The Week That Was: 2012-08-04 (August 4, 2012) Brought to You by SEPP (www.SEPP.org) The Science and Environmental Policy Project

Quote of the Week:

"[n]ot everything that counts can be counted, and not everything that can be counted counts." Einstein [H/t Michael Widlanski]

Number of the Week: 2

THIS WEEK:

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

The BEST Affair: The Berkeley Earth Surface Temperature (BEST) team began its announcement of new findings on Sunday with a media blitz featuring an opinion piece by team leader Richard Muller in the New York Times. The findings were posted on its web site later in the afternoon. To its great credit, BEST has posted its data set and its analysis (computer) code on its web site. This should be standard practice for organizations producing significant findings. It announced that it has submitted its studies to the Journal of Geophysical Research - Atmospheres.

In his op-ed, "Conversion of a Climate-Change Skeptic", Muller stated that humans are almost entirely the cause of the warming for the past 250 years by the emission of greenhouse gases (GHG), primarily atmospheric carbon dioxide (CO2). He states his conclusion is stronger than the conclusion of the UN Intergovernmental Panel on Climate Change (IPCC), which attributes the warming only since 1956 to human emissions of GHG. Muller states that he came to this bold conclusion by fitting curves of atmospheric CO2 to the temperature record from 1753 to 2011, after allowing for variation from volcanic activity where cooling follows volcanic eruptions.

He states that the team tested for solar activity, "based on the historical record of sunspots" and states "our data argues strongly that the temperature rise of the past 250 years cannot be attributed to solar changes. This conclusion is, in retrospect, not too surprising; we've learned from satellite measurements that solar activity changes the brightness of the sun very little."

Here he becomes disingenuous. Those who argue that the variation of the sun is an important factor in causing global warming / climate change do so from the standpoint that it is not visible light alone but total solar energy, especially solar wind. Sunspots are an indicator, a proxy, for solar energy other than visible light. It is solar wind that forms the heliosphere, which partially protects the earth from high energy cosmic rays.

According to the hypothesis advanced by Svensmark, Friss-Christensen, et al, it is the variation in the heliosphere that causes variations in high energy cosmic rays hitting the atmosphere, which, in turn, causes variations in low level cloud cover – the more clouds, the cooler the earth. The mechanism for this hypothesis has been physically tested several times, the latest by CERN. Muller avoids solar-cosmic ray hypothesis. Measurement of solar wind, etc. is a late 20th century development, and a curve fitting exercise with a 250 year temperature record is an unreasonable test.

Muller states it may have been warmer in the Medieval Warm Period, but offers no explanation why it cooled from then to the Little Ice Age, the period in which Muller's temperature record begins. Certainly, the cause was not a decline in CO2, which, according to the IPCC, has been increasing for thousands of years. Since the temperature record began at the beginning of the industrial age, and during the Little Ice Age, the curve fit may be a coincidence, not causation as Muller states.

The use of 1753 as a starting point is interesting, but not impressive. Only a few points on the planet have records dating that far back. As discussed in last week's TWTW only about 4% of the grid boxes for climate models were covered as late as 1900, and about 10% as late as 1950. Perhaps the choice of a 250 year record is best explained in an interview response by Muller to a question about the decade long pause in temperature rise. He stated the pause is statistically insignificant. This decade of no warming trend may be statistically insignificant over a 250 year record, but it would likely be statistically significant over a 50 year record.

Ross McKitrick was a referee on the BEST team's earlier submission to the Journal of Geophysical Research (JGR) and outlined serious shortcomings. When the BEST team started a media blitz on its earlier findings, McKitrick sought permission to release his findings that the analysis does not establish valid grounds for the conclusions. Muller gave him permission but insisted that he does not identify himself as a JGR reviewer. McKitrick stood silent. The latest media blitz was too much and McKitrick posted comments of the affair on his web site.

Christopher Monckton posted his comments on the BEST affair, and suggests the team take a course on Aristotelian logic. (Note: Monckton refers to the current period of no warming as 10 years and also as 15 years. The length is a matter of how one looks at the data. The sharp warming spike in the 1998 El Niño year causes differences in interpretation.)

Anthony Watts comments on what appears to be a major failing in the BEST methodology if the abstract of an earlier paper correctly describes the methodology. NOAA classifies the weather stations into 5 categories. Categories 1 & 2 are ranked OK and Categories 3, 4, & 5 are ranked as poor. According to its abstract in a May 20 paper, the BEST team puts the Category 3 stations into the OK rank, which would bias tests between OK and poor categories.

Willis Eschenbach on WUWT raises another possible serious methodological question. According to his analysis, when the detail of the graph of the BEST temperature record is intensified and dates of volcanic eruptions are inserted, in many cases cooling occurs before erupting. Thus, volcanoes cannot be the cause of the initial cooling. [Al Gore where are you?] It will be interesting to see if this work can be replicated.

For these and other issues about the new release, please see the links under Defending the Orthodoxy, and The BEST Affair.

The Watts Team: Last Sunday, Anthony Watts announced the work of his team in analyzing US surface temperature records from 1979 to 2008 under a World Meteorological Organization (WMO) new classification methodology. The new classification adds the need to evaluate each reporting station according to the extent of the heat sink(s) (asphalt, buildings, etc.) to distance from the heat sink. The data used by the Watts team is from United States Historical Climatology

Network (USHCN) which is used by NOAA, NASA-GISS, Climatic Research Unit (CRU) of the University of East Anglia, and BEST.

All these show warming trends significantly greater than the warming trends shown in satellite measurements of the atmosphere, where the greenhouse effect takes place. If late 20th century warming is caused by human CO2 emissions, as the IPCC contends, then the atmosphere should be warming more than the surface.

As stated in last week's TWTW, reanalysis by the Watts team is "using the recently WMO-approved Siting Classification System devised by METEO-France's Michel Leroy. ... The new analysis demonstrates that reported 1979-2008 U.S. temperature trends are spuriously doubled, with 92% of that over-estimation resulting from erroneous NOAA adjustments of well-sited stations upward."

