

# Long Drought Ahead From Global Warming, Study Says

**Warmer temperatures will hurt forests and fuel wildfires, Nobel winner Steven Running finds.**

By Amy Linn, 1-06-10



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A University of Montana study led by acclaimed scientist Steven Running shows that climate change will significantly extend drought periods in the Northern Rockies, stressing forests and inviting more frequent and virulent wildfires.

Running, the author of the study, is a Regents professor of ecology in UM's College of Forestry and Conservation and a co-winner of the 2007 Nobel Peace Prize for his leading role with the Intergovernmental Panel on Climate Change. The peer-reviewed study, conducted with the help of other UM forestry researchers, predicts that global warming will have a dramatic impact on regional forests. Rising temperatures could spark an epidemic of insect infestations and cause catastrophic fires in Montana, Wyoming and Idaho, "potentially affecting more than 360,000 people who live in homes in the forest-urban interface that are valued at \$21 billion," according to a UM announcement about the study.

Here are highlights of the research, straight from the UM statement:

- By about the 2080s, hotter temperatures could cause about two months of additional drought.
- Regional forests will see fewer days with snow on the ground, an earlier peak snowmelt, a longer growing season, and increasing drought stress, which in turn will increase insect infestations and wildfires.
- Carbon uptake could be reduced and so disrupted that "most forests in the region would switch from absorbing carbon to releasing it by late this century."

-- Even if future climate change is less severe than projected, serious impacts are expected. Forests are already being transformed by global warming, Running said, particularly since northern Rocky Mountains forests “live in a perpetually water-limited state.”

-- Over this century, the region could see an annual average warming trend of 3.6 to 7.2 degrees Fahrenheit, with winter temperatures expected to increase more than temps in other seasons.

The study was funded by the [National Commission on Energy Policy](#), a bipartisan nonprofit organization.