

**AGRICULTURE, RURAL DEVELOPMENT, FOOD  
AND DRUG ADMINISTRATION, AND RE-  
LATED AGENCIES APPROPRIATIONS FOR  
FISCAL YEAR 2022**

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U.S. SENATE,  
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,  
*Washington, DC.*

NONDEPARTMENTAL WITNESSES

[The following testimonies were received by the Subcommittee on Agriculture, Rural Development, Food and Drug Administration, and Related Agencies for inclusion in the record. The submitted materials relate to the fiscal year 2022 budget request for programs within the subcommittee's jurisdiction.]

PREPARED STATEMENT OF AGRICULTURAL RESEARCH (SoAR) FOUNDATION

The Supporters of Agricultural Research (SoAR) Foundation appreciates the opportunity to submit testimony to support a significant increase in the FY 2022 appropriation for research at the U.S. Department of Agriculture (USDA), including the National Institute of Food and Agriculture's (NIFA) Agriculture and Food Research Initiative (AFRI). A non-profit organization, SoAR was established in 2014 to increase the quality and quantity of agricultural research, and, in particular, competitive merit-based research programs devoted to funding the best science. Recently, SoAR announced that moving forward, it will work to expand the overall investment in agricultural research around the world, a key solution to the changing climate and the growing hunger crisis.

With climate change already at our front door and the ongoing battle against COVID-19, we believe now is the time to significantly increase public investments in agricultural research and development (R&D) programs at USDA. President Biden agrees and proposed in his Fiscal Year 2022 Budget Request an increase of \$647 million from the fiscal year 2021 enacted level for USDA's research, education, and outreach programs. The total request for these programs is \$4 billion to "advance innovation and the application of science-based and data driven tools to put American technologies into the hands of farmers."<sup>1</sup> SoAR strongly supports these proposed increases, including for USDA's Agricultural Research Service.

Food and agriculture have significant direct and indirect economic impact. A 2021 study shows that the food and agriculture sectors account for roughly one-fifth of the country's economic activity, directly supporting nearly 20 million jobs. That is more than 13% of U.S. employment. Total jobs indirectly supported by food and agriculture reach almost 41 million jobs. The total output of these sectors is \$7 trillion.<sup>2</sup>

Through research and innovation providing solutions to short- and long-term challenges, our food and agriculture sectors are a driving force of the U.S. economy. A recent study found that U.S. public agriculture R&D spending from 1910 to 2007

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<sup>1</sup> <https://www.whitehouse.gov/wp-content/uploads/2021/04/FY2022-Discretionary-Request.pdf>, Enclosure 2, Page 2.

<sup>2</sup> <https://feedingtheeconomy.com/>

returned, on average, \$17 in benefits for every \$1 invested.<sup>3</sup> Increased funding of USDA’s research and development (R&D) programs will invest in our rural communities and give our farmers, ranchers, foresters, and producers the tools needed to manage current and future challenges, including the climate crisis. These critical investments will also provide a significant return by improving consumer nutrition, health, and resilience.

The federal share of overall R&D spending as a percentage of GDP is now at its lowest point since the 1950s, and food and agriculture lags even further behind most other Federal R&D areas. Agricultural research funding at USDA has remained fairly flat over the last 50 years.<sup>4</sup> In contrast, funding for other Federal research agencies has increased 10- to 20-fold during the same period. Additionally, Brazil, China, India, and other countries are investing heavily in agricultural R&D, while the U.S. has fallen behind.<sup>5</sup>

An analysis by the American Association for the Advancement of Science (AAAS) of the impact of the Budget Control Act on R&D funding concluded that the “cumulative “lost” federal funding may amount to \$96 billion for basic and applied research, and \$240 billion for total R&D. In other words, if R&D agencies had simply grown at their historical pace, the (annual) R&D budget would today be about \$33 billion or 20% larger.”<sup>6</sup> The overall rate of R&D growth from 1978–2008 was 5.7%, before the Budget Control Act was signed into law.<sup>7</sup> The Office of Management and Budget’s historical data shows that R&D programs at USDA only had an overall funding growth rate of 3.5% over the same time period.<sup>8</sup>

With a significant infusion of funding for USDA’s Research, Education, and Economics agencies, a roadmap exists on how those investments can be best utilized. At the request of Members of Congress, and with the support of numerous Federal agencies and stakeholders, the National Academies of Sciences, Engineering, and Medicine (NASEM) conducted a study to determine the greatest opportunities in food and agriculture research. Released in July 2018, *Science Breakthroughs to Advance Food and Agricultural Research by 2030* (Science Breakthroughs 2030) identifies five priority research areas to strengthen U.S. agriculture within the next decade: 1.) Genomics, 2.) Microbiomes, 3.) Sensors, 4.) Data and informatics, and 5.) Transdisciplinary research.

In January 2019, research stakeholders expanded upon this report, by producing a document identifying for the public and policymakers the types of ambitious research goals that can only be achieved through implementing the priority areas. By 2030, significant investment in the five breakthroughs areas could: 1.) Reduce water use in agriculture by 20%, 2.) Reduce fertilizer use by 15%, 3.) Significantly reduce the need for fungicides and pesticides in plant production, 4.) Radically reduce the incidence of infectious disease epidemics for livestock, 5.) Reduce the incidence of foodborne illnesses by 50%, and 6.) Increase the availability of new plant varieties and animal products with enhanced nutrient content.

SoAR strongly supports the President’s FY 2022 Budget Request of \$700 million for the Agriculture and Food Research Initiative at NIFA. These investments in USDA’s flagship food and agricultural research competitive grants program are needed to fund crucial areas aimed at addressing our nation’s most pressing agriculture and public health challenges, including COVID–19, climate change, adaptation, resiliency, farmer equity, nutrition, rural prosperity, and food safety. AFRI helps our farmers, ranchers, producers, and foresters to mitigate the impacts of these agriculture and public health challenges, and gives them an opportunity to be part of the solution.

By Congressional design, this program is flexible, allowing NIFA to quickly respond to unforeseen challenges, like COVID–19. For example, through AFRI’s nimbleness, NIFA was able to award almost \$13 million across 17 grant projects to support research across all areas of agricultural research and education addressing the pandemic. Additionally, NIFA invested more than \$10.5 million through eight regional or national AFRI projects supporting technical schools, community and jun-

<sup>3</sup>Baldos, Uris Lantz, Frederi G. Viens, Thomas W. Hertel, and Keith O. Fuglie. R&D Spending, Knowledge Capital, and Agricultural Productivity Growth: A Bayesian Approach. *American Journal of Agricultural Economics*. July 2018. 101(1): 291–310; <https://doi.org/10.1093/ajae/aay039>.

<sup>4</sup><https://www.nsf.gov/statistics>

<sup>5</sup>Jahn, Molly. New solutions for a changing climate: The policy imperative for public investment in agriculture R&D. August 2020. [https://www.thechicagocouncil.org/sites/default/files/2020-12/report\\_new-solutions-for-changing-climate\\_0.pdf](https://www.thechicagocouncil.org/sites/default/files/2020-12/report_new-solutions-for-changing-climate_0.pdf). Pages 1, 13.

<sup>6</sup><https://www.aaas.org/news/budget-control-act-may-have-cost-over-200-billion-federal-rd>

<sup>7</sup><https://www.aaas.org/news/budget-control-act-may-have-cost-over-200-billion-federal-rd>

<sup>8</sup><https://www.whitehouse.gov/omb/historical-tables/>

ior colleges, and youth development programs as they deploy innovative technologies continuing developing students' STEM skills during the COVID-19 pandemic.

Depending on the fiscal year, as high as approximately 75 percent of AFRI proposals that are deemed worthy by expert review panels go unfunded (<https://nifa.usda.gov/afri-annual-review-archives>), because not enough funds are available. These are peer reviewed proposals where scientists have determined that NIFA should make an investment.

SoAR's Retaking the Field publications and recently launched Podcast series illustrate the many contributions of AFRI and other USDA research programs to benefit our producers and consumers, as well as strengthen rural communities and the U.S. economy. These efforts educate stakeholders about the importance of agricultural research and raises the visibility of the value of Federal investment in food and agricultural research.

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#### PREPARED STATEMENT OF AMERICAN COMMODITY DISTRIBUTION ASSOCIATION

On behalf of the American Commodity Distribution Association (ACDA), I respectfully submit this statement regarding the fiscal year 2021 budget request of the Food and Nutrition Service for inclusion in the Subcommittee's official record. ACDA members appreciate the Subcommittee's support for these vital programs.

ACDA appreciates the action the Subcommittee has taken during the current fiscal year through both the regular fiscal year 2021 appropriation and multiple supplemental measures. This year has been a challenge for both recipient agencies and food providers, and we compliment and thank all of them for the efforts they have made. We also offer our thanks to our partners at the Agricultural Marketing Service and the Food and Nutrition Service who have responded in ways we could not even have imagined. We want to call attention to specific concerns we have regarding commodity support for both schools and food banks. ACDA believes that there will be great demands for USDA Foods during fiscal year 22 with the end of Trade Mitigation and the uncertainty of what more will be needed in response to continuing challenges resulting from COVID-19. School food programs will face challenges as they attempt to return to normal operations. Flexibilities will be needed in both programs, and we urge strong funding in the fiscal year 22 bill with additional supplementals as may be warranted. We continue to ask that you fully fund administrative expense funding for TEFAP at \$100 million; to provide sufficient funding for the Commodity Supplemental Food Program (CSFP) to maintain the current caseload and to allow for requested expansion; and to increase funding for the school food equipment grant program.

ACDA is a non-profit professional trade association, dedicated since 1974 to the growth and improvement of USDA's Commodity Food Distribution Program. ACDA members include state agencies that distribute USDA-purchased commodity foods; agricultural organizations; industry; associate members; recipient agencies, such as schools and soup kitchens; and allied organizations, such as anti-hunger groups. ACDA members distributed nearly 3 billion pounds of domestically produced commodities this past year to programs including the National School Lunch and Breakfast Programs, the Emergency Food Assistance Program, the Summer Food Service Program, the Commodity Supplemental Food Program, and the Child and Adult Care Food Program.

#### USDA FOODS NEEDED BEYOND TRADE MITIGATION AND CORONAVIRUS RESPONSE

Food banks across the nation do appreciate the additional food items provided with Trade Mitigation purchases and those provided as a result of supplemental appropriations. The additional resources provided by the now discontinued Farmers to Families Food Box program were meaningful to many families, and offered additional food items not routinely provided in TEFAP. We suggest again that as we go forward, we need to consider how we might be able to maintain this volume and variety of food assistance. Food banks have committed additional resources of their own, getting additional warehouse space and other necessary equipment. We urge the Subcommittee to explore other authorities that will help maintain this worthwhile flow, and to seek guidance from the Department should additional authorities be needed.

ACDA appreciates the fact that Congress gave the Secretary the ability to use FY 19 data in establishing the entitlement calculation for FY 20, and extended this authority for FY 21 as well. While we all are supportive of schools fully reopening for the next school year, we suggest that school meal participation needs to be closely monitored and that further flexibilities may well be needed for FY 22. It will take time to build back to prior participation levels.

Flexibilities will also be needed for food vendors whose inventories were disrupted by the understandable changes that have been made in school meals in order to ensure that children are fed. Supplying food items for congregate sites is different than providing individual items for meals in the classroom or grab and go. Both food vendors and recipient agencies should be engaged to secure their views. We have previously highlighted section 4205 of the Agricultural Act of 2014 which established a multiagency task force to evaluate and monitor the commodity programs to ensure that they meet the mission of the Department. While the statute requires annual reports to Congress regarding the findings and recommendations of the Task Force and the policies implemented for the improvement of commodity procurement programs, there has not been such a report within the past 2 years. We urge the Subcommittee to direct the prompt provision of such a report, and to include both food vendors and recipient agencies to secure their views.

#### NUTRITION STANDARDS GOING FORWARD

School food authorities will face challenges resuming program operations, as will suppliers. While all work to provide the highest quality foods possible, ACDA agrees that more stringent standards, particularly for sodium, need to be reassessed and slated for later implementation than SY 22 to give all parties involved time to develop and market test revised formulations to ensure that they are acceptable.

#### FULLY FUND TEFAP ADMINISTRATIVE FUNDS AT \$100 MILLION

ACDA sincerely appreciates the \$79,630,000 provided for TEFAP Administrative Funds provided in the final fiscal year 2021 Consolidated Appropriations Act, and the additional funds provided in subsequent supplementals to support commodity distribution expenses. We continue to urge the Subcommittee to fully fund TEFAP Administrative Funds at \$100 million.

As we have told the Subcommittee in the past, food banks, Community Action Agencies, and other TEFAP operators continue to find that they have had little choice but to convert food dollars to administrative expense funds to maintain their operations. Using food dollars for operating expenses is too often necessary and reduces the ability of these operators to provide food assistance to more individuals and families who continue to face difficult times. We cannot at this time predict the food needs we will have in the next fiscal year and must be prudent about preserving our food purchasing capability. The current situation is even more challenging because of the additional demands placed on food banks. We urge the Subcommittee to not force this choice between food and expense funds upon operators that are experiencing reduced private donations in addition to increased demands.

#### FUNDING FOR THE COMMODITY SUPPLEMENTAL FOOD PROGRAM

ACDA joins the National Commodity Supplemental Food Program Association in recommending \$375,000,000 for the Commodity Supplemental Food Program (CSFP). This is the amount provided when supplemental funding is added to the fiscal year 21 regular appropriation. We believe this higher amount will continue to be needed to maintain current services that have encountered increased food package costs, and provide for requested expansion in the program.

#### SCHOOL FOOD EQUIPMENT GRANTS

ACDA supports increasing School Food Equipment Grants to at least \$35 million, and to increase the number of schools eligible for such grants. The resumption of school meals and the desire to provide a wider variety of foods is linked to having the appropriate equipment to do so. All school food authorities are working diligently to provide healthier and desirable meals to millions of students each and every day. This grant program has made a positive difference for those fortunate enough to receive these grants.

ACDA continues to support emphasizing the importance of fruits and vegetables in all forms—fresh, canned, dried, and frozen—as noted in the 2020–2025 Dietary Guidelines for Americans. However, we remain concerned about mandating not just what children are offered in school meals but what they must take, whether they intend to eat it or not. Increasing flexibility to program sponsors in planning menus that meet high nutrition standards but still are within cost targets is of critical importance and will help reduce waste resulting from this mandate.

#### BUY AMERICAN

ACDA appreciates the efforts of America's farmers and ranchers to provide wholesome product for various feeding programs, in addition to the important role they

make in supporting American consumers. Producers continue to see product coming into the United States that disrupt domestic sales and result in the need for Bonus Buys, in addition to the Trade Mitigation Program. ACDA supports strong guidance on Buy American requirements and efforts to assist buyers, distributors, and school food authorities improve compliance with these requirements.

ACDA thanks the Subcommittee for its support over the years and looks forward to continuing to work with you as the fiscal year 2022 Appropriation moves ahead.

[This statement was submitted by Sandra Hopple, President, American Commodity Distribution Association.]

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PREPARED STATEMENT OF AMERICAN SOCIETY OF AGRONOMY

The American Society of Agronomy (ASA), Crop Science Society of America (CSSA), and Soil Science Society of America (SSSA) represent more than 8,000 scientists and students, 13,500 Certified Crop Advisers (CCA), and more than 700 Certified Professional Soil Scientists (CPSS). We are the largest coalition of scientists and professionals dedicated to the agronomic, crop, and soil science disciplines in the United States. We are supportive of the President's budget request of \$4 billion for Research, Education, and Economics (REE) at the Department of Agriculture (USDA) in FY 2022, specifically:

\$1.721 billion in top-line funding for the Agricultural Research Service (ARS). ARS is the government's premier agriculture research institution. ARS scientists conduct high-priority research at facilities across the country, and its world-renowned facilities are used to pioneer agricultural advancements. ARS is uniquely suited to conduct research that requires long-term investments with high-impact payoffs while maintaining the capacity and readiness to respond to emerging and pressing challenges.

This level of funding provides a 5% increase, or \$76.35 million, to ARS's national programs and flat funding, \$102.6 million, for the National Bio and Agro-Defense Facility (NBAF) so that it need not tap into funding from ARS's other programs. The remaining \$15 million represents the amount necessary to meet USDA's serious need for a high-speed network, high-performance computing, big data storage, and modern informatics expertise. Without this additional funding, USDA may choose to draw from all other ARS programs with a one percent assessment. This one percent cut to all intra- and extramural programs will not be necessary if the essential \$15 million funding for Big Data is appropriated.

National Institute of Food and Agriculture (NIFA). We strongly support NIFA's suite of extramural programs that enable colleges and universities to drive innovations, expand outreach, and develop the next generation workforce. Within NIFA, our priorities include:

\$600 million for the Agriculture and Food Research Initiative (AFRI). AFRI is USDA's premier competitive grants program, seeking to solve critical challenges in food and agricultural systems. AFRI funded research supports cutting-edge advances in emerging areas such as genomics, microbiomes, sensors, and informatics to help ensure profitable and sustainable farms and a healthy nation. Currently, AFRI supports fewer than a third of the projects review panels recommended for funding.

\$5 million for Research Equipment Grants. The 2018 Farm Bill included a competitive grants program for research equipment at colleges and universities. It is authorized at \$5 million per year and limits individual grants to a maximum of \$500,000. This addresses a critical need identified by our member scientists. Agricultural researchers with innovative and exciting ideas may require large or specialized equipment for their research. However, there is no clear path to obtain equipment funding through existing programs—forcing many scientists to abandon valuable research projects.

\$50 million for the Agriculture Advanced Research and Development Authority (AgARDA) Pilot program. The world has witnessed a dramatic increase in existential threats to agriculture—disease outbreaks, changing climates, and labor challenges to name a few. Current funding models at USDA tackle these issues, and many others, by funding low-risk proposals with small grants. But these grants, by design, are capable of only incremental progress. It is now clear that slow, incremental gains are not enough—high impact, transformational ideas, which are risky in nature, have become necessary. The 2018 Farm Bill authorized AgARDA to address challenges that threaten the stability and economic viability of agriculture. Modeled after the successful Defense Advanced Research Projects Agency (DARPA), AgARDA can accelerate innovative, high-risk, high-reward research and development in areas where industry is unlikely to invest.

\$280 million for Hatch Act formula funding. Hatch funding supports agricultural experiment stations at our nation's land-grant colleges and universities. This funding addresses high-priority research needs to help farmers through droughts and floods, combat pests and pathogens, and conserve soil and water.

\$340 million for Smith-Lever 3(b) and (c) funding. Smith-Lever funding supports the cooperative extension program, a vital link between land-grant university scientists and agricultural producers, communities, consumers, families, and others who directly benefit from the latest innovations.

America's incredible agricultural productivity and economic prosperity are the result of investments in science and technology. Maintaining the pace of scientific discoveries and innovations is needed to sustainably meet the growing demand for food, fuel, and fiber around the world.

[This statement was submitted by Karl Anderson, Director of Government Relations, Crop Science Society of America, Soil Science Society of America.]

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#### PREPARED STATEMENT OF AMERICAN SOCIETY FOR MICROBIOLOGY (ASM)

The American Society for Microbiology (ASM) is one of the largest life science societies, composed of 30,000 scientists and health professionals. Our mission is to promote and advance the microbial sciences. ASM respectfully requests that Congress provide \$4 billion for research, education, and outreach at the U.S. Department of Agriculture in Fiscal Year (FY) 2022, and no less than \$200 million above the FY 2021 budget authority level for the Food and Drug Administration (FDA). Specifically, we recommend \$600 million for the Agriculture and Food Research Initiative (AFRI) and \$50 million for the Advanced Agriculture Research and Development Authority (AgARDA), an increase of at least \$85 million for antimicrobial resistance priorities at USDA, and an increase of \$20 million for the Combating Antibiotic Resistant Bacteria program at FDA.

#### A STRONG INVESTMENT IN MICROBIAL RESEARCH PAYS DIVIDENDS

We thank Congress for its bipartisan support of AFRI and for its commitment to basic, translational, and clinical microbiology research funded by this program and others through the USDA National Institute of Food and Agriculture (NIFA). In order to attain the goals of the recently released Agriculture Innovation Agenda (AIA) and Climate-Smart Agriculture and Forestry Strategy, the USDA must continue to support a broad portfolio of fundamental and applied research in the microbial sciences, integrated programs, extension, and educational programs that include training the next generation of scientists.

ASM appreciates USDA's commitment to environmentally sound and economically viable agricultural practices, and we support the goal of increasing U.S. agricultural production by 40 percent while cutting the environmental footprint of U.S. agriculture in half by 2050 as described in the AIA. In order to support the innovative technologies and practices that will help America reach this goal, USDA must increase investments in the microbial sciences. As noted in the National Academies report *Science Breakthroughs to Advance Food and Agricultural Research by 2030*, further understanding of animal, soil, and plant microbiomes will provide opportunities to improve crop production, transform feed efficiency, and increase resilience to stress and disease.

Thanks to past investments in microbiology research through AFRI, scientists are:

- Developing a voluntary framework for antimicrobial stewardship in animals. This addresses a critical need, as widespread use of antibiotics in animals and humans has led to increased resistance and could render these medicines ineffective.

- Learning more about how soil and root microbiome can be altered to improve plant productivity and soil health. This knowledge will help ensure crop viability over the longer term.

Studying ways that prebiotics and probiotics can improve human gut health. An unhealthy balance of gut bacteria can lead to inflammation and other intestinal disorders.

- Learning more about the role that the bovine gut microbiome plays in how cattle process feed. By deepening our understanding of this complex ecosystem, scientists hope that better strategies for sustainable beef production can be developed.

## MEETING THE CHALLENGES AHEAD

The challenges facing our nation's producers and consumers are growing. World food demand is expected to double in the next 25 years, increasing the stress on the U.S. food and agricultural enterprise. In addition, we continue to face the threats of climate change, antimicrobial resistance, and the COVID-19 pandemic.

To combat AMR, COVID, and looming future threats, we recommend an increase of at least \$20 million for the Combating Antibiotic Resistant Bacteria program at FDA. FDA requires support to advance antibiotic stewardship in animals and to protect antibiotic effectiveness for human and animal populations. With additional resources, FDA can accelerate its 2018 five-year antibiotic stewardship action plan, including continuing to strengthen the National Antimicrobial Resistance Monitoring System (NARMS) and other initiatives by the Center for Veterinary Medicine to transition the remaining over-the-counter antibiotic products to veterinary supervision, promptly update product labels to fully reflect judicious use principles, identify new ways to encourage the development of antibiotic alternatives, assist academic institutions and other partners in the development of veterinary educational materials, rapidly develop strategies to collect and analyze antibiotic use data on farms and in other agricultural settings, and support surveillance capacity-building through FDA's Veterinary Laboratory Investigation and Response Network (Vet-LIRN).

We also recommend an increase of at least \$85 million for antimicrobial resistance priorities at USDA, including support for the Animal and Plant Health Inspection Service (APHIS), the National Agricultural Statistics Service (NASS) and the National Animal Health Laboratory Network (NAHLN). Funding allows the agency to continue to promote agricultural stewardship, including gathering and evaluating valuable information on antibiotic use practices and identifying and characterizing injudicious use on farms and other agricultural settings through the National Animal Health Monitoring System (NAHMS) and other initiatives.

Expanded funding for agricultural research will enable USDA investigators and scientists working at public universities, veterinary colleges and other research settings to better understand the factors driving the emergence of resistant pathogens. Funding will also help producers find new vaccines and antibiotic alternatives and develop improved animal management and husbandry practices that can be shared directly with farmers and livestock growers through USDA's Cooperative Extension Service. If we are to seize the current, unparalleled scientific opportunities that exist in microbial research, Congress must also support the deployment and use of technology and practices to enhance microbial research data collection and utilization to make our food and agricultural systems more efficient, resilient, and sustainable.

Our nation's ability to meet the 21st century challenges of human nutrition and food security, conservation of our nation's resources, and antimicrobial resistance will only be possible if Congress continues its commitment to robust and sustained funding increases for microbial, food, and agricultural research through AFRI, AgARDA, and other USDA-funded research, education, and extension programs. ASM recognizes the challenges facing our nation and the difficult decisions that must be made to ensure our nation's fiscal health, and we believe that funding cutting edge agricultural research will help our nation's farmers and ranchers succeed in the 21st century. Targeted acceleration of innovative research through funding AgARDA, combined with meaningful increases for USDA-funded research and FDA budget authority in FY 2022 are essential for supporting microbial research to benefit animal, human, and environmental health.

[This statement was submitted by Allen Segal, Director of Public Policy and Advocacy, American Society for Microbiology.]

## PREPARED STATEMENT OF AMERICAN SOCIETY FOR NUTRITION (ASN)

The American Society for Nutrition (ASN) respectfully requests that the U.S. Department of Agriculture (USDA)/National Institute of Food and Agriculture/Agriculture and Food Research Initiative receive \$600 million and the USDA/Agricultural Research Service receive \$1.72 billion in fiscal year (FY) 2022. ASN has more than 8,000 members working throughout academia, clinical practice, government, and industry, who conduct research to advance our knowledge and application of nutrition.

## AGRICULTURE AND FOOD RESEARCH INITIATIVE

The USDA has been the lead nutrition agency and the most important federal agency to influence U.S. policies on dietary intake and food patterns for years. Agri-

cultural research is essential to address the ever-increasing demand for a healthy, affordable, nutritious and sustainable food supply. The Agriculture and Food Research Initiative (AFRI) competitive grants program is charged with funding research, education, and extension and integrated, competitive grants that address key problems of national, regional, and multi-state importance in sustaining all components of agriculture. These components include human nutrition, farm efficiency and profitability, ranching, renewable energy, forestry (both urban and agro forestry), aquaculture, food safety, biotechnology, and conventional breeding. AFRI has funded cutting-edge, agricultural research on key issues of timely importance on a competitive, peer-reviewed basis since its establishment in the 2008 Farm Bill. Adequate funding for agricultural research is critical to provide a safe and nutritious food supply for the world's population, to preserve the competitive position of U.S. agriculture in the global marketplace, and to provide jobs and revenue crucial to support the U.S. economy.

The USDA/NIFA/Agriculture and Food Research Initiative (AFRI) funds cutting-edge, agricultural research grants on key issues of timely importance on a competitive, peer-reviewed basis that address problems of national, regional, and multi-state importance in sustaining all components of agriculture, including nutrition. Adequate funding for AFRI is critical to provide a safe and nutritious food supply for the world's population, to preserve the competitive position of U.S. agriculture in the global marketplace, and to provide jobs and revenue crucial to support the U.S. economy. In order to achieve those benefits, AFRI must be able to advance fundamental sciences in support of agriculture and coordinate opportunities to build off of these discoveries. Therefore, ASN requests that AFRI be funded at \$600 million in FY 2022.

#### AGRICULTURAL RESEARCH SERVICE

The Agricultural Research Service (ARS) ensures high-quality, safe food and other agricultural products; assesses the nutritional needs of Americans; sustains a competitive agricultural economy; enhances the natural resource base and the environment; and provides economic opportunities for rural citizens, communities, and society as a whole. ARS supports intramural and extramural research across four national program areas including nutrition, food safety and quality. Therefore, ASN requests that ARS receive \$1.72 billion in FY 2022. ARS's program of human nutrition research includes six Human Nutrition Research Centers (HNRCs) across the nation, that link producer and consumer interests and form the core for building knowledge about food and nutrition. HNRCs conduct unparalleled human nutrition research on the role of food and dietary components in human health from conception to advanced old age, and they provide authoritative, peer-reviewed, science-based evidence that forms the basis of our federal nutrition policy and programs. HNRCs play an important role not only in generating knowledge, but also in translating it for stakeholders. Funding for ARS supports all of the USDA/HNRCs and ensures that these research facilities have adequate funding to continue their unique mission of improving the health of Americans through cutting-edge food, nutrition and agricultural research.

Nutrition monitoring conducted by the USDA/ARS in partnership with the Department of Health and Human Services (HHS) is a unique and critically important surveillance function in which dietary intake, nutritional status, and health status are evaluated in a rigorous and standardized manner. (ARS is responsible for food and nutrient databases and the "What We Eat in America" dietary survey, while HHS tracks nutritional status and health parameters.) Nutrition monitoring findings are essential for multiple government agencies, as well as the public and private sector to track what Americans are eating, inform nutrition and dietary guidance policy, evaluate the effectiveness and efficiency of nutrition assistance programs, and study nutrition-related disease outcomes. Because of past funding deficiencies, some food composition database entries do not reflect the realities of the current food supply, which may negatively impact programs and policies based on this information. It is imperative that ARS continue to receive increased support to update food and nutrient databases and to continue critical surveillance of the nation's nutritional status and the many benefits it provides.

Thank you for the opportunity to submit testimony regarding FY 2022 appropriations for the U.S. Department of Agriculture/National Institute of Food and Agriculture/AFRI competitive grants program and Agricultural Research Service. Please contact John E. Courtney, Ph.D., Executive Officer, at [jcourtney@nutrition.org](mailto:jcourtney@nutrition.org) or 240-428-3643, 9211 Corporate Boulevard, Suite 300, Rockville, MD 20850 if ASN may provide further assistance.

[This statement was submitted by Lindsay H. Allen, Ph.D., President, American Society for Nutrition.]

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PREPARED STATEMENT OF AMERICAN SOCIETY OF PLANT BIOLOGISTS (ASPB)

On behalf of the American Society of Plant Biologists (ASPB), we submit this statement for the official record in support of funding for agricultural research by the U.S. Department of Agriculture (USDA). ASPB supports a funding level of \$600 million for the Agriculture and Food Research Initiative (AFRI) in fiscal year (FY) 2022, which administers competitive funding for innovative research on issues such as food security, global health, and renewable energy. ASPB also supports a funding level of \$1.566 billion for the Agricultural Research Service (ARS).

ASPB, founded in 1924 as the American Society of Plant Physiologists, was established to promote the growth and development of plant biology, to encourage and publish research in plant biology, and to promote the interests and professional advancement of plant scientists in general. ASPB members educate, mentor, advise, and nurture future generations of plant biologists; they work to increase understanding of plant biology, as well as science in general, in K–16 schools and among the general public; they advocate in support of plant biology research; they work to convey the relevance and importance of plant biology; and they provide expertise in policy decisions world-wide. Overall, ASPB members, as representatives of the society, work to disseminate information and excitement about plant sciences, especially through ASPB's advocacy, outreach activities, conferences, and publications.

ASPB is encouraged by the special attention given to innovative soil management, plant biology research, and carbon sequestration agricultural techniques that were recently profiled in the Administration's American Innovation Effort to Create Jobs and Tackle the Climate Crisis. We indeed hope that the Committee will's support strategic planning efforts at the Department of Agriculture as officials work to advance innovation in agricultural research development. However, we are highly cognizant of the fact that in the current environment any significant increase in investment in innovative research will have to come at the expense of other programs. Therefore, as the Department adopts a posture focused on innovation it is more important than ever that Congress increase the allocation for the Agriculture, Rural Development, Food and Drug Administration and Related Agencies appropriations bill in FY 2022.

This testimony highlights the critical importance of plant biology research and development to addressing vital issues, including achieving a sustainable food supply and food security and, by extension, global security and peace; fostering energy security; reducing reliance on all petrochemical products through the use of sustainable renewable biomass approaches; and protecting our environment—all in a time of rapid climate change.

FOOD, FUEL, ENVIRONMENT, AND HEALTH: PLANT BIOLOGY RESEARCH AND AMERICA'S COMPETITIVENESS AND SELF-SUFFICIENCY

We often take plants for granted, but they are vital to our national competitiveness, security, and self-sufficiency—indeed to our very existence. New plant biology research is now addressing the most compelling issues facing our society. We are making groundbreaking advances in bioengineering and food security; renewables and energy independence; environmental stewardship; and secure development of further improved foods, feeds, fibers, and extending to building materials.

Advances in federal priority areas, including artificial intelligence, biotechnology and the bioeconomy, are rooted in foundational plant biology research, which involves scientists making key, necessary discoveries fundamental to translational and applied efforts that support the economy. Such foundationally centered strategic research is mainly funded by the USDA. As such, limited funding commitments to such basic research now threaten our future national security and leadership. Stagnant agricultural research funding budgets undermine the contributions the agriculture industry makes to the American economy: 22.2 million jobs and approximately 5.2 percent of the U.S. Gross Domestic Product (GDP).<sup>1</sup>

IMMEDIATE RECOMMENDATIONS

The ASPB membership has extensive expertise and participation in the academic, private, and government sectors. Consequently, ASPB is in an excellent position to

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<sup>1</sup> <https://www.ers.usda.gov/data-products/ag-and-food-statistics-charting-the-essentials/ag-and-food-sectors-and-the-economy/>

articulate the nation's plant science priorities and standards needed as they relate to agriculture. Our recommendations are as follows:

- Since the establishment of the National Institute of Food and Agriculture (NIFA) and AFRI, interest in USDA research has increased dramatically—a trend ASPB hopes to witness continuing in the future. However, an increased, strategic, and focused investment in competitive funding and its oversight is essential if the nation is to continue to make ground-breaking discoveries and accelerate progress toward resolving urgent national priorities and societal needs. ASPB is prepared to be of any assistance and encourages the Committee to fund AFRI at \$600 million in FY 2022.
- ARS provides vital strategic research to serve USDA's mission and objectives, as well as the broader agricultural sector. The need to bolster and enhance ARS efforts to leverage and complement NIFA is great given the challenges in food and energy security. ASPB recommends a congressional appropriation of \$1.566 billion to ARS in FY 2022.
- The Administration has indicated it will prioritize rural development and economic growth, which are driven by the technological advances and innovations supported by USDA's Research, Education, and Economics mission area. Research areas critical to advancing these objectives include water for food production, food safety, resilience, and sustainable energy production. Although ASPB appreciates the value of such strategic focus, we give our most robust support for AFRI's Foundational and Applied Sciences Program. This program provides a basis for outcomes across a wide spectrum, often leading to groundbreaking developments that cannot be anticipated in advance. Indeed, it is these discoveries that are the true engine of success for our agricultural enterprise.
- There is an increasing need for additional training of scientists in the areas of interdisciplinary energy research and plant breeding. ASPB applauds the ongoing support of the AFRI Education and Workforce program and calls for additional funding for specific programs (i.e., training grants and additional pre and postdoctoral fellowships) to provide this needed workforce over the next 10 years and to adequately prepare these individuals for careers in the agricultural research of the future. Special emphasis should be given to attracting women and individuals from marginalized groups to the agricultural sciences.
- Considerable research interest is now focused on the use of plant biomass for energy production. However, if we are to use crops and forest resources to their full potential, we must expend extensive effort to improve our understanding of their underlying biology and development, their agronomic performance, and their subsequent processing to meet our goals. Therefore, ASPB calls for additional funding targeted at efforts to increase the utility and agronomic performance of bioenergy crops using the best and most imaginative science and technologies possible.
- ASPB encourages some flexibility within NIFA's budget to enable the agency to update and improve its data management capabilities.
- ASPB supports robust funding appropriations for new Farm Bill programs, including the Agricultural Genome to Phenome Initiative and AGARDA, which have the power to transform agricultural research.

Thank you for your consideration of ASPB's testimony. For more information about ASPB, please visit us at [www.aspb.org](http://www.aspb.org).

[This statement was submitted by, Crispin Taylor, PhD, Chief Executive Officer, American Society of Plant Biologists.]

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PREPARED STATEMENT OF AMERICAN SOCIETY FOR THE PREVENTION OF CRUELTY TO ANIMALS (ASPCA)

On behalf of The American Society for the Prevention of Cruelty to Animals (ASPCA), the first humane organization in North America, and our over 2 million supporters nationwide, thank you for the opportunity to submit written testimony to the Subcommittee. We ask that you please consider the following provisions that will benefit animal welfare as you draft the FY2022 Agriculture Appropriations bill.

REQUIRE APHIS TO PROPERLY ENFORCE THE ANIMAL WELFARE ACT

Over the past several years, enforcement of the Animal Welfare Act (AWA) by USDA's Animal and Plant Health Inspection Service (APHIS) has steadily declined across all categories of enforcement actions. In 2020, APHIS only opened 30 new en-

forcement cases—a decline of nearly 90% from 2014, when the agency opened 252 new cases. Lower-level actions like formal warnings were also issued sparingly; in 2016, the agency issued almost 200 warnings, but in 2020, it issued zero. Unfortunately, the decline in enforcement cannot be explained by a lack of violations in AWA-regulated facilities; APHIS has failed to bring enforcement actions even in instances when inspectors reported multiple egregious violations of animal welfare observed during inspection. The agency has replaced enforcement with ineffective collaborative policies that allow dealers to violate the AWA with impunity. The ASPCA requests that the Subcommittee defund the ineffective programs and policies that have, for the past four years, allowed the agency to avoid proper enforcement of the AWA and allowed animal abusers to continue their unlawful activities. The ASPCA requests that the Subcommittee include the following bill language: “Sec. X: None of the funds made available by this Act may be used to carry out any activities or incur any expense related to:

- (a) Any program, policy, or guidance that allows or requires observed violations of, or failure to comply with, the Animal Welfare Act (7 U.S.C. §§ 2131–60) or Regulations (9 C.F.R. §§ 3.1–3.7) to not be documented on official inspection reports.
- (b) Any program, policy, or guidance that replaces enforcement under the Animal Welfare Act (7 U.S.C. § 2149) with collaborative approaches to violations and/or noncompliance.
- (c) Any program, policy, or guidance that combines inspections under the Animal Welfare Act (7 U.S.C. § 2146) with enforcement under the Animal Welfare Act (7 U.S.C. § 2149).
- (d) Any program, policy, or guidance that does not require comprehensive photographs and/or video to be taken of the facility and the condition of the animals therein during each pre-license and compliance inspection.
- (e) Any program, policy, or guidance that does not require further action on every inspection report that documents observed violations of the Animal Welfare Act (7 U.S.C. §§ 2131–60) or Regulations (9 C.F.R. §§ 3.1–3.7) to determine if the facility violated the law and/or is continuing to violate the law.

#### ALLOCATE FUNDING FOR HORSE SORING ENFORCEMENT

APHIS is also charged with protecting horses through its enforcement of the Horse Protection Act (HPA). We appreciate that Congress provided \$2 million in FY2021 for USDA to strengthen enforcement of the HPA. The ASPCA requests that the Subcommittee continue to exceed the statutory funding cap and fund HPA enforcement at \$3,000,000, allowing the USDA to better enforce the Horse Protection Act.

#### PROVIDE FUNDING FOR USDA TO IMPLEMENT THE PET AND WOMEN SAFETY ACT GRANT PROGRAM

We appreciate that Congress provided \$2.5 million in FY2021 to implement Section 12502 of the 2018 Farm Bill (P.L. 115–334), which incorporated the language of the Pet and Women Safety (PAWS) Act to authorize a grant program to provide emergency and transitional shelter options for domestic violence survivors with companion animals. Research shows that abusers often threaten or inflict violence on pets to intimidate or exert control over their partners and prevent them from leaving. This program will ensure that more domestic violence service providers are able to accommodate pets or arrange for pet shelter.

The ASPCA urges the Subcommittee to include \$3,000,000 in the FY2022 Agriculture Appropriations Bill to continue implementing the PAWS grant program as authorized in Section 12502 of P.L. 115–334.

The ASPCA also requests the Subcommittee to include the following Report Language: “The Committee directs the Secretary of Agriculture to continue coordinating with the Departments of Justice, Housing and Urban Development, and Health and Human Services to efficiently implement the grant program for providing emergency and transitional shelter options for domestic violence survivors with companion animals.”

#### CONTINUE THE CURRENT BAN ON FEDERAL FUNDING FOR HORSE SLAUGHTERHOUSE INSPECTIONS

The Consolidated Appropriations Act, 2021 continues the longstanding provision barring federal funding for Food Safety and Inspection Service (FSIS) inspections at domestic horse slaughterhouses. Americans do not consume horse meat, we do

not raise horses for food, and national polling indicates that 80 percent of American voters oppose the slaughter of horses for human consumption. Cruelties associated with all stages of horse slaughter are well-documented. Horses are at risk of suffering for prolonged periods during transport to slaughter. Those who survive the journey endure an inherently cruel slaughter process. The equipment used to slaughter horses is not designed for their physiology. Before this funding restriction was in place, horses slaughtered in FSIS regulated plants endured repeated blows, sometimes remaining conscious during dismemberment. FSIS documented rampant violations and cruelty in connection with domestic horse slaughter facilities, including photos of protruding broken bones, eyeballs hanging by a thread of skin, and open wounds.

In addition to these intrinsic welfare concerns, consumption of meat from American horses is a public safety gamble. Since American horses are not raised for food, throughout their lives they are routinely given fly and deworming treatments, therapeutic medicines, and drugs prohibited by the FDA for use in animals intended for human consumption. A 2010 Food and Chemical Toxicology Journal article detailed the ubiquitous use of phenylbutazone in race horses subsequently sent to auction and then to slaughter only days after medication.<sup>1</sup> Phenylbutazone is one of the most commonly administered anti-inflammatory drugs to horses in the United States regardless of discipline, and its use is prohibited, at any point, for animals raised for human consumption. Taxpayer dollars should not be used to prop up an industry that has no regard for animal welfare or human health. President Biden's FY22 Budget Proposal includes this longstanding provision blocking federal funding for horse slaughterhouse inspections. The ASPCA requests that the Subcommittee continue the prohibition on federal funding for domestic horse slaughter by including the following bill language: "None of the funds made available by this or any other Act may be used to pay the salaries or expenses of personnel— (1) to inspect horses under section 3 of the Federal Meat Inspection Act (21 U.S.C. 603); (2) to inspect horses under section 903 of the Federal Agriculture Improvement and Reform Act of 1996 (7 U.S.C. 1901 note; Public Law 104–127); or (3) to implement or enforce section 352.19 of title 9, Code of Federal Regulations (or a successor regulation)."

REQUIRE FSIS TO STRENGTHEN ENFORCEMENT OF THE HUMANE METHODS OF  
SLAUGHTER ACT

The Humane Methods of Slaughter Act (HMSA) is effectively the only federal law protecting farm animals from cruelty. It is vitally important for animal welfare and food safety that FSIS enforce this law and ensure that slaughterhouses follow related humane slaughter and handling regulations. We urge the Subcommittee to include the following bill language to ensure HMSA enforcement is strengthened: "No fewer than 165 full-time equivalent positions shall be employed during fiscal year 2022 for purposes dedicated solely to inspections and enforcement related to the Humane Methods of Slaughter Act. The FSIS shall ensure that inspectors focus their attention on overseeing compliance with humane handling rules for animals as they arrive and are offloaded and handled in ante-mortem holding pens, suspect pens, chutes, stunning areas, and on the processing line. The FSIS shall also ensure that all inspectors receive robust training in humane handling and inspection techniques, including for nonambulatory disabled animals, and it shall resume preparation and posting of humane handling quarterly enforcement reports on its website."

We remain deeply concerned about FSIS's efforts to deregulate and privatize slaughter across multiple categories of species (chickens and turkeys, pigs, and now cows) and the negative impacts of increasing slaughter line speeds on animal welfare. When regulatory limits on slaughter line speed are raised or removed, it affects every stage of slaughter, including ante-mortem handling of animals, as companies rush to slaughter and process greater number of animals per hour. Privatized, higher-speed slaughter systems endanger animal welfare, food safety, worker safety, and the environment. We urge the committee to continue to examine this important issue, review the results of the pending FSIS report on the impact of line-speed waivers on employees' health and safety, and respond accordingly, including by withholding funding for FSIS to implement higher-speed and/or privatized slaughter systems or grant waivers to establishments seeking to increase slaughter line speeds or reduce inspection staffing standards as necessary to protect animal welfare, food safety, worker safety, and the environment.

<sup>1</sup>Dodman, N., Blondeau, N., Marini, A.M., "Association of Phenylbutazone Usage with Horses Bought for Slaughter: A Public Health Risk." Food and Chemical Toxicology: May 2010.

## ALLOCATE FUNDING FOR THE VALUE-ADDED PRODUCER GRANT PROGRAM

The USDA's Value-Added Producer Grant (VAPG) program is meant to help farmers participate in value-added farming activities to generate new products, create and expand marketing opportunities and increase farmer income. Included in the definition of value-added products are those produced using more humane farming methods, such as welfare-certified or pasture-raised products. The VAPG program is one of the only federal grant programs available to farmers raising animals outside of the conventional confinement model and is a critical resource for building a more humane food system. The USDA's recent investment of Coronavirus Relief and Response funding into competitive farmers market and local food promotion grants is an encouraging illustration of the agency's commitment to supporting more resilient farming systems and we hope it will encourage further investment in the transition to higher welfare farming systems. The VAPG program can achieve improved animal welfare throughout our farming system and help farmers meet the growing demand for more humanely produced food. The enacted Consolidated Appropriations Act, 2021 included \$12 million in discretionary funding for this program; the ASPCA requests the Subcommittee to meet or exceed this funding level in the FY2022 bill.

## REQUIRE USDA TO REINSTATE THE ORGANIC LIVESTOCK AND POULTRY PRACTICES FINAL RULE

Currently, the National Organic Program's (NOP) vague regulations allow companies raising animals in crowded, intensive systems harmful to public health, animal welfare, and the environment to qualify as organic and use the coveted USDA Organic label on their products. In 2017, USDA finalized the Organic Livestock and Poultry Practices (OLPP) rule that would have ensured that animal husbandry practices on farms raising animals in the NOP better aligned with consumer expectations. This rule was finalized after nearly a decade of USDA engagement with a broad array of stakeholders. Unfortunately, in 2018, the Trump administration officially withdrew the OLPP rule, leaving millions of animals without meaningful protections against industrial conditions like crowding, barren environments, lack of meaningful outdoor access, and painful mutilations.

To ensure that the administration takes immediate action to restore the requirements of the OLPP rule, the ASPCA requests that the Subcommittee include the following bill language: Sec. X. The Secretary of Agriculture shall—

- (1) within 90 days of enactment of this Act, publish notice of USDA's intent to rescind the final rule withdrawing the Organic Livestock and Poultry Practices final rule (83 FR 10775);
- (2) within 90 days of enactment of this Act, publish notice of USDA's intent to reinstate the Organic Livestock and Poultry Practices final rule (82 FR 7042);
- (3) take public comments on the notice(s) for not more than 60 days; and
- (4) not later than 180 days after the end of the comment period(s), publish in the Federal Register the final rule(s) rescinding the withdrawal of, and reinstating, the Organic Livestock and Poultry Practices final rule.

[This statement was submitted by, Richard Patch, Vice President, Federal Affairs, ASPCA]

## PREPARED STATEMENT OF ASSOCIATION FOR CLINICAL ONCOLOGY (ASCO)

The Association for Clinical Oncology (ASCO), the world's leading professional organization representing nearly 45,000 physicians and other professionals who treat people with cancer, thanks the subcommittee for its long-standing commitment to robust federal funding for programs within the FDA, including the Office of Hematology and Oncology Products (OHOP), also known as the Office of Oncologic Diseases (OOD), and the Oncology Center of Excellence (OCE). ASCO applauds your leadership in securing a \$42.25 million increase for the FDA in fiscal year (FY) 2021 and appreciates the opportunity to weigh in on FY2022 appropriations for the FDA. ASCO respectfully requests the subcommittee appropriate the following:

- Food and Drug Administration (FDA): \$3.6 billion (not including the \$50 million authorized by the 21st Century Cures Act)
- Oncology Center of Excellence (OCE): \$20 million

## HARNESSING INNOVATION: THERAPIES &amp; THERAPEUTICS

The FDA touches the lives of every American, especially those with cancer. As the agency charged with regulation of drugs, vaccines, and medical devices, the importance of FDA's ability to carry out its mission cannot be overstated. In oncology, the FDA has a significant role and impact: in 2020, a total of 40 new indications and 19 new molecular entities (NMEs) were approved for oncology use.<sup>1</sup>

Over the last 30 years the cancer death rate has fallen 31%. This includes a 2.4% decline from 2017 to 2018—a record for the largest one-year drop in the cancer death rate—progress that would not have been possible without new, innovative treatments.<sup>2</sup> The number of new approvals in oncology is just one example of the FDA's profound impact on Americans and its ability to respond to the scientific progress and innovation underway across the country.

In 2020, the role of immuno-oncology grew, with development and approval of 16 new immune checkpoint inhibitors for novel indications across several cancer types. These treatments harness the immune system to provide new, more efficient treatment paradigms for patients with cancer. Additionally, researchers built off of the success of 2019 and the discovery of CAR-T therapies to treat cancer. Chimeric antigen receptors, or CAR-T, is a targeted treatment based on specific characteristics of a tumor, rather than the part of the body where it originated. In 2020, the use of CAR-T therapy was expanded by the FDA with the approval of the first cell-based gene therapy for the treatment of relapsed or refractory mantle cell lymphoma.

