## THE ADMINISTRATOR OF THE ENVIRONMENTAL PROTECTION AGENCY



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Dear Dr. Balling:

I want to thank you and all the members of the Farm, Ranch and Rural Communities Committee for your commitment to helping the U.S. Environmental Protection Agency address challenges to water and air quality.

As you know, you have been deliberating since January 2015 on the charge I gave you on soil health. Specifically, I asked you to explore the following: Recognizing the agency's regulatory mission to protect public health and the environment, how can the EPA best create a framework for facilitating partnerships that build upon existing resource protection efforts through collaboration and innovation? In what ways can this framework advance the agency's knowledge, efforts and use of resources to promote soil health, particularly as it relates to water and air, and to the adaption to a changing climate?

Indeed, these are important questions. It is clear that healthy soils play a critical role in helping to mitigate nonpoint-source pollution by reducing the migration of nitrogen and phosphorous, along with sediment, into our nation's waters. Accordingly, as part of its mission to protect public health and the environment, the EPA has an interest in promoting soil health. During my tenure as Administrator, the EPA has enjoyed a close working relationship with the U.S. Department of Agriculture, and I have worked closely with Secretary Tom Vilsack to promote the interests of agriculture, soil health and environmental quality. It was the goal of the charge to provide further direction for the EPA's soil-health promotion efforts and engagement with agriculture within its jurisdiction and authorities.

In response to this charge, you have submitted a final report with a series of thoughtful recommendations. I am grateful for the substantial time and effort you devoted to this report, and I am pleased to offer a response.

Strategy 1. Defer to, support and seek the help of others whose primary missions are directly tied to Agriculture and advancing Soil Health.

The committee noted that the EPA must acknowledge that the primary role for improving soil health resides with USDA and that the EPA should seek opportunities to collaborate with the agency. I agree that our ability to promote healthy soils that protect water quality and reduce nutrient runoff will depend in part on the degree to which the EPA and USDA can continue to establish partnerships and collaborative programs to attain these goals in watersheds across the nation. I am happy to report that we

have had vigorous engagement with USDA, the states and others in the agricultural community in the following ways:

- The National Water Quality Initiative launched about four years ago teams Farm Bill and CWA Section 319 (nonpoint source) funds that are used by the states to select priority watersheds for best management practice installation and monitoring. We saw quick results in improved coordination between state environmental agencies and Natural Resources Conservation Service) state conservationists, and we will soon have data on the success of installed conservation practices for agricultural runoff.
- Our collaboration with USDA helps us expand our network of other important agriculture partners, such as The Fertilizer Institute, The Conservation Technology Innovation Center, Field to Market, Certified Crop Advisors and Ag Retailers.
- We have a quarterly EPA/Office of Water-USDA senior leadership meeting, which serves as a forum to discuss collaboration and critical issues as they arise.
- USDA has been an active partner in the Gulf of Mexico Hypoxia Task Force that the EPA cochairs. USDA NRCS has provided data on conservation practices to the states and are doing some targeted projects aimed at the largest nutrient problem areas in the basin.
- USDA NIFA has helped us form Southern Extension and Research Activities committee no. 46 (SERA-46) out of the Hypoxia Task Force. This is a group of ~25 researchers and extension specialists from each Hypoxia Task Force state Land Grant University. A Joint HTF-LGU research and outreach agenda has been established to further the work of the HTF in reducing nutrients going to the Gulf, and both the EPA and USDA have provided modest funds to start off this work. USDA was also instrumental in helping us to get funding from the Walton Family Foundation to the LGU group to work on measuring the nonpoint source reductions achieved.
- The Office of Water Animal Agriculture program has established an Interagency Agreement with USDA NRCS to promote sustainable agricultural practices and manure management to protect and improve water quality. OW and NRCS regional offices, States, industry and academia will expand education among government personnel and industry stakeholders on animal agriculture and water-quality issues. In addition OW will provide support for the Conservation Innovation Grant program in the review of proposals, and may provide supplementary funding for supporting demonstration pilot(s).
- OW is partnering with USDA (NRCS, ARS & Rural Development), pork and dairy producers and environmental and scientific experts to host the Nutrient Recycling Challenge, a competition to develop affordable technologies that recycle nutrients from livestock manure. USDA is serving on the planning committee and assisted in judging technology concepts in Phase I. In Phase I, which ended in March 2016, the EPA received 75 concept papers from around the world and selected 34 submissions to continue on to Phase II of the challenge. Phase II of the challenge, currently underway, will be a noncompetitive incubation program in which the 34 selected teams will develop technology designs based on the concept papers they submitted in Phase I.

