



Is the CO₂ Hoax Aimed at Our Food Supply? (See page 8)

California Water and Infrastructure Report

For January 4, 2024

(With expanded coverage of all the Western States)
by Patrick Ruckert

Published weekly since July, 2014

An archive of all these weekly reports can be found at both links below:

<http://www.californiadroughtupdate.org>

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A Note to Readers

This week's **Feature**, illustrated by the above photo, is a farmer/chemist's repudiation of the CO₂ scare that drives the policy of the Biden administration's hysterical policies and fear-mongering that has completely dislocated the possibility of real human progress to uplift the planet's 8 billion people. The article: "**Feature: Is the CO₂ Hoax Aimed at Our Food Supply?**" is by two of my colleagues from *LaRouche PAC*.

With hundreds of articles this past week on the "snow drought" that has thus far been the weather for the western states, the first actual measurement of the Sierra snowpack has found that the snowfall, thus far this winter season, is just about 25% of the average for this date. Since California relies on its annual snowpack for about 30% of its water supply for agriculture and the cities, indeed, this is alarming. Though the state's reservoirs are full, they will be very low by the end of the year. Praying for snow and rain during the next three months of the wet season for the state, may make one feel good, but it is the "Gods" alone who will or will not deliver.

The Colorado River, while also benefiting from last winter's abundant snowpack, is also facing a snow

drought in the Rockies thus far this winter, forecasters are writing that while shortages should be minimal this year, next year will be one in which the major reservoirs are again in a crisis condition.

The gazillionaires attempting to build a city that is the *World Economic Forum's* ideal of a city of a dystopian future has further problems. A new article this week reports that all its top peoples' foreign origins had been hidden (until now) in this attempt to turn a rural county into a nightmare.

The final item before the **Feature** is an article titled, “ *What happened to Evs?*”, and begins with this: “The sudden slowdown in electric car sales is a symptom of a much uglier problem.”

The Snow Drought

As we have reported several time over the last few weeks, this year's snowpack is more than disappointing. With the first official measurements in the Sierras on January 2, the level of snow is about 25% of normal for this date. Worrisome, yes, though there are three more months to welcome some serious storms that will build the snowpack up to at least average levels. But, since the weather and climate forecasts for 100 years from now are well-known (at least so the CO2 hysterics tell us), what the forecast for the next three months will be is anyone's guess.

California Department of Water Resources

January 2, 2024

DWR today conducted the first Phillips Station snow survey of the season. The manual survey recorded 7.5 inches of snow depth and a snow water equivalent of 3 inches, which is 30 percent of average for this date, and 12 percent of the April 1st average for this location. We use the April 1st average metric because in terms of snow water content, that's typically when snowpack is at its peak each year in the Sierra Nevada. Statewide, the snowpack is 25 percent of average for this date. In California, a wet winter is not guaranteed, even during an El Nino year, which is why it's important we continue to be ready for flooding or drought.

First Snow Survey of the Season Finds Below Average Conditions for California

January 2, 2024

<https://mavensnotebook.com/2024/01/02/this-just-in-first-snow-survey-of-the-season-finds-below-average-conditions-for-california/>

With Above Average Reservoir Levels, El Niño Conditions, and a Dry Start to the Water Year, California is Preparing for Flood or Dry Conditions in the Months Ahead

The Department of Water Resources (DWR) today conducted the first snow survey of the season at Phillips Station. The manual survey recorded 7.5 inches of snow depth and a snow water equivalent of 3 inches, which is 30 percent of average for this location. The snow water equivalent measures the amount of water contained in the snowpack and is a key component of DWR's water supply forecast. Statewide the snowpack is 25 percent of average for this date.

After one of the largest snowpacks on record last season, the start of this water year has been dry despite some recent storms in the last weeks of December that provided a small boost in the snowpack. While state reservoirs are still above average for this time of year and strong El Niño conditions are present in the Pacific Ocean, the outlook for the rest of the winter remains highly uncertain.

DWR's electronic readings from 130 stations placed throughout the state indicate that the statewide snowpack's snow water equivalent is 2.5 inches, or 25 percent of average for this date, compared to 185 percent on this date last year.