Using aerial photos, personal inspections, interviews, etc. the Watts team grouped the five classes of stations into two categories: compliant and non-compliant. Well-sited stations (compliant) show less of a warming trend than poorly-sited stations in all nine geographical areas covered. It appears that NOAA's USCHN over adjusts the data, removing important information that is statistically significant. The USCHN statistical homogenization procedure does not adjust the trends from poorly-sited stations downward, but adjusts the trends from poorly-sited stations upward and raises the trends from the well-sited station as well.

The statistical results are striking. Before adjustments by the statistical homogenization procedure, compliant stations show a warming of 0.155 deg C per decade (0.279 deg F); non-compliant stations show a warming of 0.248 deg C per decade (0.456 deg F). Yet, after the adjustments procedures are applied, NOAA shows that all stations combined have a warming trend of 0.309 deg C per decade (0.556). Clearly, there appears to be something wrong. The statistical procedure should lower the trends in the poorly sited stations, not raise the trends for all stations.

NOAA has been challenged about its adjustment procedures in the past. The usual answer is that the time of day in which the measurements were made has shifted. For example, rather than taking a day time temperature reading at 2 pm, it is taken 10 am, which would introduce a Time of Observation Bias (TOB) of a cooling and NOAA has adjusted for this bias.

Summer Hearings: It's been a hot, dry summer for much of the US. That is the time for US Senate hearings on global warming! Realizing this, Senator Barbara Boxer, the chairwoman of the Senate Environment and Public Works Committee announced a hearing "Update on the Latest Climate Change Science and Local Adaptation Measures" for August 1. Three IPCC authors testified. In the majority, the Democrats invited two, Christopher Field, the Director of the

Department of Global Ecology of Carnegie Institution and James McCarthy, Professor of Biological Oceanography at Harvard University. The Republicans invited John Christy, Director

of Earth Systems for the University of Alabama, Huntsville. The entire event can be viewed at web site. Thus, only a few comments will be made here.

http://epw.senate.gov/public/index.cfm?FuseAction=Hearings.Hearing&Hearing_ID=c0293eca-802a-23ad-4706-02abdbf7f7c3

Each Senator was given time to read prepared statements on their views. The Democrats emphasized the IPCC reports and subsequent reports backing them; the BEST report and Muller's self-proclaimed conversion, the current hot summer and drought as proof of global warming / climate change causing extreme weather events, dangerous sea level rise and similar issues. They also brought up the poll that claims 98% of climate scientists agree that humans are the cause of climate change. The Republicans brought up Climategate and emphasized that the atmospheric data greatly diverges from the surface data and what the climate models project.

Each scientist had 5 minutes for prepared statement. Christopher Field strongly supported the statements of the Democrats and claimed that the link between extreme weather events and climate change is clear. [Roger Pielke Jr. has strongly challenged points in the testimony of Field as misrepresenting the IPCC reports. According to Pielke this completes the politicization of climate science since Field is a lead author of the IPCC's section on climate change impact.] Field also brought up a highly questionable study that last year's Texas drought was 20 times more likely to occur due to global warming.

James McCarthy focused on the oceans and that the Argos buoys show the heat content of the oceans is increasing which will have dire long term consequences in sea level rise etc. He did not mention that the deployment of these 3000 buoys began in 2000 and was completed in 2007. Thus, the record is too short to make any long term projections. http://www.argo.ucsd.edu/

As readers of TWTW would expect, we thought the testimony of John Christy to be the most interesting. In both written and oral testimony he focused on five points.

- 1. Extreme weather events are not evidence of human caused climate change. He showed historical evidence that Mother Nature causes extreme weather events.
- 2. The average warming rate of the IPCC models is greater than observations, suggesting they are too sensitive to CO2. Policy must be based on observations, not speculative models.
- 3. New discoveries explain part of the warming found in surface datasets. Part of the warming is unrelated to GHG, but to human development around the thermometers.
- 4. The "consensus" misrepresents climate science by overstating confidence in high climate sensitivity to CO2. Government funding is needed for a team studying the possibility of low climate sensitivity and the role of natural variability.
- 5. CO2 is food for plants, and more CO2 generally means more food. Further, developing nations need affordable carbon-based energy until other affordable, non-carbon sources are developed.

In the written comments under point three, Christy discussed at some length the studies by McNider, et al. (2012), and Watts, et al. The McNider study found that slight alterations in the surface near thermometers can disturb evening air flow as to raise measured nighttime temperatures, increasing the reported daily average temperatures. The study by the Watts team is

discussed above. In the written comments under point four, Christy specifically mentioned the Nongovernmental International Panel on Climate Change (NIPCC) and new report by Patrick Michaels questioning the prior reports of impacts of climate change on the US.

Christy also used the term Climate Establishment to describe the ongoing activities of the orthodoxy that receives about \$20 Billion per year from the US government.

It was the exchange between Senator Boxer and Christy that made the day; but more on that next week.

Number of the Week: 2. The web site Number Watch used 2 as the number of the month. Number Watch is run by John Brignell who is a pioneer in certain types of instrumentation and sensors. He is statistician who fiercely defends the proper use of statistics and as fiercely criticizes the inappropriate use of statistics.

"According to new calculations 2 is almost exactly the factor by which the claimed rate of warming in the USA has been erroneously magnified. This error comprises two components – the use of data from sensor installations that do not conform to agreed specifications and a scientific process known as 'fiddling the books'". Please link under Questioning the Orthodoxy.

ARTICLES:

For the numbered articles below please see this week's TWTW at: **www.sepp.org**. The articles are at the end of the pdf.

1. Who Really Gets Rich Off High Gas Prices?

Exxon made seven cents per gallon in 2011. Federal, state and local governments siphoned off 50 cents in taxes.

By Drew Johnson, WSJ, Aug 2, 2012

http://online.wsj.com/article/SB10000872396390443687504577563383982418536.html?mod=WSJ_Opinion_LEFTTopOpinion

2. U.S. Oil Reserves Jumped in 2010

By Tennille Tracy, WSJ, Aug 1, 2012

http://online.wsj.com/article/SB10000872396390443545504577563511346753908.html?mod=W SJ Energy leftHeadlines

[SEPP Comment: By Energy Information Administration accounting, US oil reserves went up 13% and natural gas reserves up by 12%.]

