
August 14, 2008

Subject: Comments on the Draft "Global Climate Change Impacts in the United States: Unified Synthesis Product Report by the U.S. Climate Change Science Program, First Draft, July 2008"[1]

## I. Background Information

**Name(s):** Christopher C. Horner, Esq. on behalf of CEI
**Organization:** Competitive Enterprise Institute (CEI)
**Mailing Address:** 1001 Connecticut Avenue NW, Suite 1250
Washington, DC 20036
**Phone(s)**: 202.331.2260
**E-mail(s):** CHorner@cei.org
**Area of Expertise:** Law, Regulation and Policy relevant and applicable to USP

## II. Context

Pursuant to the request for public comment in NOAA's Federal Register Notice of July 17, 2008[2] please consider the following comments on the Draft "Global Climate Change Impacts in the United States" (hereafter, "USP" or "the document"[3]).

We submit these comments mindful of the requirements of the U.S. Global Change Research Act of 1990 (USGCRA)[4] and the Federal Information Quality Act (IQA).[5] The former established the specific authority and parameters applicable to this document. The latter describes the level of scientific credibility and rigor required of any "highly influential" information disseminated by the federal government, to use the Department of Energy IQA term of art cited by NOAA in its USP.

---

[1] ***Submitted on August 14, 2008, by regular mail to the above-cited individuals and by E-mail to*** USP-comments@climatescience.gov, copies to Conrad.C.Lautenbacher@noaa.gov and Bill.Brennan@noaa.gov, and by regular mail to Dr. Anne Waple, Climate Change Science Program Office, 1717 Pennsylvania Avenue NW, Suite 250, Washington, DC 20006 and Sandy MacCracken, Administrator, Climate Change Science Program Office, U.S. Global Change Research Program, 1717 Pennsylvania Avenue NW, Suite 250, Washington, DC 20006.
[2] July 17, 2008, Volume 73, Number 138; page 41042.
[3] Version viewed at http://downloads.climatescience.gov/sap/usp/usp-prd-all.pdf.
[4] 15 U.S.C. 2921 et seq.
[5] Enacted as Section 515(a) of the FY 2001 Treasury and General Government Appropriations Act for Fiscal Year 2001 (Public Law 106-554).

Relevant to IQA's applicability and the necessity that the authors substantially rewrite the document to conform to basic requirements for scientific reports prior to official dissemination, the United States Environmental Protection Agency (EPA) recently expressly indicated an intention to rely upon the final document for purposes of considering an "endangerment" finding under the Clean Air Act, and for possible future regulation of greenhouse gases.[6]

NOAA of course also acknowledges IQA's applicability in its Notice for Comment, in the document, and in its Charter of the Climate Change Science Program (CCSP) Synthesis Product Development Committee (SPDC), the body which produced the document.[7] CCSP acknowledges IQA's authority and applicability, also.[8]

Although NOAA invokes its own IQA Guidelines as controlling, it is IQA itself and OMB's Guidelines which ultimately govern and no two agency Guidelines may compel substantially differing interpretations of its applicability or meaning.

We ground our comments/challenges/requests for correction before dissemination in the relevant statutory requirements. We request the authors address all of our claims and authorities. We identify individual comments requiring a specific corresponding change, or explanation as to why the authors do not change the challenged claims, with three boldfaced, underlined asterisks so the authors cannot miss them: "*******". Other particularly key comments for the authors' consideration are placed in boldfaced type.

---

[6] In its July 5, 2008 "Advance Notice of Proposed Rulemaking: Regulating Greenhouse Gas Emissions under the Clean Air Act", EPA-HQ-OAR-2008-0318, July 11 2008, http://www.epa.gov/climatechange/emissions/downloads/ANPRPreamble5.pdf, EPA claimed, for example, on page 388: "EPA also invites comment on the extent to which it would be appropriate to use the most recent IPCC reports, including the chapters focusing on North America, and the U.S. government Climate Change Science Program synthesis reports as scientific assessments that could serve as an important source or as the primary basis for the Agency's issuance of 'air quality criteria.'"

