

A WHITE PAPER: An Introduction and Analysis to the Clearcutting of Forests in California's Watersheds

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Battle Creek Alliance

Protecting Water, Forests and Wildlife

Introduction

This report is an overview of the clearcutting of forests in the watersheds of California.

Throughout the month of May, 2013, Battle Creek Alliance aired several television commercials on CNN, MSNBC and other cable networks to better inform the public about the plight of our state's forests.

<https://www.youtube.com/watch?v=cQmbYrOQi7s>

<https://www.youtube.com/watch?v=ip2nNLgzIE8>

Our goal is to raise public awareness of what is occurring in the forested watersheds that support the lives of all Californians. It will take masses of people to dismantle the stone walls that the timber industry has paid to construct.

A WHITE PAPER: An Introduction and Analysis to the Clearcutting of Forests in California's Watersheds is meant to further explain the problems we face today in trying to save our forests, in the face of public indifference, government corruption and ignorance, and the greed of corporations.

Taxpayers are subsidizing the plunder of our irreplaceable forests and watersheds. In fact, more than 350,000 acres of California's forests have been clearcut since 1999, by just one company.

In the late 1990s, clearcutting began being chosen as the preferred method of logging the forests in many of the watersheds of California. Some people in the rural areas saw the decimation which was occurring where they lived and began questioning the practice through the traditional avenues: the government, the governmental agencies, and the courts. There have been many reports and papers issued by various experts that describe the timber harvest plan system that has been being used by the state agencies as "inadequate."

The lengthy Forest Practice Rules are judged as "virtually all rules are written with escape clauses." The experts have been ignored. These expert opinions reflect what rural residents have learned by bitter experience when they have attempted to work within the system.

Background

Clearcutting had essentially disappeared in California during the mid 20th century, after the excesses of the late 1800s that lasted into the early 1900s. In 1934, a forester employed by the Forest Service wrote to his superiors:

“Clear cutting has always been questionable because of its tremendous losses in forest productivity, partly because of its attendant extreme fire hazard...”

There are many other losses that clearcutting contributes to because forests form part of the interdependent communities to which all life on this earth is connected.

These losses have been researched and reported on for many years. (See references.) But in the 1990s, the destructive practice of clearcutting was resuscitated, particularly by the largest landowner in California, Sierra Pacific Industries.

The industrial timber/government agency complex is fond of touting forests as a “renewable resource” but the truth is, a clearcut forest starting over from 6” tree seedlings takes 5 human generations to even begin to develop some size, complexity, and diversity.

In California, it takes about 500 years for a forest to develop 1” (yes, inch) of topsoil. After 500 years, old trees in a forest are just beginning to topple to enrich the soil with their death. They will go on to provide habitat for many life forms in the communities that can be named, classified and put into neat categories, but that are inseparable in the physical reality of the world.

If the Tar Sands project begins operations, it will be responsible for 1% of the world’s yearly CO₂ emissions. Yet, at least 18% of the emissions every year have been being produced from the cutting of the world’s forests for a very long time. One has to wonder why this is overlooked or represented as a “renewable resource.”



Clearcuts near and far.



A forest is a community formed of many kinds of life that interact with each other.

Clearcutting Defined

The form of logging that is termed “clearcutting” removes the majority of vegetation within units that are part of a timber harvest plan (THP). Units are typically 15 to 27 acres in size. Using the Battle Creek watershed as an example, each individual THP usually covers 1,000 to 2,000 acres and contains 40 to 50 units. There have been 18 THPs filed in the Battle Creek watershed

between 1998 and 2012 that covered over 21,000 acres. In the watersheds directly to the north and south, tens of thousands more acres have been cut. For an understanding of scale, Golden Gate Park in San Francisco covers about 1,000 acres and Griffith Park in Los Angeles covers 4,200 acres.

Clearcutting and salvage logging are the most destructive forms of logging.

