



Southern Oregon Climate Action Now

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Confronting Climate Change

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Representative Ken Helm

Chair, Oregon House Committee on Energy and Environment

Members of the Committee on Energy and Environment

Senator Michael Dembrow

Chair Oregon Senate Committee on Environment and Natural Resources

Members of the Committee on Environment and Natural Resources

I hereby submit testimony in support of action on the Clean Energy Jobs Bills. I do so both personally and on behalf of the 1200 Southern Oregonians who are Southern Oregon Climate Action Now.

In 2010, I relocated to Southern Oregon from the Midwest and quickly decided that I had fallen upon a natural paradise, a corner of the planet that is beautiful and deserves protecting.

However, this corner, like the rest of the state, is under severe threat from global warming and its climate change consequences. The major threats are warming, drought, reducing snowpack, and increased wildfire risk - all of which result from the climate chaos we are imposing on our planet.

Having spent 30 years in Southeast Missouri teaching university biology, especially ecology, I became aware of the projections emerging from climate science. In examining these

projections in relation to the climatic factors that determine the distribution of natural ecosystems (forests, grassland, deserts, savannas, tundra etc.), I realized that should the projections actually occur, natural systems across the planet would be jeopardized. Realizing, also, that our agriculture, forestry, and fisheries are dependent on exactly the climate factors that were being projected to shift in alarming directions and at alarming speeds, I realized that humanity itself was in equal jeopardy.

As a result, I spent considerable time exploring the science behind the projections and concluded that it was credible. Furthermore, the credibility of this science has only increased since then. Indeed, we long ago reached a point where 97% of climate scientists agree that the planet is warming and human induced emissions of greenhouse gases are largely responsible. Although there remain a few individuals who reject the consensus climate science, any reasonable understanding of the scientific process tells us there is little doubt that the consensus is accurate. Coming from a scientific background, I can testify to the fact that a 97% agreement represents as high an agreement as one is likely to find on any scientific issue. Indeed, to reject this consensus, is as reasonable as claiming the Earth is flat.

The cost ... of our inaction is way more severe than the cost of action.

Beyond mere acceptance of the climate science consensus, it is critical to appreciate that current analyses tell us the climate trajectory we are following represents not only the 'Business as Usual' scenario of continued accelerating fossil fuel use and accelerating emissions, but that this is the 'worst case scenario' for our future from among the array of model projections available. When we compare actual patterns in, for example, global temperature trends, sea level rise, and Arctic polar sea ice extent at the annual minimum, we find the actual trends are at or more severe than the projections suggested they would be at this time. In other words, the global climate trends are as serious or more serious than the models suggest. The message is clear; we face an urgent and immediate climate crisis, and have no time left to delay our response.

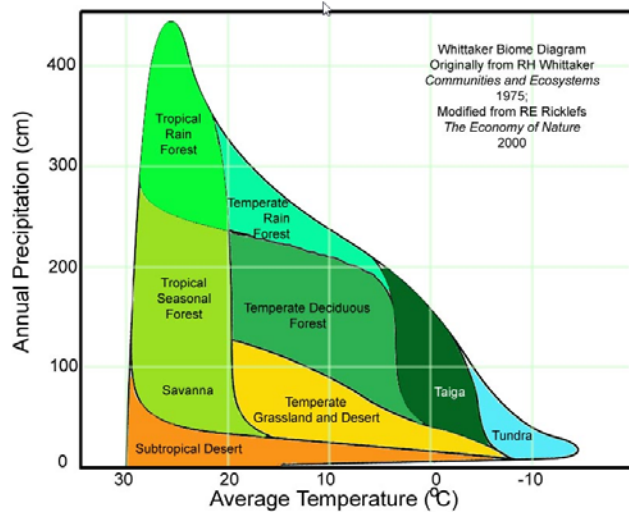


Figure 1. Whittaker Chart Depicting Biome Distribution in Relation to Annual Temperature and Precipitation.

I recognize that there are those lacking a biological understanding who don't consider the current trajectory as serious or alarming as indicated above. However, it is my expertise in this area that has informed me of the severity of our plight. A quick look at the factors that determine the distribution of our major global biomes (Figure 1) reveals the evidence. This chart demonstrates how dependent are our natural systems (biomes) on mean annual temperature and precipitation. It should be evident to even the most casual observer that a shift of 5°C (well within the range

possible by the end of this century) could result in the elimination of biomes from their current location and the shift in environmental conditions such that another biome could take its place, if that alternative system were nearby and had the capacity to disperse into the region.

Unfortunately, due to the rapidity with which climate is changing, far faster than at any time in human history if not geological history, and the presence of human infrastructure (cities and agricultural lands, for example) the ability of natural systems to relocate is compromised. Thus, rather than resulting in a shift of biological systems from one type to another, these climate disruptions may simply result in the elimination of the biomes currently present.

