

## **Defending Our Working Woodlands**

Although mature trees, woodlands, and forests (trees) are capable of immediately taking huge amounts of carbon out of our atmosphere at a scale—that in combination with reduced CO2 emissions—can greatly and cheaply mitigate our adverse impacts on the climate in the short time we have left to avoid catastrophic changes to younger generations, thousands of acres of trees are vulnerable and they are being removed, from the landscape under current county land use policies.

The current Sonoma County Tree Ordinance policy (1986) is scientifically outdated and severely undervalues the importance of trees and woodlands to people, to wildlife, and to the critical struggle to reverse the climate crisis.

### **The Scientific Imperative for Trees**

Scientists agree, protecting existing forests is the best low-cost approach for immediately sequestering atmospheric carbon dioxide, ultimately reducing climate change impact:

“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 celcius 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)

### **Drawing Down Carbon — Reductions and Emissions**

While new technologies may be coming that may take carbon out of the atmosphere, we must also use what we know works now. Time is not on our side. The IPCC estimates we have approximately 10 years to drastically change our activities to avoid critical temperature rise.

“Technologies for direct [Carbon dioxide removal] CDR from the atmosphere, and bioenergy with carbon capture and storage (BECCS), are far from being technologically ready or economically viable.” (IPCC scientist -Moomaw, Masino, et al)

Relying on new tree plantings will not accomplish the task, as new forests pale when compared to a mature forests carbon sequestration value. “Newly planted forests require many decades to a century before they sequester carbon dioxide in substantial quantities.” (IPCC).

### **Under Cutting 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.

Continued destruction of the forests occurring here and around the world in combination with vast emissions will continue to make both the climate and fires worse. Removing more trees is not the answer. 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—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 as a whole.

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;
- Recognize the scientific emphasis on preserving mature trees across the board because mature trees and second growth trees are scientifically shown to be among our best carbon sinks;

- Also consider fire safety around homes, defensible community spaces, essential food farming, and very low-income housing as important values;
- Protect trees as a means to protect vulnerable communities from the worst impacts of climate change.

In closing, Sonoma County must do all it can to protect future generations from the devastating effects of climate change. It 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.