OPINIONS

River Right: Gizmos in the water!

BY TOM CARSTENS

In 2010, when Gold Ray Dam was taken down, a buddy and I couldn't wait to kayak that stretch of the Rogue River. As we approached, we heard a deafening roar, which puzzled us because we didn't remember much more than a riffle there. As we rounded the bend, we were surprised to find dozens of belching contraptions bunched in the river just below where the dam had been. "Creatures from the Black Lagoon" rose up from beneath the water as we passed. They were miners from California, garbed in wetsuits and snorkels, operating floating suction dredges—basically glorified underwater vacuum cleaners. And the noise? Think leaf blowers on steroids. There were so many of these gizmos that we had to dodge 'em just like rocks in a rapid!

Today's miners suction gravel and sediment through floating sluice boxes in an attempt to recover gold flakes on the bottom. These machines were invented to reduce the impact of mining on streams. But they agitate the gravel, and environmentalists claim they stir up mercury and cloud up the streams. Miners argue that they remove the mercury, and the turbidity is only temporary.

For the Californian miners, the dam removal was a perfect storm. California had just suspended suction mining, Oregon had few rules, gold prices were rocketing, and that stretch of river hadn't been mined for a hundred years. It was a stampede! The din of those dredges was so loud that the poor folks in Gold Rey Estates couldn't get in a nap.

Adding to the racket, environmental groups shouted that these contraptions create havoc for fish and their habitat. The miners hollered "Not True!" and claimed the fish gorge in their wake. A couple of our local representatives decided to be done with it and get rid of the miners. With Senate Bill 401 (SB 401), they tried to add thousands of miles of Oregon rivers and streams to the list of Scenic Rivers. But when folks had a look at the legislation, they discovered that the 1970 Oregon Scenic Rivers Act prohibited new activity within a quarter mile of each bank without approval from the Oregon Parks and Recreation Department. Whoops… big time overkill!

Since SB 401 put the Applegate and Little Applegate Rivers on this list, you could hear the bellowing from our vintners, ranchers, and landowners up and down the valley. That bill went nowhere.

So last year, our lawmakers tried again. They passed a law (SB 838) that more specifically targets suction dredge mining. Miners are now limited to 850 permits ($175 each), must follow tighter rules, and get hit with big fines for noncompliance. Miners can operate their equipment only for two months in the summer—after the eggs have hatched and the salmon aren't spawning. According to the Oregon Department of Fish and Wildlife (ODFW), permit requests dropped by 90 percent and mining decreased by 60 percent. SB 838 also requires the governor to come up with a whole new set of science-based regulations.

Despite what you might have heard from either side of this issue—the miners or the environmentalists, the best science is a bit skimpy. Direct impact on either wildlife or streams is generally not that well understood because, frankly, there hasn't been a whole lot of research. What there is shows temporary impacts on the stream beds—impacts that mostly disappear after heavy winter flows. Long-term impacts, if any, are just beginning to be studied.

Last year, the Oregon Chapter of America Fisheries reviewed the existing research. Very complicated issues. They've outlined best practices that the miners should use to ensure that any damage they cause is localized and short-term. Their report also links to some of the research conducted so far. Google "ORAFS Final Report 4/10/13." A leading scientist at ODFW recommends a paper that summarizes the research. For all you science nerds, google "Harvey & Lisle Report" to learn more.

By the time you read this, the governor's office should have published its report. Our state agencies, along with the legislature, will *have* to do something with it. Let's hope they don't overreach again. Miners need to apply best practices and the regulators need to apply best science.

Between the drift boats, the anglers, the party rafts, the jet boats, and the cows, the miners don't seem so out of place on our rivers. We kayakers dodge 'em all!

See you on the river.

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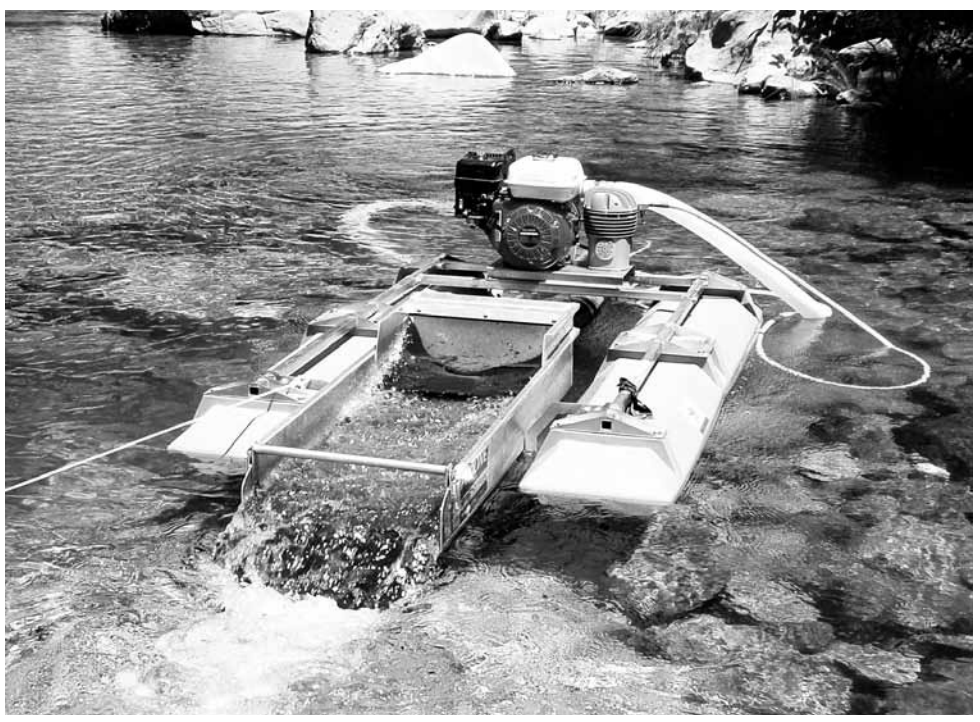

