

Heavy precipitation events increasing

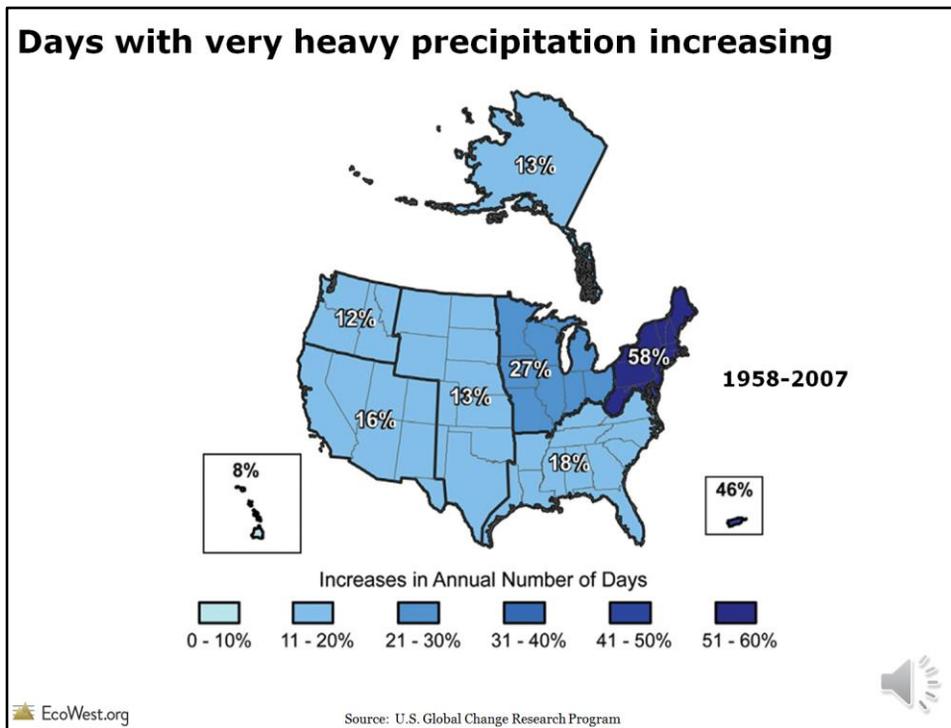


 EcoWest.org

9/13/2013



Narrative: In this EcoWest presentation, we discuss the increasing number of heavy precipitation events in the U.S.



Narrative: Between 1958 and 2007, the number of days with very heavy precipitation increased across the country. The trend was especially pronounced in the Northeast.

Source: U.S. Global Change Research Program

URL: <http://nca2009.globalchange.gov/increases-number-days-very-heavy-precipitation>

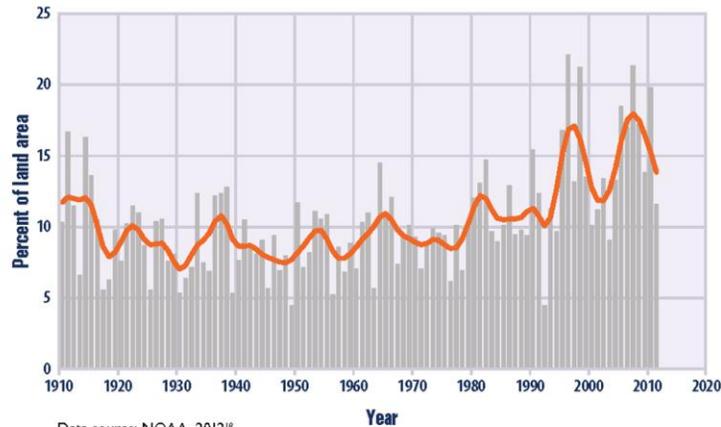
Notes: The map shows the percentage increases in the average number of days with very heavy precipitation (defined as the heaviest 1 percent of all events) from 1958 to 2007 for each region. There are clear trends toward more days with very heavy precipitation for the nation as a whole, and particularly in the Northeast and Midwest. Image Source: updated from Groisman *et al.*¹

[145] [Groisman, P.Ya., R. W. Knight, D. R. Easterling, T. R. Karl, G. C. Hegerl, and V. N. Razuvaev.](#) "Trends in Intense Precipitation in the Climate Record." *Journal of Climate* 18, no. 9 (2005): 1326-1350.

