The Week That Was: 2020-09-05 (September 5, 2020) Brought to You by SEPP (<u>www.SEPP.org</u>) The Science and Environmental Policy Project

Quote of the Week: "A few days ago, a Master of Arts, who is still a young man, and therefore the recipient of a modern education, stated to me that until he had reached the age of twenty he had never been taught anything whatever regarding natural phenomena, or natural law. Twelve years of his life previously had been spent exclusively amongst the ancients. The case, I regret to say, is typical. Now we cannot, without prejudice to humanity, separate the present from the past." – John Tyndall (1854)

Number of the Week: 4.3 to 8.7 million people in California exposed!

THIS WEEK:

By Ken Haapala, President, Science and Environmental Policy Project (SEPP)

Common Sense Continued: Last week, TWTW discussed the presentation by Physicist William Happer to the annual meeting of the Doctors for Disaster Preparedness (DDP) titled Common Sense. Happer's specific field of expertise is the interaction of radiative energy and matter. For example, how do certain gases interfere with the loss of infrared energy from the surface of the earth to space. This interference is the greenhouse effect. Yet, some newspaper reports claimed that Happer is not a climate scientist.

This week, Watts Up With That posed a series of four interviews of Happer conducted by Terry Gannon, assisted by Carolyn Gannon and Willie Soon, with advice from Marc Morano and script from Will Happer. The four topics were: 1) CO2 and Bad Press; 2) CO2 the Benefits; 3) His life as a scientist; and 4) How a CO2 Laser Works.

As stated by Happer, the greenhouse effect was described by Irish physicist John Tyndall who, in 1859, started a series of experiments to measure the absorptive capability of various gases such as water vapor, "carbonic acid" (now carbon dioxide), and ozone. He noted that there are significant differences among colorless and invisible gases to absorb and transmit radiant heat, identifying them as opaque. Other gases such as oxygen, nitrogen, and hydrogen have no such capability and are identified as transparent.

"He concluded that among the constituents of the atmosphere, water vapor is the strongest absorber of radiant heat and is therefore the most important gas controlling Earth's surface temperature. He said, without water vapor, the Earth's surface would be 'held fast in the iron grip of frost.' He later speculated on how fluctuations in water vapor and carbon dioxide could be related to climate change.

"Tyndall related his radiation studies to minimum nighttime temperatures and the formation of dew, correctly noting that dew and frost are caused by a loss of heat through radiative processes. He even considered London as a 'heat island,' meaning he thought that the city was warmer than its surrounding areas." https://earthobservatory.nasa.gov/features/Tyndall

Happer discusses how carbon dioxide (CO2) is greenhouse gas, but not a strong one. Presently, it is in the saturated range and a doubling will make a small difference on global temperatures,

about 1-degree C. Unfortunately, many climate scientists do not know enough about radiative transfer to realize that greenhouse gas warming is beneficial and runaway warming on earth with increasing CO2 cannot happen. If it were possible it would have happened long ago when CO2 concentrations were far higher than today.

In discussing the benefits of CO2, Happer states that photosynthesis is the process of using energy from sunlight to convert water and CO2 to sugars. Even chemosynthesis, which occurs in the dark using inorganic compounds (hydrogen sulfide) or ferrous ions for energy, requires carbon dioxide or methane. Chemosynthesis occurs at black smokers, hydrothermal vents deep in the ocean, and other extreme environments.

As far as CO2 being a pollutant, humans have 40,000 parts per million (ppm) in their lungs, while the current ambient air is about 410 ppm. In submarines, the US naval limit is 5,000 ppm, and crews operate submerged for months at a time. Further, we have 40 years of satellite observations showing that vegetation on land is increasing especially in arid or semi-arid regions. This is because increasing CO2 concentrations allow plants to absorb more CO2 while giving off less water.

Plants have an engineering problem. The stomata, the minute openings on the underside of the leaf, take in CO2, but water evaporates from the plant at a higher rate when it does. With higher CO2 concentrations the stomata can contract, resulting in less water loss. This is particularly true for plants classified as C3, which include wheat, rice, rye, oats, peanuts, cassava, soybean, and most trees, including fruit trees.

Interestingly, an enzyme known as Rubisco is critical for fixing CO2 during the process of photosynthesis. Yet, the biproduct of photosynthesis, oxygen, is poisonous to Rubisco. As bacteria, algae, and plants using photosynthesis became extremely successful converting CO2 to a trace gas and oxygen a dominant gas, behind nitrogen, they were creating a poison to their process of photosynthesis, their existence. Some plants evolved a different method of photosynthesis, protecting Rubisco. These are known as C4 plants and include corn (maize), sugarcane and sorghum.

In discussing his scientific career, Happer brings out how working on a CO2 laser gave him a great opportunity to understand the quantum mechanics of the interaction of infrared with atoms and molecules, including the CO_2 in the laser. An offshoot of this research led to adaptive optics, wherein a yellow laser beam excites sodium atoms in the far upper atmosphere, thereby creating a false star. The twinkling of that false star enables astronomers to remove the twinkle from other stars, thereby creating very sharp images.

This work led to Happer being appointed Director of Energy Research at the Department of Energy (DOE). Unlike many bureaucrats he conducted seminars put on by recipients of research grants and asked questions. What type of bacteria turn up when drilling to 10,000 feet (3,000 meters); how is the research on the human genome project going, etc.? Climate people did not like to be questioned on climate modeling, such as clouds, water vapor, etc.

After the Clinton-Gore administration took over, he stayed on briefly. Then, the Secretary of Energy asked him what he did to anger Al Gore, and suggested that perhaps he could shift from a political-appointed position to a professional position at DOE. Instead, Happer went back to

Princeton to work on issues such as spin polarization of nuclei and radiation transfer, both of which apply to the greenhouse effect. See links under Challenging the Orthodoxy.

Wildfires: Those who require sensationalism have renamed prairie fires or forest fires as wildfires. At the DDP annual meeting, SEPP director Willie Soon addressed these fires for what they are. A combination of irresponsible forest or brush management driven by blowing propaganda. As Soon illustrates, many of the fires of the Amazon commanding global attention are the result of arson, not climate change as often blamed. For Australia, Soon shows a composite picture of all the fires for one year deliberately put together to give the impression that the Continent is burning at one time.

Fire has long been a fact of nature, which humans can influence but not fully control. Unfortunately, some past policies to stop fires may have led to conditions that promote the spread of fires today. Subsequently, fire-prone conditions are worsened by later policies to stop all efforts to control the spread of fires, such as building fire breaks, clearing of undergrowth, and clearing of vegetation around human housing.

