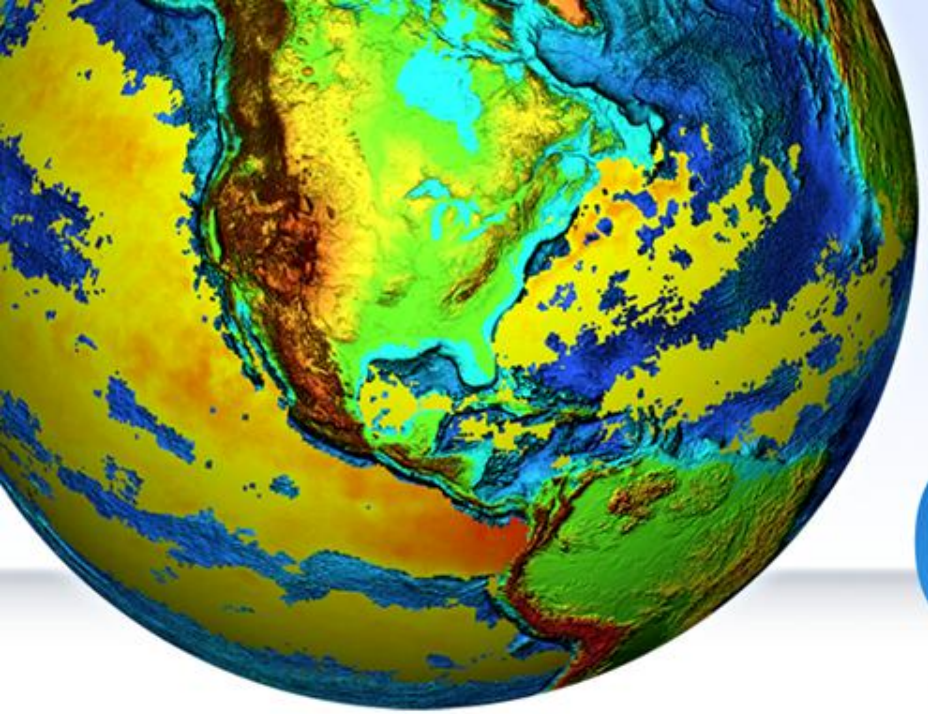
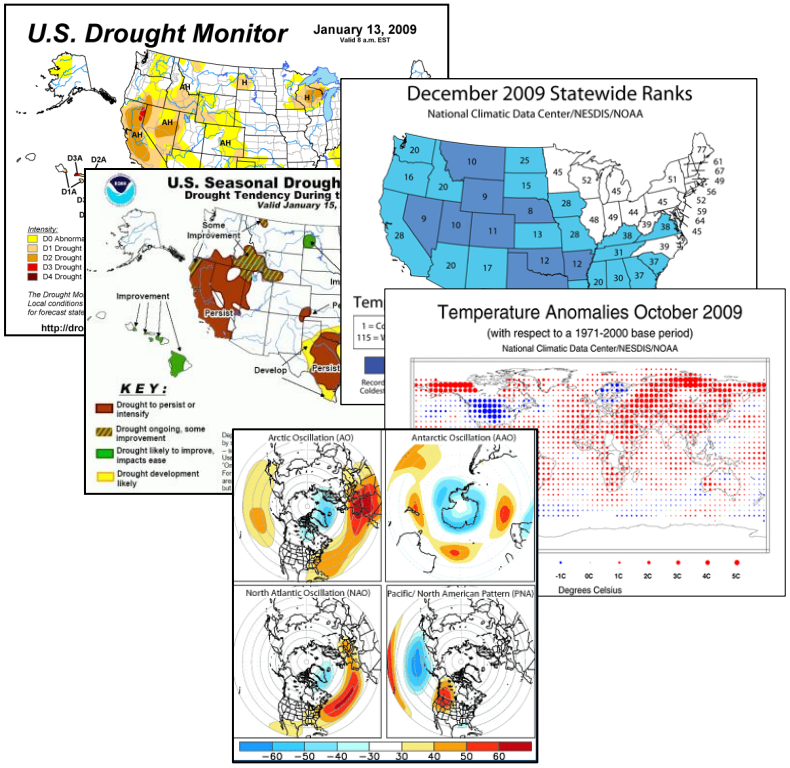


NOAA CLIMATE SERVICE

Chet Koblinsky
NOAA Climate Service Transition Deputy Director
Director, NOAA Climate Program Office

Unidata Policy Committee April 2010

A Climate Services Vision (NRC, 2001)



Climate Services: The timely production of useful climate data, information and knowledge to decision makers.

