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541-500-2331
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Reference Bill Number SB1593-01

Chair Meek and Members of the Senate Committee on Finance and Revenue:

I write as cofacilitator of Southern Oregon Climate Action Now, an organization of some 2,000 Southern Oregonians who are concerned about the climate crisis and encourage state action to address it. As rural Oregonians, we live on the frontlines of the warming, reducing snowpack, heatwaves, drought and the increasing wildfire risk that these trends conspire to produce. Because of this, we pay close attention to what is happening in Salem in terms of legislative proposals. Living in rural Oregon, we are naturally quite aware of and concerned about the problem of wildfire since they have recently wrought havoc and pose a direct risk to us on an almost annual basis. I also write as a member and Co-chair on behalf of the Climate, Energy and environment Team of the Consolidated Oregon Indivisible Network.

I write today to offer our perspective on and support for SB1593-01. Before commenting on the proposal itself I offer a little fire ecology background.

Oregonians live in a Mediterranean-type climate (MTC) where summers are very dry, and winters are wet. This is a very unusual climate, occurring in just a few locations around the globe (e.g., Geodiode undated): around the Mediterranean ocean (of course), western North America (from Washinton down to California), western S. America (especially Chile), western South Africa (around Cape Town), southwestern Australia (around Perth) and South Australia (north of Adelaide). Discussing fire and plant diversification in this climate Rundel et al. (2018) argue: “The onset of MTCs in the middle Miocene brought summer drought, a novel climatic condition, but also a regime of recurrent fire.” They also report the conclusions of Keeley et al. (2012) that: “Mediterranean-type climates with summer drought conditions are conducive to regular fire. The mild wet winter-spring seasons lead to moderate productivity generating broad landscapes of contiguous fuels, and the annual summer drought converts this biomass into available fuels.” I stress this history to underline that fire has been a constant factor influencing the forest ecosystems of Oregon for millennia and certainly throughout the period that our current associations of tree species have occupied the region. As a result, our forests, particularly our dry forests, are fire prone, fire adapted and fire dependent. Ongoing forest health requires recurrent fire. In addition to the impact of climate on fire frequency, Native Americans, who have existed

alongside our western forests essentially for thousands of years, have successfully incorporated into their forest management regimes frequent burning (e.g. Philips 2023).

The recent history of climatic conditions has displayed considerable variability. During the last century, for example, we have experienced fluctuations in the Pacific Decadal Oscillation (PDO). The PDO cycles every several decades between a warm and dry climate inland and a cool moist climate. Not surprisingly, the former phase is likely to stimulate dry vegetation and the spread of wildfires once they

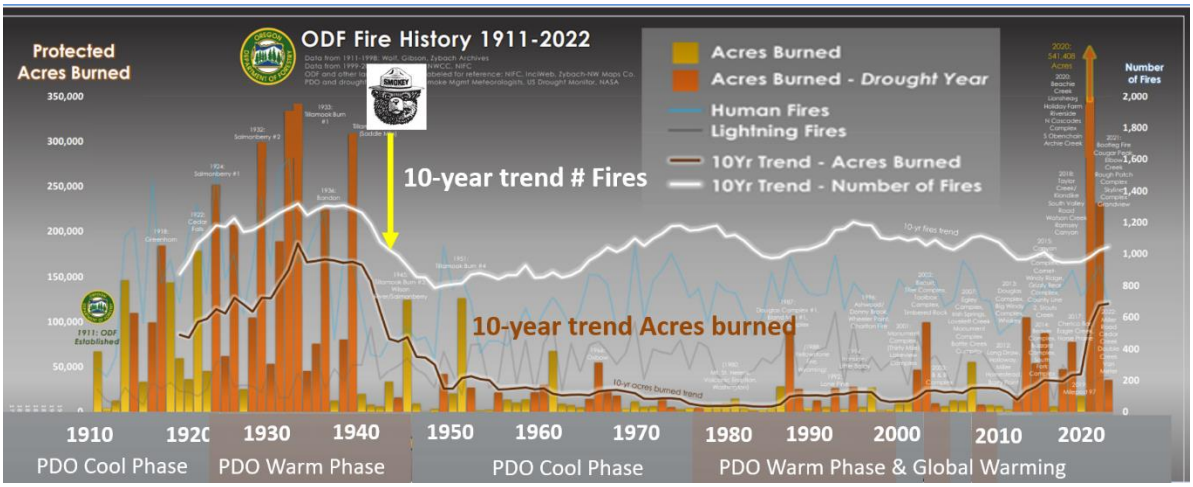


Figure 1. Historical trends in Area burned in relation to the Pacific Decadal Oscillation and wildfire suppression efforts (modified from ODF 2022)

are ignited, while the latter tends to suppress that risk. For example, over a decade ago, Keeton et al. (2007) concluded from 20th century data: "Forest fires showed significant correlations with warm/dry phases of the PDO at regional and state scales…" The Oregon Department of Forestry has been reporting data since 1911 on the area under its fire management burned by wildfire. In recent years, this has been related to the PDO transitions (Figure 1 – modified from ODF 2022).