As Soon states, a common element of all wildfires dangerous to humans is fuel load. Without excessive fuel load few fires are dangerous to human communities. Of course, the California policy of road diets, narrowing roads to handle less traffic "for safety," complicates the issue by causing traffic jams when residents try to flee an area, such as what occurred at Paradise, California, when 85 people were killed in the Camp Fire of 2018 started by a faulty electric transmission line.

Writing for a local newspaper, conservationist Jim Steele brings up another problem facing the residents of California, continued spread of invasive grasses which dry out quickly in California weather and provide "fine fuels" for fires in the grasslands and chaparral particularly along the coast. Unlike past years, thus far the August 2020 fires have been ignited by dry lightning, lightning that occurs without rain hitting the ground. Steele has a solid description of this physical event. As with Soon, he believes resources are better spent on management of fuel load rather than "climate change" or other excuses. See links under Challenging the Orthodoxy.

More on Sea Levels: In his discussion on the Scientific Method, Richard Feynman insisted that a scrupulous scientist must present all the data, including the data that is not favorable to his pet idea, his hypothesis. A favorite trick of some is to put together two different datasets taken by two different sets of instruments or methods, showing different trends over different time intervals, but to eliminate the data that shows the datasets are not similar and have different trends.

We are seeing this again with NASA claims of sea level rise since 1900. Using data from the UK PSMSL (Permanent Service for Mean Sea Level), Paul Homeward addresses the claims using data for two geologically stable locations. There are short term trends of increasing sea level rise and decreasing sea level rise. For example, in the 1970s sea levels fell at Newlyn, UK, in the 1960s sea levels fell and then rose in the 1970s at North Shields, UK. Homewood writes:

"This pattern of a slowdown or fall in sea levels in the 1960s and 70s is seen at many other sites around the world, as are rates of rise as high as now in the decades prior to that.

"Both phenomena are, of course, consistent with warming in the Arctic in the 1920s and 30s, followed by the much colder interlude there, which ended in the 1990s. Global temperatures followed the same pattern too.

"Although the overall rate of rise is around 2mm a year, because of periods when there was no rise at all there have been other periods when sea levels have been rising faster.

"Annual sea level rise of around 3mm a year was typical prior to the cooldown and is similar to what is being reported now by satellites.

Whether we enter another period of AMO [Atlantic Multidecadal Oscillation] related cooling in coming decades remains to be seen. But what the data conclusively shows is that, as far as the UK is concerned, the recent rate of sea level rise is not unprecedented, nor is there any evidence of it accelerating.

Those who become excited over short-term sea-level trends need to review Richard Feynman on the scientific method. See links under Changing Seas.

Ocean pH: Writers for the US National Academy of Sciences continue to insist that a slight lowering of the pH of an alkaline solution (the general oceans) reducing its corrosive capability by making it more neutral is acidifying it, increasing the corrosive capability. This is logical nonsense. Now, they have imagined a new disease for coral reefs: Coral Osteoporosis. In humans, osteoporosis is a bone disease that occurs when the body loses too much bone. Now the Coral Reefs are losing too much Coral – by what standards? See link under Acidic Waters.]

Small Nuclear Reactors: The U.S. Nuclear Regulatory Commission approved NuScale Power's application for the small modular reactor that Utah Associated Municipal Power Systems plans to build at a U.S. Department of Energy site in eastern Idaho. According to reports:

"The small reactors can produce about 60 megawatts of energy, or enough to power more than 50,000 homes. The proposed project includes 12 small modular reactors. The first would be built in 2029, with the rest in 2030.

"The modular reactors are light-water reactors, which are the vast majority of reactors now operating. But modular reactors are designed to use less water than traditional reactors and have a passive safety system so they shut down without human action should something go wrong."

Small nuclear reactors have been on US Navy ships and submarines since the USS Nautilus was commissioned in 1954. No doubt the greens will invent many new dangers. One of the advantages of the modular design is the ability to produce standardized reactors under controlled conditions. The passive safety system reduces human error in operation. See links under Nuclear Energy and Fears.

Whale Watch-out: The attorney general for North Carolina is attempting to block seismic surveys for offshore oil and natural gas by claiming that the use of air guns sending sounds against the ocean floor can harm sea life and could have significant impacts on fishing and tourism. The issue is how much evidence can he invent because he probably has no existing evidence. There is some evidence that some marine mammals such as deep-diving beaked whales are sensitive to mid-frequency sonar tests by the US Navy, possibly causing them to go to the

surface too quickly, giving them conditions similar to "the bends" for human divers. Beaked whales have been known to dive to 9800 feet (3000 meters) and are generally found over deep waters (300 meters) such as near the Mariana Islands, Azores, or polar waters.

Generally, state waters are 3 nautical miles from the shore on the Atlantic; federal waters extend 200 nautical miles from shore. Within state waters off North Carolina, the continental shelf is shallow, perhaps a maximum of about 100 meters. TWTW doubts beaked whales are common there. See links under Litigation Issues. *****

Number of the Week: 4.3 to 8.7 million people in California exposed! According to a paper published in AAAS, Science Advances:

"We estimate between 4.3 million and 8.7 million people in California's coastal communities, including 460,000 to 805,000 in San Francisco, 8000 to 2,300,00 in Los Angeles, and 2,000,000 to 2,300,000 in San Diego, are exposed to subsidence." [Boldface added.]

Cities in California are suing oil companies claiming damages from sea level rise, yet is the real danger land subsidence?

NEWS YOU CAN USE:

Commentary: Is the Sun Rising?

A Warning from History: The Carrington Event Was Not Unique By Tony Phillips, Spaceweather.com, Aug 30, 2020 [H/t Bill Balgord] https://spaceweatherarchive.com/2020/08/30/a-warning-from-history-the-carrington-event-wasnot-unique/

Challenging the Orthodoxy -- NIPCC

Climate Change Reconsidered II: Physical Science

Idso, Carter, and Singer, Lead Authors/Editors, Nongovernmental International Panel on Climate Change (NIPCC), 2013 https://www.heartland.org/media-library/pdfs/CCR-II/CCR-II-Full.pdf Summary: https://www.heartland.org/ template-assets/documents/CCR/CCR-II/Summary-for-

Policymakers.pdf

Climate Change Reconsidered II: Biological Impacts

Idso, Idso, Carter, and Singer, Lead Authors/Editors, Nongovernmental International Panel on Climate Change (NIPCC), 2014

http://climatechangereconsidered.org/climate-change-reconsidered-ii-biological-impacts/ Summary: https://www.heartland.org/media-library/pdfs/CCR-IIb/Summary-for-Policymakers.pdf

