

ENVIRONMENTAL ENGINEERING

NEWSLETTER

18 AUG. 2014

This week's edition includes:

If you need older URLs contact George at ghh@att.net.

Please Note: This newsletter contains articles that offer differing points of view regarding climate change, energy and other environmental issues. Any opinions expressed in this publication are the responses of the editor alone and do not represent the positions of the Environmental Engineering Division or the ASME.

George Holliday

This week's edition includes:

1. ENVIRONMENT A COURT OF APPEALS OVERTURNS DISTRICT COURT APPROVAL OF CERCLA CONSENT DECREE DUE TO INADEQUATE INDEPENDENT SCRUTINY

On August 1, 2014, the Ninth Circuit Court of Appeals vacated and remanded a district court's approval of consent decrees under CERCLA and Arizona's state law counterpart, because the district court had failed to independently scrutinize the terms of the agreements and in so doing had afforded undue deference to the Arizona Department of Environmental Quality. *See State of Arizona v. Raytheon Co., et. al.*, No 12-15691 (9th Cir. Aug. 1, 2014). The Court of Appeals reaffirmed its prior holding in *United States v. Montrose Chemical Corporation of California*, 50 F.3d 741 (9th Cir. 1995), that a district court has an "obligation to independently scrutinize the terms" of such consent decrees, and found that in this case the district court had failed to exercise such scrutiny.

The consent decrees at issue involved contamination from a hazardous waste landfill site in Tucson, Arizona. The State of Arizona had proposed 18 agreements involving 22 settling parties, which the State contends are *de minimis* contributors to the contamination, responsible for 0.01% to 0.2% of the total cost (estimated at \$75 million). The consent decrees would have released the settling parties' liability under CERCLA and its Arizona state counterpart, including any obligation to pay contribution to non-settling parties in the future. The State had initiated an action against the settling parties in the district court to obtain approval of the proposed agreements. Additional potentially responsible parties who had declined to settle with the State intervened in the action and opposed the State's motion to enter the consent decrees. The district court approved the consent decrees over the intervenors' objections.

The Court of Appeals found that the district court had failed to independently scrutinize the individual and aggregate settlement amounts as compared with the settling parties' proportional responsibility for the cleanup as required under *Montrose*, instead deferring to the state agency's

analysis. The Court of Appeals held that while a state agency is entitled to “some deference” on “environmental issues” underlying the CERCLA action, a state agency’s interpretation of the federal CERCLA statute is not entitled to deference because it is not the agency charged with enforcement of the statute. However, the Court of Appeals went on to state that even if the EPA had been a party to the proposed consent decrees in the case, the district court still would have failed to fulfill its duty to independently scrutinize the agreements. The dissenting opinion argued the majority applied an incorrect deference standard in this case, which would “make it more difficult for states to play the role that congress envisioned for them in remediating the numerous polluted sites that blight our nation.”

The Court of Appeals also held that the district court had properly declined to issue declaratory relief regarding the intervening parties’ future CERCLA liability, on the grounds that it was not properly before the court. The request for declaratory relief had been presented in the intervenors’ brief opposing the State’s motion to approve the settlements, rather than in their complaint.

Env140818

Roger Zygmunt

B. FEDERAL AGENCIES SPEND MILLIONS ON UNION BUSINESS

WASHINGTON, D.C. — The Internal Revenue Service isn’t the only federal agency where hundreds of employees do union business full-time on the public’s dime.

“Taxpayers spent around \$156 million on federal employees who did no federal work at all,” said Nathan Mehrens, president of Americans for Limited Government.

Watchdog.org reported last week that union business — oxymoronically classified as “official time” — is subsidized by the IRS. Mehrens uncovered similar behavior at other agencies.

At the IRS, 286 full-time staffers worked exclusively for the National Treasury Employees Union while receiving government paychecks in 2012 (the latest year for which statistics were available).

Mehrens’ group exposed several other agencies that fully fund union business with public money.

<http://www.foxnews.com/politics/2014/08/11/federal-agencies-spend-millions-on-union-business/>

C. LONDON EMISSIONS RULES COULD BAN CLASSIC CARS FROM CITY CENTER

There are 800,000 of them in the country -- largely well-loved by owners and the public.

And they are big business. Firms and events dealing in historic cars generate about \$7.5 billion a year and employ 30,000 people nationwide.

But now there are fears these cars will be blocked from the roads of the UK's capital city, London.

It's all about a proposed ban on all but zero or ultra-low emission cars and vehicles. London's Mayor Boris Johnson wants to put it in place by 2020 in order to bring down pollution levels in the city.

Mayor Johnson says, “vehicles will not be allowed in, or new ones will not be allowed in, unless they have, or confirm to very, very, very stringent environmental standards.”

The new restrictions would apply to many older cars, but especially classics built well before environmental controls were even dreamed of.

Vintage Car Dealer David Clark says, “customers come to London from all over the world to see classic cars, they won’t be able to drive them. Won’t be able to do anything.”

Car buffs say they're willing to work with the Mayor on the new restrictions, as long as they don't take all the air out of their historic cars' tires.

According to Ben Cussons of the Royal Automobile Club, “it is going to be a question of finding balance, about usage, whether it is a full-time exemption, or whether, for example, older vehicles will pay an enhanced charge to enter the [London ultra low emissions] zone.”

In fact, Mayor Johnson’s office tells Fox News it thinks some sort of exemptions can be put in place to keep the classics on the road, but a deal still needs to be struck to clear the air -- in more ways than one.

<http://www.foxnews.com/leisure/2014/08/11/london-emissions-rules-could-ban-classic-cars-from-city-center/>

COMMENTS:

A. THE WEEK THAT WAS: 2014-08-09 (AUG. 9 2014)

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

New Low? Some reporters have attempted to link the outbreak of Ebola, a viral hemorrhagic fever, with global warming/climate change. Normally, these assertions are not worth discussing. But, the *Richmond Times-Dispatch* hit a new low. Its editorial writers proclaimed that scientists who challenge the claim that carbon dioxide emissions are the principal cause of global warming are similar to those native Africans who claim that Ebola cannot be caused by a virus they cannot see. The editorial fails to distinguish that the position of the former group is based on science, while the position of the latter group is based on the lack of scientific knowledge –superstition. Those who challenge the scientific claims in the Summary for Policymakers in the Fifth Assessment Report (AR-5, 2013) of the UN Intergovernmental Panel on Climate Change (IPCC) and other reports that dutifully mimic them, do so by asserting the physical scientific basis for these claims are far from compelling. Further, climate models on which the reports heavily rely are failing. The models should not be used for policy decisions. For the *Times-Dispatch* to equate the science of one group with the superstition of another group borders on obscene.

According to the US Centers for Disease control, Ebola is a virulent hemorrhagic fever that can be transferred directly from human-to-human or from human-to-instrument-to-human through body fluids, a vector is not needed, once humans are infected. The animal host of the virus is not known, but bats are suspected. Assuming outbreaks of hemorrhagic fever are caused by global warming/climate change is pure speculation.

For example, yellow fever is a less virulent hemorrhagic fever, yet dangerous to humans. In 1793, long before 19th and 20th century warming, the US city of Philadelphia suffered a severe yellow fever epidemic which killed, perhaps, 5,000, 10 percent of its inhabitants, and many more fled the city. The suspected cause was fever in refugees from what is now Haiti, in the Caribbean. See links under Communicating Better to the Public –Go Personal,

<http://www.cdc.gov/vhf/ebola/about.htm>

<http://www.cdc.gov/ncidod/dvrd/spb/mnpages/dispages/vhf.htm>

Model Issues: The July 12 TWTW carried an interesting article by Robert Caprara, who spent 10 years building large-scale environmental computer models and was a consultant to the EPA.

Mr. Caprara asserted that any model can be tweaked to yield a desired result, which he did for his EPA client.

The article resulted in several follow-up letters of interest. Robert Foxen, who states he is a former chairman of an EPA task force deciding construction grant funding, agrees with Mr. Caprara, sometimes models are manipulated to produce desired outcomes. Mr. Foxen asserts that *“if the model cannot be verified, then it wouldn't be suitable for making policy decisions, and it would be necessary to further revise the model to assure it can predict future conditions.”* He also asserts that the coefficients and assumptions in the climate models that fail to produce accurate predictions need to be adjusted, then verified, before they are suitable for policy conditions. *The climate modelers are saying: "Don't confuse me with the facts."* These letters indicate that the EPA knows that it is producing deficient science to justify its policies.

Charles Battig cleverly brings up what he calls the Pygmalion syndrome where some modelers fall in love with their model, even if it is in error. Having begun his professional career designing mathematical models, this author will attest that the sirens' song is extremely strong and it is very difficult to abandon a beautiful, but flawed, model of one's creation. See Articles # 1 and #2.

Terms: Matt Briggs has an interesting post on his web site regarding language being use to describe the products of the climate models estimates about the future. No matter what term is used; forecasts, scenarios, or projections; the failure to make good estimates is still failure. See link under Challenging the Orthodoxy.

Portugal: Sebastian Lüning and Fritz Vahrenholt compare actual data with the claims of two Portuguese academics who were review editors for the Physical Science section of AR-5. The German scientists found that the claims for the impacts of global warming/climate change were not supported by actual data. They reveal that 140-year measurements from two locations in Portugal show a relationship between temperatures and solar influences, particularly in the winter, as well as a relationship between temperatures and the North-Atlantic Oscillation index. Also, sediment core data and other data show that the temperatures were warmer in the Medieval Warm Period (MWP) than today. They assert the MWP coincides with a phase of high solar activity. These and other studies they discuss show that climate is constantly changing, a fact that is glossed over by the IPCC and its mimics. Whether or not what applies for the area around Portugal applies for the rest of the world is an issue that needs further research before drastic policies are implemented. See links under Science: Is the Sun Rising? and Challenging the Orthodoxy.

