Water: California's Last Gold Rush

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by El Dorado County Supervisor, Ray Nutting

When James Marshall knelt by his lumber mill on the bank of the American River in El Dorado County more than a century ago, the riches foretold by the gold nugget he found consumed his thoughts. At that time, he had no idea that other plentiful natural resources all around him would be the riches of the future. The gold rush now is history but forests and water remain the book ends of a California economy that dwarfs those of most nations.

The relationship between the forest and its water intuitively is simple yet completely misunderstood. As a private landowner of forest land, as a working logger and as an elected supervisor of El Dorado County, I offer my perspective on that dilemma.

Rivers are both the arteries of our natural landscape as well as the boundaries of our political entities. The American River, El Dorado County's northern boundary and the Consumnes River, our boundary in the south, both produce enough water for nearly 1.5 million families, as well as habitat for hundreds of species of fish and wildlife each year.

Water resources account for many dollars spent in California

Approximately 200 million acre-feet of water (one acre-foot of water approximately is 325,000 gallons), fall as precipitation on California each year of which most falls on coniferous forest. Transpiration and evaporation return about two-thirds of this amount back into the atmosphere, and the remaining 70 million acre-feet of water stays in the landscape. Some of the water percolates into the soil and becomes ground water and some runs off and becomes stream flow. Economically, water resources account for approximately two of every three dollars spent in the state, dwarfing timber production, mining, cattle grazing and recreation.

The resources of El Dorado County, like all counties in California, have been managed through human activity for thousands of years. Native Americans used fire to keep the countryside open in order to increase desirable plant and acorn supply. Those low intensity fires rarely allowed the vegetation to become the dense, impenetrable and hazardous forests that we have today.

As a management tool, fire nearly was removed from the landscape through an aggressive suppression program during the past 60 years. In the absence of regular, low intensity "cleansing" fires, the landscape changed dramatically. Many small trees crowded together in dense stands, and brush fields covered large areas of the watersheds. Evapo-transpiration from the small trees increased removing the total amount of water available for the land. As a result of the decrease in the stream flow during summer months, water temperatures have become warmer and fishery populations have declined.

Today, when wildfires do start, instead of burning in a low intensity beneficial manner, they become catastrophic crown fires that destroy everything in their path vegetation, wildlife, soils, streams, fisheries and even human lives. The fires are so intense that soils become sterile, all vegetation burns away and entire watersheds become devastated. Something is out of balance and the evidence is clear. Examples are abundant.

On September 29, 1992, the Cleveland Fire ignited in a South Fork canyon along the American River. More than 24,000 acres were burned, dozens of homes were incinerated and two air-tanker pilots died in the 200-foot flames. Fire suppression costs exceeded $25 million. The ongoing restoration costs, already more than a $100 million, pay for soil stabilization and reforestation. Many miles away, other Californians still are paying. Catastrophic fires strip the land of its vegetation, baring the soil. Stream runoff rapidly peaks carrying along acres of mud, smothering fisheries and filling lakes. Reservoir capacities are lost and water treatment costs rise. As a result, water-short Californians will have less, dirtier water.

Urbanites must connect with land around them

As California's population continues to grow, people are becoming more interested in how natural resources are managed. In California today, nearly nine out of 10 people live in an urban setting but they are not naturally

The American River, El Dorado County's northern boundary and the Consumnes River, our boundary in the south.

Photography by Anthony M. Belli

"connected" to the land. All too often, bumper-sticker slogans take precedence over good science. Currently the urban influences dominate the state legislative process. And in Congress, the dominant eastern influences control millions of acres of federal land in California.

Thousands of jobs have been lost and direct revenues to county schools and roads are gone because of restrictions on resource management created by these controls that are not connected to the land. Rural counties depend on these resources and should be given incentives to manage these lands in a beneficial way. Owners of forested watersheds, public and private, can manage their lands to improve water yields and storage for others, but those others must recognize the costs and benefits of this type of management. Better exchange between forest landowners and water users in California need to occur so water users can more fully understand the need for sound forest management.

Water costs should include forest management

Currently serving as Regional Council of Rural Counties (RCRC) vice president and El Dorado County supervisor, I know action has been initiated by rural leaders. RCRC and its 27 member counties have embarked on a journey advocating the protection, management and restoration of our state's watersheds. Watershed programs are designed to produce a variety of benefits to downstream users by accomplishing at least the following: reduce the potential of catastrophic wildfires, protect and improve water quality, reduce erosion and downstream sediment loads to protect reservoir storage capacity and increase water yield. These types of forest management are expensive, but the alternative is even more expensive. Catastrophic wildfires cost taxpayers and ratepayers millions of dollars each year. The key is to assist water consumers throughout the state in understanding that the true cost of their water includes the cost of forest management, and that they need to invest back into the forests where their water supply originates.

As a man who works with his hands for a living, I move when I see something that must be done. I know old enemies must become allies. All Californians must be helped to understand that the greatness of this state is in its renewable resources. The water that cascades off the Sierra Nevada is the essence of the California economy. Californians must be helped to understand that if the forests and watersheds are not restored and managed properly, then our current way of life will be jeopardized. Ninety percent of our human resources in the cities cannot remain detached and ignorant to this struggle. The powers-that-be must hear our call to action. My voice is one where many are needed.

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http://foresthealth.org/magazine/jan98/nutting.htm