Climate Change Reconsidered II: Fossil Fuels

By Multiple Authors, Bezdek, Idso, Legates, and Singer eds., Nongovernmental International Panel on Climate Change, April 2019 http://store.heartland.org/shop/ccr-ii-fossil-fuels/

Download with no charge:

http://climatechangereconsidered.org/wp-content/uploads/2019/01/Climate-Change-Reconsidered-II-Fossil-Fuels-FULL-Volume-with-covers.pdf

Why Scientists Disagree About Global Warming

The NIPCC Report on the Scientific Consensus By Craig D. Idso, Robert M. Carter, and S. Fred Singer, Nongovernmental International Panel on Climate Change (NIPCC), Nov 23, 2015 <u>http://climatechangereconsidered.org/</u> Download with no charge: <u>https://www.heartland.org/policy-documents/why-scientists-disagree-about-global-warming</u>

Nature, Not Human Activity, Rules the Climate

S. Fred Singer, Editor, NIPCC, 2008 http://www.sepp.org/publications/nipcc_final.pdf

Global Sea-Level Rise: An Evaluation of the Data

By Craig D. Idso, David Legates, and S. Fred Singer, Heartland Policy Brief, May 20, 2019 <u>https://www.heartland.org/_template-assets/documents/publications/SeaLevelRiseCCRII.pdf</u>

Challenging the Orthodoxy

Interview series of Will Happer By Charles Rotter, WUWT, Sep 4, 2020 https://wattsupwiththat.com/2020/09/04/interview-series-of-will-happer/

Understanding Wildfires

Video, Willie Soon, Doctors of Disaster Preparedness, Aug 15, 2020 <u>https://www.youtube.com/watch?v=9iKrE_MoRas&list=PL3XZC6AmQVLGa8pHOQjmh664R</u> <u>GNeeQYEe&index=3&t=0s</u>

Minimizing California Wildfires

By Jim Steele, Landscapes and Cycles, Sep 2, 2020 http://landscapesandcycles.net/minimizing-california-s-wildfires.html

A simplified global warming tutorial: Who are we kidding? Judy Collins was right By Dr. Jay Lehr, Terigi Ciccone, CFACT, Aug 31, 2020 <u>https://www.cfact.org/2020/08/31/a-simplified-global-warming-tutorial-who-are-we-kidding-judy-collins-was-right/?mc_cid=09034f3964&mc_eid=ffd82d3222</u> *[SEPP Comment: "I really don't know clouds at all."]*

About The Looming Energy Crisis

By Donn Dears, Power For USA, Sep 1, 2020 https://ddears.com/2020/09/01/about-the-looming-energy-crisis/

New Calabrese Paper Continues Criticism of NAS

News Release, University of Massachusetts Amherst, Sep 1, 2020 <u>https://www.umass.edu/newsoffice/article/new-calabrese-paper-continues-criticism</u> *[SEPP Comment: Addressing why the linear no threshold (LNT) model is unsuitable for risk assessment for ionizing radiation. Also, the LNT model is misused for other types of risk assessment.]*

Defending the Orthodoxy

Guest post: Why does land warm up faster than the oceans?

By Michael Byrne, Carbon Brief, Sep 1, 2020

https://www.carbonbrief.org/guest-post-why-does-land-warm-up-faster-than-the-

oceans?utm_campaign=RevueCBWeeklyBriefing&utm_medium=email&utm_source=Revue%20 newsletter

"Last year, global temperatures were 0.95C warmer than the 20th century average. Human activity is responsible for around 100% of this warming."

[SEPP Comment: If increasing CO2 increases the greenhouse effect, thereby causing global warming; why is land warming faster than the atmosphere?]

Guest post: How the Greenland ice sheet fared in 2020

By Ruth Mottram (DMI), et al. Carbon brief, Sep 4, 2020

https://www.carbonbrief.org/guest-post-how-the-greenland-ice-sheet-fared-in-2020?utm_campaign=RevueCBWeeklyBriefing&utm_medium=email&utm_source=Revue%20n ewsletter

"In the 1980s, the average SMB saw a gain of 406bn tonnes each year. In the 1990s, this increased to 426bn tonnes, but in subsequent decades it fell – to 270bn tonnes in the 2000s and then 260bn tonnes in the 2010s. (Though it should be noted that these results are calculated based on a climate model output, so different models with different forcing data may give slightly different results).

"Over this period, Greenland has not only warmed up on average, but it has also had more periods of high pressure over the ice sheet with lots of sunshine. This has significantly increased the amount of melt in summer, leading to a decrease in the balance remaining in the surface mass budget account. The melt season of 2018-19 is a classic example." [Boldface added] "Each winter the ice sheet gains a small amount and in the summer it is lost – this seasonal fluctuation is what creates the wavy pattern. However, the loss of ice has been outstripping the winter gains consistently through the satellite record."

Greenland ice sheet reached tipping point 20 years ago, new study finds

News Release by Grace Palmer, Earth Institute at Columbia University, Sep 2, 2020 [H/t Bernie Kepshire]

https://phys.org/news/2020-09-greenland-ice-sheet-years.html [SEPP Comment: As it did in the 10th century when the Vikings began to settle there?]

Jumpstarting U.S. Clean Energy Manufacturing in Economic Stimulus and Infrastructure Legislation

By Paul Bledsoe, Progressive Policy Institute, May 2020 <u>https://www.progressivepolicy.org/wp-content/uploads/2020/05/PPI_Clean-Manufacturing-Infrastructure_Embargoed.pdf</u> "Investing in 21st Century Clean Technology Infrastructure" etc.

Questioning the Orthodoxy

Point-by-point rebuttal of Kamala Harris's unscientific climate tweet By Joe Bastardi, CFACT, Sep 1, 2020 <u>https://www.cfact.org/2020/09/01/point-by-point-rebuttal-of-kamala-harriss-unscientific-climate-tweet/</u>

Fatal polar bear attack in Svalbard unfairly blamed on lack of sea ice By Susan Crockford, Polar Bear Science, Aug 28, 2020 https://polarbearscience.com/2020/08/28/fatal-polar-bear-attack-in-svalbard-unfairly-blamed-on-lack-of-sea-ice/

[SEPP Comment: In thriving polar bear populations are young males now separated from their mothers the most dangerous to humans?]

Polar bear kills man in Arctic Svalbard

By Staff Writers, Oslo (AFP) Aug 28, 2020 https://www.terradaily.com/reports/Polar_bear_kills_man_in_Arctic_Svalbard_999.html [SEPP Comment: Grizzly bears occasional kill humans as well. Is it because of melting polar ice? See link immediately above?]