3. 'Smart growth' not so smart after all

By: Charles Battig, VA-SEEE, Jul 31, 2012

 $\underline{\text{http://www2.dailyprogress.com/news/2012/jul/31/smart-growth-not-so-smart-after-all-ar-2097603/}$

NEWS YOU CAN USE:

Climategate Continued

IPCC's Secret Letter

By Steve McIntyre, Climate Audit, Aug 3, 2012

http://climateaudit.org/2012/08/03/ipccs-secret-letter/#more-16628

Challenging the Orthodoxy

Summary Of Two Game-Changing Papers – Watts Et al 2012 and McNider Et Al 2012

By Roger Pielke Sr, Climate Science, Jul 31, 2012

 $\underline{http://pielkeclimatesci.wordpress.com/2012/07/31/summary-of-two-game-changing-papers-watts-et-al-2012-and-mcnider-et-al-2012/$

Watts et al paper 2nd discussion thread

By Anthony Watts, WUST, Jul 31, 2012

http://wattsupwiththat.com/2012/07/31/watts-et-al-paper-2nd-discussion-thread/

More On The BEST, NCDC, CRU and GISS Analyses Of Multi-Decadal Land Surface Temperature Trends

By Roger Pielke Sr, Climate Science, Aug 2, 2012

http://pielkeclimatesci.wordpress.com/2012/08/02/more-on-the-best-ncdc-cru-and-giss-analyses-of-multi-decadal-land-surface-temperature-trends/

Defending the Orthodoxy

The Conversion of a Climate-Change Skeptic

By Richard Muller, NYT, Jul 28, 2012

http://www.nytimes.com/2012/07/30/opinion/the-conversion-of-a-climate-change-skeptic.html? r=4&pagewanted=all

A new release from Berkeley Earth Surface Temperature

By Steven Mosher and Zeke Hausfather, Climate Etc, Jul 29, 2012

http://judithcurry.com/2012/07/29/a-new-release-from-berkeley-earth-surface-temperature/

[SEPP Comment: Judith Curry's comments at the end.]

Questioning the Orthodoxy

Number of the month -2

By John Brignell, Number Watch, Jul 31, 2010

http://www.numberwatch.co.uk/2012%20July.htm#NOM

Soil Moisture Illustrates Why IPCC Computer Models Fail

By Tim Ball, A Different Perspective, Jul 31, 2012

http://drtimball.com/2012/soil-moisture-illustrates-why-ipcc-computer-models-fail/

[SEPP Comment: The statement of temperature decline may be better put as no trend in increasing temperatures for over a decade, contrary to the models. The post suggest one other natural variable the models used by the IPCC fail to take into account. The disparity between model predictions / projections and temperature measurements continue to increase.]

Earth's Carbon Sink Still Strong and Growing

By Patrick Michaels, World Climate Report, Aug 2, 2012

 $\frac{http://www.worldclimatereport.com/index.php/2012/08/02/earths-carbon-sink-still-strong-and-growing/\#more-550}{}$

Earth Keeps Sucking Up Greenhouse Gases

By Richard A. Kerr, Science Now, Aug 1, 2012

http://news.sciencemag.org/sciencenow/2012/08/scienceshot-earth-keeps-sucking-.html

[SEPP Comment: So much for the claim that the CO2 emissions will remain in the atmosphere for hundreds of years.]

Reaction From Germany On Watts's Press Release: "Shocking Development, Could Have Global Relevance"

By P Gosselin, No Tricks Zone, Jul 30, 2012 [H/t GWPF]

http://notrickszone.com/2012/07/30/reaction-from-germany-on-wattss-press-release-shocking-development-could-have-global-relevance/

The BEST Affair

Berkeley Earth Study Referee Reports

By Ross McKitrick, His Web Site, Jul 30, 2012 [H/t WUWT]

http://www.rossmckitrick.com/

Müller lite: Why Every Scientist Needs a Classical Training

By Christopher Monckton of Brenchley, SPPI, Jul 30, 2012

http://sppiblog.org/news/muller-lite-why-every-scientist-needs-a-classical-training

[SEPP Comment: Drawing conclusions from a weak correlation is argumentum ad ignorantiam.]

An uncorrected assumption in BEST's station quality paper

By Anthony Watts, WUWT, Aug 3, 2012

http://wattsupwiththat.com/2012/08/03/an-uncorrected-assumption-in-bests-station-quality-paper/

New Data, Old Claims About Volcanoes

By Willis Eschenbach, WUWT, Jul 30, 2012

http://wattsupwiththat.com/2012/07/30/new-data-old-claims-about-volcanoes/

Observation-based (?) attribution

By Judith Curry, Climate Etc, Jul 30, 2012

http://judithcurry.com/2012/07/30/observation-based-attribution/#more-9238

[SEPP Comment: Curry, a former member of the BEST team, expresses her views on their latest.]

Muller in the Carbon Brief

By Andrew Montford, Bishop Hill, Aug 3, 2012

http://bishophill.squarespace.com/blog/2012/8/3/muller-in-the-carbon-brief.html

Not the BEST

By Andrew Montford, Bishop Hill, Jul 30, 2012

http://bishophill.squarespace.com/blog/2012/7/30/not-the-best.html

Richard Muller's Political Move—BEST is Best? Sophisticated Statistics!

By William Briggs, His Blog, Jul 29, 2012 [H/t GWPF] http://wmbriggs.com/blog/?p=5946

Berkeley Earth Surface Temperature: Good Data, Poor Conclusions

By David Whitehouse, The Observatory, Jul 30, 2012

 $\underline{http://thegwpf.org/the-observatory/6282-berkeley-earth-surface-temperature-good-data-poor-conclusions.html}\\$

Ex climate sceptic' Muller's latest BEST stuff is the worst so far

'Non-partisan' group abandons pretence of neutrality By Andrew Orlowski, A Register, Jul 31, 2012 [H/t GWPF] http://www.theregister.co.uk/2012/07/31/best_barnum/

Koch-funded climate change skeptic reverses course

By Neela Banerjee, LA Times, Jul 29, 2012 [H/t Bud Bromley]

 $\frac{http://www.latimes.com/news/politics/la-pn-kochfunded-climate-change-skeptic-reverses-course-20120729,0,7372823.story}{}$

A Closer Look at Climate Studies Promoted Before Publication

By Andrew Revikin, NYT, Jul 30, 2012

http://dotearth.blogs.nytimes.com/2012/07/30/a-closer-look-at-climate-studies-promoted-before-publicatio/

My advice? Ignore these publicity stunts and pay no attention to these studies until they have passed peer review. And even studies that have been peer reviewed should be viewed with a certain amount of skepticism until they have been confirmed in multiple subsequent studies and stood the test of time. By Jason Samenow, a former Environmental Protection Agency meteorologist who blogs at Capital Weather Gang,

[SEPP Comment: Why was the advice not applied to the hockey-stick?]