Many Oregonians are surprised to discover that, with the exception of the remarkable year of 2020, the area annually burned during the early decades of the last century exceeded that burning recently. Note the graph indicates that fire initiations, though variable year-to-year, show no overall trend. Meanwhile, on the other hand, the area burned was clearly greater in the early years of the 20th century than now – with the singular exception of 2020. Note also how the decline in the area burned in the early 1940s coincided both with the transition in the PDO from a warm to a cool phase, and with the launch of the Smokey Bear campaign of fire suppression (added to depict its

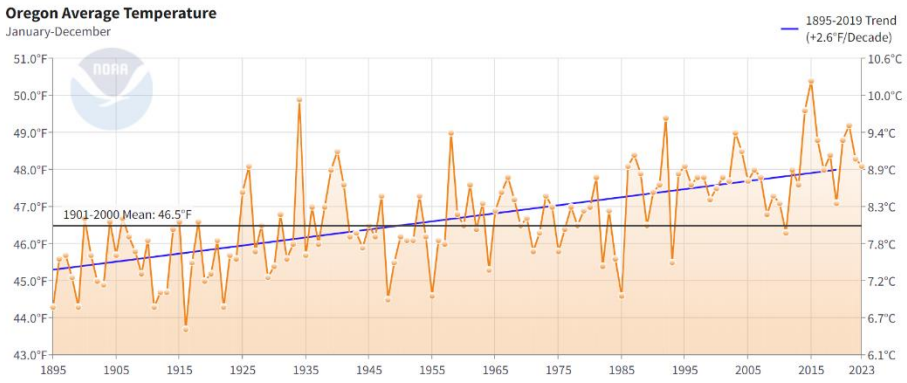


Figure 2. Historical average annual temperature for Oregon 1895-2023 (NOAA 2024).

potential relevance). Then the recent increase in area burned from the late 1980s coincides first with the return of the PDO warm phase but also with the statewide increase in temperature consequent upon global warming (Figure 2) where we can see that the recent warming phase started its upward climb in the mid-1980s and has continued essentially unabated.

One consequence of the successful fire suppression campaign has been an extension in the historic Fire Return Interval (FRI), particularly in our dry forests. The FRI in the Southwest historically ranged from single digits to the low teens (e.g., Metlen et al. 2018). With successful fire suppression, the FRI has lengthened substantially. This has resulted in the invasion into the forests of fire intolerant species (Zouhar et al. 2008) and an increased density of vegetation serving as fuel for fires once ignited (e.g., Philips 2023). Thus, we can reasonably infer that the data on the area burned display a correlation with both climatic shifts and human fire suppression efforts. While correlations don't necessarily imply cause and effect, it seems reasonable to infer that climate and fire suppression have been implicated in the increase in area burned over the last few decades. Interestingly, these trends, notably climate and fire suppression influencing fire risk, are not restricted to the Mediterranean climate of the western United States but are described elsewhere, for example in the Appalachian forests (Reilly et al. 2022).

The patterns described above are compounded by current climate projections available from the USGS (Alder and Hostettler 2013). These projections rely on the latest Intergovernmental Panel on Climate Change scenarios (IPCC 2023) involving an array of Shared Socioeconomic Pathways (SSPs) that depict different future human behaviors and their atmospheric and climate consequences. In these USGS graphs, the blue lines and shading represent the SSP 4.5 scenario, the orange line and shading represent the SSP7.0 scenario and the red line and scenario represent the SSP 8.5 scenario. These are discussed by Hausfather (2019). Schaumann (2022), meanwhile, states "RCP-8.5 is not only the arguably most popular climate change scenario, but is also often framed in a very specific manner: as the business-as-usual trajectory that humanity is on if no climate change policies are adopted." Since managing climate change comprises risk management, it seems rational to focus on what may be the most serious outcome which is reflected in the 8.5 future.

