

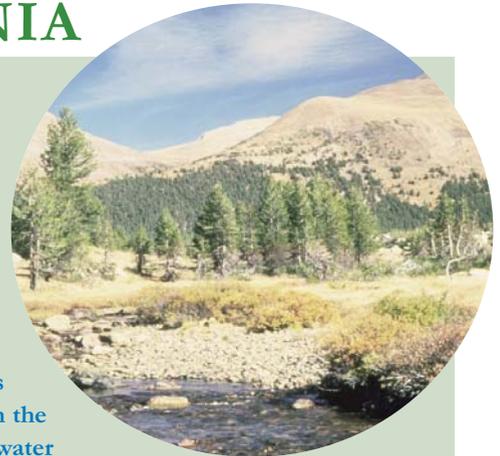


CHANGE THE FORECAST FOR WILDLIFE

SOLUTIONS TO GLOBAL WARMING

Global Warming and CALIFORNIA

California's growing population and expanding agriculture are putting pressure on the state's water resources like never before. Global warming may well make California's water woes even more troubling in the decades to come. The California Energy Commission estimates average temperatures in California could rise 8-10 degrees Fahrenheit by 2100 if global warming continues unabated. This will likely bring hotter, drier summers to an already parched state. Wildfires may increase, droughts could get worse and rains—when they do come—will likely come in more severe downpours that may cause more flash flooding. Warmer temperatures could also contribute to a 70-90 percent decline in spring snowpack in the Sierra Nevada, a natural reservoir that provides up to half the state's water supply during spring and summer. We can solve global warming and revitalize our economy by rebuilding America with clean energy.



Global warming effects on California wildlife

California is home to an incredible diversity of native wildlife species, including 415 birds, 195 mammals, 86 reptiles, 62 fish and 57 amphibians. Rising temperatures and sea level in the state will likely change the makeup of entire ecosystems, forcing wildlife to shift their ranges and adapt.

- California's Central Valley historically supported the greatest concentration of winter waterfowl on the continent. Hotter, drier conditions in the state could reduce what's left of these important wetlands.
- The state bird, the California quail, may disappear from many parts of the state in summer due to changes in climate forcing the bird to migrate to more suitable breeding habitat.
- Global warming could contribute to more frequent and intense El Niño events, which may encourage toxic algae blooms in bays and estuaries and depress ocean productivity offshore, affecting wildlife throughout the food web. California will likely



see a surge in catastrophes like the 1997-98 El Niño event which led to declines in herring, anchovies and sardines off the Pacific Coast and the starvation and death of hundreds of California sea lions and northern fur seals.

Global Warming Pollution

Burning coal, gas and oil produces carbon dioxide, which is a greenhouse gas that warms the planet as it builds up in the atmosphere. Some of the carbon dioxide released today remains in the atmosphere after even 100 years, trapping more and more heat.

Since the mid-1800s, emissions of carbon dioxide have skyrocketed, causing global temperatures to rise by about 1° Fahrenheit in the last century. Earth has not experienced such a rapid change in temperature in thousands of years.

A Global Solution

The U.S. must lead the world by passing global warming legislation at home and working with other nations at the Copenhagen climate summit at the end of 2009 to sign a new climate treaty that keeps further warming below 2° Fahrenheit. With a global solution, we can avoid the worst impacts of global warming.



What's at stake for Californians?

During one week of the 2006 North American heat wave, of the 225 fatalities reported in North America, over 160 were in California. In January, 2005, Southern California experienced intense rainstorms that led to extreme flooding and mudslides, the severity of which is consistent with what scientists expect will occur more often as global warming continues. These destructive weather events are some of the ways warmer conditions could impact Californians.

- Sea level in California has risen 3-8 inches over the last century and could continue to rise another 22-35 inches by 2100, requiring large scale beach restoration efforts from San Diego to Crescent City. The EPA estimates protecting the state's coasts from a 20-inch sea level rise could cost between \$174 million-\$3.5 billion.
- Wine grapes are a \$3.2 billion industry in California. Warmer temperatures could cause grapes to ripen earlier, causing a decline in quality throughout the state's famous Napa and Sonoma Valleys.
- Two of California's most abundant crops, cotton and wheat, are mostly irrigated. Hotter, drier weather and reduced stream flows could reduce cotton yields by 9-17 percent and wheat yields by 48-66 percent.
- In 2006, more than 8.3 million people spent more than \$7.4 billion on wildlife viewing, hunting and fishing. This industry supported 114,866 jobs in California.* Loss of wildlife and habitat could lead to a sizeable loss in tourism dollars. (*Jobs are an average from 2001 and 2006 data.*)

GLOBAL WARMING NATIONAL POLICY SOLUTION:

A federal legislative solution can drive American ingenuity, create millions of green jobs, and restore America's global leadership on global warming. Legislation should:

- * Include ambitious targets to reduce America's global warming pollution as swiftly and deeply as possible. Scientists say that developed countries as a whole need to reduce their global warming pollution by at least 80% from 1990 levels by 2050 to avoid the worst impacts of global warming.
- * Move America toward a 100% clean electricity future by maximizing energy efficiency, modernizing the electric power grid, expanding power generation from renewable energy resources, and investing in clean transportation infrastructure.
- * Invest in natural resources. Forests, coasts, wetlands, clean air and clean water are already being impacted by global warming. Funding is needed to safeguard the natural resources that are critical to wildlife populations and human health.
- * Lead a worldwide effort to finance clean energy technology, forest conservation, and adaptation to unavoidable impacts of global warming.

For more information, visit: www.nwf.org/globalwarming.

“Global warming poses an overriding challenge to our responsibility to protect wildlife for our children's future. We must advance balanced solutions that work for people, wildlife and the economy to overcome this challenge.”

Larry Schweiger
President, CEO
National Wildlife Federation



California's solutions to global warming

California has been an international leader in developing solutions to global warming and reducing carbon dioxide emissions.

- In 2006, California demonstrated its commitment to responsible and innovative policy by passing Assembly Bill 32, the California Global Warming Solutions Act of 2006. The bill requires a reduction of global warming pollution to 1990 levels by 2020. Additional legislation restricts emissions from power generated out-of-state but consumed in California.
- The state is ranked 17th in the nation in wind energy potential and second in the nation in wind energy production, with the prospect of powering 75 percent of the households in the state.

The Western Climate Initiative

The Western Climate Initiative is a collaboration between seven states (Arizona, California, New Mexico, Oregon, Washington, Utah, and Montana) and three Canadian provinces (British Columbia, Manitoba, and Quebec) to develop regional strategies to address climate change. The Partners set an overall regional goal to reduce greenhouse gas emissions 15% below 2005 levels by 2020 using a combination of regional market-based strategies and state policies to meet this goal. In September 2008 the Partners released the final set of design recommendations for the WCI Regional Cap-and-Trade Program. More information is available at www.nwf.org/westernclimateinitiative.

Following some simple guidelines, you can cut your global warming pollution, become more energy efficient and give something back to nature.

- **Convert to compact fluorescent bulbs:** If every household in America replaced one light bulb with a compact fluorescent, we would prevent more than 13 billion pounds of carbon dioxide from being emitted. That's the same as taking 1.2 million cars off the road for an entire year.
- **Visit the National Wildlife Federation website at www.nwf.org/globalwarming for more information.**

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