October 28, 2021

The Honorable Charles E. Schumer Majority Leader U.S. Senate Washington, D.C. 20510

The Honorable Maria Cantwell Chair Senate Committee on Commerce, Science and Transportation U.S. Senate Washington, D.C. 20510 The Honorable Nancy Pelosi Speaker U.S. House of Representatives Washington, D.C. 20515

The Honorable Eddie Bernice Johnson Chair House Committee on Science, Space and Technology U.S. House of Representatives Washington, D.C. 20515

Dear Leader Schumer, Speaker Pelosi, Chair Cantwell and Chair Johnson:

We write today as organizations representing the Earth system science community to support the proposed weather and climate science funding included in the Build Back Better reconciliation package. As the United States grapples with unprecedented natural disasters, the weather and climate science funding included in the package is critical to the United States economic, national security and public health interests.

In 2021, there have already been 18 weather or climate events with losses exceeding \$1 billion in the United States. Improving weather forecasting plays a critical role in mitigating the damage from these events by helping first responders and government decision makers at all levels by helping them prepare for the worst. The real-world practical applications of Earth system science, the ability to accurately forecast these events, has the potential to save billions of dollars every year and keep Americans safe.

Scientists across the nation represented by our organizations are conducting critical research into weather forecasting and climate science in coordination and under the direction of the federal government and agencies. It is important that this work not only continue but accelerate to meet our growing demand for understanding of Earth's systems, and how humans interact with the world in which we live.

Weather and climate science help us all understand and prepare for weather conditions that impact every region in the United States. From rainfall predictions guiding agriculture decisions in the American heartland to understanding the threat of wildfire in the west, earth system science and practical applications in weather forecasting are incredibly important tools that help us keep pace with a world that continues to change around us.

Unfortunately, the United States forecasting enterprise has started to lag behind over the past several years, falling behind European, British and Canadian forecasting models. As a response to this decline in forecasting capability, Congress passed the Weather Research and Forecasting Innovation Act of 2017. The authorizations included in the 2017 weather bill will help the American forecasting enterprise return to prominence but can only do so if properly funded by Congress. It is critical that Congress follow through on its funding commitments and right now it has the opportunity ahead of itself to do so.

We strongly support the House proposed funding levels for Weather Research and Forecasting Innovation Act programs as part of the Build Back Better package and encourage swift passage of the reconciliation package without delay.

Sincerely,

American Geophysical Union

American Chemical Society

American Meteorological Society

Consortium for Ocean Leadership

Ecological Society of America

Geological Society of America

National Weather Service Employees Organization

University Corporation for Atmospheric Research

Woods Hole Oceanographic Institute