Other groundbreaking discoveries includes the approval of combination therapy for advanced non-small cell lung cancer, which offers a chemotherapy-free alternative and first-line treatment for patients, by using checkpoint inhibitors to help the immune system identify and target cancer cells. Another 2020 approval by the FDA provides the first new treatment for hepatocellular carcinoma in more than ten years by combining an immunotherapy and a growth factor inhibitor that helps limit the blood supply to tumors. Hepatocellular carcinoma (HCC) is the fifth most common cancer worldwide and the second leading cause of cancer-related death. Patients with HCC commonly present with inoperable disease and face a poor prognosis. This newly approved combination therapy provides the opportunity for effective treatment.<sup>3</sup>

As scientific insight produces more innovative breakthroughs in both diagnostics and treatments, the FDA's role in ensuring safe and effective drugs and products is more important than ever. Robust funding is critical to sustain important ongoing and innovative work throughout the Agency, including the Office of Hematology and Oncology Products (OHOP), which recently became the Office of Oncologic Diseases (OOD). OHOP, or OOD, oversees the development, approval, and regulation of drug and biologic treatments for cancer and hematologic malignancies. As the agency responsible for making sure that these drugs and biologics are safe and effective, OHOP/OOD plays an indispensable role in speeding new and better therapies to patients facing cancer and hematologic conditions. We applaud the work of the office's highly trained and dedicated employees and the Administration's efforts to recruit and retain a competitive workforce. This is not an area where Congress can afford to cut corners; American lives depend on an efficient review process that facilitates improved treatment strategies that are both safe and effective. ASCO looks forward to continuing to work with OHOP/OOD on prevention, treatment, and diagnosis of the many forms of cancer.

Despite remarkable progress, even during a global pandemic, cancer remains the second most common cause of death in the United States (U.S.). In 2021, almost 1.9 million new cancer cases will be diagnosed, and more than 600,000 people will die from cancer.<sup>4</sup> The 21st Century Cures Act, which became law in 2016, established an "FDA Innovation Account," which authorized additional funding subject to the annual appropriations process. In FY2022, the law authorizes \$50 million, which is critical funding to support the FDA's ability to accelerate innovation and increase patient involvement in research.

As part of the Innovation Account, the Oncology Center of Excellence (OCE) was created, with a mission to achieve patient-centered regulatory decision making

<sup>1</sup> FDA, Oncology Center of Excellence 2020 Annual Report; <https://www.fda.gov/media/145613/download>

<sup>2</sup> American Cancer Society; <https://www.cancer.org/content/dam/cancer-org/research/cancer-facts-and-statistics/annual-cancer-facts-and-figures/2021/cancer-facts-and-figures-2021.pdf>

<sup>3</sup> ASCO, Clinical Cancer Advances 2021; <https://www.asco.org/research-guidelines/reports-studies/clinical-cancer-advances-2021/additional-advances>

<sup>4</sup> American Cancer Society; <https://www.cancer.org/content/dam/cancer-org/research/cancer-facts-and-statistics/annual-cancer-facts-and-figures/2021/cancer-facts-and-figures-2021.pdf>

through innovation and collaboration. ASCO fully supports the mission of the OCE and appreciates the subcommittee funding the OCE under the FDA's authority, allocating \$20 million for FY2021. Given the continued, staggering burden of cancer and the drastic impact it has on families across the country, it is critical that Congress continue to provide the FDA resources that sustain the OCE and its ability to speed progress in this new era of targeted and combination therapies for patients with cancer. It is also vital to provide the OCE with resources it needs to implement efficient, cross-disciplinary review processes for oncology products. Therefore, ASCO supports the Administration's FY2021 budget request of \$20 million for the OCE. ASCO looks forward to continuing to work with Congress and the FDA on achieving the OCE's mission and ensuring the agency's success.

#### ADDRESSING DRUG SHORTAGES

Drug shortages can delay or prevent patients from getting the care they need. A variety of factors ranging from environmental disasters to issues with manufacturing standards can disrupt the supply of medical drugs, threatening patient care. The reality of possible drug shortages was highlighted early in the COVID-19 pandemic, as many drug components are made exclusively in the Wuhan region of China. While it is crucial the U.S. has the tools necessary to address shortages, this is not a new challenge.

After a period of decline, there has been a recent increase in reported drug shortages. In 2018 the FDA reported 186 new shortages, up 27% from 2017.<sup>5</sup> The FDA is instrumental in helping to mitigate the effect of drug shortages. To help prevent and overcome drug shortages, the FDA uses tools such as expedited facility inspection, expedited new and/or generic drug applications, and the exercise of discretion with respect to the temporary importation of products from foreign manufacturing sources. The agency may also urge manufacturers to increase production in specific situations to meet anticipated increases in demand. The FDA has held public meetings and solicited stakeholder input in its efforts to identify additional solutions to this problem, and its work in this area is critical to daily patient care.

In response to the COVID-19 pandemic, Congress increased FDA authority to identify, prevent, and mitigate possible drug shortages by, among other things, enhancing FDA's visibility into drug supply chains. These authorities were included in the Coronavirus Aid, Relief, and Economic Security Act (CARES Act). ASCO supported these measures, but as noted, more permanent authority is necessary to combat future shortages and disruptions to our supply chain.

ASCO supports several recent proposals to address medical and drug shortages, including expanding the FDA's authority to require manufacturers to label products with the longest possible expiration date the FDA agrees is scientifically justified, expanding the authority for FDA to require application holders of certain drugs to conduct periodic risk assessments to identify the vulnerabilities in their manufacturing supply chain and develop plans to mitigate risk, and clarifying the FDA's authority to obtain detailed drug listings, regardless of whether they were directly or indirectly imported into the U.S. ASCO urges the subcommittee to continue to support the FDA's role in mitigating drug shortages.

#### COMBATTING TOBACCO USE

Tobacco use has long been the leading preventable cause of death in the U.S. Each year, it kills more than 480,000 Americans and is responsible for approximately \$170 billion in health care costs. Nearly one in three heart disease deaths, one in three cancer deaths, and nearly eight in 10 chronic obstructive pulmonary disease (COPD) deaths are caused by tobacco use. The application of the FDA's public health mission also continues to evolve as new and different tobacco products such as electronic cigarettes and flavored tobacco products come to market. FDA regulation of these products is necessary to help stem the tide of new cancer cases. The dramatic increase in youth use of e-cigarettes underscores the need for appropriate oversight by FDA. The FDA's 2020 National Youth Tobacco Survey showed that 3.6 million children used e-cigarettes in 2020, including nearly 1 in 5 high school students. The risks are also becoming clearer. In 2020, 38.9% of all high school e-cigarette users used e-cigarettes on 20 or more days a month, a sign that youth are addicted or at risk of addiction. Studies show that young people who use

<sup>5</sup>FDA, Drug Shortages: Root Causes and Potential Solutions; <https://www.fda.gov/media/131130/download>

e-cigarettes are more likely to become smokers.<sup>6</sup> Unfortunately, surveys also show that young adults and youth hold many misconceptions about e-cigarettes, with over 20% believing e-cigarettes are harmless and not addictive.<sup>7</sup> ASCO continues to support the FDA's role in ensuring flavored tobacco and electronic nicotine devices are properly regulated, specifically ensuring America's young people do not have access to these products.

#### THE IMPACT OF COVID-19

In the oncology world, 2020 started out with promise. By June 2020, the FDA was on pace for a record year of oncology and hematology drug approvals, with fourteen approved in the year's first six months, topping the eleven approvals in all of 2019. The first months of 2020 saw FDA approval for treatments such as aggressive lung cancer drug Tarectra, PARP Inhibitor Olaparib for advanced prostate cancer, daratumumab for newly diagnosed or recurring multiple myeloma, and others.<sup>8</sup>

Halfway through 2020, however, cancer clinical trials were shutting down as a result of the COVID-19 pandemic and subsequent shelter in place and social distancing guidelines. One study showed that clinical trial enrollment in May 2020 was 73% lower than accrual in May 2019. Another study found the COVID-19 pandemic was associated with a 60% decrease in the number of launches of oncology clinical trials of drugs and biologic therapies.<sup>9</sup>

In addition to stagnant trials, individuals in the research community have faced loss of employment, lab closures, and loss of momentum in pre-pandemic research. Younger investigators and support staff have been especially vulnerable during the last year. The effects of the loss of this research and researchers will likely be felt for years to come. To combat the progress lost, ASCO reiterates the request of the subcommittee to continue to prioritize funding for the FDA, OHOP/OD and the OCE.

While we cannot understate the pandemic's disruption of cancer clinical trials and drug development, there are lessons learned. Among these are streamlined and new flexibilities in the drug approval process. Historically, the review and approval process for new cancer therapies has been long and arduous. It often takes months before newly approved cancer drugs are fully accessible to patients, on average taking six months before the drug is readily available to patients, and immediate access to a recently approved FDA drug is relatively rare in most cases.

Increased flexibility for clinical trials and expedited review and approval processes for drugs and therapeutics experienced as a result of pandemic-related policy modifications can continue to benefit cancer patients after the conclusion of the public health emergency. I urge this subcommittee to work with the FDA and stakeholders to identify which regulatory flexibilities should be permanently incorporated into agency practice. Specifically, ASCO supports continuing remote and virtual approaches to consent and other trial procedures, streamlining and standardizing regulatory and training requirement, using central Institutional Review Boards and innovative trial designs, and increasing flexibility so research will be more resilient in future crises.<sup>10</sup>

We thank the subcommittee for its continued support of patients with cancer in the U.S. through consistent and appropriate funding for the FDA. We look forward to working with all members of the subcommittee on an FY2022 budget to continue to advance cancer research and treatment in our country.

Please contact Kristin Stuart at [Kristin.Stuart@asco.org](mailto:Kristin.Stuart@asco.org) with questions.

[This statement was submitted by Monica Bertagnolli, MD, FASCO, Chair of the Board, Association for Clinical Oncology.]

<sup>6</sup>FDA, Youth Tobacco Use: Results from the National Youth Tobacco Survey; <https://www.fda.gov/tobacco-products/youth-and-tobacco/youth-tobacco-use-results-national-youth-tobacco-survey>

<sup>7</sup>ASCO National Survey; <https://www.asco.org/about-asco/press-center/news-releases/national-survey-reveals-one-five-young-adults-regularly-uses-e>

<sup>8</sup>SurvivorNet, Record Numbers of Cancer Drugs Approved- But Leading Experts Say Vital Clinical Trials Could Drop Off Hugely Due To COVID-19; <https://www.survivornet.com/articles/boom-in-fda-drug-approvals-towards-cancer-treatment-in-2020-but-there-may-be-a-significant-drop-later-this-year-says-leading-expert/>

<sup>9</sup>The Journal of the American Medical Association <https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2775637>

<sup>10</sup>ASCO Road to Recovery Report: Learning for the COVID-19 Experience to Improve Clinical Research and Cancer Care; <https://ascopubs.org/doi/full/10.1200/JCO.20.02953>

## PREPARED STATEMENT OF THE ASSOCIATION OF FISH AND WILDLIFE AGENCIES

Thank you for the opportunity to submit recommendations for fiscal year 2022 (fiscal year 22) Congressional appropriations. The Association of Fish and Wildlife Agencies' (AFWA) mission, since our founding in 1902, is to protect and enable state fish and wildlife agencies (states) to exercise their statutory authority to conserve and manage the fish and wildlife within their borders. All 50 states, the District of Columbia, and the U.S. Virgin Islands are members.

We express our deep appreciation for the increased fiscal year 21 funding levels and for additional resources from the *American Rescue Plan Act*. Many of these programs benefit agricultural producers, as well as fish, wildlife, their habitats, and the people who enjoy them. We look forward to working with you to provide resources for our Federal agency partners consistent with fiscal year 21 marks, and in some cases higher. Investments in conservation and natural resources management programs present some of the highest returns on Federal dollars and offer successful solutions for natural resource management challenges. States have authority for, and are on the front lines of, wildlife health and zoonotic diseases and must be engaged early to cooperatively develop a robust health and science-driven surveillance framework to successfully combat these challenges. We request Congress emphasize the importance of early collaboration with state agencies with respect to their authority and expertise in the development of a robust, integrated animal health and science framework to combat fish wildlife diseases and zoonotic diseases within the OneHealth initiative.

UNITED STATE DEPARTMENT OF AGRICULTURE (USDA)

NATURAL RESOURCES CONSERVATION SERVICE (NRCS)

*Conservation Operations and Conservation Technical Assistance*—The AFWA recommends that Congress provide at least \$1.2 billion in discretionary funding for the Conservation Operations account, including \$1.1 billion for Conservation Technical Assistance (CTA). These funds support NRCS field staff in providing technical assistance and planning support for farmers and ranchers across the country and are critically needed to realize the full potential of conservation programs. Furthermore, leveraging CTA funds through partnership opportunities should remain a priority of NRCS to assist with delivering technical assistance to farmers, ranchers, and forest owners.

NRCS's on-the-ground capacity remains a limiting factor for conservation implementation and program delivery. NRCS staffing levels declined by 19 percent between fiscal year 04 to fiscal year 18—a trend which continues through fiscal year 21.<sup>1</sup> <sup>2</sup> At the end of fiscal year 20, NRCS had 2,276 unfilled field positions.<sup>3</sup> The decline in NRCS staffing has occurred while conservation program demand has increased, resulting in decreased program delivery capacity. Any effort to maintain or expand farmers', ranchers', and forest owners' conservation efforts will be predicated on the availability and increased capacity of local CTA.

Within these CTA funds, we urge Congress to provide \$50 million for the Grazing Lands Conservation Initiative (GLCI). Grazing planning, technical assistance, and peer-to-peer education resources are inconsistently available across the country. This technical assistance is critical to the proliferation of well-managed and economically sustainable grass-based agricultural production that protects water quality, improves soil health, provides high quality habitat for pollinators and wildlife, and when restoring native grasses can also improve carbon sequestration. Counties with dedicated grazing staff show marked increases in the use of practices such as rotational and prescribed grazing compared to nearby counties with no dedicated staff. Fifty million dollars for GLCI would help farmers and ranchers get the quality and quantity of grazing technical and educational help they need to succeed.

*Mandatory Farm Bill Conservation Programs*—As the Subcommittee develops fiscal year 22 appropriations bills, we urge you to reject any changes in mandatory spending for farm bill conservation programs. These programs remain massively

<sup>1</sup> Congressional Research Service. (2021, March 11). Staffing Trends in the USDA Farm Production and Conservation (FPAC) Mission Area (CRS Report IF11452). [https://www.everycrsreport.com/files/2020-03-11\\_IF11452\\_bf1eaa6064a214b26bd80b3a56ece56e1a521990.pdf](https://www.everycrsreport.com/files/2020-03-11_IF11452_bf1eaa6064a214b26bd80b3a56ece56e1a521990.pdf)

<sup>2</sup> Hearing to Review Implementation of Farm Bill Conservation Programs, 116th Congress. (2020) (Testimony of NRCS Chief Matt Lohr). <https://www.congress.gov/event/116th-congress/house-event/LC65669/text?s=1&r=1>

<sup>3</sup> United States Department of Agriculture fiscal year 2021 Budget Summary, Explanatory Notes—Natural Resources Conservation Service. <https://www.usda.gov/sites/default/files/documents/fpac-nrcs-fy2021-congressional-justifications.pdf>

oversubscribed, resulting in unmet demand for conservation on 13.8 million acres. Funding for conservation programs is critical to enable farmers, ranchers, and forest landowners across the country to conserve water, maintain soil health, protect grasslands and wetlands, create and maintain fish and wildlife habitat, and produce abundant and affordable food and fiber. Furthermore, any cuts to these programs would result in less funding available for the next Farm Bill, reducing available resources for voluntary, incentive-based conservation well into the future. The funding authorized for these programs in the 2018 Farm Bill should be protected as a vital investment in our natural resource and agricultural resiliency and infrastructure.

The AFWA urges Congress to include report language directing USDA to restore pre-existing Conservation Reserve Program enrollment waivers for counties with >25 percent of their farmland enrolled in the program. Despite support from local producer and conservation groups, landowners in several counties in Texas, Washington, and Idaho with critical Lesser Prairie-Chicken, Greater Sage-Grouse, and Columbian Sharp-tailed Grouse habitat, respectively, have been unable to enroll acres into the program since the provision permitting waivers was inadvertently removed in the conforming amendments of the 2018 Farm Bill (16 U.S.C. § 3844(f)(1)). This will facilitate much-needed voluntary conservation of these at-risk species.

#### ANIMAL AND PLANT HEALTH INSPECTION SERVICE (APHIS)

*APHIS Veterinary Services (VS)*—Chronic Wasting Disease (CWD) continues to spread across populations of wild and captive deer species (cervids), with the disease now detected in 26 states and the number of locations within states growing. This infectious disease is 100 percent fatal and threatens rural economies and the sustainability of livelihoods. Beyond the devastating effects its unchecked spread will have on wildlife populations, the Centers for Disease Control and Prevention has not been able to conclusively determine its zoonotic potential, but the threat of its transmission to humans remains.<sup>4</sup> VS must do more to manage the spread of CWD.

The AFWA recommends \$30 million in funding for the VS Equine, Cervid & Small Ruminant Health Program, of which we support \$15 million for CWD captive cervid herd surveillance and monitoring and an addition \$15 million for indemnification of CWD-positive captive cervid herds. VS should continue maintaining the Voluntary Herd Certification Program and work to increase its effectiveness. Hunters, rural communities, and natural resource managers continue to have significant concerns about potential deficiencies in the program, particularly since CWD-positive captive cervids continue to be found in certified herds and in captive cervids that are moved to other captive herds. We request Congress direct VS to cooperate fully with the US Geological Survey (USGS), jointly commission a National Academies of Sciences (NAS) study on the transmission pathways of CWD in cervids, and spend no less than \$1 million from the Equine, Cervid & Small Ruminant Health Program on the NAS CWD transmission pathway study as directed by Public Law 116-188. The states believe an independent, third party review of the program, the best management practices adopted by the AFWA, and other guidance to control the spread of CWD is desperately needed to identify weaknesses, shortcomings, and risks and to recommend improvements that will control the spread of CWD. We request Congress take these actions to protect our precious wildlife resources, protect rural economies and the sustainable hunting of free-ranging cervids, and to respond to the disease as this threat requires.

*APHIS Wildlife Services (WS)*—An increase in funding for WS is particularly important to address many services and technology challenges that were exacerbated by the COVID-19 pandemic. The AFWA requests at least \$112 million for Wildlife Damage Management to address increased strains on information technology infrastructure, including tele-communications and electronic access to partners' tools; to bridge the financial gap experienced by partners who were unable to fulfill financial commitments in their cooperative agreements; to continue much-needed services; and to address increases in administrative and support costs that have caused a reduction in program delivery. Further, we recommend eliminating caps on programs, such as those on fleets, which hinder staffs' program delivery ability and WS's responses to partners' needs. We recommend no less than \$35 million for Methods Development so WS can continue to be a key partner in the development of nonlethal techniques and strategies to reduce human-wildlife conflicts and respond to the growing needs of partners. We recommend providing \$25 million for Wildlife Disease Monitoring and Surveillance to enable assistance with the surveillance, monitoring,

<sup>4</sup>Watson, N., Brandel, JP., Green, A. et al. The importance of ongoing international surveillance for Creutzfeldt-Jakob disease. *Nat Rev Neurol* (2021). <https://doi.org/10.1038/s41582-021-00488-7>

and early detection of and the rapid response to fish and wildlife diseases, zoonotic diseases, CWD, and emerging pathogens. The AFWA recommends Congress provide an additional \$15 million to WS for surveillance and monitoring of CWD in free-ranging cervids by state fish and wildlife agencies. These funds are desperately needed for

the early detection and rapid response to the disease. States, who exercise primary authority over these public trust species, form the frontline efforts in combating these health threats which often occurs in partnership with WS.

U.S. FOOD AND DRUG ADMINISTRATION (FDA)

*Center for Veterinary Medicine (CVM)*—The AFWA recommends funding CVM at no less than \$254.85 million, a \$10.5 million increase from fiscal year 21 appropriation levels. As the oversight body charged with ensuring the health and safety of humans and animals for the approval of new animal drugs, CVM is a critical gateway to providing state and Federal agencies with essential management tools. Shortfalls in capacity, regulatory uncertainty, and inadequate funding mechanisms within CVM have all contributed to a lack of new animal drugs, particularly for the management of aquatic animal health. While resource managers are appreciative of the 2019 label expansions for formalin and hydrogen peroxide, and despite robust collaborative efforts between CVM, state, and industry partners, no new aquaculture drugs have been approved since 2014.

Within the recommended appropriation, the AFWA requests that Congress significantly increase funding for the Office of Minor Use and Minor Species Animal Drug Development (OMUMS). As recognized by Congress within the Minor Use and Minor Species Animal Health Act of 2004, low profit margins and small market shares combined with the significant capital investment required result in a lack of incentive for industry sponsors to develop and obtain approvals for these drugs, as it is generally economically infeasible. For this reason, OMUMS provides grants to aid and incentivize industry sponsors pursuing these approvals. However, minimal appropriations from Congress and funding maximums established by the FDA have resulted in this grant program being largely unsuccessful, with funds frequently remaining undistributed.

While Congress has typically appropriated approximately \$1 million annually, this funding level, for which there is no maximum level in statute, has proven to be inadequate to fulfill the Congressional intent of the program. The FDA imposes a \$0.25 million annual maximum for each recipient of these grants. Industry reports this amount to be an insignificant fraction of the costs of obtaining approval. The program is further limited by a 3-year maximum for each grant, far below the amount of time required to advance a drug through the approval process. We request that, along with the recommended increase in appropriations for OMUMS, Congress direct the FDA to adjust administration of this program accordingly to address these challenges.

While vigorous testing and meticulous approval processes are necessary for human and animal health and safety, healthy populations of aquatic species are compromised by a lack of diversity in FDA approved treatment options. For example, even with judicious application, states are reporting resistance within fish to oxytetracycline hydrochloride and florfenicol, the only approved antibiotics for use in aquaculture. Within the \$10 million recommended increase for CVM, the AFWA strongly recommends that funds be directed to increase staff capacity, with particular focus on increased capacity for evaluation of human food safety and residue depletion studies. These safety assessments present some of the most challenging barriers for approval of new animal drugs, and we request Congress to direct the allocation of CVM resources accordingly. In order to ensure growth in the aquatic drug industry and the health of aquatic populations and human safety, the AFWA recommends increased collaboration between the FDA, U.S. Fish and Wildlife Service, and the USGS to identify methods to increase efficiencies in the drug approval process and to identify and remove superfluous barriers.

[This statement was submitted by Association of Fish and Wildlife Agencies.]

PREPARED STATEMENT OF ASSOCIATION OF PUBLIC AND LAND-GRANT UNIVERSITIES

As you consider programmatic requests in the Senate Appropriations Subcommittee on Agriculture, Rural Development, Food and Drug Administration, and Related Agencies for fiscal year 2022, we strongly urge robust funding for agricultural and food research, education, and Cooperative Extension System programs at land-grant universities and non-land grant colleges of agriculture.

Through the fiscal year 2022 appropriations process, the subcommittee has an opportunity to enhance the partnership NIFA has with the land-grant university (LGU) system: including state colleges of agriculture (1862s), historically Black colleges and universities (1890 HBCUs), and Tribal Colleges and Universities (1994s), non-land-grant colleges of agriculture, and Hispanic-serving institutions. In doing so, the subcommittee can (insert positive outcomes of ag research investments). Over the last three decades, Federal support for agricultural research, education, and Extension, which catalyzes state and local investment via matching funds, has been flat in real dollar terms. In fact, according to purchasing power adjustments National Institute of Food and Agriculture (NIFA) appropriated dollars, public investment in agricultural research and Extension is below 1990 levels.<sup>1</sup> Meanwhile, investments by global competitors are growing at a rapid pace.<sup>2</sup> Agricultural research and Extension programs generate significant returns to the economy, averaging \$17 for every \$1 invested.<sup>3</sup> If the U.S. continues stagnant public investment in agricultural research, education, and Extension we will lose significant economic ground and influence to global competitors while failing to capitalize on the enormous potential of these investments to (insert positives like improved environment, food security, etc.).

Specifically, for fiscal year 2022, we ask the Subcommittee to fund at least the following amounts for APLU's core priorities at NIFA: \$340 million for Smith Lever, \$280 million for the Hatch Act, \$79 million for Evans-Allen Programs, \$67 million for 1890 Extension, \$39 million for McIntire-Stennis, \$10 million for Extension Services at 1994 Institutions, \$6 million for Payments to 1994 Institutions, \$6 million for Research Grants for 1994 Institutions, and \$470 million for the Agricultural Food and Research Initiative. Furthermore, we request \$10.5 million for the multi-cultural scholars program, graduate fellowships, institutional challenge grants, and funding for the 1890s institution education grants at \$28 million.

Hatch Act, Evans-Allen Programs, and Research Grants for 1994 Institutions funding are central to the function of agricultural, food, and forest research at our nation's public institutions and in critically underserved communities. The list of successful outcomes of investment in agricultural research is extensive and includes, disease-resistant banana clones, soybean cultivars, and post-harvest technology to eliminate peanut allergens. Research capacity programs support includes field-tested innovations on crop, forest, and animal health and disease prevention, as well as technologies, systems and interventions that enable access to safe and nutritious foods. These investments are instrumental to developing modern, science-based best practices about agriculture climate adaptation and mitigation and use/preservation of natural resources. The Federal-state partnership reinforced by these funds bolsters the American agricultural economy while keeping our food system safe.

Smith-Lever, 1890s Extension, and Extension Services at 1994 Institutions funds support the Cooperative Extension System (CES), a unique network of researchers, specialists, agents, and educators who deliver vital, practical information to agricultural producers, small business owners, communities, youth, and families. Over 32,000 university- and county-based employees and 2.8 million volunteers support this partnership and multiply its impact across nearly all the 3,143 counties, parishes, and boroughs in the United States. Extension programs avert the spread of agricultural pest and diseases, connect people with high-quality information during national emergencies, and keep American farmers on the farm by providing information about new sources of on-farm income.<sup>4</sup> <sup>5</sup> As part of CES, the 4-H network provides the nation's youth with community mentors and learning opportunities related to food, agriculture, environment, and personal growth. CES educators and agents have reduced the negative economic impact of COVID-19 by connecting farmers with new buyers, elucidating the uncertain global agricultural marketplace, assisting local health agencies and hospitals, and distributing educational materials to 4-H youth and adults.

McIntire-Stennis Cooperative Forestry funding supports university-based research and education that protects our forests and watersheds, preserves environmental re-

<sup>1</sup>The Biomedical Research and Development Price Index (BRDPI) indicates how much the NIH budget must change to maintain purchasing power. See link: <https://officeofbudget.od.nih.gov/gbipriceindexes.html>

<sup>2</sup>Somers, Joe, Stephen Harris, Gregory Gallant, Steve Wolf, Sana Khan, and Diya Pandey, 2021. "Benefits of Increased Public Investment in Agricultural Research." IHS Markit report commissioned by Farm Journal Foundation and American Farm Bureau Federation.

<sup>3</sup>Baldos, Uris Lantz, Frederi G. Viens, Thomas W. Hertel, and Keith O. Fuglie. R&D Spending, Knowledge Capital, and Agricultural Productivity Growth: A Bayesian Approach. *American Journal of Agricultural Economics*. 101(1): 291–310; <https://doi.org/10.1093/ajae/aay039>.

<sup>4</sup><https://nifa.usda.gov/announcement/nifa-supports-disaster-education-through-eden>

<sup>5</sup><https://onlinelibrary.wiley.com/doi/abs/10.1093/aep/1093/aapp/ppw007>

sources, and trains the next generation of natural resource scientists. Research from McIntire-Stennis enables development of new technologies to combat forest fires, approaches to carbon sequestration, biobased products and energy sources, and mitigation techniques for impacts from invasive species. The increase to McIntire-Stennis programs would allow support for more students and local and regional solutions for forest management, climate change mitigation, and biobased products development.

Finally, we request robust investment in the Agriculture and Food Research Initiative (AFRI), USDA's flagship competitive grants program for fundamental and applied research, Extension, and education in support of our nation's food and agricultural systems. AFRI was established by Congress in the 2008 Farm Bill and reauthorized in the 2018 Farm Bill with a level of \$700 million per year. Competitive research is an essential for addressing national priorities. As examples, awards from AFRI are going towards rapid detection of cattle disease, cutting greenhouse gases from ruminants, and understanding heat impacts on bees. We urge the subcommittee fund AFRI of at least \$470 million in fiscal year 22 to fund a backlog of highly ranked applications. An increase in AFRI will allow more meritorious applications to receive funding boosting the impact and advancements from the program (in 2016, the application success rate was 20 percent).

In closing, we urge the Subcommittee to fully fund these important agriculture, food and fuel innovation programs at land-grant universities and non-land grant colleges of agriculture in the fiscal year 2022 Agriculture Appropriations bill. We appreciate your consideration of this request and look forward to continuing to work with you to support 1862, 1890, and 1994 Land-grant Universities, which provide pathways of opportunity for thousands of Americans by conducting cutting-edge research that helps keep the United States at the forefront of agriculture.

[This statement was submitted by Caron Gala, Director, Governmental Affairs, Agriculture and International Development, Association of Public and Land-Grant Universities.]

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PREPARED STATEMENT OF ANIMAL HEALTH INSTITUTE

On behalf of the Animal Health Institute, I write today to request that you include funding for priorities important to human and animal health in the Fiscal Year (FY) 2022 Agriculture, Rural Development, Food and Drug Administrations and Related Agencies Appropriations Bill. Funding of these programs protects animal health and human health by providing safe and effective products to prevent and treat disease in animals.

AHI is appreciative to Congress for providing \$20.570 million for the Center for Veterinary Biologics (CVB), an increase of \$3 million, in last year's spending bill. We request Congress maintain this funding level for the Center to continue to review and approve veterinary biologics in a timely manner, help compensate for the coming wave of retirements by experienced CVB staffers and continue to bring current vaccines and new and innovative technologies to market.

Each year, U.S. animal health companies produce more than 100 billion doses of animal vaccines. These vaccines are critical to protecting the health of America's flocks, herds, and pets from domestic and foreign animal diseases. In addition to improving animal health, these technologies could lead to similar breakthroughs in products for humans. Animal health companies are developing new and innovative biologics to greatly reduce the presence of food-borne pathogens in production animals, as well as reduce the need for the use of antibiotics. These new products represent a step forward in on-farm contributions to food safety. Additionally, Congress provided funds in the 2018 Farm Bill to fund a vaccine bank, and those dollars will be spent more efficiently if the underlying infrastructure to review vaccine technologies is fully operational. In order to leverage the benefits of these new products and public health assets it is essential that CVB is fully funded and staffed.

We request the user fees established by the Animal Drug User Fee Act (ADUFA) of \$30.340 million be included in the FY 2022 appropriations bill. ADUFA provides a system of performance standards and user fees to improve the new animal drug review process at the U.S. Food and Drug Administration's (FDA) Center for Veterinary Medicine (CVM). Predictability of the review process has improved as FDA CVM has met the agreed-upon performance standards. To maintain this success, we request that the fees be integrated into this year's appropriation bill. The appropriation is entirely budget neutral as the money will be provided by the animal health companies.

Another area of importance within animal and public health is the control of ectoparasites in pets, livestock, and the environment. In order to ensure timely ap-

proval of new preventative medications for controlling fleas, ticks, and other ectoparasites in animals, AHI requests the Environmental Protection Agency's (EPA) pesticide registration activities be appropriated \$128.3 million for the FY 2022. This will help ensure that much needed improvements to the EPA registration process are possible and the agency can decrease the time currently required for review and approval of new products.

AHI respectfully request \$33 million for the USDA-APHIS Wildlife Services National Rabies Management Program (NRMP). The program is critical to decreasing the spread of rabies and is protective of human and animal health.

Thank you for your consideration. Please do not hesitate to contact me if you have any questions or need additional information.

[The statement was submitted by Ronald B. Phillips, Vice President, Legislative and Public Affairs.]

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PREPARED STATEMENT OF ANIMAL WELFARE INSTITUTE

The Animal Welfare Institute appreciates the opportunity to submit testimony on fiscal year 2022 spending priorities for the U.S. Department of Agriculture and is grateful to Congress for the actions it has taken over the past several years to address animal welfare enforcement problems. While USDA has taken some steps to abide by Congress's directives, leadership from the Committee is still needed to ensure robust enforcement of Federal laws that protect millions of animals as well as the public.

ANIMAL AND PLANT HEALTH INSPECTION SERVICE/ANIMAL WELFARE ACT ENFORCEMENT

*Requested Bill Language:* "The Secretary shall ensure that each violation or failure to comply with the Act identified by a USDA inspector under the Animal Welfare Act, 7 U.S.C. Sections 2131-2159, is documented on an inspection report. The Secretary shall also ensure that 'teachable moments' are never used."

*Requested Report Language:* "The Committee is concerned about APHIS's Animal Care program and the steep decline in enforcement related to violations of the Animal Welfare Act. The Committee urges the agency to reform its current licensing and enforcement scheme. While the agency took steps towards this goal last year with its licensing and veterinary care rule change, and more recently with the withdrawal of the May 2018 Tech Note that allowed facilities to avoid citations by self-reporting, we believe more progress can be made. This includes, but is not limited to, the following: ensure consistent, thorough, unannounced inspections on a regular basis; act swiftly when facilities fail to comply with the Act's minimal requirements; ensure each failure to allow access for inspection and each violation or failure to comply with animal welfare standards is documented on an inspection report, and consider assessing penalties in each such case; ensure that there is no use of 'teachable moments' or any similar program that obscures findings during inspections; and, require that inspection reports which identify violations or failures of compliance be shared with relevant local, state, and Federal agencies. The Committee is also concerned about the lack of enforcement of online dog dealers, which has allowed many online operations to continue selling puppies without the necessary USDA licensing pursuant to Animal Welfare Act, 7 U.S.C. Sections 2131-2159. We urge the Secretary of Agriculture to prioritize the enforcement of the 2013 rule which requires that dealers who are selling animals sight-unseen to consumers must have the necessary license to do so. The Committee also urges the Secretary of Agriculture to enter into a memorandum of understanding with the U.S. Attorney General to encourage greater collaboration on Animal Welfare Act enforcement and ensure that the Department of Justice has access to evidence needed to initiate cases."

*Background:* USDA's Animal Care division is responsible for inspecting and enforcing the AWA's minimum standards of care at nearly 12,000 sites, including puppy mills, laboratories, zoos, circuses, and airlines. We are troubled by USDA's oversight of these industries in recent years. We recognize that there were fewer in-person inspections in 2020 because of the pandemic, but that was neither the start of enforcement failures nor will it be the end. From 2016 to 2020, there was a 67 percent drop in the number of AWA inspections where citations were documented, according to AWI research. New investigations plunged by nearly 90 percent during this period.

In 2013, USDA issued a rule intended to close loopholes that allowed dog breeders to sell puppies online without a USDA license, but enforcement of online dealers has

been lackadaisical. As a result, many online operations continue to sell puppies without the necessary USDA licensing and oversight.

The USDA continues to use what it calls “teachable moments” as a means of avoiding documentation of violations on inspection reports, despite Committee report language in fiscal year 2020 directing the agency to stop this practice. This emphasis on education over enforcement undermines the goal of animal welfare. USDA’s own Inspector General, in a 2010 audit of the Animal Care program, called attention to the problem, stating that “relying heavily on education for serious or repeat violators—without an appropriate level of enforcement—weakened the agency’s ability to protect the animals.” USDA also needs to restore the many enforcement tools that have been dismantled in recent years, including the inspection guide and policy manual.

The requested bill and report language will reiterate Congress’ justified ongoing concerns and ensure Animal Care, the Office of General Counsel, and the Investigative and Enforcement Service conduct robust oversight and enforcement of the law as Congress intends.

#### APHIS/PROTECTING ANIMALS WITH SHELTER (PAWS) IMPLEMENTATION

*Requested Funding:* We request \$3 million to continue implementing the PAWS grant program (“Emergency and Transitional Pet Shelter and Housing Assistance”) as authorized in Section 12502 of Public Law 115–334.

*Background:* We appreciate that Congress provided \$2.5 million in fiscal year 2021 to continue implementing Section 12502 of the 2018 Farm Bill (Public Law 115–334), which authorized a new grant program to provide emergency and transitional shelter options for domestic violence survivors with companion animals. Applications for the fiscal year 21 round of funding are due in June, and the six recipients of the first round of funding in fiscal year 20 are now implementing their programs. Those programs represent diversity in geographic areas and populations served, and in their solutions to the problem of how best to assist domestic violence survivors who have companion animals. The common thread through them all is the level of excitement at being able to reach this highly underserved population of survivors and to increase community awareness about this long-standing oversight, which would not have been possible without these grants.

#### APHIS/ANIMAL CARE/CLASS B DEALERS

*Bill language request:* None of the funds made available by this Act may be used to carry out any activities or incur any expense related to the issuance of licenses under section 3 of the Animal Welfare Act (7 U.S.C. 2133), or the renewal of such licenses, to class B dealers who sell dogs and cats for use in research, experiments, teaching, or testing.

*Justification:* This language, which has been included in the Agriculture appropriations bill for several years, prohibits the renewal of existing licenses or the issuance of new licenses to Class B dealers who sell random source dogs and cats for use in research, experimentation, teaching, and testing. Thanks to Congress’ efforts, no random source B dealers are now operating. Continuing this spending ban will ensure that there is no lapse during which these dealers try to get back into business or others are tempted to apply for new licenses. It would be unfortunate to jeopardize the progress that has been made in shutting down this abuse-ridden industry.

#### APHIS/ANIMAL WELFARE ACT FACILITY DISASTER PLANS

*Requested Bill Language:* “The Secretary of Agriculture shall enforce the final rule published on December 31, 2012 (77 Fed. Reg. 76815) by lifting the stay issued on July 31, 2013 (78 Fed Reg 46255) no later than 60 days after enactment of this Act.”

*Background:* The USDA proposed a common-sense rule in 2008 requiring facilities regulated under the AWA to have contingency plans for safely evacuating and caring for their animals in an emergency. In 2012, USDA published the final rule; it went into effect on January 30, 2013, requiring that plans be in place by July 29, 2013. However, USDA issued an indefinite stay of this rule on July 31, 2013, in response to concerns about very small businesses being covered. Congress addressed these concerns by including a provision in the 2014 Farm Bill directing USDA to establish a de minimis exemption in the AWA for licensees with only a few non-dangerous animals. Conference managers noted that the de minimis exemption would free up agency resources and that they expected the agency to lift the stay on the contingency rule “without delay.” USDA finalized its de minimis rule in June 2018 but has not yet lifted the stay.

## WILDLIFE SERVICES/CHEMICAL POISONS

*Report language request:* “No Federal funds shall be expended or committed for the manufacture, import, purchase, sale, distribution, preparation, placement, deployment, training in the use of, or authorization for use by third parties, of M-44 sodium cyanide ejector devices (‘M-44s’), including any of the devices’ components or parts. This prohibition extends to use of Wildlife Services staff time and resources in connection with the use of M-44s, including where such actions are undertaken in connection with a cooperative agreement, except for activities directly related to the removal of M-44s that have been placed on Federal, tribal, state, and private land. Nor shall Federal funds be expended or committed for the manufacture, import, purchase, sale, distribution, preparation, placement, deployment, training in the use of, or authorization for use by third parties, of sodium fluoroacetate (‘Compound 1080’), including for livestock protection collars.

“The Committee urges Wildlife Services to reallocate resources to the provision of technical assistance and education to promote, incentivize, implement, and sustain use of nonlethal methods of predator control and coexistence, which can be less costly, more effective, and less dangerous to non-target species relative to M-44s and Compound 1080.

“Moreover, no Federal funds may be used to develop, introduce, or reintroduce other chemical poisons, including but not limited to alternative delivery mechanisms for sodium cyanide, Compound 1080, and other pesticides, for purposes of lethal predator control. This prohibition extends to the use of Federal funds to initiate or continue research, development, testing, registration, manufacture, preparation, or investigation of any chemical poisons or pesticides that may be used for lethal predator control.”

*Justification:* Lethal animal control devices such as M-44s or Compound 1080 cause severe pain and suffering and often result in painful deaths of wild animals and family pets and are ineffective approaches to sustainably reducing and preventing human-wildlife conflicts and livestock losses. In 2019, Wildlife Services killed over 8,000 animals with M-44s alone. Humans have also been injured by exposure to these poisons. Wildlife Services should no longer employ M-44s or Compound 1080 as a means of predator control. Sodium cyanide used in M-44s and Compound 1080 (sodium fluoroacetate), which is used in livestock collars, are two of the world’s deadliest poisons and present a significant national security threat. Instead, Wildlife Services should ensure the use of more humane non-lethal methods of predator control.

## WILDLIFE SERVICES/NONLETHAL METHODS DEVELOPMENT

*Report language request:* “The Committee is aware that Wildlife Services has, according to the program’s informational materials, worked with landowners to deploy nonlethal predator management strategies such as fladry, electric fencing, and livestock guardian dogs. Wildlife Services must implement and prioritize nonlethal strategies by: (1) promoting and implementing nonlethal livestock-predator conflict deterrence and mitigation techniques, including but not limited to use of barriers and fencing, fladry and turbo-fladry, visual and auditory deterrents, livestock protection animals, appropriate husbandry practices, night corralling, shed lambing, attractant and carcass removal, livestock herding, and human presence; (2) providing training in selection, implementation, monitoring, and adaptation of nonlethal techniques for agricultural producers, landowners, Federal and state agency personnel, and others; and (3) collaborating with the National Wildlife Research Center to advance and improve nonlethal predator coexistence methods, research on monitoring methods for efficacy of nonlethal control options implemented to reduce predation, and establish clear documentation protocols for nonlethal approaches implemented in advance of lethal control measures where applicable.

“The Committee directs Wildlife Services to fund nonlethal predator control activities through a percentage of the Service’s total budget. No less than \$2,000,000 of existing funds must be allocated towards nonlethal strategies. In fiscal year 21, the Committee allocated funding specific to nonlethal measures. Wildlife Services is directed to provide a report detailing how these additional funds were dispersed—including regional distribution, wild and domestic species impacted, number and size of livestock/agricultural operations impacted, nonlethal tools and methods implemented and supported, and efficacy evaluation methods and outcomes—within 45 days of the enactment of this Act. Wildlife Services is also directed to document all work on nonlethal strategies development and submit a report demonstrating progress in this area within 180 days of the enactment of this Act.”

*Justification:* It is estimated that USDA’s Wildlife Services has killed over 34 million animals over the last decade. In 2019, over 1.2 million native animals were

killed, including wolves, bobcats, bears, coyotes, and cougars. These animals were killed using a variety of inhumane methods, such as M-44 devices, snares, body-gripping traps, leg-hold traps, and firearms. Lethal predator control methods are proven to be ineffective, inhumane, pose safety risks humans and pets, and are more costly than nonlethal methods. Predator species are a critical part of healthy ecosystems. Employing nonlethal predator control methods will establish sustainable coexistence and benefit both the agricultural community and the environment.

AGRICULTURAL RESEARCH SERVICE/WELFARE FOR FARM ANIMALS USED IN  
AGRICULTURAL RESEARCH

*Requested Bill Language:* “Hereafter, and notwithstanding any other provision of law, ARS facilities as described in the “Memorandum of Understanding Between the U.S. Department of Agriculture Animal and Plant Health Inspection Service (APHIS) and the U.S. Department of Agriculture Agricultural Research Service (ARS) Concerning Laboratory Animal Welfare” (16—6100—0103—MU Revision 16—1) shall be inspected by APHIS for compliance with the Animal Welfare Act and its regulations and standards.”

*Requested Report Language:* “The Committee directs ARS to ensure that each of its facilities housing animals is adhering to the Animal Welfare Act at all times. ARS shall submit quarterly reports that include all violations found by APHIS during that quarter as well as the specific actions that will be taken to prevent their recurrence. The Committee further directs APHIS to conduct inspections of all such ARS facilities and to post the resulting inspection reports on line in their entirety without redactions except signatures. The Committee continues to direct APHIS to transmit to the Committees all inspection reports involving ARS facilities, including pre-compliance inspections. These facilities involve Federal funds over which this Committee has oversight responsibilities. APHIS is directed to include every violation its inspectors find and never to interfere with the Committee’s oversight activities by using so-called ‘teachable moments’ or other means of not fully reporting ARS facility violations.”

*Justification:* A 2015 investigation by the New York Times reported shocking instances of animal mistreatment and neglect associated with experiments conducted on farm animals at the U.S. Meat Animal Research Center (USMARC), and repeated disregard for objections raised by the Center’s own veterinary staff. The Committee responded by making 5 percent of the ARS’ fiscal year 16 budget contingent on its updating its animal care policies and requiring that all ARS facilities at which animal research is conducted have a fully functioning Institutional Animal Care and Use Committee (IACUC). The Committee has also provided increased funding to enable APHIS, under an MOU with ARS, to conduct inspections consistent with the AWA at each ARS facility that uses animals in research, and directed APHIS to post its inspections reports online and provide copies to the Committees. The fiscal year 2021 omnibus included bill language requiring ARS facilities to be inspected by APHIS for compliance with the AWA and its regulations and standards. We hope this requirement can be strengthened to ensure that ARS facilities will be permanently inspected by APHIS.

[This statement was submitted by Nancy Blaney, Government Affairs, Animal Welfare Institute.]

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PREPARED STATEMENT OF ANIMAL WELFARE INSTITUTE

Thank you for the opportunity to submit testimony on fiscal year 2022 funding priorities for the U.S. Department of Agriculture (USDA). Below are some of the Animal Welfare Institute’s top priorities that fall under USDA’s Food Safety and Inspection Service (FSIS), Farm Service Agency (FSA), and Animal and Plant Health Inspection Service (APHIS) pertaining to the humane treatment of farm animals and equines.

FOOD SAFETY AND INSPECTION SERVICE—HUMANE METHODS OF SLAUGHTER ACT  
ENFORCEMENT

Effective enforcement of the Humane Methods of Slaughter Act (HMSA) can prevent abuses like those documented in undercover investigations and reduce the chance of associated food safety risks and costly recalls of meat and egg products. The number of FTEs required under annual appropriations for enforcement of the HMSA has remained at 148 since fiscal year 2012, despite the fact that actual staffing levels have consistently been above this number for the past decade. To more accurately reflect previous staffing levels that have proven to increase the number

of humane handling verification procedures performed and align with the agency's staffing commitments, 165 FTEs should be appropriated. We also request that the agency resume publishing the Humane Handling Quarterly Reports—as previously directed by the fiscal year 2021 agriculture appropriations report—to allow for timely and efficient access to information pertinent to monitoring HMSA enforcement. AWI greatly appreciates the Committee's attention to this matter and continues to monitor whether USDA has gathered and posted the requested information; unfortunately, USDA has yet to comply with Congress's clear directive. We trust the Committee will again emphasize the need for USDA to resume publishing the Humane Handling Quarterly Reports as this critical information promotes transparency and public trust in FSIS's oversight of the treatment of animals slaughtered at USDA inspected facilities.

*Bill language request:* No fewer than 165 full-time equivalent positions shall be employed during fiscal year 2022 for purposes dedicated solely to inspections and enforcement related to the Humane Methods of Slaughter Act. This number is in addition to the Humane Handling Enforcement Coordinator and District Veterinary Medical Specialist positions.

*Report language request:* FSIS shall ensure that all inspection personnel conducting humane handling verification procedures receive robust initial training and periodic refresher training on the FSIS humane handling and slaughter regulations and directives. This includes handling of non-ambulatory disabled animals, as well as proper use of the Humane Activities Tracking System to ensure humane handling of animals as they arrive and are offloaded and handled in ante-mortem holding pens, suspect pens, chutes, stunning areas, and on the processing line. The Committee directs the agency to resume preparation and online publication of the Humane Handling Quarterly Reports, to include: (1) the number of humane handling verification procedures performed, (2) the number of administrative enforcement actions taken, (3) time spent on Humane Handling Activities Tracking System activities, and (4) comparisons of these measurements by plant size and FSIS district.

#### FOOD SAFETY AND INSPECTION SERVICE—POULTRY SLAUGHTER GOOD COMMERCIAL PRACTICES

USDA has documented a variety of serious humane handling problems at poultry slaughter plants, including birds drowning in scalding tanks, disposal of live birds under piles of dead birds, birds dying due to suffocation and/or prolonged exposure to extreme weather, and mechanical problems resulting in injury and death. In 2005, USDA issued a notice to slaughter establishments that acknowledged the link between inhumane treatment of birds and adulterated poultry products, and referenced industry "Good Commercial Practices" for bird handling. Subsequently, USDA inspectors began conducting verification of these requirements for live bird handling in every federally inspected plant. However, inspector oversight appears to vary widely at poultry slaughter establishments. According to USDA enforcement records, between 2017 and 2019, more than one-third of federally inspected poultry plants were not issued enforcement records documenting GCP compliance.

*Report language request:* The Committee recognizes that handling of birds at slaughter according to Good Commercial Practices reduces the occurrence of adulterated poultry products in the marketplace, as well as the suffering of birds at slaughter. The committee also is cognizant that current oversight of bird handling is inconsistent at USDA-inspected slaughter plants, with no enforcement records issued by USDA inspection personnel documenting compliance with GCP at more than one-third of inspected plants during the past 3 years. Therefore, the Committee directs FSIS to track the number of inspector hours spent on GCP verification activities using its existing Humane Activities Tracking System or other appropriate method.