On average, the Sierra snowpack supplies about 30 percent of California's water needs. Its natural ability to store water is why the Sierra snowpack is often referred to as California's "frozen reservoir." Data from these snow surveys and forecasts produced by DWR's Snow Surveys and Water Supply Forecasting Unit are important factors in determining how DWR manages the state's water resources. Due to last year's above average conditions and historic snowpack, a total of 3.5 million acre-feet of water was captured in State Water Project (SWP) reservoirs. Lake Oroville, the SWP's largest reservoir, is currently at 130 percent of average to date and state water managers are prepared to capture and store as much water as possible.

The New York Times

California Today

By Soumya Kariamangla

California Today writer

January 3,

It's Wednesday. California's snowpack is unusually low.

California's wet season is off to a relatively slow start, despite [El Niño conditions](#) that often mean a rainy winter.

More worrisome is the state's snowpack, which state officials said on Tuesday is just 25 percent of what it typically is at the turn of the new year. The unusually warm weather in December meant that precipitation was more likely to fall as rain than as snow, experts say.

That 25 percent figure is the lowest for California in a decade, and a huge change from a year ago. By Jan. 2 last year, [a series of atmospheric rivers](#) — storm systems named for their long, narrow shape and the prodigious amount of water they carry — had built the snowpack up to almost twice the 30-year average.

But the snowpack is an essential part of how they will fare in the seasons to come: Snowmelt from the Sierra Nevada typically provides about 30 percent of the state's water supply, filling rivers and reservoirs and propelling hydropower systems that provide the region's electricity.

Daniel Swain, a climate scientist at U.C.L.A., said forecasts showed a modest tilt toward wetter-than-average conditions in California over the next three months. But they show an even larger likelihood of warmer-than-average conditions. That may mean a snow shortage, despite an increase in overall precipitation — not a great sign for snowpack levels, which he said were currently "abysmal."

"I do think the snowpack will improve, compared to where it currently is," Swain said in a media

briefing on Tuesday, “but I don’t necessarily think this will be a good snow year.”

More from Edward Ring

Last week I posted a link from Edward Ring, who, in my view, is the best writer on California infrastructure, especially water and energy. I include this week a few more excerpts from that article, plus a couple of paragraphs from his new article.

Ringside: The Price of Scarcity



The California Aqueduct. (Photo: State Water Contractos)

How much water does \$7 billion buy?

By [Edward Ring](#), December 27, 2023 6:00 pm

<https://californiaglobe.com/fr/ringside-the-price-of-scarcity/>

How much water does \$7 billion buy?

So if we’re looking for 3 MAF/year or more just to eliminate acute water scarcity in California, isn’t there a better way to spend \$7 billion than merely to squeeze another 400,000 acre feet out of our urban residents? Let us count the ways.

There are a lot of things that can be done for \$7 billion that increase the supply of water, instead of imposing restrictions on urban residents that diminish their quality of life. Lowering indoor water use is in many respects a pointless exercise anyway, since the supposedly wasted water flows to a treatment plant where it is put right back into rivers. Along the coast, these [treatment plants are being retrofit](#) so the wastewater is pumped right back into the system. How is indoor water ever therefore wasted, if Californians average a comfortable 60 gallons per day instead of the to-be-mandated 42?

The real opportunities to achieve water abundance in California will not come from cutting back urban water use by 400,000 acre feet per year at stupendous cost. And while it is tempting for critics of urban water rationing to point to the thirsty farms, consuming a much greater 30 MAF/year, that is dead end thinking. Yes, we can take a million acres of irrigated farmland out of production. That would save 3-4 MAF/year. But if that’s all we do, instead of seizing the opportunity to invest in more water supply projects, we will just add food scarcity to water scarcity. We are all in this together, North and South, farm and city. We should be working together, and speaking with one voice, demanding investment in

abundance, rather than paying for imposition of scarcity.

