Downstream

Logging and an industry-friendly state agency imperil the Elk River and other California waterways

by Will Parrish
February 15, 2017

As a long-time resident of the Elk River basin, which drains the redwood-studded hills southeast of Eureka, Jesse Noell lives in fear of the rain. During storms of even moderate intensity, the Elk River often rises above its banks and dumps torrents of mud and sand across Noell and his neighbors' properties. The churning surges of foamy brown water have ruined domestic water supplies, inundated vehicles, buried farmland and spilled into homes.

It first happened to Noell and his wife, Stephanie, in 2002. As the flood approached, he remained inside his home to wedge bricks and rocks beneath their furniture, and pile pictures, books and other prized possessions atop cabinets and counters. The water level was at his thighs; his body spasmed in the winter cold. Across the street, two firefighters in a raft paddled furiously against the current, carrying his neighbors—military veterans in their 60s, who were at risk of drowning—to higher ground.

After crouching and shivering atop the kitchen counter through the night, Noell was finally able to wade through the floodwater to higher ground the next morning. But the home's sheetrock, floors, heating equipment, water tanks, floor joints, girders and septic system were destroyed. This experience wasn't an act of nature; it was manmade.
"California has a systematic and deliberate policy to flood our homes and properties for the sake of corporate profit," Noell says.

CAUSE AND EFFECT

The cause of the flooding is simple: logging. Since the 1980s, timber companies have logged thousands of acres of redwood trees and Douglas firs, and constructed a spider web–like network of roads to haul them away, which has caused massive erosion of the region's geologically unstable hillsides.

The deep channels and pools of the Elk River's middle reaches have become choked with a sludge of erosion and debris six to eight feet high. Each storm—such as those that have roiled California's coastal rivers this past week—forces the rushing water to spread out laterally, bleeding onto residents' lands and damaging homes, vehicles, domestic water supplies, cropland and fences, while also causing suffering that corporate and government balance sheets can't measure.

"The Elk River watershed is California's biggest logging sacrifice area," says Felice Pace, a longtime environmental activist who founded the Klamath Forest Alliance in northernmost California.

For roughly 20 years, the North Coast division of the State Water Resources Control Board, the agency in charge of monitoring water quality and hazards in the area, has deliberated on how to address the Elk River's severe impairment. But they have failed to take bold action, largely because of opposition from politically well-connected timber companies and the Department of Forestry and Fire Protection (Cal Fire), the state agency that regulates commercial logging.

Since 2008, the watershed's major timber operator has been Humboldt Redwood Company (HRC), part of a 440,000-acre North Coast logging enterprise owned by the billionaire Fisher family, best known as founders of the Gap and Banana Republic clothing empires.

Jerry Martien, an Elk River basin resident and former Humboldt State University writing instructor, says the government's failure to protect basin residents—and the aquatic life that calls the river home—should concern everyone in California.

"If they are getting away with it here, they can getting away with similar things in other places," he says.
FORESTS AND RIVERS

California’s northern coastal mountains hold some of the world’s most geologically unstable terrain, as well as some of its most ecologically productive forests. By anchoring mountain soil—which enhances the soil’s ability to absorb water—these forests play a critical role in keeping these watersheds healthy.

In the mid-20th century, a logging boom swept across California’s North Coast. The region’s legendary timber stands went south to frame the suburban housing tracts of the San Francisco Bay Area and the Los Angeles Basin. For the first time, clear-cutting occurred on a large scale here—a practice of razing virtually every tree in a large swath—and, in many places, has continued to the present.

Logging roads tend to be the main source of soil erosion and landslides in disturbed forests, and they also alter runoff patterns and disrupt subsurface water flows.

In addition to causing flooding and reducing stream flow, sediment smothers the eggs and disrupts the reproductive cycles of fish, especially salmon and steelhead, which require pools where they can rest and feed. Erosion fills in those crucial pools, while removal of canopy can raise stream temperatures to inhospitable levels.