Summertime Hearings

Video: John Christy's stellar testimony today – 'The recent anomalous weather can't be blamed on carbon dioxide.'

By Anthony Watts, WUWT, Aug 1, 2012

http://wattsupwiththat.com/2012/08/01/video-john-christys-stellar-testimony-today-the-recent-anomalous-weather-cant-be-blamed-on-carbon-dioxide/

John Christy's EPW testimony

By Judith Curry, Climate Etc, Aug 1, 2012

http://judithcurry.com/2012/08/01/john-christys-epw-testimony/#more-9260

John Christy: Climate Data Maven

Marlo Lewis, Global Warming.org, Aug 3, 2012

http://www.globalwarming.org/2012/08/03/john-christy-climate-data-maven/#more-14568

IPCC Lead Author Misleads US Congress

By Roger Pielke Jr, His Blog, Aug 1, 2012 [H/t Randy Randol]

http://rogerpielkeir.blogspot.com/2012/08/ipcc-lead-author-misleads-us-congress.html

Dems blame weather on climate change

By Zack Colman, The Hill, Aug 1, 2012

http://thehill.com/blogs/e2-wire/e2-wire/241579-senators-hold-party-lines-in-climate-change-hearing

Hide the Megadroughts

By Steve McIntyre, Climate Audit, Aug 1, 2012

http://climateaudit.org/2012/08/01/hide-the-megadroughts/

[SEPP Comment: No reason to bring up inconvenient facts.]

Déjà Vu at Senate Climate Hearing

By David Malakoff, Science Insider, Aug 1, 20123

http://news.sciencemag.org/scienceinsider/2012/08/deja-vu-at-senate-climate-hearing.html?ref=hp

Questioning European Green

Brown coal makes a comeback amid protests

By Frederike Schulz, Der Welt, Aug 1, 2012 [H/t GWPF]

http://www.dw.de/dw/article/0,,16136728,00.html

[SEPP Comment: The German Environment Minister will permit new construction of coal-fired power plants – something the EPA desires to prohibit. Contrary to the statements by Greenpeace, the figures show the demand for electricity in Germany is highest on cold winter evenings, after the sun has long set.]

German National Academy of Sciences issues a critical statement on the use of bioenergy

By Staff Writers, Berlin, Germany (SPX), Jul 31, 2012

http://www.biofueldaily.com/reports/German National Academy of Sciences issues a critical statement on the use of bioenergy 999.html

Questioning Green Elsewhere

The Problem With a "Green Domestic Product"

Environmentalists want a better standard to measure a nation's wealth, but their propoal falls short.

By Bjørn Lomborg, Slate, Jul 15, 2012

http://www.slate.com/articles/health_and_science/project_syndicate/2012/07/the_rio_20_summit_focused_too_much_greener_ways_to_calculate_wealth_and_gdp_.html

Expanding the Orthodoxy

Queen, politicians, Nobel winner named to UN social panel

By Staff Writers, United Nations (AFP), July 31, 2012

http://www.terradaily.com/reports/Queen_politicians_Nobel_winner_named_to_UN_social_panel_999.html

Seeking a Common Ground

"The Climate Debate" by Donald Rapp 2012 – An Excellent Addition To The Literature On The Climate Issue

By Roger Pielke Sr, Climate Science, Aug 1, 2012

http://pielkeclimatesci.wordpress.com/2012/08/01/the-climate-debate-by-donald-rapp-2012-an-excellent-addition-to-the-literature-on-the-climate-issue/

An Analysis By Donald Rapp Of The Levitus Et Al 2012 Analysis

By Roger Pielke Sr, Climate Science, Aug 3, 2012

 $\underline{http://pielkeclimatesci.wordpress.com/2012/08/03/an-analysis-by-donald-rapp-of-the-levitus-et-al-2012-analysis/}$

[SEPP Comment: Since the 1990 the estimated heat content is increasing, but there is no trend of acceleration.]

Evidence-Based Policy: Which Side are You On?

By Roger Pielke Jr, His Blog, Jul 30, 2012

http://rogerpielkejr.blogspot.com/

Gergis and Watts Delayed

By Steve McIntyre, Climate Audit, Aug, 2, 2012

http://climateaudit.org/2012/08/02/gergis-and-watts-delayed/

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

Scientists Tell Senate Panel: Climate Change Is Here and Disaster Costs Will Be Huge

By Staff Writers, Common Dreams, Aug 2, 2012

http://www.commondreams.org/headline/2012/08/01-4

[SEPP Comment: John Christy was the only atmospheric scientist there. Apparently the reporter was dreaming about lunch when Christy spoke.]

Canada's Oil, the World's Carbon

Editorial, NYT, Jul 29, 2012

http://www.nytimes.com/2012/07/30/opinion/canadas-oil-the-worlds-

carbon.html?nl=todaysheadlines&emc=edit th 20120730

[SEPP Comment: What is the pipeline's effect on the climate? Reminds one of the books in the 1970s such as The Ugly American.

The case against global warming - Heated response

By Charles Battig, VA-SEEE, on ICECAP, Aug 2, 2012

http://icecap.us/images/uploads/Letter_CVille_July_30, 2012_Climate_Battig_pdf.pdf

Communicating Better to the Public - Make things up.

Climate Concerns and Public Health Issues

By Staff Writers, Boston MA (SPX), Aug 01, 2012

http://www.interndaily.com/reports/Climate Concerns And Public Health Issues 999.html

[SEPP Comment: Start off with unsupported claims and go from there.]

Changing Climate

Drilling discovers ancient Antarctic rainforest

By Staff Writers, Sydney (AFP), Aug 2, 2012

http://www.terradaily.com/reports/Drilling discovers ancient Antarctic rainforest 999.html

When the world burned less

By Staff Writers, Salt Lake City UT (SPX), Aug 03, 2012

http://www.terradaily.com/reports/When_the_world_burned_less_999.html

[SEPP Comment: Global cooling caused fewer fires.]

