Testimony submitted by Karl Anderson, Director of Government Relations On behalf of **American Society of Agronomy Crop Science Society of America Soil Science Society of America** Prepared for the House Appropriations Subcommittee on Commerce, Justice, Science, and Related Agencies On the Fiscal Year 2019 Appropriations for the National Science Foundation

The American Society of Agronomy (ASA), Crop Science Society of America (CSSA), and Soil Science Society of America (SSSA) support **\$8.45 billion for the National Science Foundation** (NSF). Within NSF we request **\$55.8 million for Innovations at the Nexus of Food, Energy, and Water Systems (INFEWS)**.

The American Society of Agronomy, Crop Science Society of America, and Soil Science Society of America, represent over 18,000 scientists in academia, industry and government. We support more than 13,300 Certified Crop Advisers (CCA), and over 700 Certified Professional Soil Scientist (CPSS). Our members and certified professionals are dedicated to meeting the demands of a growing world population through the pursuit of agronomic, crop, and soil science knowledge and application.

The Nation's agricultural system must sustainably produce the food and fuel America relies on for national and economic security. Growing global competition is putting America's agricultural economy at risk. The U.S. has lost its spot as the top global funder of public agricultural R&D, falling behind China in 2009. Today, the U.S. trails Western Europe and is outspent nearly 2:1 by China.

We support **\$8.45 billion for the National Science Foundation** for the fiscal year 2019. This funding level will increase the broad base of fundamental knowledge in key disciplines, such as biology, plant science, chemistry, and soil science, which is needed to address agriculture's most intractable challenges. Such research funding will simultaneously support the scientists creating innovations today and the students who will tackle the unforeseen issues of tomorrow.

Within NSF, the Societies are very supportive of the **Innovations at the Nexus of Food**, **Energy, and Water Systems (\$55.8 million**). There is a pressing need to understand the interconnectedness of food, energy, and water and to develop new technologies that increase farm productivity while reducing costly energy and water-intensive inputs. The recent droughts in large swaths of the country, and their corresponding impact on agricultural and economic productivity, underscore the need to balance these resources. NSF's INFEWS program uniquely blends perspectives from each of these often-siloed fields. It offers scientific approaches to mitigate the impacts of future droughts, easing the tensions between competing land and natural resource interests, and creating resiliency in food, energy, and water systems.

The research and education programs funded by NSF are essential to ensure an economically competitive America now and into the future. A strong commitment to federally funded

scientific research will boost the Nation's capacity for innovation, agricultural productivity, and economic prosperity.

We appreciate the opportunity to provide written testimony and look forward to working with the Subcommittee as it considers funding for the National Science Foundation. Thank you.