October 21, 2009

American Association for the Advancement of Science

American Chemical Society

American Geophysical Union

American Institute of Biological Sciences

American Meteorological Society

American Society of Agronomy

American Society of Plant Biologists

American Statistical Association

Association of Ecosystem Research Centers

Botanical Society of America

Crop Science Society of America

Ecological Society of America

Natural Science Collections Alliance

Organization of Biological Field Stations

Society for Industrial and Applied Mathematics

Society of Systematic Biologists

Soil Science Society of America

University Corporation for Atmospheric Research Dear Senator:

As you consider climate change legislation, we, as leaders of scientific organizations, write to state the consensus scientific view.

Observations throughout the world make it clear that climate change is occurring, and rigorous scientific research demonstrates that the greenhouse gases emitted by human activities are the primary driver. These conclusions are based on multiple independent lines of evidence, and contrary assertions are inconsistent with an objective assessment of the vast body of peer-reviewed science. Moreover, there is strong evidence that ongoing climate change will have broad impacts on society, including the global economy and on the environment. For the United States, climate change impacts include sea level rise for coastal states, greater threats of extreme weather events, and increased risk of regional water scarcity, urban heat waves, western wildfires, and the disturbance of biological systems throughout the country. The severity of climate change impacts is expected to increase substantially in the coming decades.¹

If we are to avoid the most severe impacts of climate change, emissions of greenhouse gases must be dramatically reduced. In addition, adaptation will be necessary to address those impacts that are already unavoidable. Adaptation efforts include improved infrastructure design, more sustainable management of water and other natural resources, modified agricultural practices, and improved emergency responses to storms, floods, fires and heat waves.

We in the scientific community offer our assistance to inform your deliberations as you seek to address the impacts of climate change.

¹ The conclusions in this paragraph reflect the scientific consensus represented by, for example, the Intergovernmental Panel on Climate Change and U.S. Global Change Research Program. Many scientific societies have endorsed these findings in their own statements, including the <u>American Association for the Advancement of Science</u>, <u>American Chemical Society</u>, <u>American Geophysical Union</u>, <u>American Meteorological Society</u>, and <u>American Statistical Association</u>.

Alan I. Leshner Executive Director American Association for the Advancement of Science

Tinty h. Here

Timothy L. Grove President American Geophysical Union

Hus 2 Suto

Keith Seitter Executive Director American Meteorological Society

Dow In 16

Tuan-hua David Ho President American Society of Plant Biologists

Lucinda Johnson President Association of Ecosystem Research Centers

things H. Lane

Thomas Lane President American Chemical Society

May b. Bark

May R. Berenbaum President American Institute of Biological Sciences

MM tely

Mark Alley President American Society of Agronomy

Sally C Morton President American Statistical Association

Kant Holsinger

Kent E. Holsinger President Botanical Society of America

Ken Quesenberry

Kenneth Quesenberry President Crop Science Society of America

W-y B

William Y. Brown President Natural Science Collections Alliance

Douglas N Armold

Douglas N. Arnold President Society for Industrial and Applied Mathematics

Fil M/305

Paul Bertsch President Soil Science Society of America

Mary & Power

Mary Power President Ecological Society of America

Bui O. Llotte

Brian D. Kloeppel President Organization of Biological Field Stations

John Huelcenteck

John Huelsenbeck President Society of Systematic Biologists

Richard a. anthas

Richard A. Anthes President University Corporation for Atmospheric Research