We must recognize that many of the environmental policies we have adopted are harming the environment more than they are helping the environment

By [Edward Ring](#), January 4, 2024 3:30 am

<https://californiaglobe.com/fr/ringside-challenging-the-water-orthodoxy/>

The reliability of water supply under the State Water Project (SWP) has changed drastically in the past 20 years. In the [first 30 years of operation](#), the SWP supplied 100 percent of contracted supplies in all years except those of extreme drought. However, [in the past 20 years](#) the SWP has provided an average supply of only 34 percent of contract water for agricultural and 66 percent for residential, municipal, and industrial. In 2021 the SWP only delivered 5 percent of contracted water, only 20 percent In 2020, 35 percent in 2018, 20 percent in 2015, 5 percent in 2014. Even in years with excessive rainfall, [such as in 2017](#), only 85 percent was delivered. So far in 2024, even though reservoir levels are [above normal](#) for this time of year, the SWP has only guaranteed farmers 10 percent of their contracted allocation.

An [analysis by Politifact](#) disputes this statement made by Congressman Kevin McCarthy, “While California’s population has doubled since the 1970s, we haven’t completed a single major (water) storage project in that time.” But in its debunking it demonstrates a common affliction and perennial crutch of any biased observer – scope insensitivity. In contradicting McCarthy’s assertion, Politifact writes that the “state had added more than 1.6 million acre-feet of water storage since 1979.” That sounds like a lot! Nope. There is critical missing context. Prior to 1979, the state added a total of [50 million acre-feet](#) of storage capacity, almost all of it built in the 1950s and 1960s.

The Colorado River

2024 outlook for Colorado River less rosy after banner year

- [Tony Davis](#)
- Dec 30, 2023 Updated Dec 31, 2023

https://tucson.com/news/local/subscriber/colorado-river-2023-outlook-2024-water-supplies-water-use-arizona/article_4927ff12-a10a-11ee-b14e-bf05ed7d9523.html

It was a banner water year for the Colorado River Basin, with [water use in the three Lower Basin states including Arizona way below normal](#) and water supplies in the river running well above normal in 2023.

The outlook for 2024 is cloudier. While approved and planned water conservation efforts are likely to keep water demand below normal, the river’s water supply forecast for the year is much less rosy, though it’s too early in the season to know how it will turn out.

For 2023, heavy river runoff along with much bigger water conservation efforts helped push the water levels at Lakes Mead and Powell much higher than they were a year earlier.

Early in the year, water levels in both reservoirs were so low after three straight bad years that the federal government was proposing drastic water use curbs for the Lower Basin states that also include California and Nevada.

But by May, river runoff and reservoir levels were improving fast enough that the three states were able to produce a substitute, scaled-back plan. Now headed for almost certain federal approval, it will cut water use in the region by 1 million acre-feet a year for three years. That compared to the feds' earlier plan that could have cut up to 3 million to 4 million acre-feet a year.

Now, however, the early projections for 2024 are for spring and summer runoff well below normal. In mid-December, [such runoff into Powell was projected to be 75% of normal runoff between 1991 and 2020](#) by the Colorado Basin River Forecast Center.

The center's late December forecast was even more pessimistic, projecting runoff into Powell from April through July 2024 at 65% to 70% of normal. The center cited below-normal soil moisture and snowpack conditions as the basis for its forecast.

For the entire period October 2023 through September 2024, known as a "water year," runoff into Powell is now forecast to be 79% of normal levels.

Here's what feds think will happen with Lake Powell's water level this year

But there's still a while until peak snowpack in early April, leaving time for a rebound.



(Bethany Baker | The Salt Lake Tribune) The Bureau of Reclamation reported that Lake Powell will receive 2 million acre-feet less water than originally forecasted.

[By Anastasia Hufham](#)

| Dec. 30, 2023, 5:00 a.m.

<https://www.sltrib.com/news/environment/2023/12/30/lake-powell-will-get-less-water/>

With [below-average precipitation so far this winter](#), federal officials say that Lake Powell will get 2 million acre-feet less water than they originally thought.

An acre-foot is enough water to flood an acre of land one foot deep. In Utah, an acre-foot of water is enough to supply [two single-family permanent residences for a year](#), according to the Division of Water Rights.

In October of this year, the Bureau of Reclamation — the agency that oversees water projects nationwide — reported that between October 2023 and September 2024, an estimated [9.4 million acre-feet of water would flow into Lake Powell](#).