- The EPA convenes the Animal Agriculture Discussion Group, an informal, iterative group of animal agricultural stakeholders including representatives from all sectors of the animal feeding industry and their associations, USDA, academia and states. AADG seeks to keep lines of communication open, improve two-way understandings of viewpoints and develop projects focused on water-quality protection. Collaborative products include a one-page outreach piece on the beneficial uses of manure and environmental protection and soon-to-be-released videos on manure management.
- OW, Office of Wastewater Management has established a memorandum of understanding with USDA NRCS to promote sustainable agricultural practices and manure management to protect and improve water quality. OW and NRCS meet on monthly to share information and discuss opportunities for collaboration. In addition, OW will provide support for the Conservation Innovation Grant program in the review of proposals, and may provide supplementary funding for supporting demonstration pilot(s).
- The EPA participates with a technical exchange forum organized by the Southern Extension and Research Activity 17 (SERA-17) to provide input to federal agencies. SERA-17 is an information exchange group composed of land grant university researchers along with policy makers, extension personnel and educators. Its objective is to develop and promote innovative solutions to minimize phosphorus losses from agriculture. Members of the exchange forum are providing technical input on the EPA's draft research summary on water quality impacts from winter application of manure.

While this list demonstrates our commitment to finding ways to work closely with USDA and other agricultural stakeholders, I agree that we must continue to not only nurture the relations we have, but work to develop new ones as well.

Strategy 2. Develop a coordinated and consistent EPA approach to Soil Health outreach and engagement that helps to support awareness, increase knowledge, and facilitate education across the regions.

Outreach and engagement to support our soil health goals is critical, and we have undertaken a number of measures to work with the agricultural community to promote healthy soils and water quality. For example, the EPA is releasing a compendium of effective state approaches for manure management. The compendium, which was reviewed by NRCS, showcases examples of state program features for good manure management at animal-feeding operations. The examples are noteworthy because they are fully developed, show clear evidence of on-the ground implementation and focus on meaningful environmental outcomes.

The EPA is also providing support to state and tribal programs to focus efforts on specific manure management challenges. Projects to-date include:

- Nutrient management provisions in the Tribal Codes of the Confederated Tribe and Bands of the Yakama Nation in Washington.
- Assess environmental impacts of proposed manure management changes in Kewaunee County, Wisconsin.
- Develop a profile of animal agriculture in the Western Lake Erie Watershed.

The EPA is supporting the Association of Clean Water Authorities to convene the biannual CAFO Roundtable, which brings together state CAFO permitting programs. The 2016 Roundtable was held in Albuquerque, New Mexico, November 14-16, 2016.

The EPA's NPDES CAFO program provides support for state CAFO regulatory programs by reviewing permits, program authorization packages and state rules. The NPDES program also regularly provides trouble-shooting assistance to regional and state programs whenever implementation challenges or questions arise and also tracks implementation state-by-state.

Through a contract, AGREN is engaging land operators in Iowa's Raccoon River basin to build awareness and capacity to manage nutrient runoff through conservation farming techniques, matching trained land operators with absentee landowners, action-oriented direct marketing to local farmers and farming groups, expanding conservation farming workshops; and doubling farmer training from 110 in FY16.

We are supporting an outreach campaign by the National Association of Conservation Districts highlighting farmers that take voluntary actions to manage nutrient runoff; in FY17 we will expand list of farmer hero testimonials west of the Mississippi River and expand our existing website to include additional farmer heroes and their testimonials.

Again, these partnerships and engagements demonstrate a commitment on our part to work with our agricultural friends. Your recommendation will help guide our agency in developing more and better ways to coordinate our outreach and education activities in a consistent and effective way.

Strategy 3. Support and provide funding for research into tools and models for farmers to use to measure benefits from Soil Health practice implementation.

We have a grant to the CTIC to train CCAs on best practices to reduce nutrient runoff and maintain or enhance crop yield. We also have a grant to a land grant university that supports expanding the training of watershed planning tools to CCAs and many other agricultural industry and watershed practitioners.