"The majority of the water bodies in the North Coast are impaired from excess sediment, much of it associated with past logging practices," said North Coast Regional Water Quality Control Board geologist Jim Burke during a Nov. 30 agency hearing concerning the Elk River.

REGULATOR OR RUBBER STAMP?

The 1973 California Forest Practice Act instituted a uniform code for timber harvest practices in California, which are overseen and periodically updated by the Board of Forestry and Fire Protection, whose nine members are appointed by the governor. The rules are then implemented by Cal Fire, which reviews and authorizes logging permits.
But the damage has continued despite the state’s rules. In the 1980s, for example, a junk-bond-financed conglomerate named Maxxam Corporation engineered a hostile takeover of Humboldt County’s largest timberland owner, Pacific Lumber Company. They acquired more than 200,000 acres, including more than 20,000 acres in the Elk River watershed—roughly two-thirds its total land area.

The company saw the redwoods and Douglas fir forests as underexploited assets, which could help pay off its bonded debt, and moved to liquidate the last remaining stands of private old-growth redwoods—but only after first raiding the pension fund of its employees. Numerous North Coast rivers, including the Elk, were buried under soil and debris.

In a landmark 1987 lawsuit by the Arcata-based Environmental Protection Information Center (EPIC), a Humboldt County superior court judge ruled that Cal Fire was "rubber-stamping" the logging permits that came before it, rather than meaningfully reviewing them for compliance with laws and regulations. The court further ruled that Cal Fire needs to assess the "cumulative impacts" of logging on water quality and other aspects of the public trust.

Three decades later, agency leaders say Cal Fire is now faithfully discharging its duties. Russ Henly, assistant secretary of Forest Resources Management for the California Natural Resources Agency, says he thinks Cal Fire staffers are "doing a very good job" of reviewing timber harvest plans. "I know they give a hard look to the cumulative impacts of logging as part of the harvesting plans."

But numerous environmental and public interest groups disagree, including representatives of the group that filed the cumulative impacts lawsuit. "The long, sad history of the Elk River is one example of how we can't rely on our state forestry agency to deal with the multiple impacts of logging," says EPIC’s Rob DiPerna.

Environmentalists and commercial fisherpeople alike note that numerous river watersheds—and the life they harbor—have continued to spiral downward in the modern regulatory era. In the North Coast, coho salmon have been particularly hard-hit by the degradation of redwood forests.
A STATEWIDE CONCERN

Here in the North Bay, a controversy over timber industry damage to the Gualala River in northwestern Sonoma and southeastern Mendocino counties has been raging since 2015. First came the Dogwood plan, a 320-acre timber harvest plan filed by Gualala Redwoods Timber company (GRT). It involves tractor-logging hundreds of stately, second-growth redwoods that line the lower Gualala River, in areas spared from axes and chainsaws for a century or more.

Next was the German South plan that GRT filed last September, which looks to harvest an additional 96 acres of floodplain redwoods, in an area immediately adjacent to Dogwood, and clear-cutting 85 acres directly upslope. In September came GRT's Plum plan, which involves felling floodplain redwoods along the Gualala's north fork in Mendocino County.

According to environmentalists, these unique floodplain redwood groves serve as a thin green line against further severe damage to endangered and threatened species of salmon and trout, which feed, rear, shelter and migrate in them. Environmental groups—including Forest Unlimited, Friends of the Gualala River, and the California Native Plant Society—successfully sued to halt the Dogwood plan, though the others are going forward as of this writing. They say that Cal Fire and other agencies have failed to require rudimentary surveys of endangered and threatened plant and animals species in approving these logging proposals.

"Cal Fire is handing over the Gualala River's floodplain on a silver platter to the timber industry," says Jeanne Jackson, a nature columnist for the Independent Coast Observer. Gualala Redwoods Timber argues that it is only cutting these forests selectively and leaving riparian buffers, in compliance with state regulations designed to protect streams.