North America may face 'megadrought'

By Staff Writers, Corvallis, Ore. (UPI), Jul 30, 2012

http://www.terradaily.com/reports/North_America_may_face_megadrought_999.html

Tree-ring data showed the multiyear drought was unlike anything seen since the Middle Ages, from 977-981 and from 1146-1151, the researchers said.

Chronic 2000-04 drought, worst in 800 years, may be the 'new normal'

By Staff Writers, Corvallis OR (SPX), Aug 01, 2012

http://www.terradaily.com/reports/Chronic 2000 04 drought worst in 800 years may be the new_normal_999.html

[SEPP Comment: Same report as immediately above. How can something that ended be unceasing and the new normal?]

Climate change could open trade opportunities for some vulnerable nations

By Staff Writers, Stanford CA (SPX), Aug 01, 2012

http://www.terradaily.com/reports/Climate_change_could_open_trade_opportunities_for_some_v_ulnerable_nations_999.html

Changing Seas

Coral reef thriving in sediment-laden waters

By Staff Writers, Exeter UK (SPX), Aug 01, 2012

http://www.terradaily.com/reports/Coral_reef_thriving_in_sediment_laden_waters_999.html

Changing Sea Ice

Arctic Sea Ice Declines

By David Whitehouse, The Observatory, Aug 3, 2012

http://thegwpf.org/the-observatory/6310-arctic-sea-ice-declines.html

[SEPP Comment: As in parts of the US east, it has been a hot summer in parts of the Arctic. Watch out for the headlines – and predictions from computer models.]

Greenland ice said more robust to climate change than feared

- * Study shows ice loss stopped after surge
- * But ice sheet has not grown during pause

By Alister Doyle, Reuters, Aug 2, 2012

http://www.trust.org/alertnet/news/greenland-ice-said-more-robust-to-climate-change-than-feared [SEPP Comment: It has been a hot summer in Greenland; one would not expect the ice sheet to grow. It is indicative of the climate establishment that some scientists extrapolate 90 years out from one event that compassed 0.007% of the Greenland ice sheet.]

Little Ice Age climate and oceanic conditions of the Ross Sea, Antarctica from a coastal ice core record

By R.H. Rhodes, et al. Climate of the Past, July 30, 2012

http://www.clim-past.net/8/1223/2012/cp-8-1223-2012.pdf

[SEPP Comment: The paper suggests the Little Ice Age (LIA) was a global event with the Ross Ice Shelf colder than it is today. The IPCC reports claimed that the LIA was a regional event in the Northern Hemisphere.]

Changing Earth

Are large earthquakes linked across the globe?

By Staff Writers, Washington DC (SPX), Aug 03, 2012

http://www.terradaily.com/reports/Are_large_earthquakes_linked_across_the_globe_999.html

Increase in observed net carbon dioxide uptake by land and oceans during the past 50 years

A. P. Ballantyne, C. B. Alden, J. B. Miller, P. P. Tans & J. W. C. White, Nature, Letters, Aug 2, 2012

http://www.nature.com/nature/journal/v488/n7409/full/nature11299.html

Agriculture Issues & Fear of Famine

Corn for Food, Not Fuel

By Colin Carter and Henry Miller, NYT, Jul 30, 2012

http://www.nytimes.com/2012/07/31/opinion/corn-for-food-not-

<u>fuel.html?</u> r=2&partner=rss&emc=rss

Forest Fire Issues

U.S. Is Urged to Change Its Firefighting Air Fleet

By Matthew Wald, NYT, Jul 30 2012

http://www.nytimes.com/2012/07/30/us/forest-service-urged-to-update-firefighting-

fleet.html? r=1&nl=todaysheadlines&emc=edit_th_20120730

The Political Games Continue

Inhofe asks EPA to Withdraw Greenhouse Gas Regulations

By Staff Writers, Senate Environmental and Public Works Committee, Aug 3, 2012 [H/t Marc Morano]

http://epw.senate.gov/public/index.cfm?FuseAction=Minority.PressReleases&ContentRecord_id=edabd289-802a-23ad-4642-3d0655419286

Senators promise to file energy measure as amendment to every Senate bill

By Zack Colman, The Hill, Jul 30, 2012

 $\underline{http://thehill.com/blogs/e2-wire/e2-wire/241095-sens-shaheen-portman-will-file-energy-bill-as-amendment-to-every-senate-bill}$

[SEPP Comment: Net zero-energy use for homes and commercial buildings by 2030! No lighting, heating, or cooling needed. It would be great to see the feasibility paper on this one. The Federal government has had home insulation programs since the 1970s]

A Beverly Hills Bailout?

Federal earthquake insurance is an awful idea.

By Eli Lehrer, Weekly Standard, Jul 25, 2012

http://www.weeklystandard.com/keyword/Earthquake-Insurance-Affordability-Act

Cap-and-Trade and Carbon Taxes

Carbon tax gets unusual support

By Steve Hargreaves, CNN, Jul 30, 2012 [H/t Bud Bromley]

http://money.cnn.com/2012/07/30/news/economy/carbon-tax/index.htm

Congressman Introduces Carbon Tax Bill

By Marlow Lewis, Global Warming, Aug 2, 2012

http://www.globalwarming.org/2012/08/02/congressman-introduces-carbon-tax-bill/

[SEPP Comment: May not be rosy for carbon taxes.]

Subsidies and Mandates Forever

Wind PTC Already Phasing Out—for Certain

By David Kreutzer, The Foundry, Aug 1, 2012

http://blog.heritage.org/2012/08/01/wind-ptc-already-phasing-out-for-certain/

[SEPP Comment: The wind industry lamenting the uncertainty of the tax credit does not impress this commentator.]

Obama official: Ending wind credit could have 'devastating effect'

By Zack Colman, The Hill, Jul 31, 2012

http://thehill.com/blogs/e2-wire/e2-wire/241315-ferc-chairman-ending-wind-credit-could-bedevastating

Calling For Government Mandates

By Donn Dears, Power for USA, Aug 3, 2012

http://dddusmma.wordpress.com/2012/08/03/calling-for-government-mandates/

[SEPP Comment: According to its 2010 IRS form 990, ACEEE, received \$600,548 in government grants, not quite 10% total revenues of \$6,481,900. It lists \$1,633,968 in program services, undefined and \$4,147,211 in contributions.]

