

OUR VIEW

# Much thanks to forward thinkers

Throughout our little corner of the world, there are people and organizations acting now to solve the problems of tomorrow. These people deserve our gratitude, and we hope they continue their work.

One instance of this is the Morrow County School District Board, which is putting a bond on an upcoming ballot. If passed, the bond will provide the district with much-needed funds.

This money will be useful in bringing the schools up to date, for sure, but this is not all. The district plans to increase the number of classrooms at Morrow schools. With the increased classrooms, the district's schools will be able to take on more students. Perhaps this is not needed immediately — the superintendent said his schools are not yet overflowing — but it is likely to be needed in the future. Growth in the area suggests the need for such preparation.

Also, we recognize the work of the city of Hermiston as it relates to the South Hermiston Industrial Park. In placing infrastructure into the space, which is just off of Highway 395, the city of Hermiston is welcoming new business. Companies can buy a piece



City of Hermiston/Contributed Photo, File  
From left, Hermiston City Councilors Maria Duron and Roy Barron, Umatilla County Commissioners Dan Dorran, John Shafer and George Murdock, Hermiston Mayor Dave Drotzmann and Assistant City Manager Mark Morgan break ground on the South Hermiston Industrial Park on July 7, 2021. The expansion now is complete with infrastructure ready for businesses to move in.

of this land and quickly get moving on things that will benefit the community. New jobs will be created, and taxes will be collected.

Certainly, SHIP will not fill up over-

night. There is a lot of space around the present businesses in the industrial park, and it will take time for that ground to be filled. The city will need to attract new businesses and convince them that

SHIP will be a good home for them.

The city, though, recognizes they are running a marathon, not a sprint. They will need to bring in businesses, one by one. Most of these will be smaller businesses, according to the assistant city manager for Hermiston.

Through the slow growth of small businesses, the city will avoid a particular problem that has arisen in its history — that being, the development of and dependence on a large employer. When a big employer leaves, as they are wont to do, their absence can be devastating. It is much better, then, to also have smaller businesses.

When planning SHIP, people thought of this, and we are glad they did.

The previously mentioned actions are just a couple of examples. There are many people in our communities who are setting the groundwork for our future. They are giving jobs, schools, entertainment venues and more to us, but also to children who have yet to be born. So we thank them for their vision and wish them luck for their plans.

COMMENTARY

## What's the right amount of carbon dioxide?

School teachers like to see their students alert, attentive and engaged, so when some of the students start to get drowsy, the teacher (hopefully) knows it's not due to a boring lesson or inadequate sleep, but because the classroom air is stale from all those students exhaling carbon dioxide with each respired breath. At 1,000 molecules of carbon dioxide (CO2) per million molecules of air (parts per million or ppm) some people begin to feel drowsy, restless and stifled.

Reactions differ, but above 2,000 ppm people begin to experience headaches, poor concentration, loss of attention, increased heart rate, nausea or dizziness, worsened asthma or allergy symptoms. Opening a window and letting in a breeze at the outdoor CO2 level of about 412 ppm solves the stagnation (alternatively, the school may need to ventilate better).

In one Canadian study, 43% of the classrooms had CO2 levels above 1,000 ppm. A Chinese classroom studied had an average school day CO2 concentration of 2,080 ppm with a noon peak over 3,000 ppm. A Harvard study found increasing indoor CO2 levels by 400 ppm would result in a decrease in cognitive functioning by 21% and at 3,000 ppm students could experience up to an 80% decrease.

What a drag on students to struggle to pay attention to teachers, concentrate on tests or to be disciplined for wiggleness; what a frustration for teachers; what a waste of tax dollars. And adults have to consider their home or office conditions.

Above 5,000 ppm, toxicity or oxygen deprivation could occur; 40,000 ppm is immediately harmful due to oxygen deprivation. Trends project in 2100 the average global outdoor CO2 levels would reach 800 ppm.

Before the Industrial Revolution



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started in the mid-1700s, global atmospheric CO2 was about 280 ppm — really fresh air.

Plants use CO2 as the raw material for photosynthesis, and increased CO2 levels increase plant growth, leading some indoor plant-growing facilities to supplement CO2.