Science, Policy, and Evidence

How has science shaped COVID-19 policy? New global project seeks to find out By Lisa Marshall, CU Boulder Today, Sep 1, 2020

https://www.colorado.edu/today/2020/09/01/how-has-science-shaped-covid-19-policy-new-global-project-seeks-find-out

"It is not a secret that in some places around the world, including the United States and the United Kingdom, the response has been less than successful,' said Roger Pielke Jr., an environmental studies professor who studies the intersection of science and public policy. 'There are a lot of tough questions to ask about how research was used, not used or misused and how that shaped outcomes. We intend to ask those questions.'"

CDC Insights

By Willis Eschenbach, WUWT, Sep 1, 2020 https://wattsupwiththat.com/2020/09/01/cdc-insights/ [SEPP Comment: Few deaths of those under 45.]

Review of Recent Scientific Articles by CO2 Science

The Effects of Elevated CO2 and Water Deficit Conditions on Two Lettuce Cultivars Garmendia, I., Bettoni, M.M. and Goicoechea, N. 2020. Assessing growth and antioxidant properties of greenhouse-grown lettuces (*Lactuca sativa L.*) under different irrigation and carbon fertilization management. *Revista De La Facultad De Ciencias Agrarias UNCuyo* 52: 87-94. Sep 4, 2020

http://www.co2science.org/articles/V23/sep/a2.php

A Serious Downside to Reducing CO2 Emissions

Faltein, Z., Esler, K.J., Midgley, G.F. and Ripley, B.S. 2020. Atmospheric CO2 concentrations restrict the growth of *Oxalis pes-caprae* bulbs used by human inhabitants of the Paleo-Agulhas plain during the Pleistocene glacials. *Quaternary Science Reviews* 235: 105731. Sep 2, 2020 http://www.co2science.org/articles/V23/sep/a1.php

Elevated CO2-induced Impacts on Certain Medicinal Properties of a Filamentous Cyanobacterium

Aydi, S.S., Aydi, S., Kolsi, R.B.A., Haddeji, N., Rahmani, R., Ktari, N. and Bouajila, J. 2020. CO2 enrichment: Enhancing antioxidant, antibacterial and anticancer activities in *Arthrospira platensis*. *Food Bioscience* 35: 100575. Aug 31, 2020 http://www.co2science.org/articles/V23/aug/a13.php

Atmospheric scientists study fires to resolve ice question in climate models

Black carbon not as important for ice particle formation as previously thought News Release, NSF, Aug 31, 2020 <u>https://www.nsf.gov/discoveries/disc_summ.jsp?cntn_id=301151&WT.mc_id=USNSF_1</u> Link to paper: The contribution of black carbon to global ice nucleating particle concentrations relevant to mixed-phase clouds By Gregory P. Schill, et al. PNAS, Aug 24, 2020 <u>https://www.pnas.org/content/early/2020/08/20/2001674117</u>

Measurement Issues -- Surface

Hachijojima, Isolated Rural Island In Pacific, Shows No Warming In 80 Years By Kirye and Pierre Gosselin, No Tricks Zone, Sep 4, 2020 <u>https://notrickszone.com/2020/09/04/hachijojima-isolated-rural-island-in-pacific-shows-no-</u> warming-in-80-years/

New Study: An East Antarctica Region Has Cooled -0.7°C Per Decade Since The 1980s

By Kenneth Richard, No Tricks Zone, Sep 3, 2020

https://notrickszone.com/2020/09/03/new-study-an-east-antarctica-region-has-cooled-0-7c-perdecade-since-the-1980s/

Link to paper: Climate From the McMurdo Dry Valleys, Antarctica, 1986–2017: Surface Air Temperature Trends and Redefined Summer Season By M.K. Obryk, et al. JGR Atmospheres, May 29, 2020 <u>https://agupubs.onlinelibrary.wiley.com/doi/abs/10.1029/2019JD032180</u> [SEPP Comment: The extreme Antarctic desert is less than 0.1% of the continent.]

Measurement Issues -- Atmosphere

UAH Global Temperature Update for August 2020: +0.43 deg. C

By Roy Spencer, His Blog, Sep 1, 2020 http://www.drroyspencer.com/2020/09/uah-global-temperature-update-for-august-2020-0-43-degc/

Global Temperature Report, Earth System Science Center, The University of Alabama in Huntsville, August 2020

Map: <u>https://www.nsstc.uah.edu/climate/2020/august/202008_map.png</u> Graph: <u>https://www.nsstc.uah.edu/climate/2020/august/202008_bar.png</u>

Measurement Issues -- Tropics

New tool for identifying endangered corals could help conservation efforts Chip allows researchers to identify corals and symbiotic algae that live inside coral News Release, NSF, Sep 3, 2020 https://www.nsf.gov/discoveries/disc_summ.jsp?cntn_id=301169&WT.mc_id=USNSF_1

Changing Weather

The Lessons of Hurricane Laura for the Northwest By Cliff Mass, Weather Blog, Aug 30, 2020 <u>https://cliffmass.blogspot.com/2020/08/the-lesson-of-hurricane-laura-for.html</u> Updated list: Department of Health verifies two additional hurricane-related deaths By Staff. Louisiana Department of Health, Sep 2, 2020 <u>https://ldh.la.gov/index.cfm/newsroom/detail/5742</u> [SEPP Comment: Total deaths stands at 17: 1 by drowning, 1 storm cleanup, 1 falling off roof, 2 heat related, 4 fallen tree, 8 carbon monoxide poisoning.]

An Unremarkable Summer [UK]

By Paul Homewood, Not a Lot of People Know That, Sep 3, 2020 https://notalotofpeopleknowthat.wordpress.com/2020/09/03/an-unremarkable-summer/

Ferocious heat wave could bring record temperatures to California over Labor Day weekend

By Luke Money, Los Angeles Times, Sep 3, 2020

https://www.latimes.com/california/story/2020-09-03/flex-alert-issued-amid-labor-day-weekend-heat-

wave?utm_source=sfmc_100035609&utm_medium=email&utm_campaign=30616+Today%27s+ Headlines+9%2f04%2f20&utm_term=https%3a%2f%2fwww.latimes.com%2fcalifornia%2fstory %2f2020-09-03%2fflex-alert-issued-amid-labor-day-weekend-heatwave&utm_id=13293&sfmc_id=499879

Laura Only Ranks 17th For Minimum Pressure

By Paul Homewood, Not a Lot of People Know That, Aug 31, 2020 https://notalotofpeopleknowthat.wordpress.com/2020/08/31/laura-only-ranks-17th-for-minimumpressure/

