



Climate literacy: The essential principles of climate science



A guide is now available to help individuals of all ages understand how climate influences them—and how they influence climate. A product of the US Climate Change Science Program, the guide was compiled by an interagency group led by National Oceanic and Atmospheric Administration (NOAA).

Climate Literacy: The Essential Principles of Climate Science presents important information for individuals and communities to allow them to understand the Earth's climate, the impacts of climate change, and approaches for adapting and mitigating change. Principles

in the guide can serve as discussion starters or launching points for scientific inquiry. The guide can also serve educators who teach climate science as part of their curricula.

"As climate policy is being discussed, it is very important for the citizens of our nation to have an appreciation for some of the fundamental aspects of climate and climate change," said **Tom Karl**, director of NOAA's National Climatic Data Center in Asheville, North Carolina, and lead for NOAA's climate services. "This guide is a first step for people who want to know more about the essential principles of our climate system, how to better

discern scientifically credible information about climate, and how to identify problems related to understanding climate and climate change."

The 17-page guide includes information on how people can help reduce climate change and its impacts. It also defines important terms and concepts used when talking about climate and approaches to adaptation and mitigation.

"There is so much misinformation about climate. We want to provide an easily readable document to help everyone make the most informed decisions," said Karl. "Having one product endorsed by the nation's top federal science agencies, as well as leading science centres and associations, makes this document an essential resource."

NOAA, the National Science Teachers Association, and TERC (Technical Education Research Centers), an educational non-profit organization, are working with education leaders to revise state standards using this framework. The materials also provide the basis for educator resources and professional development.

Development of the guide began at a workshop sponsored by NOAA and the American Association for the Advancement of Science (AAAS). Multiple science agencies, non-government organizations, and numerous individuals also contributed through extensive review and comments. Discussion at the National Science Foundation (NSF) and NOAA-sponsored Atmospheric Sciences and Climate Literacy workshop contributed substantially to the refinement of the document. 🌲

Print and online copies available

For print copies of the guide, email **outreach@noaa.gov** or call 301-713-1208. For further information regarding the Climate Literacy document, please contact Frank Niepold at **frank.niepold@noaa.gov**. Please include "Climate Literacy info" in the subject line.

High-resolution report (11.5 MB): **<http://downloads.climate-science.gov/Literacy/Climate%20Literacy%20Booklet%20Hi-Res.pdf>**

Low-resolution report (2.4 MB): **<http://downloads.climate-science.gov/Literacy/Climate%20Literacy%20Booklet%20Low-Res.pdf>**