Eastern Regional Conference
THE COUNCIL OF STATE GOVERNMENTS

To: Representative Carolyn Partridge, Chair, Vermont House Committee on Agriculture and Forestry, and Members of the Committee

From: Rona Cohen, Program Manager, CSG East Energy and Environment Program

Topic: Overview of CSG East's Efforts Regarding a Multistate Agriculture and Forestry Sequestration Initiative

Date: January 31, 2020

Chair Partridge, Vice Chair Graham, and Members of the Committee:

My name is Rona Cohen, and I am the Program Manager of the Energy and Environment Program in the Eastern Office of the Council of State Governments (CSG), based in New York City. Thank you for the opportunity to provide you with this testimony regarding our recent efforts to coordinate a multistate agriculture and forestry sequestration initiative.

CSG is a national, nonpartisan, public nonprofit organization that facilitates the exchange of information and ideas among its members and conducts fact-based research and analysis to help shape effective public policy. CSG's Eastern Office, based in New York City, supports legislative, judicial, and executive-branch officials from its 13-member jurisdictions, which include the states from Maine to Maryland, Puerto Rico, and the U.S. Virgin Islands. The five Eastern Canadian provinces of Ontario, Québec, Nova Scotia, New Brunswick, and Prince Edward Island are international affiliate members of CSG's Eastern Region.

Our efforts to address natural climate solutions stemmed from a regional discussion that we hosted on October 26, 2019, during CSG's Northeast Climate and Energy Summit at Yale University in New Haven, Connecticut, which brought together more than 100 state officials from the region. Following a session moderated by Chair Partridge on regenerative agriculture, which included a discussion of the Vermont Environmental Stewardship Program and Maryland's healthy soils program, there was a proposal introduced to pursue a voluntary, multistate initiative to promote agricultural and forestry sequestration to help states like Vermont meet their aggressive carbon-reduction goals.

Such a program would provide revenue to public and private landowners and farmers for practices that sequester and store carbon in forests and soil, through the sale of a financial instrument called a carbon offset. An offset represents the equivalent of one metric ton of sequestered carbon dioxide (tCO_2e).

Following the summit, CSG organized a discussion in Hudson, New York that included legislators from five states, who heard from experts in farming practices that enhance carbon storage in

soils. These practices also provide co-benefits, including improving water quality, better regulating water flow, reducing erosion and increasing the diversity of soil microbes. There were also presentations from experts in forestry sequestration, and an overview of voluntary efforts to develop offsets markets internationally and in the United States.

In recent weeks, the group has reconvened via conference calls, and developed a consensus to explore the creation of a multistate offsets market for agricultural and forestry sequestration. The initiative would:

- Study existing carbon registries and accounting protocols;
- Engage NGOs and private offset carbon developers that already have experience in this space;
- Involve agriculture and environment agency officials;
- Explore both voluntary and mandatory carbon offsets markets;
- Assess the possibility for linkages with other carbon-reduction programs, including the Transportation and Climate Initiative (TCI);
- Consider a possible public/private MOU with an ambitious 20-30-year sequestration goal; and
- Seek participation among multinationals that are focused on sustainability and are looking to invest in the offsets marketplace.

This project is still in its beginning stages, and we are in the process of identifying the technical efforts that are already underway in state agencies to assess the sequestration potential through forestry and agricultural practices. This includes a variety of pathways that could promote sequestration, including wetlands, urban forestry, and enhanced use of wood products.

From our discussions with experts in soil carbon and forestry sequestration practices from the University of Maryland, the World Resources Institute, the Nature Conservancy, and American Forests, we have learned that research has shown that as the global community strives to keep Earth's average temperature from rising beyond 2 degrees Celsius – and attempts to limit the increase to 1.5 C -- which is what United Nations scientists have warned is essential to avoiding the worst impacts of climate change, forest carbon sequestration could provide 23 percent of the reductions in greenhouse gases that are needed; and if we add agricultural sequestration and "blue carbon," we can achieve close to 30 percent of those reductions.

According to the nonprofit American Forests, 80 percent of net land-based sequestration in the United States is occurring in Eastern forests. The U.S. Department of Agriculture projects that these forests will decline going forward, primarily due to development, but also owing to invasive species, among other factors. A multistate effort would focus on preserving and fortifying these forests. In addition to providing revenue for private landowners, a carbon

offsets program for state and municipal lands could help fund important land stewardship and conservation programs and enhance recreational opportunities.

In agriculture, healthy soils practices offer improved ecosystem services that can be worth up to $3,500 an acre, according to research performed by soil carbon experts at the University of Maryland. Measurement tools devised in Maryland – which can be applied to other states -- found that agricultural soil sequestered 6 million metric tonnes of carbon from 2006-18, equivalent to taking 1.3 million cars off the road. This is roughly equivalent to the carbon reduction that Maryland achieved through the Regional Greenhouse Gas Initiative (RGGI).

I should add that our work has been enhanced by the research performed by the excellent report released by the Vermont Forest Carbon Sequestration Working Group, and its overview of carbon offset markets and issues to consider for entering the state's forest lands into those markets; feasibility analyses for projects in the state and the rest of New England; and analyses of the potential for a statewide program and estimated revenue, among other topics.

Over the next several months, CSG East staff will continue to review the research on nature-based solutions being performed among state agencies, and within NGOs and academia, and connect our members with relevant experts. In addition, we have been asked to organize a regional conference later this year to bring together these experts with our members to explore a feasible path forward to developing an offsets market.

Thank you for providing me with this opportunity to discuss this effort with you. I would be happy to keep you informed about our efforts going forward and to answer any questions that you have.