



## U.S. Environmental Protection Agency (EPA) Farm, Ranch and Rural Communities Advisory Committee (FRRCC) Charge Topics

### BACKGROUND

EPA recognizes American farmers and ranchers are responsible for providing food and fiber to the world. The United States is the world's top food exporter, exporting over \$140 billion in agricultural products in 2018.<sup>1</sup> In 2017, farms accounted for 40 percent of all U.S. land.<sup>2</sup> With the shrinking availability of land for production agriculture, farmers and ranchers know that increased yields are necessary to feed a growing population. By 2050, the world's population will reach 9.1 billion, and food production must increase 70% to meet the population demand.<sup>3</sup>

Producers are simultaneously working to shrink their environmental footprint while meeting production goals. Advancements in agricultural innovations, including crop protection tools, biotechnology, precision enhancements in the use of fertilizer and water, and preventing/reducing/diverting waste, are providing tools for producers to do more with less.

### CHARGES

#### A. Creating a Holistic Pesticide Program for the Future

Crop protection tools and innovations in biotechnology often play a role in helping agricultural producers reduce their environmental footprint. However, while innovation is providing great tools to farmers, ranchers, and rural communities, challenges and barriers exist to adoption of these tools and innovations, which can include regulatory challenges (whether at the state, local, federal, or international level), or consumer fears of new innovations based on limited information about the science-based process that led to their entry in the market.

While [EPA's pesticide program](#) has done a good job in approving pesticides on an individual basis, the public does not understand our holistic approach to pesticide management. The media and the courts tend to view our individual pesticide decisions in a one-off fashion which has left the American public uninformed on our science-based

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<sup>1</sup> U.S. Department of Agriculture, Economic Research Service. (2020). *Selected Charts from Ag and Food Statistics: Charting the Essentials, February 2020* (Administrative Publication No. 083). Retrieved from: <https://www.ers.usda.gov/data-products/ag-and-food-statistics-charting-the-essentials/agricultural-trade/>

<sup>2</sup> U.S. Department of Agriculture. National Agricultural Statistics Service. (2017). Census of Agriculture Highlights: Farms and Farmland. Retrieved from: [https://www.nass.usda.gov/Publications/Highlights/2019/2017Census\\_Farms\\_Farmland.pdf](https://www.nass.usda.gov/Publications/Highlights/2019/2017Census_Farms_Farmland.pdf)

<sup>3</sup> Food and Agriculture Organization of the United Nations (2009). How to Feed the World in 2050. Retrieved from: [http://www.fao.org/fileadmin/templates/wsfs/docs/expert\\_paper/How\\_to\\_Feed\\_the\\_World\\_in\\_2050.pdf](http://www.fao.org/fileadmin/templates/wsfs/docs/expert_paper/How_to_Feed_the_World_in_2050.pdf)

process. The pesticides program of the future incorporates [integrated pest management](#), examination of new active ingredients, [plant incorporated protectants](#) and [biotechnology](#) as well as a decreased reliance on animal testing and increased efforts to safeguard pollinators and improve [Endangered Species Act consultations](#).

Recognizing the agency's regulatory mission to protect human health and the environment, how can EPA reduce barriers for American agriculture to continue to feed the world with less resources through innovations in crop protection? Looking beyond individual pesticide registrations, how can we better communicate with the American public, and our international trading partners, about the Agency's holistic approach to pesticide management and improve the availability of information about our science-based process?

How does encouraging and facilitating technologies and practices like new active ingredients, plant incorporated protectants, biotechnology, and integrated pest management advance this mission? When evaluating this charge also keep in mind the agency's decreased reliance on animal testing and increased efforts to safeguard pollinators and improve Endangered Species Act consultations. How can we promote a more holistic approach to crop and environmental protection which accounts for both costs and benefits of innovations, and supports public trust of agricultural innovations that enter the market?

#### B. Supporting Environmental Benchmarks with Interagency Partners

EPA has been working with its federal partners to support inter-agency environmental benchmarks. For example, USDA recently announced its [Agriculture Innovations Agenda](#) in 2020, which outlined a goal of agriculture increasing production by 40 percent while reducing its environmental footprint by 50 percent. The agenda includes advancing work toward the [U.S.' goal of reducing food loss and waste](#) in the U.S. by 50 percent by 2030 and reducing nutrient losses by 30 percent nationally by 2030 to benefit water quality.<sup>4</sup> These are two areas where EPA has also been doing significant work to support rural America and the food supply chain area.

