

OPINIONS

Rogue climate trends and projections

BY ALAN R.P. JOURNET

The livelihood of many Applegate Valley residents is dependent on climate and planning for it. Although we often anticipate seasonal weather expectations from past averages, no longer are past averages helpful. What we now must consider are past trends and follow them into the future.

Local climate trends are available from the National Oceanic and Atmospheric Administration (NOAA) using Medford data comparing mid-century (1930-1980) to late-century (1981-2010) averages. Additionally, data from the US Forest Service in Corvallis, used in a report by Doppelt (2008) covering the Rogue Basin, offer regional trends and projections.

Trends

The most obvious first issue is temperature. During the last century the average Rogue Basin temperature rose about 1.2 degrees while Medford, from mid to late century, rose 1.4 degrees with the average maximum and minimum temperatures rising 1.2 and 1.6 degrees, respectively. Meanwhile, the number of record low temperature days dropped substantially as that for record high days rose. As many probably already appreciate, from mid-century to late century Medford experienced increases in growing season (11.5 percent), frost-free days (8 percent), and freeze-free days (4.6 percent).

Precipitation, another important variable, exhibited an annual drop in Medford of 1.1 percent mid to late century, while in the Rogue Basin, including higher elevations, precipitation rose nearly one inch during the last century. Additionally, during the last century, precipitation patterns adjusted with rainfall occurring in heavier flood-inducing downpours rather than the kinder gentler rain that replenishes soil moisture. Snowfall is important locally since melting snow provides irrigation water during our dry summers. The trend at Crater Lake has been a drop in snowpack of 25 percent from the 1930s to this century, while in the Siskiyou of Northern California snowfall has dropped 11 percent since the 1950s. Medford snowfall also dropped—over 50 percent between mid and late century. With less snowpack and earlier snowmelt, peak river flow is earlier and lower.

Throughout the west, the wildfire season has expanded some two and a half months since 1970. NOAA's Regional Data Center shows Oregon suffering from

dry to drought conditions. Southwest Oregon experienced less than 50 percent "normal" precipitation for the last six months, while 2013 was the driest year on record for most of the region. Notably, reduced January to May precipitation will contribute substantially to the severity of the forthcoming fire season.

Projections

Assuming we continue the current gas emission trend, projections indicate an average annual regional temperature rise of over eight degrees possible by 2075-2085, with summer climbing nearly 12 degrees and August possibly 17 degrees.

Precipitation projections for the region suggest that, by late century, the summer growing season will be drier than historically, while winters might be a little wetter, and fall and spring will change little. Snowpack accumulation is projected to continue dwindling, possibly to 10 percent of the historical level by late century. The projection for stream flow is a shift to even earlier in the season with reduced flow, compromising irrigation needs exactly when greatest—in late summer and early fall.

As summers warm, lower precipitation suggests increased evapotranspiration (loss of water from the soil both by evaporation from the surface and by transpiration from the plants growing thereon) with increased drought and wildfire. As warming continues and spring arrives earlier, wildfires in Oregon will likely consume between three and five times more land area by mid-century.

These projections are not mere opinion, but represent continuations of the trends we have been seeing for many decades. They are based on a solid understanding of the physical properties of components of our planet and how they interact.

Continued "business as usual" will likely devastate our natural and agricultural systems along with our forests and fish populations. We must ask whether we are prepared to let this happen. Should we let burning fossil fuels compromise the livability of this region and planet for future generations or should we take steps to avoid that outcome? Our commitment and collaborative action alone will divert the trends.

Alan R.P. Journet, Co-facilitator
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Introducing 'For Love of the Applegate'

A new focal point for our valley, For Love of the Applegate, aims to foster and enrich community spirit by knitting nonprofit organizations together to disseminate information about happenings in the valley as often as possible. Our intentions are to build a stronger rural community by enhancing communication, thereby enriching quality of life and a sense of belonging. Our primary values are love of community, cooperation, compassion, creativity and ecological balance.

We have reached out to over 20 nonprofit organizations, receiving loads of encouragement, excitement and acceptance. Though our website, forloveoftheapplegate.com, is still in progress, eventually it will offer up-to-date information about "What's goin' on in the Valley." We invite you to visit us there, to learn more about these organizations engaged in making a positive difference in our valley and the numerous opportunities to get involved, get to know each other better, and have some fun!