Changing Seas

NASA-led Study Reveals the Causes of Sea Level Rise Since 1900

By Staff, NASA Global Climate Change, Aug 21, 2020 [H/t James Visentine] https://climate.nasa.gov/news/3012/nasa-led-study-reveals-the-causes-of-sea-level-rise-since-1900/

UK Sea Level Rise Not Unprecedented, Nor Accelerating

By Paul Homewood, Not a Lot of People Know That, Sep 3, 2020 https://notalotofpeopleknowthat.wordpress.com/2020/09/03/uk-sea-level-rise-not-unprecedentednor-accelerating/

Sea Levels Falling, with Ridd and Roberts

By Jennifer Marohasy, Her Blog, Sep 4, 2020

https://jennifermarohasy.com/2020/09/sea-levels-falling-with-ridd-and-roberts/

[SEPP Comment: Marohasy discussing changing sea levels on the east coast of Australia, bordering the western Pacific. These may be determined by the prevailing winds shifting over decades.

Changing Cryosphere – Land / Sea Ice

Bering Sea winter ice shrank to its lowest level in 5,500 years in 2018

Five millennia of climate shifts impacting the ice is recorded in peat from an Arctic island By Carolyn Gramling, Science News, Sep 3, 2020

https://www.sciencenews.org/article/climate-change-bering-sea-ice-winter-melt-lowestlevel?utm_source=email&utm_medium=email&utm_campaign=latest-newsletterv2&utm_source=Latest_Headlines&utm_medium=email&utm_campaign=Latest_Headlines Link to paper: High sensitivity of Bering Sea winter sea ice to winter insolation and carbon dioxide over the last 5500 years By Miriam Jones, et al. Science Advances, Sep 2, 2020

https://advances.sciencemag.org/content/6/36/eaaz9588

From the abstract: "Results show that over the last 5500 years, sea ice in the Bering Sea decreased in **response to increasing winter insolation** and atmospheric CO2, suggesting that the North Pacific **is highly sensitive to small changes in radiative forcing**. We find that CE 2018 sea ice conditions were the lowest of the last 5500 years, and results suggest that sea ice loss may lag changes in CO2 concentrations by several decades." [Boldface added]

[SEPP Comment: Is it more responsive to the earth being closer to the sun during the Arctic winter?]

First polar bear alert report for Churchill an astonishing seven weeks later than last year

By Susan Crockford, Polar Bear Science, Sep 1, 2020 https://polarbearscience.com/2020/09/01/first-polar-bear-alert-report-for-churchill-an-astonishingseven-weeks-later-than-last-year/ [SEPP Comment: Ice in the Hudson Bay was not melting quickly.]

Annual Arctic Meltdown Scare

By Paul Homewood, Not a Lot of People Know That, Sep 1, 2020 https://notalotofpeopleknowthat.wordpress.com/2020/09/01/annual-arctic-meltdown-scare/

Changing Earth

Washing away the economy

By Paul Robson, Climate Discussion Nexus, Sep 2, 2020

https://climatediscussionnexus.com/2020/09/02/washing-away-the-economy/

Link to news release: Satellite survey shows California's sinking coastal hotspots

By Staff, Arizona State University, July 31, 2020

https://www.eurekalert.org/pub_releases/2020-07/asu-sss073120.php

Link to paper: Tracking California's sinking coast from space: Implications for relative sea-level rise

By Em Blackwell, et al. Science Advances, July 31, 2020 https://advances.sciencemag.org/content/6/31/eaba4551

Acidic Waters

Ocean acidification causing coral 'osteoporosis' on iconic reefs

Acidification is affecting corals' ability to build their skeletons News Release, NSF, Sep 2, 2020 https://www.nsf.gov/discoveries/disc_summ.jsp?cntn_id=301157&WT.mc_id=USNSF_1

Agriculture Issues & Fear of Famine

IGC projects record output for corn, wheat and soybeans

By Arvin Donley, World-Grain.com, Aug 31, 2020

https://www.world-grain.com/articles/14164-igc-projects-record-output-for-corn-wheat-and-soybeans

"The largest corn harvest in history is among the reasons the International Grains Council (IGC) is forecasting record total grains production in 2020-21."

August likely to be wettest since 1901

By Shashwat Mohanty, Economic Times of India, Aug 31, 2020

https://economictimes.indiatimes.com/news/politics-and-nation/august-likely-to-be-wettest-since-1901/articleshow/77839413.cms?utm_source=Media&utm_campaign=476fae5072-EMAIL_CAMPAIGN_2020_09_01_01_23&utm_medium=email&utm_term=0_8f98a37810-476fae5072-20196673&mc_cid=476fae5072&mc_eid=2206e9995b

Climate change could increase rice yields

News Release, American Society of Agronomy, Sep 2, 2020 <u>https://www.eurekalert.org/pub_releases/2020-09/asoa-ccc082720.php</u> Link to paper: Breaking rice yield barrier with the ratooning method under changing climatic conditions: A paradigm shift in rice-cropping systems in southwestern Japan By Hiroshi Nakano, Agronomy Journal, May 27, 2020 <u>https://acsess.onlinelibrary.wiley.com/doi/full/10.1002/agj2.20309</u>

Lowering Standards

Met Office Caught Cheating Over Wind Speed "Records"

By Paul Homewood, Not a Lot of People Know That, Sep 2, 2020 https://notalotofpeopleknowthat.wordpress.com/2020/09/02/met-office-caught-cheating-overwind-speed-records/

CLINTEL challenges IChemE climate scaremongering

By David Wojick, CFACT, Sep 2, 2020 https://www.cfact.org/2020/09/02/clintel-challenges-icheme-climate-scaremongering/

Communicating Better to the Public – Use Yellow (Green) Journalism?

Matt McGrath's Latest Howler! By Paul Homewood, Not a Lot of People Know That, Sep 1, 2020 <u>https://notalotofpeopleknowthat.wordpress.com/2020/09/01/matt-mcgraths-latest-howler/</u> [SEPP Comment: The new BBC.]

Communicating Better to the Public – Exaggerate, or be Vague?

