

NOAA Climate Services User Engagement

CLIMATE AND WATER RESOURCES



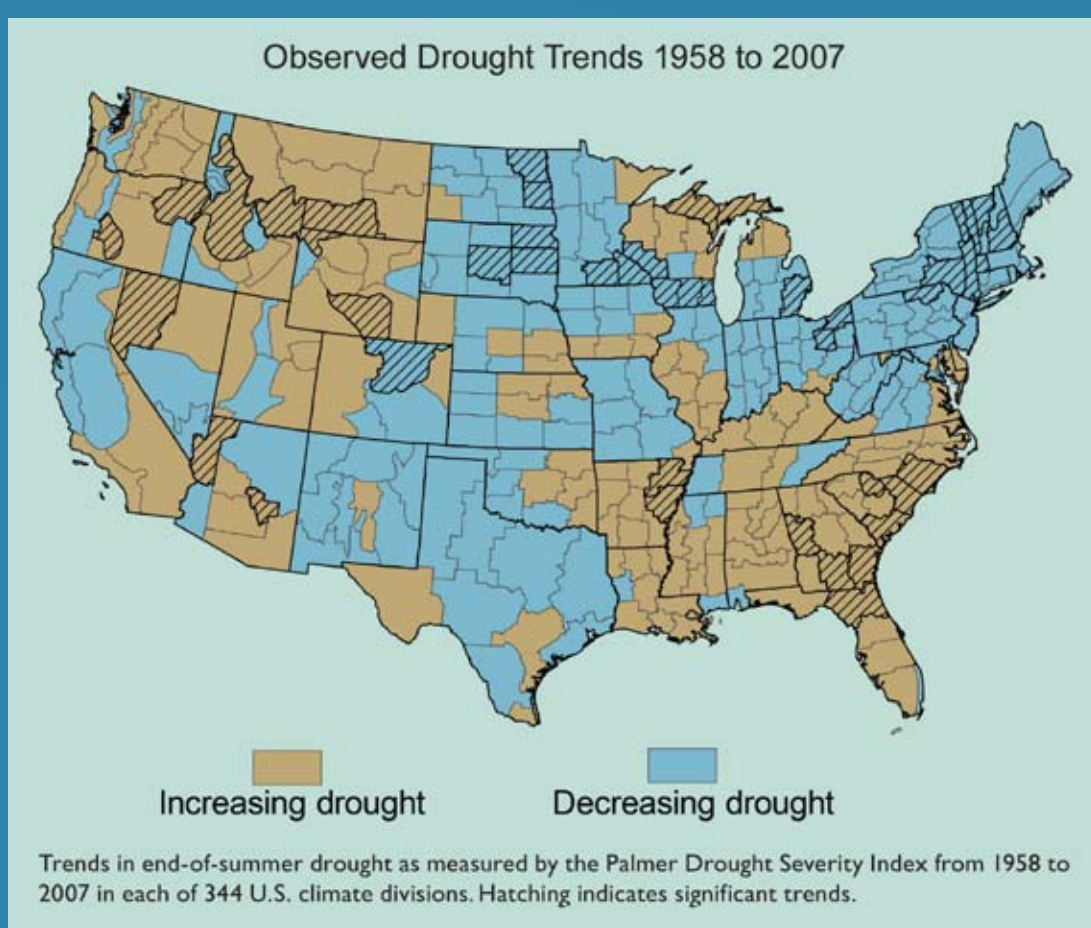
OVERVIEW

Water is fundamental to life and water resources are directly dependent on climate. Extreme weather events like droughts and heavy precipitation, which are expected to increase as climate changes, can impact water resources. Water supply imbalances or water quality degradation can have major societal impacts. Relevant climate information is essential to developing appropriate planning, response, and adaptation strategies.

