NATIONAL CLIMATE ASSESSMENT: THE GREAT PLAINS

The draft National Climate Assessment is the most comprehensive report on climate change impacts in the United States. Here are a few things we learned from the draft assessment about impacts in the Great Plains region: Montana, Wyoming, North Dakota, South Dakota, Nebraska, Kansas, Oklahoma, and Texas.

Heat

- Climate change is happening now, and is primarily caused by carbon pollution from fossil fuels like coal, oil, and gas. How much the climate changes in the future is up to us.
- The last two years have been brutally hot and dry in the southern Great Plains. In 2011, Wichita, Oklahoma City, Houston, Dallas, and Austin sweltered under a record number of 100-degree days.
- If carbon pollution continues to increase, the number of days with high temperatures above 100 degrees Fahrenheit could double in the northern Great Plains and quadruple in the southern Great Plains.
- Warmer winters will likely increase the risk of some infectious diseases in the Great Plains. By the end of the century, the ticks that carry Lyme disease could become far more common in Nebraska, Kansas, and Oklahoma.

Drought and Fire

- The southern Great Plains, especially Texas, will get drier as the climate changes and increasingly susceptible to drought. Competition for water will directly affect consumers, electricity producers, and the region’s $92 billion-per-year agriculture industry.
- The 2011 drought in Texas and Oklahoma cost farmers and ranchers more than $10 billion in losses. Record wildfires burned close to 4 million acres in Texas, destroying more than 2,750 homes. In 2012, continued drought across the entire region forced ranchers to liquidate large herds of cattle.

Storms and Floods

- Rainstorms and snowstorms are growing more intense. Since 1958, the amount of very heavy rain and snow has increased about 21 percent. In 2011, record rain and snow put the Souris River near Minot, North Dakota four feet above its previous record. The floods caused $2 billion in damages.
- Heavy rainstorms are likely to become more common in the northern Great Plains, leading to erosion and pollution in lakes and streams.