#### FARM SERVICE AGENCY—LIVESTOCK INDEMNITY PROGRAM

The Livestock Indemnity Program (LIP) compensates producers for farm animal injuries and deaths caused by adverse weather and natural disasters. The number of farm animals that die from adverse weather events is immense—as is the amount of Federal funds disbursed under LIP (between 2008 and 2016, LIP payments totaled \$313 million according to USDA). However, producers are not required to demonstrate that they provide animals with basic protections from extreme weather or that they have disaster plans in place before receiving taxpayer dollars under LIP. Disaster preparedness plans are widely supported by agriculture industry groups and are recommended by both the American Veterinary Medical Association and the USDA. To save taxpayer dollars and mitigate losses, USDA should require that producers have disaster preparedness plans for the issuance of payments under LIP.

*Bill language request:* Livestock Indemnity Payments for Adverse Weather. For expenses involved in making indemnity payments to eligible livestock owners or contract growers, such sums as may be necessary: Provided, That the Secretary shall ensure that no funds are used for issuing payments under the program, unless the applicant offers 1) a disaster preparedness plan that is specific to the species of animal(s) and region of the country, and 2) a description of how the plan was executed to prevent livestock injuries or deaths.

*Report language request:* Disaster Preparedness.—The Committee recognizes that millions of farmed animals die each year due to the effects of adverse weather, and extreme weather events are occurring at increased frequency, putting additional livestock at risk of injury and death. The committee also is cognizant that veterinary and agricultural trade associations recognize the importance of disaster planning in preventing the extent of livestock deaths. Therefore, the Committee encourages USDA to require written disaster preparedness plans for the issuance of payments under the Livestock Indemnity Program.

#### FOOD SAFETY AND INSPECTION SERVICE—HORSE SLAUGHTER FACILITY INSPECTIONS

Horse slaughter does not occur in the United States due to the inclusion of annual appropriations language blocking the use of Federal funds to inspect horse slaughter facilities, thereby preventing these facilities from legally operating on U.S. soil. Before horse slaughter facilities closed in the United States, USDA itself documented horrific incidents of cruelty. Horses—which serve as companion, working, and performance animals—have a strong fight-or-flight reflex and instinctively thrash their long necks when panicked. Rendering horses unconscious prior to slaughter can be extremely difficult as stunning them often requires repeated blows to the head. In addition to well-documented animal abuse within the predatory horse slaughter industry, the consumption of horse meat presents a significant food safety concern. Horses are not raised for human consumption in the United States and are regularly administered a wide range of drugs that are expressly prohibited by the Food and Drug Administration for use in food animals.

*Bill language request:* None of the funds made available by this Act may be used to pay the salaries or expenses of personnel (1) to inspect horses under section 3 of the Federal Meat Inspection Act (21 U.S.C 603); (2) to inspect horses under section 903 of the Federal Agriculture Improvement and Reform Act of 1996 (7 U.S.C. 1901 note; Public Law 104–127); or (3) to implement or enforce section 352.19 of title 9, Code of Federal Regulations (or a successor regulation).

#### ANIMAL AND PLANT HEALTH INSPECTION SERVICE—HORSE PROTECTION ACT ENFORCEMENT

We appreciate Congress providing \$2 million in fiscal year 2021 for USDA to improve enforcement of the Horse Protection Act (HPA) and combat the abusive practices associated with soring. A 2010 Office of Inspector report outlined serious conflicts of interest with the industry self-monitoring system by Horse Industry Organizations (HIOs) on which USDA still relies. Indeed, earlier this year, the National Academies of Sciences, Engineering, and Medicine issued a report that echoed OIG's findings and called for an end to the industry self-policing system. In January 2017, USDA announced final regulations to eliminate industry self-policing and institute other reforms to end soring. The HPA rule has received widespread public support, including from the veterinary community, and hundreds of lawmakers have also written in support of the rule. Unfortunately, these regulations were frozen by the prior administration. Again, we appreciate Congress's inclusion in fiscal year 2021 of language directing reinstatement of this long overdue rule and reminding USDA that it holds primary responsibility for enforcing the HPA.

*Bill language request:* The Secretary shall reinstate and publish the final rule, "Horse Protection; Licensing of Designated Qualified Persons and Other Amendments" [Docket No. APHIS–2011–0009], as it was finalized and displayed in advance public notice in the Federal Register on January 19, 2017, with effective dates adjusted to reflect the delay in implementation.

*Funding Request:* \$3 million for Horse Protection Act Enforcement

*Report language request:* The Committee provides \$3,000,000 for enforcement of the Horse Protection Act of 1970, as amended (15 U.S.C. 1831), and reminds the Secretary that Congress granted the agency primary responsibility to enforce this law.

[This statement was submitted by Dena Jones, Director, Farm Animal Program and Joanna Grossman, PhD, Equine Program Manager and Senior Advisor.]

PREPARED STATEMENT OF CENTRAL ARIZONA WATER CONSERVATION DISTRICT  
(CAWCD)

On behalf of the Central Arizona Water Conservation District (CAWCD), I am writing to ask that you include \$12.4 million in the U.S. Department of Agriculture's Environmental Quality Incentive Program Financial Assistance (EQIP FA) for the Colorado River Basin Salinity Control Program in the Fiscal Year 2022 Appropriation bill. The salinity control funding under EQIP FA will help protect the water quality of the Colorado River that is used by approximately 40 million people for municipal and industrial purposes and used to irrigate approximately 5.5 million acres in the United States.

The CAWCD manages the Central Arizona Project (CAP), a multi-purpose water resource development and management project that delivers Colorado River water into central and southern Arizona. The largest supplier of renewable water in Arizona, CAP delivers an average of more than 1.5 million acre-feet of Arizona's 2.8 million acre-foot Colorado River entitlement each year to municipal and industrial users, agricultural irrigation districts, and Indian communities.

Our goal at CAWCD is to provide an affordable, reliable and sustainable supply of Colorado River water to a service area that includes more than 80 percent of Arizona's population.

These renewable water supplies are critical to Arizona's economy and to the economies of Native American communities throughout the state. Nearly 90% of economic activity in the State of Arizona occurs within CAP's service area. The canal provides an economic benefit of \$100 billion annually, accounting for one-third of the entire Arizona gross state product. CAP also helps the State of Arizona meet its water management and regulatory objectives of reducing groundwater use and ensuring availability of groundwater as a supplemental water supply during future droughts. Achieving and maintaining these water management objectives is critical to the long-term sustainability of a state as arid as Arizona.

NEGATIVE IMPACTS OF CONCENTRATED SALTS

Natural and man-induced salt loading to the Colorado River creates environmental and economic damages. EPA has identified that more than 60 percent of the salt load of the Colorado River comes from natural sources. With the significant federal ownership in the Basin, most of this comes from federally administered lands. Human activity, principally irrigation, adds to the salt load of the Colorado River. Further, natural and human activities concentrate the dissolved salts in the River.

The U.S. Bureau of Reclamation (Reclamation) has estimated quantifiable damages at about \$354 million per year. Modeling by Reclamation indicates that damages will rise to approximately \$671 million per year by 2040 without continuation of the Program. These damages include:

- A reduction in the yield of salt sensitive crops and increased water use to meet the leaching requirements in the agricultural sector;
- Increased use of imported water and cost of desalination and brine disposal for recycling water in the municipal sector;
- An increase in the use of water and the cost of water treatment, and an increase in sewer fees in the industrial sector;
- An increase in the cost of cooling operations and the cost of water softening, and a decrease in equipment service life in the commercial sector;
- A reduction in the useful life of galvanized water pipe systems, water heaters, faucets, garbage disposals, clothes washers, and dishwashers, and increased use of bottled water and water softeners in the household sector;
- A decrease in the life of treatment facilities and pipelines in the utility sector, and
- Difficulty in meeting wastewater discharge requirements to comply with National Pollutant Discharge Elimination System permit terms and conditions, and an increase in desalination and brine disposal costs due to accumulation of salts in groundwater basins.

The threat of salinity continues to be a concern in both the United States and Mexico. In 2012, a five-year agreement, known as Minute 319, was signed between the U.S. and Mexico to guide future management of the Colorado River. Among the key issues addressed in Minute 319 included an agreement to maintain salinity standards. The United States, Mexico, and key water users, including CAWCD, worked since 2015 to develop a successor agreement, Minute 323, which was finalized on September 27, 2017. Minute 323 continues collaboration and cooperation among the United States and Mexico with respect to salinity control in the Colorado

River system. The CAWCD and other key water providers are committed to meeting these goals.

Funding for salinity control will prevent the water quality of the river from further degradation and significant increases in economic damages to municipal, industrial and irrigation users.

#### CONCLUSION

Implementation of salinity control practices through EQIP has proven to be a very cost-effective method of controlling the salinity in the Colorado River. CAWCD urges the subcommittee to include \$12.4 million from the USDA's Environmental Quality Incentive Program Financial Assistance for the Colorado River Basin Salinity Control Program in the Fiscal Year 2022 Appropriation bill. Additionally, there is needed sufficient Technical Assistance dollars to adequately implement the program. The funding level will prevent the further degradation of water quality of the Colorado River, and significantly increased damages from the higher salt concentrations to municipal, industrial and irrigation users.

[This statement was submitted by Theodore C. Cooke, General Manager, Central Arizona Water Conservation District.]

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#### PREPARED STATEMENT OF COLORADO RIVER BASIN SALINITY CONTROL FORUM

Waters from the Colorado River are used by approximately 40 million people for municipal and industrial purposes and used to irrigate approximately 5.5 million acres in the United States. Natural and man-induced salt loading to the Colorado River creates environmental and economic damages. In 2020 the Bureau of Reclamation (Reclamation) estimated the quantifiable damages to Lower Basin water users due to elevated salinity levels at about \$354 million per year. Congress authorized the Colorado River Basin Salinity Control Program (Program) through the Colorado River Basin Salinity Control Act (Act)(Public Law 93-320) in 1974 to offset increased damages caused by continued development and use of the waters of the Colorado River. Modeling by Reclamation indicates that the quantifiable damages will rise to approximately \$671 million annually by the year 2040 without continuation of the Program. Congress has directed the Secretary of Agriculture to participate in the implementation of the Program. The USDA portion of the Program, as authorized by Congress and funded and administered by the Natural Resources Conservation Service (NRCS) under the Environmental Quality Incentives Program (EQIP), is an essential part of the overall effort. A funding level of \$12.4 M in EQIP Financial Assistance (FA) in 2022 is in keeping with the Program's Plan of Implementation and is required to prevent further degradation of the quality of the Colorado River and commensurate increases in downstream economic damages to water users.

In enacting the Colorado River Basin Salinity Control Act in 1974, Congress directed that the Colorado River Basin Salinity Control Program should be implemented in a cost-effective way. The Program is currently funded under EQIP through NRCS and under Reclamation's Basinwide Program. Recognizing that agricultural on-farm improvements are some of the most cost-effective strategies, Congress authorized the United States Department of Agriculture (USDA) to establish a voluntary, cooperative program with irrigators to improve on-farm water management and reduce watershed erosion through amendment of the Act in 1984 (Public Law 98-569). With the enactment of the Federal Agriculture Improvement and Reform Act of 1996 (FAIRA) (Public Law 104-127), Congress directed that the Program should continue to be implemented as part of the then newly created EQIP. Since the enactment of the Farm Security and Rural Investment Act (FSRIA) in 2002, and more recent EQIP funding levels, there have been, for the first time in a number of years, opportunities to adequately fund the Program within EQIP. In 2008, Congress passed the Food, Conservation and Energy Act (FCEA) (Public Law 110-234). The FCEA amended the Act to address the cost sharing requirement and established the Basin States Program (BSP). The BSP provides the mechanism for expenditure of 30 percent of the total amount spent each year by the combined EQIP and BSP effort. With the passage of the Agricultural Improvement Act of 2018 (Public Law 115-334), the authority for USDA to implement salinity control activities in the Colorado River Basin was continued.

The Program, as set forth in the Act, is to benefit Lower Basin water users hundreds of miles downstream from the sources of salinity in the Upper Basin. The salinity of Colorado River waters increases from about 50 mg/L at its headwaters to more than 700 mg/L in the Lower Basin. There are very significant economic dam-

ages caused downstream by high salt levels in the water. EQIP is used to improve upstream irrigation efficiencies, which in turn reduce leaching of salts to the Colorado River. There are also local benefits in the Upper Colorado River Basin from the Program in the form of soil and environmental benefits, improved agricultural production, improved water efficiencies, lower fertilizer and labor costs, and water distribution and infrastructure improvements. Also important is the collaboration that EQIP fosters between farmers and ranchers, states, and the federal government in complying with EPA mandated water quality standards and the attainment of multi-benefit economic and sustainability goals. Local producers submit cost-effective applications under EQIP in Colorado, Utah and Wyoming and offer to cost share in the acquisition of new irrigation equipment. The mix of funding under EQIP, cost share from the Basin States and efforts and cost share brought forward by local producers has created a most remarkable and successful partnership.

After longstanding urgings from the states and directives from Congress, NRCS recognized that this Program is different from small watershed enhancement efforts common to EQIP. In the case of the Colorado River salinity control effort, the watershed to be considered stretches more than 1,400 miles from the Colorado River's headwaters in the Rocky Mountains to the Colorado River's terminus in the Gulf of California in Mexico. Each year the NRCS State Conservationists for Colorado, Utah and Wyoming prepare a three-year funding plan for the salinity efforts under EQIP. The Colorado River Basin Salinity Control Forum (Forum) supports this funding plan which recognizes the need for \$12.4 M in EQIP FA allocations in FY 2022. Additionally, there is needed sufficient EQIP Technical Assistance (TA) dollars to adequately implement the program. State and local cost sharing is triggered by the federal appropriation. The Forum appreciates the efforts of NRCS leadership and the support of this Subcommittee in implementing the Program.

Concentration of salt in the Colorado River causes approximately \$354 million annually in quantified damages and significantly more in unquantified damages in the United States and results in poor water quality for United States users. Damages, by water usage sector, include the following:

- a reduction in the ability to reclaim and reuse water for beneficial uses, including drinking water and irrigation water supplies, due to high salinities in the water delivered to water treatment and reclamation facilities,
- a reduction in the yield of salt sensitive crops, increased water use to meet leaching requirements and additional actions necessary to comply with the Clean Water Act within the agricultural sector,
- increased use of imported water and cost of desalination and brine disposal for recycling water in the municipal sector,
- a reduction in the useful life of galvanized water pipe systems, water heaters, faucets, garbage disposals, clothes washers and dishwashers, and increased use of bottled water and water softeners in the household sector,
- an increase in the cost of cooling operations and the cost of water softening, and a decrease in equipment service life in the commercial sector,
- an increase in the use of water and the cost of water treatment, and a corresponding increase in sewer fees in the industrial sector,
- a decrease in the lifespan of treatment facilities and pipelines in the utility sector, and
- difficulty in meeting wastewater discharge requirements to comply with National Pollutant Discharge Elimination System permit terms and conditions, and an increase in desalination and brine disposal costs necessary to minimize accumulation of salts in groundwater basins.

The Colorado River Basin Salinity Control Forum (Forum) is composed of gubernatorial appointees from Arizona, California, Colorado, Nevada, New Mexico, Utah and Wyoming. The Forum is charged with reviewing the Colorado River's water quality standards for salinity every three years to facilitate compliance with Section 303(c) of the Clean Water Act (Public Law 92-500). In so doing, it adopts a Plan of Implementation consistent with these standards. The level of appropriation requested in this testimony is in keeping with the adopted Plan of Implementation. If adequate funds are not appropriated, significant damages from higher salinity concentrations in the water will be more widespread in the United States and Mexico.

Over the years, NRCS personnel have developed a productive working relationship with farmers within the Colorado River Basin. Maintaining salinity control achieved by implementation of past practices requires continuing education and technical assistance from NRCS personnel. Additionally, technical assistance is re-

quired for planning, design and implementation of future projects. Lastly, the continued funding for the monitoring and evaluation of existing projects is essential to maintaining the salinity reduction already achieved.

In summary, implementation of salinity control practices through EQIP has proven to be a very cost-effective method of controlling the salinity of the Colorado River and is an essential component to the overall Colorado River Basin Salinity Control Program. Continuation of EQIP with adequate funding levels dedicated to the Program will prevent the water quality of the Colorado River from further degradation and significant increases in economic damages to municipal, industrial and irrigation users. A modest investment in source control pays huge dividends in improved water quality for nearly 40 million Americans.

[This statement was submitted by Don A. Barnett, Executive Director, Colorado River Basin Salinity Control Forum.]

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#### PREPARED STATEMENT OF COLORADO RIVER BASIN SALINITY CONTROL PROGRAM

This Statement is submitted in support of appropriations for the U.S. Department of Agriculture's Environmental Quality Incentives Program (EQIP) and the Colorado River Basin Salinity Control Program (Program). The Program is funded through EQIP, the U.S. Bureau of Reclamation's Basinwide Program, and cost-sharing provided by the Basin States. I request that \$12.4 million in EQIP funds be designated for the Colorado River Basin Salinity Control Program in FY 2022. I also request that adequate funds be appropriated for technical assistance and education activities directed to Program participants.

Congress authorized the Colorado River Basin Salinity Control Program in the Colorado River Basin Salinity Control Act of 1974. Congress amended the Act in 1984 to give new responsibilities to the U.S. Department of Agriculture (USDA). While retaining the Department of the Interior as the lead coordinator for the Program, the amended Act recognized the importance of USDA efforts in meeting the objectives of the Program. Many of the most cost-effective salinity control projects to date have occurred since implementation of the USDA's authorization for the Program.

With the Federal Agricultural Improvement and Reform Act of 1996 (FAIRA), Congress directed that the Program be implemented as a component of EQIP. However, until 2004, the Program was not funded at an adequate level to protect the Basin State-adopted and Environmental Protection Agency approved water quality standards for salinity in the Colorado River. Appropriations for EQIP prior to 2004 were insufficient to adequately control salinity impacts from water delivered to the downstream states and Mexico.

EQIP subsumed the salinity control program without giving adequate recognition to the responsibilities of the USDA to implement salinity control measures per Section 202 (c) of the Colorado River Basin Salinity Control Act. The EQIP evaluation and project ranking criteria targeted small watershed improvements and did not recognize that water users hundreds of miles downstream are significant beneficiaries of the salinity control program. Proposals for EQIP funding were ranked in the states of Utah, Wyoming and Colorado under the direction of the respective State Conservationists without consideration of those downstream, particularly out-of-state, benefits.

Following recommendations of the Basin States to address the funding problem, the USDA's Natural Resources Conservation Service (NRCS) designated the Colorado River Basin an "area of special interest" and earmarked funds for the Program. The NRCS concluded that the salinity control program is different from the small watershed approach of EQIP. The watershed for the Program stretches more than 1400 miles from the headwaters of the river through the salt-laden soils of the entire basin to the river's termination at the Gulf of California in Mexico. NRCS is to be commended for its efforts to comply with the USDA's responsibilities under the Colorado River Basin Salinity Control Act, as amended.

With the enactment of the Farm Security and Rural Investment Act in 2002, an opportunity to adequately fund the salinity control program now exists. The NRCS State Conservationists for Utah, Wyoming, and Colorado now prepare a three-year funding plan for the salinity efforts under EQIP. I support this plan, including the request for \$12.4 million annually. State and local cost-sharing will be triggered by and indexed to the federal appropriation. The Agricultural Act of 2014 continued the authorities for the USDA's salinity control activities in the Colorado River Basin.

USDA salinity control projects have proven to be a cost-effective component of the salinity control program. The Basin states provide cost-sharing for the salinity con-

trol efforts. The agricultural producers in the Upper Basin are willing to cost-share their portion and are awaiting funding for their applications to be considered.

Bureau of Reclamation studies show that quantified damages from Colorado River salinity to United States water users are about \$354,000,000 per year, with these damages rising to \$671,000,000 per year by 2040 if the Program was discontinued. Continued funding of USDA salinity control projects is important to protect the quality of Colorado River Basin water delivered to the Lower Basin States and Mexico. Also, irrigated agriculture in the Upper Basin realizes local benefits of improved irrigation practices.

I urge the Congress to designate \$12.4 million in EQIP funds for the Colorado River Basin Salinity Control Program in FY 2022. Also, I fully support testimony by the Colorado River Basin Salinity Control Forum's Executive Director, Don Barnett, in request of this appropriation.

[This statement was submitted by Rolf Schmidt-Petersen, Director, New Mexico Interstate Stream Commission.]

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#### PREPARED STATEMENT OF COLORADO RIVER BASIN SALINITY CONTROL PROGRAM

The Metropolitan Water District of Southern California (Metropolitan) encourages the Subcommittee's support for fiscal year 2022 federal funding of \$12.4 million in financial assistance from the U.S. Department of Agriculture's (USDA) Environmental Quality Incentives Program (EQIP) for the Colorado River Basin Salinity Control Program (Salinity Control Program) to prevent further degradation of Colorado River water quality and increased economic damages.

The salt concentration in the Colorado River causes an estimated \$354 million in quantifiable damages to water users each year. While this figure is significant, had it not been for the efforts of the Salinity Control Program, damages would be much higher. Salinity Control Program actions have reduced the salinity of Colorado River water at key locations over 90 milligrams per liter (mg/L) from what they would have been without the actions. Modeling by the U.S. Bureau of Reclamation (Reclamation) indicates that quantifiable damages will rise to approximately \$671 million per year by the year 2040 without continuation of the program.

Metropolitan is the regional water supplier for most of urban Southern California, providing supplemental water to retail agencies that serve approximately 19 million people. Water imported via the Colorado River Aqueduct has the highest level of salinity of all of Metropolitan's sources of supply, averaging around 630 mg/L since 1976. This salinity level causes economic damages to all sectors. For example, high salinity has the following impacts:

- It reduces the useful life of water heaters, faucets, garbage disposals, clothes washers, and dishwashers, and increases use of water softeners in the household sector;
- It increases the cost of cooling operations, the need for and cost of water softening, and decreases equipment service life in the commercial sector;
- It increases water use, the cost of water treatment, and sewer fees in the industrial sector;
- It decreases the life of treatment facilities and pipelines in the utility sector;
- It increases the cost of desalination and brine disposal for recycled water in the municipal sector;
- It reduces the yield of salt sensitive crops and increases water use for leaching in the agricultural sector;
- It increases desalination and brine disposal costs due to accumulation of salts in groundwater basins, and reduces opportunities for water recycling due to groundwater quality deterioration;
- It reduces the ability to replenish groundwater in basins with relatively low salinity standards;
- It reduces the ability to reclaim and reuse water due to high salinities in the water delivered to water treatment and reclamation facilities; and
- It makes it more difficult to meet wastewater discharge requirements to comply with National Pollutant Discharge Elimination System permit terms and conditions.

There has been concern over salinity levels in the Colorado River for many years. To address the concern, the International Boundary and Water Commission signed Minute No. 242, Permanent and Definitive Solution to the International Problem of

the Salinity of the Colorado River in 1973, and the President signed the Colorado River Basin Salinity Control Act of 1974 (Act) into law. Title I of the Act deals with the U.S. commitment to the quality of waters being delivered to Mexico. Title II of the Act deals with improving the quality of the water delivered to users in the United States. This testimony deals specifically with Title II efforts. To further foster interstate cooperation and coordinate the Colorado River Basin states' efforts on salinity control, the seven Basin states formed the Colorado River Basin Salinity Control Forum.

The Forum is charged with reviewing the Colorado River's water quality standards for salinity every three years. In so doing, it adopts a Plan of Implementation consistent with these standards. The level of appropriation requested in this testimony is in keeping with the adopted Plan of Implementation, which is to be implemented by Reclamation, the Natural Resources Conservation Service (NRCS), and the U.S. Bureau of Land Management (BLM).

In implementing the Act, Congress recognized that most of the salt load in the Colorado River originates from federally owned lands and that the majority of land within the Colorado River Basin is federally owned and administered. The salts in the Colorado River system are naturally-occurring and pervasive, mostly resulting from saline sediments in the Basin that were deposited in prehistoric marine environments. They are easily eroded, dissolved, and transported into the river system, and enter the River through both natural and anthropogenic processes.

The Salinity Control Program reduces salinity by preventing salts from dissolving and mixing with the River's flow. Irrigation improvements (sprinklers, gated pipe, lined ditches) and vegetation management reduce the amount of salt transported to the Colorado River. Point sources such as saline springs are also controlled.

The Salinity Control Program benefits the Lower Basin water users, hundreds of miles downstream from salt sources in the Upper Basin, through reduced salinity of Colorado River water. The Salinity Control Program, as set forth in the Act, also benefits the Upper Colorado River Basin water users through more efficient water management and increased crop production, and benefits local economies through construction contracts and environmental enhancements.

In enacting the Act, Congress directed that the Salinity Control Program be implemented in the most cost-effective way. The Program is currently funded under EQIP through NRCS and under Reclamation's Basinwide Program. With the passage of the Agricultural Act of 2014, USDA's authority for implementing salinity control activities in the Colorado River Basin was continued. Each year the NRCS State Conservationists for Colorado, Utah and Wyoming prepare a three-year funding plan for the salinity control efforts under EQIP.

EQIP is used to improve on-farm irrigation efficiencies which in turn reduce leaching of salts to the Colorado River. Salinity control projects are selected in a competitive process to ensure cost-effectiveness. Local producers submit applications under EQIP in Colorado, Utah and Wyoming and offer to cost share in the acquisition of new irrigation equipment. Appropriated federal dollars will be augmented by state cost sharing of 30 percent with an additional 25 percent provided by the agricultural producers with whom the U.S. Department of Agriculture contracts for implementation of salinity control measures. The mix of funding under EQIP, cost share from the Basin States, and efforts and cost share brought forward by local producers has created a remarkable and successful partnership.

Over years, the Salinity Control Program has proven to be a cost-effective approach to managing salinity in the Colorado River. Continued federal funding of this important program is essential. Metropolitan urges the Subcommittee to support funding for fiscal year 2020 of \$12.4 million from the U.S. Department of Agriculture's Environmental Quality Incentives Program for the Colorado River Basin Salinity Control Program. Additionally, there is a need for sufficient technical assistance funding to adequately implement the Salinity Control Program.

[This statement was submitted by Jeffrey Kightlinger, General Manager, The Metropolitan Water District of Southern California.]

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PREPARED STATEMENT OF COLORADO RIVER BOARD OF CALIFORNIA

This testimony is in support of Fiscal Year 2022 funding for the Department of Agriculture (USDA) associated with those activities that assist in the implementation of Title II of the Colorado River Basin Salinity Control Act of 1974 (Public Law 93-320), as amended. This long-standing and cost-effective salinity control program in the Colorado River Basin is being carried out pursuant to the Colorado River Basin Salinity Control Act and the Clean Water Act (Public Law 92-500). Congress authorized the Colorado River Basin Salinity Control Program (Program) in 1974

to offset increased damages caused by continued development and use of the waters of the Colorado River. The USDA portion of the Program, as authorized by Congress and funded and administered by the Natural Resources Conservation Service (NRCS) under the Environmental Quality Incentives Program (EQIP), is an essential part of the overall effort. A funding level of at least \$12.4 million in EQIP Financial Assistance (FA) annually is required to prevent further degradation of the quality of the Colorado River and increased downstream environmental and economic damages.

The Colorado River Board of California is the state agency charged with protecting California's interests and rights in the water and power resources of the Colorado River system. In this capacity, California participates along with the other six Colorado River Basin states in the Colorado River Basin Salinity Control Forum (Forum), the interstate organization responsible for coordinating the Basin States' salinity control efforts. In close cooperation with the U. S. Environmental Protection Agency (EPA) and pursuant to requirements of the Clean Water Act, the Forum is charged with reviewing the Colorado River's water quality standards every three years. The Forum adopts a Plan of Implementation consistent with these water quality standards. The level of appropriation being supported in this testimony is consistent with the Forum's 2020 Plan of Implementation. The Forum's 2020 Plan of Implementation can be found on this website:

<https://coloradoriversalinity.org/docs/2020%20REVIEW%20-20Final%20w%20appendices.pdf>.

If adequate funds are not appropriated, significant damages associated with increasing salinity concentrations of Colorado River water would become more widespread in the United States and Mexico.

The Program benefits both the Upper Basin water users through more efficient water management and Lower Basin water users through reduced salinity concentration of Colorado River water. The salinity of Colorado River waters increases from about 50 mg/L at its headwaters to more than 700 mg/L in the Lower Basin. There are very significant economic damages caused downstream by high salt levels in the water. There are also local benefits in the Upper Colorado River Basin from the Program in the form of soil and environmental benefits, improved agricultural production, improved water efficiencies, lower fertilizer and labor costs, and water distribution and infrastructure improvements. Local producers submit cost-effective applications under EQIP in Colorado, Utah and Wyoming and offer to cost-share in the acquisition of new irrigation equipment. The mix of funding under EQIP, cost-share from the Basin States and efforts and cost-share brought forward by local producers has created a most remarkable and successful partnership.

At the urging of the states and directives from Congress, NRCS recognized that this Program is different than small watershed enhancement efforts common to EQIP. In the case of Colorado River salinity control efforts, the watershed to be considered stretches more than 1,400 miles from the Colorado River's headwater in the Rocky Mountains to the Colorado River's terminus in the Gulf of California in Mexico. Each year the NRCS State Conservationists in Colorado, Utah and Wyoming prepare a three-year funding plan for the salinity control efforts under EQIP. The Colorado River Board of California supports this funding plan which recognizes the need for \$12.4 million in EQIP Financial Assistance (FA) allocations in FY 2022. Additionally, there is still a need for sufficient Technical Assistance (TA) dollars to adequately implement the Program.

It has been over forty-five years since the passage of the Colorado River Basin Salinity Control Act and much has been learned about the impact of salts in the Colorado River system. Currently, the salinity concentration of Colorado River water causes about \$354 million in quantifiable damages in the United States annually. Economic and hydrologic modeling by Reclamation indicates that the quantifiable damages could rise to nearly \$671 million by the year 2040 without the continuation of the Program. For example, damages can be incurred related to the following activities:

- A reduction in the ability and increased costs to re-claim and reuse water due to high salinities in the water delivered to water treatment and reclamation facilities;
- A reduction in the yield of salt sensitive crops and increased water use to meet the leaching requirements in the agricultural sector;
- Increases in the volumes of imported water required;
- Increased costs of desalination and brine disposal for recycling water in the municipal and industrial sectors;

- A reduction in the useful life of galvanized water pipe systems, water heaters, faucets, garbage disposals, clothes washers, and dishwashers, and increased use of bottled water and water softeners in the household sector;
- An increase in the cost of cooling operations and the cost of water softening, and a decrease in equipment service life in the commercial sectors;
- An increase in the use of water and the cost of water treatment, and an increase in sewer fees in the industrial sectors;
- A decrease in the life of treatment facilities and pipelines in the utility sectors;
- Difficulty in meeting wastewater discharge requirements to comply with National Pollutant Discharge Elimination System permit terms and conditions; and
- An increase in desalination and brine disposal costs due to accumulation of salts in groundwater basins.

The Colorado River is, and will continue to be, a major and vital water resource to the nearly 20 million residents and 860,000 acres of irrigated agriculture within southern California, including municipal, industrial, and agricultural water users in Imperial, Los Angeles, Orange, Riverside, San Bernardino, San Diego, and Ventura Counties. The protection and improvement of Colorado River water quality through the continuation and expansion of an effective salinity control program avoids additional economic and environmental damages to Mexico, California and the other states that rely on Colorado River water resources.

Thank you for your consideration of this testimony.

[This statement was submitted by Christopher S. Harris, Executive Director, Colorado River Board of California.]

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#### PREPARED STATEMENT OF EDESIA NUTRITION

Edesia appreciates the opportunity to submit testimony to the U.S. Senate Committee on Appropriations Subcommittee on Agriculture, Rural Development, Food and Drug Administration, and Related Agencies. Since 2010, Edesia has worked in partnership with the U.S. government to promote life-saving interventions for beneficiaries and greater global stability and national security for Americans by supplying evidence-based nutritional Ready-to-Use Foods (RUTFs and RUSFs) to vulnerable children worldwide. We request that the Subcommittee fund Title II Food for Peace Grants (Food for Peace) at a level of \$2 billion, and the McGovern-Dole Food for Education and Child Nutrition Program (McGovern-Dole) at a level of \$265 million. Food for Peace is administered by the U.S. Agency for International Development (USAID). McGovern-Dole is administered by the U.S. Department of Agriculture (USDA). Funds for these programs support the critical work of the private and non-profit sector alike to further America's mission of peace and security abroad. As the United States faces unprecedented challenges brought on by the Coronavirus pandemic, including food supply chain and market disruption, it is imperative that these accounts are fully supported by Congress to help the most vulnerable populations in the world. According to the most recent Food Security and Nutrition in the World Report, an additional 132 million people around the world are estimated to have become chronically hungry/food insecure as a result of the COVID-19 (a doubling of pre-pandemic figures).

While there is more than enough food produced in the world to feed everyone, there are still about 690 million people who go to bed hungry every night. Smallholder farmers, herders, and fishermen produce about 70 percent of the global food supply, but they are the most vulnerable to food insecurity. Of the most in need, there are an estimated 14 million children under the age of five who suffer from severe acute malnutrition, also known as severe wasting. Unfortunately, only 25 percent of severely malnourished children have access to lifesaving treatment (RUTF). Continued financial support of food aid and humanitarian assistance leadership from the United States is needed now more than ever.

While serving those in need globally, the current food assistance programs simultaneously provide opportunities for Edesia (in Rhode Island) as well as our suppliers from other states (including Iowa, Wisconsin, New York, Georgia, North Carolina). Edesia is a Rhode Island-based non-profit manufacturer of high quality, peanut-based ready-to-use therapeutic and supplementary foods (RUTF and RUSF) that are used to treat malnutrition in children around the globe. Through innovative manufacturing, we have reached over 14 million children in 55 countries with our products over the last decade. This includes over 50,000 metric tons of products made from U.S. agricultural goods for programs supported by the USAID and the USDA—

equivalent to providing over 6 million acutely malnourished children with lifesaving treatments. We are proud of the part we play in helping to save the lives of children around the world—children who would not be reached without the generosity of the American people and the hard work of USAID, USDA, and the United States' Congress. Saving these lives also helps to build a safer world—healthy children have the ability to grow and reach their full potential.

As an American manufacturing company, we recognize the important part that U.S.-manufactured, in-kind food assistance plays around the world. Our partnerships with the U.S. government not only allow us to reach children in need, but also allow us to create economic growth at home. Since our opening in 2010, we have gone from a company of 20, to today having a team of over 100. In 2016, we expanded into a new 83,000 square foot facility that can produce over 20,000 MT of nutrient-dense food aid products per year, made from high-quality, U.S.-sourced ingredients (e.g., peanuts, soy, dairy, sugar) that support U.S. farmers, U.S. transportation companies and the U.S. economy. Annually, we purchase over \$30 million of high-quality, U.S. sourced raw materials. Our country's lifesaving assistance abroad allows us to create opportunities here at home.

Edesia is an industry leader in innovation and has been a critical partner of the U.S. government to ensure that United States remains a leader in fighting world hunger. Our work supports the second UN Sustainable Development Goal (SDG) of "Zero Hunger" with a target of ending all forms of malnutrition by 2030. An emphasis on nutrition security and aid that is fit-for-purpose, such as specialty nutritional products for treating and preventing malnutrition, will be increasingly important in order to reach the SDG goals for 2030.

Thank you for providing Edesia the opportunity to submit testimony. As funding for international food aid programs are reviewed by your Subcommittee, we hope you will use us as a resource; we are highly experienced in the area of specialized food aid, and as a non-profit business, we understand the economics while also remaining committed to the goals. Please do not hesitate to contact us if the Committee has any questions or would like further information.

[This statement was submitted by Navyn Salem, Founder & CEO, Edesia Inc., and Maria Kasparian, Executive Director.]

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PREPARED STATEMENT OF ENTOMOLOGICAL SOCIETY OF AMERICA

The Entomological Society of America (ESA) respectfully submits this statement for the official record in support of funding for agricultural research at the U.S. Department of Agriculture (USDA). ESA joins the research community and requests discretionary appropriations of at least \$1.345 billion in fiscal year (FY) 2022 for USDA's National Institute of Food and Agriculture (NIFA), including at least \$600 million for the Agriculture and Food Research Initiative (AFRI). The Society also supports a topline funding level of at least \$1.566 billion for the Agricultural Research Service (ARS) including robust funding for the ARS Crop Protection budget as well as funding to preserve valuable pest management research and invasive species programs in FY 2022. Additionally, ESA supports at least \$1.1 billion for Animal and Plant Health Inspection Service (APHIS) to carry out their mission of safeguarding domestic soil from foreign and invasive threats.

Advances in the agricultural sciences, including the field of entomology, help to address some of our most pressing societal needs related to food security and safety, as well as environmental and human health. Through improved understanding of insect pests and the development of biological approaches to pest management, entomology plays a critical role in the protection of crops from infestation and disease. In addition, entomology contributes to our knowledge of pollinator biology and the factors affecting pollinator health and populations, helping to ensure safe, reliable crop production that meets the needs of a growing world population.

As NIFA's premier competitive research program, AFRI funds a wide range of agricultural research, education, and extension projects at universities and research institutions nationwide. To maximize its limited resources, AFRI supports projects that address key societal challenges and build foundational knowledge in high-priority areas of the food and agricultural sciences, such as food safety and food security. For example, researchers funded by AFRI are currently investigating whether certain viral pathogens are capable of manipulating honey bee behavior, which may increase the spread of that virus at the expense of honey bee health and mortality. Honey bees contribute \$16 billion per year to food production in the United States

alone.<sup>1</sup> With many species of pollinators in rapid decline, research in this area is increasingly critical to maintain our agricultural economy.<sup>2</sup> In addition to directly funding research, AFRI's Education and Literacy Initiative annually supports more than 2,000 trainees that will become the next generation workforce of agricultural and food scientists. ESA appreciates the Subcommittee's efforts to increase the AFRI budget since the program's establishment, and ESA requests at least \$600 million for AFRI in FY 2022.

In addition to AFRI, other NIFA grants support programs to study and implement evidence-based approaches to reduced-risk integrated pest management (IPM), which has implications for human health, the environment, and the economy. IPM uses science-based, environmentally conscious, comprehensive methods to take effective management action against pests, often resulting in lower costs and a more judicious use of pesticides. NIFA also supports the critical work of our extension communities, helping connect farmers, ranchers, homeowners, and others with educational resources and information to help everything from farms to urban parks flourish. ESA requests at least \$1.345 billion in fiscal year (FY) 2022 for USDA's National Institute of Food and Agriculture (NIFA).

ESA supports increased funding for research on pollinator populations. Insects that play a role in pollination play a vital role in our nation's agriculture industry; honey bees alone pollinate more than 90 crops in the U.S. and are essential for the production of an estimated one-third of all the food we eat or export. To ensure a healthy bee population, more research is needed to examine the diverse factors that endanger bee health. ESA appreciates the establishment of the Honeybee and Pollinator Research Coordinator position in the 2018 Farm Bill. However, in addition to the funding increases requested within AFRI and ARS, ESA supports USDA's coordination of multi-agency activities through the Office of the Chief Scientist to further investigate pollinator health and develop implementation plans to prevent pollinator population decline.

As USDA's intramural research agency, ARS funds research with a direct impact on our nation's agriculture enterprise, including in the areas of crop and livestock production and protection, human nutrition, food safety, and environmental stewardship. For example, ARS conducts research on ways to defend against invasive species, such as by conducting research to identify biocontrol agents which can be deployed to combat expanding populations of invasive pests like the Emerald Ash Borer (EAB), which is one of the most destructive and costliest invasive insects to ever spread across the U.S., responsible for an estimated cost of \$12.7 billion so far in damage. This past year, ARS and APHIS jointly found that wasps from eastern Russia parasitize the eggs of EAB, thus killing the beetle, and this may lead to a new biocontrol to help deal with this terrible pest that is destroying Ash trees from the East Coast across the Midwest.<sup>3</sup> Two other important programs in ARS are the Crop Protection and Crop Production programs. The ARS Crop Protection research program builds knowledge and develops approaches that are made available to crop producers, enabling better control of pest and disease outbreaks as they occur. The ARS Crop Production research program develops and approves safe and effective strategies for reducing crop loss and providing a dependable food supply. ESA supports at least \$1.566 billion for ARS and maintaining strong funding levels for the Crop Protection and Crop Production accounts.

USDA also plays a critical role in protecting domestic soils from foreign threats in the form of invasive species through APHIS. Invasive insect pests are some of the most costly and troublesome challenges faced by farmers, homeowners, and others, outcompeting native species, spreading disease, and transforming ecosystems. Increasing rates of trade, human movement, and climate change all put growing pressure on the need for increased inspections and screening. Currently only a tiny fraction of cargo coming in through ports and planes are screened. While data-driven methods for prioritizing shipment inspections based on statistical risk are improving success rates, the international capacity and cooperation for pre-border, border, and post-border inspection and response must be expanded and improved. Furthermore, remote sensing is applied to a range of problems, but it is virtually absent in insect pest management. However, it could play a significant role in increasing early detection and rapid response (EDRR) to invasive pests. APHIS would greatly benefit from a program dedicated to EDRR for emerging threats. ESA supports APHIS's mission of safeguarding the nation and requests that in addition to supporting APHIS at the level of \$1.1 billion. This would include an additional \$25 mil-

<sup>1</sup> <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3358326/>

<sup>2</sup> AFRI Competitive Grant: "Inter-strain Variation and Evolution of Resistance to Phytochemicals in the Bumblebee Trypanosome Parasite, *Crithidia bombi*."

<sup>3</sup> <https://www.sciencedirect.com/science/article/pii/S1049964418304973>

lion on top of the \$75 million authorized in the 2018 Farm Bill for a program focused on responding to emerging invasive threats via EDRR at a high level, rather than a threat-specific line item, giving APHIS the flexibility and discretion to respond as new threats emerge.

ESA, headquartered in Annapolis, Maryland, is the largest organization in the world serving the professional and scientific needs of entomologists and individuals in related disciplines. Founded in 1889, ESA is a non-partisan professional organization with nearly 7,000 members affiliated with educational institutions, health agencies, private industry, and government. Members are researchers, teachers, extension service personnel, administrators, marketing representatives, research technicians, consultants, students, pest management professionals, and hobbyists.

Thank you for the opportunity to offer the Entomological Society of America's support for USDA research programs. For more information about the Entomological Society of America, please see <http://www.entsoc.org/>

[This statement was submitted by Michelle S. Smith, BCE., President, Entomological Society of America.]

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PREPARED STATEMENT OF FEDERATION OF AMERICAN SOCIETIES FOR EXPERIMENTAL BIOLOGY

Federal investments in fundamental research have led to remarkable progress in the biological and biomedical sciences. Basic research was the groundwork for the speed—months instead of years—in the development of COVID-19 vaccines, and pre-clinical research, such as animal studies, has been essential to every step of achieving medical progress.

Despite Congress' bipartisan support for investing in science, Federal funding for research has not kept pace, posing a threat to our nation's competitiveness. We face a real threat of losing our edge in industries such as biotechnology if we do not prioritize increasing investments in science and building a diverse workforce.<sup>1</sup> The U.S. spends less on research and development (R&D) than many countries. If the U.S. is to be prepared to respond to future threats, our scientific leadership must progress. According to Science Is Us, there is the added benefit of jobs. STEM supports 69 percent of U.S. gross domestic product, touches two out of three workers, and generates \$2.3 trillion in tax revenue.<sup>2</sup>

The Federal government should commit to robust, predictable, and sustained funding increases for science agencies.

USDA AGRICULTURE AND FOOD RESEARCH INITIATIVE

Our agricultural system faces unprecedented challenges, including global food and fuel demand, water availability, and training the agricultural workforce. The U.S. Department of Agriculture funds an interdisciplinary research portfolio that brings pioneering science to address complex problems through the Agriculture and Food Research Initiative (AFRI).

AFRI funds agricultural and food sciences research at colleges, universities, and other institutions nationwide. Established by the Farm Bill in 2008, AFRI funding has resulted in numerous advancements, including new wheat cultivars and novel ways to combat invasive species.

Despite AFRI's progress—and the need for scientifically informed solutions—the program is appropriated at about 60 percent of its authorization, leaving hundreds of innovative proposals unfunded. AFRI should be funded at its full \$700 million authorization (\$265 million above fiscal year 2021), to fulfill its mission as the leading competitive grants program for agricultural sciences.

AFRI should be funded at its full \$700 million authorization (\$265 million above fiscal year 2021), to fulfill its mission as the leading competitive grants program for agricultural sciences.

FASEB fiscal year 2022 recommendation: at least \$700 million for AFRI.

[This statement was submitted by Ellen Kuo, Associate Director, Legislative Affairs, FASEB.]

<sup>1</sup>NSF Science Indicators 2018

<sup>2</sup>STEM and the American Workforce. You've heard it before: STEM jobs—... by Science is US Medium

## PREPARED STATEMENT OF GREENWICH BIOSCIENCES

On behalf of Greenwich Biosciences, a subsidiary of GW Pharmaceuticals (part of Jazz Pharmaceuticals (GW)), we respectfully submit this statement regarding the FY 2022 budget request for the Food and Drug Administration (FDA) for inclusion in the Committee's official record. GW appreciates the Committee's support for FDA's ongoing regulatory oversight of cannabis and cannabis-derived substances, including encouraging high caliber research, review of product applications, and robust inspections and enforcement. We ask for a continuation of that support so FDA's work may continue.

## ABOUT GW AND OUR CANNABIS PHARMACEUTICAL DEVELOPMENT PROGRAM

Since our founding in 1998, GW has been focused on unlocking the potential of cannabinoids as medicines to address serious medical conditions with limited treatment options. As a result of GW's long-term involvement in cannabinoid research, we have a deep understanding of the promise that patients and their families see in cannabis-based medicines to treat intractable illnesses.

GW is the first and only company to have brought a cannabis-derived pharmaceutical grade therapy through the drug review and approval process of the FDA. FDA approved GW's Epidiolex(r) (cannabidiol) oral solution in 2018 for the treatment of seizures associated with two rare diseases, Lennox-Gastaut Syndrome (LGS) and Dravet Syndrome (Dravet); in 2020, FDA also approved Epidiolex for the treatment of seizures associated with tuberous sclerosis complex (TSC).

GW's research with cannabis-derived medicines goes far beyond FDA's approval of Epidiolex. GW also developed nabiximols (branded name Sativex(r) outside the United States), a botanical drug product containing a complex mixture of THC- and CBD-rich extracts as well as other plant constituents including related cannabinoid and non-cannabinoid plant components. Nabiximols is licensed and approved for marketing in Canada, the United Kingdom, parts of the European Union, and more than 25 other countries for the treatment of spasticity due to multiple sclerosis. We are currently conducting a drug development program with nabiximols in the United States and intend to seek FDA approval for the same indication.

GW supports a comprehensive approach to the regulation of cannabis-derived products that supports development of new FDA-approved medicines from the cannabis plant while, in parallel, protecting consumers from unsafe products. To that end, we support an adequately funded FDA to accomplish these goals and Congressional oversight of these regulatory activities. We appreciate the Committee's support in the 2021 appropriations cycle and urge a continuation of those efforts.

## 2021 APPROPRIATIONS

With the passage of the 2018 Farm Bill,<sup>1</sup> "hemp" (i.e. cannabis plants and plant material with no more than 0.3% THC) and hemp derivatives are no longer controlled substances. In establishing a pathway for the cultivation of hemp, as a significant agricultural commodity, Congress also recognized the importance of preserving FDA's authority to protect consumers and patients from dangerous products and unproven therapies containing cannabis-derived substances.

Last year, the Committee examined the agency's resources to address cannabis-derived substances in FDA-regulated products and prepared a Joint Explanatory Statement in Division A for the Consolidated Appropriations Act, 2021. GW thanks the Committee for the appropriation to FDA and this Report Language. Significant work has been done; more, however, remains.

## FDA'S RECENT WORK WITH CANNABIS-DERIVED SUBSTANCES

Even with the many demands COVID-19 has placed on the agency, FDA has been able to pursue its agenda regarding cannabis and cannabis-derived substances and implement much of what the Committee directed the agency to do. Over the last year, FDA has engaged in significant policy development and enforcement,<sup>2</sup> including:

- Reopened a docket indefinitely to receive scientific data and information about products containing cannabis or cannabis-derived compounds.<sup>3</sup>

<sup>1</sup>The Agricultural Improvement Act of 2018, H.R. 2; Pub. L. 115-534.

<sup>2</sup><https://www.fda.gov/consumers/consumer-updates/what-you-need-know-and-what-were-working-find-out-about-products-containing-cannabis-or-cannabis>.

<sup>3</sup><https://www.regulations.gov/document/FDA-2019-N-1482-4341>.

- Approved Epidiolex (cannabidiol) [CBD] oral solution for the treatment of seizures associated with TSC in patients one year of age and older.<sup>4</sup>
- Conducted a workshop on policy options for CBD safety surveillance.<sup>5</sup>
- Issued numerous warning letters to companies making medical claims.<sup>6</sup>
- Issued draft guidance on the conduct of cannabis-related clinical research.<sup>7</sup>
- Updated the public on concerns about potential harm from CBD products, including potential liver injury, interactions with other drugs and male reproductive toxicity, as well as side effects such as drowsiness.<sup>8</sup>
- Conducted a scientific conference regarding sex and gender differences in use and responses to CBD and other cannabinoids.<sup>9</sup>
- Analyzed the purity and content of products in the marketplace and reported those findings to Congress, with more surveying underway.