Deadly weather more likely to spur local climate policy changes By Brooks Hays, Washington DC (UPI), Aug 31, 2020 <u>https://www.terradaily.com/reports/Deadly_weather_more_likely_to_spur_local_climate_policy_</u> <u>changes_999.html</u>

How climate change feeds off itself and gets even worse

By Amy Harder, Axios, Aug 31, 2020 https://www.axios.com/climate-change-feedback-loops-e6cfd8d6-56fe-449b-a856e8f97717c44c.html

Low-oxygen zones in Danish seas double in a year

By Staff Writers, Copenhagen (AFP) Aug 28, 2020 <u>https://www.terradaily.com/reports/Low-</u> oxygen zones in Danish seas double in a year 999.html

"The area suffered from high levels of runoff from rivers at the beginning of the year, increasing the amount of organic matter and nutrients, the study found, along with 'high temperatures in the bottom water and mainly weak winds since the middle of spring'."

Communicating Better to the Public – Make things up.

New John Cook 97% Consensus Climate Change Video

By Eric Worrall, WUWT, Sep 3, 2020 https://wattsupwiththat.com/2020/09/03/watch-the-thimble-new-john-cook-97-consensus-climatechange-video/

The doomsday lies of climate activists never stop

By Vijay Jayaraj, WND, Sep 2, 2020 [H/t Bernie Kepshire] https://www.wnd.com/2020/09/doomsday-lies-climate-activists-neverstop/?utm_source=Email&utm_medium=wndbrief&utm_campaign=dailypm&utm_content=brief&ats_es=d038faf921d148445d09e65f22c382c 5

Communicating Better to the Public – Do a Poll?

About That Sharp Rise in Climate Concern

Poll sponsors say climate attitudes have been 'remarkably consistent' over two decades. By Donna Laframboise, Big Picture News, Sep 2, 2020 https://nofrakkingconsensus.com/2020/09/02/about-that-sharp-rise-in-climate-concern/

Communicating Better to the Public – Use Propaganda

UNSW: "Climate change and the tyranny of psychological distance" By Eric Worrall, WUWT, Sep 3, 2020 <u>https://wattsupwiththat.com/2020/09/03/unsw-climate-change-and-the-tyranny-of-psychological-distance/</u>

"If even believers have to keep kicking themselves to believe, the end of the climate movement may be closer than we think."

Communicating Better to the Public – Use Propaganda on Children

German Psychotherapists Offer Free Workshops For Youth Struggling With Climate Crisis Emotional Strain

By P Gosselin, No Tricks Zone, Sep 2, 2020 https://notrickszone.com/2020/09/02/german-psychotherapists-offer-free-workshops-for-youthstruggling-with-climate-crisis-emotional-strain/

"Die kalte Sonne comments: 'If you preach climate catastrophe all day long, you will eventually believe it yourself. Then burnout is not far off. Fortunately there are now courses against it. Will the health insurance soon pay for it? Will 'climate alarmism' now be a recognized disease?""

Communicating Better to the Public – Protest

Extinction Rebellion's plan for eco-oligarchy By Anthony Browne, The Spectator, Aug 29, 2020 <u>https://www.spectator.co.uk/article/extinction-rebellion-hypocrisy-could-lead-to-environmental-dictatorship</u>

Extinction Rebellion Lets the Veil Slip on their Political Agenda

By Eric Worrall, WUWT, Sep 2, 2020 https://wattsupwiththat.com/2020/09/02/extinction-rebellion-lets-the-veil-slip-on-their-politicalagenda/

Expanding the Orthodoxy

German Environment Prize shared by climate economist, metal producer

By Staff, Xinhua.Net, Sep 4, 2020 [H/t Dennis Ambler] http://www.xinhuanet.com/english/2020-09/03/c 139338297.htm

"The award stood for a 'new level of recognition for the social science approach of exploring the climate solutions space,' commented Edenhofer in a statement and added that the world had the obligation and means to 'further advance equitable policy options for tackling the climate challenge.""

[SEPP Comment: Ignoring that photosynthesis is necessary for the rich diversity of life on the planet.]

Questioning European Green

Britain Faces Growing Risk Of Blackouts, National Grid Boss Warns By Staff, The Times, Via GWPF, Sep 1, 2020 https://www.thegwpf.com/britain-faces-growing-risk-of-blackouts-national-grid-boss-warns/

Claim: British Conservative Climate Change Plans "The Stuff of Dreams"

By Eric Worrall, WUWT, Sep 2, 2020 https://wattsupwiththat.com/2020/09/02/claim-british-conservative-climate-change-plans-thestuff-of-dreams/

German Industry Warns Of Bankruptcies & Relocations Over EU Climate Plans

By Staff, Die Welt, Translated by GWPF, Sep 3, 2020 <u>https://www.thegwpf.com/germany-industry-warns-of-bankruptcies-relocations-over-eu-climate-plans/</u>

Questioning Green Elsewhere

Flannery's Flim Flam Drought

By Geoff Browne, The Australian Climate Sceptics, Sep 1, 2020 http://theclimatescepticsparty.blogspot.com/2020/09/flannerys-flim-flam-drought.html

Americans Must Fight 'Green' Climate Ideology

By Frank Lasee, Real Clear Energy, Sep 3, 2020 https://www.realclearenergy.org/articles/2020/09/03/americans_must_fight_green_climate_ideolo gy_576196.html

Four energy solutions that are smarter than the disastrous Green New Deal

By James Meigs, New York Post, Aug 22, 2020 https://nypost.com/2020/08/22/four-new-solutions-smarter-than-the-disastrous-green-new-deal/ [SEPP Comment: But not as smart as doing nothing.]

Green lurch

By Paul Robson, Climate Discussion Nexus, Sep 2, 2020 https://climatediscussionnexus.com/2020/09/02/green-lurch/

"With Canada's economy reeling from the pandemic lockdown and the government's long war of attrition on the energy sector, new finance minister Chrystia Freeland burbles that 'I think all Canadians understand that the restart of our economy needs to be green.' It is frightening to think how many things are wrong with that statement..."

Funding Issues

Timmermans defends higher EU goals on climate change

By Frédéric Simon, EURACTIV, Sep 2, 2020 [H/t GWPF]

https://www.euractiv.com/section/climate-environment/news/timmermans-defends-higher-eu-goals-on-climate-change/

"If the European Green Deal made economic sense before the COVID-19 crisis, 'it makes even more sense now' because it will help reboot the economy, said Frans Timmermans, the EU Commission vice-president in charge of climate action."

[SEPP Comment: To some politicians, squandering billions to accomplish little or nothing makes sense all of the time.]

