

Ecological Society of America 1990 M St, NW, Suite 700 Washington, DC 20036

Testimony for the Record David M. Lodge, President of the Ecological Society of America

To the Senate Committee on Appropriations Subcommittee on Commerce, Justice, Science, and Related Agencies

Regarding the National Science Foundation FY 2018 Budget

April 4, 2017

The Ecological Society of America (ESA) is the world's largest society of professional ecologists representing over 10,000 members across the country. We write to you in strong support of \$8 billion in FY2018 for the federal research and development budget of the National Science Foundation (NSF), and in support of its mission—created over 60 years ago—to advance research across a broad spectrum of disciplines, research that has fueled American economic growth for decades. We also request that you reject proposed cuts to FY2017 funding for NSF as you complete the FY2017 appropriations process.

NSF is unique among federal agencies in that it supports all scientific disciplines in a balanced portfolio that uses the scientific peer review system as the foundation for awarding research grants based on merit.

Ecological and Biological Research Provides Solutions for National Challenges

FY18 funding of \$8 billion would sustain NSF's Biological Sciences Directorate, which is the primary federal funding source for basic non-medical biological research at US colleges and universities. Its research disciplines include botany, zoology, microbiology, ecology, basic molecular and cellular biology, and other fields that enhance our understanding of the natural world. This research also increases our understanding of how biological systems, infrastructure, and natural resources are affected by environmental changes and contributes to the development of sustainable solutions to challenges such as drought, flooding, and natural disasters.

NSF Awards Build a Strong STEM Workforce

NSF provides critical funding for Science, Technology, Mathematics, and Engineering (STEM) education programs that are vital to job creation and the bedrock of US research and innovation infrastructure. In a given year, NSF awards reach over 2,000 colleges, universities, and other public and private institutions in all 50 states and the District of Columbia. These programs fund early career scientists and enable undergraduate and graduate students to conduct research, ensuring future generations obtain the skillset to pursue careers in science that are vital for job creation and maintaining our nation's global competitiveness.

Science-Informed Research Plans Ensure American Scientific Competitiveness

As you prepare to introduce and debate the Commerce, Justice and Science (CJS) appropriations bill for FY18, we urge you to reject attempts to reduce funding for NSF. We also stand in strong opposition to legislative attempts to fund NSF by directorate, which would circumvent the merit review process.

Therefore, we urge you to protect the integrity of the scientific enterprise by ensuring that the NSF and its independent scientific panels determine where the best scientific opportunities are and how to allocate its research budget for directorates. Allocating federal investments through competitive scientific merit review is the very process that has led this country to be the world leader in science. We encourage you to provide congressional oversight by protecting that process rather than allowing others to threaten critical contributions to our innovative spirit and knowledge base.

The Society is appreciative of the strong bipartisan, bicameral support NSF has received from House and Senate appropriators over the years. Maintaining this support by funding \$8 billion in FY18 is vital towards sustaining our nation's capacity for economic growth, job creation, and innovation.