What we must realize is that these biomes are the home to our native biodiversity. If we compromise the biomes we are threatening species existence across the planet. This is why we currently face the sixth mass extinction in the history of life on the planet. This extinction is an anthropogenic (human-caused) event, not a 'natural' circumstance beyond our control.

Furthermore, if the threat to natural biodiversity is not itself cause for alarm, we should recall that the health of our agricultural, forestry and fisheries systems are dependent on exactly the same factors. Thus, if we compromise our natural systems and biodiversity, we also compromise our food and fiber support systems.

The above explanation is why thoughtful biologists are among the most alarmed at the plight in which we currently find ourselves, and are among those most vocal in urging immediate and urgent action. The reality is that if we do not act rapidly to minimize the climatic trends underway, humanity faces serious hardship. The cost for our children and grandchildren of our inaction is way more severe than the cost of action.

Oregon should lead by example.

There is no doubt that this problem demands a massive national and international commitment. Fortunately, we have the Paris Agreement of 2015 which is supported by every nation on the planet except the United States which is being removed from the Agreement by the current administration aided and abetted by Congress. Thus, we have the international commitment we need. What we lack is a national commitment from the United States. Regrettably, one party in Congress, acting in support of the Executive, has determined that the conclusions offered by climate scientists are not conducive to their political philosophy. They thus reject the science and suppress efforts to address the cause of the climate chaos. In the absence of federal action, the responsibility falls to more local jurisdictions throughout the country to take appropriate action. To date, ten states in the U.S. have enacted policies that limit the emissions of greenhouse gases (carbon dioxide, methane, nitrous oxide and other gases) which are the indisputable cause of the plight in which we find ourselves.

If we wish to protect our corner of paradise from the consequences of global warming and its climate change impact, we cannot assume that other jurisdictions will take care of us. Certainly, the total emissions from Oregon are but a small proportion of those from the U.S., and an even smaller proportion of emissions across the planet. However, unless we take action ourselves, we forfeit the right to ask or urge other jurisdictions to take action. We need to address this problem, and we need to address it NOW, not tomorrow, and not next year.

In response to the evidence of what we need to do, there are those who demur, there are those who argue Oregon should not act to reduce its emissions. They offer various questionable claims to support their argument for inaction. However, by looking at what has occurred in other states that have enacted some form of cap on greenhouse gas emissions, we can test their claims:

We can see that economic stagnation does not befall states enacting a cap on emissions. Indeed, the data are clear, economic growth in those states imposing a cap is greater than in the remaining forty states without a cap. Capping emissions is thus a recipe for economic growth not a barrier to it.

We can see that consumer utility bills do not rise as a result of a cap on emissions.

We can see that fuel costs do not rise as a result of placing a cap on emissions. Indeed, in most states with a cap, gasoline prices have fallen - indicating that other factors besides emissions controls dictate gasoline prices.

There are those who consistently argue against regulations and accuse proponents of this proposal of simply wanting to generate more government regulations and more government income. In contrast, there is probably not one person promoting this proposal who would not prefer to see us achieve our necessary goals through voluntary efforts. Unfortunately, Oregon has had voluntary goals in effect for a decade. The data on statewide emissions published by

our DEQ indicate clearly that we are not on a trajectory to achieve those goals. Voluntary efforts have failed! Some entities in the leading emissions sectors may have considered reducing their emissions, but it is very difficult - in an economic system that rewards externalizing pollution costs - for businesses to compete on a playing field where others can benefit economically from polluting. It's time Oregon levelled the playing field.

While no complex effort such as this is likely to be perfect at its initial implementation, Oregon has been working on the current proposal for many years, approaching a decade in fact. Furthermore, this proposal is modeled on programs in other states that are successful at both reining in emissions and supporting economic growth. The program may not be perfect, but flaws can be addressed in rule-making and subsequent tweaking of the policies and procedures enacted. Indeed, the advisory committee structure in the program is designed to be receptive to receiving and considering such adjustments.

If I were to argue that I should not be required to pay my taxes because my contribution is such a small proportion of the state or federal budget, and doing so imposes on me an unreasonable hardship, I would not fair well in the courts. Thus, Oregon should commit itself to doing its part to address the problem of global greenhouse gas emissions. Our state should not continue to be part of the problem; we should contribute to the solution. Oregon should lead by example.

We urge the Oregon Legislature to support a Clean Energy Jobs proposal

Sincerely,

A handwritten signature in black ink, reading "Alan R.P. Journet". The signature is written in a cursive, flowing style.

Alan R.P. Journet Ph.D.