1. The activities and elements of a climate service should be user-centric.

2. If a climate service function is to improve and succeed, it should be supported by active research.

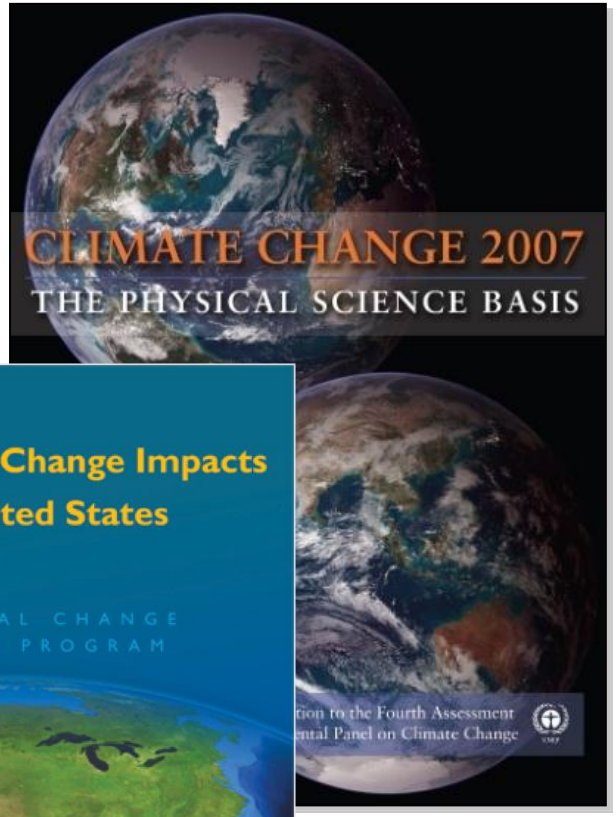
3. Advanced information (including predictions) on a variety of space and time scales, in the context of historical experience, is required to serve national needs.

4. The climate services knowledge base requires active stewardship.

5. Climate services require active and well-defined participation by government, business, and academia.

NOAA has contributed to recent international and national scientific assessments of climate change

NOAA contributed significantly to the development of the IPCC Fourth Assessment series of reports. NOAA scientists shared the 2007 Nobel Peace Prize.



NOAA led the development of the USGCRP Global Climate Change Impacts Report, released in 2009.

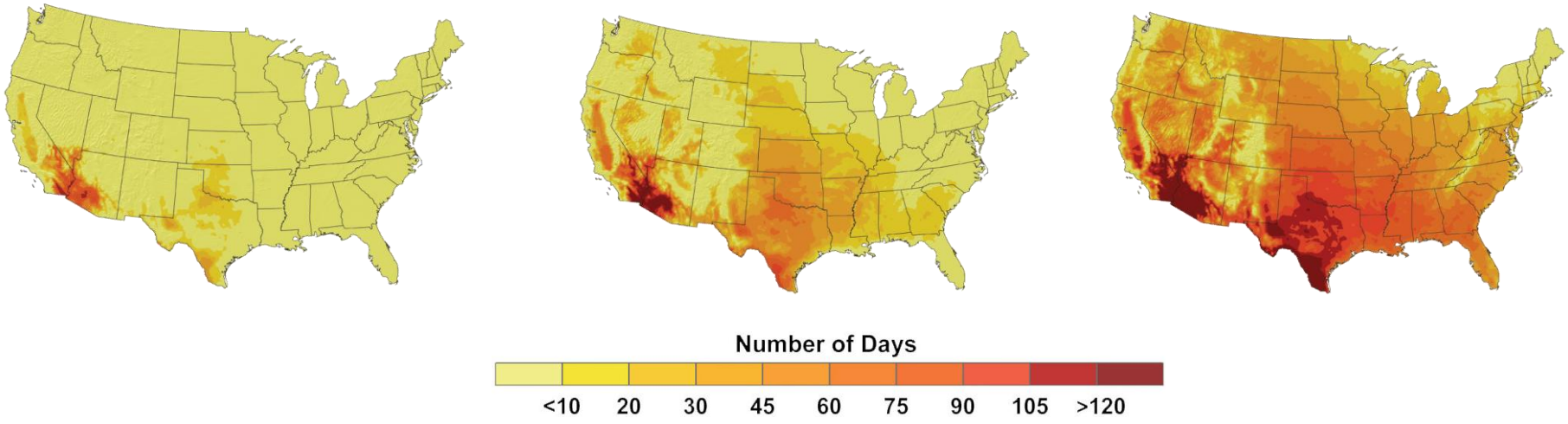
Widespread climate-related impacts are occurring now and are expected to increase.