This month, they've revised their estimate. Reclamation now says that Lake Powell will receive just [7.6 million acre-feet of water in that time frame](#). That's 79% of the historical average runoff between 1991 and 2020.

Last year, Lake Powell received a whopping 12 million acre-feet of water from last winter's record-breaking snowpack, which saved the reservoir from reaching drastically low levels. But even after that picture-perfect runoff, [Lake Powell stands at just 35% full](#).

More on the Gazillionaires Plan to Build a No Future City in Solano County

The Secret Foreign Roots of Tech Titans' New California City

Silicon Valley investors' plans for a new city near a military base were hatched by a pair of foreign nationals

By [Kate O'Keeffe](#)
, [Kristina Peterson](#),
[Jack Gillum](#)
and [Anna Hirtenstein](#)
December 28, 2023

https://www.wsj.com/us-news/the-secret-foreign-roots-of-tech-titans-new-california-city-d5d421d6?st=pf9huuvwiz8svam&reflink=desktopwebshare_permalink

When the backers of a secretive effort to amass nearly \$1 billion worth of land in California finally [unveiled their vision](#) this past summer, they did so in great detail. They announced plans to build a new city near San Francisco. They listed the Silicon Valley titans involved.

California Forever, as the project was called, described itself as “a California company backed by California investors.”

What California Forever didn't highlight was its foreign roots. Its creator is a Czech-born entrepreneur who became an American citizen midway into the land-buying venture. His right-hand man in the project for much of the time is South African.

Foreign involvement in deals like California Forever's is a potential trigger for a U.S. government [national security review](#), and Jan Sramek, a former Goldman Sachs trader, and Thomas Mather, who manages investments for the family of a South African billionaire, took steps to play down their central roles, according to a Wall Street Journal review of legal documents, property and corporate records, publicly available data and interviews with people involved.

What happened to EVs?

The sudden slowdown in electric car sales is a symptom of a much uglier problem.

[Paris Marx](#)

Jan 3, 2024, 2:46 AM PST

<https://www.businessinsider.com/electric-car-ev-sales-prices-problem-transportation-2024-1>

Electric vehicles were supposed to be inevitable. Two years ago President Joe Biden climbed behind the wheel of a beefy white electric Hummer to tout his plan to make [half of all new cars sold electric by 2030](#). The following year Congress passed the Inflation Reduction Act, which created a bevy of incentives for drivers to buy electric and for automakers to invest in EVs. That set off a flurry of new projects: EV plants, battery-manufacturing facilities, and mining operations began popping up. By the end of 2022 the situation looked promising: More and more Americans were going electric, and soon everyone would be driving an EV, reducing emissions in the process.

The transition to an all-EV future seemed like a slam dunk. It would not only give the government a highly visible way to show it's fighting the climate crisis but boost the economy through new jobs and investment. But the electric-vehicle takeover has hit some serious roadblocks.

Sure, [sales of EVs keep going up](#) — a record 300,000 cars sold in the US in the third quarter of 2023 were electric — but the pace of adoption has markedly slowed, and analysts have suggested the country is no longer [on track](#) to hit the government's sales targets. The trickle-down effects of this decreased demand are everywhere. EVs [accumulated at dealerships](#) this fall, even as automakers cut prices to try to entice customers. Automakers have backtracked on their promised investments: [Ford](#) delayed \$12 billion of its planned \$15 billion investment in EV manufacturing capacity, while General Motors delayed production of key EV models and scrapped a \$5 billion partnership with Honda to make cheaper EVs. Even [Tesla](#) — once the superstar of EVs — announced it would delay a planned factory in Mexico. Auto execs who were once trumpeting the potential of electric cars are even publicly acknowledging that [EVs aren't working](#).

Industry analysts have pointed to several reasons for the slowdown, including insufficient charging infrastructure and a lack of affordable EV options. But they're a symptom of the larger problem: America's EV plan was flawed from the start. Instead of seeing EVs as one piece of a plan for more sustainable transportation, America has focused on using EVs as a one-to-one replacement for gas guzzlers. But this one-size-fits-all solution fails to address our broader transportation problems, meaning emissions targets are likely to be missed and other transportation problems will continue to go unaddressed.