Sierra Club targets GOP lawmakers for opposing wind energy tax credit

By Zack Colman, The Hill, Jul 30, 2012

 $\frac{http://thehill.com/blogs/e2-wire/e2-wire/241037-environmental-group-targets-gop-lawmakers-for-wind-tax-credit-stance}{}$

EPA and other Regulators on the March

EPA Walks Back Its War Against Fracking

By Marita Noon, Energy Tribune, Aug 1, 2012

http://www.energytribune.com/articles.cfm/11320/EPA-Walks-Back-Its-War-Against-Fracking

[SEPP Comment: EPA scientific method revealed. Make splashy press releases on hazards first; then quietly pull away when scientific challenges arise. This gives the environmental supporters the ability to label the issue as "controversial."]

Energy Issues – Non-US

UK's Energy Policy 'Schizophrenia' Spreads to Europe

By Peter C Glover, Energy Tribune, Jul 31, 2012

http://www.energytribune.com/articles.cfm/11307/UKs-Energy-Policy-Schizophrenia--Spreads-to-Europe

The U.S. economy is in severe danger of being revived by what is happening in its shale gas and oil sectors.

Unprecedented Grid Failures Underscore India's Infrastructure Woes

By Sonal Patel, Power News, Aug 2, 2012

http://www.powermag.com/POWERnews/4846.html?hq e=el&hq m=2495937&hq l=5&hq v= 5e660500d0

The Property Rights Myth of European Shale Gas

By Nick Grealy, No Hot Air, Aug 3, 2012 [H/t GWPF]

 $\frac{http://www.nohotair.co.uk/gas-guru-blog/shale-gas-2012/166-shale-gas/2606-the-property-rights-myth-of-european-shale-gas}{(2012/166-shale-gas/2606-the-property-rights-myth-of-european-shale-gas/2606-the-propean-shale-gas/2606$

[SEPP Comment: Just because the oil and gas hydraulic revolution began on private property with private mineral rights in the US, it does not mean that such activities would not work in countries where mineral rights are government owned. That is a decision of the government. For years the state capitol grounds of Oklahoma has had working oil rigs – no doubt something that would horrify many political leaders elsewhere.]

Energy Issues -- US

Mine Succumbs To Obama's War On Coal, Ohio

Editorial, IBD, Aug 1, 2012

http://news.investors.com/article/620622/201208011852/obama-war-on-coal-hits-ohio.htm?p=full [SEPP Comment: Staggering increases in the price of futures for electricity capacity.]

It Worked! US Energy Emissions Back At 1992 Levels

By Hank Campbell, Science 2.0, Aug 1, 2012

http://www.science20.com/science 20/it worked us energy emissions back 1992 levels-92685

Oil and Natural Gas – the Future or the Past?

Europe's Quiet Shale Revolution

By Guy Chazan, Financial Times, via GWPF, Aug 2, 2012

http://thegwpf.org/energy-news/6303-europes-quiet-shale-revolution.html

Washington's Control of Oil and Gas

Chicago-area gas-price spike caused by 'cluster of bad luck'

Pipeline shutdown in Wisconsin, unrelated refinery problems contribute to short-term increase By Gregory Karp and Cheryl V. Jackson, Chicago Tribune, Aug 3, 2012

http://www.chicagotribune.com/business/ct-biz-0803-gas-prices-20120803,0,935805.story

[SEPP Comment: Transportation Ray LaHood may find the pipeline spill unacceptable, but so is his ham handed dictate that punished the public for it. Spike in gas price – in many other parts of the country as well – demonstrates the fragility of the system in which the EPA demands many boutique summertime blends. The price increase really occurred late this week.]

Return of King Coal?

Record number of coal-fired generators to be shut down in 2012

By Michael Bastasch, Daily Caller, Jul 28, 2012 [H/t SPPI]

 $\underline{\text{http://dailycaller.com/2012/07/28/record-number-of-coal-fired-generators-to-be-shut-down-in-2012/}$

27 gigawatts of coal-fired capacity to retire over next five years

By Staff Writers, EIA, Jul 27, 2012

http://www.eia.gov/todayinenergy/detail.cfm?id=7290#

Nuclear Energy and Fears

Fukushima's doses tallied

Studies indicate minimal health risks from radiation in the aftermath of Japan's nuclear disaster. By Geoff Brumfiel, Nature, May 23, 2012

http://www.nature.com/news/fukushima-s-doses-tallied-1.10686

Global Uranium Supply Ensured for Long Term, New Report Shows

Press Release, IAEA, July 26, 2012

http://www.iaea.org/newscenter/pressreleases/2012/prn201219.html

[SEPP Comment: Based on current use, over a 100 year supply is identified.]

Alternative, Green ("Clean") Solar and Wind

Spanish Renewable Lessons for Obama

By Andrés Cala, Energy Tribune, Aug 2, 2012

http://www.energytribune.com/

President Obama's Energy Outlook Is Far Too Sunny

Editorial, IBD, Aug 1, 2012

 $\frac{http://news.investors.com/article/620623/201208011852/obama-favors-solar-energy-over-fossil-fuels.htm$

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

Peak Oil: Meet \$2 A Gallon Algal Biodiesel

By Al Fin, GWPF, Aug 2, 2012

http://thegwpf.org/energy-news/6304-peak-oil-meet-2-a-gallon-algal-biodiesel.html

[SEPP Comment: Sensational headline, the question is when? However, an interesting projection of possible future costs of oil from various production methods.]

The Ethanol Mandate: Drought Only Compounds Inherent Catastrophic Consequences

By Larry Bell, Forbes, Jul 31, 2012

http://www.forbes.com/sites/larrybell/2012/07/31/the-ethanol-mandate-drought-only-compounds-inherent-catastrophic-consequences/

U.S, Australian navies focus on new fuels

By Staff Writers, Canberra, Australia (UPI), Jul 26, 2012

http://www.biofueldaily.com/reports/US_Australian_navies_focus_on_new_fuels_999.html

[SEPP Comment: Research is fine, implementation of expensive fuels is not.]