EPA also signals an intention on p. 412 to rely upon this document to expedite issuing GHG NAAQS: "Given the complexity of global climate change science, and the vast amount of research that would be relevant to the Agency's scientific assessment, EPA anticipates this task would be particularly time consuming in the case of GHGs, though relying on synthesis reports such as the Intergovernmental Panel on Climate Change's Fourth Assessment Report and various reports of the US Climate Change Science Program could help expedite the process."

[7] NOAA states "This Synthesis and Assessment Product described in the U.S. Climate Change Science Program (CCSP) Strategic Plan, was prepared in accordance with Section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001 (Public Law 106-554) and the information quality act guidelines issued by the Department of Commerce and NOAA pursuant to Section 515 (http://www.noaanews.noaa.gov/stories/iq.htm). The CCSP Interagency Committee relies on Department of Commerce and NOAA certifications regarding compliance with Section 515 and Department guidelines as the basis for determining that this product conforms with Section 515. For purposes of compliance with Section 515, this CCSP Synthesis and Assessment Product is an 'interpreted product' as that term is used in NOAA guidelines and is classified as 'highly influential'. This document does not express any regulatory policies of the United States or any of its agencies, or provide recommendations for regulatory action."

[8] "Guidelines for Producing CCSP Synthesis and Assessment Products," December 2, 2004, http://www.climatescience.gov/Library/sap/sap-guidelines.htm.

Finally, the document when published in final purporting to be a USGCRA "National Assessment" will constitute final agency action subject, like this process, to scrutiny for compliance with the USGCRA and Administrative Procedure Act.[9]

## III. General Comments and Objections: Impermissible Bias and Conflicts

### A. The document serially violates the letter and spirit of IQA

Global climate change is unequivocal, and indeed something that is and always has been underway. The document, however, in several places conflates this without sufficient support with Man-made climate change – that is, assuming the position that all climate changes are Man-made – and much of its content flows from that false leap.

The document's greatest failures may well therefore be the inability or refusal to follow this threshold presumption with the necessary support for some claims – also unspecified – as to what about the various cited climatic phenomena are unequivocally Man-made. **It is not permissible to simply attribute Man's influence by stating it or referring to an authority, particularly the chosen authority – the IPCC – which openly admits that it performs no scientific research**.[10]

The authors go to great lengths to obscure and even further lengths to contradict the fact that they cannot credibly articulate Man's influence. They do so through selectivity in research, alarmist language, failure to provide relevance or context to many of their claims, and generally throughout with transparent advocacy in tone and content.

As noted in several places, below, the document does not provide a balanced treatment of the science. As Zbigniew Jawoworski notes in his Comments, the document "totally ignores studies which disagree with the man-made warming hypothesis".

*** For these reasons the document is not acceptable for dissemination. IQA required the Office of Management and Budget (OMB) to issue government-wide guidelines, and each agency to issue agency-specific guidelines, "ensuring and maximizing the quality, objectivity, utility, and integrity of information disseminated by the agency." Ultimately, OMB's Guidelines govern and all agency Guidelines must conform to them.

In its Guidelines,[11] OMB defines "quality" as the encompassing term, of which "utility," "objectivity," and "integrity" are constituent elements:

"'Utility' refers to the usefulness of the information to the intended users.

---

[9] 5 U.S.C 551 *et seq*.

[10] On p. the document references the *Climate Change 2007: The Physical Basis*. Contribution of Working Group I to the Fourth Assessment Report (AR4) of the Intergovernmental Panel on Climate Change, to support its claim that "". Yet the IPCC itself is merely asserting this, as it admits that it conducts no scientific research (see, e.g., http://www.ipcc.ch/about/about.htm).

[11] OMB 2002 (67 FR 9452), http://www.whitehouse.gov/omb/fedreg/reproducible2.pdf.

> 'Objectivity' focuses on whether the disseminated information is being presented in an accurate, clear, complete, and unbiased manner, and as a matter of substance, is accurate, reliable, and unbiased. 'Integrity' refers to security—the protection of information from unauthorized access or revision…"

**Peer review – although badly degraded in practice by the incestuous "climate" community as Wegman et al. revealed – is nonetheless required of this "highly influential scientific assessment". Although NOAA purports that its own Request is toward that end, peer review is not under any definition satisfied simply by asking for public comment through the Federal Register**.[12] "Peer review" demands "the selection of appropriate peer reviewers," and that the authors amend the Draft document to conform to substantive comments or satisfactorily explain why the requested changes are rejected.

