



California Forest Watershed Alliance (CAFWA)

An alliance of urban and rural organizations dedicated to the restoration and improvement of California's watersheds and forests.

Drought and forests: Managing California forests is crucial to water supply and quality

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2013 was a year of record drought and wildfires in California, and the risks of droughts and wildfires are only expected to increase in the coming years. Although there are no easy answers, understanding the relationship between healthy forests and downstream water supply should be part of the solution.

The Sierra Nevada and other watersheds upstream of the Delta are the primary sources of the state's water supply, and the quality and quantity of water that flows through the region are directly linked to the health of these watersheds. Unfortunately, in many places, the legacy of past management practices has led to unhealthy forests that are overly dense with brush and small trees.

These conditions have greatly increased the risk of devastating mega-fires like last year's Rim Fire, leaving burned areas susceptible to landslides and erosion and jeopardizing downstream water supplies and infrastructure.

The connection between high-intensity wildfires and water quality is quantifiable and real. Reduced vegetation cover in burned areas can lead to flooding, soil erosion, changes to water temperature, and sedimentation.

Water treatment facilities and reservoirs well downstream from wildfire sites can be affected by post-fire sediment ash and other contaminants. Additionally, increased sediment and ash loads increase the risk of post-fire fish die-off in freshwater bodies.

In contrast, better forest management can reduce wildfire intensity and help to safeguard water quality. Ecologically based forest management may also increase water

yield by thinning overly dense forests, thereby reducing the utilization of water by small trees and allowing more snow (and snowmelt) to reach the ground.

Research in the Sierra Nevada to further demonstrate the relationship between forest management and water availability is underway.

Given the potential importance of this issue for a state with an increasing population and a decreasing water supply, the Sierra Nevada and other forested watersheds upstream of the Delta should be an important focus for the state.

Earlier this month, Gov. Jerry Brown released the California Water Action Plan. For the first time, the plan acknowledges the critical role of healthy headwaters for downstream water supply.

Specifically, the plan identifies a "crucial need" to restore forests and meadows in the Sierra Nevada and other headwaters for multiple benefits, including safeguarding and enhancing water resources. This new policy should raise public awareness and lay the groundwork for policies and funding measures designed to protect and restore the forests and meadows in the Sierra Nevada and other critical headwaters.

The Nature Conservancy, California Forestry Association and Rural County Representatives of California represent a wide range of perspectives regarding forestry, water, and other natural resources issues, but we agree that we must address the importance of California's forested headwaters in securing and enhancing California's water supply.

This includes the need to increase the pace and scale of fuels reduction in these forests as an important part of the state's water strategy.

Healthy forests will not reverse the current drought, but restoring and conserving our forests and watersheds can have multiple benefits for people and nature, including helping to safeguard California's water supply.

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