KEY STAKEHOLDERS

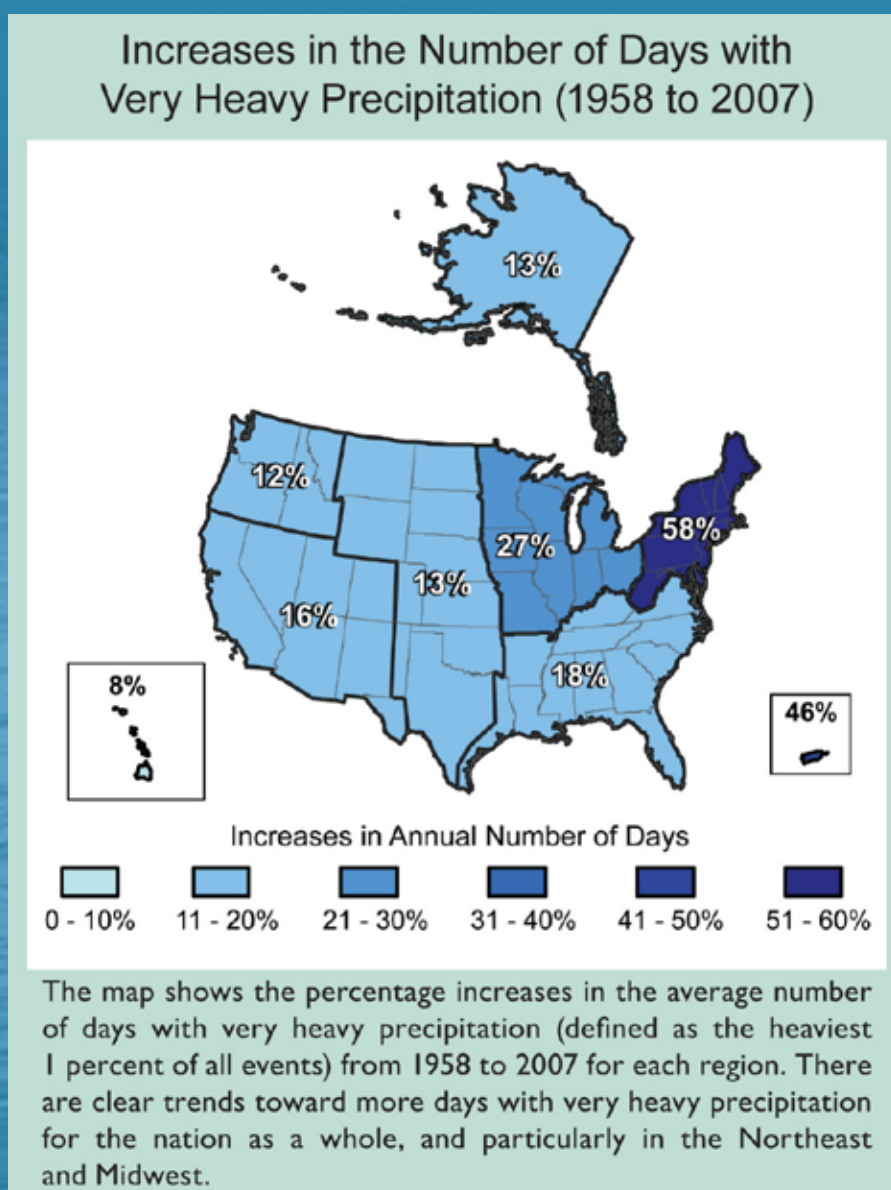
NOAA engages various groups, both as an actionable information provider and as an applied research partner, to examine the effects of weather and climate on water resources:

- Federal, state, regional, county, and city water managers, planners, and drought task forces
- Federal water resource agencies, (e.g., NOAA, U.S. Geological Survey, U.S. Department of Agriculture, U.S. Environmental Protection Agency, U.S. Army Corps of Engineers, National Park Service, and the Federal Emergency Management Agency)
- Agriculture, transportation, energy, and recreation industries
- Academia and other researchers



SECTOR NEEDS

NOAA is partnering with the water resources sector to translate climate data into accessible, useful, and accurate products.



For example:

- Short-duration rainfall values can be used to properly engineer retention basins to reduce storm water pollutants.
- Drought information can be used to determine when water rationing may be required.
- Temperature and snowpack trends can be used to determine changes in the seasonal timing of runoff.

NOAA DATA AND PRODUCTS

There are many different types of useful climate information available.

Examples include:

- The *Global Historical Climate Network*, which contains world-wide historical temperature and precipitation data.
- The *National Integrated Drought Information System*, which is a collaborative system that provides information about drought conditions, impacts, and forecasts, as well as planning, education, and research.
- The *United States Snow Climatology*, which includes U.S. daily, monthly, and seasonal snowfall and snow depth.

