



United States Department of the Interior

U. S. GEOLOGICAL SURVEY
North Carolina Science Center
3916 Sunset Ridge Road
Raleigh, NC 27613

March 21, 2013

United States Environmental Protection Agency
Sam Nunn Atlanta Federal Center
61 Forsyth Street, SW
Atlanta, GA 30303-8960

To Whom it May Concern:

I am writing in support of the North Carolina Division of Water Quality (NC DWQ) grant application for the FY11 EPA Region 4 Wetland Program Development entitled "Hydraulic Fracturing Reference Network". Establishing baseline environmental conditions in advance of hydraulic fracturing activities in North Carolina is critical to determining the impact that such activities have on water-quality and ecological health. As is the case in other states with appreciable levels of hydraulic fracturing activities, such as Pennsylvania, Wyoming and Utah not having baseline data makes it virtually impossible to make any conclusive determination of impacts. The United States Geological Survey (USGS) and Duke University partnered to collect water-quality samples from 56 wells and 1 spring in the Triassic Basins of Lee and Chatham Counties to establish baseline conditions. The proposed DWQ study will leverage the work already done by USGS and Duke by expanding the baseline characterization in Lee and Chatham Counties to include surface waters and will include water-quality sampling for a similar suite of chemical constituents. In addition, the proposed project will implement methane gas tracer methods being developed and applied by the USGS to determine the source, amount, and seasonal variability of natural methane and other chemical constituents discharging to streams, which is critical information for evaluating future impacts associated with hydraulic fracturing activities.

In closing, allow me to reiterate my support for this grant and for furthering the baseline dataset of environmental conditions in the Triassic Basin of North Carolina in advance of hydraulic fracturing activities. If you have any questions or require further information, you may contact me at (919) 571-4048 or via e-mail at hsweyers@usgs.gov.

Sincerely,

Holly Weyers
Director, USGS North Carolina Water Science Center