River Right: How many monsters in the room?

BY TOM CARSTENS

When I first took up kayaking, it quickly became apparent that I could use some schooling. Understanding how to control my puny little vessel in all that big water was crucial to my survival.

Applegate Valley settlers thought schooling was a good idea, too. They tucked numerous small schools into the valley so their kids could get a basic education without having to walk—or ride a horse—too far. It was a simpler time—no standardized tests, no compulsory attendance, no state bureaucracy, no teachers' unions. Some things haven't changed, though: teachers still fork over their own money to help pay for stuff in their classrooms, and parents still organize endless fund drives.

Ex-Governor Kitzhaber called this funding gap the "Tyrannosaurus in the Room." Essentially, it's the difference between what the state doles out and what the school districts want to spend. Beginning in 1850, we paid for our public schools through property taxes; expenditures were controlled locally. When voters put a cap on property taxes in 1990, the state took over. Now, two-thirds of school funding is controlled by the state.

Where does it go? Oregon's Constitution requires the legislature to fund the school system at sufficient levels—and to report to us biannually on how that's going. Anybody seen that report? Most estimates figure that we're underfunding our schools by just under two billion dollars per year. Talk about a monster in the room! Nevertheless, every other year or so we're asked to approve a new tax that will supposedly fix the gap.

So here we go again. Public employees' unions are pushing for a measure, innocuously titled Initiative 28, to be put on the November ballot that would establish a new "gross receipts," i.e., sales tax on businesses with more than \$25 million in sales. And it ain't small—we're talking \$2.6 billion per year. This represents better than a 25 percent hike in total tax intake for the state and the largest tax increase in history. This could be the "Godzilla in the Room." The president of the Senate predicts that this effort "will tear our state apart."

We're told vaguely that all this largesse ripped from big business will go straight to our schools and a few public services. I'm not so sure. Last year, none of the \$72-million corporate kicker went to the school fund as voters had directed.

Why are the unions pushing this initiative? Could it have something to do with the fact that our public employees' pension liabilities are \$20 billion in the hole? Could this be the "King Kong in the Room"? We know that the latest bill for teachers' pensions in our local districts will soon come due—to the tune of millions of dollars. The Oregon Business Council is skeptical that any of this money will find its way to the classroom when we're dealing with such a huge pension deficit.

Economists at the Oregon Investment Council tell us that a tax this big tends to discourage investment, spark an out-of-state exodus, cut employment, and raise prices. Instead of soaking businesses, maybe we ought to try asking their advice about what's needed. Especially since they're the ones who will hire our kids.

Our schools are in trouble. We're ranked near the bottom of the

nation in high school graduation rates. It's the "Moby Dick in the Room." A recent study published by Education Week ranks Oregon 38th overall in performance and 39th in funding. We get what we pay for.

We dohave a funding gap. If we could s o m e h o w ensure that our tax money would indeed



from artist Dominic DeVenuta and Willamette Week

find its way into classrooms, who wouldn't be supportive? But nobody ever tells us exactly where the money is destined. And it's almost impossible to verify where it actually ends up. We deserve better. It's time for the legislature to put this mess right.

If you talk to teachers and **parents,** you'll discover that they have a bazillion ideas on how we can put money to better use in our system. I'm not sure the legislators, the bureaucrats, or the unions are listening to the right folks.

The world is changing rapidly, and we need to get our kids ready for it. Let's not continue to senselessly throw more money at the monsters in the room.

Tom Carstens • 541-846-1025 **Note:** To get your head around this issue a bit better, read "Feed the Beast" by Pulitzer Prize-winner Nigal Jaquiss at www.wweek.com/portland/article-24661feed_the_beast.html.

CO,: Villain or scapegoat?

BY REX GAROUTTE

With politicians racing to control CO, emissions, we need to rethink the cause of climate change and understand that CO₂ levels in the atmosphere are an indicator and not a cause. Greenhouse gases don't let heat in and then keep it from radiating away. These gases reflect heat in both directions, giving us a zero

Of all the atmospheric CO₂, eight percent is absorbed by surface plants and 92 percent is absorbed by the oceans with the current base level of atmospheric CO₂ at .04 percent. Once in the ocean, it is used by plants or converted to an acid or a carbonate. These compounds will precipitate out and, given time and pressure, become hydrocarbons again.