A New Hot (Cold) Spot? If the Earth's surface is warming appreciably, whatever the cause, based on theory there should be an amplified warming trend centered over the tropics at about 10 km (33,000 feet). Such a warming trend was erroneously called the distinct human fingerprint. As discussed in the July 12 TWTW, writing in the otherwise alarmist "State of the Climate in 2013" John Christy calculates that the warming trend between 20° S and 20° N is +0.069 °C per decade, based on both radio sondes (weather balloons) and satellites (starting in 1979). This is hardly cause for alarm, and a pronounced hot spot is not found.

Now, the Climate Establishment is coming up with a new human fingerprint –stratospheric cooling. To date, the science behind the claim that human emissions of carbon dioxide (CO2) would cause stratosphere cooling is less than adequate. Arguments include that the stratosphere

is more sensitive to increased CO2 and less disturbed by natural variability of water vapor. According to this logic, a better measurement of human-caused warming is cooling? Further, it was amplification of warming caused by increased atmospheric water vapor that was the justification for high-end warming claims. It appears the Climate Establishment is living in interesting (desperate) times. See link under Measurement Issues.

Aerosols Again? A new study used satellite measurements of aerosol levels [tiny droplets or small particles] in the atmosphere from 2006 to 2011. The thinking is aerosol levels alter the amount of cloud cover and change the properties of clouds. *The researchers found each effect to be of similar magnitude --that is, changing the amount of the clouds and changing their internal properties are both equally important in their contribution to cooling our planet. Moreover, they found that the total impact from the influence of aerosols on this type of cloud is almost double that estimated in the latest report of the IPCC.*

There are several issues here. Assuming the paper holds up to further review, the certainty expressed by the IPCC in the Summary for Policymakers becomes far less certain. The models need to be changed. The time frame of the study is a period of a no-warming trend. How do the aerosol levels in this period compare with aerosol levels during the warming period? It is possible that this question cannot be answered. See link under Model Issues.

Funding Green: The August 2 TWTW, briefly discussed a minority staff report by the US Senate Committee on Environment and Public Works, revealing an interlocking network of foundations and charities that are intensely involved in expanding government powers and limiting energy use in the US. The discussion omitted several disturbing findings in the report. *Public charities attempt to provide the maximum amount of control to their donors through fiscal sponsorships, which are a legally suspect innovation unique to the left, whereby the charity essentially **sells its nonprofit status to a group for a fee.*** [Boldface added]

Also: *Under President Obama, EPA has given more than \$27 million in taxpayer-funded grants to major environmental groups.*

See link under Funding Issues.

Additions and Corrections: Reader Jim Cooper asked why the West Antarctic ice sheet is slowly melting (adding to sea level rise) even as Antarctica is cooling. The answers are at least two-fold. One, the earth is warmer than it was during the last ice age and the oceans transport this heat under the ice sheet; and, two, the land under the west Antarctic ice sheet is tectonically active. For example, <http://www.volcanodiscovery.com/antarctica.html>

The August 2 TWTW pointed out that US National Health Statistics attributed twice the number of deaths due to cold than due to heat. The omitted link for that report is under Changing Weather.

Reader Anton Garrett correctly pointed out that TWTW erred in stating tanks were used in the first day of the Battle of the Somme on July 1, 1916. Instead, tanks were first used in the Battle of Flers–Courcelette, which was the third and final general offensive during the Battle of the Somme mounted by the British, and supported by Canadian and New Zealand Divisions. The offensive started on September 15, 1916. It failed to achieve the break through British General Haig desired. Mr. Garrett also correctly points out that there is no general consensus among military historians about what should have been done. As always, TWTW appreciates additions and corrections from its readers.

Number of the Week –20%. The article by Sebastian Lüning and Fritz Vahrenholt reminded TWTW that the European Union committed at least 20% of its 2014 to 2020 budget to “fight” Climate change. The estimated budget for the period is about 960 billion Euros. At least during WW I, the countries could identify their enemy. Today, it is not clear what the enemy is –what is the principle cause of climate change? See link under Funding Issues and

http://www.consilium.europa.eu/uedocs/cms_Data/docs/pressdata/en/ecofin/139831.pdf

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<http://www.sepp.org/twtwfiles/2014/TWTW%208-9-14.pdf>

B. BOMBSHELL: STUDY SHOWS GREENHOUSE GAS INDUCED WARMING DROPPED FOR THE PAST 14 YEARS

Posted on [August 5, 2014](#) by [Anthony Watts](#)

Paper finds a decrease of IR radiation from greenhouse gases over past 14 years, contradicts expected increase – cloudiness blamed for difference.

A paper published in the *Journal of Climate* finds from 800,000 observations a significant decrease in long wave infrared radiation from increasing greenhouse gases over the 14 year period 1996-2010 in the US Great Plains. CO2 levels increased ~7% over this period and according to AGW theory, downwelling IR should have instead increased over this period.

According to the authors,

“The AERI data record demonstrates that the downwelling infrared radiance is decreasing over this 14-yr period in the winter, summer, and autumn seasons but it is increasing in the spring; these trends are statistically significant and are primarily due to long-term change in the cloudiness above the site.”

The findings contradict the main tenet of AGW theory which states increasing greenhouse gases including the primary greenhouse gas water vapor and clouds will cause an increase of downwelling longwave infrared “back-radiation.”

<http://wattsupwiththat.com/2014/08/05/bombshell-study-shows-greenhouse-gas-induced-warming-dropped-for-the-past-14-years/#more-114122>

Don Shaw

C. SURPRISING FACTS ABOUT CLIMATE CHANGE IN PORTUGAL: WHY THE CLIMATE CATASTROPHE IS NOT HAPPENING

Posted on [August 5, 2014](#) by [Guest Blogger](#)

By Sebastian Lüning and Fritz Vahrenholt

www.kaltesonne.de

As Portugal came out of its second unusually wet winter in a row, some people already fear these could be the first signs of global climate change. Can the seemingly endless rainy period be blamed on ourselves because we are driving our cars to work, heating and air-conditioning our homes, and flying on holidays or on business to Brazil? Undoubtedly the atmospheric carbon dioxide (CO₂) concentration has been steadily increasing over the past 150 years. In its latest report released last September the United Nations Intergovernmental Panel on Climate Change (IPCC) warned of dire consequences should CO₂-emissions not be drastically curtailed in the near future.

Among the contributors to the IPCC report were also two Portuguese academics, Dr Pedro Viterbo, Director at the Portuguese Instituto de Meteorologia, and Professor Filipe Duarte Santos of the Lisbon University's Faculty of Sciences, both serving as review editors for the IPCC. [In conjunction with the report's launch](#) Santos warned that Portugal would be among the European countries most vulnerable to climate change. He suggested that the country in the future will suffer from more extreme weather events like heat-waves and droughts, which in turn will lead to more forest fires and reduced agricultural output. Santos prognosis sees an overall drop in rainfall but with the threat of short bursts of torrential rains that will raise the risk of flooding. Moreover, the Lisbon-based professor expects sea level to rise by more than half a metre before the end of this century, which would put two thirds of Portugal's coastline at risk for a loss of terrain.

<http://wattsupwiththat.com/2014/08/05/surprising-facts-about-climate-change-in-portugal-why-the-climate-catastrophe-is-not-happening/#more-114096>

D. WIND POWER HOPES FOR SEA CHANGE

Companies Behind Sea-Based Wind Farms Are Learning From Past Mistakes

By

Jan Hromadko

July 31, 2014 5:38 p.m. ET

ADRIFT: Backers of the Meerwind project have invested about \$1.6 billion to harness wind power. The project counts 80 massive Siemens turbines and is about a year behind schedule. Delays have cost Siemens more than \$1 billion over two years. *European Pressphoto Agency* HAMBURG, Germany—For years, Germany's ambitious effort to generate bountiful electricity with wind farms rising from the deep blue sea has been drowning in red ink. Now, investors like [Blackstone Group](#) like [Siemens AG](#) are looking to buck that trend.

Offshore wind holds enormous potential for plentiful, environmentally friendly energy because the open sea is almost always windy. But ever since Germany started planning investments in the sector—around the start of the century—obstacles have piled up, including a lack of component suppliers and the absence of equipment needed to link turbines to the national power grid. Even the ships needed for construction out in open water were unavailable.

As a result, early offshore-wind projects blew through budgets and schedules because developers had to invest billions of dollars in ports, special barges and power connections.

Siemens, the world's largest manufacturer of offshore wind turbines, and its partners concede they underestimated the challenges behind offshore wind. The financial fallout from these challenges was highlighted last week, when Siemens said it booked €128 million (\$171 million) in new charges related to connecting offshore wind farms to the power grid. It blamed unexpectedly high costs for shipping, installing and starting up grid components.

They say, however, that they managed to learn new skills in the process. And with huge investments made and painful lessons learned, confidence in the sector is returning—with a dose of realism.

Private-equity firm Blackstone and German project developer WindMW have invested €1.2 billion in the Meerwind—German for "sea wind"—project, more than 50 miles (about 85 kilometers) off Germany's coast on the North Sea. Meerwind, which counts 80 massive Siemens turbines, is expected to start delivering electricity late this year—about a year behind schedule.

