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Opinion

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Our View

A fanciful climate change challenge

ast week President Joe Biden announced a goal to reduce U.S. greenhouse emissions by 50% of 2005 levels by 2030.

His goals nearly double the emission cuts agreed to in 2015 by President Barack Obama in the Paris Climate Agreement. The president offered only a broad outline on how this would be accomplished.

The impacts and the costs would be staggering. To meet these goals would require producing all of the nation's electricity by carbon-free sources, rebuilding the power grid and radically changing the transportation system. All in nine years to help the world limit global temperature increases to no more than 1.5 degrees Celsius.

No one can say exactly how much it will cost and what the specific impacts will be on the lives and livelihoods of everyday Americans. The president



says his plan will create hundreds of thousands of new, high-paying jobs as hundreds of thousands of existing iobs will end.

Presidents of both parties are famous for over promising benefits and soft-peddling suffering. We would be surprised if this was the exception.

What about agriculture?

According to the Environmental Protection Agency, agriculture is responsible for 10% of U.S. greenhouse gas emissions. Plowing, planting, harvesting and transporting crops to market are all powered by fossil fuels.

Conventional machinery would likely continue in use for years, but would eventually have to give way to electric versions. The major manufacturers are touting R&D to build production-size electric tractors. One John Deere prototype plugs into the on-farm power supply through a 3,000-foot cable fed from a reel mounted on the front

There are some electric utility tractors on the market, but we couldn't find any over 100 horsepower available for sale, let alone an electric combine. When they do come, we've read that they could cost twice the price of a diesel equivalent.

Farmers could find it more attractive to lease their land for solar and wind energy production. If the administration excludes nuclear power, it will take a lot of ground to replace the electricity generated by fossil fuels. We've seen estimates of 11 million to 15 million acres, but it would take much more to supply all the things now powered by fossil fuels.

It's also possible that farmers would

have opportunities to produce crops for increased biofuel production. But the energy required to process and transport biofuels reduces the benefits and make them unpopular among climate activists.

But the Biden plan is fanciful, a technological possibility with low political probability.

Without Congress, the president can't commit the country to such a goal. Thankfully, we don't think Congress will be that aggressive once the cost estimates start rolling in and the impacts on constituents are known.

We have to ask if it's worth upending the U.S. economy and dramatically altering just about everything for reducing global temperature increases by less than a tenth of the goal. We'd feel a bit better if China and India, the real polluters, were also sacrificing their economies to the effort.



A female member of the Wenaha Pack in northern Wallowa County, Ore.

Oregon's wolves are fine ranchers not so much

Occasional tillage and herbicide resistance

in 2011, I attended the Fourth International Crop Science Congress in Brisbane, Queensland, Australia. I listened to a presentation by Dr. Stephen Powles, University of Western Australia, now retired. Dr. Powles is still considered the international guru on herbicide resistance.

Australia has some of the most serious herbicide resistance issues in the world. I was struck by a statement he made concerning tillage. He said, "I tell all of my no-tillers that what they need is a little bit of tillage, and I tell all of my tillers what they need is a little bit of no-till." The basic concept being that occasionally you need to change what you are doing to prevent or slow down the shift in weed species or populations that occurs anytime



sional tillage performance." While they stated that more research is needed to better target and optimize occasional tillage options, they found that "occasional tillage one in 5-10 years has limited or no effects on soil ecosystem services while reducing compaction and stratification, and aiding

weed control as part of integrated weed management." When I was at the Univer-

sity of Nebraska-Lincoln, I had the opportunity to work with Dr. John Doran, USDA-ARS, who is considered by many to be the father of "soil health." He was among the first soil scientists to try and quantify soil health. We collaborated on a study to look at occasional tillage effects on downy brome control and soil quality in a winter wheat-fallow rotation. He told me that soil that is healthy will quickly recover from an occasional tillage operation, but soil that is in poor health, possibly as the result of frequent tillage, will struggle to recover from the damage caused by additional tillage. While every situation is different, I believe that occasional tillage in an otherwise no-till system can be an effective tool in the management of herbicide-resistant weeds. What type of tillage, and when and how frequently to use it, are questions that still need to be answered. The answers probably vary widely by cropping system, soil type, and location. Growers who till frequently can also improve their weed management by introducing a year or two of no-till into their cropping systems. The weed species that thrive in tilled systems (annual broadleaf weeds) are often different than the weed species that thrive in no-till systems (annual grass weeds and perennial weeds). By occasionally changing tillage practices, you can keep any one weed species or biotype from dominating and creating problems for your farming operation. Tillage is only one aspect of an integrated weed management system, but its occasional use for specific weed management objectives can be helpful. Drew Lyon is the endowed chair in small grains extension and research for weed science at Washington State University.