Cal Fire's watershed protection program manager Pete Cafferata, who is involved in many of the department's activities concerning the Elk, Gualala and other rivers, says the forest practice rules have helped improve river health overall.
"Monitoring work conducted over the past 20 years has demonstrated that California's water-quality-related forest practice rules implementation rate is high," Cafferata says, "and that when properly implemented, the current [regulations] are generally effective in protecting water quality."

Others note that logging-impacted rivers and the life they harbor continue to decline in numerous areas of the state. And the worst impacts typically occur from clear-cutting. From 1997 to 2014, Cal Fire approved more than 512,000 acres of clear-cutting, or about 800 square miles, an area larger than either Napa or Marin counties.

PEER REVIEW

Most of those clear-cuts were completed by Sierra Pacific Industries (SPI), the United States' second largest timber company, which owns roughly 1.8 million acres across California—nearly 2 percent of the state's land area.

Battle Creek is a 350-square-mile drainage fed by water from melting snow that drips down the western slope of Mount Lassen in northeastern California where SPI owns more than 30,000 acres. Because of the creek's ample year-round flow of cold water, state and federal wildlife managers have deemed it the most welcoming area in California for the reintroduction of endangered Sacramento River winter-run Chinook salmon, prompting the federal government to invest over $100 million in its recovery. Juvenile Chinook must have cold water to survive.

Not only has Cal Fire failed to prevent SPI's clear-cuts from severely damaging this critical watershed, critics say, but it has even attempted to prevent publication of scientific research concerning the logging's impact on Battle Creek.

In 2016, recently retired US Forest Service hydrologist Jack Lewis co-authored a research paper analyzing Battle Creek water-quality data, collected largely by the environmental group Battle Creek Alliance, and submitted it to the journal Environmental Monitoring and Assessment for peer
review. It is the first-ever study to examine the cumulative impacts of SPI's logging in the Sierra Cascade region. The journal's editor invited two professional hydrologists, including Cal Fire's Cafferata, to peer-review the study. Cafferata strongly criticized it, prompting the journal's editor to reject it. In an email to the Bohemian, Cafferata writes that "the literature suggests that" a large fire "was a more probable mechanism than logging for the [water-quality impacts] described in the paper."

In emails obtained by the Bohemian, Cafferata wrote to another Cal Fire hydrologist, Drew Coe, concerning the research essay. He stated that a "key piece" of his objection was that the paper was "advocating limits on [SPI's] harvesting rates" in Battle Creek. Coe responded that he similarly saw the article as "an advocacy piece rather than an objective analysis."

The research paper's co-author, Jack Lewis, stood by his analysis. "We believe that roads, logging, fire, and post-fire logging have all contributed to the degradation of water quality in Battle Creek."

THE FATE OF THE ELK RIVER

By 1994, Maxxam's liquidation style of logging was resulting in severe flash-flooding of the Elk River. Ironically, a simultaneous campaign further up the watershed sought to save the largest remaining area of unprotected old-growth redwoods in California, and thus the world: the Headwaters Forest. California and the federal government purchased the 5,600-acre tract in 1999, creating the Headwaters Forest Reserve, a deal that many lower Elk River residents contend left the rest of the watershed vulnerable to continued degradation.

The Fisher family scooped up Maxxam's land in 2008, after Maxxam went bankrupt. Ever since, Cal Fire's main counter to the call for limiting the logging in the Elk River watershed has been that HRC's logging operations are significantly better than that of Maxxam, and that it is unclear in the scientific literature whether HRC's logging is actually exacerbating the river's water-quality problems. HRC has foresworn traditional clear-cutting, though.
In the meantime, the Santa Rosa–based North Coast Regional Water Quality Board voted to delay taking action to limit sediment inputs into the watershed multiple times, dating back to 1998.

In 2015, a study by consulting firm Tetra Tech, hired by the water board, concluded that the Elk River is so impaired that no more sediment should be allowed to enter it. This study formed the basis of the board's development of a so-called total maximum daily load (TMDL), a calculation of the maximum amount of pollutants a water body can receive and still meet health and safety standards. Finally, this past spring, the board voted to adopt its own TMDL action plan for the Elk, which largely echoes Tetra Tech's recommendation.