Building Meerwind proved daunting, despite its relatively shallow waters. Engineers had to anchor foundations for turbines, transformers and converter stations more than 130 feet beneath the surface, which proved far more difficult than expected.

Another problem was wiring the system to move gigawatts from the sea to consumers on land. This requires offshore converter stations the size of factories, which Siemens builds at a price of around €1 billion each.

Siemens says delays in manufacturing and preparing the converters have cost it roughly €900 million in the past two years, including the latest charges announced Thursday. The company finally installed the last two stations in July.

Tim Dawidowsky, chief executive of Siemens's electricity-transmission unit, said Siemens has nearly doubled the amount of time allotted to build offshore converter stations to five years.

Despite its challenges, wind power remains a crucial element in Germany's strategy to replace nuclear and fossil-fuel plants with more environmental sources. The country's exit from nuclear energy was speeded up after a tsunami crippled Japan's Fukushima nuclear plant in March 2011. Germany closed eight of its oldest nuclear plants immediately following the disaster and plans to close the other nine by 2022.

Other wind farms, including the Nordsee Ost project developed by German utility are under construction.

Last year, renewable energies accounted for 24% of Germany's power generation. And with a share of more than one third of that, wind energy is by far the biggest generator of "green" electricity in the country, according to energy lobby BDEW.

Offshore wind only accounts for a fraction—less than 1%—of the Germany's renewable-energy generation, but the densely populated country already has allocated its most promising onshore wind spots, leading investors to look to the sea.

To date, Germany has an offshore capacity of around 630 megawatts of offshore wind power and plans to boost that tenfold by 2020 to 6.5 gigawatts. By 2030, it aims for offshore capacity of 15 gigawatts.

Technological challenges behind offshore wind may be shrinking, but the economics remain daunting. One kilowatt-hour of electricity generated offshore costs up to 18 European cents, compared with 11 cents for solar power and 8 cents for onshore wind. Coal and gas plants generate electricity for as little as 4 cents per kwh.

"Long-term subsidy programs need to be in place to cover this gap," said Magnus Dale, senior analyst at consultancy IHS Energy in Paris.

Germany is offering long-term support to the sector, guaranteeing subsidies for offshore wind farms for up to 12 years, despite having slashed its capacity target through 2030 by 40% as part of an effort to curb spiraling costs.

The country still expects total renewables subsidies to rise to around €24 billion this year, a bill that electricity consumers are paying through a surcharge on their power bills.

The industry believes that further industrialization and technological progress will help reduce the cost of offshore wind.

Michael Hannibal, head of Siemens's wind-power division, said the offshore industry aims to cut costs by around 40% by 2020. This would still be around 35% higher than onshore wind today—and 2.7 times more expensive than coal and gas—but more reductions are expected to follow. To achieve this, Siemens is looking to develop bigger and more efficient wind turbines.

Siemens's biggest wind generator has a capacity of 6 megawatts but the company needs to begin looking at 8 MWs, said Mr. Hannibal.

WSJ, Marketplace, p.B8, 7 August 2014.

E. TOLD YA SO – WASHINGTON POST LINKS EBOLA TO CLIMATE CHANGE

Posted on [August 7, 2014](#) by [Anthony Watts](#)

Eric Worrall writes:

*The Washington Post has in my opinion **stooped to a new low**, by trying to tie the ongoing Ebola misery in Africa to the issue of Climate Change. According to the Post;*

“A 2002 study published in the journal of Photogrammetric Engineering and Remote Sensing found that sudden shifts from dry to wet conditions were associated with Ebola outbreaks from 1994 to 1996 in tropical Africa.

As the globe warms, precipitation extremes are projected to increase. Periods of drought are expected to become more frequent in some areas while heavy rain events, when they occur, are forecast to become more intense. Presumably, those areas which see precipitation variability increases – with abrupt shifts from extremely dry to extremely wet periods – would be most vulnerable to Ebola outbreaks.” (h/t Breitbart)

Ebola is a horrible disease which is ravaging the poorest people of Africa. The new outbreak, which has demonstrated a frightening ability to spread to new victims, and to infect and kill health workers, may yet become the new global plague we all fear – with every new victim, Ebola improves its ability to strike at our vulnerabilities. We are all at risk

<http://wattsupwiththat.com/2014/08/07/told-ya-so-washington-post-links-ebola-to-climate-change/#more-114184>

F. RECENT PAPER FINDS 1950-2009 SOLAR GRAND MAXIMUM WAS A ‘RARE OR EVEN UNIQUE EVENT’ IN 3,000 YEARS

Posted on [August 6, 2014](#) by [Anthony Watts](#)

Sun said to be “bi-modal”

While many, including the IPCC, suggest the modern Grand Maximum of solar activity from 1950-2009 has nothing to do with the 0.4C global warming measured over that time frame, it does seem to be unique in the last three millennia.

[from CO2 Science: A 3,000-Year Record of Solar Activity](#)

What was done

According to Usoskin *et al.* (2014), the Sun “shows strong variability in its magnetic activity, from Grand minima to Grand maxima, but the nature of the variability is not fully understood, mostly because of the insufficient length of the directly observed solar activity records and of uncertainties related to long-term reconstructions.” Now, however, in an attempt to overcome such uncertainties, in a Letter to the Editor published in the journal *Astronomy and Astrophysics*, Usoskin *et al.* “**present the first fully adjustment-free physical reconstruction of solar activity**” covering the past 3,000 years, which record allowed them “to study different modes of solar activity at an unprecedented level of detail.”

What was learned

As illustrated in the figure below, the authors report there is “remarkable agreement” among the overlapping years of their reconstruction (solid black line) and the number of sunspots recorded from direct observations since 1610 (red line). Their reconstruction of solar activity also displays several “distinct features,” including several “well-defined Grand minima of solar activity, ca. 770 BC, 350 BC, 680 AD, 1050 AD, 1310 AD, 1470 AD, and 1680 AD,” as well as “**the modern Grand maximum (which occurred during solar cycles 19-23, i.e., 1950-2009),**” which they describe as “a rare or even unique event, in both magnitude and duration, in the past three millennia.”

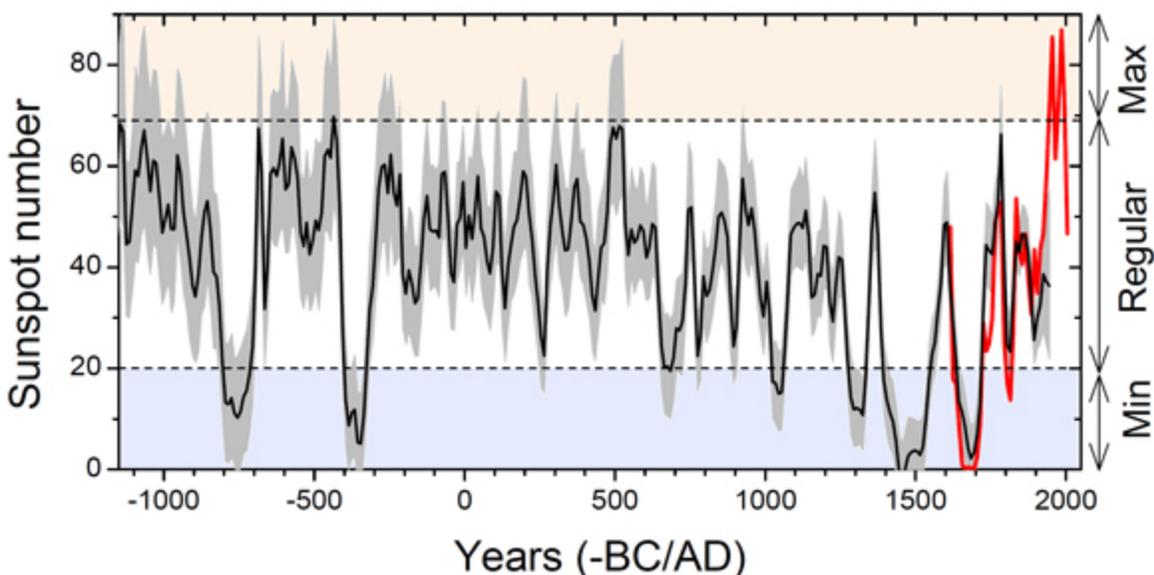


Figure 1. Reconstructed decadal average of sunspot numbers for the period 1150 BC-1950 AD (black line). The 95% confidence interval is shown by the gray shading and directly measured sunspot numbers are shown in red. The horizontal dashed lines demark the bounds of the three suggested modes (Grand Minimum, Regular, and Grand Maximum) as defined by Usoskin et al.

Further statistical analysis of their reconstruction revealed the Sun operates in three distinct modes of activity – (1) a regular mode that “corresponds to moderate activity that varies in a relatively narrow band between sunspot numbers 20 and 67,” (2) a Grand minimum mode of reduced solar activity that “cannot be explained by random fluctuations of the regular mode” and which “is confirmed at a high confidence level,” and (3), a possible Grand maximum mode, but they say that “the low statistic does not allow us to firmly conclude on this, yet.”

What it means

Usoskin *et al.* (2014) write their results “provide important constraints for both dynamo models of Sun-like stars and investigations of possible solar influence on Earth’s climate.” They also illustrate the importance of improving the quality of such reconstructions, in light of the fact that previous reconstructions of this nature “did not reveal any clear signature of distinct modes” in solar activity.