Floating suction dredge. Photo courtesy of Western Mining Alliance.

Fuels reduction reduces wildfire damage

BY DON BELLVILLE, MEL WANN AND JACK SHIPLEY

Mr. Thomas's August 2014 opinion pieces in the *Applegater* (Fall 2014) and *Oregonian* came to erroneous conclusions regarding the effects of vegetation thinning on wildfires. We are concerned that unknowing property owners may misconstrue his comments to conclude that doing nothing on forestland is better for wildfire protection than thinning and fuels reduction.

There are numerous reasons for overstory/understory thinning and fuels reduction, including:

1. Decrease the density of overstory vegetation and separate leave tree crowns.
2. Increase the rate of growth/vigor for leave trees.
3. Reduce the amount of vegetation to more closely match the site's capacity to support that vegetation.
4. Reduce stand replacement wildfire potential, e.g., remove everything dead.
5. Develop/maintain wildlife habitat.
6. Generate revenue by selling some of the timber.

Reducing overstory vegetation density by thinning reduces the crown fuel available to sustain a crown fire, i.e., fire moving through tree crowns. Thinning also reduces moisture stress on individual trees and improves overall forest health and vigor. The greater the tree separation, the less likely that a crown fire can be sustained. As a result, a wildfire returns to the ground surface where it is more easily controlled.

This was demonstrated in various 2013 wildfires (Worthington Road, Stratton Creek, Douglas Complex, Brimstone) where fire suppression personnel were able to use direct attack methods, near to or on the edge of fire, within the thinned areas. These treated areas experienced reduced fire intensity and flames less than four feet in length, so that firefighters were able to safely work near the fire edge. Firefighters were able to use these treated areas for control locations, so they could contain the fire more quickly and help prevent its spread to nearby private land.

Decreasing overstory density also results in increased diameter and height growth. Tall and large diameter trees, especially those that are inherently fire tolerant such as ponderosa pine and Douglas fir, are less susceptible to being killed during a wildfire. Tall trees with crowns substantially separated from the ground or lower height vegetation decreases the potential for a surface fire to move into overstory crowns.

Historically, Applegate watershed forests typically had 25 to 50 large-diameter trees per acre (30 to 42-foot spacing). However, in a 2008 survey of 2,700 acres in this watershed, the number of 11"-plus DBH (diameter at breast height) overstory trees *averaged 56 trees per acre* with numerous stands over *100 trees per acre*. Such densities can support crown fire.

Understory thinning is often coupled with overstory thinning in order to reduce ladder fuel. Dense understory vegetation provides a vertical conduit for a surface fire to move into the overstory. Removal of a portion of these stems separates understory and overstory vegetation both horizontally and vertically. As a result, a surface fire cannot easily spread either horizontally between understory shrubs and small trees or vertically through their crowns into the overstory canopy—unless winds are extreme.

Treatment of slash resulting from thinning operations is essential and can be accomplished by a number of effective methods. Even natural decay can be used to "treat" this slash, but one does have to accept increased wildfire spread risk for a period of time. Untreated fuels can intensify a wildfire.

We agree with Mr. Thomas that thinning does open a forest to increased sunlight, wind, rate of drying, amount of fine fuel, and a wildfire's rate of spread. However, wildfires in such areas burn with less intensity and have a reduced "active burn" time frame. Thus, those wildfires are easier to control.

Thinning improves the amount of moisture available to sustain the growth of the remaining trees. Vegetation within the significantly overstocked forests of southwest Oregon are suffering unprecedented moisture stress as a result of this overcrowding. This has left these forests highly susceptible to outbreaks of various insects and disease. The ongoing loss of Applegate ponderosa pine and Douglas fir to bark beetles is directly related to drought stress. This, in turn, increases the susceptibility of these forests to devastating wildfires. Thinning permits the remaining plants better access to available moisture and helps them better resist these insects and disease.

The ecosystems of southwest Oregon are "fire adapted," which means that local forests were historically maintained by fire. However, after more than 70 years of successful fire suppression, the Applegate's forests are significantly denser than previously and are at significant risk for catastrophic loss in a wildfire.

Appropriate forest thinning and slash treatment will not increase wildfire risk. In fact, thinning aids firefighters in the control of wildfires. More of our forests need to be thinned in order to help reduce wildfire intensity and prevent loss of life, property and the environment.

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Stand replacement wildfire, e.g., all trees dead, in an unthinned, mature age, perennial stream zone. 2014 Onion Mountain Fire. Photo: Don Bellville.