We are likely not aware of every local nonprofit community organization. So in case we have inadvertently missed yours, please contact us at our email address: forloveoftheapplegate@gmail.com.

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The Josephine County ballot initiative to end government and corporate pesticide use

BY DARYL JACKSON

In 1995 Josephine County put herbicides on the ballot. All the rural voting precincts—like Williams, Wolf Creek, Selma and Cave Junction—voted to end the use of herbicides by Josephine County Public Works/Road Department. The only reason the initiative did not pass was because Grants Pass residents, who did not "have a horse in the race," voted it down because herbicides are not applied by the county within city limits. Regardless, the vote count was very close.

Almost 20 years have passed since that epic vote and the issues have changed—massively. Since that date literally tons of toxic chemicals have been applied by the county and, to make matters worse, private forestland industrial pesticide application has grown exponentially. We are being systematically poisoned from the top of our watersheds to the valley floor.

Example

Between 60 and 80 million pounds of atrazine is applied in America each year. Atrazine is a common component of the suite of herbicides sprayed on Josephine County forests. It has been proven to be one of the most toxic chemicals ever created by man. One of its most shocking and insidious effects is the "transgender" inducing process where the offspring of parents, having been sprayed, exhibit sex organs of the opposite sex growing in their bodies. The effect persists in generations that have not been sprayed. Entire nations have banned its use. It has been proven to be an endocrine disrupter and causes miscarriages, sexual development disorders, cancer, retinal damage, muscle wasting in humans and hermaphroditism in frogs. It is banned in most of Europe for groundwater

contamination.

Change is long overdue. *Whether or not you agree or disagree about the potential for toxicity*, as a citizen of this county, state, nation and planet, you should be alarmed that any entity has the ability to dump any chemicals on you without your permission or knowledge. This is known as chemical trespass. Trespass in any form is a violation of human rights. Being trespassed upon with toxic chemicals is especially insidious. Trespassing on nature is also a violation of an inalienable right.

The petition to place the initiative on the ballot is the beginning of an exciting and ground-breaking new campaign to assert our right to be free from pesticides. Written by a diverse group of local citizens right here in Josephine County, Oregon, the Freedom from Pesticides Bill of Rights codifies that right of the people in Josephine County—as well as the right of the natural community—to be free from trespass of chemicals associated with pesticide use. Towards this end, the initiative would prohibit corporations and government entities from using or applying pesticides within the county.

Public meetings to introduce the petition and ballot initiative will take place at locations throughout Josephine County, *the first in Selma and Williams in February closely followed by other events throughout Josephine County*. Look for meeting notices and the petition to put the NOSPRAY initiative on the November ballot, and visit freedomfrompesticidesalliance.org for more information.

Daryl Jackson, Staff Biologist
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Memories of the Applegate Store

It was about thirty years ago that I moved out to the Applegate. For the first twenty years I seldom missed my morning coffee at the Applegate store. At about seven AM I joined a group of Applegaters who had probably been going there since time immemorial.

I remember when things were a lot different... a lot more rustic. There was a pot-bellied stove in the corner and it was long before Scott put up his wonderful woodwork, before the booths were installedand when half the store was devoted to hardware.

I remember when Meghan and Emily would wait inside for the school bus. They're all grown up now.

I was there the day the kitchen stove exploded and Jim Wendt and I pulled Peggy out and doused the fire.

I was there the morning we heard that Tuffy was in intensive care after rolling his tractor. Someone lightened the mood by saying "He'll be OK. They'll have to drive a stake through his heart to kill him." I was there the day we heard that Tim Hoffman had hung himself in his front yard.

There aren't many who remember those days. So many have passed away: Brownie, Jasper, Bill Macy, my friend and neighbor, Max Butcher, Ralph Hendrickson, Betty, Kay, and one of my favorites, Gregg Yamada. Given some time, I could probably come up with several others. All gone.

I moved away from the Applegate store almost ten years ago. I miss it. I'd like to go back but it wouldn't be the same.

Too many ghosts.
Too many strangers.
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