Tidal Turbine to Take the Plunge in the Bay of Fundy

Ocean Renewable Power says it will have its first grid-connected tidal generator online this fall. By Martin Lamonica, Technology Review, Jul 25, 2012 [H/t Tom Sheahen] http://www.technologyreview.com/view/428620/tidal-turbine-to-take-the-plunge-in-the-bay-of/?nlid=nlenrg&nld=2012-07-30

[SEPP Comment: What will the salt water and salt spray do to the turbine and the infrastructure?]

Commercial project dedicated

By Erin Ailworth, Boston Globe, Jul 25, 2012

 $\frac{http://www.bostonglobe.com/business/2012/07/24/nation-first-tidal-energy-project-dedicated-eastport-maine/y477E7mCnIpfBPod5hfKXL/story.html?s_campaign=sm_tw$

[SEPP Comment: High electricity costs bring hope?]

Study: Ocean waves could power Australia

By Staff Writers, Canberra, Australia (UPI), Jul 26, 2012 http://www.energy-daily.com/reports/Study Ocean waves could power Australia 999.html

Alternative, Green ("Clean") Vehicles

Even With Subsidies

By Donn Dears, Power for USA, Jul 31, 2012

http://dddusmma.wordpress.com/2012/07/31/even-with-subsidies/

Carbon Schemes

Eight Oxy-Combustion Projects Get DOE Awards to Advance CCUS

By Sonal Patel, Power News, Jul 31, 2012

http://www.powermag.com/POWERnews/4843.html?hq_e=el&hq_m=2495937&hq_l=12&hq_v =5e660500d0

Review of Recent Scientific Articles by NIPCC For a full list of articles see www.NIPCCreport.org

Probing Ecosystem Resilience to Climate Change in Arctic-Alpine Plants

Reference: de Witte, L.C., Armbruster, G.F.J., Gielly, L., Taberlet, P. and Stocklin, J. 2012. AFLP markers reveal high clonal diversity and extreme longevity in four key arctic-alpine species. *Molecular Ecology* 21: 1081-1097.

http://www.nipccreport.org/articles/2012/jul/31jul2012a1.html

CO2 Effects on Plant Nutrient Concentration

Reference: Duval, B.D., Blankinship, J.C., Dijkstra, P. and Hungate, B.A. 2012. CO2 effects on plant nutrient concentration depend on plant functional group and available nitrogen: a meta-analysis. *Plant Ecology* 213: 505-521.

http://www.nipccreport.org/articles/2012/jul/31jul2012a4.html

Northern Scandinavian Temperatures of the Past 2000 Years

Reference: Esper, J., Frank, D.C., Timonen, M., Zorita, E., Wilson, R.J.S., Luterbacher, J., Holzkamper S., Fischer, N., Wagner, S., Nievergelt, D., Verstege, A. and Buntgen, U. 2012. Orbital forcing of tree-ring data. *Nature Climate Change*: DOI 10.1038/NCLIMATE1589.

http://www.nipccreport.org/articles/2012/aug/1aug2012a1.html

A New Record of Late Holocene Climate at the Antarctic Peninsula

Reference: Lu, Z., Rickaby, R.E.M., Kennedy, H., Kennedy, P., Pancost, R.D., Shaw, S., Lennie, A., Wellner, J. and Anderson, J.B. 2012. An ikaite record of late Holocene climate at the Antarctic Peninsula. Earth and Planetary Science Letters 325-326: 108-115.

http://www.nipccreport.org/articles/2012/aug/1aug2012a3.html

[SEPP Comment: Study suggests the Antarctic Peninsula was not as warm in the late 20th century as it was during the Medieval Warm Period.]

Health, Energy, and Climate

Hong Kong chokes under 'worst' air pollution

By Staff Writers, Hong Kong (AFP), Aug 2, 2012

http://www.terradaily.com/reports/Hong_Kong_chokes_under_worst_air_pollution_999.html

Tiny airborne pollutants lead double life

By Staff Writers, Vancouver, Canada (SPX), Aug 02, 2012

http://www.terradaily.com/reports/Tiny airborne pollutants lead double life 999.html

[SEPP Comment: Better understanding of the chemistry of polluting particles may lead to more cost effective removal.]

Other Scientific News

Scientists probe link between magnetic polarity reversal and mantle processes

By Staff Writers, Liverpool UK (SPX), Aug 03, 2012

http://www.terradaily.com/reports/Scientists_probe_link_between_magnetic_polarity_reversal_an_d_mantle_processes_999.html

A Fish Friendly Facility for the ISS

By Jessica Nimon for ISS Science News, Houston TX (SPX), Jul 31, 2012 http://www.space-travel.com/reports/A_Fish_Friendly_Facility_for_the_ISS_999.html

Cloud seeds and ozone holes

By Staff Writers, Washington DC (SPX), Aug 03, 2012

http://www.terradaily.com/reports/Cloud seeds and ozone holes 999.html

Other News that May Be of Interest

Who owns the North Pole?

By Staff Writers, Copenhagen, Denmark (UPI), Aug 1, 2012

http://www.terradaily.com/reports/Who_owns_the_North_Pole_999.html

[SEPP Comment: Will we see the coming of a new type of cold war?]

ARTICLES:

1. Who Really Gets Rich Off High Gas Prices?

Exxon made seven cents per gallon in 2011. Federal, state and local governments siphoned off 50 cents in taxes.

By Drew Johnson, WSJ, Aug 2, 2012

http://online.wsj.com/article/SB10000872396390443687504577563383982418536.html?mod=WSJ_Opinion_LEFTTopOpinion

With the average price of gas in America hovering around \$3.50 per gallon for regular unleaded, it costs more than \$50 to fill a typical car's 15-gallon tank this summer. Why does gas cost so much?

You may blame high gas prices on rich oil company executives or greedy gas station owners. The truth is that governments rake in a larger profit at the pump than anyone—and with gas taxes on the rise in many parts of the country, there's no relief in sight.

The price of a gallon of gas is based on the combination of four costs: that of crude oil, of refining gas, of distribution and marketing, and of taxes.

Crude oil costs make up about 76% of the cost of gasoline, according to U.S. Energy Information Administration (EIA). Thus \$2.66 of a \$3.50 gallon of gasoline is set before the oil is even refined. Global markets, reacting to supply and demand, determine the cost of crude oil. Just like any commodity, from gold to corn, a shortage in supply or an increase in demand leads to a rise in prices.