#### CONTINUED SUPPORT FOR FDA’S WORK

Amidst the many serious demands upon FDA’s resources, the agency has still been able to work diligently to further advance science-based policies around cannabis-derived substances in regulated products. However, much more work remains and we again urge inclusion of language regarding cannabis-derived substances in the report accompanying FDA appropriations. GW would be happy to work with the Committee and its members on specific report language. Among the reasons for continued support for FDA’s work:

- Cannabis-Derived Substances Can Pose Significant Health Consequences. Products containing cannabis-derived substances are not approved by FDA and are often promoted to vulnerable populations without a prescription or healthcare professional oversight and with outlandish and unproven therapeutic claims. This poses potential dangers to patient and consumer health because some cannabis derivatives are known to interact with a variety of commonly-used prescription drugs and cause liver complications. The effects of other cannabis compounds on vulnerable populations, including children and pregnant and lactating women, are not fully understood and merit further regulatory consideration. Cannabis-derived products may also contain significant levels of intoxicating compounds such as THC as well as harmful adulterants such as heavy metals, pesticides, and mold.<sup>10</sup>
- Deceptive Practices Persist. FDA has sent warning letters to over 50 marketers of cannabinoid products that were making unproven and false medical claims, including COVID–19 treatment claims. Deceptive marketing of unproven treatments may keep some patients from accessing appropriate, recognized therapies to treat serious or fatal diseases.<sup>11</sup> Yet, marketing of products bearing false and misleading claims has continued to proliferate. More recently, CBD marketers have been cited for failure to comply with good manufacturing practices and that there are inadequate assurances that the products have the identity, strength, quality, and purity they purport to possess.<sup>12</sup> Moreover, in the absence of other additional enforcement by FDA, many marketers who have received

<sup>4</sup> <https://www.fda.gov/news-events/press-announcements/fda-approves-new-indication-drug-containing-active-ingredient-derived-cannabis-treat-seizures-rare>.

<sup>5</sup> <https://healthpolicy.duke.edu/events/exploring-policy-options-establishing-cannabidiol-safety-surveillance>.

<sup>6</sup> <https://www.fda.gov/news-events/public-health-focus/warning-letters-and-test-results-cannabidiol-related-products>.

<sup>7</sup> <https://www.fda.gov/news-events/fda-brief/fda-brief-fda-issues-draft-guidance-encourage-cannabis-related-clinical-research>.

<sup>8</sup> <https://www.fda.gov/consumers/consumer-updates/what-you-need-know-and-what-were-working-find-out-about-products-containing-cannabis-or-cannabis>.

<sup>9</sup> <https://www.fda.gov/science-research/womens-health-research/scientific-conference-cbd-and-other-cannabinoids-sex-and-gender-differences-use-and-responses>.

<sup>10</sup> See FDA, <https://www.fda.gov/consumers/consumer-updates/what-you-need-know-and-what-were-working-find-out-about-products-containing-cannabis-or-cannabis> (many products did not contain the CBD they claimed; FDA is investigating reports of CBD products containing unsafe levels of contaminants such as pesticides, heavy metals, and THC); Bonn-Miller M.O., et al., Labeling Accuracy of Cannabidiol Extracts Sold Online, *JAMA*. 2017. Vol 318, No. 17 (CBD content of nearly 70 percent of artisanal products tested was mislabeled).

<sup>11</sup> <https://www.fda.gov/news-events/public-health-focus/warning-letters-and-test-results-cannabidiol-related-products>.

<sup>12</sup> See, e.g., Warning Letter to Honest Globe, Inc., <https://www.fda.gov/inspections-compliance-enforcement-and-criminal-investigations/warning-letters/honest-globe-inc-597177-03152021>.

warning letters continue to market their unlawful cannabis-derived products to vulnerable patients and consumers.

- Bringing More Cannabis-Based Therapies Through the FDA Approval Process. Over 4 million Americans are estimated to be using cannabis to treat medical conditions.<sup>13</sup> Yet, FDA has approved cannabis-derived compounds for only three medical conditions: some rare forms of epilepsy; chemotherapy-induced nausea; and anorexia associated with weight loss in AIDS patients. To address the ongoing widespread and uncontrolled experimentation on Americans, it is in the interest of public health to have more FDA-approved cannabis-derived drugs, supported by high quality clinical research, so that patients seeking cannabis-derived medicines do not have to turn to unproven therapies that have bypassed the FDA process.
- Dietary Supplements and Foods Containing Cannabis Derivatives Must Be Differentiated from FDA-Approved Drugs to Preserve Research and Innovation. Unlike foods and dietary supplements, FDA-approved drugs are studied for efficacy and safety in intended patient populations and are manufactured to exacting standards. If there is no distinction made between approved drugs and unapproved dietary supplements and foods, there is, similarly, no incentive to undertake costly clinical research to develop robust data on the therapeutic benefits of cannabis. Such differentiation should include limits in finished products on total concentration of cannabinoid content and in recommended daily servings.
- Addressing Potential Emerging Risks to Public Health. The rise in delta-8-THC use to circumvent controlled substances regulation is another reason for continued support for FDA. While consideration of Drug Enforcement Administration authority over new compounds such as delta-8-THC is ongoing, there is no ambiguity as to FDA's authority. Under the federal Food, Drug and Cosmetic Act, FDA may regulate novel, cannabis-derived substances that may be added to a food or dietary supplement, and has authority over any substance that makes therapeutic claims.<sup>14</sup>

\* \* \*

GW thanks the Committee for its continuing attention to cannabis issues and its support for FDA and the agency's ongoing work. While the views on cannabis are complex and varied, public health and scientific evidence are, and should remain, the cornerstone for patient and consumer safety, drug efficacy, and payment.

[This statement was submitted by Greenwich Biosciences, a subsidiary of GW Pharmaceuticals.]

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PREPARED STATEMENT OF HUMANE SOCIETY LEGISLATIVE FUND AND HUMANE  
SOCIETY OF THE UNITED STATES

OFFICE OF THE SECRETARY/COMMODITY CREDIT CORPORATION/CAGE-FREE HEN HOUSING  
CONVERSION

We request report language: “The committee recognizes that the cage-free market is rapidly expanding due to demand by consumers and food corporations. In addition, a growing number of state laws are requiring farmers to convert to cage-free facilities. The committee strongly encourages the Secretary to review this information and consider helping egg farmers meet these economic opportunities by providing financial assistance through the Commodity Credit Corporation for the conversion to cage-free housing.” Due to an increase in consumer awareness surrounding animal welfare and food safety concerns in our agricultural systems, more than 200 companies are demanding a 100% cage-free egg supply including McDonald's, Walmart, Kroger, Denny's, and IHOP. Eight states have passed laws banning cages for egg laying hens (with at least five others considering bills). Six of the states with enacted bans require that eggs sold within their state borders are cage-free. Producers, however, have been hesitant to make the switch to cage-free systems because of the initial costs to convert to these systems. While USDA data shows that 29.2% of the U.S. egg flock is now cage-free (95.7 million hens), federal

<sup>13</sup> [https://www.mpp.org/issues/medical-marijuana/state-by-state-medical-marijuana-laws/medical-marijuana-patient-numbers/\(as of December 2020\)](https://www.mpp.org/issues/medical-marijuana/state-by-state-medical-marijuana-laws/medical-marijuana-patient-numbers/(as%20of%20December%202020)).

<sup>14</sup> M. Zhang, High Anxiety Over Federal Weed Loophole, Politico (March 27, 2021), <https://www.politico.com/news/2021/03/27/rise-of-delta-8-thc-478215>.

support on the upfront conversion costs would help other producers to make the shift, bolstering animal welfare and helping the egg industry take advantage of the expanding cage-free market.

#### FSIS/HORSE SLAUGHTER

We request the same bill language barring USDA from expenditure of funds for horse slaughter inspections as was included in the FY21 omnibus. This provision is vital to prevent renewed horse slaughter activity in this country and wasting tax dollars on a practice that 80% of the American public opposes as inherently cruel and posing serious public health risks.

#### APHIS/ANIMAL WELFARE ACT (AWA) ENFORCEMENT

We request language to address AWA enforcement. Bill language: “The Secretary shall ensure that each violation or failure to comply with the Act identified by a USDA inspector under the Animal Welfare Act, 7 U.S.C. Sections 2131–2159, is documented on an inspection report. The Secretary shall also ensure that “teachable moments” are never used.” Report: “The Committee is concerned about APHIS’s Animal Care program and the steep decline in enforcement related to violations of the Animal Welfare Act. The Committee urges the agency to reform its current licensing and enforcement scheme. While the agency took steps towards this goal last year with its licensing and veterinary care rule change, and more recently with the withdrawal of the May 2018 Tech Note that allowed facilities to avoid citations by self-reporting, we believe more progress can be made. This includes, but is not limited to, the following: ensure consistent, thorough, unannounced inspections on a regular basis; act swiftly when facilities fail to comply with the Act’s minimal requirements; ensure each failure to allow access for inspection and each violation or failure to comply with animal welfare standards is documented on an inspection report, and consider assessing penalties in each such case; ensure that there is no use of “teachable moments” or any similar program that obscures findings during inspections; and, require that inspection reports which identify violations or failures of compliance be shared with relevant local, state, and federal agencies. The Committee is also concerned about the lack of enforcement of online dog dealers, which has allowed many online operations to continue selling puppies without the necessary USDA licensing pursuant to Animal Welfare Act, 7 U.S.C. Sections 2131–2159. We urge the Secretary of Agriculture to make a priority of the enforcement of the 2013 rule which requires that dealers who are selling animals sight-unseen to consumers must have the necessary license to do so. The Committee also urges the Secretary of Agriculture to enter into a memorandum of understanding with the U.S. Attorney General to encourage greater collaboration on Animal Welfare Act enforcement and ensure that the Department of Justice has access to evidence needed to initiate cases.”

#### APHIS/HORSE PROTECTION ACT (HPA) ENFORCEMENT

We request \$3,000,000 in the bill and language to strengthen HPA enforcement. Bill: “The Secretary shall reinstate and publish the final rule, “Horse Protection; Licensing of Designated Qualified Persons and Other Amendments” [Docket No. APHIS–2011–0009], as it was finalized and displayed in advance public notice in the Federal Register on January 19, 2017, with effective dates adjusted to reflect the delay in implementation.” Report: “The Committee provides \$3,000,000 for enforcement of the Horse Protection Act of 1970, as amended (15 U.S.C. 1831), and reminds the Secretary that Congress granted the agency primary responsibility to enforce this law.”

#### APHIS/PROTECTING ANIMALS WITH SHELTER (PAWS) IMPLEMENTATION

We request \$3,000,000 in the bill for PAWS grants and report language: “The Committee directs the Secretary of Agriculture to continue coordinating with the Departments of Justice, Housing and Urban Development, and Health and Human Services to efficiently implement the grant program for providing emergency and transitional shelter options for domestic violence survivors with companion animals.”

#### AFRI/ALTERNATIVE PROTEIN RESEARCH

We request report language to support alternative protein research that will spur innovation and stimulate economic growth, creating jobs including in rural communities, while helping meet growing consumer demand and protecting animals and the environment: Alternative Protein Research. -The Committee strongly supports

the Agriculture and Food Research Initiative (AFRI). The Committee encourages USDA to support research focused on mimicking the characteristics of animal meat using plants, animal cell cultivation, or fermentation (together, “alternative proteins”) for competitive awards in the AFRI program. The Committee further directs USDA to spend \$50 million to support alternative protein research (encompassing all stages of the production process, including optimizing ingredient processing techniques and developing new manufacturing methods) and to encourage applications from 1890 Institutions. This research should be done in collaboration with other relevant programs, including but not limited to the Agricultural Research Service (ARS) and the National Science Foundation (NSF).

#### FSIS/SLAUGHTER PLANT LINE SPEED

We request bill and report language to address extreme line speeds that jeopardize worker safety, animal welfare, and food safety. Bill: “None of the funds made available to the Department of Agriculture shall be used to develop, propose, finalize, issue, approve, implement, maintain, or renew any policy, regulation, directive, constituent update, program, waiver, or any other agency action that would allow any official establishment, defined in 9 C.F.R. § 301.2 or 9 C.F.R. § 381.1, to operate without, or in excess of, the maximum line speeds set out at 9 C.F.R. § 381.69(a); 9 C.F.R. § 381.69(b); 9 C.F.R. § 310.1(b)(2); or 9 C.F.R. § 310.1(b)(3)(ii), Tables 1–4; or that would allow any official establishment to reduce or suspend the staffing standards set out at 9 C.F.R. § 381.76; 9 C.F.R. § 310.1(b)(2); or 9 C.F.R. § 310.1(b)(3)(ii), Tables 1–4; or that would otherwise allow any official establishment to increase line speeds or reduce inspection staffing standards.” Report: “The committee is concerned about the harmful impacts of certain USDA–FSIS policies that have allowed slaughter and meatpacking establishments, as defined in 9 C.F.R. § 301.2 or 9 C.F.R. § 381.1, to operate without, or in excess of, the maximum line speed limits at 9 C.F.R. § 381.69(a); 9 C.F.R. § 381.69(b); 9 C.F.R. § 310.1(b)(2); or 9 C.F.R. § 310.1(b)(3)(ii), Tables 1–4; or to reduce the inspection staffing standards at 9 C.F.R. § 381.76; 9 C.F.R. § 310.1(b)(2); or 9 C.F.R. § 310.1(b)(3)(ii), Tables 1–4. These policies have been linked with elevated dangers for slaughterhouse workers, who have been disproportionately impacted by the spread of COVID–19 in their workplaces, as well as increased risk of contamination of meat with *E. coli*, *Salmonella*, and other pathogenic bacteria. Also, these policies increase the possibility of missed pathology (such as cancer), systemic infections (such as pneumonia) or the use of drugs that violate the Food, Drug, and Cosmetic Act or create antimicrobial resistant bacteria. The policies also run the risk of exacerbating climate change through increased greenhouse gas emissions associated with faster line speeds. FSIS is directed to reevaluate and reverse these policies. No funds should be used to develop, propose, finalize, issue, implement, maintain, or renew any policy, regulation, directive, constituent update, program, waiver, or any other agency action that allows any official establishment to operate without, or in excess of, maximum line speed limits, or to reduce inspection staffing standards.”

#### FSIS/HUMANE METHODS OF SLAUGHTER ACT (HMSA) ENFORCEMENT

We request language to strengthen HMSA enforcement. Bill: “No fewer than 165 full-time equivalent positions shall be employed during fiscal year 2022 for purposes dedicated solely to inspections and enforcement related to the Humane Methods of Slaughter Act. This number is in addition to the Humane Handling Enforcement Coordinator and District Veterinary Medical Specialist positions.” Report: “FSIS shall ensure that all inspection personnel conducting humane handling verification procedures receive robust initial training and periodic refresher training on the FSIS humane handling and slaughter regulations and directives. This includes handling of non-ambulatory disabled animals, as well as proper use of the Humane Activities Tracking System to ensure humane handling of animals as they arrive and are offloaded and handled in ante-mortem holding pens, suspect pens, chutes, stunning areas, and on the processing line. The Committee directs the agency to continue preparation and online publication of the Humane Handling Quarterly Reports, to include: (1) the number of humane handling verification procedures performed, (2) the number of administrative enforcement actions taken, (3) time spent on Humane Handling Activities Tracking System activities, and (4) comparisons of these measurements by plant size and FSIS district. The Committee recognizes that handling of birds at slaughter according to Good Commercial Practices reduces the occurrence of adulterated poultry products in the marketplace, as well as the suffering of birds at slaughter. The committee also is cognizant that current oversight of bird handling is inconsistent at USDA-inspected slaughter plants, with no enforcement records issued by USDA inspection personnel documenting compliance

with GCP at more than one-third of inspected plants during the past three years. Therefore, the Committee directs FSIS to track the number of inspector hours spent on GCP verification activities using its existing Humane Activities Tracking System or other appropriate method.”

ARS/ANIMAL WELFARE FOR FARM ANIMALS USED IN AGRICULTURAL RESEARCH

We request language to ensure compliance with the Animal Welfare Act for animals used in research at ARS facilities. Bill: “Hereafter, and notwithstanding any other provision of law, ARS facilities as described in the “Memorandum of Understanding Between the U.S. Department of Agriculture Animal and Plant Health Inspection Service (APHIS) and the U.S. Department of Agriculture Agricultural Research Service (ARS) Concerning Laboratory Animal Welfare” (16–6100–0103–MU Revision 16–1) shall be inspected by APHIS for compliance with the Animal Welfare Act and its regulations and standards.” Report: “The Committee directs ARS to ensure that each of its facilities housing animals is adhering to the Animal Welfare Act at all times. ARS shall submit quarterly reports that include all violations found by APHIS during that quarter as well as the specific actions that will be taken to prevent their recurrence. The Committee further directs APHIS to conduct inspections of all such ARS facilities and to post the resulting inspection reports on line in their entirety without redactions except signatures. The Committee continues to direct APHIS to transmit to the Committees all inspection reports involving ARS facilities, including pre-compliance inspections. These facilities involve federal funds over which this Committee has oversight responsibilities. APHIS is directed to include every violation its inspectors find and never to interfere with the Committee’s oversight activities by using so-called “teachable moments” or other means of not fully reporting ARS facility violations.”

OIG/ANIMAL FIGHTING ENFORCEMENT

We request \$1,000,000 in the bill for increased and dedicated enforcement of 7 U.S.C. Section 2156, and report language: “The Committee is concerned about illegal animal fighting activity that subjects animals to cruel conditions and has the potential to spread illnesses such as virulent Newcastle disease and avian flu. The OIG is encouraged to increase its enforcement efforts in the states and territories and to pursue animal fighting cases even if related concerns, such as money laundering and illegal weapons, have not yet been determined to be at issue before an investigation is opened. The Committee is providing an increase of \$1,000,000 for this purpose and encourages the OIG to spend at least that much on animal fighting enforcement. The Committee also encourages the OIG to audit and investigate USDA enforcement of the Animal Welfare Act, the Horse Protection Act, and the Humane Methods of Slaughter Act to help improve compliance with these important laws, and to prioritize completion of the audits on the Horse Protection Act, Animal Care Program Oversight of Dog Breeders, and APHIS Controls over Licensing of Animal Exhibitors.”

NIFA/NATIONAL VETERINARY MEDICAL SERVICES ACT

We request \$10,000,000 for the Veterinary Medicine Loan Repayment Program (P.L. 108–161).

APHIS/EMERGENCY PREPAREDNESS AND RESPONSE/ANIMAL CARE

We request \$1,400,000 for Animal Care to assist in addressing animal issues in disasters.

APHIS/ANIMAL WELFARE ACT ENFORCEMENT/CLASS B RANDOM SOURCE DEALERS

We request the same bill language as in FY21 barring expenditures for licensing Class B dealers who sell “random source” dogs and cats for use in research, teaching, or testing.

[This statement was submitted by Mimi Brody, Director of Federal Affairs, Humane Society Legislative Fund.]

PREPARED STATEMENT OF HUMANE SOCIETY OF THE UNITED STATES

On behalf of the undersigned horse industry, veterinary, and animal welfare organizations, we submit the following testimony seeking funding of \$3,000,000 and language for the USDA/APHIS Horse Protection Program for FY 2022. We appreciate that Congress provided \$2,009,000 in FY 2021 for USDA to strengthen enforcement

of the Horse Protection Act. An increase to \$3,000,000 is urgently needed as we seek to fulfill the intent of the Horse Protection Act—to eliminate the cruel practice of soring—by allowing the USDA to further strengthen its enforcement capabilities for this law.

In recent years, it has been reported that USDA officials have stated their view that Horse Industry Organizations (HIOs) have primary responsibility to enforce the HPA, not the Agency. We request the following report language: “The Committee provides \$3,000,000 for enforcement of the Horse Protection Act of 1970, as amended (15 U.S.C. 1831), and reminds the Secretary that Congress granted the agency primary responsibility to enforce this law.”

We also urge you to include the following bill language regarding the final rule (announced by USDA in January 2017) that received more than 100,000 public comments in support, including letters signed by 182 Representatives and 42 Senators, to strengthen the HPA regulations that have undermined enforcement of this law for decades: “The Secretary shall reinstate and publish the final rule, “Horse Protection; Licensing of Designated Qualified Persons and Other Amendments” [Docket No. APHIS–2011–0009], as it was finalized and displayed in advance public notice in the Federal Register on January 19, 2017, with effective dates adjusted to reflect the delay in implementation.”

In 1970, Congress passed the Horse Protection Act to end soring, the intentional infliction of pain on the hooves and legs of a horse to produce an exaggerated gait in the “Big Lick” segment of the Tennessee Walking Horse show industry. Caustic chemicals—such as mustard oil, diesel fuel, and kerosene—are painted on the horse’s lower front legs. Then the legs are wrapped for days in plastic wrap and bandages to “cook” the chemicals deep into the flesh, making the horse’s legs extremely painful and sensitive. When ridden, the horse is fitted with chains that slide up and down the sore legs, forcing the animal to produce an exaggerated, high-stepping gait in the show ring. Additional tactics include inserting foreign objects such as hard acrylic between a heavy stacked shoe and the horse’s hoof; pressure shoeing—cutting a horse’s hoof down to the sensitive live tissue to cause extreme pain every time the horse bears weight on the hoof; and applying painful chemicals such as salicylic acid to slough off scarred tissue or numbing agents, in an attempt to obscure evidence of soring.

The Horse Protection Act authorizes the USDA to inspect horses, including the three specific breeds known to be involved in soring—Tennessee Walking Horses, Racking Horses, and Spotted Saddle Horses—in transport to and at shows, exhibits, auctions and sales—for signs of soring, and to pursue penalties against violators. Unfortunately, since its inception, enforcement of the Act has been plagued by underfunding. As a result, the USDA has never been able to adequately enforce the Act, allowing this extreme and deliberate cruelty to persist on a widespread basis.

To eliminate soring and meet the goals of the Act, USDA officials must be present at more shows. However, limited funds allowed USDA attendance at only approximately 5% of the 150 HPA events held in FY 2020. Years ago, the Agency set up the industry-run system of certified HIO inspection programs, which are charged with inspecting horses for signs of soring at the majority of shows. These groups license examiners known as Designated Qualified Persons (DQPs) to conduct inspections. To perform this function, some of these organizations hire industry insiders who have an obvious stake in preserving the status quo. Statistics clearly show that when USDA inspectors are in attendance to oversee shows affiliated with these organizations, the numbers of noted violations are many times higher than at shows where industry inspectors alone are conducting the inspections. By all measures, the overall DQP program as a whole has been a failure—the only remedy is to abolish the conflicted industry-run inspection programs charged with self-regulation and have USDA oversee a legitimate inspection program.

Many horse show industry, veterinary, and animal protection groups have called for an end to this flawed system of industry self-policing, and USDA’s 2017 announced final rule would accomplish this along with other needed reforms to end soring. Unfortunately, these regulations were withdrawn. The National Academies of Sciences, Engineering, and Medicine issued a report in January 2021, following a thorough study on methods of detecting soring, which criticized the industry self-policing system and made recommendations consistent with the 2017 regulations. The NASEM report called for greater use of technologies such as thermography, prohibited substance testing, blood testing, and video to assess facial expressions of pain, as well as urging that only veterinarians be allowed to inspect the horses, recommendations that all depend on adequate agency resources.

USDA appeared to have attempted to step up its enforcement efforts some years ago, and had begun to work with the Department of Justice in prosecuting criminal cases as provided for under the Act. In 2011, a federal prosecutor sought the first-

ever criminal indictments under the Act and as a result, a well-known, winning trainer in the Spotted Saddle Horse industry served a prison sentence of over one year. A former Walking Horse Trainers' Association Trainer of the Year and winner of the Tennessee Walking Horse World Grand Championship, Jackie McConnell, was indicted in 2012 on 52 counts (18 of them felony) of violating the Act and pleaded guilty to felony conspiracy to violate the Act. He was sentenced to three years of probation and a \$75,000 fine in federal court. In 2013, another Tennessee trainer, Larry Wheelon, and three of his employees were indicted on 19 counts of aggravated animal cruelty charges under state law in a case flowing from a USDA Office of Inspector General investigation. While Wheelon's case was dismissed on a technicality, evidence of soring in his barn was plentiful and horrifying.

These were significant actions that should have had a deterrent effect, but there are many other violators who go undetected and many cases that go unprosecuted due to a lack of resources USDA needs to carry out its responsibilities under this Act as Congress and the public expect. In years past, Agency inspections were limited to physical observation and palpation by the inspector. Protocols for the use of new technologies, such as chemical analysis of prohibited foreign substances used by violators on the legs of horses (either to sore them, or to mask underlying soring and evade detection by inspectors) have been implemented, which can help inspectors identify violations more effectively. The results of USDA's testing for prohibited foreign substances are staggering: 46 of the 66 random samples (70%) taken by the USDA at the industry's pinnacle event—the 2019 Tennessee Walking Horse National Celebration—tested positive for illegal foreign substances including soring, masking, and numbing agents.

Effective though this inspection protocol may be, due to budget constraints, USDA has been unable to put enough of this testing into use in the field, allowing industry players to continually evade detection. In 2019, USDA collected and tested only 268 samples at only 8 of the largest Big Lick shows; in 2018, 260 samples at only 20 shows; and in 2017, 316 samples at only 14 shows. With increased funding, the USDA could purchase more equipment and dispatch more inspectors to use it, greatly increasing the agency's ability to enforce the HPA.

Currently, when USDA inspectors arrive at shows affiliated with some industry organizations, many exhibitors load up and leave to avoid being caught with sored horses. While USDA could stop these trailers on the way out, Agency officials have stated that inspectors are wary of going outside of their designated inspection area, for fear of harassment and physical violence from exhibitors. Armed security is frequently utilized in the designated area to allow such inspections, at additional expense to this program. The fact that exhibitors feel they can intimidate government officials without penalty is a testament to the inherent shortcomings of the current system.

Lack of a consistent presence by USDA officials at events featuring Tennessee Walking Horses, Racking Horses, and Spotted Saddle Horses has fostered a cavalier attitude among industry insiders, who have not stopped their abuse, but have only become more clandestine in their soring methods. The continued use of soring to gain an advantage in the show ring has tainted this segment of the horse industry, and creates an unfair advantage for those who are willing to break the law in pursuit of victory. Besides the indefensible suffering of the animals themselves, the continued acceptance of sored horses in the show ring prevents those with sound horses from competing fairly for prizes, breeding fees and other financial incentives, while those horse owners whose horses are sored may unwittingly suffer property damage and be duped into believing that their now abused, damaged horses are naturally superior.

The egregious cruelty of soring is not only a concern for horse industry and animal protection organizations, but also for veterinarians. In 2008, the American Association of Equine Practitioners (AAEP) issued a white paper condemning soring, calling it "one of the most significant welfare issues faced by the equine industry." It called for the abolition of the DQP Program, saying "the acknowledged conflicts of interest which involve many of them cannot be reasonably resolved, and these individuals should be excluded from the regulatory process." The AAEP further stated, "The failure of the HPA to eliminate the practice of soring can be traced to the woefully inadequate annual budget... allocated to the USDA to enforce these rules and regulations."

The USDA Office of Inspector General conducted a comprehensive audit of the Horse Protection Program, and issued its report in September 2010 documenting serious conflicts of interest and other significant problems with the industry self-monitoring system of HIOs on which the APHIS inspection program still relies. The report recommended the abolition of DQP inspections and an increase in funding for APHIS enforcement of the Horse Protection Act. The Agency concurred with the

findings and recommendations in the report, including Recommendation 2: “Seeking the necessary funding from Congress to adequately oversee the Horse Protection Program,” indicating that it would develop a budgeting and staffing plan to phase in the resources needed to adequately oversee the Horse Protection Program.

It is unacceptable that more than 50 years after passage of the Horse Protection Act, the USDA still lacks the resources needed to end this extreme form of abuse. It is time for Congress to give our public servants charged with enforcing this Act the support and resources they need to fulfill their duty to protect these horses as effectively and safely as possible.

We appreciate the opportunity to share our views about this serious problem and thank you for your consideration of our request.

Sincerely,

Keith Dane, Senior Director, Equine Protection  
Humane Society of the United States

Scott Hay, DVM, President  
American Association of Equine Practitioners

Barry Kipperman, DVM, DACVIM, President  
Humane Society Veterinary Medical Association

Cathy Liss, President  
Animal Welfare Institute

Sara Amundson, President  
Humane Society Legislative Fund

Nancy Perry, Senior Vice President, Government Relations  
American Society for the Prevention of Cruelty to Animals (ASPCA)

Teresa Bippen, President  
Friends of Sound Horses, Inc.

Robin Lohnes, Executive Director  
American Horse Protection Association

Neda DeMayo, President  
Return to Freedom Wild Horse Conservation

Donna Benefield, Vice President  
International Walking Horse Association

Susan Crotty, President  
Plantation Walking Horse Association of California

Molly Lieberknecht, President  
United Pleasure Walking Horse Association

Lucy Rangel, President  
Gaitway Walking Horse Association, Inc.

Bonnie Yeager, President  
International Pleasure Walking Horse Registry

Penny Austin, President  
One Horse At a Time, Inc. Horse Rescue

Shayna Shaw, President  
Northern California Walking Horse Association

Linda Fey, President  
New York State Plantation Walking Horse Club, LLC

Libby Kurtz  
San Francisco Bay Area Tennessee Walking Horse Club

Nancy O'Dell Plunkett  
 President, Northwest Gaited Horse Association

[This statement was submitted by Keith Dane, Senior Director, Equine Protection, Humane Society of the United States.]

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PREPARED STATEMENT OF IR-4 COMMODITY LIAISON COMMITTEE

This request is being submitted behalf of the membership of IR-4 Commodity Liaison Committee. This group is a coalition of commodity associations, grower groups, food processors and individuals who represent agriculture that feed Americans healthy fruits, vegetables, nuts, herb or enhances our environment with ornamental crops and flowers. The membership collectively represents conventional and organic specialty crop growers and allied industries with operations in every state. Specialty crop agriculture collectively is sector of American agriculture; the farm gate value of specialty crops is over \$65 billion annually.

We are requesting that US Senate Appropriations Committee—Subcommittee on Agriculture, Rural Development, Food and Drug Administration, and Related Agencies restore funding and allocate at least \$20.0 million for the IR-4 Project. This is justified as follows:

Farmers of conventionally produced and organic specialty crops must protect their high value commodities from economic damage caused by insects, plant diseases, weeds and other crop pests. US EPA regulates chemical and bio-based pesticides that protect crops. The private sector invests significant resources to develop data that meets US EPA regulatory standards, which ensure that products are safe for humans and the environment. Because of the research costs, the crop protection industry concentrates their registration efforts on large acreage “major” crops like corn, soybean, and cotton where potential sales support an acceptable return on investment. Small acreage, specialty crops are orphan crops. Due to limited potential sales, it is economically unfeasible for the crop protection industry to commercialize pest control products for specialty crops. Recognizing the dilemma, Congress created the IR-4 Project in 1963 to help America’s specialty crop growers and food processors with the Minor Use Problem. The IR-4 Project has facilitated over 20,000 registrations of pest management uses on food crops that have benefitted agriculture in all states and helped provide quality food for the public.

The IR-4 Project remains relevant today and in desperate need of enhanced funding to sustain services that are critically important to specialty crop agriculture. After a decade of a flat funding, the impact is significant. Over the past five years, there has been a 20% drop in research. However, destructive pests continue to attack and damage specialty crops causing reductions in quality and quantity of the final product. Newly emerging pest problems, such as Spotted Lanternfly, Brown Marmorated Stink Bug, Spotted Wing Drosophila and Downy Mildew have disrupted existing integrated pest management systems. Additionally, more pests are becoming resistant to existing chemical pesticides. IR-4 has been on the front line to facilitate new registration/solutions to manage pests and help ensure that domestic specialty crop farmers can continue to grow quality and wholesome products demanded by food processors and consumers.

Other factors contribution to the need for enhanced IR-4 Project funding include:

- IR-4 is leading research efforts with the strategic integration of reduced risk pesticides and biopesticides to manage hard to control pests while minimize pest resistance to pesticides and while reducing exposure to pesticides in consumed foods.
- IR-4 develops data to remove pesticide residues in specialty crops as a barrier to trade allowing domestic producers access to lucrative international specialty crop markets.
- The cost of IR-4 research continues to escalate from factors such as land rental, supplies, employee salary/health care costs, etc. Furthermore, USDA made an administrative change to the IR-4 funding which allowed the land-grant institutions that host IR-4 research to deduct up to 10% of the total direct cost of the grant. This is an effective 12% reduction of funding for research.
- IR-4 has had to defer replacement of its vital analytical equipment in laboratories due to funding shortfalls.

The IR-4 Project provides an exceptional return on investment. Michigan State University Center for Economic Analysis reported in November 2017 that the IR-

4 Project's efforts contribute over \$9.4 BILLION to annual US Gross Domestic Product and its efforts support over 95,000 JOBS throughout the United States.

U.S. specialty crop growers and allied industries need IR-4; the public needs IR-4. We urge the Subcommittee to bring FY 2022 Appropriations level to at least \$20 million for the Minor Crop Pest Management (IR4) line within the USDA-NIFA Research and Education Activities area.

[This statement was submitted by Dr. Michael Bledsoe, Chair, IR-4 Commodity Liaison Committee.]

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PREPARED STATEMENT OF NANA REGIONAL CORPORATION, INC.

Hello, my name is Sonny Adams and I'm the Director of Energy for the NANA Regional Corporation, Inc. (NANA), one of 12 land-based regional corporations formed under the Alaska Native Claims Settlement Act. I write in support of significantly increasing the funding of the U.S. Department of Agriculture's (USDA) High Energy Cost Grant (HECG) because it is an effective program that is changing lives for the better in our region.

In 2015, NANA received a USDA HECG grant to install energy storage batteries in our villages of Deering and Buckland. This project helped create the first microgrids for our region, enabling us to achieve diesel generator off-operation and capture more solar and wind energy. Although we are still collecting performance data and optimizing the microgrid, we are currently reducing diesel consumption by 21% per year. This project has given our region a road map on how to lower the cost of energy, thus allowing us to start replicating the microgrid project in the remaining villages. In 2018, NANA worked with the Northwest Arctic Borough (NWAB), Alaska Village Electric Cooperative (AVEC), and the Native Villages of Kobuk and Shungnak to submit a grant application to install a community solar array and energy storage batteries in Shungnak. This project will serve both communities via intertie and should be operational by the end of June 2021.

In 2019, NANA once again worked with AVEC, the NWAB, and the Native Village of Noatak on submitting a USDA HECG grant application to install a community solar array and energy storage batteries in Noatak. Noatak met all the criteria for the grant application because they must fly in fuel 100% of the time. Because of low river levels, Noatak has not been able to barge fuel for decades. Noatak has one of the highest costs of energy in Alaska. Noatak residents must make tough choices between heating their home, paying their electric bill, or putting food on their table. Unfortunately, this project was not funded because of lack of USDA funding.

Increasing funding for high energy cost grants would enable these significant projects to be completed. The struggle to find solutions for low-cost energy has been ongoing for decades. NANA works with our region's 11 federally recognized tribes on the execution of our Northwest Arctic Regional Energy Plan. In 2009, NANA held a Regional Energy Summit with our villages to discuss the energy crisis and potential solutions to lower the cost of energy. NANA helped create the Region's Energy Steering Committee and worked with the communities to perform an energy options analysis for each village. NANA also conducted a regional energy survey to ensure our tribes and elders were in support of renewable energy projects. Our region is in support of implementing renewable energy projects if they do not impact subsistence or traditional activities.

NANA continues to work on renewable energy projects for our tribes and villages. Our diesel fuel prices can range from \$4.89 to \$10.04 per gallon, depending on where you live within our region. Our region is roadless, and diesel fuel is delivered by barge or plane. In past years, climate change has had an impact on fuel delivery to some of our villages. When snow accumulation is low, it causes river levels to be low, which prohibits fuel delivery into three of our villages. Diesel fuel is used for both home heating and electricity generation. It is 64% more expensive to live in our region than it is to live in Anchorage, Alaska, the largest city in Alaska.

NANA feels that the USDA HECG program is underfunded and needs an increase to help those communities in need.

[This statement was submitted by Mr. Sonny Adams, Director of , NANA Regional Corporation, Inc.]

PREPARED STATEMENT OF NATIONAL ASSOCIATION OF STATE ENERGY OFFICIALS  
(NASEO)

Chairman Baldwin and Ranking Member Hoeven, I am David Terry, Executive Director of the National Association of State Energy Officials (NASEO), and I am testifying in support of FY 22 funding for the energy title of the Farm Bill. The mandatory levels of the energy title of the Farm Bill should be supported (2018 Farm Bill, P.L. 115-334). Specifically, we support funding of at least \$50 million mandatory and \$250 million in additional discretionary spending for the Rural Energy for America (REAP) program. Fifteen percent of the additional discretionary funds should be allocated to underutilized renewable energy technologies through a reserve fund. The REAP program was created in the 2002 Farm Bill and it has been a huge success. Over 15,000 energy efficiency and renewable energy projects have been implemented in every state since 2003. Since the 2014 Farm Bill, REAP has leveraged \$4 billion in private investment with \$338 million in appropriations. We support \$15 million in mandatory funding and \$30 million in discretionary funding; a total of \$45 million for the Rural Energy for America Loans program. Senator Merkley's efforts to support "on-bill" energy efficiency financing programs for rural electric cooperatives is an important activity through USDA. Under the Rural Energy Savings Program (RESP), \$50 million should be provided for FY'22. This program is outside of the energy title of the Farm Bill, but is very important. The models in South Carolina and Arkansas are very exciting. This program should be dramatically expanded. We also recommend that electrification initiatives should be funded with both the REAP and RESP programs.

REAP has specifically benefitted farmers, ranchers and rural small businesses that are often underserved by other federal energy efforts. NASEO's State Energy Office members work directly with eligible entities, as well as state agricultural agencies and rural interests to promote this successful program. REAP is about facilitating private-sector led rural economic development.

NASEO represents the energy offices in the 56 states, territories and the District of Columbia. The REAP program, and the other critical programs in the energy title of the last multi-year Farm Bill (and RESP), helps the private sector create jobs, supports increased agricultural productivity and operational efficiency, reduces energy costs for farmers, ranchers and rural small businesses, generates home-grown energy, promotes use of alternative fuels produced by America's farmers, and further reduces our dependence on imported petroleum. The cost is very low and the payback is very high.

As noted above, NASEO also supports additional energy title programs and RESP. There are several of note that should be supported at mandatory funding levels. These include the Biomass Crop Assistance Program, Biorefinery Assistance, Renewable Chemical and Biobased Product Manufacturing Assistance Program, and the Biobased Markets Program (otherwise referred to as "Biopreferred"), the Biomass Research & Development Initiative, the Bioenergy Program for Advanced Biofuels, the Biodiesel Fuel Education Program, and the Carbon Utilization and Biogas Education Program.

In FY'22, we urge your support for the REAP program and the Rural Energy for America Loans program, and additional energy title programs as noted above. We also support expansion and support for "on-bill" financing programs (RESP) through USDA. For all these programs, we recommend streamlining the applications in order to reduce paperwork burdens for low-cost grants and loans.

[This statement was submitted by David Terry, NASEO Executive Director and Jeff Genzer, NASEO Counsel.]

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PREPARED STATEMENT OF NATIONAL ASSOCIATION OF STATE DEPARTMENTS OF  
AGRICULTURE

The National Association of State Departments of Agriculture (NASDA) commends the subcommittee for its work in support of farmers, ranchers and their rural communities. NASDA represents the Commissioners, Secretaries, and Directors of agriculture in all fifty states and four territories. NASDA members are co-regulators with the federal government and strong advocates for American agriculture.

As you begin the fiscal year 2022 appropriations process, NASDA asks you to prioritize the following programs that enhance farmers, ranchers and their rural communities and ensure a safe, affordable, and abundant food supply.

FOOD SAFETY MODERNIZATION ACT (FSMA): PRODUCE, ANIMAL FOOD, PRODUCE SAFETY ALLIANCE, FOOD SAFETY OUTREACH PROGRAM

- a. \$34 million—Produce Safety Rule Implementation, State Cooperative Agreement Program
- b. \$6 million—Animal Food Preventive Controls Rule Implementation, State Cooperative Agreement Program
- c. \$10 million—Food Safety Outreach Program
- d. \$2 million—Produce Safety Alliance Funding

NASDA members are at the forefront of implementing FSMA and funding these programs will allow NASDA to continue building state regulatory programs required by FSMA and educate and train the farm and food sectors on compliance. The education, outreach, and training provided by state programs, FSOP and PSA are all critical pieces of meeting FSMA's mandate and ensuring a safe food supply.

FARM AND RANCH STRESS ASSISTANCE NETWORK—\$10 MILLION, FULL FUNDING

Funding will continue efforts to scale assistance programs and create trainings and partnerships to serve rural Americans-60% of whom live in areas with mental health professional shortages.

ANIMAL AND PLANT HEALTH INSPECTION SERVICE PROGRAMS

- a. National Animal Health Laboratory Network—\$30 million, full funding
  - i. NAHLN funding is critical for large-scale animal-disease outbreak response. NASDA members, who regulate and oversee animal health in the states, are the first line of defense against animal disease outbreaks and rely on NALHN labs for tracking disease progress and performing tests on thousands of diagnostic samples. Federal funding for the NAHLN will expand surveillance and surge capacity to diagnose diseases and ramp up during emergency situations.
- b. Swine Health Program—\$25.2 million
  - i. APHIS' Swine Health program protects the health of the U.S. swine herd through programs such as comprehensive and integrated swine surveillance, emergency preparedness and response planning, disease investigation and control activities, and other activities.
- c. National Veterinary Stockpile—Additional \$20 million
  - i. The National Veterinary Stockpile is a critical component of APHIS emergency response capability. Additional funding towards depopulation equipment is needed to avoid disastrous supply chain disruption in the event of a Foot-and-mouth disease outbreak.

AGRICULTURE RESEARCH

a. Agriculture research, educational and extension efforts are vital in creating short and long-term advancements in food and agriculture to benefit farmers, ranchers, industry and consumers. NASDA supports funding USDA's Research, Education and Economics mission areas to support short-term and long-term research needs. Specifically, NASDA supports funding for:

- i. the Foundation for Food and Agriculture Research, National Institute for Food and Agriculture and USDA-Agricultural Research Service.
- ii. Competitive research grant programs including the Agriculture and Food Research Initiative and other competitive-based funding initiatives.
- iii. Maintaining and strengthening program funding through the Hatch, Smith-Lever Act and other formula-based funding authorities.

b. NASDA supports USDA's Agricultural Research Service maintaining a focus on agricultural-related legal issues within the National Agricultural Library and encourages ARS and the National Agricultural Library to engage in multi-year cooperative agreements with the Agricultural Law Information Partnership's partner institutions.

c. Animal Disease Research Funding:

- i. Provide \$50 million in new funding to support the Agriculture Advanced Research and Development Authority, authorized in Section 7132 of the Agricultural Improvement Act of 2018.

ii. \$11.8 million for the National Antimicrobial Resistance Monitoring System (NARMS). This represents a \$500 increase over FY 2019 and maintains FY 2021 funding. NARMS serves as a source of data for the approval of new animal antibiotics and for the post-approval safety monitoring of these compounds.

d. Minor Crop Pest Management Program (IR-4):

i. NASDA recommends funding this program at the authorized funding level because developing pest control tools has high regulatory costs. This funding ensures safe and effective agrichemicals and biopesticides are available for small, specialty crop markets.

BIOENGINEERED FOOD

NASDA supports the inclusion of language that will ensure the FY22 Agriculture Appropriations bill is aligned with the National Bioengineered Food Disclosure Standard.

WILDLIFE SERVICES

NASDA supports funding to strengthen Wildlife Services' resources and to ensure a continued federal partnership in the responsible management of our nation's wildlife, including the management of wild horse and burro populations.

—\$76 million in no-year funding for FY 2022 to implement the full modernization of the U.S. Geological Survey, National Wildlife Health Center.

URBAN AGRICULTURE

Urban farming has grown more than 30 percent in the U.S. in the last 30 years. There is great potential for urban agriculture to help address the poverty, unemployment, and food insecurity that often comes as a result of urbanization.

—NASDA supports funding the Office of Urban Agriculture and Innovative Production at the full authorized level of \$25 million.

—NASDA recommends an additional \$14 million for the urban agriculture data collection initiative.

CONCLUSION

NASDA thanks you for your careful consideration of these requests as you work to fund the nation's agricultural policy priorities in fiscal year 2022.

[This statement was submitted by Barbara P. Glenn, Ph.D., Chief Executive Officer]

PREPARED STATEMENT OF NATIONAL ASSOCIATION OF WHEAT GROWERS

The National Association of Wheat Growers (NAWG) appreciates the opportunity to provide testimony about our priorities for the fiscal year (FY) 2022 Agriculture Appropriations bill. Before outlining our FY 2022 requests, we wanted to say "thank you" for continuing to fully fund our top priority in FY2021—the U.S. Department of Agriculture's (USDA) U.S. Wheat and Barley Scab Initiative (USWBSI). The 2018 Farm Bill increased authorization for the USWBSI from \$9.5 million to \$15 million to enhance food safety and supply by reducing the impact of Fusarium Head Blight (Scab) on wheat and barley. The funding secured in the enacted FY 2021 Consolidated Appropriations Act (H.R. 133) will play a vital role in supporting the agricultural economy and public food system.

As our leaders in Congress consider a FY 2022 Agriculture Appropriations bill, one of NAWG's main priorities will be to ensure that no provisions are included that would cut Farm Bill programs, particularly mandatory programs like crop insurance, farm programs, conservation programs, or trade promotion programs. Additionally, NAWG joins the National Wheat and Barley Improvement Committees in urging the Committee to maintain full funding for the USWBSI. Scab is a plant disease attacking all wheat-producing regions of the U.S. that impacts not just growers but also millers and bakers because of its impact on the quality of wheat. Also, NAWG supports the National Wheat Improvement Committee's (NWIC) request to fund a Wheat Resiliency Initiative at \$5.66 million to address new and emerging challenges to wheat production. NAWG urges the Committee to continue providing \$1 million to support research focused on utilizing crop genetics research at public-private consortiums. NAWG applauds the funding of the National Predictive Mod-

eling Tool Initiative (NPMTI) in FY 2021, and we request that the committee fund the NPMTI at \$12 million this year. Lastly, NAWG urges the Committee to maintain funding of the Agriculture Research Service (ARS) Small Grains Genomic Initiative (SGGI) at least \$3.44 million. NAWG also supports maintaining at least the current level of funding for the NIFA Hatch Act, Smith-Lever Formula Grants, and the Agriculture and Food Research Initiative.

Wheat is a vital crop and source of economic activity. In the United States, wheat ranks third in planted acreage, production, and gross farm receipts, according to the USDA's Economic Research Service (ERS). According to the 2020/2021 crop year, total U.S. wheat planted acreage was 44.35 million acres in the USDA and produced 1.8 billion bushels. Since 2012, working capital for the U.S. farm sector has decreased from over \$165 billion to around \$85 billion in 2020, and, according to ERS, working capital is forecasted to fall an additional 13.6 percent in 2021. In addition to the economic challenges facing wheat farmers, growers must deal with a number of disease and pest challenges that can only be addressed through public and private research efforts. Federal funding for agriculture research has remained stagnant, threatening the future viability and competitiveness of U.S. food systems by being out invested by competitors such as China.

Over the past year, the COVID-19 pandemic has challenged agriculture in a variety of ways. Economic shutdowns led to high volatility in markets and disruptions in the food supply chain that negatively impacted farmers. These difficulties came at the same time as low commodity prices and numerous weather-related challenges; the COVID-19 outbreak only exacerbated the effects on farmers.

Given the current economic environment that farmers face, it is critical that mandatory programs like crop insurance, farm programs, conservation programs, and trade promotion programs are not cut or harmed. The 2018 Farm Bill passed through Congress with strong bipartisan, bicameral support and sent a clear message that these critical programs should not be harmed. NAWG also strongly urges Congress to provide at least \$255 million for the Agricultural Trade Promotion and Facilitation Program with at least \$200 million for the Market Access Program (MAP) and \$34.5 million for the Foreign Market Development (FMD) program in FY 2022. We are asking that your subcommittee use discretionary funds to provide \$7 million—less than 3 percent of the program investment—for USDA administrative and operational costs to help reverse the diminished real dollar value of MAP and FMD from being funded at the same level for over 15 years. MAP/FMD funding is critical to help U.S. farmers, ranchers, and food exporters keep pace and help us make up for a lost time after two and half years of trade conflict and retaliatory tariffs.

NAWG is extremely appreciative of the historical support for USWBSI to address Scab. This disease negatively impacts yields and causes the grain to be rejected by elevators and mills due to the mycotoxin deoxynivalenol (DON) presence. Each year, particular conditions throughout the U.S. result in scab outbreaks, and these epidemics cause disruptions in food and feed supply, economic losses to growers, and increased costs for end-users. The development of varieties with improved scab resistance and better models to predict the need for a fungicide application to prevent Scab has led to a reduction in the percent of wheat impacted by *Fusarium* head scab in the United States. A 2017 economic study by North Dakota State University estimates that every dollar invested in the USWBSI provides an economic return of approximately 71 dollars.