However, when CO2 levels are high:

- Plants can become less nutritious. For example, increased CO2 levels can increase plant growth and fiber levels, thereby lowering digestibility.

- A part of the plant that is not marketed could be favored more (have more yield increase) than the marketed part (e.g. the seed, the leaf or the root).

- Less valuable plants in an ecosystem can gain a competitive advantage over preferred plants. Higher levels of CO2 can increase the invasion of cheatgrass along with other annual grasses and juniper, which can reduce more desired native species (overgrazing further increases the competitive advantage of weeds). Cheatgrass also can increase fire frequency and extent. Because cheatgrass has a much shorter period of good nutritional quality compared with native perennial grasses, the quality of rangelands may decrease with increases in CO2 levels.

- Outbreaks of some insects and infectious diseases may increase.

The earth's atmosphere lets through light and other forms of radiative energy in different amounts depending on wavelength. The groups of wavelengths where the atmospheric gases are transparent (not absorbing or scattering radi-

ation) are like an atmospheric window, whereas the greenhouse gases, such as water and CO2, absorb the energy passing through and reduce the transparency of the atmosphere completely or partially. The atmosphere lets visible sunlight through but blocks or traps much of the energy at other wavelengths we don't see (heat) that is emitted from the earth back toward space, creating a greenhouse effect and a warm earth.

Because CO2 obscures/reduces the atmosphere's transparency, as CO2 increases, heat builds up on earth. CO2 concentrations have increased enough to heat the earth and make changes in the earth's weather systems; drought, heat waves and reduced snowpack are some of the outcomes that impact agriculture.

It is wise for people to protect their home and habitat, for their own health and well-being. A price on carbon combined with cashback payments and border adjustment would encourage us to use low CO2-emitting products and to reduce harmful carbon dioxide emissions. This approach is market-based and leaves the decisions on what changes to make to individuals. By the fee (assessed at the wellhead, mine and border and passed along) being 100% refunded as a monthly, equal dividend to all Americans, it protects the poor and middle classes (even gives them a boost), and it does it without growing government.

Studies show rural Americans would be affected similarly to other Americans. The border adjustment protects American business from unfair competition from countries that haven't yet enacted a carbon fee.

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LETTER TO THE EDITOR

## River Act a step in right direction

Like many of our Northeastern Oregon friends and neighbors, we support the River Democracy Act proposed by Oregon Sens. Ron Wyden and Jeff Merkley.

Meaningful action addressing life-threatening climate change is overdue. Our waterways pay a heavy price for our drive to squeeze every last penny from natural resources. Centuries of destructive practices have damaged every ecosystem on earth and threaten planetary life itself.

Our full-speed-ahead enterprise destroys plant and animal species at mass extinction rates, canceling them from our intricate web of life. In light of climate change and biodiversity collapse, destructive "business as usual" practices are worse than senseless. We know better. Passing the River Democracy Act is a modest, yet important, step towards protecting and restoring our natural world.

The River Democracy Act does not "lock up" our public lands. They remain as accessible as ever. Wild and Scenic designation allows restoration of these waterways and protects them from future degradation. Wyden and his staff have carefully listened to stakeholders and specifically addressed their concerns in the bill.

Maps abound: A statewide map depicting all of the proposed stream reaches is found at [tinyurl.com/rdamap](http://tinyurl.com/rdamap). The River Democracy Act itself forms an atlas, its stream names and geographic details easily found on any map or GPS device. Acquiring ourselves a detailed map of Killamacue Creek, we find its reach length is indeed 4 miles, contrary to a public official's complaint it was but 2 miles.

We need long-range thinking to protect the natural systems on which all life depends. Two years ago local citizens, businesses and organizations answered the call for nominations, did their homework and made their recommendations, since reduced to protecting just 4% of Oregon's waterways. The River Democracy Act represents local knowledge and expertise in managing local resources for a sustainable future.

Thank you, senator. Now is the time to pass the bill. Our kids, grandkids and future generations will thank you, too.

**Mike Higgins  
Mike Beaty  
Halfway**



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