"The entire myth at the heart of this whole transition is that the battery car seamlessly fits right into the gas car's position," Edward Niedermeyer, the author of "Ludicrous: The Unvarnished Story of Tesla Motors," told me. "It doesn't, and that's the problem."

Feature: Is the CO₂ Hoax Aimed at Our Food Supply?

by Noel Cowling and Brian Lantz

January 04, 2024

https://www.larouchepac.com/is_the_co2_hoax_aimed_at_our_food_supply

Noel Cowling, a retired Texas farmer and nuclear chemist, realized that we should present the role of CO₂ -- carbon dioxide -- in the production of starches and photosynthesis. That is, in the production of food - the plants we eat, and the plants our livestock eat to produce the protein our bodies need. Brian Lantz, also in Texas, is a well-known contributor to LaRouchePAC on economic policy issues and physical economy.

The two of us have been discussing U.S. agriculture, agricultural practices, and the "environmentalist" assault on family farmers and their use of agricultural chemicals. Most Americans probably don't realize that the climate change nonsense is not just a nuisance, like having EV's shoved down your

throat; it threatens the very food you eat.

There is a massive Big Lie that CO₂ is destroying our environment when, in fact, it is CO₂ that makes our planet green, while comprising just .04% (!) of our atmosphere. We have another example of this kind of hoax with another set of chemicals, *hydrochlorofluorocarbons (HCFCs)*, and we want to talk about that too.

Why CO₂ is so important to life certainly needs to be better understood, but the essentials are quite straight-forward: **photosynthesis itself depends on carbon dioxide.**



CO₂ Now at Heart of Debate Over the Future of American Farming

There is lively political ferment among farmers, here and in Europe, including currents of thought promoting **“regenerative agriculture,”** and this is a very *human*. These are human responses intent on ending a dehumanizing process that has grown over decades.

Today, agricultural cartels in fertilizer, seed, pesticide, meatpacking, and grain control the inputs into, and sale of, what the American farmers and ranchers produce. The American family farmer/rancher struggles simply to survive and does so largely based on income "off the farm." At the same time, the farmer and citizens generally are under a green fascist assault, both here and in Europe, attacked now for causing "climate change." The bare intention is to reduce food production, drive up food prices, and reduce the world population.

Who Says?

The Food and Agricultural Organization is calling for people in the U.S. and other advanced sector countries to be "nudged," and cut their consumption of meat and dairy - to reduce CO₂ emissions. Again, CO₂ is necessary for life on earth - it is plant food! Animal protein, in turn, is part of the healthy diet vital to human life!

At the COP28 summit the U.N.'s FAO claims **"higher income countries can benefit from reduced consumption of animal-source foods."** Further that, "meat and dairy provide just 18% of calories consumed but use 83% of global farmland and are responsible for 60% of agriculture's greenhouse gas emissions." Meat and dairy production, they and various foundation-bankrolled academics intone, are also leading causes of, "deforestation, biodiversity loss pandemic risk and water pollution." Their studies promote "novel meat and dairy alternatives," like **"farming insects, reduced meat consumption in favor of whole plant protein sources like beans, vegan products like tofu, or**

taxing meat."

It is claimed that, over the vast landscape of the U.S., agriculture is responsible for 10-12% of CO₂ emissions - gasp! [Our own U.S. Department of Agriculture, under 'Biden,' is aligning itself with the UN-FAO agenda.](#) All of this is promoted based on the lie that CO₂ and other "greenhouse gases" are drastically altering climate.

[At the World Economic Forum, and elsewhere, "regenerative agriculture"](#) is now promoted to impose *the financial oligarchy's* Malthusian agenda, and a buzzword promoted by the largest agri-food corporations that are part of the existing food oligopoly. For them regenerative agriculture, "sequesters atmospheric carbon dioxide, reversing industrial agriculture's contributions to climate change." CO₂ is plant food, and we will come back to that. It is true that part of the CO₂ captured by plants does stay in the ground, which is good. However, in the crazed world of "[climate mitigation](#)" and [financialized ESG markets](#), what if "carbon capture" could be increased across agricultural lands, and then "[carbon credits](#)" *marketed and sold on a colossal scale*? Then farmers and farming would be profitable -- producing carbon credits and less food.