- Temperature rise
- Increase in heavy downpours
- Less snow and earlier snowmelt lead to changes in river flows
- Sea-level rise

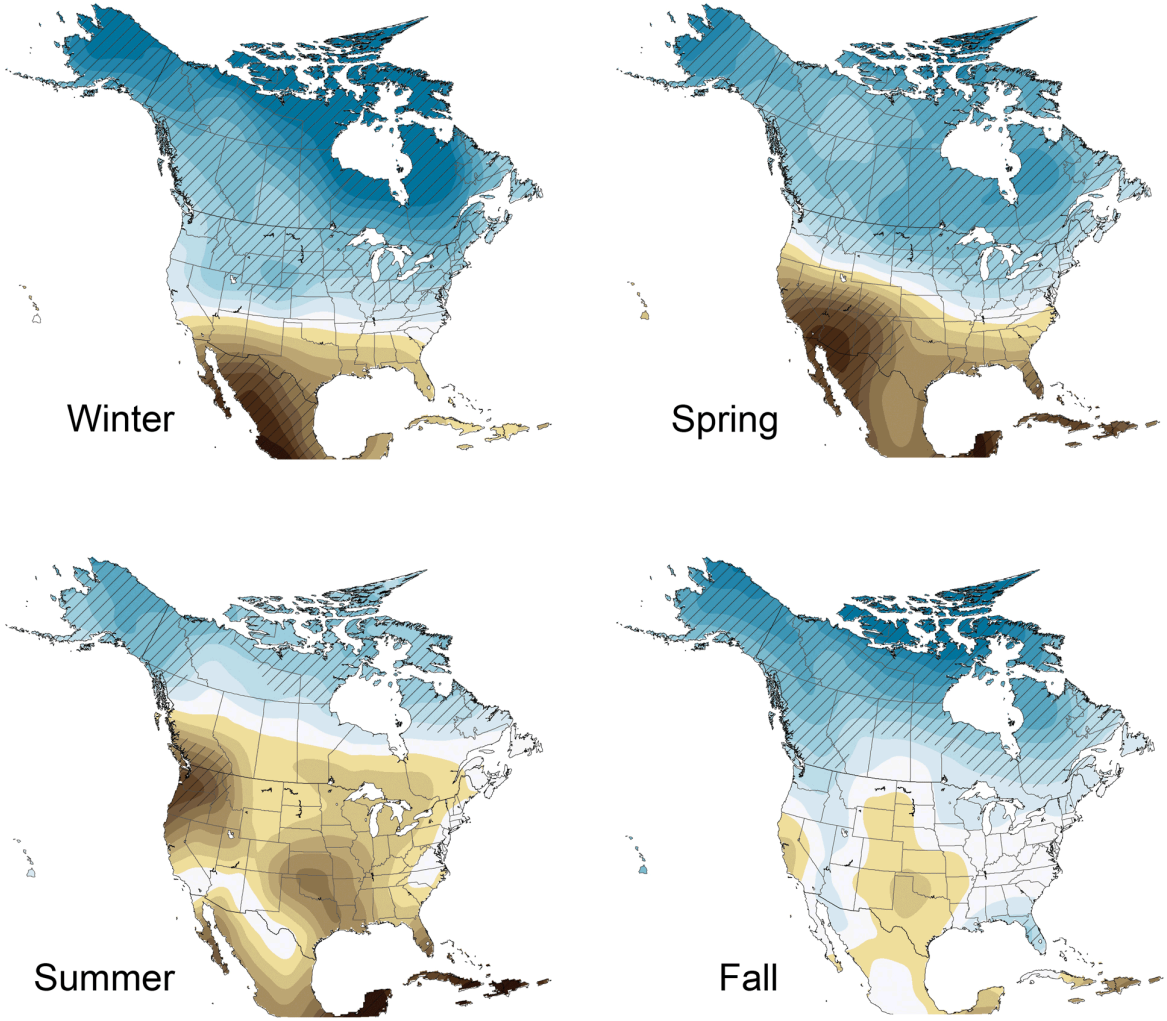
Recent Past, 1961-1979

Lower Emissions Scenario, 2080-2099

Higher Emissions Scenario, 2080-2099



Climate change will stress water resources.



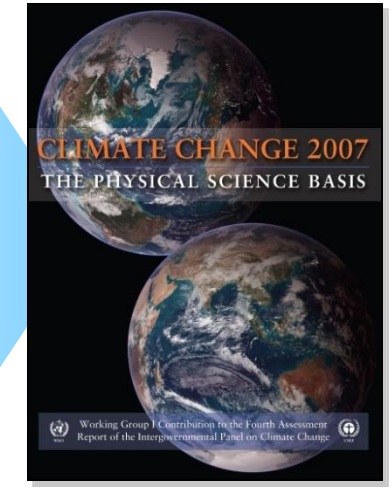
Projected change in precipitation by 2080-90s

The north will see more precipitation and the south will get less.

Spring in the Southwest will see a 40 percent decrease in precipitation.