Those who have worked with CO₂ know that water's ability to absorb the gas is directly related to temperature. The cooler the water the more CO₂ is absorbed. To illustrate this, before you go to bed, take two sodas and open them. Place one on the counter and one in the refrigerator. The next morning, pour each of them in a glass and check which one still has some carbonation. The coldest soda will have more carbonation.

These facts about CO, mean it is impossible for the gas to be the cause of climate change. If it was the cause, then the planet would go into a positive feedback: the ocean would release more CO, into the atmosphere, which would cause more warming, which would release more CO₂, and on and on.

So if we use rising atmospheric CO, levels as an indicator of warming, then what is the cause? My uncle clued

me in to what he thought was the cause, and the math backs it up. At no time in the planet's history has there been this much warm-blooded biomass. In 1950 the world's population was around 2.5 billion.

Because of disease, famine, and war, it took humanity 10,000 years to get to that level. Thanks to technology, population growth is now doubling every 40 years. Current estimates are 7.8 billion people. Each person generates 100 watts of heat. Add to that all the animals that we use for food and as pets (700-watt cows to 10-watt cats), and we see that warm-blooded biomass becomes a significant part of the heat on the planet.

This steady source of heat changes the baseline of the planet's heating-cooling cycle. With most human actions that involve generating heat, there is a starting point and a stopping point. These allow the heat to become part of the heating-cooling cycle and to eventually be dissipated. Warm-blooded biomass is only going up, so it changes the balance point and the planet's mean temperature.

Given that the only solution to the problem is population control, this becomes an extremely difficult problem to resolve politically.

I won't bore you with the math, which includes numbers like 510 trillion, but if you are interested in the numbers, I'll be glad to email them to you.

In order for me to do my part in cutting excess biomass heat, I'm going to give up exercising.

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Denying climate science

BY ALAN JOURNET

Leaders of 196 nations now agree with the US Department of Defense, every professional scientific society and academy that has expressed an opinion, an increasing number of fossil fuel and other corporations, and 97 percent of practicing climate scientists. They all agree that our planet is warming and that humans are the primary cause.

Even amid this remarkable agreement, we still encounter those in the Applegate Valley who continue to claim that climate science consensus is a conspiracy and a hoax. If so, it has to be the mother of all conspiracies.

Rejecting the science usually relies on one of two misjudgments: (1) the warming reflects a natural cycle or (2) the warming has slowed or stopped for nearly two decades.

1. It's a natural cycle

This often flows from the claim that we are still emerging from the last Ice Age, which was most intense 18,000 to 20,000 years ago.

Indeed, the last Ice Age was most severe about 20 millennia ago, but its primary cause, together with that of the three Ice Ages overtaking us during the last two million years, is well understood: the Milankovitch cycle is a combination of three sub-cycles involving the Earth's orbit around the sun and the tilt of its axis. Those blaming this cycle for our current warming should know that the evidence shows us that these three cycles in combination are throwing us back into another Ice Age. They are cooling, not warming factors.

Another "natural cycle" argument implicates solar radiation. Though it's reasonable, we reject it because solar radiation has been declining since the

1970s, exactly when warming has been at its most torrid. A third argument is volcanic activity. But this is rejected because volcanos have a net cooling impact; this effect can be seen by looking at the global cooling occurring after each major eruption.

The "natural cycle" explanation is convenient for those denying human culpability, but it simply does not pass muster.

2. Warming has slowed for nearly two decades

Climate science deniers trot this explanation out every time there seems to be a few years' hiatus in the warming trend. The deniers now go back to the magic year of 1998 and argue that warming since that year has slowed or halted. The data from 1998 through about 2010 certainly seems to exhibit a slowing of the warming trend seen from 1970 to 1998. Statistical analysis of this pattern reveals, however, that the apparent slowdown is an illusion and the warming is no different from the previous trend.

But two further lines of evidence lead to a rejection of this claim: First, our focus on atmospheric temperature obscures the real story. In fact, only about two percent of retained heat energy contributes to atmospheric warming, while over 93 percent ends up in our oceans. This increases oceanic energy content. The ocean trend of rising heat energy content has never slowed. (It's called global warming, not atmospheric warming, for a reason.) Second, for those who cherry-pick subsets of a large data set to make their point about a confounding trend, an inspection of the micro-trend

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