The mission of USWBSI is to enhance food safety and supply by reducing the impact of Scab on wheat and barley. The USWBSI is an organization of grower, research, and miller and baker stakeholders, providing annual recommendations to ARS for a mission-directed competitive grant program. The USWBSI directs its resources provided by Congress to a consortium of land-grant colleges and universities through a competitive grant process. The collaborative research efforts take place at state universities and ARS facilities in 31 states (AL, AR, CA, GA, ID, IL, IN, KS, KY, LA, MD, MI, MN, MO, MT, NC, ND, NE, NJ, NY, OH, OR, PA, SC, SD, TN, TX, VA, VT, WA, WI). For FY 2022, NAWG is recommending that Congress continue to provide fully authorized funding for the USWBSI at \$15 million.

In addition to the challenges related to Scab research, NAWG supports the NWIC's recommendation of allocating \$5.66 million in FY 2022 for a Wheat Resiliency Initiative. U.S. wheat growers and researchers have identified wheat rusts, wheat stem sawfly, hessian fly, and bacterial leaf streak as the greatest future threats to wheat production. This funding would allow researchers to build capacity to address underfunded and emerging challenges to wheat production throughout the United States. Specifically, these funds would be used to build research capacity at USDA-ARS facilities and work with university collaborators to address these threats to wheat production. Additionally, we urge Congress to include language to

establish a Wheat Resiliency Initiative under the ARS to address these challenges related to wheat rusts, wheat stem sawfly, hessian fly, and bacterial leaf streak.

Together, these various pests and pathogens affect every growing region and market class of wheat grown across the U.S. Wheat is grown, milled, and delivered as a dietary staple in every state. If funded, through this initiative, the community of U.S. wheat researchers will build a new genetic base in all wheat market classes for resiliency to these challenges posed by wheat rusts, stem sawfly, hessian fly, and bacterial leaf streak. The strength of local agricultural economies of every state will be supported through building resiliency in the face of these challenges to wheat production.

Further, NAWG supports the continuation of funding provided by the Senate in the FY 2021 Consolidated Appropriations Act of \$1 million for ancient crop genetics research conducted at public-private consortiums to enhance yields, fight diseases and pests, and adapt to changing climates and reduce global food insecurity. This funding is pivotal for research centers where research focused on utilizing ancient crop plant ancestors to mobilize genetic diversity, meet consumer demands, and protect the global food supply. These public/private partnerships create opportunities for researchers across the supply chain to work together to provide improved genetics to farmers, millers, bakers, and consumers. This funding will expand access to research funding and novel germplasm to new regions of the country.

NAWG continues to support the SGGI under the ARS Salaries, and Expenses account. The FY 2021 Consolidated Appropriations Act provided a \$940,000 million increase, raising funding to \$3.445 million a year. NAWG is supportive of maintaining funding for the SGGI at least at \$3.44 million in FY 2022. The SGGI provides critical resources to four research areas: Next Generation Genotyping, Next Generation Phenomics, ARS Uniform Small Grains Nurseries, and Doubled Haploid Research and Production.

NAWG also supports increased funding for the NPMTI at \$12 million for FY 2022. The NPMTI was funded for the first time as part of the FY 2020 Consolidated Appropriations Act, and additional resources beyond its current appropriations of \$5 million are necessary to carry out this valuable research to develop a predictive modeling tool for diseases and mycotoxins affecting U.S. row crops to better inform management decisions. The overall goals of the NPMTI are to ensure crop sustainability and crop quality, increase precision, improve soil health through soil-borne disease quantification, and improve disease management, thereby reducing yield losses. Over time, baseline background levels of various pathogens can be established, which will help with anomaly detection and serve as an early warning system for our nation's food security.

In addition to USWBSI and SGGI funding, we urge the Committee to provide at least level funding for the NIFA Hatch Act and Smith-Lever Formula grants. These programs provide the base levels of support for our Land Grant institutions and Extension service, which is the conduit between university research and its application with the grower. These programs enable Land Grants to identify and meet the needs of the nation's wheat producers, millers, bakers, and consumers. NAWG also supports maintaining the Agriculture and Food Research Initiative (AFRI) funding at no less than \$400 million. This critical competitive grant program provides valuable supplemental support to research in agriculture and related sciences to capitalize on recent technological advances to respond to agriculture challenges. Investments through this program enable significant research to be conducted at Land Grant institutions that can have important implications for farmers across the country. Additionally, NAWG believes that any increase in funding for AFRI should not be at the expense of ARS funding or the Hatch Act and Smith-Lever Formula grant.

Wheat research at the federal level is driven by funding to the ARS division of USDA, land grant universities via Hatch Act and Smith-Lever Act funds, and Agriculture and Food Research Initiative competitive grants. State governments support wheat research through funding of public universities and agriculture experiment stations. Wheat growers in many states directly support wheat research through check-offs or assessments on their crop each year. This collaborative partnership has made the United States one of the premier countries for wheat research, with all segments sharing in its cost. The investment has resulted in wheat varieties with the end-use quality that meets or exceeds the demands of our customers, both domestic and international.

Agribusiness investment in wheat breeding and wheat improvement in the United States is minimal compared to other commodities. Private investment in wheat research has increased in recent years, but increased federal investments must be made to provide solutions for problems affecting wheat productivity in the U.S. Wheat growers and the wheat industry depend on the USDA-ARS' public research efforts and land grant universities to provide these solutions.

The National Association of Wheat Growers works with our 20 wheat state associations to benefit all wheat farmers. These requests will directly help find new markets to export our wheat, provide critical investments in research, and facilitate innovative wheat research to improve quality and protect against disease and pest challenges. We greatly appreciate your consideration of these requests.

[This statement was submitted by Dave Milligan, President, National Association of Wheat Growers.]

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PREPARED STATEMENT OF NATIONAL CENTER FOR APPROPRIATE TECHNOLOGY

Appropriations Bill: Agriculture  
 Specific Agency: Rural Business—Cooperative Service  
 Appropriations Account: Rural Cooperative Development Grants  
 Program: Appropriate Technology Transfer for Rural Areas  
 Amount requested for FY 2022 Appropriations: \$3.5 million  
 Amount requested in the President's FY 2022 Budget: \$2.8 million  
 Amount Provided in FY 2022: \$2.8 million

SUMMARY

ATTRA (Appropriate Technology Transfer for Rural Areas) provides practical, cutting edge information to tens of thousands of farmers, ranchers, extension agents, conservation professionals and many others. ATTRA is a long-standing Farm Bill program with a current authorization for appropriations of \$5 million annually. ATTRA is a one-stop shop for farmers and ranchers, managed by the National Center for Appropriate Technology under a Cooperative Agreement with USDA Rural Development's Rural Business—Cooperative Service.

The program offers free technical assistance on sustainable agriculture production and farm energy issues via a toll-free hotline that is answered in English and Spanish for nine hours per day and through our websites [www.ncat.attra.org](http://www.ncat.attra.org) and [www.ncat.attra.org/espanol](http://www.ncat.attra.org/espanol). Assistance is also available through email, texting, social media, and online chat. NCAT's agricultural specialists include 30+ highly qualified experts from diverse agricultural disciplines including horticulture, agronomy, animal science, economics, soil science, business planning, and marketing. Most staff also have experience in farming, ranching, Extension, and education.

In addition to technical assistance and educational materials, ATTRA also helps train military veterans with its Armed to Farm program and is accelerating the adoption of regenerative agriculture practices through workshops, multi-media materials, conferences and farm visits with producers. The Soil for Water Initiative combines peer-to-peer learning networks with rangeland monitoring, workshops, and direct producer technical support.

For FY 2022, we request \$3.5 million, a \$700,000 increase over FY 21 levels to expand ATTRA services for technical assistance to: improve soil health, increase farm resilience and expand market opportunities by adapting to and mitigating the effects of climate change support marketing of products that are sustainably produced; expand farm energy programs including agrisolar; and expand training for beginning, socially disadvantaged, limited resource, and veteran farmers.

NCAT has also signed on in support of other appropriations requests when those requests are linked closely to ATTRA's mission and where ATTRA can provide resources and expertise to support other programs, including support for farm sustainability, climate resilience, soil and water conservation and quality, value-added marketing, on-farm renewable energy production, and farming opportunities for beginning socially disadvantaged, limited resource, and veteran farmers. These linkages are highlighted at the end of this testimony.

ATTRA HIGHLIGHTS AND INITIATIVES

**Educational materials:** ATTRA offers over 1,000 educational resources in print publications, webinars, databases, podcasts, videos, blogs, and tutorials directly related to sustainable agriculture, soil health, regenerative land management, climate solutions, business planning, and marketing.

**Technical Assistance:** ATTRA provides one-on-one assistance, small-group assistance, and peer-to-peer learning networks through workshops, conference presentations, farmer listening sessions, farm tours, and social media, including six regional Facebook groups.

**Armed to Farm** is a sustainable agriculture training program for military veterans. More than 500 veterans have been trained in week-long sessions through farm visits, hands-on activities, and classroom sessions on business planning, mar-

keting, recordkeeping, and various production topics. To date 82 percent of participants are farming or in the process of starting a farm; 94 percent say that the training improved their ability to farm; and 34 percent added new enterprises to their farm since attending the training. NCAT hosts a listserv and an Armed to Farm Facebook page to facilitate peer-to-peer learning.

The Soil for Water Initiative is accelerating the adoption of regenerative agricultural practices that catch and hold more rainwater in soils. Peer-to-peer learning networks are combined with rangeland monitoring, workshops, and support for producers who are trying new ways to improve health of their land and soils. ATTRA resources have been leveraged to expand these networks with support from NRCS, SARE, and private foundations.

To learn more about ATTRA's activities, please see our 2019–2020 Report to RBS as well as the ATTRA website.

#### ATTRA REGIONAL OFFICES

Work carried out under ATTRA is accomplished among all of NCAT's regional offices, located in Butte, Montana (headquarters); Fayetteville, Arkansas; Davis, California; San Antonio, Texas; Keene, New Hampshire; Jackson, Mississippi; and Check, Virginia. Satellite offices are in Pennsylvania, Kentucky, Colorado, and Idaho. Each office covers a region of the U.S.: Montana covers the northern plains, Arkansas covers the southeast, California covers the west, Texas covers the southwest, New Hampshire covers the northeast, Mississippi covers the Gulf states region, and Virginia covers the mid-Atlantic region.

#### ATTRA AND NCAT CONTRIBUTIONS TO OTHER PROGRAMS IN THE ANNUAL APPROPRIATIONS BILL

In addition to running a first-class education, training and technical assistance program via a cooperative agreement with USDA with funds provided by this Subcommittee, we also have a closely linked interest and make contributions to and help promote many other USDA programs and thus also have an interest in their annual funding level. In that light, earlier this year we joined with many other organizations in support of robust appropriations for the following:

- Research, education, outreach, and technical assistance funding to provide farmers and ranchers the tools they need to adapt to and help mitigate climate change, including support for AFRI, SARE, LTAR, Climate Hubs, ORG, CTA, and ATTRA (March 26, 2021 Letter from over 50 national and regional organizations including NCAT)
- Conservation Technical Assistance (CTA) support at \$1.1 billion (April 8, 2021 Letter from 70 national and regional organizations including NCAT)
- Grazing Lands Conservation Initiative (GLCI) support of \$50 million within the NRCS CTA appropriations account (April 15, 2021 Letter from over 100 national and regional organizations including NCAT)
- Farm and Ranch Stress Assistance Network (FRSAN) support of \$10 million (April 20, 2021 Letter from over 30 national and regional organizations including NCAT)
- Rural Energy for American Program (REAP) support of \$20 million in discretionary funding (April 29, 2021 letter from nearly 50 national and regional organizations and businesses including NCAT)

NCAT is proud to be a long-term partner with USDA in support of sustainable agriculture, value-added production and marketing, local food systems, and training and technical assistance for beginning, socially disadvantaged, limited resource, and veteran farmers. We appreciate the Subcommittee's ongoing support for ATTRA as the nation's premier source of information on sustainable agriculture and for the range of other programs that help farmers thrive by producing healthy, fresh food to the American people while conserving natural resources and supporting rural communities.

[This statement was submitted by Steve Thompson, Executive Director, National Center for Appropriate Technology.]

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#### PREPARED STATEMENT OF NATIONAL COALITION FOR FOOD AND AGRICULTURAL RESEARCH (NCFAR)

The National Coalition for Food and Agricultural Research (NCFAR) is a non-profit, nonpartisan, consensus-based and customer-led coalition that brings food, ag-

riculture, nutrition, conservation, and natural resource organizations together with the food and agricultural research and Cooperative Extension community, serving as a forum and unified voice in support of sustaining and increasing federal investment in food and agricultural research, extension, and education.

NCFAR strongly supports increased federal investment in food and agricultural research, extension, and education in the U.S. Department of Agriculture's (USDA) Research, Education, and Economics (REE) mission in fiscal year 2022 (FY22) through intramural and extramural programs, as follows:

—Agricultural Research Service (ARS), at least	\$1,720 million
—Economic Research Service (ERS), at least	\$87 million
—National Agricultural Statistics Service (NASS), at least	\$180 million
—National Institute of Food and Agriculture (NIFA), at least	\$1,721 million
—Agricultural Advanced Research and Development Authority (AGARDA) pilot	\$2 million

The requested increase for the NIFA budget should be provided to NIFA leadership, with suggested allocations of increases to specific programs, including:

—Hatch Act (Research and Education Programs), at least	\$280 million
—Smith-Lever (Extension Activities), at least	\$341 million
—Evans-Allen (Research and Education Programs), at least	\$79 million
—1890 Extension (Extension Activities), at least	\$67 million
—1890 Education Grants, at least	\$28 million
—McIntyre-Stennis (Research and Extension Programs), at least	\$39 million
—Agriculture and Food Research Initiative (AFRI), at least	\$600 million
—Research Grants for 1994 Institutions, at least	\$6 million
—Extension Services for 1994 Institutions, at least	\$10 million

NCFAR supports at least level funding from FY21 enacted for other NIFA programs and encourages proportionate increases where possible.

#### AMERICA'S COMPETITIVENESS

NCFAR submits that our nation is not investing enough in publicly funded research to permit the discoveries necessary to regain our place as the global leader in agricultural research—supporting our food and national security. The unparalleled success story in the nation's food and agricultural system is in large part the product of past investments in food and agricultural research and extension. Federal funding for food and agricultural science has been essentially flat for over two decades despite much greater demonstrated needs and opportunities. Our nation's health and wellness, along with our competitiveness in global markets is at risk, which impacts our national security. China surpassed the U.S. in public funding in 2009 and realized a 2-to-1 advantage in 2013.<sup>1</sup> In 2015, the U.S. share of global investment in public agricultural research and development was 8.9%; China, India and Brazil together spent some \$3.16 for every dollar the U.S. invested in public agricultural research and development.<sup>2</sup> U.S. public sector funding in research and development is falling in absolute terms and relative to major competitors, including Brazil, India, and China.<sup>3</sup>

Modern agriculture is a science-based business, supported by the important goals of the farm bill research title. Research underpins the critical advancements and tools that help those in the food and agricultural system do their jobs, on which consumers, rural communities, the nation's economy, and global stability rely.

<sup>1</sup>Abbott, Chuck (March 2017) China Overtakes U.S. as Top Government Funder of Ag Research. Successful Farming. <https://www.agriculture.com/news/business/china-overtakes-us-as-top-government-funder-of-ag-research>.

<sup>2</sup><https://kansascityfed.org/documents/7107/the-drivers-of-us-agricultural-productivity-growth.pdf> and <https://www.cambridge.org/core/journals/journal-of-economic-history/article/unpacking-the-agricultural-black-box-the-rise-and-fall-of-american-farm-productivity-growth/6B12A75BB1FD611628A9FC9C08B90056> and <https://www.ers.usda.gov/amber-waves/2020/july/productivity-is-the-major-driver-of-us-farm-sector-s-economic-growth/>.

<sup>3</sup>Clancy, Matthew (2017 September) Public sector spending on agricultural research declining in the United States and Western Europe, but rising in China, India, and Brazil. USDA ERS. <https://www.ers.usda.gov/data-products/chart-gallery/gallery/chart-detail/?chartId=85038>.

## TAXPAYER RETURN ON INVESTMENT

The returns on investment in agriculture research are significant, averaging \$17 for every \$1 invested.<sup>4</sup> Public and private investments in U.S. agricultural research and practical application of results have paid huge dividends to the United States and the world, especially in the latter part of the 20th century. These returns include work on food quality and quantity; resource conservation; producer profitability; food safety and security; and improved human and animal health. Societal expectations, climate impacts, and multifaceted food security and health challenges placed upon the food and agricultural system are ever-changing and growing, requiring in depth responsiveness by the research community. The United Nations projects by 2050, a 70 percent increase in food production will be necessary. Meeting this increase will require much more research developing new technologies.<sup>5</sup>

While Congress has acknowledged this funding need in the America Grows Act of 2021, which authorizes a five percent increase for REE agencies, more federal funding is needed to ensure the nation's competitiveness and continued agricultural innovation.

## ADDITIONAL BACKGROUND INFORMATION

NCFAR supports mandatory programs in the farm bill that provide funding for research, encompassing the entire REE mission area. This includes extramural programs in NIFA-such as AFRI, and capacity funds to support Experiment Stations and Cooperative Extension at the 1862 and 1890 land-grant universities and 1994 tribal colleges and universities-and intramural programs in ARS, ERS, and NASS, as well as the U.S. Forest Service research program.

"Customers" of the USDA REE enterprise include farmers, ranchers, and foresters across the nation; the agricultural input industry; food producers and processors; professionals in the fields of nutrition and health, natural resources, and environment; rural communities; and ultimately all consumers of food and natural fiber around the world. Indeed, this Subcommittee and other Members of Congress and policy makers at all levels of government are important "customers" of federally funded research, extension, and education.

## EXTRAMURAL PROGRAMS

NCFAR's strongly held position is that increases to any programs in the REE mission area should constitute a net increase in REE funding, and not come at the expense of other REE programs, as the various programs serve important and complementary roles.

NCFAR urges the Subcommittee to support AFRI at the authorized level of \$700 million as soon as practicable. Absent a FY 2022 President's Budget Request, NCFAR commends USDA for including \$600 million for AFRI in its FY21 budget request, with \$100 million targeted toward basic and applied research in AI.

Capacity funding through Smith-Lever 3(b)-(c), the Hatch Act, Evans-Allen Programs, and 1890 Extension, Research Grants for 1994 Institutions, and 1994 institution Extension program have not kept pace with inflation due to flat funding for food and agricultural science for over 20 years.

NCFAR supports Hatch Act, Evans-Allen Programs, and Research Grants for 1994 Institutions funding which is central to the function of agricultural, food, and forest research at our nation's public institutions. Research capacity programs in agriculture support high-priority food, feed, fuel, and fiber research needs including field-tested innovations on crop, forest, and animal health and disease prevention, as well as technologies, systems and interventions that enable access to safe and nutritious foods.

NCFAR encourages the Subcommittee to enhance funding for functions that assure the translation of science for practical application through Cooperative Extension education. Smith-Lever, 1890s Extension, and Extension Services at 1994 Institutions funds support the Cooperative Extension System, a unique network of local educators who deliver vital, practical information to agricultural producers, small business owners, communities, youth, and families. Researchers, agents, and educators work together to test new innovations and practices on the farm and share science-based best farm and food system information with communities. Extension programs avert the spread of agricultural pest and diseases, connect people with

<sup>4</sup>Baldos, Uris Lantz, Frederi G. Viens, Thomas W. Hertel, and Keith O. Fuglie. R&D Spending, Knowledge Capital, and Agricultural Productivity Growth: A Bayesian Approach. *American Journal of Agricultural Economics*. 101(1): 291-310; <https://doi.org/10.1093/ajae/aay039>.

<sup>5</sup>How to Feed the World in 2050. UN Food and Agriculture Organization. [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).



ment of Agriculture for their continued innovations to strengthen the quality of the food package and streamline administration. In fact, on February 1, 2020, USDA implemented a progressive new “Prescription” food package. This new menu offers an increased quantity and variety of food. These changes were informed by the most current information in nutrition science, enhancing the health benefits enjoyed by CSFP participants. While the pandemic limited the availability of some CSFP items during FY 21, distribution waivers and FNS procurement of additional items helped maintain distributions across the country. Additional CSFP funding is currently helping to replenish national inventories and address the increased food costs.

We are greatly encouraged by the President’s efforts to support seniors as we move out of the pandemic, as evidenced in the White House statements on CSFP released on May 3, 2021:

“The Commodity Supplemental Food Program (CSFP) provides nutritious, domestically sourced USDA foods to low-income persons 60 years or older. The American Rescue Plan provided nearly \$37 million to expand the reach of CSFP by fulfilling all 2021 requests from states to serve more seniors and adding the Wichita and Affiliated Tribes to the program. This expansion, along with similar actions in other nutrition programs including SNAP that serve this population, will help combat food insecurity among seniors during the pandemic. In addition, FNS is ensuring those who rely on CSFP don’t unintentionally lose access to their benefits due to the financial relief they receive through the American Rescue Plan. FNS is providing guidance to states and Tribal nations to exclude stimulus funds and child tax credits provided by the American Rescue Plan from income when determining eligibility for CSFP.”

Equally encouraging are the comments from the presidential proclamation honoring May 2021 as Older Americans Month:

“The proclamation recognizes that older Americans and families have faced substantial challenges during the last year, and their resilience and strength have made our country stronger,” the White House said. “Older adults deserve to age with dignity and have equitable access to the long-term care system, regardless of race, sexual orientation or gender identity, disability, or socioeconomic status. The Biden-Harris administration is committed to expanding access to health care, nutrition services, caregiving, and opportunities to age in place for all older Americans. In the first 100 days, the Biden-Harris administration has taken significant steps to address the health and security of older adults.”

As a senior-based program, CSFP has a long-standing presence in providing healthy food to some of our most vulnerable citizens. The FY 21 efforts to replenish national inventory and expand caseload sets up the opportunity to reach more eligible seniors across the country and provide consistent nutrition support in FY 22. Commitment to supporting CSFP in FY 22 will build on that foundation at a time when our senior population continues to grow, and new distributions remain needed to reach unserved populations in states across the US.

CSFP continues to be a testimony to the power of community partnerships with faith-based organizations, farmers, private industry, and government agencies. The CSFP offers a unique combination of advantages unparalleled by any other food assistance program:

- The CSFP specifically targets one of our nation’s most nutritionally vulnerable populations: low-income seniors.
- The CSFP provides a monthly selection of food packages tailored to specific nutritional needs.
- The CSFP involves the entire community. Tens of thousands of volunteers and private companies donate money, equipment, and most importantly time and effort to deliver food to needy and homebound seniors. These volunteers not only bring food but companionship and other limited support systems.
- The COVID–19 pandemic provided some powerful examples of the protective benefits of CSFP. While stores continued to see limitations for some food items, CSFP participants still had access to nutritious foods, provided through safe and socially distant practices implemented during the pandemic. No-contact distributions, including home deliveries, electronic intake practices, and drive-up food pick-ups streamlined efforts to protect staff, volunteers, and participants.
- With the aging of the Baby Boomers and the coming “Silver Tsunami”, CSFP is uniquely positioned to meet the nutritional needs of our nation’s growing population of vulnerable seniors. Replenishing national food inventories and increasing caseload are vital as we work to keep up with this growing population.

NCSFPA senior participants across the country value their CSFP benefits for both the balanced meals that CSFP provides each month and the interaction between seniors and program staff. CSFP is a program that promotes healthy lifestyles and reduces any discomfort associated with participation in food support programs. The program allows seniors to live more stable, self-sufficient lives, whether homebound, living with limited income, or lacking access to other food and support options. It allows participant income to be put toward other costs of living, such as rent/mortgage, utilities, medical care.

America is aging and CSFP is an integral part of senior nutrition programming that is a cost-effective and nutritionally sound way to ensure that today's seniors remain productive, healthy, and independent to maintain a good quality of life. It is of note that many seniors are now continuing to work at least part-time beyond retirement age to ensure that they can afford basic necessities. As such, CSFP is an important tool for them to remain healthy so that they may continue to be an active part of the work force.

The Agriculture Appropriations Subcommittee has consistently supported CSFP, acknowledging it as a cost-effective way of providing nutritious supplemental foods. We urge the Subcommittee to provide \$375,000,000 subject to cost revisions submitted by the U. S. Department of Agriculture for the Commodity Supplemental Food Program in order to allow us to provide needed services to a minimum of 760,634 vulnerable seniors each month.

Again, thank you for your continuing support. We look forward to working with you on behalf of CSFP participants.

[This statement was submitted by Danielle Bozarth, President, National Commodity Supplemental Food Program Association.]

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#### PREPARED STATEMENT OF NATIONAL CONGRESS OF AMERICAN INDIANS

The National Congress of American Indians (NCAI) is the oldest, largest, and most representative national organization serving the interests of tribal governments and communities. NCAI appreciates the opportunity to provide the following testimony on funding for tribal and related programs in the U.S. Department of Agriculture. More information on the funding requests that are outlined throughout this letter can be found in NCAI's FY 2022 Indian Country Budget Request: Restoring Promises.<sup>1</sup>

Native peoples were farming this land long before the establishment of the first American colony. To this day, agriculture remains a major economic force in Indian Country, especially as a job creator for rural tribal communities. The U.S. Department of Agriculture's (USDA) 2017 Census of Agriculture counted at least 79,198 American Indian farm and ranch operators utilizing more than 59 million acres of land. These farms and ranches sold \$3.5 billion of agricultural products, including more than \$1.4 billion of crops and \$2.1 billion of livestock and poultry. Additionally, the 2007 Census of Agriculture Fact Sheet notes that "American Indian farm operators are more likely than their counterparts nationwide to report farming as their primary occupation...to derive a larger portion of their overall income from farming...[and] to own all of the land that they operate." Tribal Nations and individual Native farmers and ranchers rely on active partnerships with USDA to sustain and advance common interests across the broad array of services that this federal agency provides for tribal governments.

USDA programs span a wide range of areas that impact Indian Country, including food safety, housing, business development, telecommunications and broadband, water systems, crop insurance, nutrition, land conservation, forestry, research, and, of course, the programs designed to assist farmers. From 2001 to 2018, USDA Rural Development (USDA-RD) invested more than \$6.2 billion in Indian Country. As such, Tribal Nations look to the myriad services, programs, and resources available from USDA to ensure sustained prosperity and economic security for American Indians and Alaska Natives—not only through its programs to farmers and ranchers, but also through programs that serve tribal governments, natural resource managers, Native youth, colleges, water infrastructure providers, tribal utilities and housing providers, and tribal communities.

The 2018 Farm Bill contained a historic number of new tribal provisions, several of which need increased funding, outreach, and technical assistance support to ensure full and proper implementation consistent with the intent of Congress. Additionally, the 2018 Farm Bill extended tribal self-determination contracting under

<sup>1</sup> National Congress of American Indians (2021). Fiscal Year 2022 Indian Country Budget Request: Restoring Promises. Washington, DC.

the Indian Self-Determination Education and Assistance Act of 1975 (P.L. 93-638) to two USDA programs in food procurement and forestry management. Accordingly, NCAI requests the following amounts of programmatic support.

#### U.S. Department of Agriculture FY 2022 Requests

Department of Agriculture Programs	NCAI FY 2022 Request
1994 Institutions Extension Program (NIFA) .....	\$107,000,000
1994 Institutions Research Program .....	\$60,500,000
1994 Institutions Educational Equity Grants .....	\$250,000 from non-INAP resources
Native American Endowment Account (Corpus Payment) .....	\$434,400,000
TCU Essential Community Facilities Program .....	\$10 million
Office of Tribal Relations .....	\$1.5 million
Rural Development .....	\$3.4 billion
Rural Utilities Service .....	\$980.7 million
Rural Housing and community Facilities Programs .....	\$29 billion
Natural Resources Conservation Service (NRCS), Environmental Quality Incentives Program.	\$1.75 billion
NRCS, Conservation Stewardship Program .....	\$725 million
Federally Recognized Tribal Extension Program .....	\$30 million
Food Distribution Program on Indian Reservations (FDPIR) .....	\$200 million
FDPIR, Traditional Foods Market Development .....	\$5 million
FDPIR, Demonstration Project for Tribal Organizations .....	\$5 million
Industrial Hemp Production, Regulation, and Research .....	Amounts as necessary to implement authorizing provisions
Rural Development 502 Direct Loan Program for Tribal Relending Demonstration, tribal set-aside.	\$50 million
TCU Broadband/IT Infrastructure Fund (Rural Utilities Service) .....	\$24 million

Rural Development, Rural Housing and Community Facilities Programs: Access to housing, community, and home repair financing provides Native individuals, families, and communities with security, credit facilities, and repair and weatherization needs. This financing also supports community and educational facilities and provides employment in construction and related industries that flows from access to capital in Indian Country. In FY 2013, the Rural Housing Service (RHS) programs provided \$177 million in economic support to American Indian and Alaska Native enterprises and communities, as well as tribal colleges. During this time, USDA-RD provided 56 Single Family Housing direct loans (totaling \$119 million) and 1,100 Single Family Housing loan guarantees (totaling \$155 million).

NCAI requests a minimum of \$29 billion in loan authority for the Rural Housing and Community Facilities Programs.

Food Distribution Program on Indian Reservations Program (FDPIR): FDPIR is currently serving approximately 276 Tribal Nations and is a critical food assistance program, particularly in areas that do not have easy access to Supplemental Nutrition Assistance Program (SNAP) offices or authorized food stores. Through more than 100 Indian Tribal Organizations (ITOs) and three state agencies, FDPIR provides USDA foods to low-income households and the elderly living on Indian reservations and to AI/AN households residing in eligible areas near reservations or in Oklahoma. The ITOs also provide employment to local and tribal personnel who administer the program. Average monthly participation for FY 2019 was 83,800. Additional funding is needed to address the new demands on the programs, rising food costs—especially the increasing price of meat-based proteins—and to improve program operations at ITO sites, many of which have lacked the administrative funds necessary to update critical equipment like refrigerators and freezers.

NCAI requests \$200 million for the FDPIR Program. NCAI also requests an additional \$5 million to develop a traditional foods market for FDPIR, and, separately, an additional \$5 million for the Tribal Self-Governance Demonstration Program.

Rural Development (RD), Rural Utilities Services (RUS), and Rural Housing and Community Facilities Programs: USDA-RD began implementing changes in 2012 designed to improve access to RUS funding for individuals living in Substantially Underserved Trust Areas (SUTA)—including tribal lands and lands owned by Alaska Native Regional Corporations and Village Corporations—to improve basic services, including: water and waste disposal, rural electrification and high-cost energy, telecommunications and broadband infrastructure, and distance learning and telemedicine. The SUTA changes, originally authorized by the 2008 Farm Bill, still require additional funding for administration as well as for programs and loan author-

ity within RUS. It is important that more funding is made available to provide the infrastructure development and upgrades necessary in Indian Country.

NCAI requests \$980.624 million to RUS; \$1.5 million for the USDA's Office of Tribal Relations; and \$1.5 million for the USDA Rural Development Tribal Technical Assistance Program.

#### CONCLUSION

Thank you for this opportunity to provide written testimony and for your consideration of the FY 2022 budget recommendations of NCAI. We look forward to working with this subcommittee on a nonpartisan basis to ensure the federal government honors its treaty and trust obligations to Tribal Nations through the federal budget process. For more information, please contact Policy Analyst Julia Wakeford ([jwakeford@ncai.org](mailto:jwakeford@ncai.org)).

[This statement was submitted by Dante Desiderio, Chief Executive Officer of the National Congress of American Indians.]

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#### PREPARED STATEMENT OF THE NATIONAL COOPERATIVE BUSINESS ASSOCIATION CLUSA

Thank you for the opportunity to provide testimony to support your work on Fiscal Year 2022 appropriations. The National Cooperative Business Association CLUSA International (NCBA CLUSA) represents the more than 65,000 cooperative businesses in the United States across all sectors of our economy and is an international development organization currently working in more than 20 countries.

The COVID-19 pandemic has ravaged nearly every aspect of life for Americans and people across the world. Over the past 15 months, cooperative businesses have faced the same challenges as non-cooperative counterparts but have navigated these challenges in fundamentally different ways. Cooperatives are owned and controlled by their members, and as such, were able to quickly adapt and make decisions in the best interest of all stakeholders-member-owners, employees, supply chain partners and the community.

Cooperatives are more resilient than other business models, particularly in times of economic crisis. During the pandemic, many cooperative businesses chose to make other adjustments to business operations in lieu of laying off employees, including decisions to collectively reduce hours or pay. Moreover, many cooperatives have gone above and beyond to meet the needs of high-risk community members as well as create new partnerships with businesses whose operations were impacted by closures. For example, many food co-ops not only expanded services to accommodate shopping hours and delivery services for high-risk people, but also built new and strengthened existing partnerships with local farmers that depended on contracts with schools and restaurants.

As our nation transitions toward recovery, more people are turning to cooperatives to meet their day-to-day needs and capture economic opportunity, it is imperative the Congress allocate funding necessary to meet this demand for cooperative business development.

First, NCBA CLUSA requests funding the Rural Cooperative Development Grant program at its authorized level of \$40 million, including no less than \$15 million for technical assistance grants for cooperative development organizations. RCDG, administered by the Rural Business-Cooperative Service, is awarded on a competitive basis to development organizations and institutions of higher education to provide technical assistance to support cooperative businesses start-up, expand and innovate in rural communities.

Despite growing demand, this grant has been stagnant at \$5.8 million for nearly a decade. While requests for technical assistance have steadily increased in the last several years, it has spiked for many cooperative development organizations in the last 15 months, with some organizations reporting four times the number of requests of assistance.

In addition to requests for assistance in cooperative startups, there is also significant drive from retiring business owners seeking to sell their business to a cooperative of workers or consumers. Many business owners of the Baby Boomer generation, particularly those in rural America, are considering selling their businesses in the wake of the COVID economic turbulence. In many cases, employees or consumers are the most viable buyers, when the alternatives are selling out to a bigger firm, or worse, shuttering the business altogether.

Moreover, the pandemic has created an opportunity to strengthen the economies of rural communities. Many families chose to relocate to rural communities during

the pandemic and are experiencing the quality of life and opportunity these communities hold. We must ensure that rural communities capture this dynamic and provide a lively the jobs and recreational opportunities that contribute to a high quality of life. Cooperatives provide community-driven, long-term solution for small businesses to thrive for generations to come.

Second, NCBA CLUSA requests \$25 million for the Rural Energy Savings Program (RESP) administered by the Rural Utilities Service. RESP provides no-interest loans to rural electric cooperatives to invest in energy efficiency improvement in rural households. The electric co-op or other eligible intermediary works with households to facilitate these projects with low or no upfront costs and are paid back through monthly on-bill financing.

Across rural America, rural households face energy burdens significantly higher than non-rural homes. RESP not only creates greater opportunity for more households to reduce their monthly energy bills, but the on-bill financing mechanism ensures that these projects can equitably reach low-income households where additional savings can have lifechanging impacts.

Greater resources available for RESP will help scale the impacts of energy efficiency improvements across more households and cooperative service areas, reducing the overall climate impact. Moreover, RESP projects create or support good-paying 21st century energy jobs, with many cooperatives choosing to hire new staff to the cooperative or contracting with local businesses specializing in these activities, further spurring economic activity and growth in rural communities.

Finally, NCBA CLUSA urges robust funding for the Foreign Agriculture Service Food for Peace and McGovern-Dole Food for Education programs. NCBA CLUSA is proud to partner with local actors in countries across the world using the cooperative approach to promote economic growth and build more inclusive, resilient local economies. Importantly, NCBA CLUSA projects are built on the seven cooperative principles and designed to address larger societal issues that communities face by addressing food access, creating equitable opportunities for women and young people, and improving health and nutrition. These projects are driven by people living in the community, with technical assistance from NCBA CLUSA, to build institutions that are sustainable long after the project ends. The projects equip people with the skills to use the cooperative model to effectively address other economic or social challenges that may arise in the future.

In the United States and globally, the impacts of the pandemic will continue to have the harshest impacts on the most vulnerable members of communities across the world. Cooperatives have historically been a model especially effective for disadvantaged people, not only because of lower barriers to entry than other forms of business, but also because cooperatives are democratically controlled, so member-owners ensure that the business remains responsive to members' most pressing needs as conditions change.

As many communities continue to weather the public health and economic impacts of the pandemic, cooperatives are a time-tested solution to help more people own and control the businesses they use. Both domestically and internationally, the cooperative model can help more people to address market failures, gain greater parity with bigger competitors, or create market alternatives to existing goods and services through local ownership. Robust investments in cooperatives will help more people fully recover from the consequences of the pandemic, benefit from a rapidly changing economy to reap more of the profits they help to create and be more resilient to future economic shocks that may come.

Thank you for your consideration of these requests. NCBA CLUSA looks forward to continuing to work with the Subcommittee on Agriculture, Rural Development, Food and Drug Administration, and Related Agencies on Fiscal Year 2022 appropriations.

[This statement was submitted by Douglas J. O'Brien, President & CEO, McGovern-Dole Food for Education.]

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#### PREPARED STATEMENT OF THE NATIONAL COTTON COUNCIL

This is to transmit the cotton industry's request for FY 2022 funding for selected programs under the jurisdiction of the Subcommittee. The National Cotton Council (NCC) appreciates your consideration of our requests.

The NCC is the central organization of the United States cotton industry. Its members include producers, ginners, cottonseed processors and merchandizers, merchants, cooperatives, warehousemen and textile manufacturers. A majority of the industry is concentrated in 17 cotton-producing states stretching from California to Virginia. U.S. cotton producers cultivate between 10 and 14 million acres of cotton

with production averaging 12 to 20 million 480-lb bales annually. The downstream manufacturers of cotton apparel and home furnishings are located in virtually every state. Farms and businesses directly involved in the production, distribution and processing of cotton employ more than 115,000 workers and produce direct business revenue of more than \$22 billion. Annual cotton production is valued at more than \$5.5 billion at the farm gate, the point at which the producer markets the crop. Accounting for the ripple effect of cotton through the broader economy, direct and indirect employment surpasses 265,000 workers with economic activity of almost \$75 billion. In addition to the cotton fiber, cottonseed products are used for livestock feed and cottonseed oil is used as an ingredient in food products as well as being a premium cooking oil.

The NCC welcomes the opportunity to provide the following recommendations and requests for FY 2022 appropriations for programs which make important contributions to our industry's ability to compete and prosper in a world market.

#### FUNDING PRIORITIES

*Animal Plant Health Inspection Service (APHIS):* The NCC supports adequate funding so that APHIS can continue to administer essential services.

*Cotton Pests:* The NCC requests \$15.83 million (a \$2.31 million increase) for the APHIS Cotton Pests Account. This increase in funding will partially offset additional program costs resulting from Hurricane Hanna passing through the National Buffer Zone (NBZ), as well as more aggressive eradication activities currently underway to accelerate completion of eradication.

The NBZ is the remaining U.S. cotton acreage with residual boll weevil populations requiring active eradication operations and is located in the Lower Rio Grande Valley of Texas. The NBZ is viewed by the cotton industry as an area that protects the national investment in this program to date. The U.S. cotton industry recognizes unique circumstances of the NBZ bordering active boll weevil populations in Tamaulipas, Mexico. The successful completion of boll weevil eradication in the U.S. is biologically linked to the success of boll weevil eradication in adjacent areas of northern Tamaulipas, Mexico.

The data for early 2020 reflected the progress of 2019 and advanced population reduction significantly until Hurricane Hanna passed through the NBZ which caused significant setback and essentially 80% loss of cotton crop. High winds destroyed more than 60% of the pheromone trapping grid used to monitor weevil movement and areas with growing populations, and also dispersed weevils across multiple fields and locations that were essentially free of the boll weevil. Flooding and continued rain impeded any treatment activities, thus allowing adult females to lay numerous eggs protected from program operations for at least 30 days as the boll weevil larvae matured inside cotton fruit. Record freezing temperatures in the NBZ during the winter of 2021 have aided the program by eliminating numerous non-commercial cotton plants and likely some overwintering weevils. Scientifically, it would appear the 2021 year should provide great advancement of the eradication efforts.

*Elimination of Invasive Exotic Cotton Pest Introductions:* The NCC requests \$2 Million in new funds directed to APHIS for the Elimination of Invasive Exotic Cotton Pest Introductions. The Cotton Seed Bug (CSB) has been identified in residential and urban areas of three counties in California. This represents the introduction of a new cotton pest to the U.S. The CSB has been reported to cause up to 6.8% reduction in yield, 32% reduction in seed weight, 6% reduction in oil content of seed, unquantified reduction in germination of seed, unquantified reduction in ginning efficiencies, quality reduction due to lint stain, reduction in lint quality and reduction in square retention. The primary food of adults and nymphs are the seeds of plants in the Malvaceae family, which include cotton. Based on literature reporting annual damage incurred as a result of CSB, the NCC has conservatively estimated \$47.8 million dollars lost annually for California, \$28.5 million for Arizona, and \$8 million for New Mexico if steps are not taken to remedy this threat. APHIS needs funds to improve diagnostic capabilities for this virus, survey the fairly isolated area where these two finds occurred, sample potential alternate hosts in order to determine if alternate host destruction may eliminate this virus from the U.S. and prevent further spread to nearby cotton production areas. Failure to react now could allow the virus to spread to additional areas with greater host availability and more rapid spread across the U.S.

*Foreign Agricultural Service (FAS):* The industry supports sufficient funding to ensure FAS is adequately staffed to carry out important market development and trade enhancing functions in headquarters and abroad.

*Market Access Program (MAP):* The NCC strongly supports the funding level of at least \$200 million for MAP, as authorized and funded in the 2018 Farm Bill. Cotton Council International (CCI), the foreign market development arm of the NCC, has the critical mission of maintaining and expanding exports of US cotton and cotton products in Asia, Europe, Africa, and Central and South America. The value of U.S. cotton fiber and value-added cotton product exports exceed \$10 billion in value. Activities carried out using MAP and Foreign Market Development (FMD) funds have been documented as contributing to increased export sales of cotton fiber and value-added manufactured cotton products. Independent studies reveal that for every dollar spent by USDA cooperators, including CCI, U.S. exports increase \$35, a 35-to-1 return on investment. For the cotton industry, this represents over one billion dollars in export value or an additional 7,000 jobs to the U.S. economy. The cotton industry believes CCI's programs are an effective catalyst for private sector investments, with the industry investing \$2.00 for every dollar of MAP funds received.

*Foreign Market Development (FMD):* The FMD program is used to encourage and support U.S. commodity groups to undertake long-term market development and trade servicing. These funds are used for programs with detailed market assessments, strategic program development and ongoing evaluations. These funds create unique market development and trade servicing value and, like the MAP funds, are closely monitored by USDA for compliance with U.S. laws. FMD is currently funded at no less than \$34.5 million and requires at least a dollar-for-dollar industry match. The industry requests that funding for FMD be continued at no less than the level authorized in the 2018 Farm Bill. The cotton industry believes CCI's programs are an effective catalyst for private sector investments with industry investments totaling \$1.75 for every dollar of FMD funds received.

*Farm Service Agency (FSA) and National Resource Conservation Service (NRCS):* The NCC supports adequate funding for both agencies so that FSA and NRCS can continue to deliver essential farm and conservation programs and services.

*Joint Pest Eradication:* The NCC requests sufficient funding to allow FSA to make up to \$30 million in loans to eligible producer-controlled organizations carrying out Boll Weevil Eradication Program. This authority has existed since FY2005 and has been critically important to the success of the programs. There has not been a forfeiture on any loan made by FSA for the purpose of carrying out boll weevil eradication efforts.

*Risk Management Agency (RMA):* The NCC supports adequate funding so that RMA can continue to administer essential insurance products.

*Agricultural Research Service (ARS):* The cotton industry continues to be concerned with the financial support of this important intramural research agency. ARS programs and facilities conduct vital research programs in fiber quality, production agronomic systems and textiles that ultimately support U.S. cotton production and post-harvest processing as well as the U.S. textile industry's efforts to remain competitive in global markets.

*Cotton Breeding And Germplasm Program:* The NCC specifically requests an annual funding increase of \$6.8 million to support five major cotton breeding and germplasm development program locations in Arizona, Mississippi, South Carolina and Texas. There have been numerous budget cycles since these programs have seen any significant increases. Four of the five major research locations are operating well below the current ARS standard of \$600,000 per scientist year (SY). A portion of this appropriation increase request will be used to provide funding to achieve the recommended financial support level per SY. In addition, several new positions are needed in multiple locations to provide biological, physiological and genetic database support for existing cotton breeder projects. In many situations, the lead scientists and their support groups are working collaboratively with other major row crops such as corn, grain sorghum and peanuts to provide sustainable regional cropping systems. Additionally, the Cotton Germplasm Collection is in desperate need of additional database management support and equipment to adequately catalog existing and new accessions (genetically and phenotypically) as well as properly renew the collection and then distribute requested germplasm to breeders, both public and private, at multiple locations servicing the US industry. Other major row crop germplasm collections have access to this type of support.

*Cotton Germplasm Collection:* The collection is located at the ARS's Southern Plains Agricultural Research Center (SPARC), College Station, TX and needs significant repairs and renovation to the storage vault and related buildings and equipment. Plant breeding experts in cotton, that are also familiar with other crops, have identified specific renovations that will allow improved storage protection and distribution of the collection in addition to providing for increased space needs to better

complete its mission. We request \$2.3 million for building renovations for this facility.

*Cotton Ginning Research Units:* We request maintaining the level of funding for FY 2022 provided in the FY 2018–2021 appropriations for the three cotton ginning research units (Southwestern Cotton Ginning Research Laboratory, Mesilla Park, NM; Cotton Production and Processing Research Unit, Lubbock, TX and the Cotton Ginning Research Unit, Stoneville, MS). All three ginning research units need this continued level of funding to address scientific personnel needs, conduct research, and offset the impact of inflation after years of flat or decreasing budgets.

*Cotton Blue Disease:* We request an additional \$1.5 million to Cotton Blue Disease account and urge the language be modified to “Exotic Pathogens of Cotton.” Cotton Leafroll Dwarf Virus is closely related to Cotton Blue. The NCC urges the language modification to reflect “Exotic Diseases of Cotton”, thus allowing funding prioritization should other exotic diseases threaten the cotton industry. In that regard, the additional \$ 1.5 M are requested for needed proactive activities of the Cotton Leafroll Dwarf Virus.

*Elimination of Invasive Exotic Cotton Pest Introductions:* As noted in the APHIS section, the Cotton Seed Bug (CSB) has been identified in residential and urban areas of three counties in California. The NCC requests \$2 million in funding to allow ARS to conduct further research on the effects of the CSB in conjunction with APHIS.

Thank you for your consideration of our recommendations and of our funding requests for FY 2021. Please contact me with any questions or if additional information is needed.

[This statement was submitted by Reece Langley, VP, National Cotton Council.]

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#### PREPARED STATEMENT OF THE NATIONAL FARMERS UNION

I write on behalf of National Farmers Union’s (NFU) roughly 200,000 family farmer, rancher, and rural members. This past year, the COVID–19 pandemic caused severe supply chain disruptions that led to lower prices for farmers and difficulty selling crops and livestock. The pandemic also resulted in unprecedented levels of stress in rural communities and on farms and ranches. The challenges of the past year compounded ongoing issues for farmers and rural communities, including chronic periods of sustained low crop prices and a changing climate.

As you draft and advance appropriations legislation, I urge you to provide funding for programs that alleviate the challenges facing rural and agricultural communities and that improve the resiliency of our food system.

#### FAIR, COMPETITIVE, AND RESILIENT MARKETS

Many sectors in American agriculture are dominated by a small handful of multinational corporations. Multiple waves of nearly unfettered mergers and acquisitions over several decades has resulted in agriculture and food supply chains that are uncompetitive and that underpay farmers while overcharging consumers. This extreme concentration has also left food and agriculture supply chains less resilient and flexible, and thus vulnerable to shocks. During the COVID–19 pandemic, this was most evident in the disruption in the livestock and poultry industries, where the closures or slowdowns at several massive meatpacking plants resulted in lost markets for farmers.

Concentration in the livestock and poultry industries has been on the rise for decades. Just four companies controlled approximately 83 percent of beef slaughter and processing in 2017, and concentration is high in pork and poultry as well. Concentrated market structures increase opportunities for market manipulation and coordinated behavior. Yet, few significant enforcement actions have been taken in recent years by USDA under the Packers and Stockyards Act, a law meant to assure fair competition, safeguard farmers and ranchers, and protect consumers, from unfair, deceptive, and unjustly discriminatory and monopolistic practices of the livestock, meat, and poultry industries.

NFU requests the inclusion of the following report language to address these concerns:

The Packers and Stockyards Act is an important federal statute for protecting U.S. livestock and poultry farmers from abusive, discriminatory, deceptive, and anti-competitive practices by meatpackers, swine contractors and live poultry dealers. Yet the statute has been underutilized and underenforced for decades. The market disruptions in the meatpacking sector during and prior to the COVID–19 pandemic

have highlighted the need to scrutinize how the practices of the dominant companies in the meat and poultry sectors affect farmers and consumers.

The Committee urges the Agricultural Marketing Service (AMS) to increase enforcement of the Packers and Stockyards Act, including by updating existing regulations to expand the tools necessary for the agency to fully achieve the farmer protection intent of the Packers and Stockyards Act.