Unfortunately, it was beyond the scope of this paper to address the potential impact of solar activity on climate. Yet the reconstruction leaves a very big question unanswered — **What effect did the Grand maximum of solar activity that occurred between 1950 and 2009 have on**

Earth's climate? As a "unique" and "rare" event in terms of both magnitude and duration, one would think a lot more time and effort would be spent by the IPCC and others in answering that question. Instead, IPCC scientists have conducted relatively few studies of the Sun's influence on modern warming, assuming that the temperature influence of this rare and unique Grand maximum of solar activity, which has occurred only once in the past 3,000 years, is far inferior to the radiative power provided by the rising CO2 concentration of the Earth's atmosphere.

Reference

Usoskin, I.G., Hulot, G., Gallet, Y., Roth, R., Licht, A., Joos, F., Kovaltsov, G.A., Thebault, E. and Khokhlov, A. 2014. Evidence for distinct modes of solar activity. *Astronomy and Astrophysics* **562**: L10, doi: 10.1051/0004-6361/201423391.

Abstract

Aims. The Sun shows strong variability in its magnetic activity, from Grand minima to Grand maxima, but the nature of the variability is not fully understood, mostly because of the insufficient length of the directly observed solar activity records and of uncertainties related to long-term reconstructions. Here we present a new adjustment-free reconstruction of solar activity over three millennia and study its different modes.

Methods. We present a new adjustment-free, physical reconstruction of solar activity over the past three millennia, using the latest verified carbon cycle, ^{14}C production, and archeomagnetic field models. This great improvement allowed us to study different modes of solar activity at an unprecedented level of details.

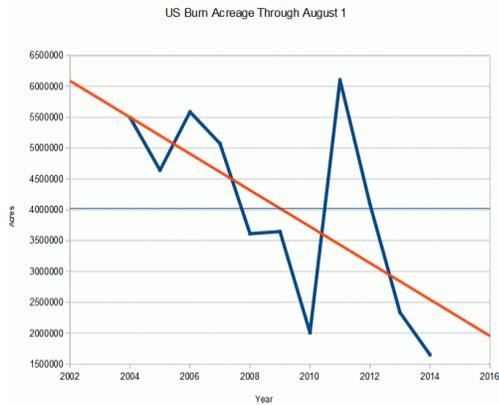
Results. The distribution of solar activity is clearly bi-modal, implying the existence of distinct modes of activity. The main regular activity mode corresponds to moderate activity that varies in a relatively narrow band between sunspot numbers 20 and 67. The existence of a separate Grand minimum mode with reduced solar activity, which cannot be explained by random fluctuations of the regular mode, is confirmed at a high confidence level. The possible existence of a separate Grand maximum mode is also suggested, but the statistics is too low to reach a confident conclusion.

Conclusions. The Sun is shown to operate in distinct modes – a main general mode, a Grand minimum mode corresponding to an inactive Sun, and a possible Grand maximum mode corresponding to an unusually active Sun. These results provide important constraints for both dynamo models of Sun-like stars and investigations of possible solar influence on Earth's climate.

G. U.S. FOREST FIRES VERSUS CLIMATE MODEL PREDICTIONS

Posted on [August 5, 2014](#) by [Anthony Watts](#)

While we have one of the lowest US fire seasons to date on record so far...



(Data at right from [National Interagency Fire Center](#)

plotted by Tony Heller)

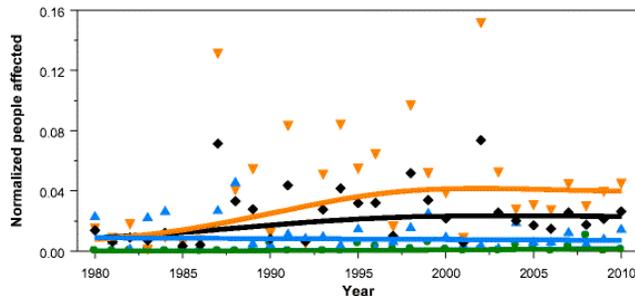
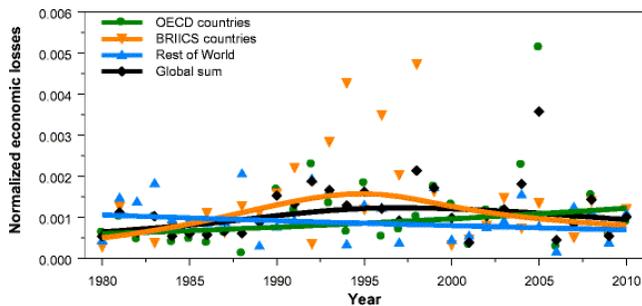
... we have this special report based on “... numerous predictions that wildfires—especially in the West—will get larger, more intense, and increasingly hard to contain with climate change,”.

The Interaction of Climate Change, Fire, and Forests in the U.S.

Special Journal Section Provides Regional Assessments

Asheville, NC — A special section of the September issue of *Forest Ecology and Management*, available online now, assesses the interactions among fire, climate change, and forests for five major regions of the United States.

H. A New Paper on Disaster Losses and Climate Change



A new paper appeared [in *Climatic Change* this week by Visser et al.](#) which looks at disasters and climate change (open access [here](#)). Like other studies and the IPCC assessment, Visser et al. find no trends in normalized disaster losses, looking at several metrics of economic and human losses.

They conclude:

The absence of trends in normalized disaster burden indicators appears to be largely consistent with the absence of trends in extreme weather events. This conclusion is more qualitative for the number of people killed. As a consequence, vulnerability is also largely stable over the period of analysis.

<http://rogerpielkejr.blogspot.com/2014/07/a-new-paper-on-disaster-losses-and.html?spref=tw>

I. HEARTLAND INSTITUTE CONFERENCE SHOWS THE GROWING POWER OF CLIMATE REALISM

BY [RON ARNOLD](#) | JULY 15, 2014 | 5:00 PM

TOPICS: [LAS VEGAS CLIMATE CHANGE ENERGY AND ENVIRONMENT](#)

Heartland Institute's Ninth International Conference on [Climate Change](#), with its 64 speakers from 12 countries, marked a turning point in the climate wars between alarmists and skeptics: A lot more first-timers than dogged veterans showed up for the three-day science marathon, July 7-9.

That's significant because it reflected the vanishing public concern over "dangerous man-made climate change" and growing discontent with the politicized rear guard's increasingly desperate search for new scare words and its bigoted hate speech hurled at skeptics ("deniers," evoking the [Holocaust](#)).

Held this year in a vast [Las Vegas](#) convention center, what was usually a [New York](#) or [Chicago](#) gathering of scorned, independent-minded scientists -- many of whom suffered grievously for refusing the dictates of "believe-us-or-else" climate despots -- turned into a new kind of festival with about 650 attendees.

<http://washingtonexaminer.com/heartland-institute-conference-shows-the-growing-power-of-climate-realism/article/2550882>

J. COLORADO METHANE COMPROMISE COULD BE MODEL FOR OTHER STATES

Posted on **August 5, 2014 at 6:11 pm** by [Jennifer A. Dlouhy](#) in [Politics/Policy](#)

DENVER — Oil companies and environmentalists can find common ground, Noble Energy CEO Chuck Davidson said Tuesday, pointing to first-of-their-kind regulations in Colorado aimed at corralling methane emissions from drilling.

State regulators approved the methane mandates in February, after Noble, Anadarko Petroleum Corp. Encana Corp., the Environmental Defense Fund and other conservation groups reached agreement on the approach.

The air quality measure — now considered a model for federal regulators also looking to rein in emission of the potent greenhouse gas — forces oil and gas companies to do more to routinely search out methane leaks and gives them timelines for sealing them. Companies also will have to install emissions-control devices at new wells and on compressors, storage tanks and other equipment.

Methane, the main component of natural gas, is 28 to 34 times more potent than carbon dioxide over 100 years, even though it dissipates much more quickly in the atmosphere.

New steps: [Energy Department moves to plug methane leaks](#)

<http://fuelfix.com/blog/2014/07/29/energy-department-takes-steps-to-plug-methane-leaks/>

Speaking at the Rocky Mountain Energy Summit on Tuesday, Davidson said the industry-environmental collaboration on the air quality rules stemmed from a realization that some mandates were coming, whether oil companies cooperated or not.

“If it’s there and we’re facing it, we might as well face it head on, don’t dodge it,” Davidson said.

Although the rule scales the frequency of inspections to the size of individual drilling operations, it did not go far enough to ease cost concerns from smaller operators in the state and some with dry coalbed methane production.

Some oil industry supporters put the price tag of complying with the new methane mandates around \$20 million; the Colorado Petroleum Association said the cost is likely to be five times that, around \$100 million.

And even though Noble backed the new rule, Davidson noted Tuesday that the company doesn’t view the required changes as a money-maker just because potentially leaked gas can instead be captured and sold. New methane monitoring and leak detection programs will cost the company “several million dollars a year,” he said.

What happens in Colorado already may be exported to other states, as Ohio and Wyoming move to limit methane emissions from oil and gas activities.

It also is likely to serve as a model for Obama administration officials in the nation’s capital, where the Environmental Protection Agency is set to decide later this year on whether new regulations are needed to clamp down on methane.

Read more: [White House strategy to cut methane emissions takes aim at oil industry](http://fuelfix.com/blog/2014/03/28/white-house-strategy-to-cut-methane-emissions-takes-)
(<http://fuelfix.com/blog/2014/03/28/white-house-strategy-to-cut-methane-emissions-takes->)

Davidson said methane regulation should spread beyond Colorado’s borders and the emissions must “be addressed more broadly.”