Water quality and quantity: Over the last few years the Agency has worked with our federal partners to launch a [Water Reuse Action Plan](#)<sup>5</sup> and begun prioritizing market-based approaches to improve water quality (including nutrient trading)<sup>6</sup>, while modernizing the legal frameworks in which the regulated community interacts with federal and state regulators. EPA has also successfully launched a water infrastructure

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<sup>4</sup> U.S. Department of Agriculture. (2020). USDA Agriculture Innovation Agenda: *Agriculture Innovation as a Solution for Farmers, Consumers and the Environment*. Retrieved from: <https://www.usda.gov/sites/default/files/documents/agriculture-innovation-agenda-vision-statement.pdf>

<sup>5</sup> United States Environmental Protection Agency. (2020). *National Water Reuse Action Plan: Collaborative Implementation (Version 1)*. Retrieved from: <https://www.epa.gov/waterreuse/water-reuse-action-plan>

<sup>6</sup> United States Environmental Protection Agency (2020). *What EPA is Doing to Reduce Nutrient Pollution*. Retrieved from: <https://www.epa.gov/nutrient-policy-data/what-epa-doing-reduce-nutrient-pollution>

funding vehicle and resource center ([Water Infrastructure Finance and Innovation Act Program](#)<sup>7</sup>, and [Water Infrastructure and Resiliency Finance Center](#)<sup>8</sup>), and recognizes the need to address water workforce recruitment and training needs. We must combine these initiatives with an integrated planning approach that can meet the demands of the water sector and the American public to ensure a resilient and sustainable 21st century water economy.

Food loss and waste: EPA estimates that more food (over 81 billion pounds in 2017<sup>9</sup>) reaches landfills and combustion facilities than any other material in everyday trash, constituting 22% of discarded municipal solid waste.<sup>10</sup> In addition to natural resources, food loss and waste impacts food security and the economy.<sup>11,12</sup> In alignment with Target 12.3 of the United Nations Sustainable Development Goals, in 2015 the EPA and the U.S. Department of Agriculture (USDA) announced the first ever domestic goal to reduce food loss and waste by half by the year 2030.<sup>13</sup> Achieving this goal will require engagement by all segments of the food supply chain, including producers, processors, retailers, restaurants, and consumers—as well as governments at federal, state, local, tribal, and territorial levels. EPA, USDA, and FDA announced an [interagency strategy](#) in 2020 to support this goal.<sup>14</sup>

As EPA supports these inter-agency environmental benchmarks, in what ways can EPA facilitate the development of new technologies, practices, or market-based approaches to advance environmental goals around nutrient pollution, water reuse, and food loss and waste?

Specifically, how can EPA coordinate with other agencies to facilitate the following:

- How can EPA better measure data and information regarding proactive measure that production agriculture and rural communities take in nutrient management, water reuse, and food loss and waste (including mitigation)?

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<sup>7</sup> United States Environmental Protection Agency (2020). *Water Infrastructure Finance and Innovation Act (WIFIA)*. Retrieved from: <https://www.epa.gov/wifia>

<sup>8</sup> United States Environmental Protection Agency (2020). *Water Infrastructure and Resiliency Finance Center*. Retrieved from: <https://www.epa.gov/waterfinancecenter>

<sup>9</sup> Further with Food: Center for Food Loss and Waste Solutions. (2020). *How much is there?* Retrieved from: <https://furtherwithfood.org/how-much-is-there/>

<sup>10</sup> United States Environmental Protection Agency. (2019). *Sustainable Management of Food Basics*. Retrieved from the Environmental Protection Agency website: <https://www.epa.gov/sustainable-management-food/sustainable-management-food-basics>

<sup>11</sup> United States Environmental Protection Agency. (2019). *Methane Emissions from Landfills*. Retrieved from the Environmental Protection Agency website: <https://www.epa.gov/lmop/basic-information-about-landfill-gas>

<sup>12</sup> Buzby, J., Wells, H., & Hyman, J. (2014). *The Estimated Amount, Value, and Calories of Postharvest Food Losses at the Retail and Consumer Levels in the United States*. Retrieved from the United States Department of Agriculture's Economic Research Service website: <https://www.ers.usda.gov/publications/pub-details/?pubid=43836>

<sup>13</sup> ReFED. (2019). *The Multi-Billion Dollar Food Waste Problem*. Retrieved from ReFED's website: <https://www.refed.com/?sort=water-conservation%0D>

<sup>14</sup> U.S. Environmental Protection Agency. (2019). *Winning on Reducing Food Waste Federal Interagency Strategy*. Retrieved from: <https://www.epa.gov/sustainable-management-food/winning-reducing-food-waste-federal-interagency-strategy>

- How can we better utilize or coordinate data from state, local, or federal level partners)?
- How can EPA leverage existing programs such as the following, to help meet the unique needs of production agriculture and rural communities in mitigating environmental impacts from food waste?
  - [Excess Food Opportunities Map](#)
  - [The Food Recovery Challenge](#)
  - [EPA & USDA Food Waste 2030 Champions initiatives](#)
  - [WasteWise](#)
  - Support for treatment options (e.g., anaerobic digesters, composting, etc.)
  - Technical assistance
  - Pesticide registration/plant protection tools
- How can EPA support agriculture's and rural America's efforts to reuse water and ensure the sustainability, security, and resilience of our nation's water resources?
- How can EPA support efforts to combat nutrient pollution in U.S. water bodies by:
  - promoting collaborative approaches
  - overseeing regulatory programs
  - conducting outreach
  - developing partnerships
  - providing technical and programmatic support to states
  - financing nutrient reduction activities
  - conducting research and development