Deluges becoming more common

Figure 1. Extreme One-Day Precipitation Events in the Contiguous 48 States, 1910–2011

This figure shows the percentage of the land area of the contiguous 48 states where a much greater than normal portion of total annual precipitation has come from extreme single-day precipitation events. The bars represent individual years, while the line is a nine-year weighted average.



Data source: NOAA, 2012¹⁸

Source: EPA

EcoWest.org



Narrative: This chart shows that the number of extreme one-day precipitation events has been increasing lately, although there's considerable year-to-year variation.

Source: EPA

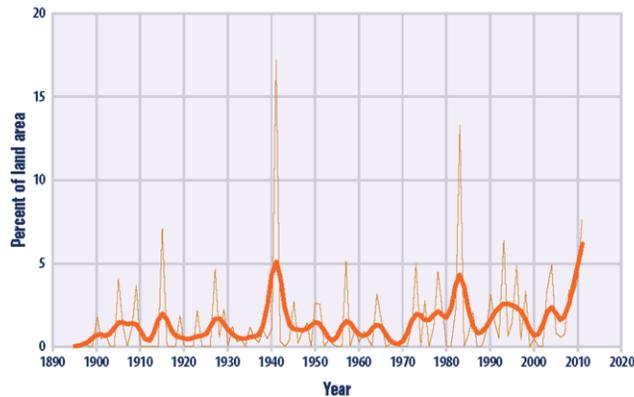
URL: <http://www.epa.gov/climatechange/science/indicators/weather-climate/heavy-precip.html>

Notes: This figure shows the percentage of the land area of the contiguous 48 states where a much greater than normal portion of total annual precipitation has come from extreme single-day precipitation events. The bars represent individual years, while the line is a nine-year weighted average.

Recently, more areas experiencing very wet years

Figure 2. Unusually High Annual Precipitation in the Contiguous 48 States, 1895–2011

This figure shows the percentage of the land area of the contiguous 48 states that experienced much greater than normal precipitation in any given year, which means it scored 2.0 or above on the annual Standardized Precipitation Index (SPI). The thicker orange line shows a nine-year weighted average that smoothes out some of the year-to-year fluctuations.



Data source: NOAA, 2012⁹

EcoWest.org

Source: EPA



Narrative: This indicator measures the percent of the contiguous 48 states that have experienced much greater than normal precipitation in any given year. The trend here is more ambiguous, but there has been a recent spike.

Source: EPA

URL: <http://www.epa.gov/climatechange/science/indicators/weather-climate/heavy-precip.html>

Notes: This figure shows the percentage of the land area of the contiguous 48 states that experienced much greater than normal precipitation in any given year, which means it scored 2.0 or above on the annual Standardized Precipitation Index (SPI). The thicker orange line shows a nine-year weighted average that smoothes out some of the year-to-year fluctuations.

Download more slides and other resources

ecowest.org

Visualizing environmental trends

search

EcoWest

ABOUT BIODIVERSITY CLIMATE FIRES LAND POLITICS WATER

2012 was hottest year on record in U.S.
National Oceanic and Atmospheric Administration



Temperature
Anomalies
2012

2012 was hottest year on record for U.S.
No doubt about it: 2012 was hoasty. Today, the National Oceanic and Atmospheric Administration reported that 2012 was not only the warmest on record for the lower 48 since 1880, but also the second warmest on a measure known as the Climate Extremes Index, which includes factors such as temperature anomalies, drought patterns, and the [...]

read more →

BIODIVERSITY
Hawaii, West and South have most at-risk species

WILDFIRES
Ebb and flow of snow, fuels, and fire

CLIMATE
2012 was hottest year on record for U.S.

LAND
Which states have the most federal land?