Clearcutting releases huge amounts of greenhouse gases that contribute to a hotter climate. CO₂ is released from both the loss of the trees themselves and from the release of the carbon which is stored in the soil. Most plant's seeds occur in the top 6" of soil, but the soil is ripped by equipment to a depth of 2 feet.

Grown, diverse forests that take decades to hundreds of years to develop are replaced by plantations of tiny tree seedlings, usually of only one species. The monoculture plantations are subsequently sprayed with herbicides to reduce competition from any regeneration of the native plants that existed before the clearcut. The dearth of native plants and a diverse plant community has impacts on all species of life, from fungi to carnivores.



Little but invasive weeds can survive the herbicides used in a clearcut unit

Salvage logging occurs after a fire. The rules for this form of logging are even less restrictive than are the rules that cover clearcutting. There is no acre limit. Clearcutting plans need to leave at least 300 feet between each unit in the plan, although the rules allow those “adjacency” areas to be cut 5 years later.



This unit is from a plan that was filed in 1998. It was photographed in 2009 when a new plan was filed to cut the surrounding areas known as “adjacency units.”

Note the lack of different vegetation species. The tree plantations that replace the grown, diverse forests have none of the diversity and cover that is needed by most forms of life for their survival. Open areas every few hundred feet also increase the temperature and lowers the humidity, making an area more fire-prone.

Salvage logging can occur without interruption over miles of land. It does not even require a timber harvest plan, nor any public review or comment. It is covered by one of the many “exemptions” in the Forest Practice rules. There is no cumulative impact analysis required.



Salvage logging

At times, the timber industry points to Canada, Washington, and Oregon for models of tree growth rates. This is quite misleading though because California's climate is a much hotter and drier, which means that trees grow more slowly. Climate change and less rainfall are making it impossible to rely on past records. In addition, the more northern places are suffering many ill effects also, including water quality issues, loss of diversity of flora and fauna, and plummeting wildlife populations.

Economic Costs

The state of California spends approximately \$18 million a year regulating the timber industry, but receives only a small percentage of that in fees: \$550,000 in 2011. At a legislative hearing in September, 2011, the Legislative Analyst's Office stated that other industries pay the cost of their own regulation; the timber industry is one of the few that does not.

Governor Brown's "solution" to this was to impose a fire tax on rural property owners. This tax does not apply to industrial timberland owners though. The 2012 Ponderosa fire in the Battle Creek watershed burned over 27,000 acres; over 17,000 acres were within the industrial timberland boundaries that had been heavily clearcut. All the homes that burned were on the industrial timberland's edges. The fire suppression cost to the state was about \$34 million. The industrial timberland was 64% of the burned area, yet is required to pay no rural fire tax/fee. A new tax has also been levied on lumber purchased by consumers to pay for the shortfall in the fees collected. So, taxpayers must fund the agency reviews of the timber harvest plans.

Additionally, the public shoulders the environmental costs that are more difficult to ascertain or describe in dollar amounts; the timber companies reap all the profits while paying a fraction of the costs.

The majority of the clearcutting in the state is occurring on private industrial timberland. But these lands are connected to many resources that do not belong to any one owner. Public trust resources that are affected are water resources, wildlife and their habitat, plant communities, carbon storage and release, and local climate.

A recent paper by Barnosky et al. (2012) addresses the approaching shifts in the Earth's biosphere and how that will be caused by changes in both localized ecological systems (bottom up, local-to-global) and top-down (global-to-local) forcings. These forcings occur when thresholds are crossed and "are magnified by the synergistic interaction of seemingly independent processes or through feedback loops.

For example, rapid climate change combined with highly fragmented species ranges can be expected to magnify the potential for ecosystem collapse, and wholesale landscape changes may in turn influence the biology of oceans." The authors also observe: "The plausibility of a planetary 'tipping point' highlights the need to improve biological forecasting by detecting early warning signs of critical transitions on global as well as local scales, and by detecting feedbacks that promote such transitions. It is also necessary to address root causes of how humans are forcing biological changes."