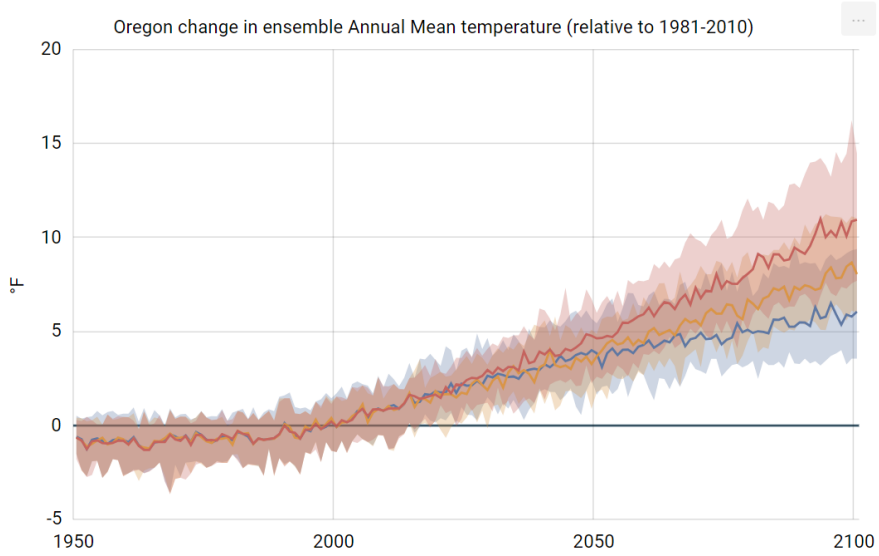


Figure 3. USGS modeled projections of annual temperature change trend relative to the 1981-2010 average this century for Oregon under three Shared Socioeconomic Pathway scenarios. (Alder and Hostetler, 2013).

If Oregon follows the temperature trend consistent with the recent past (Figure 3), by the end of the century, annual temperatures will likely climb over 10°F (about 6°C) above the

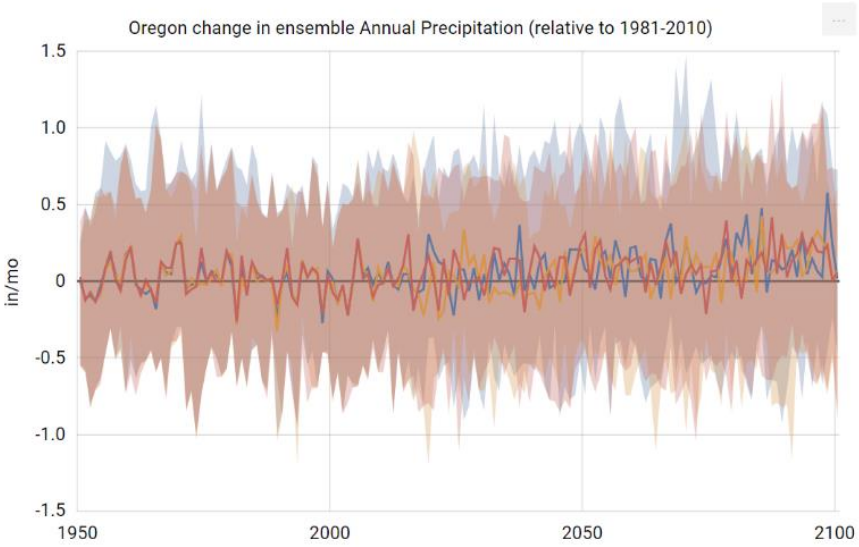


Figure 4. USGS modeled projections of annual precipitation change trend relative to the 1981-2010 average this century for Oregon under three Shared Socioeconomic Pathway scenarios. (Alder and Hostetler, 2013).

1981-2010 average. The same source indicates that the projected trend of increasing temperature is greater during summer months than winter months.

The same USGS source (Alder and Hostettler 2013) provides projections that suggest average annual precipitation will change little (Figure 4) although seasonal patterns are different: winters will likely exhibit a slight increase in precipitation while summers will likely exhibit a slight decrease. As a result, we can expect the very conditions (increasing temperature and decreasing water availability during summer and fall) stimulating wildfire spread will become more severe. A decade ago, Marlon et al. (2012) reported on the historical relationship between climate and areas burned by wildfires over several thousand years. They concluded that the western U.S. is already currently experiencing a substantial fire deficit, meaning that according to climatic patterns, the area burned should currently be much greater than it is. Presumably, the projected climate trends will only exacerbate this fire deficit, creating conditions where even greater risk of megafires can be expected.

