UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JUN 28 2011

OFFICE OF CONGRESSIONAL AND
INTERGOVERNMENTAL RELATIONS

The Honorable Glenn Thompson
Chairman
Subcommittee on Conservation, Energy, and Forestry
Committee on Agriculture
U.S. House of Representatives
Washington, D.C. 20515

Dear Chairman Thompson:

At the Subcommittee on Conservation, Energy and Forestry hearing about the Chesapeake Bay in March, the USDA and the EPA stated their intention to continue efforts to refine and increase the level of data available for understanding the implementation of conservation practices by farmers in the Chesapeake Bay Region. To ensure that the work continues to progress, the EPA and the USDA scientists have developed a plan of work for the key activities that are expected to be accomplished. A copy of the plan of work for that effort is enclosed.

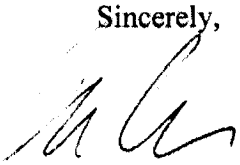
The additional data and refinements will serve a set of key purposes that will:

- Account for agricultural conservation practices implemented throughout the Chesapeake Bay watershed, including those practices funded solely by the farmer (not funded by federal or state cost share funding).
- Develop, as appropriate and feasible, a consistent estimate of pasture and hay land acres for use by the EPA and the USDA.
- Develop, as appropriate and feasible, a consistent approach for estimating fertilizer and manure applications for use by the EPA and the USDA.

In addition, there is ongoing work to 1) update and refine current conservation practice effectiveness estimates; and 2) credit new conservation practices as they are applied in the field. These efforts are intended to reflect our long term commitment to ensuring the best possible data is available. As a result of this work, we hope to increase our understanding of the impact of conservation practices and of the contribution farmers are making to restoration of the Bay.

We appreciate your interest in this important issue and will be glad to provide additional information that you may request.

Sincerely,



Arvin R. Ganesan
Associate Administrator

Enclosure

U.S. Department of Agriculture (USDA) and U.S. Environmental Protection Agency (EPA)
Chesapeake Bay Conservation Data Collaboration

In December 2010, the EPA released the final Total Maximum Daily Load (TMDL) for the Chesapeake Bay. TMDL nutrient and sediment load allocations for the Bay Watershed States were developed using water quality monitoring data and a suite of models, including the Chesapeake Bay Program Watershed Model.

In March 2011, the USDA released its Assessment of the Effects of Conservation Practices on Cultivated Cropland in the Chesapeake Bay Region, a document known familiarly as the Chesapeake Bay Conservation Effects Assessment Project, or CEAP report. The USDA's CEAP effort is based on a combination of farmer surveys and modeling used to estimate the impact of conservation practices on the landscape.

There is a lot of interest from Chesapeake Bay stakeholders and within the USDA and the EPA to ensure consistency between the two modeling efforts and that they are informed by the best data available describing implementation of conservation by farmers in the Chesapeake Bay region. Below are commitments by the two agencies to that end.

Improve tracking and reporting of conservation practices in the Chesapeake Bay Program (CBP) Watershed Model

As called for in the May 12, 2009 Executive Order 13508 - *Strategy for Protecting and Restoring the Chesapeake Bay Watershed,* The USDA and the EPA are working with state agricultural agencies, conservation districts, and other key agricultural groups to ensure that non-cost shared practices are tracked, verified, and reported for credit in the CBP Watershed Model.

Additionally, the USDA is surveying approximately 1,400 producers through the National Resources Inventory (NRI) in 2011 to estimate the level of conservation practice implementation and to refine the spatial scale of available data. Combined with the similar work conducted from 2003-2006 (presented in the 2011 CEAP report), the results of this survey will provide an estimate of additional on-the-ground implementation of conservation practices between the two survey time periods.

Commitments:

The USDA and the EPA will work with state agricultural agencies, conservation districts, and other key agricultural groups to develop a mechanism for tracking, verifying and reporting non-cost shared conservation practices on agricultural lands for use in the CBP Watershed Model.
Timeframe: Complete by July 2012.

Using CEAP results from 2003-2006 and the pending 2011-12 analysis, the USDA and the CBP Partnership will explore inclusion of the additional practices identified in these surveys into the CBP Watershed Model.
Timeframe: Begin in 2012.

Develop consistent estimates of pasture and hay land use in both models

The CBP Watershed Model and CEAP Model use different approaches for estimating pasture and hay land in the Chesapeake Bay watershed. The U.S. Geological Survey developed a methodology for estimating land use for the CBP modeling effort in which the pasture and hay land use is based on the USDA census of agriculture data rather than satellite imagery.

Commitment:
The Natural Resources Conservation Service (NRCS) and the CBP will work together to investigate the appropriateness of using a common approach for estimating pasture and hay land in both models.
Timeframe: Begin in 2011.

Coordinate fertilizer and manure nutrient input assumptions in both models
The NRCS and the CBP independently developed databases to estimate nutrient applications to cropland and arrived at similar figures for total application. However, differences likely exist in application timing and amounts applied by region, crop, and management system. A consistent approach for fertilizer and manure nutrient inputs that is informed by the significant work by the USDA and the CBP partnership would likely improve both models.

Commitment:
The NRCS and the CBP will work together to investigate the development of a single database to estimate nutrient applications to cropland that would drive both modeling efforts, building on the experiences of both. Alternatively, given the different temporal and spatial scales of the modeling, the NRCS and the CBP can work together to standardize assumptions across databases.
Timeframe: Begin 2012 and continue thereafter. Results may be used in CEAP on an ongoing basis and may be used for the CBP management decisions in 2017.

Develop comparable scales for reporting nutrient/sediment loads in CEAP & CBP Models
Commitment:
Currently the two models track and report loads on different geographic scales. Development of common reporting scales will allow a more effective comparison of model findings and increase watershed model data and technique sharing capabilities. As the technologies of the two models advance, opportunities to collaborate should be explored.
Timeframe: Begin 2012 and continue thereafter.

There are two further tasks that are already in progress to ensure that the CBP Watershed Model is informed by the latest scientific data:

Updating current conservation practice effectiveness estimates based on the latest science. The NRCS and the CBP will work with the Agriculture Workgroup to determine the most appropriate way to inform updates to conservation practice effectiveness estimates in the CBP Watershed Model, with a particular focus on characterizing spatial variability in practice effectiveness.
Timeframe: Ongoing

Crediting new conservation practices. The EPA will provide resources to help coordinate the effort to credit new conservation practices in the CBP Watershed Model, in accordance with the established protocols. The USDA will provide relevant data on effectiveness estimates of the new conservation practices to inform assessment by expert panels that evaluate practice effectiveness.
Timeframe: Ongoing