Meeting the Rising Demand

NOAA contributed significantly to the development of the Intergovernmental Panel on Climate Change (IPCC) Fourth Assessment series of reports
NOAA scientists shared the 2007 Nobel Peace Prize



NOAA led the development of the USGCRP Global Climate Change Impacts Report (GCCI)


Commerce


Coasts


Recreation


Ecosystems


Hydropower


Farming


Wind Energy


Private Sector

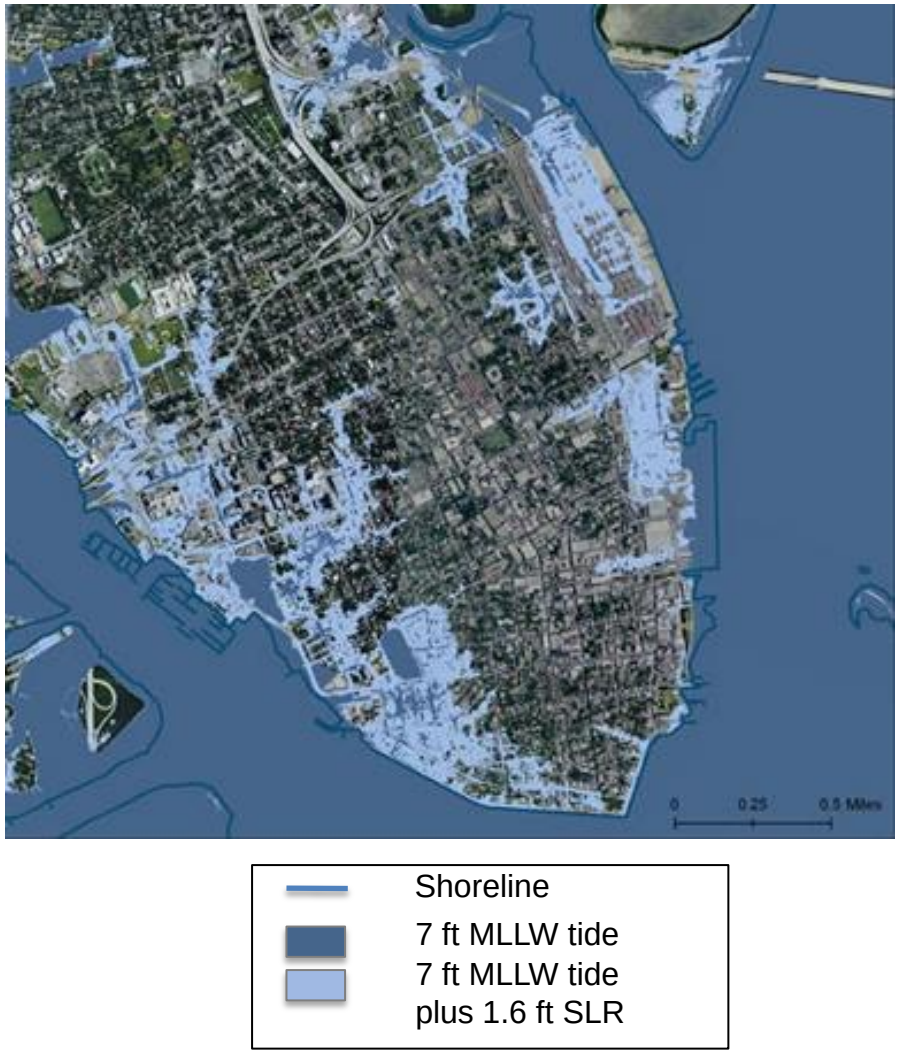
Meeting the Rising Demand for Climate Services

