

Sunbelt, on the other hand, energy consumption for cooling may rise, along with the emissions it generates (Figure 2-2). The net effect on energy consumption would depend on the net change in heating- and cooling-degree days.

Baseline rainfall levels are also central to determining the vulnerability of the United States to global warming. Most of the western states are currently arid. The reduced rainfall and increased evaporation from global warming projected for midcontinental areas of the United States by general circulation models may exacerbate the scarcity of freshwater resources in those states. And although the eastern states have only rarely experienced severe drought, they are increasingly vulnerable to flooding and storm surges—particularly in densely populated coastal area—as sea level rises. If extreme weather events—such as tornadoes, hurricanes, and floods—occur with greater frequency and/or intensity, damages could be very extensive. However, there is great uncertainty about whether extreme events will become more common as a result of climate change.

Climate change may also benefit some plants and animals. Warmer temperatures may allow them to expand their range northward. Higher levels of CO₂ may boost the growth and productivity of some plants—particularly agricultural crops, where nutrients can be closely monitored.

Figure 2-2

