How Will Climate Change Affect the Southwest?

Climate change means lots more heat and lots less water in the Southwest, and that will trigger more wildfires

In addition to national data, the Third National Climate Assessment has chapters that explore how climate change will affect different regions of America.

Among the National Climate Assessment’s findings for the Southwest:

- Climate change pose challenges for the Southwest, which is an already parched region that is expected to get hotter and, in its southern half, significantly drier.
- In the Southwest, the period since 1950 has been hotter than any comparably long period in at least 600 years.
- In the future, summertime heat waves are projected to become longer and hotter. Under worst case scenarios, average temperatures could rise up to 9.5 degrees Fahrenheit by the end of the century.
- Severe and sustained drought will stress water sources, which are already over-utilized in many areas.
- For major river basins such as the Colorado River Basin, drought is projected to become more frequent, intense, and longer lasting than in the historical record.
- Snowpack is expected to continue decreasing, putting the water supply for the region at risk.
- Increased heat, drought, and insect outbreaks, all linked to climate change, have increased wildfires. Between 1970 and 2003, warmer and drier conditions increased the amount of western conifer forest that burned by 650 percent.
- The amount of land burned in wildfires could double in the Southern Rockies and northern California by the end of the century, if climate pollution isn’t reduced.
- The western coastlines are also at risk for flooding and erosion from sea level rise.
- In the last 100 years, sea levels along the California coast rose up to 7.9 inches. In the last decade, high tides on top of this sea level rise have caused serious damage, such as the inundation of Highway 101 near San Francisco.
- Sea levels are expected to rise up to 4 feet in the next 50 years. With just a 16-inch rise, the San Francisco and Oakland airports, many coastal highways and bridges, and ports that handle half of America’s incoming shipping containers could flood.
- There is hope. The Southwest’s abundant geothermal, wind, and solar power-generation resources could help reduce climate pollution. This transformation has already started, with renewable energy portfolio standards adopted by five of six Southwest states, plus renewable energy goals in Utah.

Want even more info? Check out these state-by-state fact sheets on the White House web site.