1. NOAA's existing framework for climate was established before climate services were recognized as essential, and is not optimized for climate service delivery.

2. While NOAA has continued to build its suite of climate services within its existing framework, including our interagency approach to delivering drought information services, much of the demand remains unmet.

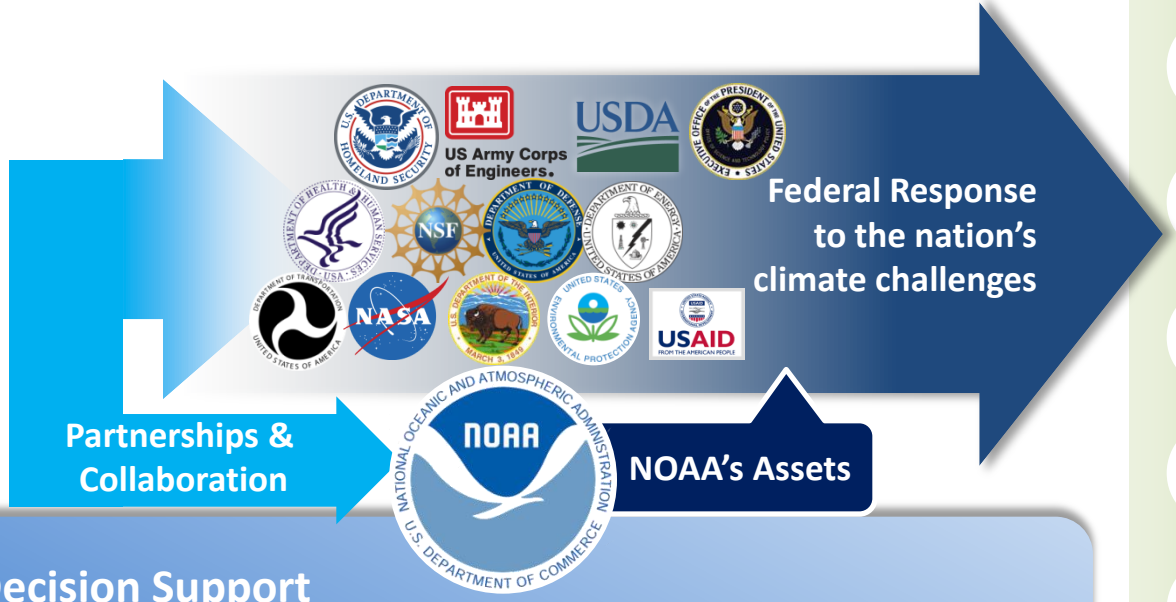
3. To meet climate service demands, NOAA must direct efforts to develop a framework that will:
   - Connect users to existing climate products and services, while continuing to develop new authoritative, reliable services;
   - Transform current science and data into understandable, usable and accessible information;
   - Actively engage users in service development.

4. NOAA's climate framework must deliver needed climate services while maintaining leadership in observing, research, modeling and assessments



Lidar-derived data used to map potential area of shallow coastal flooding in Charleston, SC.

