



Protect Our Working Woodlands

In Sonoma County, thousands of acres of woodlands and forests - broadly speaking trees - lack legal protections to prevent them from being cut down in large numbers.*

Given the severity of the climate crisis and the power of trees to soften its impact on our community, it is critical that the County take immediate steps to protect our working woodlands from being cut down.

The Scientific Imperative for Trees

Scientists agree, protecting existing forests is the *best* low-cost approach for immediately sequestering large amounts of atmospheric carbon dioxide, ultimately reducing our adverse impacts on the climate:

"With respect to pulling harmful carbon out of the atmosphere, natural forests are by far the most effective." (Lewis et al., 2019).

"Standing forests are the only proven system that can remove and store vast amounts of carbon dioxide from the atmosphere *at the scale necessary* to keep global temperature rise below 1.5 degrees celsius this century. It is therefore essential to not only prevent further emissions from fossil fuels, deforestation, forest degradation, bioenergy, but also to expand our forests' capacity to remove carbon from the atmosphere, and store it long-term." (IPCC, Moomaw, Ph. D. et al. *Intact Forests in the United States: Proforestation Mitigates Climate Change and Serves Greatest Good.* emphasis added).

"Climate science shows that we cannot stop a climate catastrophe without scaling up the protection of forests around the world, including in the United States." Statement from 200 US

based elected officials, organizations, and eminent scientists including 40 mayors, and the Sunrise Movement. (#Stand4Forests)

Effectively Drawing Down Carbon Dioxide

The Intergovernmental Panel on Climate Change estimates we have approximately 10 years to drastically change our activities to avoid critical temperature rise. New technologies are slowly coming that may suck carbon out of the atmosphere, but these are costly, have their own carbon footprints, and pose many social equity concerns. The power of woodlands to do this same work for free is here now, and already in action. Should woodlands be cut down, replanting them results in drastic reduction in our ability to rapidly reduce carbon in our atmospheres within the time scale needed. Protecting our mature trees is the only “technology” we have that can help on a large scale today.

Undercutting the Future of Fires in Our Communities

The fires blowing through our communities are the result of past development models, and we now need new models.

"Technologies for direct Carbon dioxide removal (CDR) from the atmosphere, and bioenergy with carbon capture and storage, are *far from being technologically ready or economically viable.*" (IPCC Moomaw, Masino, et al)

Relying on new tree plantings will not accomplish the tasks before us in a meaningful time frame. New forests do not absorb large amounts of CO2 like mature forests and woodlands. Newly planted forests require many decades to a century before they can do the job of our current mature forests. Fire scientists are telling us that the *best way to protect communities and homes* now from fire is to make the homes themselves ready for these fires by removing all flammable material within five feet of structures and carefully managing the property immediately around the home and out buildings. (Jack Cohen, Ph. D.).

The wind driven fires we have seen are not stopped by thinning or clearing trees out in the wildlands. The fuel that is vulnerable to these embers which are driven by winds across large rivers and freeways, are the flammable materials around homes.

The real work of protecting communities and homes requires fighting climate change as effectively as we know how and leaning into modern fire education and public policy. As the science explains, protecting forests and woodlands in combination with significant reductions of emissions will effectively deliver the balance and security we all seek.

A Modern Science Based Model by Sonoma County

The lands within the borders of Sonoma County have the capacity to grow trees –that many in less nature-rich areas envy. Tree removal, even on a very large scale, unfortunately, continues to be considered appropriate public policy in Sonoma County.

We seek a comprehensive, fair, open, and scientifically based approach to protecting a resource that provides benefits to the community and that is a shared resource for the community.

We are asking the County of Sonoma to:

- Update the County Tree Protection Ordinance, based on the best climate science incorporating input from the community *to that end*;
- Pass an immediate, temporary moratorium on approvals of significant tree clearing in Sonoma County until such time as our Tree Protection Ordinance is updated and reflects the value of trees in climate mitigation;
- Protect trees as a means to protect vulnerable communities from the worst impacts of climate change;
- Protect trees as a way of reducing the worst effects of climate change on vulnerable communities;
- Consideration for cutting trees for important values like for fire safety immediately around homes, defensible community spaces, essential food farming, and very low income housing.

In closing, Sonoma County must do all it can to protect future generations from the devastating effects of climate change. We can do so by embracing the science with respect to the important role trees play in our struggle to rein in greenhouse gases in as rapid a manner as possible and thereby respect the younger generation's right to a habitable planet.

*BACKGROUND

- We estimate that based on available figures, that on average 100+ acres of critically important woodlands are being converted/cut down per year in Sonoma County.
- Scientists tell us that the best way to protect communities and homes is to start at the homes and move outward.
- The wind driven fires we have seen in recent years would not have been stopped by thinning or clearing of forests, evidenced by the fires started by embers that jumped Highway 101.
- Because of the large amounts of carbon mature trees and woodlands absorb from the air and draw down into the soils, the impacts of clearing these woodlands is in direct conflict with our county climate goals. Mature trees and second growth trees are scientifically shown to be among our best carbon sinks.
- In addition, the mature trees and woodlands are key to protecting watershed and water quality.
- Clearing woodlands, from a social equity lens, means we are trading our best tool to fight climate change, which impacts the systemically vulnerable populations more severely than others in society.
- Loss of mature woodlands threatens agriculture disproportionately, as dramatic changes in weather patterns, sea level rise and coastal flooding, and wildfires all pose significant risk and operational challenges to all farmers.