In the Netherlands, the green fascist-controlled Dutch government attempted to cut "nitrogen emissions" by a radical cut in livestock - [they estimated 11,200 farms would have to close](#) and some 17,600 farmers would have to significantly reduce their livestock. Consider that the air in our Earth's atmosphere is made up of approximately **78 percent nitrogen** and 21 percent oxygen! We depend upon the nitrogen in our air, and it feeds our soil and plants -- just as "biotic respiration" of animals and human beings helps produce the CO₂ which feeds plant life.

(In response to this insanity, Dutch farmers rose up, organizing tractor cades to their Capitol and organized broad public support. An off-shoot, the Farmer-Citizen Movement (BBB), now holds a large number of seats in the Dutch senate.)

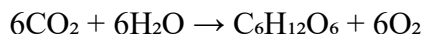
On the other side of the coin, farmers supporting the use of *regenerative agriculture* practices of soil enrichment say, "stop treating the soil like dirt!" It is also an implicit plea for the same, as regards the treatment of farmers & ranchers, and their families and communities. It is a rational response to the mono-crop practices of big corporate farming and the food cartel's imposed "buy cheap-sell dear" destructive practices.

However, as a farmer friend recently explained, "when you go to pick-pocket school you first learn the importance of creating diversions." It is the oldest trick.

A Look at the Chemistry of Life

Life on Earth absolutely depends on photosynthesis. Plants, algae, and some types of bacteria capture energy -- the Sun's radiation that reaches earth in packets of light called photons. Photosynthesis in turn produces chemical energy stored as glucose.

During photosynthesis, **plants take in carbon dioxide (CO₂)** and water (H₂O) from the air and soil, along with nutrients. **Plants combine the Sun's captured energy that came from sunlight to change that carbon dioxide and water into glucose and release oxygen back into the atmosphere.** At the chemical level, within the plant cell, the water is *oxidized*, meaning it loses electrons, while the carbon dioxide is *reduced*, meaning it gains electrons.



That "C₆-H₁₂-O₆" is the produced **sugar molecule** along with six oxygen molecules.

That sugar molecule, broken down as glucose, is then used by plants (and your body) for its own energy and to make other substances like cellulose and starch.

The Earth's Carbon Cycle

Carbon is one of the most important elements on Earth. It is the principal building block for the organic compounds that make up life, including carbon dioxide. Carbon's ability to bond (covalent bonds) with other atoms of carbon creates the enormous diversity in carbon molecules that can be formed around carbon, hence the very diversity and complexity of life.

The natural carbon cycle is a whole system of processes that transfers carbon in various forms through the Earth's different parts. The carbon cycles throughout the biosphere, atmosphere, hydrosphere, and geosphere are most important for life. The carbon that is in the atmosphere in the form of CO₂ and CH₄ (methane) doesn't stay in the atmosphere for long — it moves from there to other places. For example, there is an estimated CO₂ "uptake" by the cold surface water of the oceans - maybe 90 gigatons a year - and the cyclical release of a roughly equivalent of CO₂ into the atmosphere from warm surface water.

There is both the sinking of dead marine biota - formerly living forms of life - into the sediment of oceans, and there is the respiration from marine and land biota releasing oxygen into the atmosphere. There is then the photosynthesis of marine biota, which alone *absorbs* some 32 gigatons of CO₂.

In comparison, human output of CO₂ is a tiny portion of the 750 gigatons moving through the Earth's carbon cycle each year. Further, increases in CO₂ in our atmosphere is conducive to photosynthesis ("the carbon fertilization effect") and is greening our planet. As well, contrary to the hysterics, the "warming effect" of each molecule of CO₂ decreases significantly (logarithmically) as its concentration increases.

Again, this photosynthesis *produces our oxygen*. It is estimated that roughly half of the oxygen production on Earth comes from the ocean. The majority of that production is from oceanic plankton — drifting plants, algae, and some bacteria that can *photosynthesize*. In addition though, land biota still release oxygen to the tune of 110 gigatons a year.