NOAA commits to providing critical assets in science and service to a Federal partnership



Information Delivery and Decision Support

NOAA uses its national and regional infrastructure to deliver climate services today

Assessments of Climate Change and Impacts

NOAA is a leader in national and regional climate impact assessments
Over 70% of Federal IPCC AR4 WG1 authors were from NOAA

Climate Change Research and Modeling

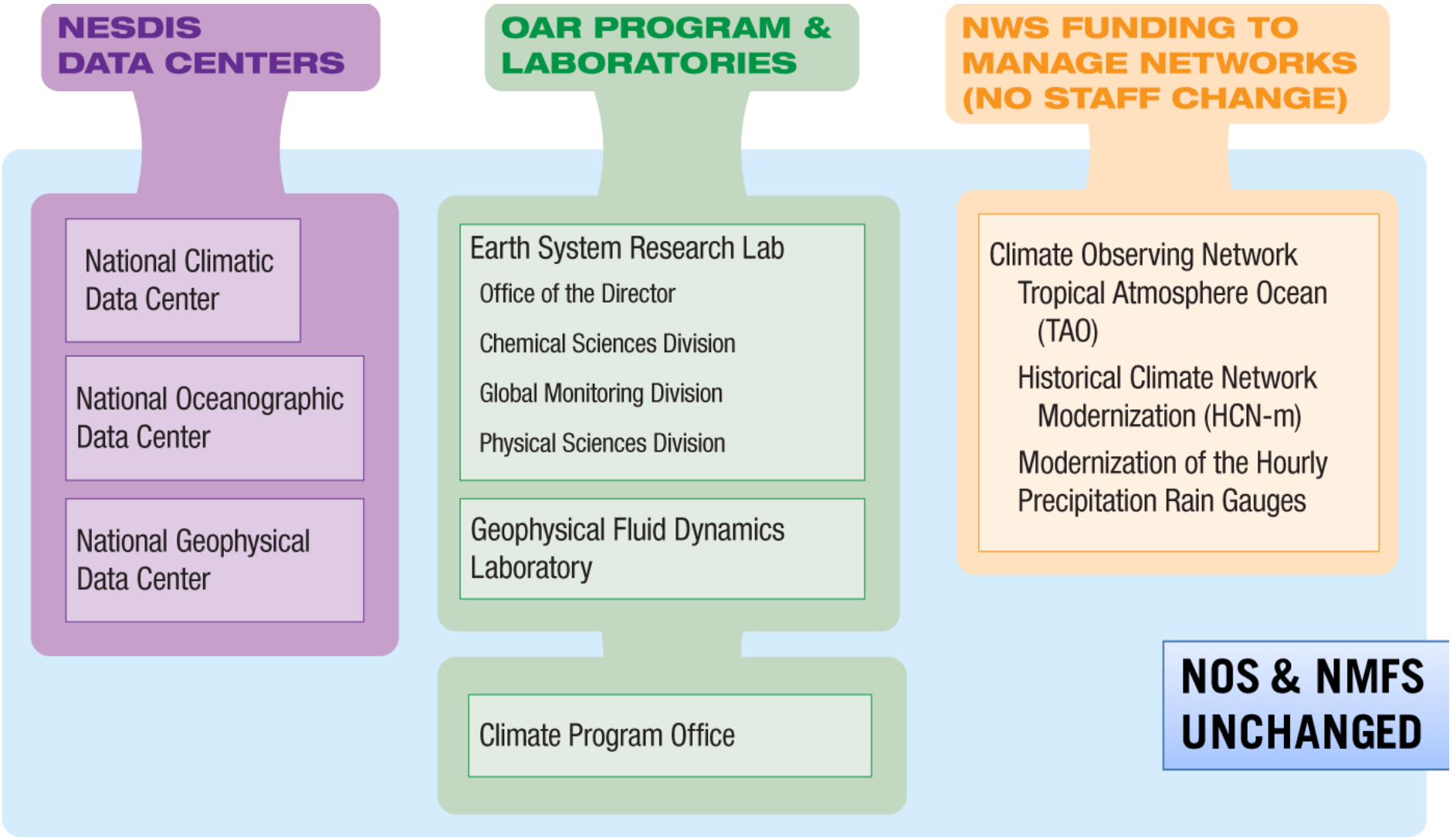
Internationally recognized models of the global climate

Climate Observations and Monitoring

NOAA operates over 90 observation and monitoring systems
NOAA is mandated to monitor and provide access to climate data and information