This leads to the critical question of what we should do to address and manage this wildfire problem. There is no magic bullet. However, history and evidence tell us that management that simply suppresses and extinguishes all fires, rather than management that recognizes the need for fires in our forests, is doomed to failure. Rather than develop management plans that simply increase our susceptibility to fires spreading once initiated, we need to develop plans that both manage fires once initiated and include prescribed fires that simulate the historic pattern and thus promote healthy forests. This illustrates the problem of unintended consequences. While there is no doubt that Oregonians have recently suffered much from the smoke and disastrous loss that have resulted from fire, it is critical that those making decisions on policy and funding acknowledge the fire ecology of our forests and respond appropriately.

It is also worth recognizing a commonly voiced and false opinion (e.g., VBC 2022) that many Oregonians maintain is that most destructive wildfires start on public rather than private land. However, in the western United States, fires that cross ownership boundaries (so-called cross boundary fires) more frequently originate on privately owned land and cross onto USFS lands than the reverse (Downing et al. 2022). Lunderberg (2022) summarized these findings with the conclusion: “Of all ignitions that crossed jurisdictional boundaries, a little more than 60% originated on private property, and 28% ignited on national forests. Most of the fires started due to human activity.” Lundquist (2022) summarized the

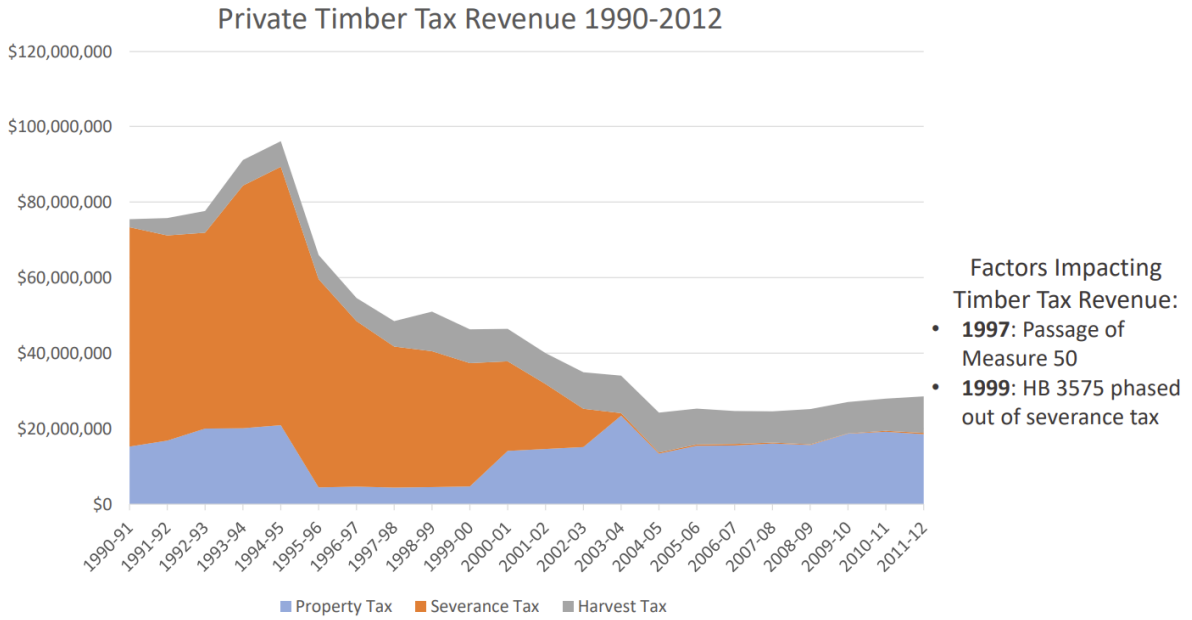
same study by stating: “The data showed that ignitions on Forest Service land resulted in fewer than 25% of the most destructive wildfires – those causing the loss of more than 50 structures.”

Given this context, we offer the following comments on SB1593:

There can be little doubt among Oregonians that wildfires are a problem. Data from forests managed by the Oregon Department of Forestry (Figure 1 above) should be sufficient to demonstrate this. Although, as noted previously, 2020 was an extreme case and fires a century ago burned greater areas than recently, the evidence suggests that, though not consistent or inevitable, the last decade has seen an increase in area burned compared to several decades ago. During the 2021-23 biennium, the problem was recognized by the legislature which then passed SB762 committing $200 million to addressing the wildfire problem. Regrettably, this allocation has not been maintained, thus starving Oregonians of the funds needed to address the wildfire problem. Given that there is a need for funds to address the problem, the question becomes: from where should these funds come?