Over 100 years ago, Chief Joseph of the Nez Perce tribe expressed it more succinctly: "All things are connected, like the blood that unites one family."

Jobs

According to the state's Employment Development Department figures, there were 16,226,600 jobs in the state in 2011. Of those, 1,700 were classified as logging jobs. That equals a little more than one-one hundredth of one percent (.01) of the total jobs. The timber industry/government complex focuses on job loss whenever any protections against overcutting are asked for, because they know it is a way to manipulate the public's opinions.

Clearcutting is a labor issue in many ways. Large machines, known as "feller bunchers," replace a crew of 5 or more with 1 lonely machine operator mowing down a 20 acre forest unit in a few days, much like a corn field. The difference is: a cornfield grows back in one year. The replacement of working people with

machines in the woods and in the mills has cost many more jobs than any environmental protections ever have. Because clearcutting employs fewer people, it provides larger profits for the wealthy timber company owners and their upper management levels. Much of the labor is also done by sub-contractors, which allows the companies to avoid paying any benefits or overtime to the workers, and saves the companies the cost of purchase and maintenance of equipment.

Cumulative Effects

The ground-breaking National Environmental Policy Act (“NEPA”) was passed in 1969. The California Environmental Quality Act (“CEQA”) is based on it. The sponsors of NEPA had no doubt of its importance. The legislative history of the time is filled with warnings and reflects the thoughts and feelings that “we cannot continue on this [environmentally destructive] course...for our natural resources are not unlimited.”

Senator Henry Jackson, the prime mover of NEPA, hoped the Act would help avert otherwise inevitable environmental catastrophes. Also in 1969, a Senate committee commented “environmental problems are only dealt with when they reach crisis proportions...Important decisions concerning the use and the shape of man’s future environment continue to be made in small, but steady increments which perpetuate, rather than avoid, the recognized mistakes of previous decades.” The present timber harvest plan process in California has continued to fulfill the prophecy of this statement for the past 15 years by continuing the mistakes of the past.

One of the primary purposes and requirements of both NEPA and CEQA is to analyze and evaluate the cumulative impacts or effects (these terms are used interchangeably) of projects. CEQA’s guidelines define “cumulative impacts” as “two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.” The guidelines go on to say that: “Cumulative impacts can result from individually minor but **collectively significant** projects taking place over a period of time.” This is where one of the main troubles lays, i.e. project after project being cut in the same area with each plan being evaluated as if it were the only one.

This is also where some of the previously mentioned rule "escape clauses" come in. A watershed is defined as "a drainage basin that discharges its surface water through one outlet or mouth." Typically, there are higher ridges on each side of a watershed that serve to direct all the water flows from the seasonal and year-round smaller tributaries to the main stream. But, one of the ways that an honest cumulative impacts analysis of multiple timber harvest plans is avoided is by subdividing a watershed into "subwatersheds" that are delineated by the smaller tributary streams of an area.