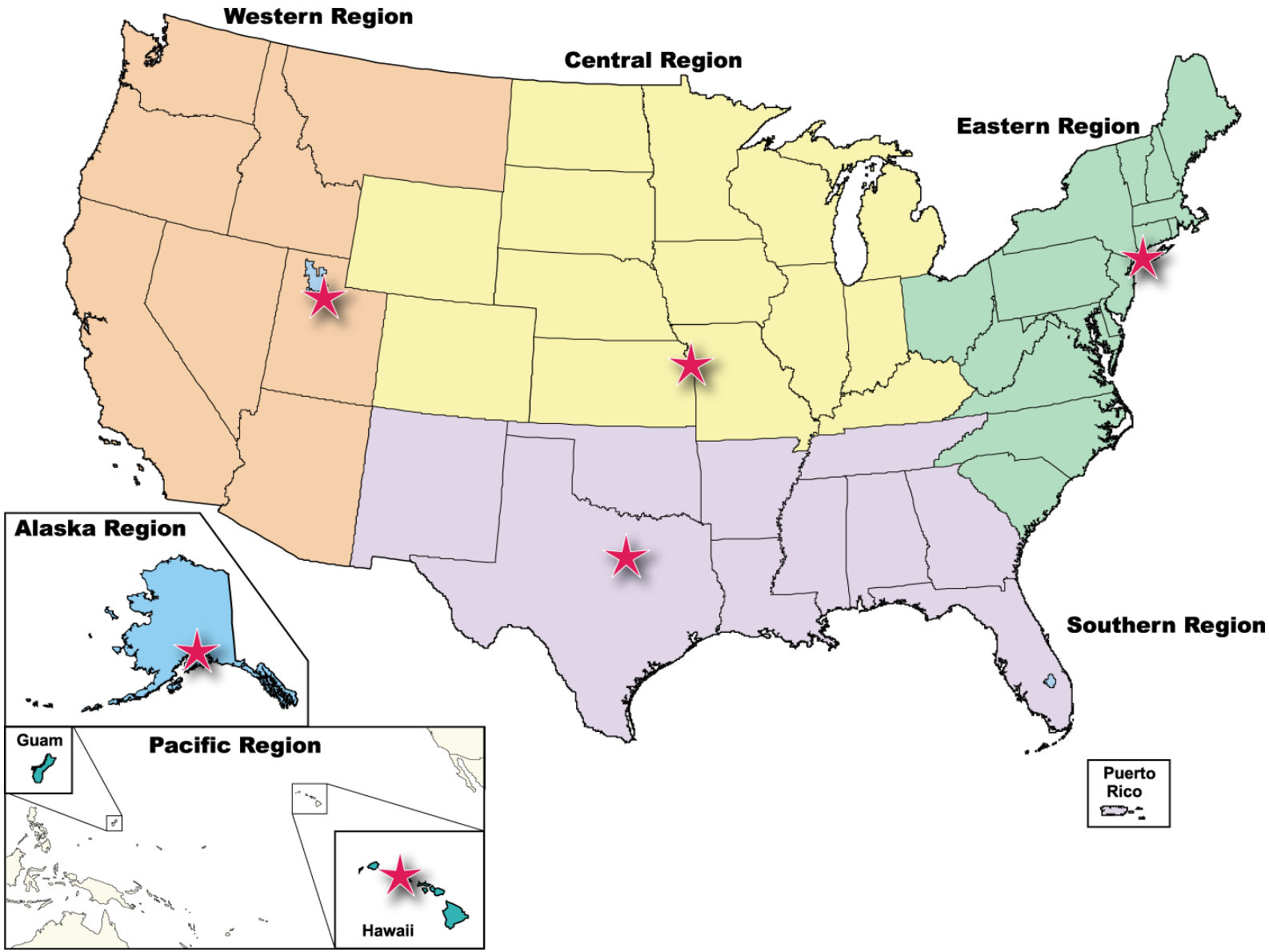
Security
Forestry
Water
Health
Infrastructure
Global
Land Management
Oceans
Energy
Other

