-12 immediately following the Penn State School of Forest Resources/US Forest Service meeting "**Oil and Gas Development Impacts on Forested Ecosystems: Research and Management Challenges**" to be held on April 9-10. The objectives of the workshop are:

- To review and synthesize the research available regarding the environmental effects of shale gas development (drilling, hydraulic fracturing, gas distribution, and related activities)
- To identify the environmental effects that shale gas development may pose to the Chesapeake Bay Watershed relative to Chesapeake Bay water quality
- To identify and prioritize future research needs relative to shale gas development and Chesapeake Bay water quality

Fulfilling these objectives will result in a workshop report that will be used to inform the Chesapeake Bay Program of the potential cumulative effects of shale gas development on the Chesapeake Bay and how federal, state, and local governments' abilities to meet the TMDL requirements may be compromised. The workshop will have two subgroups who will address specifics of these objectives. One group will be water quality and quantity effects and the other group will be land-based effects which includes land use change, road and pipeline networks, and other indirect effects.

Water Quality and Quantity Effects Questions

How does shale gas development effect water quality and quantity? How effective are BMPs at reducing those effects? What is the potential effect on Chesapeake Bay TMDL reduction efforts? What are the high priority research needs for shale gas development effects on Chesapeake Bay water quality?

Land-based Effects Questions

How does the shale gas development infrastructure effect land cover/use and indirectly water quality and quantity via cumulative effects? How effective are BMPs at reducing those effects? What is the potential effect on Chesapeake Bay TMDL reduction efforts? What are the high

priority research needs for shale gas development effects on land cover/use for Chesapeake Bay water quality?