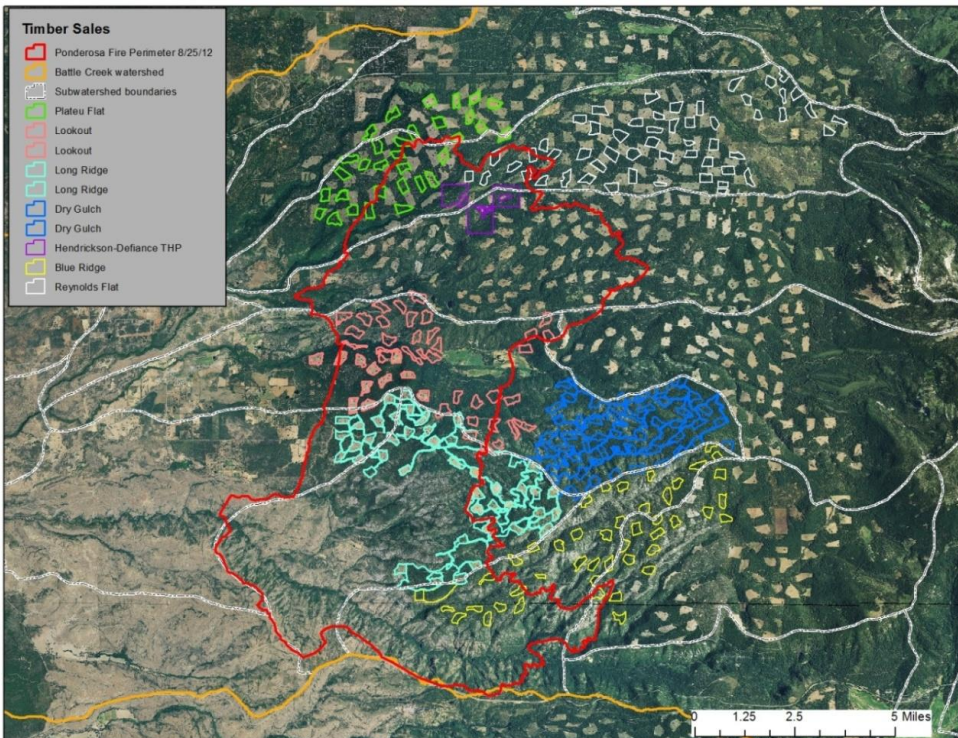
In the Battle Creek watershed there have been plans filed that have units literally across a road from each other with no stream in sight that are said to be in separate watersheds because of this fallacious subwatershed system. The Battle Creek watershed is in two counties, Shasta and Tehama, also.

In one instance, 2 timber harvest plans that were adjacent were filed and approved within several days of each other, cut at the same time and withdrew water from the same creeks to water down the roads (this uses many millions of gallons of water a year). One of the plans was filed as a Shasta County plan and the other was filed as a Tehama county plan. Neither plan mentioned or mapped the other plan and no cumulative impacts analysis of the two plans was conducted.

Many people are familiar with the phrase "death by a thousand cuts" but few know where it came from. It was a form of torture that made death extremely slow and painful by making many small cuts on the victim's body. Each cut was in itself insignificant and survivable, but the cumulative effects of the many cuts eventually overwhelmed the victim's ability to heal and survive. This is exactly what is being done to the watersheds that support all Californian's lives.



The following map details clearcutting in the Battle Creek watershed between 1998 and 2012. Each regularly spaced brown hole is a clearcut of an average size of 20 acres. The darker yellow lines are the watershed boundary. The white lines are the subwatershed delineations. The red line is the boundary of the 27,000 acre fire in 2012. The shapes of various colors are in-process and proposed plans. No analysis of the impact of all of these projects combined has ever been performed, contrary to law.



Conclusion

A forest includes trees, shrubs, vines, grasses, mosses, algae, fungi, insects, birds, mammals, reptiles, amphibians, and microorganisms living on the plants and animals and in the soil. All of these life forms interact with each other and with the soil, water, and minerals. Forests and watersheds are inextricably linked. The one thing that every form of life has in common is that it is dependent on at least one watershed.

Cal Fire is the lead agency that oversees timber harvest plans. It is an extremely rare occurrence for any of the many hundreds of plans filed every year to not be approved. Although many experts, scientists, and public members have been presenting research and knowledge to the contrary, every plan states that it will not have "a significant cumulative effect."

The state's public agencies and government consistently ignore anything that disagrees with the powerful and wealthy timber industry. This willful ignorance and blindness to what is occurring in the watersheds of the state must cease and be replaced by honest efforts to serve the public interest.

The industry and agencies constantly repeat the same line: "California has the strictest rules in the country." That may be true on paper. In practice, there are countless exemptions, loopholes, and lobbyists to defeat those rules.

Everyone in the state is, or will be, paying the costs of this practice to the detriment of all of our shared present and future.

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