"It's pretty damn unprecedented for a sediment TMDL to call for zero additional sediment input," says North Coast Water Board executive officer Matt St. John.

The water board's staff members proposed to restrict all logging in the five most impacted areas of the watershed and create a wider buffer between timber harvest zones and water courses, among other new restrictions.

But HRC representatives have strongly lobbied against any additional state-mandated environmental protections in the Elk River, as has another company with timberland in the watershed, Green Diamond Resources Company. The watershed is especially important for HRC, since the watershed and one immediately north of it, Freshwater Creek, account for roughly half of what HRC logs every year.

Jesse Noell and another Elk River basin resident, Kristi Wrigley, formed a group called Salmon Forever in the late-’90s to conduct their own water-quality monitoring. Wrigley is a fourth-generation apple farmer in the watershed, whose cropland has been destroyed by flooding.

Between 1997 and 2008, when there was a moratorium on Elk River logging followed by low harvest rates in the Elk River watershed, suspended sediment concentrations in the river's south fork diminished by 59 percent, according
data collected by Salmon Forever funded in part by a State Water Board grant.

From 2011 to 2013, after Cal Fire permitted increased harvesting by HRC, the sediment concentration increased by 89 percent. The sediment concentrations below HRC's land is at 27 times the level of the Headwaters Forest Reserve, located upstream.

**A NEW PRECEDENT**

At a Nov. 30 hearing, HRC watershed analyst Mike Miles told the North Coast Water Board that his company already has strong restrictions on where, when and how to log in the Elk River area. "In this watershed, we have the strongest set of rules you can find in the state of California for private forestlands," he said.

In addition to his work for HRC, Miles is a political appointee of Gov. Jerry Brown and presides over the state's timber harvest practices: He is one of nine members of the Board of Forestry, and is the chairman of its committee that is most directly involved in the enforcement of the forest practice rules. Gov. Brown's wife, Ann Gust Brown, is a former attorney for the Fisher family, the owners of HRC.

The water board members had also received comment from Cal Fire that opposed restrictions on HRC's logging beyond those already prescribed by the forest practice rules. Cal Fire executive officer Matt Dias, a one-time forester for Santa Cruz–based timber company Big Creek Lumber, expressed the same point.

Elk River basin resident Jerry Martien was among those who also spoke up at the meeting. He had advocated giving "the Upper Elk River watershed a rest, for at least five years, with the possibility for another five, if that is bringing us cleaner water."
EPIC's Rob DiPerna said the North Coast Water Board should be taking action, precisely because the alternative would be to leave the river's well-being in Cal Fire's hands. "Do we really think that falling back on Cal Fire is the way to make sure that water quality is protected from timber operations in the state of California?" he asked.

The water board's Greg Giusti, an extension service adviser for the University of California, strongly opposed the water board staff's proposed restrictions. His objections were similar to those of Cal Fire, the Board of Forestry, Humboldt Redwood Company and Green Diamond. Only one board member, John Corbett, spoke up in the Elk River residents' defense, noting that "they are the only ones who have always been right about what's best for the river." Ultimately, the board voted not to adopt the logging restrictions proposed by the staff.

Elk River residents, whose suffering has been a silent residue of state agency decisions for two decades, were outraged but not surprised. Kristi Wrigley notes that the water board's new waste discharge permit for HRC allows the equivalent of 2 percent clear-cutting of the entire watershed per year—thus guaranteeing that more sediment will continue to wash into the river.

On Feb. 22, the State Water Board will meet in Sacramento to decide whether to certify the Elk River TMDL. The Activists at EPIC have filed an appeal to the water board's waste-discharge permit, and residents have filed a separate appeal calling for a cease and desist order forbidding any more logging by HRC until the river's water again flows clean.

"To people whose lives are already destroyed, their land is destroyed, and their water is destroyed," says Wrigley. "Do you think a permit allowing that much logging is really going to do anything to make our lives better?"

Will Parrish's website is [www.willparrishreports.com](http://www.willparrishreports.com).