But he cautioned against a wholesale adoption of the Colorado approach nationwide.

“What we did in Colorado was very specific to some of the conditions in Colorado,” he said.

“We have to be thoughtful before we try to apply the Colorado model to everyone. One size does not fit all.”

Both Davidson and Environmental Defense Fund President Fred Krupp noted the difficulty of the months-long negotiations over the air quality regulations.

“There were moments of rough sledding where both sides thought about walking away,” Krupp said.

But, Krupp stressed that stakeholders tried to work toward mandates that would minimize cost while maximizing performance.

“At the beginning, we really tried to stand in Noble’s and Anadarko’s shoes and understand what were there operating realities, what were their concerns,” Krupp recalled. “I think they tried to do the same.”

Under Krupp, the EDF’s willingness to work with the oil industry on issues around the design of wells, the content of fluids pumped underground and, now, methane, has drawn fire from some environmental groups.

Krupp acknowledged that EDF “took a lot of heat” for collaborating with oil industry leaders to find compromises on those issues. “It’s no fun to have your friends raking you over the coals,” he said.

Editor’s Note: The difficulty with this report is the utter lack of technical support for reducing methane leaks from drilling and producing operations. There is no proof that Greenhouse gases cause anything more than insignificant atmospheric temperature rise.

We know the IPCC computer model grossly over estimate atmospheric temperature rise. (Cristy and Spencer) The U. S. Energy Department has never shown proof of the greenhouse effect. They rely on the miscalculations of the IPCC. In the 1980's API sponcered a leak detection program of Gas Plamts, where there is noting but gas. The resultss of the measurement program showed <1 percent of the total natural gas leaked from the gas plant and piping. GHH

K. FINDING: 'EL NIÑOS 10,000 YEARS AGO WERE AS STRONG AND FREQUENT AS THE ONES WE EXPERIENCE TODAY'

Posted on [August 8, 2014](#) by [Anthony Watts](#)

Ancient shellfish remains rewrite 10,000-year history of El Niño cycles

[Hannah Hickey](#) University of Washington

The planet's largest and most powerful driver of climate changes from one year to the next, the El Niño Southern Oscillation in the tropical Pacific Ocean, was widely thought to have been weaker in ancient times because of a different configuration of the Earth's orbit. But scientists analyzing 25-foot piles of ancient shells have found that the El Niños 10,000 years ago were as strong and frequent as the ones we experience today.

<http://wattsupwiththat.com/2014/08/08/finding-el-ninos-10000-years-ago-were-as-strong-and-frequent-as-the-ones-we-experience-today/>

Don Shaw

L. SCIENTIST REVEALS INCONVENIENT TRUTH TO ALARMISTS

Tuesday, 17 Jun 2014 07:59 AM

By [Larry Bell](#)

Dr. Christian Schlüchter's discovery of 4,000-year-old chunks of wood at the leading edge of a Swiss glacier was clearly not cheered by many members of the global warming doom-and-gloom science orthodoxy.

This finding indicated that the Alps were pretty nearly glacier-free at that time, disproving accepted theories that they only began retreating after the end of the little ice age in the mid-19th century. As he concluded, the region had once been much warmer than today, with "a wild landscape and wide flowing river."

Dr. Schlüchter's report might have been more conveniently dismissed by the entrenched global warming establishment were it not for his distinguished reputation as a giant in the field of geology and paleoclimatology who has authored/coauthored more than 250 papers and is a professor emeritus at the University of Bern in Switzerland.

Then he made himself even more unpopular thanks to a recent interview titled "Our Society is Fundamentally Dishonest" which appeared in the Swiss publication Der Bund where he criticized the U.N.-dominated institutional climate science hierarchy for extreme tunnel vision and political contamination.

<http://www.newsmax.com/LarryBell/warming-global-climate/2014/06/17/id/577481/#ixzz355f6L5y2>

Don Shaw

M. REPLACING THE ENVIRONMENTAL PROTECTION AGENCY

A plan to replace the United States Environmental Protection Agency with a Committee of the Whole of the 50 state environmental protection agencies, utilizing a phased five-year transition period.

By Jay Lehr, Ph.D.1Guest Post by WUWT Regular “Just The Facts”

In 1968, when I was serving as the head of a groundwater professional society, it became obvious to me and a handful of others that the United States did not have any serious focus on potential problems with the quality of its air, drinking water, and surface water, and that the nation suffered from waste disposal problems and contamination from mining and agriculture. I held the nation’s first Ph.D. in groundwater hydrology, which gave me insight to understand the problems. I was asked by the director of the Bureau of Water Hygiene in the U.S. Department of Health to serve on a panel to study the potential to expand the bureau’s oversight into a full environmental protection organization.

Collectively, we spoke before dozens of congressional committees in both the House of Representatives and the U.S. Senate, drawing attention to mounting environmental pollution problems. We called for the establishment of a national Environmental Protection Agency (EPA), and in 1971 we succeeded.

I was appointed to a variety of the new agency’s advisory councils and over the next 10 years I helped write a significant number of legislative bills that were to make up a true safety net for our environment. They included the Water Pollution Control Act (later renamed the Clean Water Act), Safe Drinking Water Act, Resource Conservation and Recovery Act, Surface Mining and Reclamation Act (which, surprisingly, covered deep mines as well), Clean Air Act, Federal Insecticide, Rodenticide, and Fungicide Act, and Comprehensive Environmental Response Compensation and Liability Act (which we now know as Superfund).

http://heartland.org/sites/default/files/lehr_-_replacing_epa_0.pdf

N. BAKKEN OIL PIPELINE WOULD BISECT MINNESOTA, CROSS 144 WATERWAYS

Enbridge says it consulted with regulatory agencies and communities for a year and a half to select the best route, which faces intense public opposition.

<http://insideclimatenews.org/news/20140806/bakken-oil-pipeline-would-bisect-minnesota-cross-144-waterways>

David Sassoon

O. SORRY, ALARMISTS, LIES AND INSULTS DON’T CHANGE COOLING TREND

August 6, 2014

[JAMES M. TAYLOR](#)

James M. Taylor is managing editor of Environment & Climate News, a national monthly...([read full bio](#))

In a recent column at [Forbes.com](#) I called attention to the latest, most accurate data showing [U.S. temperatures have cooled](#) during the past decade. At the end of the article I predicted global warming alarmists would try to claim the temperatures are irrelevant. Sure enough, freelance blogger [Erik Sherman did not disappoint](#), subsequently performing an epic face plant making that very argument.

As I noted in my initial article, the National Oceanic and Atmospheric Administration (NOAA) in January 2005 began collecting temperature data from a nationwide network of more than 100 pristinely located temperature stations immune to corruption by human development or other factors. After a decade of collecting data, NOAA has released the first decade of data. The data show a fairly consistent cooling throughout the decade. Temperatures are cooler now than they were in 2005. Moreover, with the exception of a very brief period in 2011 and 2012, cooler temperatures have dominated since 2007.

I noted, “Of course, 10 years is hardly enough to establish a long-term trend.” Nevertheless, I drew three lessons from the cooler temperatures: (1) Global warming is not as dramatic and uniform as alarmists claim. (2) U.S. temperatures are consistent with the global temperature stagnation of the past 17-plus years. (3) The temperature data debunk assertions that rising temperatures caused various extreme weather events in the United States during the past year.

In a column abrasively titled, “[The Latest Climate Change Denial Fact Twisting](#),” Sherman unleashed a torrent of misinformation and character assaults to the effect that I “inaccurately characterized and misrepresented the information and what it shows.” In the process, Sherman not only fulfilled my prediction that alarmists would try to claim the temperatures are irrelevant, but he additionally displayed an impressive lack of reading comprehension skills.

Sherman opened his column saying I “claim[ed] the new government data debunks the concept of global climate change.” That is quite rich. To the contrary, I have consistently maintained that climate is constantly changing and humans have likely played a role in recent planetary warming. Sherman did not identify anywhere in my article where I say the data debunk the concept of global climate change.

Sherman next admitted that “yes, the stations showed a slight end-to-end drop over the time they’ve run.” That was nice to see. But he then argued the very brief temperature uptick in 2011-2012 means the long-term temperature trend may end up oscillating while remaining rather flat rather than being one of long-term cooling. OK, that may or may not turn out to be the case, but where did I claim that Sherman’s admitted 10-year cooling portends a longer-term cooling trend? Which part of “Of course, 10 years is hardly enough to establish a long-term trend” was Sherman incapable of understanding? Moreover, even if a long-term oscillating temperature stagnation does indeed occur, that would also support my larger argument that the temperature data contradict claims of accelerating warming.

Sherman next claimed “Over the period show[n], six years saw temperatures above normal; only three years saw lower than normal temperatures.” Well, that may be true, but Sherman conveniently forgot to mention that most of those above-average temperatures occurred at the very beginning of the 10-year period. When a time series shows warmer temperatures at the beginning of a time period and cooler temperatures at the end of the time period, this hardly disproves the notion that temperatures were warm early in the time period.

After launching several additional character assaults, Sherman concluded by claiming, “I had first asked Heartland last week for someone to interview. Although a representative said that a

person would be made available, the organization has yet to provide a name or contact information for a discussion. If and when I hear more, I'll update this post."

I laughed out loud when I read this final mischaracterization and disparagement. Sherman sent an email to generic Heartland Institute staff on a Friday afternoon. I guess that qualifies as "last week" in the most generous sense of the term. A more precise and less misleading way of putting it would have been, "I sent an email Friday afternoon to generic Heartland Institute staff but nobody called me back over the weekend."