The EPA is providing most support to CTIC as they manage a large industry project in Iowa with significant support from the state. With the EPA's support, CTIC will assess success at the local level of watershed conservation implementation as well as impact on water quality. This project is focused on expanding cover crop implementation in Iowa by having CTIC and agricultural retailers work with participating growers to input their field level data into the Field to Market Field print Calculator. This tool provides the farmer a feedback loop on field-level performance rating of sustainability indicators and this project has a focus on indicators linked to nutrient management, such as soil carbon and water quality.

The EPA and CTIC have a cooperative agreement where CTIC will host five technical training workshops to increase capacity of agricultural professional advisors to work with farmers and producers on the benefits, efficacy and implementation of targeted conservation systems that improve water quality. The target audience includes certified crop advisers, technical service providers, independent crop consultants, members of the Land Improvement Contractors of America, soil and water conservation districts, agricultural retailers and more. More than 500 anticipated attendees will not only increase their understanding of conservation practices and systems, but also enhance collaboration, communication and coordination to increase adoption of these practices.

Strategy 4. Exercise its influence in other venues where regulatory authority is clear to incentivize the adoption of Soil Health practices.

Strategy 5. EPA should review its regulations and programs and summarize key areas that impact soil health and include information on benefits and potential barriers to protecting soil health to incorporate into education opportunities and incorporate into Education and Outreach activities.

I appreciate the recommendations contained in Strategies 4 and 5 and agree that both could enhance the EPA's role in promoting soil health in positive and beneficial ways. As forward-looking proposals, they provide a road map for the kinds of measures and approaches the agency should be considering to advance the cause of soil health, and I believe that consideration of both strategies should be a priority for the agency in the coming months and years. I will encourage the next Administrator to carefully explore these two recommendations and, where feasible, incorporate them into agency soil health activities in the coming months and years.

The committee has also indicated that it would like to see stronger outreach to the agricultural community by the 10 regional offices. More specifically, it has recommended that the agricultural advisor positions be full-time and that they be adequately resourced to improve their ability to engage stakeholders in meaningful ways throughout the regions.

The EPA currently has an agricultural advisor in place in all 10 regions. In many cases, they devote most, if not all, of their time to agricultural responsibilities, including attending meetings and conferences, advising the regional administrator and the program leads in their region, and participating in weekly conference calls with the counselor to the administrator for agricultural policy to share information and provide timely updates on agricultural issues in their areas.

However, some regions have filled this position with short-term detailed employees, resulting in a disruption in continuity in the position as staff rotate in and out every few months. Regions 4 and 10 have now hired advisors who are full-time, joining Regions 3, 5, 7 and 8 with full-time advisors rather than short-term employees.

As for resources, I believe that the agency has made important strides in the regions in engaging agricultural stakeholders. However, I appreciate the recommendation that even more resources could appreciably improve stakeholder contact and outreach, not only by allowing the regional ag advisors additional opportunities to travel more frequently to meet with the agricultural community throughout the region, but to provide addition assistance, materials and information about the activities and actions of the agency that could or do impact agriculture. This is important work that must, of course, be considered within existing agency needs and budgetary constraints.

As part of the transition, I will urge the next Administrator to review the regional agricultural advisor structure, including the proposed full-time status of each advisor, and consider the recommendations of the committee to ensure that our regions can robustly engage and work with the agricultural community.

Overall, I am proud of the progress we have made with developing collaborations and partnerships with our agricultural stakeholders. I believe that many of our joint activities with USDA have helped in the effort to advance soil health and protect our waters. But the nature of the nonpoint source challenge and the risks posed by poor soils will require even more innovative and creative partnering, not only with

USDA, but with state partners and the entire agricultural community. It will require that the agency explore more ways to engage agriculture and support activities that promote soil health, including greater regional interaction and outreach, technical and financial assistance, and reducing program barriers that might hinder progressive and workable solutions to adopting healthy soil practices.

We have done well, but we can do even better. Going forward, it is important that the EPA and USDA continue to explore ways in which our agency policies, programs and federal investments routinely consider how we might best serve both agency missions. A growing and vibrant agriculture sector can and should be entirely consistent with a healthy and sustainable environment.

Thank you for your report and recommendations highlighting key issues and steps that the EPA can pursue to achieve its goals to reduce nutrient pollution and protect our waters. Again, I am grateful for your service on the Farm, Ranch and Rural Communities Committee.

Sincerely

Gina McCarthy

cc: Secretary of Agriculture

Members of the Farm, Ranch and Rural Communities Committee