We also request that the Committee provide USDA AMS with robust funding for Packers and Stockyards Act enforcement.

#### FARM AND RANCH STRESS ASSISTANCE NETWORK (FRSAN)

The purpose of FRSAN is to establish and fund a service provider network that connects individuals and their families engaged in farming, ranching, and other agriculture-related occupations to stress assistance programs. Funding thus far has been used to create four regional centers to coordinate efforts to serve the needs of their populations. These centers have been developing and implementing training and services to address farm stress issues.

There are many causes of stress among farmers and their families, including volatility in the farm economy, the financial risk involved in agriculture, weather unpredictability, and a changing climate. Over the past year, COVID-19 has taken a significant toll, with a recent poll finding that two in three farmers or farmworkers say the pandemic has impacted their mental health. Moreover, 60 percent of rural residents live in areas with mental health professional shortages.

We urge you to continue funding FRSAN, administered by the National Institute of Food and Agriculture (NIFA), at the authorized level of \$10 million. This funding is critically important in meeting the needs of farmers, ranchers, and their families as they endure and seek to manage stress.

#### AGRICULTURAL MEDIATION PROGRAM

It is essential that family farmers and ranchers have access to mediation services to resolve disputes affecting their operation. The Agricultural Mediation Program, administered by the Farm Service Agency (FSA), provides grants to state-designated entities that provide mediation services to agricultural producers, lenders, and others to resolve a variety of disputes. These services provide a low-cost alternative to appeals, litigation, and bankruptcy.

Mediation programs have seen significant increases in caseload over the last several years, and the 2018 Farm Bill further expanded the breadth of cases the program covers. In FY21, the program received \$6.9M through appropriations. To keep pace with growing demand, we urge you to increase funding to the fully authorized level of \$7.5 million in FY22.

#### RURAL COOPERATIVE DEVELOPMENT GRANT (RCDG) PROGRAM

The objective of the RCDG program is to improve the economic condition of rural areas by assisting individuals or entities in the startup, expansion, or operational improvement of rural cooperatives. Over the past decade, RCDG grants have been instrumental in developing over 650 businesses and creating more than 10,000 jobs. Yet, the RCDG program has received stagnant funding at \$5.8 million since FY12. Congress should fund this program at its authorized level to sustain and accelerate recovery from the pandemic.

NFU requests full funding for the Rural Cooperative Development Grant (RCDG) program, administered by USDA's Rural Business-Cooperative Service, at \$40 million, including at least \$15 million for technical assistance development grants.

#### CONSERVATION PROGRAMS AND CLIMATE CHANGE

As Congress and USDA continue to increase their focus on climate change, funding must be provided for America's family farmers and ranchers to sequester carbon, reduce greenhouse gas emissions, and adapt working lands. The Environmental Quality Incentives Program (EQIP) and the Conservation Stewardship Program (CSP) are key programs in this effort, but demand for participation exceeds available funding by at least two to one. We urge you to reject any cuts to mandatory spending for farm bill conservation programs.

On-the-ground capacity at the Natural Resources Conservation Service (NRCS) continues to be a limitation for farmers seeking to implement conservation practices on their land. While many farmers have implemented conservation practices as part of their operation, in some cases with the assistance of NRCS, many more stand ready to conserve soil, protect waterways, improve air quality, and both adapt to and mitigate the effects of a changing climate. However, NRCS often lacks the staff

needed to help these farmers make such changes. We ask that you ensure there are sufficient resources to hire NRCS field staff to provide technical assistance to farmers and ranchers by providing at least \$1.2 billion in funding for Conservation Operations, including \$1.1 billion for Conservation Technical Assistance.

Additionally, improved pasture and grazing management has the potential to play a substantial role in terrestrial carbon sequestration. Thus, we request funding at the authorized level of \$60 million per year for the Grazing Lands Conservation Initiative (GLCI). The initiative is made up of local, state, and national organizations that provide technical assistance to help maintain and improve the management, productivity, and health of our nation's privately-owned grazing land.

#### FOOD SAFETY EDUCATION, OUTREACH AND TECHNICAL ASSISTANCE

As producers struggle to learn the rules and come into compliance with the Food Safety Modernization Act (FSMA), it is critical that adequate resources are directed to the Food Safety Outreach Program (FSOP). FSOP provides targeted outreach, education, and technical assistance to small- and mid-sized, beginning, and socially disadvantaged farmers and processors to help them comply with complex FSMA regulations.

To help ensure a safe food supply for American families, and to help small- and mid-sized, beginning, and socially disadvantaged farmers comply with food safety regulations, we urge you to provide \$10 million for FSOP, administered by the National Institute of Food and Agriculture (NIFA), in FY22.

We also request robust funding for Food and Drug Administration (FDA) FSMA implementation that will allow FDA to continue their current outreach, education, and technical assistance efforts.

#### USDA FARM LOAN PROGRAMS

It can be difficult, especially in today's farm economy, for some farmers to obtain credit from private lenders. Creditors may be hesitant to lend to farmers for a variety of reasons and can raise their collateral requirements to mitigate risk. When private lending is unavailable, farmers turn to Farm Service Agency (FSA) loans and loan guarantees.

The 2018 Farm Bill increased limits for direct and guaranteed loans to reflect the current costs of owning and operating a farm. As the average size of FSA's loans increases, FSA must have the funding needed to maintain the number of loans it provides. Furthermore, many socially disadvantaged farmers have been historically underserved by USDA programs and lending. With recent legislation and commitments by USDA, important steps are underway to right these wrongs. FSA Farm Loan programs are well-positioned to help family farmers build a more equitable and resilient food system.

NFU urges the committee to provide robust funding that will ensure farmers have access to FSA loans that help keep their farms in business.

#### CONCLUSION

Thank you for your attention to these matters. If you have any questions or would like to further discuss NFU's requests, please contact Aaron Shier, NFU Senior Government Relations Representative at [ashier@nfudc.org](mailto:ashier@nfudc.org).

[This statement was submitted by Rob Larew, President, National Farmers Union.]

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#### PREPARED STATEMENT OF THE NATIONAL ORGANIC COALITION

I am submitting this testimony on behalf of the National Organic Coalition (NOC) to detail our fiscal year 2022 funding requests for USDA programs of importance to the organic sector.

#### USDA/ AGRICULTURAL MARKETING SERVICE (AMS)

National Organic Program  
Request: \$22 million

Organic agriculture is one of the fastest growing sectors of agriculture, fueled by strong consumer demand. The organic sector now exceeds \$60 billion in annual sales with over 28,000 certified organic family farmers and other businesses represented.

The National Organic Program (NOP) is the agency charged with regulating and enforcing the USDA organic label. NOP was funded at \$14 million for FY 2019, \$16 million for FY 2020, and \$18 million for FY 2021. The President's FY 2022 budget

has not yet been submitted. We are requesting \$22 million for the NOP for FY 2022, as authorized by Section 10104(j) of the Agriculture Improvement Act of 2018, in recognition of the need for enhanced oversight, enforcement and rulemaking for the rapidly growing sector.

In addition, we are requesting the following report language to encourage NOP to increase enforcement efforts with regard to the soil health requirements of existing organic standards:

USDA organic standards require organic farmers to use farming practices that improve soil health, such as crop rotations, cover cropping, and pasture-based livestock practices. By improving soil health, these farming practices also increase the carbon sequestration potential of the soil, and improve the farm's resilience to extreme weather events and patterns. To maximize the climate benefits of organic agriculture, the Committee urges the National Organic Program to increase enforcement efforts to ensure full compliance with the soil health and pasture requirements of USDA organic standards.

USDA (AMS, NASS, ERS)

#### Organic Data Initiative

Request: \$1 million for organic data collection and analysis

Authorized by Section 7407 of the 2002 Farm Bill, the Organic Production and Marketing Data Initiative states that the "Secretary shall ensure that segregated data on the production and marketing of organic agricultural products is included in the ongoing baseline of data collection regarding agricultural production and marketing" In addition to mandatory funding, Section 10103 of the 2018 Farm Bill authorizes \$5 million annually in discretionary funding.

As the organic industry matures and grows at a rapid rate, the lack of data for the production, pricing, and marketing of organic products has impeded further development of the industry and limited the functioning of USDA organic programs. Organic data collection and analysis at USDA has made significant strides in recent years but remains in its infancy.

We request \$1 million for FY 2022 for organic data collection at AMS, NASS, and ERS.

USDA/ NATIONAL INSTITUTE OF FOOD AND AGRICULTURE (NIFA)

#### Organic Transitions Program

Request: \$10 million

The Organic Transitions Program, authorized by Section 406 of the Agricultural Research, Education and Extension Reform Act (AREERA) for Integrated Research Programs, is a research grant program to help farmers address challenges of organic production and marketing. As the organic industry grows, the demand for research on organic agriculture is experiencing significant growth as well. This research has broad applications to all sectors of agriculture, even beyond the organic sector.

Many organic research needs go unmet because of lack of adequate funding. As demand for organic products continues to grow at a fast rate, domestic production of organic food has not kept pace, requiring a greater percentage of organic product to be imported to meet the consumer demand. Funding for organic research has not kept pace with the growth in the industry either.

The Organic Transition Program was funded at \$6 million for FY 2020, and \$7 million for FY 2021. The Administration's FY 2022 budget has not yet been submitted. We are seeking \$10 million for FY 2022, with report language to specify that the increase in funding should be used for fund research regarding climate change and organic agriculture.

USDA/FARM SERVICE AGENCY (FSA)

#### National Organic Certification Cost Share Program (NOCCSP)

Request: \$12 million in one-time funding

The Organic Certification Cost Share Program is important for small and mid-size farms, underserved farmers, and new organic farmers. Unfortunately, USDA's Farm Service Agency (FSA) unilaterally cut 2020 reimbursements to organic farmers under the Organic Certification Cost Share Program, in conflict with the 2018 Farm Bill directive. The agency has also explained that they will be cutting reimbursement for the next 3 years as well. The problem resulted from accounting errors by FSA under the previous Administration. NOC has requested that Secretary Vilsack

fix the problem internally, but we are also asking Congress to work with USDA to fix the problem through the FY 2022 appropriations process, if necessary. To address this problem, we are asking that Congress provide \$12 million in extra funding for the Organic Certification Cost Share Program in the FY 2022 Agriculture Appropriations bill.

**Agriculture and Food Research Initiative (AFRI)**

Request: Report language on public cultivar development

In recent decades, public resources for the development of improved plant varieties and cultivars have dwindled, while resources have shifted toward genomics and biotechnology, with a focus on a limited set of major crops.

In Section 7406 of the Food, Conservation, and Energy Act of 2008, the National Research Initiative was merged with the Initiative for Future Agriculture and Food Systems to become the Agriculture and Food Research Initiative (AFRI). Congress included language within AFRI to make “conventional” plant and animal breeding a priority for AFRI grants, consistent with concerns expressed by the Appropriations Committee in past appropriations cycles.

In the last several years, USDA has made regionally adapted cultivar development using conventional breeding techniques a higher priority within the plant breeding funding area. Recently, in response to direction from the Senate Agriculture Appropriations Subcommittee report language, a “Conventional Plant Breeding for Cultivar Development” program area was created within the Plant Health and Production and Plant Products (PHPPP) priority area with the Foundational and Applied Science RFA of AFRI. While this development represents progress, there are several areas where further improvement is needed: 1) the amount of funding overall remains extremely low relative to the need; 2) the AFRI practice of awarding three-to-five-year grants conflicts with the longer-term breeding cycles typical for public cultivar development projects 3) the “Conventional Plant Breeding for Cultivar Development” RFA does not specify that the cultivars developed with these grants should remain publicly available for farmers and for plant breeders for future breeding efforts; and 4) the maximum grant in this new program area priority is \$500,000, whereas the grant limit within the other PHPPP program area priorities range from \$650,000 for standard grants up to \$800,000 for partnerships.

Therefore, we request the following AFRI report language to address these concerns:

Section 7406 of the Food, Conservation, and Energy Act of 2008 specifies priority areas within the Agriculture and Food Research Initiative [AFRI], including an emphasis on conventional (classical) plant and animal breeding. The Committee strongly concurs with the intent of this section and appreciates the agency’s progress in creating a distinct Conventional Plant Breeding for Cultivar Development program area priority within the AFRI program for development of locally and regionally adapted cultivars, as the Committee previously directed. While noting this progress, the Committee expects the agency to significantly increase funding for this AFRI priority area, to increase the timeframe for grants made in this area to be more in keeping with classical plant breeding timeframes, to increase grant funding limits to be parallel with the other AFRI Plant Health and Production and Plant Health program areas, and to require that cultivars developed using these grants be publicly available for farmers and for plant breeders for future breeding efforts. In addition, the agency should take steps to improve its tracking of public cultivar development projects within AFRI. The Committee further directs the agency to report its progress in meeting these requirements.

**Sustainable Agriculture Research and Education (SARE)**

Request: \$60 million

on environmentally sound and profitable practices and systems, including organic production. The reliable information developed and distributed through SARE grants is very helpful to organic farmers. SARE was funded at \$37 million in FY2020, and \$40 million in FY2021. The President’s FY2022 budget has not yet been submitted. We are requesting \$60 million for SARE for FY 2022.

**Food Safety Outreach Program**

Request: \$15 million

We are requesting \$15 million to help small and mid-size farms and small processing facilities comply with food safety requirements. This training program, authorized in the Food Safety Modernization Act of 2010 (FSMA), is one of the best

and least costly ways to improve food safety outcomes without resorting to excessive farm regulation. The program received \$7 million for FY2018, and \$8 million for FY2020, and \$10 million for FY2021. The President's FY2022 budget has not yet been submitted. We are requesting \$15 million for FY2022.

USDA/NATIONAL AGRICULTURAL STATISTICS SERVICE (NASS)

Tenure, Ownership, and Transition of Agricultural Land (TOTAL) Survey  
Request: \$3 million

Land access is a major challenge facing beginning, socially disadvantaged, and young farmers, including organic farmers. Sec. 12607 of the 2018 Farm Bill tasked the National Agricultural Statistics Service with completing an updated TOTAL Survey to provide data on farmland ownership, tenure, transition, and entry of beginning and socially disadvantaged farmers. NOC requests \$3 million for this survey for FY 2022.

Organic Research within the Agricultural Research Service (ARS)  
Request: \$20 million

Organic farmers across the country lack research on basic agronomic challenges. ARS organic funding has declined from over \$15 million in FY2007 to just \$12 million in FY2020. This is less than 1 percent of the ARS research budget, versus organic's market share of 6 percent. To start addressing this inequity, we are requesting FY2022 statutory language to require not less than \$20 million for ARS organic research.

Thank you for your consideration of these requests.

[This statement was submitted by Steven Etka, Policy Director, National Organic Coalition.]

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PREPARED STATEMENT OF NATIONAL PREDICTIVE MODELING TOOL INITIATIVE  
(NPMTI)

The National Predictive Modeling Tool Initiative (NPMTI) operates under the auspices of the USDA-ARS. NPMTI received funding from the Appropriations Subcommittee on Agriculture, Rural Development, Food & Drug Administration, and Related Agencies in FY20. It was funded again in FY21. NPMTI is requesting a \$7-million increase in funding to \$12-million for FY22 so that this successful program can be expanded to more geographies and to additional crops.

NPMTI was designed as a multi-year program to develop research-based tools to help growers forecast crop diseases and mycotoxins. Currently, it brings together applied researchers and pathologists (most of whom work in Extension) from 26 states to develop practical solutions to diseases that threaten U.S. wheat, corn, and cotton crops. This team coordinates and shares research methods and results at unprecedented levels. Increased funding will allow expansion of the initiative into such crops as peanuts, soybeans, tomatoes, and tuberous crops including potatoes, sugar beets and sweet potatoes. Longer term expansion into apples, grapes, strawberries and hay, among others is anticipated.

To address the resulting threats of soil erosion, rainfall runoff and soil crusting, and improve the resilience of U.S. agriculture, many growers across the nation have adopted soil conservation practices including reduced tillage and cover crops. These environmentally-sound soil conservation practices have precluded the use of two standard disease controlling tools: crop residue incorporation (i.e., sanitation) and exclusion of alternate hosts.

Historically, tillage was used to bury crop residues in the soil to promote rapid decomposition of stalks, leaves and associated pathogens, while non-crop areas were often maintained vegetation free. With soil conservation programs, residues now remain on the surface providing necessary soil health benefits but also leaving pathogen inoculum for future crop infection. Non-crop areas are managed now as grassed waterways, filter strips and wildlife habitat that can serve as a pathogen bridge from one crop season to the next. Farmers need the information that NPMTI researchers are developing to predict when pathogens will threaten.

National Agricultural Genotyping Center (NAGC) is a not-for-profit forensic laboratory that develops assays (tests) that can detect and quantify pathogens in crop samples. Testing results are sent to Los Alamos National Laboratory for inclusion in its suite of modeling tools.

Recent advancements in detecting and modeling the movement of human pathogens, such as SARS-CoV-2 can be adapted to plant pathogens with appropriate investment. Methods to forecast inoculum exposure would allow growers to take time-

ly, better informed management decisions such as: delayed planting, resistant varieties, selective fungicides, crop growth regulators, irrigation management, and targeted rotations, among other agronomic practices.

There are many advantages and benefits of predictive modeling. NPMTI, through these modeling efforts, will improve disease management, thereby reducing yield losses, while ensuring crop sustainability and quality under changing climate conditions. Over time, baseline background levels of various pathogens can be established, which will inform anomaly detection and serve as an early warning system for our nation's food security.

On the following pages, three key NPMTI collaborators address the agronomic, economic and environmental aspects of arming our nation's farmers in advance of disease outbreaks.

[This statement was submitted by Peter L. Snyder, Chairman, National Predictive Modeling Tool Initiative (NPMTI), President, National Agricultural Genotyping Center, Inc. (NAGC).]

#### LOS ALAMOS NATIONAL LABORATORY

Los Alamos National Laboratory (LANL) has extensive experience in the development of epidemiological models, analytics and databases to support decision making during infectious disease events in humans. Some recent examples include planning vaccine strategies, school re-openings for the state of New Mexico during the COVID-19 pandemic and earlier on, using our analytics to understand effective mitigation strategies for the 2014 Ebola outbreak. In the first year of the NPMTI, we have leveraged this experience and are adapting some of our tools to facilitate preparedness for crop diseases, specifically, corn, cotton and wheat.

A major task for this adaptation was to identify crop disease relevant data streams and acquire the data for surveillance of crop pathogens and outbreaks. LANL established a working group to include representatives from each of the crop specific research area committees (RACS—corn, cotton and wheat) and established key collaborations with Dr. Erick DeWolfe, Dr. Pierce Paul, Dr. Heather Kelly, and Mr. Dan McDonald for data sources. These collaborations will be essential for future development and adaptation of LANL tools.

LANL designed and developed version 1 of the NPMTI database that accommodates the surveillance data collected by the three RACs (cotton, corn, wheat). Information to be stored includes all data that describes the actual setup in a field and all data that are essential to disease forecasting tools and models that are used to inform end users such as the agricultural community. This database has been designed to be a "one stop shop" for data that can be used by any entity that is building crop disease prediction and forecasting models.

A second LANL tool that is being leveraged for crop disease management is Analytics for investigation of disease outbreaks (AIDO). This is a visual analytic tool that contains a library of representative historical outbreaks of infectious diseases and uses a similarity algorithm to compare an unfolding event to the closest match in the library and provide control/mitigation actions together with a forecast of the trajectory of the unfolding event. LANL developed version 1 of AIDO4Crops for Wheat Rust, with planned expansion to other Wheat diseases. Following is a simple use case for this version—an agricultural extension officer in Kansas visits a farm with extensive leaf rust in the North West corner of the state in April. The officer is interested in identifying a historical year(s) that has similar rust occurrence at this location in April in order to assess possible spread of rust for the rest of Kansas. In this scenario, the extension officer would input the current situation into the AIDO4Crops user interface and evaluate the wheat rust library for Kansas. The closest matching rust year would provide the officer with all the details and aid the extension officer in making effective recommendations for fungicide application in the state.

Finally, in year 2, in addition to iterative improvement and expansion of the NPMTI database and AIDO4Crops, LANL will leverage its extensive experience in diagnostic and detection technologies to develop a fieldable technique for mycotoxin detection. LANL is thus supporting NPMTI through a suite of tools to bolster preparedness for the nation's farmers.

[This statement was submitted by Alina Deshpande, Ph.D., Group Leader Biosecurity and Public Health, Bioscience Division.]

## COTTON RESEARCH AREA COMMITTEE (RAC)

Cotton uniquely benefits from the NPMTI because of its role in expanding farm resilience to climate change, enhancing farm profitability and improving rotational crops such as soybeans, peanuts, and tomatoes.

The NPMTI allows cotton growers to benefit from reduced-tillage and no-till instead of sanitation tillage. Historically, tillage or burning was necessary to destroy pathogens in crop residue. Tools developed by the NPMTI can provide annual pathogen alerts that now give growers the confidence to avoid these harsh measures when conditions are unfavorable for disease outbreaks and utilize environmentally friendly preventative methods when diseases are predicted. The use of surface residue, from conservation-till or no till, is expanding across the U.S. Innovative growers may adopt these for a single benefit, such as soil erosion, and then see multiple benefits from weed suppression, wind erosion protection, nutrient availability, rain-water capture, soil water storage and root health. These last three are pillars for building climate resilience on the farm because the early damage that farmers face from climate change is erratic rainfall. As the atmosphere and oceans warm storms become more violent and droughts more intense. Resilient farming practices better infiltrate heavy rainfall, store more moisture during droughts and increase root health for nutrient and water uptake.

The NPMTI enhances farm profitability at a time when profit margins are squeezed between variable yields and the ever-rising costs of inputs. Even now, when commodity prices are favorable, the input suppliers of fertilizer, seed, equipment, and chemicals are increasing their prices to capture more of the farm profitability. There is no room in farm budgets for disease outbreaks that devastate yields or for unbudgeted expensive disease protectants. The NPMTI provides growers actionable intelligence to avoid disease outbreaks with cost effective tools by planting a more resistant variety or budgeting for disease prevention before the outbreak.

The NPMTI can create farm benefits beyond its current 3 crops, because the tools and science learned from cotton, corn or wheat can be adapted to a multitude of other crops by both farmers and scientists. Examples from cotton are clear. Cotton and peanuts are a preferred rotation of growers in Georgia, Virginia, Texas and North Carolina because of the disease and nematode suppression each offer to the other. Collaboration between these crops through NPMTI will strengthen the yield and profitability benefits of this rotation with tools that help growers adjust inputs or varieties in one crop to further suppress diseases or nematodes in the other. Cotton and soybeans are a preferred rotation in the Midsouth. Both crops are impacted by Target Spot and both benefit from advanced spore sampling methods to help growers anticipate disease outbreaks before damage or costly fungicide applications. Processing tomatoes are commonly rotated with cotton for weed and disease suppression and salt management. Expanding the NPMTI to tomatoes, soybeans and peanuts would extend the knowledge that cotton, corn and wheat growers gain from the NPMTI to the diversity of crops they grow.

Collaboration across multiple states and rotational crops strengthens the precision of tools that farmers need to maintain profitability in times of uncertain weather, diseases, and markets. The NPMTI already encompasses 26 states and 3 crops. Geographical and crop expansion of this existing collaboration is the logical next step in serving U.S. farmers.

[This statement was submitted by Kater D. Hake, Ph.D., Vice President, Agricultural & Environmental Research, Cotton Inc., Co-Chair, NPMTI Cotton Research Area Committee (RAC).]

## WHEAT RESEARCH AREA COMMITTEE

Wheat is the third-largest commodity crop and largest food crop grown in the United States. NPMTI plays a crucial role in developing predictive models and tools to help wheat growers evaluate disease risk. As growers learn to use these tools, they will maximize the efficacy of management decisions, reduce disease-related yield losses, and help ensure wheat production remains a viable economic crop in the United States.

Wheat is one of the most versatile plants on Earth. Six classes of wheat are produced in 42 states in the United States and nearly every region on six continents around the world. Through NPMTI, the wheat research area committee (RAC) collects data in six states for two disease complexes that result in annual losses of \$528 million. The pathologists involved in the NPMTI represent a broad cross-section of the wheat-producing regions and environmental conditions.

Wheat in the United States is affected by many types of foliar diseases. These foliar diseases limit the productivity and quality of the wheat crop in the United

States every year. The magnitude of the disease-related losses within a state or wheat-producing region varies annually and are strongly influenced by environmental conditions (weather and cropping system factors such as tillage and crop rotation) that favor the survival, reproduction, and movement of pathogens within and across fields or regions. Yield losses are further influenced by the genetic susceptibility of wheat varieties grown regionally, the timing of disease onset relative to crop growth, and whether pesticides are applied and applied correctly. Identifying risk factors related to the presence and abundance of inoculum, host susceptibility, favorable weather conditions, and quantifying their relationship of these factors with disease development will help farmers better manage diseases, avoid unnecessary pesticide applications and avoid yield losses.

A focus of NPMTI for wheat is rust research in its three forms: stem, stripe, and leaf. Collaborators in the wheat research are organizing historical records of disease outbreaks. These data sets are already providing valuable insights into weather patterns and source regions that favor disease epidemics at a national level. This information is already being used to direct disease surveillance and provide information about disease risk months before an outbreak occurs. Additionally, wheat researchers are working with Los Alamos National Laboratory to establish a central data repository. These databases provide a foundation for future modeling objectives of NPMTI and ensure cohesive communications among researchers within different commodity groups. Lastly, wheat researchers involved with NPMTI are creating disease and pathogen monitoring networks for multiple diseases that cause constant yield losses in the United States. These monitoring efforts enhance local extension efforts to communicate in-season disease risk to wheat producers in the project's first year.

Continued and increased support for NPMTI is necessary to carry out this valuable research, which will help growers with on-farm management decisions. The overall goals of NPMTI are to ensure crop sustainability and crop quality, increase precision, improve soil health through soil-borne disease quantification, and improve disease management, thereby reducing yield losses. Over time, baseline background levels of various pathogens can be established, which will help with anomaly detection and serve as an early warning system for our nation's food security.

[This statement was submitted by Jacob Westlin, Senior Director, National Association of Wheat Growers, Chairman, NPMTI Wheat Research Area Committee.]

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#### PREPARED STATEMENT OF NATIONAL SUSTAINABLE AGRICULTURE COALITION

Thank you for the opportunity to present our FY 2022 funding requests and thank you for your work on the Consolidated Appropriations Act, 2021, which addressed many of our priorities for FY21. On behalf of our member organizations from around the country, we submit the following requests for the Department of Agriculture, in the order they generally appear in the appropriations bill:

#### NATIONAL INSTITUTE OF FOOD AND AGRICULTURE

#### SUSTAINABLE AGRICULTURE RESEARCH AND EDUCATION PROGRAM

We urge you to provide full funding—\$60 million—for the Sustainable Agriculture Research and Education Program (SARE). For over 30 years, SARE has been at the forefront of research and extension activities for farming systems based on profitable and environmentally sound practices developed with farmer and business input, including research and extension activities that are critically important to addressing the climate crisis. It has helped create more innovative farm practices that are actually adopted by farmers on the ground than any other competitive research program.

Due to growing demand and limited funding, in recent years USDA can only fund roughly ten percent out of all eligible research and education pre-proposals submitted to the program each year. In order to meet future productivity challenges, farmers need cutting-edge research that is easily accessible and relevant to their farming systems. Increased funding will allow SARE's farmer driven research to keep pace with the growing challenges farmers face in remaining profitable and viable in the context of climate change. Finally, the additional resources would also help SARE expand its unique graduate student research program, which is helping to establish the pipeline of future agricultural scientists who will be needed to make the next breakthroughs in agriculture. To date, SARE has awarded over 912 graduate student research grants, which often open the doors for many researchers early in their career to larger, more competitive pots of research funding—including the Agriculture and Food Research Initiative (AFRI).

## AGRICULTURAL MARKETING SERVICE

## LOCAL AGRICULTURE MARKET PROGRAM

The 2018 Farm Bill created the Local Agriculture Market Program (LAMP) (7 U.S.C. 1621 et seq), combining two long-standing programs, the Farmers Market and Local Food Promotion Program (FMLFPP) and the Value-Added Producers Grant Program (VAPG), streamline and better coordinate USDA efforts to support the growth and expansion of domestic markets for local/regional food and value-added agriculture. Administered by the Agricultural Marketing Service, FMLFPP is a competitive grants program that supports direct-to-consumer marketing strategies, as well as projects to develop and expand local and regional markets and associated supply chains. We urge you to provide \$20 million in additional discretionary funding for LAMP, split appropriately between VAPG and FMLFPP. Despite a long track record of success and consistent interest in local and regional markets, funding for LAMP is typically only a fraction of what is needed to meet the demand for support through the program. As the country seeks to recover from the global pandemic, it is important that we invest in both recovery and building resilience in our food and farm system in anticipation of future crisis. LAMP subprograms have been essential to past efforts to develop more resilient local and regional food systems and should be prioritized and fully utilized for those tasks moving forward. Therefore, we request \$20 million in discretionary funding split appropriately between FMLFPP and VAPG for FY 2022.

## FARM SERVICE AGENCY

## DIRECT AND GUARANTEED FARM OWNERSHIP AND OPERATING LOANS

Direct and Guaranteed Farm Service Agency (FSA) loans provide crucial capital for beginning farmers and others not adequately served by commercial lenders. There has been greater attention on funding for FSA farm loan programs in recent years, due in large part to the increased financial pressures placed on farmers as a result of the ongoing pandemic.

With many farmers losing markets and income seemingly overnight, they have faced revenue shortfalls and looked to FSA loans to extend additional capital necessary to keep their farms operating. Some of that capital allowed farmers to quickly pivot their operations to meet new market conditions and to meet the additional expenses required to work safely during the pandemic (i.e., PPE, cold storage, additional packaging, increased transportation and labor costs). Total demand for FSA loans in 2020 saw a 30 percent increase compared to the year before, and this trend is expected to continue in the year ahead as farmers continue to face uncertainty in what the year ahead will hold.

As Congress looks towards FY 2022, we urge you to work with the Administration to ensure they have the funding levels necessary to meet anticipated loan demand across their direct and guaranteed portfolios given recent increases to loan caps. We believe that Congress must respond in a timely manner if it becomes clear loan projections will fall short of expected or actual demand in FY 2022, especially given the uncertainty this year.

## THE NATIONAL ORGANIC CERTIFICATION COST SHARE PROGRAM

The National Organic Certification Cost Share Program provides organic farmers and handling operations with a reimbursement to cover a portion of their annual organic certification fees. In August of 2020, USDA slashed funding for this program. This has left organic operations, who had been counting on being reimbursed for their certification costs at the same level as previous years, burdened with an unplanned expense, amid a period of higher costs and disrupted markets caused by the pandemic. The cost-share program is particularly important to small and mid-sized organic farms, and those who are just starting out with organic certification.

The 2018 Farm Bill provided new mandatory funding for the organic certification cost-share program, but at that time the USDA provided inaccurate reports of carry-over balances to Congress, which has resulted in a shortfall for the program for the remainder of the 2018 Farm Bill. The USDA Farm Service Agency (FSA), which administers this program, has communicated to organic stakeholders that \$9 million in supplemental funding is needed to fill the funding gap for the program, at the full authorized reimbursement levels, through the end of the 2018 Farm Bill cycle (end of fiscal year 2023). However, staff have also acknowledged that the \$9 million figure does not include any growth in the number of certified operations eligible for assistance under the program. In order to ensure that there are sufficient resources to provide current, and prospective or transitioning, organic producers with cost-

share assistance at full authorized reimbursement rate we request that the National Organic Certification Cost Share Program be provided \$12 million discretionary funding for FY22.

#### NATURAL RESOURCES CONSERVATION SERVICE

##### CONSERVATION TECHNICAL ASSISTANCE

Conservation Technical Assistance is the backbone of USDA's conservation programs. Through CTA, NRCS field staff work with farmers to develop and implement conservation plans to conserve resources on their farms and fulfill conservation compliance requirements. NRCS also uses CTA funds to assess conservation practices and systems, and to collect, analyze, and disseminate data on the condition of the nation's natural resources. This funding is critical in order to help producers develop site-specific plans to conserve water, prepare for extreme weather, and address natural resource concerns on their land.

On-the-ground capacity at NRCS continues to be a limiting factor for conservation implementation, and an increased investment in CTA will give NRCS the ability to truly build local capacity. While partially rebounding recently, staffing levels at NRCS declined 19%, or over 2,000 employees, from FY 2004 to FY 2018 and with 98% of all NRCS staff located outside Washington, D.C. in state, county and technical offices, this decrease has taken a toll on customer service and the ability to provide technical assistance.<sup>1</sup> This has all taken place as producer demand, as well as consumer expectations, has increased for a sustainable and reliant agriculture industry. We must not hamstring our investment in conservation and climate efforts by under-funding technical assistance and local staffing capacity. In order to ensure that CTA has the necessary resources to help producers implement the kind of conservation practices that are essential to mitigating climate change, CTA should be provided \$1.1 billion.

#### OFFICE OF URBAN AGRICULTURE INNOVATIVE PRODUCTION

The 2018 Farm Bill authorized the creation of the Office of Urban Agriculture and Innovative Production (the Office), but in doing so provided the office with no mandatory funding. The Office of Urban Agriculture received \$5 million in FY20 and \$7 million in FY21 to stand up the office and implement its authorities. Funding has supported the piloting of eleven urban and suburban Farm Service Agency County Committees, the establishment of an advisory committee for the office and USDA, a competitive grants program, and a Community Compost and Food Waste Reduction cooperative agreement program. In FY20 the Office received 578 applications requesting competitive grants or cooperative agreement funding. With their limited FY20 discretionary funding, the Office was able to fund only four percent of all applications—10 competitive grant projects and 13 cooperative agreements. Due to the overwhelming interest in the program—particularly from farmers of color more frequently operating within urban areas—the Office of Urban Agriculture should be provided \$25 million—full funding—in FY22 so that it has sufficient resources to meet the demand of a growing farming sector and expand beyond the initial pilot states.

#### RURAL BUSINESS—COOPERATIVE SERVICE

##### APPROPRIATE TECHNOLOGY TRANSFER FOR RURAL AREAS (ATTRA)

For nearly 30 years, the ATTRA program also known as the National Sustainable Agriculture Information Service, has provided practical, cutting edge information to farmers, extension agents, and others. In 2019, ATTRA responded to nearly 48,000 technical assistance requests for resources and materials on sustainable agriculture production and farm energy issues, including 2,184 technical responses that required substantial research. Resources were accessed by farmers and ranchers 3,348,790 times via ATTRA's website ([www.attra.ncat.org](http://www.attra.ncat.org)), podcasts and social media platforms. Sustainable agriculture workshops and presentations by ATTRA staff reached over 52,000 attendees. Clearly, the resources that ATTRA provides to the farm community free of charge are in high demand and have helped thousands of farmers build more profitable and sustainable farming operations over the past three decades. We urge Congress to provide at least \$3.5 million in FY 2022 in order to support the continued work and expansion of ATTRA.

<sup>1</sup> [https://www.everycrsreport.com/files/2020-03-11\\_IF11452\\_bf1eaa6064a214b26bd80b3a56ece56e1a521990.pdf](https://www.everycrsreport.com/files/2020-03-11_IF11452_bf1eaa6064a214b26bd80b3a56ece56e1a521990.pdf)

## LOCAL AGRICULTURE MARKET PROGRAM

The 2018 Farm Bill created the Local Agriculture Market Program (LAMP) (7 U.S.C. 1621 et seq), which combines the Farmers Market and Local Food Promotion Program (FMLFPP) and the Value-Added Producers Grant Program (VAPG). Administered by the Rural Business-Cooperative Service, VAPG offers competitive grants to farmers and ranchers to fund business and marketing plans, feasibility studies, or working capital to operate a value-added business. Without future discretionary funding, annual VAPG investments will shrink, depriving farmers of important tools as they continue to struggle through a prolonged downturn in the agriculture economy, compounded by the current coronavirus pandemic. We urge you to provide \$20 million in additional discretionary funding for LAMP, split appropriately between VAPG and FMLFPP, to help meet demand. Despite long track records and consistent interest in local and regional markets and value-added agriculture, funding is only a fraction of what is needed to meet producer demand. LAMP has been essential to past efforts to develop more resilient local and regional food systems and should be prioritized and fully utilized for those tasks moving forward. As the country seeks recover from the global pandemic, it is important that we invest in both recovery and building resilience in our food and farm system in anticipation of future crisis. Therefore, we request \$20 million in discretionary funding split appropriately between FMLFPP and VAPG for FY 2022.

[This statement was submitted by Wes King, NSAC, Senior Policy Specialist.]

PREPARED STATEMENT OF NON-LAND-GRANT AGRICULTURAL AND RENEWABLE  
RESOURCES UNIVERSITIES (NARRU)

The Non-land-grant Agricultural and Renewable Resources Universities (NARRU) is requesting that \$10 million be appropriated in FY22 to the Non-land-grant College of Agriculture Competitive Capacity Building Grants program re-authorized in the Agriculture Act of 2018 (2018 Farm Bill, TITLE VII—RESEARCH, EXTENSION, AND RELATED MATTERS, Sec. 7127. Capacity building grants for NLGCA institutions).

Institutions in Food, Agriculture, and Natural Resources- Non-Land-Grant Colleges of Agriculture (NLGCAs) have a long and successful history of educating and preparing professionals in agriculture, food, renewable resources and many related fields. The Non-Land Grant Agricultural and Renewable Resources Universities (NARRU) recognize 58 NLGCA colleges in 20 states that enroll about 25% of the U.S. total, and 50% of the food, agriculture, and natural resources graduates in those states. These public colleges and universities provide important translational research and outreach benefits through graduate education (MS and Ph.D. level) as well. NLGCA's are making a significant contribution, nationwide, in developing a highly skilled workforce for agriculture, food, and renewable resource industries.

Graduates with Real-World Skills—NLGCA's offer accessible and affordable opportunities in agriculture, food, and renewable resource education for over 32,000 students annually which is a significant complement to the over 110,000 undergraduate students in agriculture enrolled at Land-Grant Universities (LGU). Their academic programs and graduates are unique because of the incorporation of real world, hands-on experiences in undergraduate research, independent studies, and internships on campus farms and laboratories, directly with producers and industry, and in government agencies.

Graduates that are Workplace Ready—Graduates from NLGCA are helping to fulfill a national demand for a highly skilled workforce in agriculture and related areas. The Employment Opportunities for College Graduates in Food, Agriculture, Renewable Natural Resources and the Environment, United States, 2020–2025, produced by Purdue University with grant support from USDA National Institute of Food and Agriculture, indicates that new U.S. graduates with expertise in food, agriculture, renewable natural resources, or the environment are expected to fill only 61 percent of the expected 59,400 average annual openings. Full report found at: <https://www.purdue.edu/usda/employment/>.

At NLGCAs, theory and practice are balanced through science-based curricula that emphasize business principles, critical thinking, problem solving, decision-making, creativity, communications, and teamwork. NLGCA's graduates have a strong work ethic and are ready to enter industry and government careers, or return to production-oriented positions on our nation's farms and ranches. Many also pursue graduate studies, often at land-grant institutions.

Double Food Production by 2050—Congress regularly provides many authorizations for agriculture- related research, education, and extension programming.

While these authorizations are generally available to NLGCA's, these institutions often lack the capacity to compete with land-grant universities and other entities for federal funds. The 2008 Farm Bill authorized a program to provide competitive grants to NLGCA's to help build such capacity. The program was re-authorized in the 2014 Farm Bill. In recognition of the need to more than double food production on existing land resources to meet the global food needs by 2050, increasing the research, educational, and outreach capacity of the NLGCA's makes sense. Seven NLGCAs are already in the top 100 universities in FY 2014 R&D expenditures for agricultural research.

Since the first awards in FY12, the NLGCA Capacity Building Grants have been instrumental in developing academic, research, and outreach capabilities at NLGCA institutions. Of particular interest is the number of NLGCA awards that have facilitated multi-institutional collaboration and regional projects. Progress on enhancing capacity of the NLGCA's has been very positive and must be continued to maximize NLGCA's ability to compete for Agriculture and Food Research Initiative (AFRI) funding that seeks to meet the food, fiber and renewable resource needs of a growing world.

Five million federal dollars were appropriated in FY 2021 for competitive capacity building activities on education, research and outreach at NLGCA. Although the research mission and activities such as Cooperative Extension are not directly comparable, appropriations for formula capacity building at Land-Grant Universities provides an important perspective on how capacity building funds are used. Appropriations in FY 2021 for formula capacity building at Land-Grant Universities for six major programs were \$1.18 billion. The NLGCA Capacity Funds are currently budgeted at 0.4% of these funds, even though these universities are preparing 25% of the nation's food, agriculture, and natural resources workforce. Further information on the need for support of Agricultural Higher Education including NLGCAs can be found through the Charles Valentine Riley Memorial Foundation at: <https://rileymemorial.org/>.

FY22 Request: Provide \$10.0 million to the competitive grants program to build agriculture, food, and renewable resource related education, research, and outreach capacity at the Non-Land-Grant Colleges of Agriculture as re-authorized in the Agriculture Improvement Act of 2018 (2018 Farm Bill). By making this funding available on a competitive basis to qualifying NLGCA's, Congress can be assured the funds will be leveraged to the greatest extent possible.

[This statement was submitted by Dr. Todd A. Winters, Dean, College of Agriculture and Applied Sciences, University of Tennessee at Martin, and Legislative Affairs Chair, Non-land-grant Agricultural and Renewable Resources Universities (NARRU).]

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#### PREPARED STATEMENT OF ORGANIC FARMERS ASSOCIATION

Thank you for the opportunity to provide this testimony on FY 2021 appropriations to agencies within the U.S. Department of Agriculture. The Organic Farmers Association is a nonprofit membership organization that represents U.S. certified organic farmers.

#### **National Organic Program**

U.S. Department of Agriculture, Agricultural Marketing Service  
OFA FY 2022 request: \$22 million

The integrity of the organic label is organic farmers' top priority and if the National Organic Program (NOP) is not able to enforce the organic standards, consumers will lose trust in the integrity of the label, putting the economic viability of organic farmers at risk. The NOP has oversight of the standards that define the USDA certified organic label as well as the accredited certifying agencies that inspect organic farms and food companies. The NOP must be able to grow to provide proper oversight of certifiers and enforcement in an industry that is rapidly expanding to create complex new supply chains that present numerous opportunities for fraud. Enforcement priorities for OFA include compliance with the Pasture Rule, finishing the Origin of Livestock rulemaking, reinstating the Organic Livestock and Poultry Practices rule, finishing the Strengthening Organic Enforcement rulemaking, clarifying standards and certification interpretation of hydroponic and container operations and reducing opportunities for fraud in the organic supply chain.

Despite the explosive growth of the organic industry into a global industry and repeated instances of failures of USDA to keep up with oversight and enforcement, the NOP was level funded at \$9 million from fiscal years 2014 to 2017. The NOP was funded at \$14 million for fiscal year 2019, \$16 million in 2020, and \$18 million

in 2021. To keep up with the growth of the industry, funding must be increased. We request \$22 million for the NOP for FY 2022, as authorized by the 2018 Farm Bill.

**Organic Certification Cost Share Program**

U.S. Department of Agriculture, Farm Services Agency  
OFA FY 2022 Request: \$12 million

Report Language Request: OFA requests that funding to restore the reimbursement levels for Organic Certification Cost Share Program be accompanied by strong report language requiring FSA to reimburse eligible organic operations at the full authorized reimbursement rates for 2020 and 2021, and to report back to Congress with a plan to ensure the accounting problems associated with FSA's administration of the program do not occur again.

The Organic Certification Cost Share Program reimburses a portion of organic certification fees paid by organic farms and businesses. Annual inspection and certification are a requirement for all organic operations, and the inspection and certification process serves as a core component in maintaining the integrity of the USDA organic label. The federal government has historically reimbursed up to 75% of organic certification fees paid by organic farms and businesses, with a maximum reimbursement of \$750 per certification scope (crops, livestock or handling) per operation. In August 2020, the FSA unexpectedly announced that reimbursement rates for 2020 certification costs would be cut to 50% of the certified organic operation's eligible expenses, up to a maximum of \$500 per scope. The decision by FSA to reduce the reimbursement levels came as a surprise to the organic sector. It leaves organic operations—who had been planning on being reimbursed for their certification costs at the same level as previous years—burdened with an unplanned expense. The cost share program is particularly important to small and mid-sized organic farms, and those who are just starting out with organic certification.

FSA's announcement in August 2020 revealed that the agency has struggled to track program spending. This led the agency to provide inaccurate reports of the carryover balances to Congress as the funding provided in the 2018 Farm Bill was being considered, and has resulted in a shortfall for the program for the rest of the years of the Farm Bill cycle. FSA has communicated to Congress and organic stakeholders that \$9 million in supplemental funding is needed to fill the funding gap for the program, at the full authorized reimbursement levels, through the end of fiscal year 2023. However, FSA staff have also acknowledged that the \$9 million figure does not include any growth in the number of certified operations eligible for assistance under the program, which we believe is shortsighted. Therefore, OFA requests \$12 million for the Organic Certification Cost Share Program.

**Organic Data Initiative**

U.S. Department of Agriculture, Agriculture Marketing Service, National Agricultural Statistics Service, and Economic Research Service  
OFA FY 2022 request: \$1 million

As the organic industry has grown, we have struggled to represent that growth to policy makers and regulators in part because USDA has been slow to develop systems to track the growth of organic. Increasing USDA's capacity to conduct the Certified Organic Production Survey and other organic data collection will not only help us show the public and policy makers that organic is a growth industry for U.S. farmers, having accurate data on the amount of organic acreage around the world will also help the National Organic Program and organic certifiers to better enforce organic standards and identify potential fraud in the supply chain.

The 2002 Farm Bill requires USDA to "ensure that segregated data on the production and marketing of organic agricultural products is included in the ongoing baseline of data collection..." As the organic industry grows, the lack of good organic data has been an impediment. We request \$1 million for the Organic Data Initiative for AMS, NASS, and ERS to expand organic data collection and analysis efforts.

**Organic Transitions Program**

U.S. Department of Agriculture, National Institute of Food and Agriculture  
OFA FY 2022 request: \$10 million

Many of the challenges facing the organic sector can be helped with increased research. Organic research often addresses practices and challenges that are also relevant to farmers who are not certified organic or who farm conventionally. An increased focus on soil health, alternatives to chemical pest management and cover crops across all sectors of agriculture show that this kind of research can serve an audience that is wider than certified organic. The Organic Transitions Program focuses on these types of topics and addresses the historic backlog of research needs

in this sector. OFA is requesting \$10 million for FY 2022, with a focus on using the increase to fund climate change research related to organic agriculture.

**Farming Opportunities Training and Outreach Program**

U.S. Department of Agriculture, National Institute of Food and Agriculture, Office of Partnership and Public Engagement  
OFA FY 2022 Request: \$5 million

The 2018 Farm Bill combined the Beginning Farmer and Rancher Development Program and the Section 2501 Outreach and Assistance for Socially Disadvantaged and Veteran Farmers and Ranchers Program into the FOTO program, authorizing annual mandatory funding as well as additional discretionary appropriated funding. The Beginning Farmer and Rancher Development Program (BFRDP) is administered by NIFA. It is the only federal grant program dedicated to training the next generation of farmers, including veterans and farmers of color. The Section 2501 Outreach and Assistance for Socially Disadvantaged and Veteran Farmers and Ranchers Program is administered by the Office of Partnership and Public Engagement and is dedicated to helping historically underserved producers gain access to USDA programs and service. Both parts of the combined FOTO program are vitally important to agriculture in general and to organic agriculture because the programs help address previous inequity in who can access USDA programs and services and helps ensure the success of a diverse range of new people entering farming. This support is vitally needed to make sure that organic agriculture becomes an even more vital and resilient part of the agriculture system. OFA is requesting \$5 million of appropriated discretionary funding for this program, in addition to the mandatory funding authorized by the Farm Bill.

**Agriculture and Food Research Initiative**

U.S. Department of Agriculture, National Institute of Food and Agriculture  
Report Language Request: Support Funding for Regionally Adapted, Public Cultivar Development Programs.

Farmers need access to seeds and animal breeds adapted to their farming systems, soils and climates. USDA recently responded to the request by the Senate Appropriations Committee for a separate AFRI funding stream for regionally adapted cultivars, by establishing an AFRI “cultivar development” program priority area. The FY2022 appropriations bill should call for increased funding for this AFRI priority area.

**Sustainable Agriculture Research and Education Program**

U.S. Department of Agriculture, National Institute of Food and Agriculture  
OFA FY 2022 Request: \$60 million

The SARE program funds on-farm research into sustainable agricultural farming systems, including organic systems. OFA is seeking \$60 million for SARE in FY2022.

**Tenure, Ownership, and Transition of Agricultural Land (TOTAL) Survey**

U.S. Department of Agriculture, National Agricultural Statistics Survey  
OFA FY 2022 Request: \$3 million

Land access is a major challenge facing beginning, socially disadvantaged, and young farmers, including organic farmers. Sec. 12607 of the 2018 Farm Bill tasked the National Agricultural Statistics Service with completing an updated TOTAL Survey to provide data on farmland ownership, tenure, transition, and entry of beginning and socially disadvantaged farmers. OFA requests \$3 million for this survey for FY22.

