

Prepared in cooperation with Trout Unlimited and the U.S. Forest Service

The Potential Influence of Changing Climate on the Persistence of Salmonids of the Inland West



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Warming during the 20th century profoundly impacted native trout habitat by increasing water temperature, altering its flow and changing disturbance regimes, e.g. wildfire, flooding, etc., of aquatic systems. Tools are needed to forecast where important changes may occur and how conservation efforts should be prioritized. The USGS partnered with the U.S. Forest Service and Trout Unlimited to examine the influence of changing climate on the persistence of 10 native trout species within 11 western States. The study area ranged from the crests of the Sierra Nevada eastward through the Rocky Mountains, Great Basin, and Southwest Deserts within the western United States.

Our results provide a valuable overview of regional effects and risks to coldwater fish as a result of climate change. The broad-scale perspective can help guide managers and interested stakeholders in developing a strategic conservation framework that will increase resilience in native trout populations and improve resistance to the environmental changes brought on by a warming planet.