As an enormous global cycle, the carbon cycle challenges us to draw together information from biology, chemistry, oceanography, and geology in order to understand how it works and what causes it to change. This includes these major reservoirs for carbon and the processes that move carbon from reservoir to reservoir.

*In the face of science and reason, the calculated fear-generating arguments of Malthusians shrivel up. The assertion is that the CO₂ released from the burning of fossil fuels is accumulating as an insulating blanket around the Earth, trapping more of the Sun's heat in our atmosphere. This is based on evidence "in the small." **Stepping back at look at longer term cycles, in terms of geological time, our current geologic period (Quaternary) has the lowest average CO₂ concentration in more than 600 million years.***

The "Holes in the Ozone" Scare

Let's turn briefly to Freon and hydrochlorofluorocarbons, another scare story.

Freon has many important uses, stemming in part from its inertness (it does not react with other substances). So, it is used for separating oil from water in industrial systems, including refrigerant systems. Raw milk, from the time of milking to farm storage, through transporting, processing and again storage, must be refrigerated. The same is true with fruits and vegetables.

As a chemist and farmer, Noel Cowling has been particularly interested in how Freon, an inert liquid once widely used as a refrigerant and as a solvent for separating oil from water, could, like other *hydrochlorofluorocarbons*, end up high in the Earth's atmosphere where they allegedly destroy Ozone and make holes in Earth's atmosphere which in turn expose us to excessive ultraviolet energy from the

Sun. Noel here offers proof that this scare story is also absurd.

Freon (CF₂Cl₂) is considered a hydrochlorofluorocarbon in which each molecule consists of 1 carbon atom, 2 fluorine atoms, and 2 chlorine atoms. Now, each carbon atom has an atomic weight of 14, each Fluoride atom has an atomic weight of 19, and each chlorine atom has an atomic weight of 35. As a result, 1 Freon molecule has a total atomic weight or mass of 122 – the sum of 1 C, 2 F's, and 2 Cl's.

Ozone exists as a pale blue gas making up about 0.00006% of the Earth's atmosphere. Ozone (O₃) is an unstable allotrope of oxygen (O₂) and is found in the upper portions of the Earth's atmosphere beginning about 20 miles up. It has difficulty existing because it can be easily destroyed by Nitrogen, which itself makes up 78% of the Earth's atmosphere. Ozone is created from oxygen, which makes up about 21% of the Earth's atmosphere, by energy from the Sun. Ozone does protect us from a small portion of the Sun's Ultraviolet light.

Carbon dioxide (CO₂) also exists in the Earth's atmosphere. It is composed of 1 carbon atom having an atomic weight of 14 and 2 oxygen atoms each having an atomic weight of 16. That gives each carbon dioxide molecule a total atomic weight or mass of 46. The atmosphere is composed of about 21% oxygen (O₂) and about .04% carbon dioxide (CO₂). Because of its mass, carbon dioxide sinks to the lower portions of the atmosphere and only exists in the lower 2 miles of the atmosphere. That upper level of carbon dioxide's existence is called the "Treeline" because plants cannot exist where there is little or no carbon dioxide, which is necessary for photosynthesis.

Noel Cowling asks: How can molecules of *hydrochlorofluorocarbons*, including Freon (which have 3 times the atomic weight mass of CO₂ or more) be 20 miles high in the Earth's atmosphere and do the alleged damage they supposedly do when the much lighter molecules of carbon dioxide are not found above 2 miles high? In what amounts to hand-waving, the explanation is that wind currents *must somehow* carry Freon up there. But most hydrochlorofluorocarbons are much more massive than Freon.

We ask you, was this another hoax perpetrated upon us to control people through fear?

Conclusion

The most independent thinkers are farmers, commented Lyndon LaRouche. Farmers, ranchers, and their communities rightly think in terms of "feeding the world." Our nation was itself founded by "Latin farmers," so-called because they and their brethren were, at that time, the most educated population in the world. That tradition continues.

President Trump has made clear he loves American farmers & ranchers, and he loves his hamburgers! President Trump, the MAGA movement and broader patriotic movement around it, are a bright hope for American agriculture - if we get the policies right. The future is now up to us.