**Agricultural Research Service**

U.S. Department of Agriculture  
OFA FY 2022 Request: \$20 million for organic research

Organic farmers across the country lack research on basic production challenges. ARS funding for organic research has declined from over \$15 million in FY07 to just \$12 million in FY20. This is less than 1 percent of the ARS research budget, versus organic’s market share of 6 percent. If ARS were to invest 6 percent of its total research budget on organic, it would equate to about \$80 million. OFA requests \$20 million for ARS organic research.

[This statement was submitted by Patty Lovera, Policy Director, Organic Farmers Association.]

## PREPARED STATEMENT OF THE ORGANIC FARMING RESEARCH FOUNDATION

Organic farming is a bright spot in the agriculture economy, yet organic producers across the country remain challenged by the lack of research on basic agronomic challenges. Funding from the USDA Agricultural Research Service (ARS) for organic farming research is not commensurate with the continued rapid growth of the organic market. In fact, according to ARS data, organic funding has declined from over \$15 million in FY 2007 to just \$12 million in FY 2020. This represents less than one percent of the total ARS research budget, versus organic's market share of six percent. If ARS invested the equivalent six percent, the total ARS organic research budget would be closer to \$80 million. Clearly a huge gap exists, one that needs to be closed to bring about a greater degree of equity, address barriers to wider adoption, and advance the substantial contributions of organic agriculture to pressing environmental, climate, and human health concerns. We believe that appropriators can and should take action, over a multiyear period in stair-step fashion, to ensure organic agriculture gets its fair share of the ARS research budget. We urge you to start with a down payment in the FY 2022 bill at a level of at least \$20 million for ARS organic farming research, while also directing ARS to develop a long-range national strategic plan for organic research.

## PROPOSED BILL LANGUAGE

We urge you to request the following clause be added to the list of statutory clauses that follow the total line item for ARS research that says:

"\$X,XXX,XXX,XXX,...., including not less than \$20 million for research directly related to organic agriculture and for the agency to develop a five-year plan for organic food and agriculture research encompassing all relevant crop, animal, nutrition, and natural resource national programs; ...."

The Committee is aware of the important role organic farming can play in enhancing farm income, developing new markets, improving soil health, mitigating climate change, and protecting water quality. The Committee provides an increase for research directly related to organic agriculture. The Committee also notes that the percentage of direct organic research relative to the total research budget lags far behind the share of organic food in the marketplace. Therefore, the Committee directs the agency to develop a five-year national strategic plan to close the gap. The plan should include all of the relevant national programs within the crop, livestock, nutrition, and natural resources mission areas, and should include robust stakeholder involvement from the organic farming and organic research communities. To improve coordination and accountability, the Committee also encourages the agency to name one of its existing National Program Leaders in each of those four mission areas as the lead for organic research within their mission area. In developing the strategic plan, the Committee also encourages the agency to coordinate with the National Institute for Food and Agriculture on soil health, climate mitigation and resilience, crop cultivar development, pest and weed management, grazing systems, and other priority topics.

## BACKGROUND

The Organic Farming Research Foundation (OFRF) believes the Agriculture Research Service (ARS) is ideally positioned to help producers sustain production and contribute to climate mitigation through better coordination and an expanded research investment in organic agriculture. Climate disruption, soil and resource degradation, a global pandemic, and inequitable distribution of natural, financial, and social resources threaten farmer and rancher livelihoods and food security nationwide, especially in communities of color and other vulnerable populations. Organic agricultural systems show great potential to build agricultural and food system resilience in the face of today's multiple crises, and ARS can play a critical role in advancing organic agriculture as a climate solution.

ARS works at the forefront to find solutions to agricultural problems. The long-term research carried out at the agency will be critical in preparing farmers and ranchers, organic and non-organic, to adapt to and mitigate the climate crisis. We believe that by increasing funding for organic research, developing an iterative five-year strategic plan for organic research, and appointing a National Program Leader to coordinate organic research within each of the four mission areas at ARS, the agency can address the historical lack of investment in organic agriculture research and help organic and non-organic producers alike overcome challenges to realize their potential to mitigate and adapt to the impacts of the climate crisis.

The organic method builds and maintains healthy, living soils as the foundation for successful production, and largely excludes synthetic agrochemicals to protect soil life and other beneficial organisms. Research shows that organic practices have great potential to sequester carbon (C) in soil and plant biomass, reduce net greenhouse gas (GHG) emissions of agricultural operations, build resilience to the impacts of climate disruption and other stresses, and enhance long-term sustainability of agriculture and food systems.

While organic agriculture is a key component to mitigating climate change, organic producers face unique challenges. These include managing weeds without herbicides while minimizing the soil health costs of tillage and cultivation, managing nutrients from organic sources for optimal crop yield and soil health, and maintaining satisfactory and profitable yields without synthetic pesticides. Weather extremes related to climate change further complicate production and can compromise soil health itself.

A coordinated nationwide effort should be directed by dedicated National Program Leaders for organic within the crops, livestock, natural resources, and nutrition mission areas. Increased investment in organic research is urgently needed to help organic producers overcome these challenges and help more farms transition to organic to more meaningfully contribute to climate mitigation efforts.

Lack of research investment in organic agriculture is largely responsible for the approximately 20% yield gap between organic and conventional yields. Most modern crop cultivars and livestock breeds have been developed for input-dependent conventional systems and are poorly adapted to organic methods that rely on natural biological processes for crop nutrition and crop protection.

Since 2002, extramural funding through the Organic Research and Extension Initiative (OREI), Organic Transitions Program (ORG), and Sustainable Agriculture Research and Education (SARE) administered by the National Institute for Food and Agriculture (NIFA) has begun to address this research gap, yielding valuable practical outcomes for organic producers and others wishing to adopt more sustainable farming practices.

Inclusion of organic systems in ARS Long Term Agricultural Research (LTAR) at Beltsville, Maryland has made important contributions to understanding and optimizing organic crop rotations. In addition, the nation's one dedicated ARS organic research facility, based in Salinas, California, where long-term research (now in year 17) is making significant strides in understanding the effects of cover crops and crop rotations on fertility and weed management. This has critical implications not just for organic but for the whole agriculture sector, as all farmers can utilize and benefit from cover cropping.

However, ARS organic funding remains at \$12 million per year, or 1.2% of the agency's total budget, which lags far behind the exponential growth of the organic industry's market share, now approaching 6%. Furthermore, both ARS and NIFA organic funding declined significantly between 2010 and 2013, and ARS funding for organic research has since remained relatively flat. The 2018 Farm Bill increases OREI funding to \$50 million by 2023, meaning NIFA's contribution is increasing, while ARS investment in organic remains disproportionately low.

ARS National Programs and LTAR sites support long-term basic and applied research vital to the understanding of phenomena such as soil carbon sequestration, nutrient cycling, plant-soil-microbe interactions, and climate resilience in different farming systems. NIFA, on the other hand, awards shorter term grants (1–5 years) for projects that emphasize practical application and farmer engagement. Coordination between ARS and NIFA can leverage their complementary roles. For example, ARS-funded plant breeding research conducted in the context of organic systems can speed progress toward finished cultivars through OREI farmer-participatory breeding networks.

To better support the organic community, ARS should:

- Appoint National Program Leaders within each mission area to coordinate organic research efforts at ARS and create a new, coordinated iterative five-year national program plan devoted to organic.
- Devote at least \$80 million per year (6% of the ARS annual budget, equivalent to the organic share of the marketplace) to organic systems by the end of the first 5-year cycle.
- Strengthen coordination between ARS and NIFA organic research on soil health, climate mitigation and resilience, crop cultivar development, and other priority topics.
- Include within ARS organic research priorities the following:

- Optimize organic systems that integrate cover crops, crop rotation, amendments, innovative nutrient management, judicious tillage, and livestock-crop integration on a site-specific basis for soil health climate change resilience, and farm viability. Understand and optimize soil microbiomes and biological processes in organic systems.
- Understand the role of crop genetics in efficacy of plant-soil-microbe relationships for nutrient and moisture uptake, disease resistance, and overall crop resilience and vigor.
- Advance the cutting edge of organic integrated pest management for crop diseases, pests, and weeds.
- Develop regionally adapted, climate-resilient, public crop cultivars that perform well in organic systems, partner effectively with beneficial microbes, resist disease, use nutrients and moisture efficiently, outcompete weeds, and meet market needs of organic producers.
- Advance the science and practice of management-intensive rotational grazing for organic livestock production systems, including regional adaptation of advanced rotational grazing and pasture management methods.
- Develop soil health, climate mitigation, and organic production methodologies suited to small-scale, diversified, and limited resource production systems.

OFRF conducts periodic surveys of organic producers across the country and summarizes the research priorities identified by producers in our National Organic Research Agenda (NORA) publications. The next NORA report will be published in 2021, which we will share with the Subcommittee and ARS National Program Leaders.

To learn more about our policy recommendations and research priorities to advance organic agriculture as a climate solution, please visit our website.

[This statement was submitted by Organic Farming Research Foundation.]

#### PREPARED STATEMENT OF THE ORGANIC TRADE ASSOCIATION

Chairwoman Baldwin, Ranking Member Hoeven, and Members of the Subcommittee, I, Laura Batcha, am the Executive Director and CEO of the Organic Trade Association (OTA). We respectfully request the following funding levels and oversight for programs whose mandate is to support the growth of the organic industry: USDA (AMS) National Organic Program (NOP)—\$22 million\*; USDA (NIFA) Organic Transition Research Program—\$10 million; and USDA (AMS) Organic Data Initiative—\$1 million. We remain concerned by the National Organic Program's lack of commitment to updating the organic regulations to ensure consistent standards. Therefore, we request that any increase in funding for NOP should be strictly limited to standards development. Additionally, we request that the committee include bill language requiring NOP to issue an Organic Improvement Action Plan to clear the backlog of the more than 20 National Organic Standards Board Recommendations that have passed with wide support, none of which have been implemented by USDA.

The Organic Trade Association (OTA) is the membership-based business association for organic agriculture and products in North America. OTA is the leading voice for the organic trade in the United States, representing over 9,500 organic farms and businesses across 50 states. Its members include growers, shippers, processors, certifiers, farmers' associations, distributors, importers, exporters, consultants, retailers, and others.

Despite the many challenges facing the food and agriculture sector, U.S. organic soared to new highs in 2020, growing by a record 13 percent to \$62 billion in annual sales. As one of the fastest-growing food and farming sectors in the U.S. and global marketplace, organic is an increasingly essential part of American agriculture. Organic provides economic opportunities for farmers, creating jobs and lifting rural economies, while also utilizing sustainable farming practices that are proven to help mitigate the threat of climate change. Organic also provides a safe, healthy choice to consumers, who are increasingly seeking out the trusted USDA Organic seal on the food and products they purchase for their families.

#### NATIONAL ORGANIC PROGRAM (NOP)

A healthy market for organic products requires a clear market distinction backed by a trusted, verified and enforced claim. The National Organic Program's (NOP) role is to enforce the organic regulations and ensure they evolve to keep pace with consumer expectations. However, the federal regulatory apparatus, lack of inertia

and focus at NOP have stifled innovation and continuous improvement within the industry. In the past 10 years, industry has advanced 20 consensus recommendations for improvements to the organic standards, yet USDA has not completed rule-making on a single one of them. In fact, the only update to the organic standards that has been completed since the program became effective in 2002 is the pasture rule, which was finalized in 2010, more than a decade ago.

For example, clarifying the organic dairy transition standards, known as the Origin of Livestock, has gone through a process that has taken more than fifteen years and yet a final rule still remains elusive despite widespread support and agreement on the standards. Congress included bill language in the Fiscal Year 2020 appropriations act requiring USDA to issue a final rule on Origin of Livestock by June 2020. As of now, USDA has reopened the comment period on the proposed rule for a third time. Unfortunately, there are numerous examples of stalled standards impacting broad segments of the industry. The full list can be found here.

The National Organic Program's resource allocation is currently not aligned with its mission to provide clear, consistent organic standards as required by the Organic Foods Production Act. In fact, the committee with OTA's support has doubled NOP's budget from \$9 million to \$18 million in the past five years. NOP has gone from a small staff of 32 in 2013 to 63 full-time staff today. Of those 63 staff, only three are devoted to writing these very standards. Since the foundation of organic is strong, consistent standards, we believe it would be irresponsible to increase the NOP's budget without strict Congressional oversight to ensure the funding is meeting the needs of industry and fulfilling NOP's mission.

OTA requests the following language be included: "The committee requires that the additional National Organic Program funding provided be exclusively focused on standards development." In the absence of the above restrictions placed on additional NOP funding, we would request that the budget remain flat at \$18 million for FY22.

Additionally, OTA requests that the committee include provisions from the bipartisan Continuous Improvement and Accountability in Organic Standards Act (H.R. 2918) introduced by Representatives Peter DeFazio, Rodney Davis, Chellie Pingree, Jimmy Panetta, Dan Newhouse and Ron Kind. Specifically we request the following bill language: "Not later than 90 days after the date of the enactment of this Act, the Secretary shall publish in the Federal Register and seek public comment on an Organic Improvement Action Plan that identifies and sets forth the recommendations approved by the National Organic Standards Board by a decisive vote and submitted to the Secretary that have not been implemented by a final rule or any other agency action with clear timelines for implementation."

#### ORGANIC TRANSITION RESEARCH PROGRAM (ORG)

OTA requests that ORG, which supports research, extension, and higher education programs for organic producers, be funded at \$10 million. The overall goal of ORG is to improve the competitiveness of organic livestock and crop producers, as well as those who are adopting organic practices and transitioning to organic certification. Practices and systems addressed include those associated with organic crops, organic animal production, and organic systems integrating plant and animal production. ORG consistently receives more funding requests than can be accommodated, as consumer demand for organic products outpaces domestic production. Without continued funding of ORG as an organic-specific research grant program, this gap will only increase.

#### ORGANIC DATA INITIATIVE (ODI)

The organic industry has grown at a tremendous rate over the past several years, and accurate data for the production, pricing and marketing of organic products is essential to maintaining stable markets, identifying fraud, creating risk management tools, tracking production trends, and increasing exports. ODI collects and disseminates data regarding organic agriculture through the Agricultural Marketing Service (AMS), the National Agricultural Statistics Service (NASS) and the Economic Research Service (ERS). This program has been successful in providing valuable information to Congress, government agencies, and the organic industry at a low cost. We ask for a \$1 million in discretionary funding for this effort for AMS, NASS and ERS to continue collecting organic pricing information and surveys, and expand those collections to comparable levels as the data collected for conventional agriculture.

In conclusion, organic food and farming are built on a commitment to shape our collective future for the better. The organic industry is creating jobs, stimulating our economy and delivering quality products in high demand. Consumer expectations

drive improvement, and organic farms and businesses work hard to have a positive impact on people and the planet.

I thank the Committee and look forward to working with you to advance the organic industry.

[This statement was submitted by Laura Batcha, CEO, Organic Trade Association.]

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#### PREPARED STATEMENT OF THE OREGON WATER RESOURCES CONGRESS (OWRC)

The Oregon Water Resources Congress (OWRC) strongly supports increased funding of the U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) programs for FY 2022 programs. We are supportive of \$3 billion split between the Regional Conservation Partnership Program (RCPP), Environmental Quality Incentives Program (EQIP), and PL-566 programs. Within the PL-566 programs, a minimum of \$800 million is needed to support ongoing irrigation modernization efforts under the Watershed Protection and Flood Prevention Operations (WFPO) Program and \$200 million is needed for coordinated federal agency watershed planning and assistance with dam rehabilitation under the Small Watershed Rehabilitation Program. This funding appropriation is crucial for NRCS to adequately provide technical assistance and funding opportunities for farmers and agricultural entities across the nation.

OWRC was established in 1912 as a trade association to support the protection and use of water rights and promote the wise stewardship of water resources in Oregon. OWRC members are local governmental entities, which include irrigation districts, water control districts, drainage districts, water improvement districts, and other agricultural water suppliers that deliver water to roughly 1/3 of all irrigated land in Oregon. These water stewards operate complex water management systems, including water supply reservoirs, canals, pipelines, and hydropower facilities.

Our members from across Oregon face challenges related to irrigation water supply reliability and aging infrastructure. While there are common concerns and interests throughout irrigated agriculture, each basin is unique, and necessitates local communities' work together to identify their needs and develop solutions to best meet them. Funding programs, like the ones housed under the USDA NRCS programs, are valuable tools to meet the myriad of infrastructure needs throughout all our basins, without placing the entire burden on the backs of the agricultural economy that produces food and fiber for our nation.

#### RCPP BENEFITS & NEEDS

OWRC strongly supports robust funding for NRCS programs, particularly the RCPP, which is a critical tool for districts and other agricultural water suppliers in developing and implementing water and energy conservation projects in Oregon. While we understand the need to streamline federal agency activities and programs, it is our hope essential programs like the RCPP continue to receive the additional funding that is still needed to meet program demands. In the past, related NRCS programs, such as the Agricultural Water Enhancement Program (AWEP) and the Cooperative Conservation Partnership Initiative (CCPI), have been highly successful in developing cooperative approaches for federal, state, and local interests to address Endangered Species Act (ESA) and Clean Water Act (CWA) issues in watershed basins and sub basins. Those programs helped catalyze conservation efforts that live on in the RCPP today.

RCPP currently has over 2,000 partners engaged in locally led conservation efforts that help implement collaborative basin-level solutions and reduce detrimental legal action, resulting in better outcomes for all.

Federal support of water conservation activities funded through NRCS programs, including the RCPP, is essential to the conservation of our natural resources and critical to protecting our food, energy, and water supply. Since 2014, RCPP has invested \$1 billion in over 375 projects across all fifty states and Puerto Rico. That \$1 billion has leveraged an additional \$2 billion from state and local partners for a total of \$3 billion invested in water conservation projects. Among those are Oregon projects that will address water quality and drought like those described below. Irrigation districts in Oregon are the model of successful RCPP projects that "innovate, leverage additional contributions, offer impactful solutions and engage more participants." More projects like this could be developed and implemented in Oregon and throughout the nation with additional federal support through the RCPP.

—East Fork Irrigation District (EFID) Watershed Restoration—EFID, with a diverse set of partners in the Hood River Watershed in the Columbia River Basin,

will focus on a top-priority water conservation and fish habitat project in the Lower East Fork Hood River. EFID and its partners will construct Phase 1 of the Eastside Lateral pipeline project, assist agricultural producers with approximately 400 acres of on-farm water conservation practices and educate producers and farm workers on the latest irrigation water management techniques. The project will also restore one mile of spawning and rearing habitat on the East Fork Hood River for threatened steelhead, spring Chinook, and Coho. The project will increase irrigation water reliability for high value food crops, improve resilience to drought, and restore instream habitat for ESA listed species.

RCPP Funding: \$2,033,000, Project Timeline: 2018–2022

—The Wallowa Lake Irrigation Modernization Project, Farmers Conservation Alliance (FCA)—This project will address water quantity, water quality, and inadequate habitat resource concerns in the Prairie Creek area of Wallowa County, Oregon. This project proposes to pipe 11.8 miles of private ditches, install water control structures/fish screens on newly piped ditches and install up to ten new sprinkler systems to increase on-farm conveyance and application efficiency. The actions will improve water conveyance and application efficiency, reduce fish entrainment risk decrease return flows into Prairie Creek and the Wallowa River, and decrease sediment, nutrient, and bacteria inputs into Prairie Creek and the Wallowa River. FCA and its partners seek to benefit threatened or endangered populations of spring Chinook salmon, summer steelhead trout and bull trout.

RCPP Funding: \$1,730,000, Project Timeline: 2018–2021

—Lower Crooked River Strategic Restoration—This is a comprehensive project, led by the Crooked River Watershed Council, intended to address degraded fish and wildlife habitat, water quality, and riparian plant communities over 17 miles of the Crooked River in Central Oregon. Proposed restoration activities include both instream and riparian restoration to improve habitat for fish and wildlife, water quality, and agricultural productivity. In addition, the project will reduce the threat of regulatory enforcement associated with the Federal Endangered Species Act and compliance with non-point source impacts from agriculture under Sections 303 and 319 of the Federal Clean Water Act.

RCPP Funding: \$7,091,000, Project Timeline: 2018–2022

—Three Sisters Irrigation District (TSID) Innovation—TSID in the Deschutes Basin, Oregon, with government, private industry and nonprofit partners will implement multiple innovative projects to mitigate drought, improve water quality/quantity and improve fish habitat as part of the Whychus Creek Collaborative Conservation Project. The project includes the completion of piping Watson McKenzie Main Canal, resulting in the conservation of 800 acre-feet of annual canal seepage loss. The on-farm component of this project will encompass 61 projects, over 1500 acres, in the Upper District, allowing farmers to pipe private laterals, thereby providing access to pressurized water from the District's pipeline. Pressurized water will eliminate electrical pumps that use over 2.5 million kWh of electricity annually. A feasibility study will be conducted to determine the potential for 60 on-farm hydro net metering projects. This project will allow TSID to mitigate drought by piping the entire District.

RCPP Funding: \$990,604, Project Timeline: 2017–2022

OWRC also continues to support funding for Environmental Quality Incentives Program (EQIP), in accordance with the 2018 Farm Bill. As demonstrated by the huge demand for RCPP funding, programs like EQIP need to be funded for investment in conservation projects. It is essential the EQIP have at least \$2 billion in appropriations funding if Congress would like to see widespread results. Furthermore, with numerous new and potential listings under ESA and increased water regulations under the CWA, there is a dire need for additional funding to support conservation efforts nationwide.

RCPP helps fill a funding void for multi-partner conservation projects and allows farmers to pool together and leverage the dollars invested in the off-farm project with the addition of EQIP on-farm projects. The effects of drought combined with ESA and CWA regulation has created a daunting set of circumstances for irrigated agriculture in the west. RCPP and EQIP have become an essential lifeline for farmers to adapt to drought. It is critical to increase funding for new eligible RCPP projects that maximize economic investment while benefiting the environment and alleviating some of the negative effects of drought.

## SMALL WATERSHED REHABILITATION PROGRAM AND WATERSHED PLANNING NEEDS

OWRC also strongly supports the Small Watershed Rehabilitation Program. Two of our members, Sutherlin Water Control District (SWCD) and Middle Fork Irrigation District (MFID) have dams that were built under PL-566. SWCD and MFID have received funds to begin the long and expensive process of updating their 50-year-old dams to today's standards for safety, however; both districts will need continued funding from the Small Watershed Rehabilitation Program to fully update their infrastructure.

SWCD has two dams built under PL-566 and while they were built to seismic standards 50 years ago, they do not meet today's standards for earthquakes. SWCD's dams serve as multi-purpose storage for the community: providing flood control, irrigation water, municipal water, and recreation. To date, SWCD has been authorized to receive funding for planning, design, and construction of one of their dams and planning and design on the other. However, SWCD will still need considerable funding dollars to complete construction on the second dam.

MFID is responsible for the management and maintenance of Clear Branch Dam, a PL-566 dam within the Hood River watershed, which provides a clean, dependable water supply and distribution system for the irrigation of pears, apples, cherries, and other high value crops. Rehabilitation of the dam is needed to protect the public from flooding, for access to a clean and dependable water supply, and to maintain agricultural productivity. Rehabilitation of Clear Branch Dam will improve fish passage connectivity for ESA threatened Bull Trout and improve water temperature for spawning, rearing and migration.

Once planning and design studies are complete, both MFID and SWCD will know what the costs will be to make the necessary improvements to their dams, which is currently estimated at over \$10 million for both SWCD dams and \$9.45 million for MFID. Additionally, in 2017, Senator Merkley championed increased funding within PL- 566 for Watershed and Flood Prevention Operations. The program was funded at \$150 million and included projects that benefit wildlife and irrigation. These funds are available to substantially assist Central Oregon irrigators with water conservation projects that benefit spotted frog preservation while ensuring farmers and ranchers in the region get the water they need for their operations.

Considering the high costs to fix just three of the PL-566 dams, and the immense price tag of modernizing infrastructure to increase water conservation, preserve wildlife habitat and increase water reliability for farmers and ranchers, a minimum of \$1 billion is needed to fund this important program. Our member districts, the farms and other water users they serve, and the communities in which they are located benefit greatly from the NRCS programs described in our testimony. NRCS programs are essential to irrigation districts in developing and implementing conservation projects that benefit the entire watershed and community.

Furthermore, conservation projects also benefit the economy through job creation and ensuring the future viability of American agriculture. Oregon's agricultural community is actively committed to water conservation programs, but those programs require robust federal participation if the agricultural community is to be able to continue its efforts to address Oregon's water supply needs through conservation. Increasing the budget for NRCS programs is a strategic investment that will pay both environmental and economic dividends to Oregonians and America as a whole.

Thank you for the opportunity to provide testimony on FY 2022 Appropriations for the U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) programs.

[This statement was submitted by April Snell, Executive Director, Oregon Water Resources Congress.]

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 PREPARED STATEMENT OF THE PERSONAL CARE PRODUCTS COUNCIL

On behalf of the Personal Care Products Council (PCPC), thank you Chairwoman Baldwin, Ranking Member Hoeven, and members of the Subcommittee for the opportunity to submit testimony on Agriculture, Rural Development, Food and Drug Administration, and Related Agencies appropriations for Fiscal Year 2022.

PCPC is the leading national trade association representing the global cosmetic and personal care products industry. Founded in 1894, PCPC represents approximately 600 member companies who manufacture, distribute, and supply the vast majority of finished personal care products marketed in the U.S., ranging from multi-national corporations to medium and small enterprises. As the makers of a diverse range of products millions of consumers rely on every day, from sunscreens,

toothpaste and shampoo to moisturizer, lipstick and fragrance, personal care products companies are global leaders committed to product safety, quality and innovation.

PCPC and its members very much appreciate the Subcommittee's consistent support and once again encourage provision of sufficient FY22 funding for the FDA's Center for Food Safety and Applied Nutrition (CFSAN) and its Office of Cosmetics and Colors. We share your commitment to continuing and strengthening FDA's regulatory and enforcement capabilities.

As you know, the Federal Food, Drug & Cosmetic Act requires that every cosmetic and personal care product and its individual ingredients be safe before they are put on the market. Companies that manufacture or market cosmetics have a legal responsibility to ensure their products are safe and properly labeled, and current federal law provides penalties for failure to meet these requirements. Our member companies take their responsibility to make safe products very seriously. Consumer and product safety are top priorities for our industry, with careful and thorough scientific research and development serving as the foundation for everything that we do.

The U.S. cosmetics industry invests nearly \$3 billion each year in scientific research and development. As a result of this research, approximately 2,000 new products are launched annually. The industry employs nearly 6,000 scientific and technical professionals dedicated to ensuring product and ingredient safety. Companies also work with a number of scientific and medical experts—chemists, toxicologists, microbiologists, dermatologists, epidemiologists, environmental scientists, and other technical experts—to evaluate and ensure the safety of their products before they reach the consumer.

FDA and the personal care products industry continuously strive to ensure cosmetics safety, and cosmetics products have an excellent safety record. However, because the key statutory provisions authorizing FDA regulation of these products have not been updated since enactment of the Federal Food, Drug, and Cosmetic Act of 1938, PCPC supports modernizing cosmetics regulation to ensure that FDA has the appropriate authority and resources to oversee cosmetic products for decades to come.

As you consider potential funding for the FDA's Office of Cosmetic and Colors, we wanted to share our continuing efforts to work with the authorizing committees and key stakeholders on a comprehensive and uniform national framework for cosmetics regulation that advances safety, innovation, and consumer confidence. Below are the key principles guiding our advocacy in support of modernization of cosmetic regulation.

We believe that modernization efforts should be designed to protect the public health, while also providing for a framework appropriately calibrated to the excellent safety record of cosmetics. The following components are key to creating and sustaining a comprehensive, effective modernized system for cosmetics regulation:

stantiate the safety of cosmetic products and ingredients, utilizing widely accepted scientific principles and established scientific ingredient reviews such as the Cosmetic Ingredient Review. Manufacturers should be able to choose which FDA-accepted data to use.

**FDA Cosmetic Ingredient Review:** Congress should authorize FDA to review the safety of individual cosmetic ingredients and nonfunctional constituents found in cosmetics. Review should be discretionary rather than mandatory, which would ensure the Agency can best utilize its public health resources.

**Alternatives to Animal Testing:** Congress should prohibit any new testing of cosmetics on animals, exempting over-the-counter drug products from such prohibition (since these products are regulated separately by FDA), allow for limited exemptions for certain ingredients on the basis of safety concerns (as in the EU), ensure national uniformity, and provide greater transparency in use of "cruelty free" labeling.

**Mandatory Registration:** For all cosmetic products sold in the United States, manufacturers should be required to register their foreign and domestic manufacturing establishments with FDA and report their ingredients to FDA.

**Importation:** A federal cosmetics regulation framework should bar importation of cosmetics produced outside the U.S. where the manufacturing facility or ingredient statement has not been registered with FDA.

**Good Manufacturing Practices:** FDA should be authorized to issue Good Manufacturing Practices (GMP) for cosmetic products. GMP standards created by FDA under this authority should leverage existing national and international standards.

**Adverse Event Reporting:** Manufacturers should be required to engage in mandatory reporting to FDA of serious and unexpected adverse health events experienced by a consumer from a cosmetic product marketed and used in the United States.

**Cosmetic Records Inspection:** FDA should be authorized to inspect a manufacturer's records if FDA has a reasonable belief that a cosmetic product presents a threat of serious adverse health consequences to humans.

**Mandatory Recall:** FDA should be provided authority to order a mandatory recall of a product if a manufacturer refuses to comply with an FDA request for a voluntary recall in which FDA has a reasonable belief that the product is adulterated or otherwise is likely to cause serious adverse health consequences.

**Flexibility for Small Businesses:** Any cosmetics regulation framework should allow flexibility for small businesses, as defined by the Small Business Administration, to comply with certain requirements, including additional time to submit ingredient statements to FDA, simplified ingredient statements, additional FDA guidance on safety substantiation, and extended effective date for GMP compliance. Very small cosmetic manufacturers should be exempted from any new requirements.

**Interaction of Cosmetic and Over the Counter Drug Authorities:** Congress should clarify that when a product falls under FDA's cosmetic and Over the Counter (OTC) drug authorities, and the requirements conflict, the OTC drug requirements will apply.

**National Program Uniformity:** A comprehensive national program is needed to ensure uniform regulation of cosmetics. Consumers benefit from consistently regulated cosmetics across the nation, and cosmetic companies benefit from a uniform regulatory framework. As such, federal legislation modernizing cosmetics regulation should preempt state and local laws that would duplicate new authorities granted to FDA to regulate cosmetics.

A comprehensive update to federal cosmetics regulation guided by these principles will promote development of products that are safe, innovative, and meet consumer needs.

We look forward to working with Congress to develop this regulatory framework and serving as a resource to the Subcommittee as it considers funding for the FDA's Office of Cosmetics and Colors.

If you have any questions, feel free to contact at [simpsonm@personalcarecouncil.org](mailto:simpsonm@personalcarecouncil.org) or 202-431-8686.

[This statement was submitted by Meredith Simpson with the Personal Care Products Council.]

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PREPARED STATEMENT OF THE PERSONALIZED MEDICINE COALITION

Chairwoman Baldwin, Ranking Member Hoenes and distinguished members of the subcommittee, the Personalized Medicine Coalition (PMC) appreciates the opportunity to submit testimony on the U.S. Food and Drug Administration (FDA)'s fiscal year (FY) 2022 appropriations. PMC is a nonprofit education and advocacy organization comprised of more than 220 member institutions across the health care spectrum who are working together to advance personalized medicine in ways that benefit patients and health systems. The global COVID-19 pandemic did not slow the extraordinary pace of scientific innovation in personalized medicine. The widely variable effects of COVID-19 have only highlighted the need for personalized medicine to move further and faster and for Congress to continue its investment in FDA. As the subcommittee begins work on the FY 2022 Agriculture, Rural Development, FDA, & Related Agencies Appropriations bill, we respectfully ask that you increase the FDA's appropriation by no less than \$200 million above the FY 2021 budget authority level so that the agency can continue to carry out its public health mission and support the delivery of the targeted health care interventions that are the foundation of personalized medicine.

Personalized medicine, also called precision or individualized medicine, is an evolving field in which physicians use diagnostic tests to determine which medical treatments will work best for each patient or use medical interventions to alter mo-

lecular mechanisms that impact health. By combining data from diagnostic tests with an individual's medical history, circumstances, and values, health care providers can develop targeted treatment and prevention plans with their patients. Personalized medicine promises to detect the onset of disease, pre-empt its progression, and improve the quality, accessibility, and affordability of health care.<sup>1</sup>

Previous increases in funding have enabled the FDA to advance multiple programs facilitating the development of personalized medicine products. Additional increases in FY 2022 will allow the FDA to expand these initiatives and launch new ones, which all require a highly skilled and technical workforce. By increasing federal investment in FDA activities fostering the development of innovative medical products, clinical trial design, real-world evidence, and digital health, Congress can help advance a new era of personalized medicine at a pivotal moment, promising a brighter future for health systems and patients with unmet medical needs.

#### THE ROLE OF THE FDA IN PERSONALIZED MEDICINE

The rapid progress we have seen over the past year, from mRNA vaccine development, diagnostic testing, and variant sequencing, to beginning to understand how human genomic variation influences infectivity, disease severity, vaccine efficacy, and treatment response, show that science is leading the health system away from one-size-fits-all, trial-and-error medicine and toward an era of personalized medicine.<sup>2,3</sup> This progress was in part made possible by years of diligent funding from Congress to advance the necessary regulatory science and infrastructure.

Thanks in part to a responsive regulatory agency, personalized medicine has seen steady progress in recent years. As of 2020, more than 286 personalized treatments are available for patients.<sup>4</sup> Personalized medicines accounted for 39 percent of the new drugs FDA approved last year, topping one-third of new drug approvals for the third time in the last four years.<sup>5</sup> This is a sharp increase since a decade ago, when personalized medicines accounted for less than 10 percent of newly approved therapies. These new approvals help transform care for molecularly selected subsets of patients with cancer, rare diseases, and common/infectious diseases. FDA also approved the first blood-based biomarker tests for cancer that will help guide targeted treatment strategies for patients who are unable to undergo invasive operations to obtain tissue biopsies. The emergence of blood-based biomarker testing may also usher in a new era in which cancers are detected at earlier stages, when they may be easier and less expensive to treat.

The FDA is the gateway for personalized medicine breakthroughs entering the market. FDA's Center for Devices and Radiological Health (CDRH), Center for Drug Evaluation and Research (CDER), and Center for Biologics Evaluation and Research (CBER) each have responsibilities for evaluating medical products for their safety and efficacy. As personalized approaches to treatment and prevention have grown, new types of drugs, tools, and technologies using genetic information have challenged existing regulatory frameworks and processes.

#### FACILITATING THE DEVELOPMENT OF PERSONALIZED MEDICINE PRODUCTS

The FDA is taking a number of steps to modernize its regulatory processes, such as streamlining its technical and data infrastructure to shorten review times, improving clinical trials to address disparities and unmet medical needs, integrating RWE into medical product reviews, and building partnerships to foster digital health and artificial intelligence (AI) technologies. Robust funding from Congress will help the FDA build upon this work and bring personalized medicine products to patients as efficiently as possible.

#### EXPEDITING PRODUCT DEVELOPMENT

The FDA continues to take actions across the agency that enable it to make more rapid decisions and improve communications with medical product developers. In recent years, the agency has worked toward integrating premarket and post-market programs to transition to a total product lifecycle approach to device evaluation and monitoring. These are positive steps, but the agency's technical infrastructure remains fragmented. For example, with over 30 data systems in the Devices Program,

<sup>1</sup> <http://www.personalizedmedicinecoalition.org/Userfiles/PMC-Corporate/file/PMC—The—Personalized—Medicine—Report—Opportunity—Challenges—and—the—Future.pdf>

<sup>2</sup> <https://doi.org/10.1016/j.cell.2021.01.015>

<sup>3</sup> <https://doi.org/10.1038/s41586-020-2817-4>

<sup>4</sup> <http://www.personalizedmedicinecoalition.org/Userfiles/PMC-Corporate/file/PMC—The—Personalized—Medicine—Report—Opportunity—Challenges—and—the—Future.pdf>

reviewers need to access up to 10 different systems during the review process.<sup>6</sup> Additional funding would enable the agency to continue its Data Modernization Action Plan beginning with near term “driver projects” to promote consistent, repeatable data practices across centers that build foundational capabilities.

The agency must also bolster its workforce to keep pace with the growing pipeline of gene therapies, as well as build in workforce flexibilities across each of its centers. As of January 2020, FDA had over 900 active Investigational New Drug applications for gene therapies.<sup>7</sup> The scientific review of gene therapies requires the evaluation of highly complex information and, thus, reviewers with highly specific expertise, and by 2025, the agency anticipates it will be approving 10 to 20 cell and gene therapy products per year.<sup>8</sup> Additional funding would help FDA grow its workforce to prepare for an increasing pre- and post-market cell and gene therapy workload. FDA staff have taken extraordinary steps over the past year to respond to the coronavirus public health emergency, with CDER staff absorbing the workload of around 250 full-time employees and CDRH seeing a 38 percent increase in pre-market submissions. This stretched capacity, however, is not without consequences. In April 2021, CDRH announced that, due to limited resources and delays in review timelines, it will be declining in vitro diagnostic pre-submission requests that do not fall into certain priority categories.<sup>9</sup> While Congress has appropriated no-years monies to the agency to address some of the pandemic’s resource demands, FDA is only able to hire permanent full-time employees through increased budget authority from Congress. Increasing FDA’s base funding level will allow the agency to begin addressing restraints on workload capacity and build in future flexibilities.

#### MODERNIZING CLINICAL TRIALS

More rare diseases and cancers are being defined by biological markers, creating smaller groups of patients who are more likely to respond to targeted treatments and are candidates for participation in trials. Trials that rely on identification of patients by biological markers, such as enriched trials, trials with master protocols, and in silico trials using computer modeling, present opportunities to streamline clinical research, especially in cases where a scarcity of patients makes a randomized control infeasible and where important personalized medicines may be delayed or discarded because FDA cannot afford to run trials needed to validate them. In addition, ensuring that personalized medicines are impactful to all patients requires the inclusive and equitable representation of patients with diverse characteristics and health needs in clinical research. In 2020, FDA finalized guidance outlining approaches to enhancing the diversity of participants in clinical trials, and the COVID-19 pandemic has prompted FDA to consider additional opportunities allowing for remote participation in research through decentralized trials. FDA is also supporting clinical trials networks in rare diseases and working to bring clarity to the emerging area of individualized drugs developed for a single, “n-of-one” patient diagnosed with a very rare genetic disease and where traditional clinical trials are not an option. These initiatives promise to foster a more agile clinical research enterprise for personalized medicine that helps address unmet medical needs and disparities in clinical research.

#### ADVANCING THE USE OF REAL-WORLD EVIDENCE (RWE)

Traditional post-market studies require years to design and complete and cost millions of dollars. The use of medical data collected outside of a clinical trial, or RWE, has played a vital role in answering key questions about COVID-19 and related therapeutics, diagnostics and vaccines as standards of care evolved rapidly.<sup>10</sup> These experiences over the past year have demonstrated how RWE can be used to understand the utility of new treatments and diagnostics, as well as improve patient access to personalized medicine. In March 2021, CDRH published an analysis of 90 examples of different types of regulatory submissions supported by RWE, and later this year CDER plans to publish draft guidance on how RWE can contribute to the assessment of safety and effectiveness in regulatory submissions. FDA is also work-

<sup>5</sup> <http://www.personalizedmedicinecoalition.org/Userfiles/PMC-Corporate/file/PM—at—FDA—The—Scope—Significance—of—Progress—in—2020.pdf>

<sup>6</sup> <https://www.fda.gov/media/135078/download>

<sup>7</sup> <https://www.fda.gov/news-events/press-announcements/fda-continues-strong-support-innovation-development-gene-therapy-products>

<sup>8</sup> <https://www.fda.gov/news-events/press-announcements/fda-continues-strong-support-innovation-development-gene-therapy-products>

<sup>9</sup> <https://www.fda.gov/news-events/fda-voices/year-pandemic-how-fdas-center-devices-and-radiological-health-prioritizing-its-workload-and-looking>

<sup>10</sup> <https://www.fda.gov/news-events/fda-voices/fdas-technology-modernization-action-plan-accel>

ing to expand its Sentinel System and NEST (National Evaluation System for health Technology) programs to monitor the safety and effectiveness of approved medical products. Increased budget authority for FDA would create a more reliable source of funding for and strengthen programs like Sentinel and NEST, which provide national resources for filling data gaps in existing surveillance systems, improving product review, and improving the quality of RWE available to health care providers and patients to make more informed treatment decisions.

#### FOSTERING DIGITAL HEALTH TECHNOLOGIES AND ARTIFICIAL INTELLIGENCE (AI)

Data-capturing technological devices, or digital health technologies, and AI can play a key role in the collection and analysis of RWE. In 2020, CDRH launched the Digital Health Center of Excellence to build partnerships advancing the development and FDA review of cutting-edge digital health technologies. Over the past year, FDA also released an action plan for innovation in medical device software using AI and machine learning, held a public meeting to discuss the use of real-world data generated from patients through digital health technologies, and published learnings from its pilot precertification program for medical device software. FDA recently granted Breakthrough Designation to an AI platform that would aid clinicians in identifying patients at increased risk of developing atrial fibrillation (AFib) or atrial flutter. AFib is highly prevalent in the older adult population, and AFib-related strokes are disabling and costly. This AI platform utilizes ECGs to predict, among people without a previous history of AFib, who would develop it within the next 12 months. By informing FDA's approach to regulatory oversight of these emerging technologies, additional investment in these initiatives may encourage the use of personalized medicine by helping match new personalized medicine products with the patients who are most likely to benefit or by helping to identify potentially serious therapeutic side effects sooner. Digital health technologies can also play a key role in enabling remote participation in trials. This foundation laid at the FDA for digital health and AI will become increasingly important for personalized medicine as patients assume a larger role in managing their own health care and are more informed by their ability to access their genomic data.

#### IMPLEMENTING THE 21ST CENTURY CURES ACT (CURES ACT)

By passing the Cures Act, Congress acknowledged the need for an additional focus on and funding for the FDA. These resources have facilitated many of the programs mentioned above, but this funding alone is insufficient to fully sustain the agency's work in these critical areas. The Cures Act authorizes \$50 million in FY 2022 for the FDA through the Innovation Account,<sup>11</sup> but as annual allocations start to taper off, the science behind product development continues to increase in complexity. Increases in the FDA's budget authority appropriations are necessary for the agency to continue the important programs launched by the Cures Act and build on them in ways that help the FDA evaluate novel personalized medicines and technologies.

#### CONCLUSION

PMC appreciates the opportunity to highlight the FDA's importance to the continued success of personalized medicine. A budget authority appropriation for the FDA in FY 2022 that is no less than \$200 million above the FY 2021 base appropriations level will help the agency chart an efficient path for advancing innovative medical product development and bring us closer to a future in which every patient benefits from a personalized approach to health care.

[This statement was submitted by Cynthia A. Bens, Senior Vice President, Public Policy, Personalized Medicine Coalition.]

#### PREPARED STATEMENT OF THE PET AND WOMEN SAFETY (PAWS) ACT COALITION

The Pet and Women Safety Act (PAWS) Coalition, a group of organizations working together in support of domestic violence survivors and their pets, strongly supports continued appropriations for the Emergency and Transitional Pet Shelter and Housing Assistance Grant Program. Together, we call on Congress to fund the program at the fully authorized amount of \$3,000,000.

PAWS Act legislation was included in the 2018 Farm Bill (Section 12502), establishing this important grant program to support domestic violence shelters as they

<sup>11</sup> <https://www.fda.gov/downloads/AdvisoryCommittees/CommitteesMeetingMaterials/ScienceBoardtotheFoodandDrugAdministration/UCM556618.pdf>

help survivors and their families safely seek shelter with their pets when leaving an abuser. These grants provide emergency and transitional shelter and housing assistance or short-term shelter and housing assistance. Grants awarded may also be used for programs that provide support services designed to enable someone fleeing domestic violence to locate and secure safe housing with their pet, safe accommodations for their pet, or related services such as transportation and other assistance. The U.S. Department of Justice (DOJ) Office of Victims of Crime (OVC) is now in its second year of administering this program, and demand for this funding is high.

The Consolidated Appropriations Act of 2020 provided \$2 million for the Emergency Transitional Pet Shelter Housing and Assistance Grant Program. In 2020, the U.S. Department of Justice (DOJ), Office of Justice Programs (OJP), and Office of Victims of Crime (OVC) awarded \$2.2 million to six organizations throughout the United States.

With this funding, these domestic violence shelters are already implementing pet-friendly policies such as partnering with local veterinary offices to provide care for survivors' pets, and building necessary infrastructure such as temporary pet shelters.

The FY 2020 awards are expanding services and establishing new programs that will increase lifesaving resources for families seeking safe shelter together with their pets.

Grant recipients are utilizing funding to:

- Create a coordinated community response to improve resources available to survivors and their pets
- Provide temporary shelter for pets, transitional housing and hotel rooms for survivors with pets
- Establish partnerships with local non-profits and veterinarians to provide preventative, non-emergency, and emergency pet care for survivors' pets
- Hire new staff and hold additional trainings for staff on the link between domestic violence and animal abuse
- Target rural communities for capacity-building assistance
- Establish a survivor emergency relief fund, which will include funding for pet deposits and other support for pet-owning survivors
- Operate a 10-kennel pet shelter on-site
- Purchase pet supplies and food

In late April 2021, the U.S. Department of Justice (DOJ), Office of Justice Programs (OJP), and Office of Victims of Crime (OVC) announced the availability of \$2.5 million in grant funding appropriated by Congress in the Consolidated Appropriations Act of 2021. Since this announcement, the PAWS Act Coalition has worked to raise awareness among the domestic violence shelter community of the availability of this important funding.

PAWS Act Coalition members are also contributing funds and volunteer hours to the cause of making more domestic violence shelters pet-friendly. For example, Purina and RedRover awarded six additional Purple Leash Project grants to domestic violence shelters across the country in the winter of 2021. These grants provide funding and resources to transform domestic violence emergency shelters into safe spaces for survivors and their pets. Shelters can use the grant money to complete renovations and upgrades to their survivor services offerings that will allow people and pets to escape abuse and heal together. The success of this program demonstrates that smaller-size grants can still have a big impact. Purple Leash Project grants typically range between \$20,000 and \$50,000 each. Since founding the Purple Leash Project, Purina and RedRover have provided 21 grants totaling to more than \$300,000 in funding to domestic violence shelters across the United States. Since 2012, RedRover has awarded 120 Safe Housing grants to domestic violence shelters in 41 states to help them become pet-friendly, and the majority of these grants are less than \$20,000. Purina and RedRover are working towards the goal of 25 percent of U.S. domestic violence shelters to become pet-friendly by the end of 2025. While these public-private partnerships are hugely important, fully funding the PAWS Act will help to address the widespread need for funding to support similar programs across the country.

Noah's Animal House and Urban Resource Institute (URI), members of the PAWS Act Coalition are part of the less than 20% of domestic violence shelters across the country that actively offer co-shelter services to keep both pets and their owners away from the dangers of domestic abuse. Together, these two organizations have saved approximately 2,300 pets from abusive conditions, so that domestic violence

survivors are not forced to choose between staying in an abusive relationship and leaving their pet with their abuser.

Fully funding the Emergency and Transitional Pet Shelter and Housing Assistance Grant Program at \$3 million is essential to saving the lives of people and pets. According to the Centers for Disease Control, 4,774,000 women in the United States experience physical violence by an intimate partner every year. According to the National Coalition Against Domestic Violence, 1 in 4 women and 1 in 4 men have experienced physical violence by an intimate partner within their lifetime. On a typical day, there are more than 20,000 phone calls placed to domestic violence hotlines nationwide.

Additionally, the majority of domestic violence situations include pets in the household and 85% of women residing in domestic violence shelters reported a pet was harmed by their abuser<sup>1</sup>. As many as 65% of people experiencing domestic violence remain in abusive situations out of fear for their pets' safety<sup>2</sup>.

A growing body of science has demonstrated a link between domestic violence and animal cruelty<sup>3</sup>. An outlet of emotional support for survivors, the family pet often becomes a target for physical abuse<sup>4</sup>. In studies that have explored the role of companion animals in an abusive relationship, companion animals are used by abusers to control, hurt, and intimidate their partners<sup>5</sup>.

Research demonstrates the link between pets and improvements in mental health, particularly for those who have experienced trauma. Companion animals often serve as a much needed and effective outlet for overcoming abuse, and have also been shown to improve mental health conditions such as depression, stress and anxiety, all of which can manifest from intimate partner violence<sup>6</sup>. The pervasiveness of domestic violence during the ongoing COVID-19 pandemic and the incidence of violence towards pets in the United States shows the urgency of providing safe shelter for survivors and their pets.