Proposed NOAA Climate Service (NCS) Entities



The physical location of these facilities will not change

New Regional Climate Service Directors



Federal Regional Climate Service Enterprise

Connecting Science, Services and People

State and Local Engagement, Education & Service Delivery

Regional Climate Services Partnerships

Regional Climate Science

USER ENGAGEMENT

- *Development, Delivery & Evaluation of Products & Tools*
- *Understanding and Translating User Needs*
- *Informing Program Requirements*

Government
Private Sector
Academia
NGO's

NOAA Climate Service Leadership

Water

Water Issues

- Precipitation Patterns; Drought and Floods
- Changes in snowpack (quantity and timing)
- River stream flow
- Fire outlooks
- Physical Infrastructure (i.e., dams, reservoirs, water delivery systems)
- Planning (e.g., urban, agriculture, health)

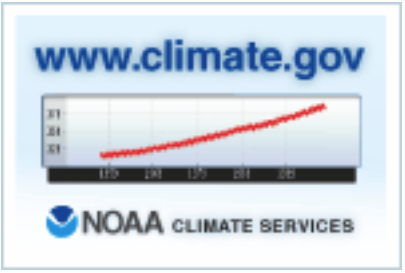
NOAA Products and Services

- Monitor and Forecast Drought and Flood Related Conditions
- NIDIS (Including Stakeholder Engagement)

Key Federal Agencies

NOAA, DOI, Army Corps of Engineers, USDA, EPA

NOAA Climate Services Portal



Multiple audiences so multiple avenues to access information

- *ClimateWatch* Magazine
- Data and Services
- Understanding Climate
- Education
- Climate Dashboard

One-stop access for NOAA's climate information

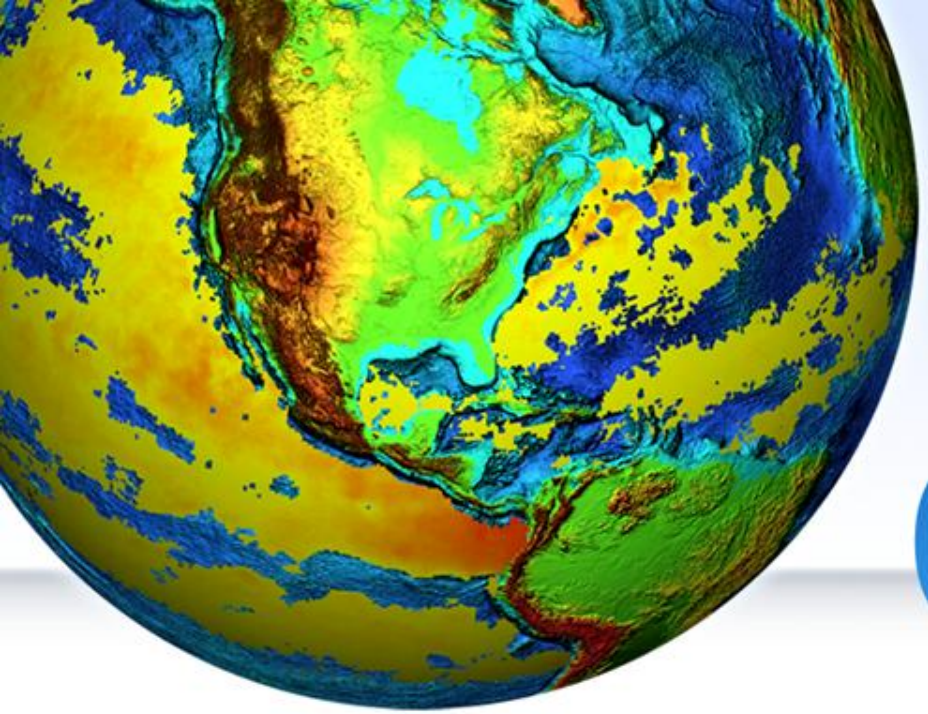
www.climate.gov

For More Information…

- www.noaa.gov/climate
  - Q&As, proposed reorganization chart, a Power Point, climate handouts featuring our science and regional services, and recordings from this Town Hall and a press conference.
- climateservice@noaa.gov
  - New mailbox to address your questions
- www.climate.gov
  - NOAA's new Climate Portal

Next steps…

- Stakeholder Engagement
- National Academy of Public Administration study
- Reprogramming Submission



NOAA CLIMATE SERVICE

Thank you!