The current debate regarding the source of the funds to address the wildfire problem presents us with a choice between raising the funds from all Oregonians or from those landowners engaged in forestry and ranching who benefit directly from the Oregon Department of Forestry firefighting activities.

Taxes raised from timber fall into several categories: ***Privilege*** taxes comprise a charge for the privilege of harvesting timber in Oregon with revenue distributed to local counties (LRO 2012) , the rate being charged per thousand board feet of timber harvested. The ***Timber Harvest*** tax is another tax also imposed per thousand board feet with revenues assigned quarterly to administering the Forest Practices Act, Forestry Research at OSU, Oregon Forestland protection Fund, Oregon Forest Resources Institute (ODOR undated). ***Severance*** taxes were imposed on the value of harvested timber in eastern Oregon in 1966 and western Oregon in 1972 with revenue distributed to local taxation districts to replace property taxes (LRO 2012). Prior to the phase out of the Severance tax, Oregon’s timber counties received



Figures 5. History of timber tax revenue 1990-2012 (Holvey 2021).

substantial income for county services from this tax. Finally, specifically to fund fire protection, Oregon established an ***acreage assessment*** in 1973 (Rocco and Hill 2016) whereby landowners are charged a "pro rata share per acre for fire protection based on the number of acres they own within a specific fire district."

Holvey (2021) produced a graph (Figure 5) illustrating the history of timber tax revenue from 1990 – 2012. As a result of abolishing the Severance tax in 1999, generated revenue dwindled, disappearing completely by 2003-2004. However, as ODOR (2015) states, a small tract forest severance tax (STF) is in place, with fees indexed to reflect changes in forestland values. The STF was established in 2003 (LRO 2012) with revenues distributed to the state school fund, community college fund and the counties. Presumably because of different forestland values, the 19 western counties are taxed at a different rate from the 17 eastern counties (ODOR 2015).

Green (2018) reported the findings of Chuck Willer of the Coast Range Association that: "Oregon's west-side county governments are collecting 85 percent less in tax revenue from private timber companies than they were in the early 1990s, while logging on private lands has remained largely unchanged." Younes and Schick (2020) reported that Oregon's western counties (Multnomah was excluded) lost $2.3 billion between 1991 and 2019 as a result of the Severance tax being abolished. Incidentally, these counties also lost $3.5 billion from diminished Federal payments resulting from reduced payments to counties as revenue from timber sales on federal lands, and subsidy payments made as federal logging levels declined.

Additionally, in an assessment of proposals before the Oregon legislature in the current session Baumhardt (2024) reported that taxes collected from timber harvest in Oregon (in 2018) were approximately half those imposed in the state of Washington.

The evidence indicates clearly that revenues from the harvest of timber in Oregon are lower than Washington state and haves declined since the Severance tax was repealed. This has been profoundly detrimental to the counties where timber revenue has been important.

We applaud the principle embedded in the bill that exempts small landowners harvesting and selling under 25,000 board feet. While we may not always be thrilled by actions undertaken by the Oregon Department of Forestry, we certainly acknowledge the benefit of funding that agency. Given the increasing risk that Oregonians face from wildfire, we also support funding efforts to reduce the risk faced by individual Oregonians. Since the evidence demonstrating the immense loss of revenue suffered by rural timber counties, and the consequent threat to community services, we endorse the principle that a substantial proportion of the revenue generated from a Severance tax should be allocated to the counties.

We are mindful that there is an increasing trend towards Oregon private forests not being owned by regional individuals or even regional corporations but by Timber Investment Management Organizations (TIMOs) and Real Estate Investment Trusts (REITs). In many cases these are not even based in Oregon and view our forests as merely resources to be exploited for maximizing shareholder profits (e.g., Latter 2023, Schick et al. 2020, Hickman 2020, Coast Range 2024). Latter (2023) pointed out that Weyerhaeuser, the largest forest owner in western Oregon is a REIT while Coast Range (2024) assessed the proportion of the 4.4 million acres of Western Oregon private forest land owned by REITs or TIMOs

as 62%. We argue that Oregon's forests should be managed to counter the climate crisis, and in the service of Oregonians not distant shareholders who are concerned only about short-term profits.

For these reasons, we appreciate the principles that (a) the tax rate should rise with increasing acreage, and (b) landowners managing their forests according to Forest Stewardship Council principles should be awarded a tax break.

We support SB1593 with and without amendment -01. While we would prefer a hastier adoption of the principles embedded in SB1593 than will be permitted by establishing a study, we recognize that procedural limitations may make this the best option for moving the concept forward.

Respectfully Submitted

Alan Journet

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