The need for additional pet-friendly options for domestic violence survivors remains an under-addressed, critical issue facing our country. The continuation of the Emergency and Transitional Pet Shelter Housing and Assistance Grant Program funding is an important step to meet this need. Please increase federal funding in FY 2022 for the PAWS Act grant program to the fully authorized amount of \$3 million so that no survivor of domestic violence will have to choose between their own safety or the safety of their pets. The Coalition also encourages the U.S. Department of Agriculture (USDA) and the DOJ to consider providing a greater number of grants at lesser dollar amounts in the future. Offering grants in the \$20,000—\$500,000 range could fill a gap in funding resources and help more shelters become pet-friendly, especially those that are smaller and more rural.

The PAWS Act Coalition is counting on your strong support for the Emergency and Transitional Pet Shelter Housing and Assistance Grant Program. Together, we can protect survivors of domestic violence by protecting the animals they rely on for comfort and healing.

On behalf of the Pet and Women Safety Act Coalition Members:

Nestlé Purina Petcare  
Human Animal Bond Research Institute  
Noah's Animal House

Pet Partners  
RedRover  
Urban Resource Institute

[This statement was submitted by Steven Feldman, Human Animal Bond Research Institute (HABRI).]

<sup>1</sup> Ascione, F.R., Weber, C. V., Thompson, T.M., Heath, J., Maruyama, M., Hayashi, K. (2007). Battered Pets and Domestic Violence: Animal Abuse Reported by Women Experiencing Intimate Violence and by Nonabused Women. *Violence Against Women*, 13(4), 354–373.

<sup>2</sup> <https://www.drarmartybecker.com/healing-power-of-pets/people-pets-caught-domestic-violence-personal-story/>

<sup>3</sup> Faver, Catherine A., and Elizabeth B. Strand. "Domestic violence and animal cruelty: Untangling the web of abuse." *Journal of Social Work Education* 39.2 (2003): 237–253.

<sup>4</sup> Matthews, Kevin, and Kelly McConkey. "Examining the nexus between domestic violence and animal abuse in a national sample of service providers." *Violence and Victims* 27.2 (2012): 280.

<sup>5</sup> Flynn, Clifton P. "Battered women and their animal companions: Symbolic interaction between human and nonhuman animals." *Society & Animals* 8.2 (2000): 99–127.

<sup>6</sup> World Health Organization. *Global and regional estimates of violence against women: prevalence and health effects of intimate partner violence and non-partner sexual violence*. World Health Organization, 2013.

## PREPARED STATEMENT OF THE PICKLE PACKERS INTERNATIONAL, INC.

## SUMMARY

Sustained and increased funding is desperately needed to maintain the research momentum built over recent years and to defray rising fixed costs at laboratory facilities. Companies in the pickled vegetable industry generously participate in funding and performing short-term research, but the expense for long-term research needed to insure future global competitiveness is too great for individual companies to shoulder on their own.

## ADDITIONAL BUDGET REQUESTS FOR FY 2022

Funding needs for USDA/ARS laboratories are as follows:

## I. Requests for Program Enhancement—Pickled Vegetables

\$500,000	Applied Crop Genomics
\$500,000	Product Quality and New Uses and Food Safety
\$250,000	Precision Agriculture for Specialty Crops
\$500,000	Emerging Diseases of Crops
\$1,750,000	Increase in Operating Funds to Fully Fund Existing Scientists, Support Staff, Graduate Students, and Post-Doctorates

## USDA/ARS Research Provides:

- Consumers with over 150 safe and healthful vegetable varieties providing vitamins A, C, folate, magnesium, potassium, calcium, and phytonutrients such as antioxidant carotenoids and anthocyanins.
- Genetic resistance for many major vegetable diseases and pests, assuring sustainable crop production with reduced pesticide residues—valued at nearly \$1 billion per year in increased crop production.
- Classical plant breeding methods combined with bio-technological tools, such as DNA markers, genetic maps, and genome sequencing to expedite traditional breeding and increase efficiency.
- New vegetable products with economic opportunities amidst increasing foreign competition.
- Improved varieties suitable for machine harvesting, assuring post harvest quality and marketability.
- Fermentation and acidification processing techniques to improve the efficiency of energy use, reduce environmental pollution, and reduce clean water intake while continuing to assure safety and quality of our products.
- Methods for delivering beneficial microorganisms in fermented or acidified vegetables and producing reduced sodium, healthier products.
- New technology and systems for rapid inspection, sorting and grading of pickling vegetable products in the field and at the processing facility.

## Health and Economical Benefits

- Health agencies continue to encourage increased consumption of fruits and vegetables, useful in preventing heart disease, cancer, stroke, diabetes, and obesity.
- Vegetable crops, including cucumbers, peppers, carrots, onions, garlic, and cabbage (sauerkraut), are considered “specialty” crops and not part of commodity programs supported by taxpayer subsidies.
- Current farm value for just cucumbers, onions and garlic is estimated at \$2.4 billion with a processed value of \$5.8 billion. These vegetables are grown and/or manufactured in all 50 states.

The pickled vegetable industry strongly supports and encourages your committee in its work of maintaining and guiding the Agricultural Research Service. To accomplish the goal of improved health and quality of life for the American people, the health action agencies of this country continue to encourage increased consumption of fruits and vegetables in our diets. Accumulating evidence from the epidemiology and biochemistry of heart disease, cancer, diabetes, and obesity supports this policy.

As an association representing processors that produce over 85 percent of the tonnage of pickled vegetables in North America, it is our goal to produce new products that increase the competitiveness of U.S. agriculture as well as meet the demands of an increasingly diverse U.S. population that is encouraged to eat more vegetables.

The profit margins of growers continue to be narrowed by foreign competition. This industry can grow by meeting today's lifestyle changes with reasonably priced products of good texture and flavor that are high in nutritional value, low in negative environmental impacts, and produced with assured safety from pathogenic microorganisms and from those who would use food as a vehicle for terror. With strong research to back us up, we believe our industry can make a greater contribution toward reducing product costs and improving human diets and health for all economic strata of U.S. society.

Many small to medium sized growers and processing operations are involved in the pickled vegetable industry. We grow and process a group of vegetable crops, including cucumbers, peppers, carrots, onions, garlic, cauliflower, cabbage (Sauerkraut) and Brussels sprouts, which are referred to as 'minor' crops. None of these crops are in any "commodity program" and do not rely on taxpayer subsidies. However, current farm value for just cucumbers, onions and garlic is \$2.4 billion with an estimated processed value of \$5.8 billion. These crops represent important sources of income to farmers and rural America.

#### APPLIED CROP GENOMICS

The USDA/ARS has the only vegetable crops research unit dedicated to the genetic improvement of cucumbers, carrots, onions, and garlic. ARS scientists account for over half of the total U.S. public breeding and genetics research on these crops. Their efforts have yielded cultivars and breeding stocks that are widely used by the U.S. vegetable industry (i.e., growers, processors, and seed companies). All U.S. seed companies rely upon this program for developing new varieties and economically important traits (e.g., pest resistances and health-enhancing characteristics) not available in commercial varieties using long-term high-risk research efforts.

ARS scientists have developed genetic resistance for many major vegetable diseases that is estimated at \$670 million per year in increased crop production, not to mention environmental benefits due to reduction in pesticide use. New research has resulted in cucumbers with improved disease resistance, pickling quality and suitability for machine harvesting. New sources of genetic resistance to viral and fungal diseases, tolerance to environmental stresses, and higher yield have recently been identified along with molecular tools to expedite delivery of elite cucumber lines to U.S. growers.

There are still serious vegetable production problems which need attention. Field loss caused by pathogens and pests remain high, yield and nutritional quality needs to be significantly improved, and U.S. production value and export markets should be enhanced. Genetic improvement of these crop attributes is available through the unique USDA lines and populations (i.e., germplasm) and new biotechnological methodologies that are being developed. Classical plant breeding methods combined with state-of-the art molecular tools such as genetic maps, marker-assisted and genomic selection, and genome sequences can expedite traditional cucumber, carrot and onion breeding and increase efficiency. New high-value vegetable products based upon genetic improvements can offer vegetable processors and growers expanded economic opportunities for the U.S. and export markets.

#### PRODUCT QUALITY AND NEW USES AND FOOD SAFETY

The USDA-ARS maintains a Food Science and Market Quality & Handling Research Unit (FSMQHRU) that our industry looks to for new processing technologies and scientific information regarding the quality and safety of fermented, acidified, and preserved vegetable products. Major accomplishments include: development of pasteurization technology used for most acidified pickles and other vegetables in the US market; determination of the combined vinegar and sugar concentrations needed to preserve shelf stable sweet pickles; purging technology that saves the pickled vegetable industry up to 40% in losses due to bloater damage; technologies that reduce or eliminate sodium chloride to help comply with federal EPA regulations for waste salt disposal; and scientific data needed to support required process filings for safe production practices of acidified foods under FDA regulations and the Food Safety Modernization Act.

The pickling industry still relies on food processing methods developed in the 1940's and 50's. FSMQHRU is working to develop continuous flow microwave technology and "hot-fill-and-hold" pasteurization methods (potentially eliminating the need for a costly steam pasteurizers) to save energy costs and reduce water use. The Unit is developing a process to eliminate carbon dioxide production in cucumber fermentations to significantly reduce the environmental footprint of production, eliminating bloater defects and the need for air purging conducive to off-flavors and microbial instability. The FSMQHRU is also working to develop preservation tech-

nologies that will enhance health promoting compounds in pickled vegetables with preferred textures and flavors. It has been demonstrated that pickles contain gamma-aminobutyric acid (GABA), an amino acid known to reduce anxiety and hypertension. Specific fermentation processes can be developed to increase GABA in pickle products.

Additional research funding is urgently needed to: 1) develop low salt fermentation methods that significantly reduce environmental impact; 2) assure the safety of imported and non-traditional fermented and acidified foods through pH modeling to prevent illness and help define safe production practices; 3) develop methods for converting surplus vegetables into healthful new products. The Economic Research Service reported that roughly 1/3 of the food produced in the US is not consumed, representing losses of over 1,000 calories per capita per day and \$100 billion annually; and 4) Develop advanced processing technologies that enhance the healthfulness and quality of vegetable products to encourage vegetable consumption.

The FSMQHRU is a unique and valuable resource for the US fermented and acidified vegetable industry. It is internationally recognized and well-suited to provide the scientific and technological support needed to develop new food processing technologies that will enhance industry competitiveness and ensure food safety.

#### PRECISION AGRICULTURE FOR SPECIALTY CROPS

Smart or digital technologies have had huge impacts on the productivity and sustainability of specialty crop production in the U.S. over the past two decades. Recent advances in sensors, robotics and automation, machine learning, artificial intelligence, and data analytics provide new, exciting opportunities for enhancing specialty crops production, food quality and safety, and postharvest food handling and distribution. The USDA/ARS engineering research has successfully developed and transferred several innovative optical technologies for rapid, nondestructive inspection of specialty crops for food quality and safety during and after harvest. Its current research is focused on the development of new robotic technology, coupled with artificial intelligence, for automated harvesting, sorting, grading, and tracing of apples and other specialty crops. This program is also working on a new generation of intelligent imaging technology for evaluation and grading of raw and processed horticultural products to ensure food quality and safety and to reduce postharvest loss.

The current resources available are grossly inadequate, threatening its leadership position in this scientific field. Increased funding is needed to hire a new engineer to address key technical challenges in the development of new automation and sensing technology for rapid detection of postharvest quality issues and enable fast transfer and dissemination of the technologies to the U.S. pickled vegetable industry.

#### EMERGING DISEASES OF CROPS

USDA/ARS vegetable research addresses national problems confronting the vegetable industry across the U.S. The mission of the program is to develop disease and pest resistant vegetables, and new, reliable, environmentally-sound disease and pest management practices that do not rely on conventional pesticides. Programs currently address 14 crops, including those in the cabbage, cucumber, and pepper families—a major importance to the pickling industry. USDA/ARS research is recognized world-wide, and its accomplishments include over 150 new vegetable varieties and many improved management practices.

Vegetable growers depend heavily on synthetic pesticides to control diseases and pests. Without the availability of certain pesticides that have been eliminated for use, producers are experiencing significant crop losses and even crop failures, and this will continue unless other effective, non-pesticide control methods are readily identified. Soil-borne diseases are especially on the rise due to the elimination of methyl bromide, which kept numerous diseases caused by fungi and nematodes in check when it was used extensively. In this context, the research on improved, more efficient, and environmentally compatible vegetable production practices and resistant varieties continues to be essential. Increasing funding to hire a new Research Geneticist to study and develop host plant resistance will facilitate important research in these critical situations.

#### FUNDING NEEDS FOR THE FUTURE

It remains critical that USDA/ARS funding continues the forward momentum in pickled vegetable research that the U.S. now enjoys, and to increase funding levels to ensure long-term global competitiveness.

It is important to note that FY 2020 enacted funding for USDA/ARS laboratories identified below totaled \$17,227,000. However, funding for all cucurbits equaled just \$5,241,000 with only \$3,234,000 directed toward cucumber and pickled vegetable research. For FY 2022, PPI is requesting an additional \$1,750,000 in operating funds to support needed research for cucumber and pickled vegetables.

Applied Crop Genomics—Madison, WI

We request additional funding to replenish recent reductions in operating funds and fill the position of a recently retired researcher. That hire is not possible until more funds are made available.

FY 2020 Enacted	\$357,000
FY 2021 Estimate	\$357,000
FY 2022	\$357,000 + \$500,000

Product Quality and New Uses and Food Safety—Raleigh, NC

We request additional funding to offset reductions in operating funds and support research initiatives.

FY 2020 Enacted	\$595,000
FY 2021 Estimate	\$595,000
FY 2022	\$595,000 + \$500,000

Precision Agriculture for Specialty Crops—East Lansing, MI

The current funding is far short of the level needed to conduct needed research on pickling cucumbers.

FY 2020 Enacted	\$145,000
FY 2021 Estimate	\$145,000
FY 2022	\$145,000 + \$250,000

Emerging Diseases of Crops—Charleston, SC

There is a critical need to increase funding to support host plant resistance research.

FY 2020 Enacted	\$1,797,000
FY 2021 Estimate	\$1,797,000
FY 2022	\$1,797,000 + \$500,000

[This statement was submitted by Brian Bursiek, Executive Vice President, Pickle Packers International, Inc.]

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PREPARED STATEMENT OF RESEARCH!AMERICA

Research!America appreciates the Subcommittee's stewardship over funding for such critical federal agencies as the Food and Drug Administration (FDA). The Research!America alliance advocates for science, discovery, and innovation to achieve better health for all and we hope the comments below prove useful as you allocate funding for Fiscal Year 2022 (FY22). We urge you to support a robust increase of no less than \$200 million above FY21 levels to non-user fee funding to FDA in FY22.

The ever-increasing list of public health responsibilities that FDA fulfills directly affects the health and safety of Americans. Overall, FDA oversees more than \$2.8 trillion in products, which account for 20 percent of annual spending by U.S. consumers. In 2020, FDA once again demonstrated a solid commitment to evaluating the safety and effectiveness of new products in as efficient a manner as possible, approving 53 novel drugs, 58% of which treat rare or orphan diseases. FDA is working collaboratively with patients, academic researchers, and industry to responsibly speed the review of medical advances, knowing that any unnecessary delay squanders health and time.

The need for efficient and nimble review of new medical products and therapies has been on full display during the ongoing COVID-19 pandemic. In response to the critical need for therapies for this novel disease, the FDA created the Coronavirus Treatment Acceleration Program (CTAP), which uses innovative methods to move COVID-19 treatments to patients as quickly and as safely as possible. Thanks to this innovative program, the FDA has authorized 10 COVID-19 treatments and 3 vaccines to date. Even while meeting this important need, the FDA has not wavered in its commitment to its other health priorities. Of the 53 drugs approved for a range of medical conditions, 75% were approved in the U.S. before any other coun-

try. FDA's role is too important, across a myriad of American priorities, for inadequate federal support.

Increased funding for the FDA will allow this agency to continue in its many critical functions: developing new strategies for ensuring food safety across America, including deploying pioneering artificial intelligence programs; assessing the safety of new drugs and medical devices coming to market; ensuring that Americans have access to the highest quality therapeutics when they need them; and working together with other agencies to handle epidemics and pandemics, including the ongoing COVID-19 response, as well as potential future threats.

Additional funding would also allow FDA to do even more to address other urgent national health priorities, including using drug regulation, enforcement, and education to combat the persistent and deadly opioid crisis; approving safe and effective therapies for illnesses like Alzheimer's disease, which affected as many as 5.8 million Americans in 2020; curbing the use of harmful tobacco products; and supporting initiatives to eliminate antimicrobial resistance, a major public health issue that is reducing the efficacy of antibiotics.

Americans recognize that our nation cannot afford to retreat in the face of these and other health threats. Since 1992, Research!America has commissioned national and state-level surveys to gauge public sentiment on issues related to research and innovation. According to a national survey we commissioned in 2021, more than 75% of Americans say that opioid abuse is a problem in their communities. FDA is responsible for ensuring prescription drugs are safe for users and has made addressing the opioid crisis a key priority. The same 2021 survey found that 70% of Americans believe the COVID-19 pandemic has revealed that major changes, including more funding, are needed in our public health systems. FDA has played a major role in combating the COVID-19 pandemic and will continue to be a vital part of preparing for future pandemics and other public health threats. We cannot win the battle against the opioid crisis or against future pandemics unless FDA has the resources necessary to fulfill these crucial responsibilities to protect public health.

Given FDA's growing portfolio of responsibilities that bear on the health, safety, and wellbeing of the American people, we believe the Subcommittee would be advancing the best interests of our nation by supplying FDA with an increase of at least \$200 million in budget authority.

I thank you and your respective staff for your hard work, your leadership in funding FDA, and for considering Research!America's views.

Contact: Ellie Dehoney, Vice President of Policy and Advocacy, Research!America [edehoney@researchamerica.org](mailto:edehoney@researchamerica.org)

[This statement was submitted by Mary Woolley, President and CEO, Research!America.]

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PREPARED STATEMENT OF SOUTH DAKOTA STATE UNIVERSITY (SDSU)

On behalf of South Dakota State University (SDSU), I respectfully submit this statement for inclusion in the Subcommittee's official record in support of full funding of \$5,000,000 for the New Beginning for Tribal Students Program in FY 2022. This is a budget request for FY2022 to be included as a part of Title VII, General Provisions.

The New Beginning Program was authorized by Section 7120 of the Agriculture Improvement Act of 2018, the most recent farm bill. Congress has provided \$5,000,000 in each of the last two years as part of Title VII, General Provisions. It is an excellent program, and funding should be continued at that level for administration by the National Institute of Food and Agriculture.

Congress enacted this program based on the experience we were having in South Dakota. The program is intended to promote access to higher education and student success for our American Indian students through innovative partnerships between tribal communities, K-12 schools, tribal colleges and universities and Land Grant Universities and Colleges. Colleges and universities will receive the funds for, but not limited to, support for American Indian students for articulation agreements with tribal colleges; dual credit programs; recruiting; tuition and related fees; experiential learning; student services, including tutoring, counseling, academic advising; and other student services that would increase retention and graduation rates. Our work in South Dakota began one year ago as an inaugural recipient of a New Beginning Program grant. Through a partnership with Sinte Gleska University and tribal high schools in Rosebud, Yankton, Crow Creek, and Lower Brule Sioux tribal communities, SDSU has embarked on the Igluwiyeya (prepare oneself) program. The program invests in college access liaisons in three regions to promote college

preparation, tribal career opportunities, educational options, and financing for college to students in the tribal high schools. Pathways to achieving a college degree are a focus and work has begun to engage with students in the tribal high schools and develop the pathways model that will guide this work in a culturally relevant manner.

SDSU is the largest, most comprehensive university in the state—serving more than 11,400 undergraduate, graduate, and post-graduate students. It attracts students, faculty, and staff from around the region, nation, and the world. The land-grant heritage commits SDSU to serve the entire state of South Dakota, providing academic programming in four additional communities outside of Brookings and online.

South Dakota currently has one of the lowest unemployment rates in the nation and, in general, has an extremely healthy economy. However, the people living in the nine tribal nations in South Dakota have the highest unemployment rate in the nation, reaching more than 80 percent in certain areas. Many of those same people are among the poorest in the nation. SDSU has a responsibility to provide educational opportunities for this underserved population, as it does for all people.

New Beginning is part of a holistic effort transforming the lives of many American Indian students throughout the United States, as well as in South Dakota. Providing opportunities and access to the benefits of higher education will begin a process that allows these young people to advance their education and gain new knowledge that will benefit their families, communities, and tribes. Sustained opportunities like New Beginning will lift individuals to advance their futures.

South Dakota State University uses these grant funds to help tribal students prepare for, and transition to, an institution of higher education with the goal of graduating with a college degree. The grant's impact is felt by hundreds of young people, providing them assistance to address the tough barriers they face when thinking about college.

At SDSU, we created the Wokini Initiative to support our American Indian students upon their arrival to campus. Wokini Scholarships in the amount of \$5,000 per year for up to five years have been very impactful. We have gone from awarding 15 Wokini students in 2018 to 25 Wokini students in 2020. In addition to the \$5,000 renewable scholarships, we created emergency funding to assist current students who are Wokini eligible but matriculated to SDSU before Wokini was implemented. SDSU also supports students who paused their degree program due to financial hardship by paying past tuition balances which allows the student to return to campus. Lastly, we advise and assist students to determine a financial plan moving forward.

SDSU is proud of the results we have seen over the past few years. SDSU has over 275 American Indian students, and we continue to promote opportunities available to our students to increase recruitment, as well as persistence and graduation. The Wokini Initiative provides scholarships for tribally enrolled students, collaborative research projects with tribal communities, training, and educational workshops across campus for all faculty, staff, and administration. Additionally, the initiative provided an opportunity to build a stand-alone American Indian Student Center (AISC), created an American Indian recruitment coordinator position and an American Indian programming coordinator position. Through the AISC, we provide tutoring and mentoring services, regular cultural programming, a classroom, and study space, art and multipurpose room. These are critical to our success in ensuring student connectedness to campus which results in increased recruitment of American Indian students and better pathways to graduation.

Nationally, the New Beginning program is having a tremendous impact. Last year 20 universities received approved USDA matching grants. These Universities included:

- Kansas State University
- Nebraska Indian Community College
- Michigan State University
- University of Nevada, Reno
- North Dakota State University
- University of Arkansas System
- NC State University
- Oglala Lakota College
- Ilisagvik College
- University of Maine System acting through the Univ. of Maine
- Arizona Board of Regents, University of Arizona
- Washington State University
- University of Wyoming

University of Idaho  
 Oregon State University  
 Oklahoma State University  
 Blackfeet Community College  
 University of Wisconsin-Madison  
 South Dakota State University  
 University of Alaska Fairbanks

The United States has not yet devised a way to extend the American dream to American Indian people, especially on our Native American reservations. The reservations in the heartland have the highest unemployment rates in the United States. With that unemployment comes a long list of social problems.

The New Beginning program is a critical first step in breaking that cycle of poverty. As an educated workforce continues to be established, we can attract private sector employers and create an economy on the reservations. It is the beginning of an American Indian policy that will work for all of America.

[This statement was submitted by Dr. Barry Dunn, President, South Dakota State University (SDSU).]

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#### PREPARED STATEMENT OF THE SQUAXIN ISLAND TRIBE

On behalf of the Tribal Leadership and citizens of the Squaxin Island Tribe, I am honored to submit written testimony which identifies our annual budget priorities for the FY 2022 appropriations for the Rural Development Rural Utilities Program and Rural Housing and Community Facilities Program. The Squaxin Island Tribe requests that all Tribal program funding throughout the Federal government be exempt from future sequestrations, rescissions, and disproportionate cuts.

#### COVID-19

Throughout the COVID-19 pandemic American Indians and Alaska Natives have and continue to experience irrevocable impacts in all facets of our lives compared to other non-Native communities. We remain among the most vulnerable given our remote locations and lack of infrastructure to address emerging and critical threats of danger to our citizens. The U.S. Department of Agriculture (USDA), with its unique and essential focus on rural areas across the country continues to play a critical role in the response and support of Tribal governments to the devastating issues and growing concerns around COVID-19. With the important Tribal-specific and overall agriculture provisions that were contained in the “Coronavirus Aid, Relief, and Economic Security Act” (CARES Act) and the “American Rescue Plan Act of 2021” (ARPA), USDA must continue to work with Tribal leadership on expeditiously and wisely allocating relief funds to Tribes. We appreciate the additional resources and grateful that Congress listened when Tribes vehemently shared reasons why Tribes needed more flexibility to use these emergency/relief funds which is assisting the Squaxin Island Tribe to better respond to the critical needs of our citizens and community more efficiently and effectively.

Tribal Specific Request—Rural Development—Infrastructure  
 \$1.8 million—Water Connection Project

#### NATIONAL AND REGIONAL REQUESTS

1. \$980.62 Million—to Rural Utility Services (RUS)
2. \$29 Billion—Loan Authority for the Rural Housing and Community Facilities Program
3. \$1.5 Million—Rural Development Technical Assistance Program
4. Support the requests of the National Congress of American Indians (NCAI) and the Affiliated Tribes of Northwest Indians (ATNI)

#### SQUAXIN ISLAND TRIBE BACKGROUND

We are native people of South Puget Sound and descendants of the maritime people who lived and prospered along these shores for untold centuries. We are known as the People of the Water because of our strong cultural connection to the natural beauty and bounty of Puget Sound going back hundreds of years. The Squaxin Island Indian Reservation is in southeastern Mason County, Washington and the Tribe is a signatory to the 1854 Medicine Creek Treaty. Our treaty-designated reservation, Squaxin Island, is approximately 2.2 square miles of uninhabited forested land, surrounded by the bays and inlets of southern Puget Sound. Because the Is-

land lacks fresh water, the Tribe has built its community on roughly 26 acres at Kamilche, Washington purchased and placed into trust. The Tribe also owns 6 acres across Pickering Passage from Squaxin Island and a plot of 36 acres on Harstine Island, across Peale Passage. The total land area including off-reservation trust lands is 1,715.46 acres. In addition, the Tribe manages roughly 500 acres of Puget Sound tidelands.

Our Tribal governance combines our sovereign powers as well as U.S. Congressional acts related to treaties, statutes, and public law. Squaxin Island Tribe, like all Tribal Nations, continue to work through the impacts of the pandemic. Prior to COVID-19, the Tribal government and our economic enterprises constituted the largest employer in Mason County with over 1,250 employees. The Tribe has a current enrollment of 1,040 and an on-reservation population of 426 living in 141 homes. Squaxin has an estimated service area population of 2,747; a growth rate of about 10%, and an unemployment rate of about 30% (according to the BIA Labor Force Report). We continue to need the assistance of Congressional relief funds to mitigate the ongoing challenges to recovery. We are grateful for the support we have received so far.

SQUAXIN ISLAND TRIBE SPECIFIC REQUEST/JUSTIFICATION:

\$1.8 Million—Water Connection Project—Rural Development

The Squaxin Island Tribe is seeking funding for our “Water Connection Project” which is critically essential to provide for the safety and health of the Squaxin Island Tribal Community. As the largest employer in Mason County, we impact the economy of Grays Harbor, Thurston, and Kitsap Counties. Families rely on the jobs created by the Tribe. This water source allows for Squaxin to maintain and build thriving economies that positively impact the businesses in the greater region. When we thrive the State of Washington benefits as well. With this water capacity we would be able to create new jobs for hundreds of families. Our current water source is at capacity and diminishing every year. Along with Taylor Shellfish we have obtained a water right that sits on land owned by Taylor. This is approximately 1.5 miles away and this project would allow for connection to the Squaxin Island Tribe water system. A new water connection study has been completed with pre-engineering design and costs of the connection. We are near shovel ready and could complete the project in FY 2022. This new water source will allow the Tribe to build much needed housing. We have a large waiting list and overcrowding with multigenerational household composition. The pandemic has emphasized just how much these households create a high-risk situation. Taylor Shellfish fully endorses this project in true collaboration with the Squaxin Island Tribe.

National and Regional Requests:

1. \$980.62 Million—Rural Utility Services
 

Of special concern is the need to maintain funding for Tribal set-asides for water, wastewater, and solid waste management for Indian Country and Alaska Native villages. USDA’s Water and Environmental Program (WEP) provides a combination of loans, grants, and loan guarantees for drinking water, sanitary sewer, solid waste, and storm drainage facilities in Tribal and rural areas and cities and towns of 10,000 or less. WEP also makes grants to non-profit organizations to provide technical assistance and training to assist rural communities with water, wastewater, and solid waste management.
2. \$29 Billion—Loan Authority for the Rural Housing and Community Facilities Program
 

As Tribes seek to build sustained prosperity and economic security, it is imperative that Tribal citizens and businesses on Tribal lands have access to environments that are stable, conducive to economic and community development, and support of schools, health facilities, first responders and businesses.

Access to housing, community, and home repair financing provides Native individuals, families, and communities with security, credit facilities, and repair and weatherization needs. This financing also supports community and educational facilities and provides employment in construction and related industries that flows from access to capital in Indian Country.
3. Include \$1.5 Million for USDA Rural Development Tribal Technical Assistance Program

The 2018 Farm Bill mandated the establishment of a Tribal Technical Assistance Program within USDA–RD designed to address the unique challenges Indian Country faces when seeking infrastructure, cooperative development, housing, and other development opportunities funded by USDA–RD. Funding for this newly established area is especially critical due to the unique circumstances surrounding lending and infrastructure deployment in Tribal communities, which often leads to either misinformation provided to Tribal nations or misinterpretation of Tribal applications. Appropriating \$1.5 million to establish this program will help to eliminate these unnecessary barriers to development in Indian Country.

4. Support the FY 2022 Budgets Requests of the National Congress of American Indians (NCAI) and the Affiliated Tribes of Northwest Indians (ATNI)

Thank you for this opportunity to present written testimony and considering these requests.

[This statement was submitted by Kristopher Peters, Chairman, Squaxin Island Tribe.]

PREPARED STATEMENT OF SUSTAINABLE URBAN FORESTS COALITION (SUFC)

The undersigned organizations, many of which are members of Sustainable Urban Forests Coalition (SUFC), write today to urge continued support by the Subcommittee on Agriculture and Rural Development for a federal program that is key to protecting America’s urban and rural forests from pest-caused mortality: the USDA Animal and Plant Health Inspection Service (APHIS). APHIS is responsible for preventing introduction and spread of invasive pests. While most port inspections are carried out by the Department of Homeland Security Bureau of Customs and Border Protection, APHIS sets the policy guidance. APHIS also inspects imports of living plants.

Program	FY 2020 (millions)	FY 2021 (millions)	FY 2022 ask (millions)
Tree & Wood Pest .....	\$60.000	\$60.456	\$70 million
Specialty Crops .....	\$192.000	\$196.553	\$200 million
Pest Detection .....	\$27.446	\$27.733	\$30 million
Methods Development .....	\$20.686	\$20.844	\$25 million

We ask that you continue your past support for four USDA APHIS programs that are essential for protecting the nation’s forests from invasive pests: Tree and Wood Pests, Specialty Crops, Methods Development, and Pest Detection. We thank you for the incremental increases in funding for these programs in the past, but a more substantial investment is warranted.

Introduced pests threaten many forest products and services benefitting all Americans, including wood products, wildlife habitat, carbon sequestration, clean water and air, storm water management, lower energy costs, improved health, aesthetic enjoyment, and related jobs. These pests also impose significant costs, borne principally by municipal governments and homeowners. As more pests have been accidentally introduced over time, these costs have risen. Some crops-including avocados, grapes, tree fruits and nuts-are also at risk.

Tree-killing pests are linked to the international supply chain. Many pests-especially the highly damaging wood-borers-arrive in inadequately treated crates, pallets, and other forms of packaging made of wood. Other pests-especially plant diseases and sap sucking pests-come on imported plants. Some pests take shelter, or lay their eggs, in or on virtually any exposed hard surface, such as steel or decorative stone.

Imports from Asia have a history of transporting highly damaging pests, for example, Asian longhorned beetle; emerald ash borer (EAB); several ambrosia beetles which vector fungi killing avocado, redbay, sycamore, and willow trees in the Southeast and California; and sudden oak death disease.

Import volume from Asia rises every year. Two-thirds of Asian imports enter through the two ports of Los Angeles—Long Beach, and New York—New Jersey. The rest enter through Savannah, Seattle, Tacoma, Oakland, Norfolk, Houston, Charleston, Baltimore, and Mobile.

An estimated 6,000 of the shipping containers from Asia in 2020 were infested by tree-killing wood-borers. Rising volumes of imported steel, vehicles, and stone,

and the containers themselves might carry egg masses of gypsy moths and spotted lanternflies.

Once introduced, the pests that become invasive do not stay in the cities where they first arrived. Instead, they proliferate and spread through both natural and human-mediated means. Their movement is often accidentally facilitated by people moving firewood, plants, and outdoor household goods (such as patio furniture). For example, the emerald ash borer has spread to 35 states since its likely introduction in the early 1990's, and the redbay ambrosia beetle to 11 states since detection in 2002.

In this way, the pests introduced to our cities threaten not just the trees in city parks, along our streets, and in people's yards, but also the natural forest stands across the country. Scientists estimate these pests also threaten an estimated 41% of forest tree biomass across the contiguous US and additional trees in Hawai'i.

Many forest pests are brought here in imported plants for planting (such as bulbs, saplings, and bedding plants). Among this group of pests are sudden oak death (which attacks more than 100 species of trees and shrubs, including oaks and rhododendrons); the rapid 'ohi'a death pathogen that threatens Hawai'i's most widespread tree, 'ohi'a lehua; and beech leaf disease, a newly discovered threat that is killing beech trees in a band stretching from Ohio to Connecticut.

To respond effectively to these pests and to the others that will be introduced in coming years, the key APHIS programs identified above must have adequate funds. For this reason, we thank the Congress for increasing funding for APHIS' Tree and Wood Pests program to \$60.4 million in FY2021 and ask that you raise that funding level to \$70 million in FY2022. We also thank you for increasing funding for the Specialty Crops program to \$196,553,000 and ask that you raise that level in FY2022 to \$200 million.

The Tree and Wood Pests account supports eradication and control efforts targeting principally the Asian longhorned beetle (ALB) and gypsy moth. Eradicating the ALB normally receives about two-thirds of the funds. The programs in Massachusetts, New York, and Ohio must continue until eradication succeeds. The ALB program must expand to counter the South Carolina outbreak, where more than 4,000 infested trees occupy an area of 58 square miles. Eradicating the South Carolina outbreak will be especially difficult because extensive wetlands limit access.

APHIS has terminated its domestic emerald ash borer regulatory program, which once cost up to \$7 million per year. APHIS has said it will now focus on production and release of biocontrol agents as the primary management tool, although it has not indicated the funding level. It is probable that, in the absence of a federal domestic regulation, EAB will now spread more rapidly to the mountain and Pacific Coast states, threatening riparian and urban forests and potentially California's olive crop. We urge the Committee to monitor the effectiveness of this new management focus.

About \$5 million from the Specialty Crops program funds APHIS' regulation of nursery operations to prevent spread of the sudden oak death pathogen. APHIS must step up its regulatory efforts to prevent a repetition of the 2019 incident, in which SOD-infected plants were shipped to 18 states, including Alabama, Michigan, Kentucky, and Indiana.

APHIS must also ensure adequate funding for management of the spotted lanternfly, which in seven years has spread from Pennsylvania to seven additional states, including Maryland, Virginia, West Virginia, and Ohio. This pest threatens both native trees and agricultural crops- including hops, grapes, apples, and more.

We support increased funding of the Detection budget line at \$30 million for FY 2022. Early detection of newly introduced pests is critical to successful pest eradication or containment, which prevents more widespread damage and associated costs and job losses.

Finally, we seek an increase of \$4.2 million in funding for the "Methods Development" program, which allows APHIS to develop essential detection and eradication tools.

Thank you for your attention to these important matters. We look forward to working with you.

#### Supporting Organizations

Alliance for Community Trees  
 American Forests  
 American Society of Consulting Arborists  
 Arbor Day Foundation  
 Casey Trees  
 Center for Invasive Species Prevention  
 City Parks Alliance

Corazon Latino  
 Davey Tree Expert Company  
 Green Infrastructure Center  
 International Society of Arboriculture  
 Maryland Forestry Foundation  
 Minnesota Shade Tree Advisory Committee  
 National Association of Landscape Professionals  
 National Association of State Foresters  
 NativeScapes  
 The Nature Conservancy  
 Openlands  
 Outdoor Power Equipment Institute  
 Sacramento Tree Foundation  
 SavATree LLC  
 Society of American Foresters  
 Society of Municipal Arborists  
 Tree Care Industry Association  
 Wildlife Habitat Council

[Submitted by Members of the Sustainable Urban Forests Coalition.]

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PREPARED STATEMENT OF USA DRY PEA & LENTIL COUNCIL

This request is being submitted on behalf of the USA Dry Pea & Lentil Council (USADPLC). The Council is a national coalition representing pulse producers, processors, warehousemen, exporters, and food manufacturers across the USA. Basically, the USADPLC represents the pulse industry from farm to table. As a specialty crop, pulses rely on the work of IR-4 to provide crop protection for both conventional production and organic production of pulses. One of the biggest concerns to pulse crop production is pest management and we estimate that IR-4 has enabled or assisted with the registration of over 80% of our current crop protection tools. IR-4 provides specialty crop producers like pulse crop producers, the tools needed to be successful.

For this reason, we are requesting that US Senate Appropriations Committee— Subcommittee on Agriculture, Rural Development, Food and Drug Administration, and Related Agencies restore funding and allocate at least \$20.0 million for the IR-4 Project for FY 2021–22. This is justified as follows:

Pulse crop farmers, like all specialty crop farmers, struggle to gain access to crop protection tools. Registrants do not focus their efforts to support these smaller acreage crops and the cost of creating the data needed to the standards required is an expensive time-consuming process for the industry to provide. The IR-4 provides the expertise and technical information needed to accomplish this goal. The need for the IR-4 has continued as the markets demand harmonization of standards across countries and IR-4 has begun to provide that help. But while the need is increasing, the funding has decreased.

The IR-4 Project remains relevant today and in desperate need of enhanced funding to sustain services that are critically important to specialty crop agriculture. After a decade of a flat funding, the impact is significant. Over the past five years, there has been a 20% drop in research. However, destructive pests continue to attack and damage specialty crops causing reductions in quality and quantity of the final product. Newly emerging pest problems, such as Spotted Lanternfly, Brown Marmorated Stink Bug, Spotted Wing Drosophila and Downy Mildew have disrupted existing integrated pest management systems. Additionally, more pests are becoming resistant to existing chemical pesticides. IR-4 has been on the front line to facilitate new registration/solutions to manage pests and help ensure that domestic specialty crop farmers can continue to grow quality and wholesome products demanded by food processors and consumers.

Other factors contribution to the need for enhanced IR-4 Project funding include:

- IR-4 is leading research efforts with the strategic integration of reduced risk pesticides and biopesticides to manage hard to control pests while minimize pest resistance to pesticides and while reducing exposure to pesticides in consumed foods.
- IR-4 develops data to remove pesticide residues in specialty crops as a barrier to trade allowing domestic producers access to lucrative international specialty crop markets. .

- The cost of IR-4 research continues to escalate from factors such as land rental, supplies, employee salary/health care costs, etc. Furthermore, USDA made an administrative change to the IR-4 funding which allowed the land-grant institutions that host IR-4 research to deduct up to 10% of the total direct cost of the grant. This is an effective 12% reduction of funding for research.
- IR-4 has had to defer replacement of its vital analytical equipment in laboratories due to funding shortfalls.

The IR-4 Project provides an exceptional return on investment. Michigan State University Center for Economic Analysis reported in November 2017 that the IR-4 Project's efforts contribute over \$9.4 BILLION to annual US Gross Domestic Product and its efforts support over 95,000 JOBS throughout the United States.

Pulse crops, as a member of the specialty crop community, supports increasing the funding of the IR-4 to \$20 Million for FY 2021–22. This funding is needed to provide the increasing needs of our industry and specialty crops across the nation.

[This statement was submitted by Todd F. Scholz, Vice President for Research and Member Services, USA Dry Pea & Lentil Council.]

#### PREPARED STATEMENT OF WESTERN GOVERNORS' ASSOCIATION

Chair Baldwin, Ranking Member Hoeven, and Members of the Subcommittee, the Western Governors' Association (WGA) appreciates the opportunity to provide written testimony on the appropriations and activities of the U.S. Department of Agriculture (USDA). WGA is an independent organization representing the Governors of the 22 westernmost states and territories. The Association is an instrument of the Governors for bipartisan policy development, information-sharing and collective action on issues of critical importance to the western United States.

USDA programs have a significant effect on the American West and the economic viability of its rural communities. Western Governors recognize the importance of a close and productive working relationship between states and the federal government and understand that more effective cooperation depends on federal recognition of states as co-sovereigns and partners. The promotion of greater partnership between states and the federal government is central to the mission of WGA and is reflected in the Governors' Policy Resolution 2021–01, Strengthening the State-Federal Relationship. WGA also commends your attention to other Western Governors' resolutions that articulate policy positions relevant to the Subcommittee's work. These include Policy Resolutions 2020–06, Western Agriculture; 2020–07, Rural Development; 2020–08, Broadband Connectivity; 2021–03, National Forest and Rangeland Management; and 2019–06, Biosecurity and Invasive Species.

Agriculture in western states faces a variety of challenges, including extreme variations in soil, climate, terrain, commodity types and production practices, and water availability. Amid these difficult conditions, the western agricultural sector provides a vast array of high-demand, high-quality food products for American and foreign markets. Western agricultural lands also serve as primary sources of crucial ecosystem services, including open space, wildlife habitat, and water supplies, and support a diverse suite of rural economic opportunities in the recreation, food, fiber, energy and bio-based product industries.

In December 2018, WGA and USDA signed a Memorandum of Understanding (MOU) to establish a framework to allow the USFS and WGA to work collaboratively to accomplish mutual goals, further common interests, and effectively respond to the increasing suite of challenges facing western landscapes. Under this agreement, WGA and USDA have pursued several collaborative campaigns to improve the management and restoration of western forests and rangelands. Western Governors consider the WGA–USDA Shared Stewardship MOU an effective framework to establish shared state-federal priorities for forest and rangeland management, and encourage the development of similar MOUs with other Executive Branch agencies for other areas of collaborative endeavor.

USDA conservation programs promote responsible land management in western states and are of crucial importance to the agricultural sector, including livestock producers dependent on using federal allotments through permits and fees to sustain their operations. Western Governors support targeted, voluntary and collaborative conservation to address locally identified natural resource issues affecting farms, rangelands and forests on private and public lands. These issues include soil health, air and water quality, drought and wildfire resilience, wildlife habitat conservation and invasive species. WGA supports the role of conservation title programs in promoting voluntary solutions to the challenges of threatened and endangered species, water quality impairments, and groundwater recharge. Western Gov-

ernors encourage the Subcommittee to support appropriate funding levels for programs addressing these critical concerns.

The work of the Natural Resources Conservation Service (NRCS) is especially important to western states, and WGA encourages you to provide adequate funding for the conservation programs administered by the agency. NRCS empowers private landowners to work with states and the federal government on large-scale management priorities across landscapes with different land ownerships. NRCS programs provide multiple benefits to western communities:

- Stimulating economic activity and creating jobs in local communities;
- Conserving habitat for the greater sage-grouse and lesser prairie chicken, among other species;
- Mitigating wildland fire potential in western states;
- Improving water quality;
- Reducing the threat of invasive species on western lands; and
- Responding to imminent hazards caused by floods, wildfire, windstorms, and other natural disasters through the Emergency Watershed Protection Program.

Western Governors also support adequate funding of the NRCS Snow Survey and Water Supply Forecasting (SSWSF) program. Sufficient funding is required to ensure the long-term viability of the program's continued and uninterrupted collection of snowpack and water data, the full operation and maintenance of all snow survey sites, the hiring of needed program staff, and technological and software upgrades. The SSWSF program provides integral information for water supply management decisions in agricultural production, hydroelectric power generation, reservoir operations, industry, recreation and economic development, and international treaties. The program's forecasting and predictive capabilities are critically useful throughout the arid West, where snowpack accounts for the vast majority of the region's annual water supply.

Western Governors support adequate funding for the Animal and Plant Health Inspection Service (APHIS), and the National Institute of Food and Agriculture (NIFA). APHIS works in partnership with state departments of agriculture to monitor, prevent and control infestations of invasive pests and diseases and curtail or minimize wildlife conflicts, which can cause widespread environmental and economic damage, as well as safety hazards. APHIS is a key agency protecting the West from invasive species and was an active participant in the Western Governors' Biosecurity and Invasive Species Initiative. APHIS also works in cooperation with other federal agencies, states, territories, counties and private entities to implement invasives management programs. Western Governors recognize the valuable role NIFA plays in research on biosecurity and invasive species and support further research to understand the potential spread of invasive species and to develop geographically appropriate control measures.

The West's network of land-grant universities and colleges, including Cooperative Extension Service programs and Agricultural Experiment Stations, provides national leadership in research to develop more resilient seeds and crops, manage soil health, advance technology deployment in the bio-based economy and conduct on-farm research experiments that help farmers and ranchers be more effective and efficient. Western Governors support efforts to expand research funding to address drought, a changing climate and extreme weather risks facing western producers. WGA also encourages the effective use of extension and other partnerships to deliver practical tools, technologies and information to farmers, ranchers and forest landowners.

Healthy, vibrant and prosperous rural communities are critical to western states. Rural communities, however, face a variety of challenges with respect to economic development, infrastructure, and quality of life. Western Governors support USDA's Rural Development programs, which address those challenges and request an increased emphasis on rural capacity-building efforts. Building local capacity through training, technical assistance and consistent support for institutions that serve rural communities is fundamental to economic and community development and maximizes the effect of state and federal resources. At the same time, rural development programs should be designed in a manner that recognizes the limited resources and capacity of rural applicants. The COVID-19 pandemic has illustrated the challenge of rapidly deploying resources to meet rural needs. WGA encourages Congress to examine how emergency funds have been distributed to rural communities and ensure that adequate systems are in place to meet demand during widespread emergencies.

Western Governors support rural development programs aimed at fostering small businesses, entrepreneurs, and cooperative business models. WGA recognizes the need for substantial technical assistance and education in developing new coopera-

tive businesses and support funding of such efforts. Western Governors remain committed to creating new opportunities for rural job seekers and for young people to pursue careers in their rural communities. WGA supports solutions that leverage public universities, community colleges, and the business community to provide the appropriate training and skills for the jobs that are available in rural communities.

Western Governors support funding for the Market Access and Foreign Market Development Programs to promote opportunities for western producers to increase export revenues and encourage trade agreements that maximize benefits for the West's farmers, ranchers and forest landowners. WGA also supports adequate funding for the Specialty Crop Block Grant Program, which provides critical research, education, and promotion tools to fruit and vegetable producers.

Western agricultural cooperatives perform many important functions for their members and rural communities. These include provision of seed, feed and fertilizer to growers; product storage, processing and transportation; trade and market promotion; and education and technical assistance. Western Governors support funding for federal programs that provide assistance to agricultural cooperatives across the West. These include USDA Rural Cooperative Development Grants and Value-Added Producer Grants, and programs administered by USDA's Agricultural Marketing Service and National Institute of Food and Agriculture.

Western Governors support the continued efforts of the Rural Utilities Service to provide financial assistance for drinking water and wastewater facilities, and broadband connectivity in rural and remote areas, particularly in communities that have minimal or no such infrastructure. Western Governors support dedicated funding to develop innovative solutions for communities and tribes that cannot be served by traditional drinking water and wastewater systems. Governors also remain concerned by the nationwide shortage of certified water system operators, but were encouraged to see an increase in funds for such training in last year's House report language (H. Rpt. 116-446). Ongoing and coordinated efforts to develop these skilled workers are necessary to ensure that existing water access in rural communities can be maintained.

Expanding broadband access to rural America empowers citizens to compete in a global market and access electronic information and telecommunications technologies to support and promote telehealth and distance learning, which have proven to be especially important amidst the current public health crisis. Western Governors note the significance of programs such as the Distance Learning and Telemedicine Program and the ReConnect Program, which support broadband deployment to underserved or wholly unserved rural communities. WGA appreciates the additional flexibility and funds awarded to such programs under the CARES Act (Pub. L. 116-136). However, Western Governors remain concerned about ReConnect Program eligibility criteria for communities slated to receive satellite service support through the Federal Communications Commission's Connect America Fund Phase II program. The current eligibility criteria severely limit the ability of many western rural communities to develop high-speed, resilient broadband networks through the ReConnect Program.

Western Governors recognize that nutrition assistance programs can help meet the needs of children and the most vulnerable, while creating economic opportunity across the agriculture supply chain from the store where food is purchased all the way back to the farm. Nutrition assistance programs should continue to provide flexibility for states to respond to unique economic conditions, serve all eligible participants without drastically reducing benefits, and pursue transparency and accountability in program administration.

Western states and federal agencies deal with a complex web of interrelated agriculture, conservation, and economic development priorities. It is an enormous challenge to judiciously balance competing needs in this environment, and Western Governors appreciate the difficulty of the decisions the Subcommittee must make. The foregoing recommendations are offered in a spirit of cooperation and respect, and WGA is prepared to assist as you as the Subcommittee discharges its critical and challenging responsibilities.

[This statement was submitted by James D. Ogsbury, Executive Director, Western Governors' Association.]