Horror UK Covid-19 Tax Rises Considered, while the UK Squanders Billions on Renewable Energy

By Eric Worrall, WUWT, Sep 2, 2020 https://wattsupwiththat.com/2020/09/02/horror-uk-covid-19-tax-rises-considered-while-the-uk-squanders-billions-on-renewable-energy/

UN Advisor: Divert National Military Budgets to Climate Change and UN Sustainability Programmes

By Eric Worrall, WUWT, Aug 31, 2020

https://wattsupwiththat.com/2020/08/31/un-advisor-divert-national-military-budgets-to-climatechange-and-un-sustainability-programmes/

The Political Games Continue

Senate Democrats' Climate Committee Releases New Report On Climate Action, Plan To Build Clean Economy For American People

Report Outlines How Climate Action Will Grow The Economy, Improve Lives For Americans Across The Country; Read The Full Report: Democrats.Senate.Gov/Climate-Report By Staff, Senate Democrats, Aug 25, 2020

https://www.democrats.senate.gov/newsroom/press-releases/senate-democrats-climatecommittee-releases-new-report-on-climate-action-plan-to-build-clean-economy-for-americanpeople

"'This pandemic is showing us the importance of responding to crises boldly and decisively, with science not ideology,' said Senator Merkley. 'Climate chaos, like the coronavirus, is already disproportionately harming communities of color, exacerbating health inequities, and devastating the rural economy. Those ramifications are only going to get worse unless we take on the fossil fuel lobby and special interests that are blocking urgently needed climate action at every turn."'

Biden Says He's Not Banning Fracking Months After Promising To Stop All New Fracking Projects

By Chris White, Daily Caller, Aug 31, 2020 https://dailycaller.com/2020/08/31/biden-trump-fracking-pennsylvania-ban-natural-gas/

Litigation Issues

NC Attorney General Files Lawsuit to Block Marine Seismic Surveys By David Middleton, WUWT, Sep 3, 2020 <u>https://wattsupwiththat.com/2020/09/03/nc-attorney-general-files-lawsuit-to-block-marine-seismic-surveys/</u>

Beaked Whale Strandings in the Mariana Archipelago May Be Associated with Sonar By Staff, NOAA Fisheries, Feb 19, 2020 https://www.fisheries.noaa.gov/feature-story/beaked-whale-strandings-mariana-archipelago-maybe-associated-

sonar#:~:text=In%20a%20new%20study%20%2C%20a,naval%20anti%2Dsubmarine%20sonar%20operations.

Link to paper: Co-occurrence of beaked whale strandings and naval sonar in the Mariana Islands, Western Pacific

By Anne Simonis, et al. Proceedings pf the Royal Society, Feb 19, 2020 https://royalsocietypublishing.org/doi/10.1098/rspb.2020.0070

EPA and other Regulators on the March

EPA finalizes rollback of coal plant wastewater regulations By Rachel Frazin. The Hill, Aug 31, 2020 <u>https://thehill.com/policy/energy-environment/514490-epa-finalizes-rollback-of-power-plant-wastewater-regulations</u>

Energy Issues – Non-US

Build Back Better?

By Paul Homewood, Not a Lot of People Know That, Aug 29, 2020 <u>https://notalotofpeopleknowthat.wordpress.com/2020/08/29/build-back-better/</u> "Far from boosting the economy, this mad rush to decarbonise the economy will stop any recovery dead in its tracks."

Hunterston B [UK Power Plant] to close two years early

By Paul Homewood, Not a Lot of People Know That, Sep 2, 2020 https://notalotofpeopleknowthat.wordpress.com/2020/09/02/hunterston-b-to-close-two-yearsearly/

"With coal plants all due to go by 2025 as well, we will be more reliant on gas and Hinkley Point C than ever."

New Zealand startup eyes global wireless electrical grid

By Peter Grad, Tech Xplore, Aug 31, 2020 [H/t Bernie Kepshire] https://techxplore.com/news/2020-08-zealand-startup-eyes-global-wireless.html

Energy Issues -- US

America Needs Energy Policies That Won't Harm Families, Businesses With High Costs, Less Reliability

By David Holt, Real Clear Energy, Aug 30, 2020 https://www.realclearenergy.org/articles/2020/08/30/america_needs_energy_policies_that_wont_h arm families businesses with high costs less reliability 575637.html

End China's Infection of the US Power Grid

By Paul Steidler, Real Clear Energy, Sep 2, 2020 https://www.realclearenergy.org/articles/2020/09/02/end_chinas_infection_of_the_us_power_grid_576065.html

"China has also become the world's leading supplier of transformers – the "spine" of electricity grids -- according to a 2014 U.S. Department of Energy (DoE) report."

Happy Labor-Saving Day (as in modern energy)

By Robert Bradley Jr. Master Resource, Sep 5, 2020

<u>https://www.masterresource.org/uncategorized/happy-labor-saving-day-as-in-modern-energy/</u> [SEPP Comment: An array of photos of electric appliances and what the kitchen is was like before them.]

Oil and Natural Gas – the Future or the Past?

Saudi Aramco Finds Two New Oil, Gas Fields, Press Release The fields are located in the northern region of Saudi Arabia. By Shardul Sharma, Natural Gas World, Aug 31, 2020 [H/t Dennis Ambler] <u>https://www.naturalgasworld.com/saudi-aramco-finds-two-new-oil-gas-fields-81488</u> State-run Saudi Aramco has discovered two new oil and gas fields in the northern region of the country, state-owned Saudi Press Agency (SPA) reported on August 30 quoting Saudi Arabian energy minister Abdul Aziz bin Salman.

Chevron: Oil and Gas is the Future (greenwashing not)

By Robert Bradley Jr. Master Resource, September 2, 2020 https://www.masterresource.org/chevron/chevron-oil-gas-the-future/

ExxonMobil "Cancelled" by The Wall Street Journal... Dumped From DJIA David Middleton WUWT, Sep 2, 2020 <u>https://wattsupwiththat.com/2020/09/02/exxonmobil-cancelled-by-the-wall-street-journal-</u> <u>dumped-from-djia/</u>

Nuclear Energy and Fears

US gives first-ever OK for small commercial nuclear reactor By Keith Ridler, AP, Sep 2, 2020 https://apnews.com/910766c07afd96fbe2bd875e16087464

Saving Nuclear Power

By Donn Dears, Power For USA, Sep 4, 2020 https://ddears.com/2020/09/04/saving-nuclear-power/

China poised to be the largest global nuclear power by 2030

By Jo Nova, Her Blog, Sep 1, 2020 http://joannenova.com.au/2020/09/china-poised-to-be-the-largest-global-nuclear-power-by-2030/

Alternative, Green ("Clean") Solar and Wind

Renewable energy production will exacerbate mining threats to biodiversity By Charles Rotter, WUWT, Sep 3, 2020 https://wattsupwiththat.com/2020/09/03/renewable-energy-production-will-exacerbate-miningthreats-to-biodiversity/ Link to paper: Renewable energy production will exacerbate mining threats to biodiversity By Laura Sonter, et al. Nature Communications, Sep 1, 2020 https://www.nature.com/articles/s41467-020-17928-5