Also, Sherman claimed he sought "a name or contact information for a discussion." Considering I wrote the article in question and he was attacking me and my article by name, I am surprised he could not identify the most appropriate "name or contact information" for a discussion. My email address is all over the Internet. Sherman could have easily contacted me directly if he desired an open and honest conversation rather than an excuse to assert the Heartland Institute was dodging him.

The long and short of it is – as Sherman admitted – U.S. temperatures have indeed declined over the past decade. The verdict still stands. All the constructed straw men in the world won't change that, nor will Sherman's desperate insults and character attacks. To his credit, however, Sherman finally and parasitically found his 15 minutes of fame. Nice effort, Erik.

P. SIMULATIONS OF MEDITERRANEAN AND NORTHERN AFRICA PRECIPITATION (5 AUG 2014)

Reference

Perez-Sanz, A., Li, G., Gonzalez-Samperiz, P. and Harrison, S.P. 2014. Evaluation of modern and mid-Holocene seasonal precipitation of the Mediterranean and northern Africa in the CMIP5 simulations. *Climate of the Past* 10: 551-568.

Introducing their work, Perez-Sanz *et al.* (2014) state they analyzed "the spatial expression of seasonal climates of the Mediterranean and northern Africa in pre-industrial and mid-Holocene simulations from the fifth phase of the Coupled Model Intercomparison Project (CMIP5)," which they did by comparing the CMIP5 simulations with "modern observations from the CRU TS3.1 data set," and by evaluating "mid-Holocene simulations using quantitative climate reconstructions derived from pollen records."

In discussing their findings, the team of researchers report "the CMIP5 models fail to reproduce key aspects of both the modern and mid-Holocene climate of the northern Africa and Mediterranean region, including [1] the correct geographical location of zonal precipitation regimes in the pre-industrial simulation and [2] the magnitude of mid-Holocene changes in these regimes." More specifically, they say that most models [3] "overestimate the extent of monsoon influence and [4] underestimate the extent of desert." And they state that they also [5] "fail to reproduce the amount of precipitation in each zone," while noting that [6] "most models underestimate the mid-Holocene changes in annual precipitation."

When all was said and done, the four researchers were forced to acknowledge that "there are still important discrepancies between the simulated and observed magnitude of changes in precipitation, despite the increasing complexity and resolution of the CMIP5 models compared to earlier generations of models." And they state, in the concluding sentence of their paper, that "the failure to simulate observed mid-Holocene changes in the north African monsoon and the potentially linked failure to simulate the observed shift in rainfall seasonality in the Mediterranean raises concerns about the reliability of model projections of future climates in these regions."

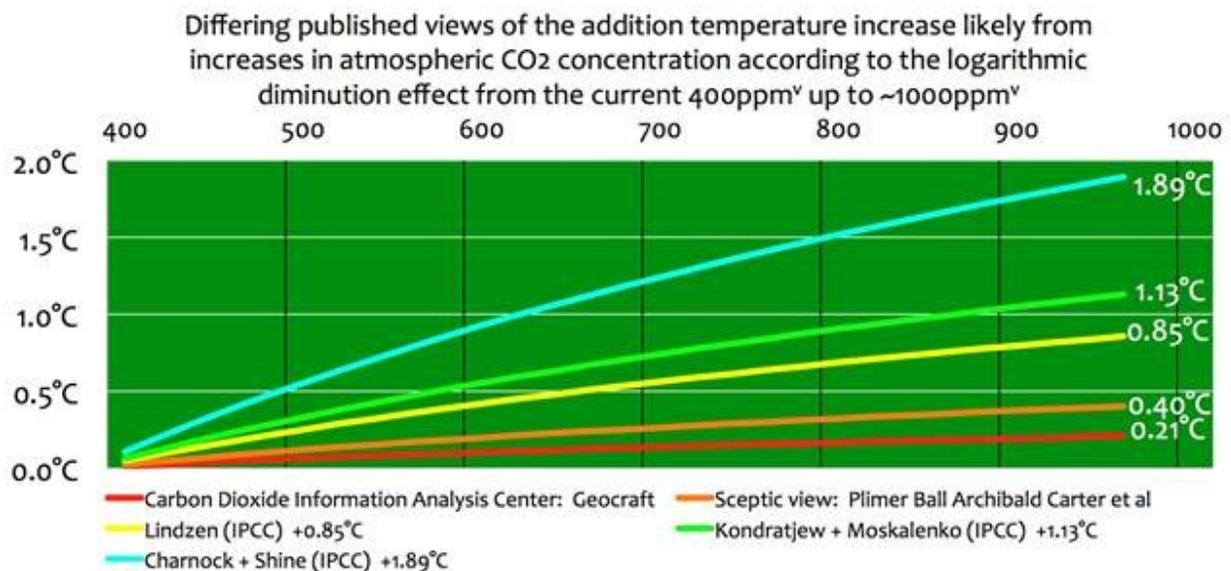
Q. THE DIMINISHING INFLUENCE OF INCREASING CARBON DIOXIDE ON TEMPERATURE

Posted on [August 10, 2014](#) by [Anthony Watts](#)

Guest essay by Ed Hoskins

Using data published by the IPCC on the diminishing effect of increasing CO₂ concentrations and the latest proportional information on global Man-made CO₂ emissions, these notes examine the potential for further warming by CO₂ emissions up to 1000ppm^v and the probable consequences of decarbonisation policies being pursued by Western governments.

The temperature increasing capacity of atmospheric CO₂ is real enough, but its influence is known and widely accepted to diminish as its concentration increases. It has a logarithmic relationship to concentration. Global Warming advocates and Climate Change sceptics both agree on this.



<http://wattsupwiththat.com/2014/08/10/the-diminishing-influence-of-increasing-carbon-dioxide-on-temperature/#more-114325>

R. CLIMATE CHANGE AND THE HUMAN CONDITION: IS IT TIME TO RECONSIDER CLIMATIC DETERMINISM?

Posted on [August 9, 2014](#) by [Anthony Watts](#)

Guest Opinion by Dr. Tim Ball

Those who cannot remember the past are condemned to repeat it.

George Santayana (Original quote from his book *The Life of Reason*, much paraphrased.)

The Intergovernmental Panel on Climate Change (IPCC) and its supporters urge action because the planet and humans are threatened by global warming. We must modify our behavior, mitigate the warming, or die by the millions. In the centuries prior to the First World War (WWI) these reactions were classified as climatic determinism, the idea that human behavior is dictated by climate. As one research group explains.

<http://wattsupwiththat.com/2014/08/09/climate-change-and-the-human-condition-is-it-time-to-reconsider-climatic-determinism/#more-114293>

S. THE IGNORANCE OF CLIMATE ALARMISM

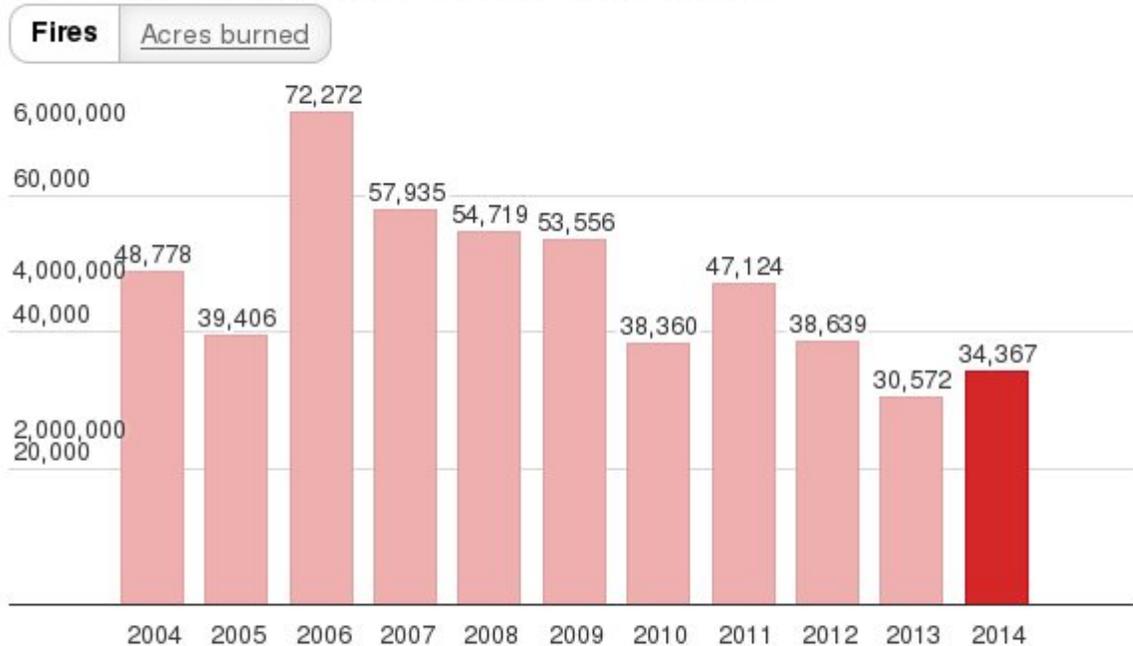
Submitted by Doug L. Hoffman on Wed, 08/06/2014 - 13:31

One of the sad side effects of the global warming climate scam is the way otherwise fairly intelligent people have been snookered into believing the dumbest things. An example in point: in a world where millions die each year due to malnutrition, **US Secretary John Kerry lectured African leaders attending a summit in Washington that creating more farms in Africa causes too much carbon pollution.** Can you imagine the response of any national leader, being told he must let his people starve because a bunch of rich nation, ivory tower science boffins have this unproven, wild idea that CO₂ might cause the world to warm by a degree or two a hundred years from now? This is the type of imbecility that comes from following a pernicious untruth down a rabbit hole of false assumptions. Yet around the globe people seem defenseless against the infectious ignorance that is climate alarmism.

