Predicted reduction in trout habitat due to climate change called ‘startling, depressing’

By David O. Williams | 08.16.11 | 7:36 am

Trout habitat will be cut in half in the western United States over the next 70 years if current climate change trends continue, according to a federally funded study conducted by 11 scientists from various federal agencies, conservation groups and universities, including Colorado State in Fort Collins.

Published this week in the science journal “Proceedings of the National Academy of Sciences,” the study predicts native cutthroat trout populations across the West could drop by nearly 60 percent during that time span and that introduced brook trout could see 77 percent declines.

“The study advances our understanding of climate change impacts by looking beyond temperature increases to the role of flooding and interactions between species,” lead author Seth Wenger said in a press release. “The study also is notable in scope, using data from nearly 10,000 sites throughout about 400,000 square miles of the western United States.”

Besides Colorado State University, the study was conducted by Trout Unlimited, the U.S. Forest Service Rocky Mountain Research Station, the U.S. Geological Survey and the University of Washington Climate Impacts Group. In addition to rising water temperatures, the study looks at other factors such as “flow regimes” and “biotic interactions.”

Researchers concluded that such significant declines in habitat would result in huge impacts to trout fishing throughout the West – a major economic driver in Colorado and other Rocky Mountain states.

Kurt Fausch, professor in CSU’s Department of Fish, Wildlife and Conservation Biology, said the study builds on 15 years of research by CSU graduate students trying to find ways to prevent the degradation of habitat for native cutthroat trout, considered a keystone species in the Rocky Mountain ecosystem.

“It’s exciting to see these ideas being used,” Fausch said, “but the impending loss of trout habitat is both startling and depressing. The West is iconic for trout fishing, but much of this is projected to go away.”

Trout Unlimited has been working to maintain habitat by reconnecting coldwater drainages and protecting existing habitat on public lands in the West, but the pace of TU’s work clearly needs to be accelerated, experts say.

“This report is a wake-up call,” said Chris Wood, president and CEO of Trout Unlimited. “The good news is that we’re already working to protect high-quality trout habitat, such as backcountry roadless areas on national forests. We’re reconnecting tributaries to mainstem rivers, and we’re restoring degraded habitat.

“It is imperative that we accelerate the scope and the pace of that work if we are to have healthy trout populations and the irreplaceable fishing opportunities they provide through this century.”
Wood also said the study shows why congressional attempts to cut funding for conservation programs and to reduce the acreage of protected federal roadless lands are misguided.

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