These black lives matter too

By Paul Robson, Climate Discussion Nexus, Sep 2, 2020 <u>https://climatediscussionnexus.com/2020/09/02/these-black-lives-matter-too/</u> *[SEPP Comment: Copper was one of the metals named in the famous Ehrlich-Simon bet.]*

Painting wind turbine blades black can reduce bird deaths 70%

Wind power is dangerous for birds, but there's a new, simple, cheap solution: paint. By Adele Peters, Fast Company, Aug 27, 2020 https://www.fastcompany.com/90543981/painting-wind-turbine-blades-black-can-reduce-birddeaths-70

Alternative, Green ("Clean") Energy -- Other

Mitsubishi Power Snags Hydrogen Integration Contracts for 2 GW of New Gas Power By Sonal Patel, Power Mag, Sep 2, 2020 <u>https://www.powermag.com/mitsubishi-power-snags-hydrogen-integration-contracts-for-2-gw-of-</u> new-gas-power/

"The gas-fired projects include: Balico's 1,600-MW Chickahominy Power Project in Virginia; EmberClear's 1,084-MW Harrison Power Project in Cadiz, Ohio; and Danskammer Energy's 600-MW plant in Newburgh, New York." [SEPP Comment: The real issue is: How is the hydrogen produced?]

Alternative, Green ("Clean") Vehicles

Appetite For Electric Cars In UK Collapses As Pandemic Squeezes Finances By Staff, Financial Times, Via GWPF, Sep 3, 2020 <u>https://www.thegwpf.com/appetite-for-electric-cars-in-uk-collapses-as-pandemic-squeezes-finances/</u>

California Dreaming

California has a power supply problem

By Dan Walters, Orange County Register, Aug 30, 2020 https://www.ocregister.com/2020/08/30/california-has-a-power-supply-problem/

California Bows to Energy Reality

By Clarice Feldman, The Pipeline, Sep 3, 2020 [H/t WUWT] <u>https://the-pipeline.org/california-bows-to-energy-reality/</u>

"Today it acknowledged reality, as the Los Angeles Times reports. The [California State Water Resources Control Board] allowed the [Natural Gas] plants to remain in operation for a few more years until -- they hope -- chimerical renewable energy can pick up the load."

Natural Gas & Coal Prevent L.A. Blackouts (75 percent market share)

By Wayne Lusvardi, Master Resource, Aug 31, 2020

https://www.masterresource.org/california-power-crisis-2020/natural-gas-coal-prevent-lablackout/

Link to paper: On energy sufficiency and the need for new policies to combat growing inequities in the residential energy sector

By Eric Daniel Fournier, et al. Elementa: Science of the Anthropocene, 2020 https://www.elementascience.org/article/10.1525/elementa.419/

[SEPP Comment: The California Independent System Operator (CAISO) does not cover Los Angeles and several other parts of the state.]

Environmental Industry

Potentially powerful pipeline precedents By Craig Rucker, WUWT, Aug 31, 2020 https://wattsupwiththat.com/2020/08/31/potentially-powerful-pipeline-precedents/

Other Scientific News

Science, Skepticism, and Irony

An impressive new book about the shortcomings of scientific research is inadvertently ironic. By Donna Laframboise, Big Picture News, Aug 31, 2020 <u>https://nofrakkingconsensus.com/2020/08/31/science-skepticism-and-irony/</u>

Other News that May Be of Interest

Book Review: A Dominant Character by Samanth Subramanian — the stupidity of a brilliant mind

By Matt Ridley, Rational Optimist, Sep 2, 2020 <u>http://www.rationaloptimist.com/blog/a-dominant-character-by-samanth-subramanian/</u> "JBS Haldane was a polymath — but his communist faith blinded him to the truth about the Soviet Union."

BELOW THE BOTTOM LINE:

Study: Climate Map Predicting Future African Malaria Outbreaks

By Eric Worrall, WUWT, Sep 4, 2020 https://wattsupwiththat.com/2020/09/04/study-climate-map-predicting-future-african-malariaoutbreaks/ [SEPP Comment: Start with a defective model then go from there]

These kites generate wind power by flying through the air

In places where erecting massive wind turbines is impossible, wind power might still be feasible. By Adele Peters, Fast Company, Aug 31, 2020 <u>https://www.fastcompany.com/90545456/these-kites-generate-wind-power-by-flying-through-the-air</u> *[SEPP Comment: Micro-generators for micro-grids?]*

ARTICLES

A Good Hurricane Response

Laura was a killer storm but governments seem to have coordinated well. By The Editorial Board, WSJ, Aug. 30, 2020 https://www.wsj.com/articles/a-good-hurricane-response-11598828874?mod=opinion_lead_pos4

TWTW Summary: After a brief discussion of Presidents Trump's visit to the area hit by Laura, the editorial states:

"... While the destruction was grim, there were many fewer human casualties than expected thanks to effective government preparation and response.

"Laura struck the Gulf Coast on Thursday as a Category 4 storm and the strongest hurricane to hit Louisiana in 150 years. Densely populated areas were spared the storm's brunt. But Texas and Louisiana had prepared for a bigger hit, requesting federal emergency declarations several days before and mobilizing the National Guard. "Governors also issued mandatory evacuation orders for some half a million residents in highrisk areas. Texas marshaled 400 buses equipped with face masks and disinfectants to assist with the evacuation. People were encouraged to stay in hotels, though shelters provided protective equipment and virus tests.

"Most people appear to have complied with evacuation orders, which has helped minimize deaths. As of Sunday morning, 16 were reported dead, most due to carbon monoxide poisoning from unsafe generators. Katrina killed 1,836.

"The Federal Emergency Management Agency has been on the ground working with the Red Cross and Salvation Army to provide shelter and food for displaced residents, doing search-andrescue, and surveying the damage. Indiana has also deployed a search-and-rescue team. Government at all levels seems to have worked effectively, which is probably why the press has been more interested in baiting the President with questions about the NBA protests.

"Oh, and climate change. President Trump rightly replied that 'we've had tremendous storms in Texas for many decades and for many centuries and that's the way it is' and 'we handle them as they come.' Banishing fossil fuels won't prevent powerful storms or wildfires.

"Governments can do more to gird their infrastructure, elevate homes and toughen building codes as Louisiana has over the past 15 years. Congress could also reform federal flood insurance so homeowners aren't encouraged to rebuild in high-risk areas. But green energy won't control the winds or tides."