As part of making our '[Third American Revolution,](#)' it is vital that we recognize that the current green/brown cartelized agricultural system is a deliberately created, Malthusian disaster. We are intent on addressing many of the intertwined, systemic agricultural problems at length, and offered solutions based on the [American System of political economy, including the critical important of an agricultural parity pricing.](#) We invite your collaboration in this critically important 2024 election year.

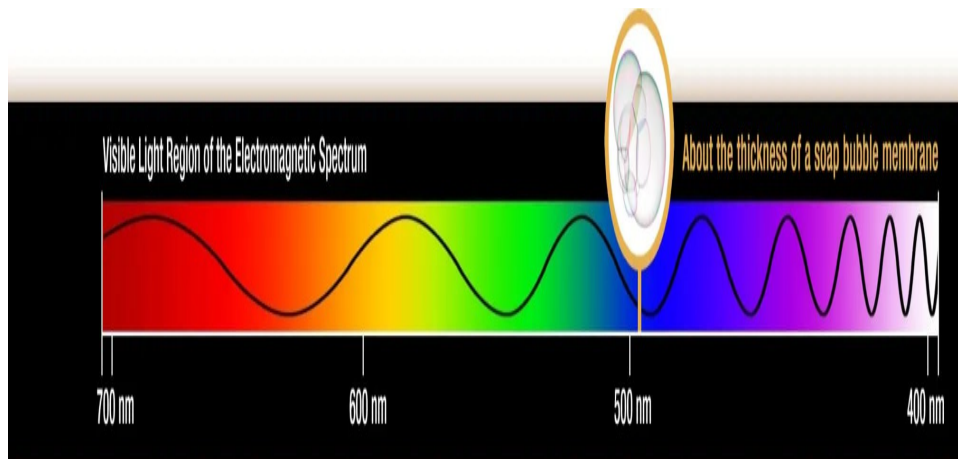
Addendum on Photosynthesis

Let's look at the process of photosynthesis a bit further.

The plant is made up of cells, somewhat like our own bodies are made up of cells. Inside living cells are then small organized or specialized structures which have been named "organelles." In plant cells you have organelles called chloroplasts, and they specialize in storing the energy of sunlight. What is

quite amazing is that they *convert* the *sun's energy* (photons of *light*) into *chemical energy*, which is then used *to* build carbohydrate molecules, using **CO₂ and Water (H₂O) to do it, to feed life.**

However, to do it, they use only specific parts of the visible light region of the electromagnetic spectrum. Sunlight as we see it, or the visible spectrum of light, ranges from violet, having the shortest wavelength at around 380 nanometers, to red having the longest wavelength, at around 700 nanometers.

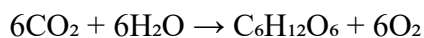


https://science.nasa.gov/ems/09_visiblelight/

Now inside the membrane of the chloroplast -- named thylakoid membranes -- is that light-absorbing pigment called chlorophyll. During photosynthesis, chlorophyll absorbs energy from blue- and red-light waves, and reflects green-light waves -- making the plant look green to our eyes.

In absorbing the *sun's* blue and red *light*, chlorophyll loses electrons, which become mobile forms of *chemical energy*. **It is this energy that uses the carbon dioxide captured from the air to make carbohydrates.** The entire process is called photosynthesis, and it all depends on the little green chlorophyll molecules in each chloroplast.

Within the plant cell, the water is oxidized, meaning it loses electrons, while the carbon dioxide is reduced, meaning it gains electrons. This transforms the water into oxygen and the carbon dioxide into glucose, and returns oxygen back into the air, while storing the energy within the plant's glucose molecules:



That is, it takes six water molecules and 6 carbon molecules to produced one glucose molecule and 6 O₂ molecules. Indeed, the oxygen, nitrogen and carbon dioxide in our Earth's atmosphere are the very products of life, of living, biological processes!

For further reading, [here is a link to an intriguing 2015 study by Benjamin Deniston.](#) He explores galactic cycles, geological time, and the evolutionary anti-entropic development of complex life on Earth.