Refining oil is the next step in the process—and the next expense for drivers. Gasoline is extracted from crude oil and additives, including lubricants and detergents to reduce engine deposits, are added. As of January 2012, the EIA found that refining was responsible for 6% of the cost of gasoline.

Distribution and marketing—the part of the process most apparent to consumers—constitutes another 6% of gas prices. That portion of the cost includes the shipping and transportation of the gasoline, a markup to cover retailers' expenses, and any advertising created to appeal to customers.

The remaining 12%—or almost 50 cents per gallon today—goes directly to federal, state and local governments in an array of sales and excise taxes. The federal gas tax is 18.4 cents on every gallon of gasoline sold in America. State gas-tax rates vary from a low of eight cents per gallon in Alaska to a jarring 49 cents per gallon in New York. Other states where it's steep to fill up include California and Connecticut—each with 48.6-cent-per-gallon gas taxes—and Hawaii, at 47.1 cents per gallon.

Some local governments have gotten in on the act, too. In California, local sales and excise taxes on gasoline average 3.1%, according to the Los Angeles Times. That works out to about 12 cents in local taxes for each gallon of gas, based on the state's current average of \$3.80 per gallon.

Skokie, Ill., a suburb north of Chicago, levies a gas tax of three cents per gallon. You'll pay an extra nickel per gallon at gas stations in Eugene, Ore. And the next time you're gambling in Las Vegas, you'll need plenty of cash left over to cover Clark County's 10 cent local tax on a gallon of gas. In Florida, Brevard County (home to the Kennedy Space Center) expects to siphon more than \$15 million from motorists this year, according to the newspaper Florida Today.

Put this all together, and government makes far more from gas sales than all of the oil companies put together. Exxon, for example, made only seven cents per gallon of gasoline in 2011. That's a drop in the bucket compared to the nearly 50 cents per gallon that federal, state and local governments rake in on an average gallon of gas pumped in the U.S.

Most people have to drive—whether to work, to the grocery store, to pick up kids from school or for dozens of other reasons. For some families struggling to make ends meet, paying 50 cents per gallon in taxes may be the difference between driving to work and putting dinner on the table.

2. U.S. Oil Reserves Jumped in 2010

By Tennille Tracy, WSJ, Aug 1, 2012

http://online.wsj.com/article/SB10000872396390443545504577563511346753908.html?mod=WSJ_Energy_leftHeadlines

U.S. energy officials estimate that oil and natural-gas reserves jumped in 2010 by the highest margin in at least three decades, lending weight to the idea that the U.S. can meet more of its own energy demand.

The Energy Information Administration said in its annual report that proven reserves of crude oil jumped by 13%, with the highest increases seen in Texas, North Dakota and the Gulf of Mexico. Proven reserves of natural gas rose by 12%.

The increases were the highest recorded by EIA since it began publishing the estimates in 1977. "These reserves increases underscore the potential of a growing role for domestically produced hydrocarbons in meeting both current and projected U.S. energy demands," EIA chief Adam Sieminski said in testimony prepared for a House of Representatives hearing Thursday.

The EIA's estimates identify how much oil or natural gas can be produced with reasonable certainty, given current economics and existing technology. Higher oil prices, which make it profitable to do more types of drilling, helped to boost the oil reserves in 2010. The increased use of hydraulic fracturing, meanwhile, helped to buoy the amount of natural-gas reserves by allowing operators to tap into supplies locked in shale-rock formations.

The jump in energy reserves comes as lawmakers are debating how quickly the U.S. should be expanding domestic production. Earlier this year, Republicans criticized the Obama administration for keeping a lock on offshore drilling in the Atlantic and Pacific oceans. The administration says it wants to promote oil drilling in areas where resources are known to exist and production already takes place.

The EIA estimates show 25.2 billion barrels of oil could be recovered in the U.S., up from the previous estimate of 22.3 billion barrels. Current U.S. petroleum consumption is about seven billion barrels annually.

Natural-gas reserves are estimated at 318 trillion cubic feet, up from the previous estimate of 284 trillion cubic feet. Annual U.S. natural-gas consumption is about 24 trillion cubic feet.

"The report is further proof that we have more oil and natural gas than anyone thought possible even a few years ago," said Erik Milito of the American Petroleum Institute. "We are sitting on a lottery ticket that could spur millions of jobs, billions of dollars in revenue for the government, and more than 100 years of energy for our country."

3. 'Smart growth' not so smart after all

By: Charles Battig, VA-SEEE, Jul 31, 2012 http://www2.dailyprogress.com/news/2012/jul/31/smart-growth-not-so-smart-after-all-ar-2097603/

The editors of the American Planning Association published a paper refuting many of the unfounded claims for "smart growth." The APA has its own trademarked version: "Growing Smart." It is to the credit of the APA that it published a paper that refutes a number of the unproved tenets of this building block of governmental planning at all levels.

In the official abstract of this paper, "Growing Cities Sustainably," in the May edition of the Journal of the American Planning Association, the authors note: "It is commonly asserted that so-called compact development is the urban form most able to sustainably accommodate growth by reducing travel distances and conserving land, but credible supportive evidence remains limited." Compact development is commonly known as "smart growth" and follows the "neighborhood model" plan, with increased housing density.

The four authors included experts in land use and transportation, architecture, environmental science and engineering. Their conclusions: "The current planning policy strategies for land use and transport have virtually no impact on the major long-term increases in resource and energy consumption. … They generally tend to increase costs and reduce economic competitiveness."

The negative consequences of smart growth principles include: "less housing choice, crowding, congestion, property price increases, and increases in overall respiratory disease burden as exposure to traffic emissions is increased."

The "smart growth" model appears not to be so smart. The question is whether our local planners are smart enough to accept the reality that their favorite concept is flawed. Forcing people into compact enclaves as a claimed solution to urban sprawl stifles human individuality, and delivers negative outcomes in place of long-term environmental benefits.

A new paradigm is needed. People tend to be most creative and productive when freedom of choice is assured.

This	paper	gives	reason	for p	olanners	to	reconsider	the	micromanager	nent	of taxpayers	' hous	sing
and l	land-us	se cho	ices.										