According to [reports](#), Secretary of State John Kerry told an audience that “8,000 children die every day” and in sub-Sahara Africa, one in four suffer from chronic hunger. Then a few minutes later, he stressed how creating new farms would cause too much carbon pollution so they need to discourage more farm land. What abject moron can truly believe that curing hunger in Africa today can be accomplished by fighting unproven global warming in the far future? At the same time Kerry revealed the administration’s top priority for Russia: reducing greenhouse gases, not the 8,000 additional Russian troops massing on the Ukraine border. At least he is a consistent fool.

Another example, not coincidentally from the Obama administration, was the release of a YouTube video linking the California wildfires to climate change. According to the [Washington Post](#) newspaper: “The administration released a video Tuesday aimed at clarifying the link between climate change and one of the most tangible products of climate change: wildfires. Wildfires have been an increasing topic of conversation on Capitol Hill, thanks both to the record wildfire years we've had this decade and to a strain on funding to fight them.” The article then goes on to explain the situation in a graphic that shows the situation to not be as described by the administration. Both in terms of number of fires and total acres burned 2014 is far from a record year for wildfire. The graphics below are from the *WaPo* based on government statistics.

Wildfires In the United States



Source: [National Interagency Fire Center](http://www.nifc.gov/)

The Washington Post

<http://theresilientearth.com/?q=content/ignorance-climate-alarmism>

T. EPA DEFIES SUPREME COURT, PROPOSES UNPRECEDENTED WATER REGULATIONS

The U.S. Environmental Protection Agency proposed new regulations that would give the agency control over more privately owned land than ever before. EPA issued the regulations despite the Supreme Court ruling twice in recent years that federal environmental officials had too expansively defined its Clean Water Act powers.

EPA Ignores Supreme Court Rebukes

EPA claims the Supreme Court's decisions in *SWANCC v. U.S. Army Corps. of Engineers* (2001) and *Rapanos v. United States* (2006) created confusion regarding its newly proposed regulations. In *SWANCC*, the Court ruled federal environmental officials could not use what was known as the "migratory bird rule" to assert jurisdiction over isolated bodies of water. In *Rapanos*, the Court ruled federal environmental officials could not prohibit a private landowner from filling sand in an isolated wetland. In both cases, the Court emphasized the need for federal environmental officials to show the body of water at issue meets the Clean Water Act's definition of "navigable waterway" that triggers federal jurisdiction.

In its newly proposed regulations, EPA claims dry streambeds that only occasionally fill with water qualify as navigable waterways under the Clean Water Act. EPA also expands its definition of what qualifies as navigable. Further, EPA claims small ponds and water holes can qualify as navigable waterways even if they are not navigable and are not physically connected to navigable waters. Instead, EPA claims federal environmental officials can view multiple such small bodies of water in combination, even if they are not physically connected.

Property rights advocates point out the EPA's proposed rule would allow it to regulate far more bodies of water than it tried to regulate before being rebuked by successive Supreme Court decisions. They also wonder how EPA can in good faith "clarify" the Supreme Court decisions rebuking federal government overreach by treating the decisions as EPA victories and invitations to expand EPA's powers to an unprecedented extent.

Farm Groups Voice Opposition

"As a result [of EPA's proposal], permit requirements that apply to navigable waters would also apply to ditches, small ponds, and even depressions in fields and pastures that are only wet when there is heavy rain," the American Farm Bureau Federation noted in the Gilroy Dispatch. "If landowners could not get permits to do things like build fences and use pesticides to control bugs and weeds—something that would be far from guaranteed—farming and ranching would be much more costly and difficult. Other landowners, too, would face roadblocks to things they want to do, such as build a house or plant trees. American Farm Bureau and California Farm Bureau are both calling on Congress to prevent this expansion."

"Congress, not federal agencies, writes the laws of the land," said American Farm Bureau President Bob Stallman in a press statement. "When Congress wrote the Clean Water Act, it clearly intended for the law to apply to navigable waters. Is a small ditch navigable? Is a stock pond navigable? We really don't think so, and Farm Bureau members are going to be sending that message."

"This, in my career of farming, is the most scary and frightening proposition that I have witnessed," Iowa Farm Bureau Federation president Craig Hill told the Des Moines Register.

Congress Limited EPA's Reach

"When Congress wrote the Clean Water Act, Congress limited the Act's application to 'navigable waters' for good reasons," said Jay Lehr, science director for the Heartland Institute, which publishes *Environment & Climate News*. "Among the reasons, Congress did not want EPA bullying farmers over small depressions in their land that occasionally hold rainwater, bullying people who dig a ditch to help drain their land, and using the smallest of streams and micro-bodies of water to restrict property use. EPA is attempting to stand the Clean Water Act on its head as it continues to seek more money and power."

"EPA says farmers should take the agency at its word that it will not enforce these regulations in a heavy-handed manner. In light of EPA's longstanding record of heavy-handedness, arrogance, and abuse, however, farmers know better," said Lehr.

"Private individuals would never attempt to misapply the statute so blatantly, because there are tremendous expenses involved with fighting hopeless legal cases. EPA, however, relies on its bottomless pockets full of taxpayers' money to bully landowners and force them alone to bear the financial burdens of challenging EPA," Lehr explained.

<http://news.heartland.org/newspaper-article/2014/07/05/epa-defies-supreme-court-proposes-unprecedented-water-regulations>

U. WIND INDUSTRY ATTACKS CALIFORNIA SOLAR SUBSIDIES

The California Wind Energy Association and other renewable energy groups criticized a new law extending special tax breaks to the California solar power industry. Wind power, biomass, and geothermal power groups say the special benefits for solar power tilt the playing field against other renewable power options.

Senate Bill 871, signed by Gov. Jerry Brown on June 20, extends until 2025 an exemption for solar power systems from state property taxes. The existing exemption was not scheduled to expire until 2017, but the legislature rushed the new exemption into law at the end of the session with almost no advance notice or opportunity for debate.

Renewable Groups Criticize Solar Deal

"There is no reason for the State Legislature and Governor Brown to extend a property tax exemption to large scale solar energy projects at this time," said Nancy Rader, executive director of the California Wind Energy Association, in a press statement.

"What is disturbing is this tax break for the solar industry comes at a time when existing biomass projects are shutting down," Julee Malinowski-Ball, executive director for the California Biomass Energy Alliance, said in the same press statement. "Wind and geothermal renewable energy producers are also facing challenges in getting utilities to recontract for their existing resources. California needs these resources to balance our energy portfolio and meet long-term greenhouse gas reduction goals."

"The original intent of the property tax exemption was to help stimulate what was once a fledgling industry. Today, solar PV is thriving and utility-scale solar is expected to increase more than 1,200 percent between 2012 and 2020, according to California Public Utilities Commission (CPUC) projections," the three renewable energy groups noted in the press statement.

Unnecessary Rush to Subsidize

Section 73 of the California Revenue and Taxation Code allows a property tax exemption for certain types of solar energy systems installed between January 1, 1999 and December 31, 2016. AB 1451 amended this section was amended in 2008 to include the construction of an active solar energy system installed by the owner-builder in the initial construction of a new building the owner-builder does not intend to occupy.

Established in 2002, and accelerated by the enactment of two additional laws in 2006 and 2011, California's Renewable Portfolio Standard (RPS) requires investor-owned utilities, electric service providers, and community-choice aggregators to increase procurement from eligible renewable energy sources to 33 percent of total procurement by 2020.

Non-Solar Renewables Struggling

"It is amazing how the renewable energy industry is struggling in California even with mind-boggling federal, state, and local subsidies," said Jay Lehr, science director for the Heartland Institute, which publishes *Environment & Climate News*. "The CPUC projects geothermal and biomass power will decline by 50 percent in the state by 2020 despite enormous subsidies."

Wind, too, is encountering turbulence in trying to secure contract renewals that would enable 1,500 megawatts of old wind turbines to be replaced by many fewer newer ones, according to the California political news site Fox & Hounds.

"The bickering among competing renewable power industries illustrates how they care little about the national and California environment and economy, but instead are merely looking to pad their pocketbooks at taxpayer expense," Lehr observed.

Welcome to the Fold

Today's squabbles among the already heavily subsidized renewable energy producers may be a sign of things to come. John Droz, a physicist and energy analyst, says it is "ludicrous" that subsidy-dependent renewable energy industries complain about the subsidies received by other renewable energy industries.

"If this isn't a case of the pot calling the kettle black, I don't know what is," said Droz.

“Wind producers have no leg to stand on when it comes to subsidies,” agreed Daniel Simmons, director of regulatory and state affairs at the Institute for Energy Research.

“Wind and solar are both dependent on subsidies for the large increase in installations we have seen over the past few years,” Simmons explained. “But if this means wind producers no longer want subsidies for any energy sources, then we welcome them into the fold.”

