

Climate Services for Society: Challenges and Opportunities

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ABSTRACT

Governments, communities, businesses and resource managers are increasingly challenged to develop and implement programs, policies and procedures that reduce vulnerability and enhance resilience in the face of changing climate conditions. These actions should address both today's climate-related challenges (e.g., climate-related extreme events) and support planning for the future in the context of climate change by.....

- reflecting a continuously evolving understanding of the integrated “climate-society system” and
- embracing an adaptive management approach that provides for regular evaluation and adjustment of decisions as new scientific insights emerge and socio-economic conditions change.

Mainstreaming climate considerations into societal decision-making in this manner requires a new partnership through which scientists and decision-makers develop a shared understanding of the nature and consequences of changing climate conditions (shared learning) and support joint problem-solving based on the unique insights and expertise that each brings to the table. Experience suggests that designing climate services that effectively support adaptation requires adherence to a number of guiding principles including:

- Engaging users in the development and continued evolution of services through sustained and iterative dialogue;
- Adopting a problem-focused approach that supports the development, dissemination and use of products and services on time and space scales relevant to decision-making;
- Transforming climate science and data into understandable, usable, useful and accessible information; and
- Establishing effective partnerships involving government, academia, NGOs, the private sector and decision-makers that leverage their unique assets and capabilities.

Experiences related to establishing a programmatic framework for providing climate information to support decision-making, performing regional and national climate impact assessments, and planning for an effective new NOAA Climate Service program will be discussed.