GUES

The good news is the wolf population continues to grow and spread across Oregon. The population grew 9.5% last year to at least 173 wolves in 22 packs. In 2019, the population grew 15%, according to the department.

The bad news is ranchers — particularly those in Klamath County — struggle as wolves continue to attack their livestock at will.

That's the short version of the Oregon Department of Fish and Wildlife 2020 wolf report, which was issued last week.

Of particular concern to ranchers are the continued attacks on livestock. Despite ranchers' use of non-lethal means in attempts to keep their livestock safe, state biologists confirmed 31 attacks last year.

Even more troubling: the three wolves in the Rogue Pack were responsible for more than half of those attacks, killing 16 yearling cows in Klamath and Jackson counties.

That's in spite of the fact that biologists and staff from ODFW, USDA Wildlife Services and the U.S. Fish and Wildlife Service spent 99 nights last

year trying to keep Rogue Pack wolves away from livestock using non-lethal means.

This is the second straight year that the number of confirmed depredations in Klamath County due to the Rogue Pack has exceeded all other depredations elsewhere in the state, according to ODFW.

Statewide, wildlife managers did not remove any of the problem wolves, though a rancher did legally shoot one as it attacked his livestock. Four other wolves were illegally killed.

Meanwhile, the state paid \$30,609 to ranchers who had dead, injured or missing livestock and spent \$217,000 on non-lethal preventive measures trying to keep wolves away from cattle.

What's apparent in reading this report is wolves in Oregon need to be better managed. In Klamath, Jackson, Baker, Union and Umatilla counties, they continue to cost ranchers — and the state — many thousands of dollars with no resolution of the problems they cause.

The wolf population has clearly reached a critical mass. The time has come to remove the small minority of wolves that create the vast majority of problems.

READERS' VIEW

Investing in our future

The landscape of northeast Oregon has changed significantly over the past century and a half. Myself and my family have borne witness to much of it. From the railroad to the state highway, hydroelectric dams and their distribution infrastructure to mechanization and computers. Change is ever present.

As a sixth generation farmer/ rancher I often lament of the world today and how best to move forward. I look at where we have been and what direction, as

a productive contributing member of society, I should go and teach my children to head. We live in uncertain times, from climate change and economic crashes to the pandemic and riots. Certainty seems fleeting.

We, however, are still tasked with guiding change in the attempt to maximize holistic benefit. Idaho Congressman Mike Simpson is proposing a change of gargantuan proportion in the lower reaches of the Snake River watershed. This proposal is unique to my knowledge in that it attempts to encompass and mitigate all aspects of change in relation to the breaching of the lower

Snake River dams. From ecological and environmental to industry, agriculture, energy and recreation. This plan covers all of the bases.

Farmers, ranchers and the tribes have made considerable progress improving ecological conditions for salmon and their habitat in Wallowa County. But the success of these measures is dependent on improving conditions in the Snake River, which requires action at the federal level. With change comes opportunity, and Simpson's plan creates opportunities for farmers, fish and the economy, here in Wallowa County and beyond.

Woody Wolfe Wallowa, Ore.

you do the same thing over and over again, whether that be the same herbicide application, tillage operation or crop selection.

In my grower presentations on herbicide resistance, I encourage growers to use as many different weed control tactics as possible and not rely on a limited range of weed control practices, for example, just herbicides. I have found the discussion on occasional tillage for the management of herbicide resistance to be the most controversial.

Some people believe that any tillage jeopardizes the soil quality gains that have been achieved with multiple years of no-till.

Others are afraid of the "slippery slope" that might be created by suggesting that some amount of tillage in an otherwise no-till system might be acceptable or even beneficial. They rightly fear the detrimental effects of a widespread return to the tillage systems of the past.

Until recently, there have been very few studies reported in the scientific literature on occasional tillage. Comparisons were almost always between never tilling and always tilling. This was likely influenced by the need for researchers to publish in a timely manner. Treatment differences between the extremes of always tilling and never tilling were more quickly evident than in studies with only occasional tillage.

In 2020, Humberto Blanco-Canqui and Charles Wortmann at the University of Nebraska-Lincoln published a review on occasional tillage in Soil & Tillage Research. Their review of the existing literature on occasional tillage found that "tillage method, depth, frequency, and timing, and also soil temperature and water content affect occa-