Look in the Mirror

“The wind power industry is taking hypocrisy to new levels in their protests against solar power,” Lehr observed. “Wind power needs to look in the mirror. Big Wind claims solar power subsidies were designed long ago merely to help a fledgling industry get on its feet. That, however, is the exact same model the wind power industry has been advocating for its own taxpayer subsidies. Now, decades later, the wind power industry continues to push for never-ending subsidies to prop up an industry that will fall like a house of cards without never-ending subsidies and guaranteed market share.”

<http://news.heartland.org/newspaper-article/2014/07/15/wind-industry-attacks-california-solar-subsidies>

V. EARTH’S RESPONSE TO INCREASING CO₂: AN EXAMPLE OF HORMESIS?

August 11th, 2014

One of the dubious assumptions undergirding the environmental movement is that the Earth was in an optimum state of health before humans arrived on the scene and screwed everything up. But this is a religious assumption...which I don’t have a problem with, until it is foisted on the masses as “science”.

The idea that everything humans do to the environment is bad is an emotional one, not scientific, especially when the “pollution” we are talking about (CO₂) is necessary for life on Earth. There is a concept in toxicology called “hormesis”, around since at least the late 1800s, which states that for many chemicals the biological response is actually positive at low doses, before it becomes negative at high doses. I spent some time last week with Ed Calabrese, who has published extensively on the hormesis concept (here is a [review paper](#) by him, which includes a discussion of how the hormesis concept got unfairly grouped in with the homeopathy movement).

For a very simple example, there is a wide variety of minerals necessary for human health in low doses, but which are toxic at high doses. Food and water are also necessary in low doses...but will kill you in high doses.

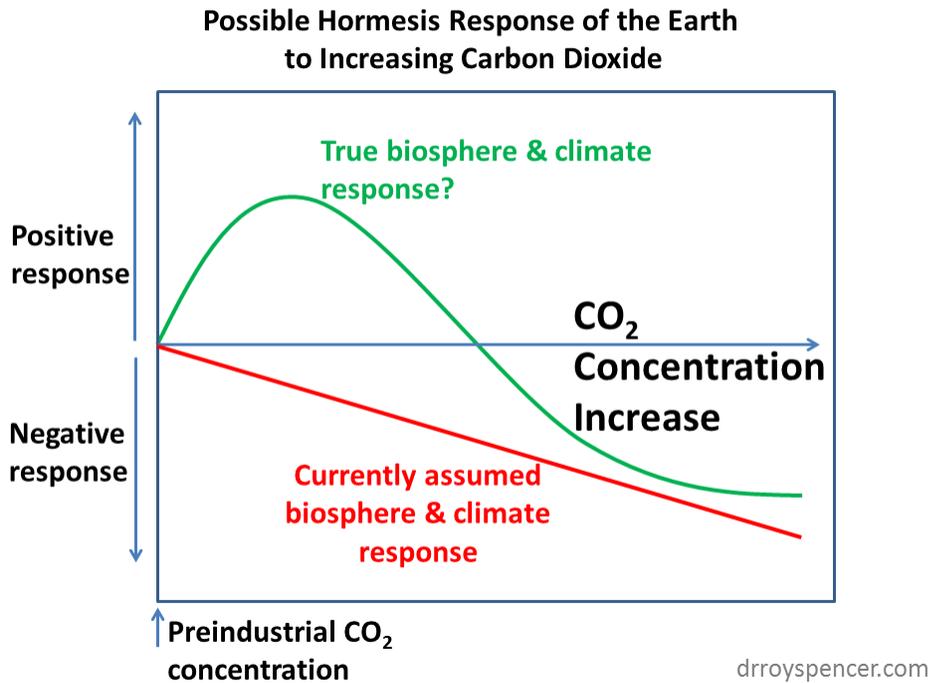
More generally, there is also evidence that even for chemicals which are *not* necessary in the human body, low doses can actually make a person healthier because some level of environmental stress on the body makes the body more resilient. For example, some non-zero level of bacteria and virus exposure helps keep us healthier. I’m told there has been some research that suggests that inhaling low levels of radon is beneficial..or at least benign. Physical exercise tears apart human tissue...but helps build more muscle as a response to the demands placed on the body.

The hormesis concept is anathema to regulatory organizations such as the EPA, which want to regulate “pollution” to infinitesimally small values, no matter how many people those regulations might kill in the process. The supposed justification is linear dose-response curves which basically assume that there is no beneficial level of a “pollutant”, and even that the smallest level of exposure will cause harm.

Needless to say, the possibility that low doses of many pollutants might actually be *beneficial* to human health would be a real paradigm changer in the regulatory community.

This is the basis of statistical epidemiological studies which claim thousands of deaths each year from exposure to benign things like Justin Bieber's music.

For those who like graphs, the following cartoon shows what I'm suggesting in qualitative functional form for carbon dioxide:



An Earth scientist who has not already sold his soul to the government regulation bureaucracy might legitimately ask, “I wonder if some level of enrichment of atmospheric CO₂ is actually a *good* thing for life on Earth?”, as suggested by the green curve in the above graph.

<http://www.drroyspencer.com/>

W. SNAP: ‘DATA SAYS GLOBAL COOLING, PHYSICAL MODEL SAYS IT HAS TO BE WARMING’

Posted on [August 11, 2014](#) by [Anthony Watts](#)

A global temperature conundrum: Cooling or warming climate?

From the [University of Wisconsin-Madison](#)

MADISON, Wis. — When the Intergovernmental Panel on Climate Change recently requested a figure for its annual report, to show global temperature trends over the last 10,000 years, the University of Wisconsin-Madison’s Zhengyu Liu knew that was going to be a problem.

“We have been building models and there are now robust contradictions,” says Liu, a professor in the UW-Madison Center for Climatic Research. **“Data from observation says global cooling. The physical model says it has to be warming.”**

<http://wattsupwiththat.com/2014/08/11/snap-data-says-global-cooling-physical-model-says-it-has-to-be-warming/>

X. EPA MUST EXPLAIN THE COSTS OF ITS RULES BETTER, FEDERAL WATCHDOG SAYS

By [Zack Colman](#) | August 11, 2014 | 5:15 pm

The [Environmental Protection Agency](#) needs to do a better job explaining and disclosing the data it uses to determine the costs of proposed regulations, particularly those regarding [climate change](#), according to a [Government Accountability Office report](#) released Monday.

While the agency adhered to many of the guidelines outlined by the White House [Office of Management and Budget](#) when describing the economic effects of proposed rules and potential alternatives, the report said the information EPA used was "not always clear."

"As a result, EPA cannot ensure that its [regulatory impact analyses] adhere to OMB's guidance to provide the public with a clear understanding of its decision making," the report said.

The report could have implications for the EPA proposal to reduce carbon emissions from power plants, which won't be finalized until June 2015. The report suggested that "OMB clarify the application of guidance for estimating the benefits of reducing greenhouse gas emissions," a topic of much debate between supporters and detractors of the proposed rule.

The EPA pushed back against some of the report's characterization, saying that some of the issues raised were not unique to the agency.

"The EPA stands behind the quality of [regulatory impact analyses] that we conduct and believes the GAO findings do not point to systematic deficiencies with respect to the accuracy of our analytical work," Joel Beauvais, assistant administrator for the EPA's office of policy, said in response. "That said, the agency supports GAO's emphasis on the importance of [transparency](#) and clarity and will continue to strive to enhance these qualities in our [regulatory impact analyses]."

Still, the report will likely be a launching pad for [GOP](#) attacks on the EPA, as Republicans have slammed the agency for inflating the benefits of its regulations and withholding data used to arrive at its conclusions.

"The independent study released today demonstrates that the Obama administration failed to provide thorough, transparent cost-benefit analyses for major environmental rules that cost American jobs," said House Oversight and Government Reform Committee Chairman [Darrell Issa](#), R-Calif., who requested the study in 2011. "Rather than using a fair and open rulemaking process, EPA pushed through regulations using sloppy analysis without sufficiently informing Congress or the public of the economic impact."

The GAO reviewed seven analyses of recent rulemakings and determined that the EPA did not adequately monetize the costs and benefits of their effects, such as improving water quality and reducing hazardous air pollutants. It also questioned how the EPA arrived at the employment effects of its regulations, suggesting the agency relied on an old and potentially ill-suited study, saying it "was based on data that were more than 20 years old and may not have represented the regulated entities addressed in the [regulatory impact analyses]."

The EPA said its practices were "up-to-date and consistent with sound science and economics." The report noted inconsistencies between OMB's guidance for calculating cost-benefit analyses and future benefits from the "social cost of carbon" — a measurement that monetizes the damages of incremental carbon emissions increases — used by the EPA "places greater weight on carbon dioxide emission reductions when calculating the overall net benefits of a rule."

Industry groups and conservatives are making a similar case about EPA rules, particularly the power plant proposal that aims to cut power-sector emissions 30 percent below 2005 levels by

2030. Using the social cost of carbon calculation, the EPA estimates up to \$93 billion in benefits by 2030 at a cost of up to \$8.8 billion.

But the EPA said OMB guidelines allow it to include the social cost of carbon. OMB also backed up the EPA, saying the calculation was unavoidable because waiting to reduce carbon emissions would compound costs over time as the effects of climate change become more deeply entrenched.

"In GAO's examination of a very small subset of the rules which the EPA has issued in recent years, it found that the EPA generally adhered to OMB guidance for regulatory analysis. GAO acknowledges that the results of its review "cannot be generalized" to the EPA's economic analysis overall because it looked at only a small sample," the EPA said in a statement.

http://washingtonexaminer.com/epa-must-explain-the-costs-of-its-rules-better-federal-watchdog-says/article/2551908?utm_campaign=Fox

Regards
George