*** NOAA's Request for Comment is a useful first step. Regardless, absent the actual characteristics of peer review as commonly accepted and as affirmed in OMB's relevant Bulletin, this process of merely seeking comment does not *per se* equate with the peer review announced by the Notice for Comment. This is important because, *inter alia*, EPA guidelines require scientific reports to, at minimum, undergo peer review.[13]

B. Biases in violation of "Objectivity" requirements

The common IQA violation underlying the statements, errors and omissions for which we request correction prior to final publication, is the ideological and policy-advocacy nature of the document which is instead prescribed by statute to be a scientific assessment. This bias leads to a series of claims that are unsupportable, misleading and not relevant without context, not reproducible and/or not validated.

*** This bias is demonstrated in various ways beginning with the apparent rush to produce some product in time to be styled as a report of the current administration. The rush is undeniable, given it even precluded NOAA from producing all of the underlying Assessments that the document (*prima facie* falsely) purports to synthesize.

That is to say that the document claims to be a summary or synthesis of 21 reports, with NOAA's July 17 notice for comment stating:

> "You are invited to provide comments on the First Draft of CCSP Unified Synthesis Product. This product is an integrative summary of the 21 Synthesis and Assessment Products of the Climate Change Science Program (CCSP), as well as

[12] See "Memorandum for Heads of Departments and Agencies," re: Issuance of OMB's "Final Information Quality Bulletin for Peer Review", December 16, 2004, Executive Office of the President, Office of Management and Budget, http://www.whitehouse.gov/omb/memoranda/fy2005/m05-03.pdf, esp. pp. 2-5, 21-22.

[13] Other than the popular media it is clear that EPA is the principal intended audience, for reasons of its nascent efforts exploring regulation of greenhouse gases (GHGs). Despite the authors' apparent rush to produce something before the current administration leaves office, they would be wise to adhere to traditional requirements of peer review.

the recent IPCC Fourth Assessment Report, and other recent results that have appeared in the scientific literature. By producing this summary, there will exist a single coherent analysis of the current understanding of climate change science, summarizing the contributions of the CCSP Program, and identifying important gaps in the science."

Yet NOAA/CCSP admit that the a preponderance of the individual reports which the USP purportedly synthesizes and on which it is purportedly based had yet to even be completed by the time the USP was produced.[14]

*** Further, we note the unreasonable offer of a 27-day comment period for a 208-page technical document (Cf. EPA granting 120 days for the far-less technical 493-page ANPR on possible regulation of GHGs, cited above). We note that previously the NAST offered 60 days for public comment on the draft, "first" National Assessment,[15] and that the CCSP requires a comment period of "not less than 45 days" for the far-less involved document, a CCSP prospectus.[16] **NOAA must extend the comment period for a more thorough review and process.**

NOAA implicitly concedes this point by purporting that the document embodies "a single coherent analysis of the current understanding of climate change science, summarizing the contributions of the CCSP Program, and identifying important gaps in the science."[17] No such document can be fairly and comprehensively critiqued in the short time prescribed, particularly one so misleading and rife with misstatements.

CEI notes that it was among numerous commenting parties requesting an extension of this period to some reasonable length, and note that the only constraint on NOAA granting these requests is an OMB caution to avoid "avoid open-ended comment periods, which may delay completion of peer reviews."

C. Bias in Author Selection

*** Similarly, the document's inherent bias is evident in the inclusion among its handful of authors of an individual notorious in the "climate" community for advocating that, e.g., "we have to get rid of the Medieval Warm Period." It is not conceivable that this *prima facie* disqualification is unknown among the other authors and parties responsible for his inclusion in the drafting team. His participation as one of thirty authors merely telegraphed the team's view of its mission, and its approach of ignoring that observations and the scientific literature published since that "first" National

[14] http://www.climatescience.gov/Library/sap/sap-summary.php
[15] National Science Foundation, Notice of the availability of draft report for public comment, "Reports and guidance documents; availability: National Assessment Synthesis Report", Federal Register, June 12, 2000, 36845–36846 [00–14732] http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=2000_register&docid=00-14732-filed.pdf.
[16] "Guidelines for Producing CCSP Synthesis and Assessment Products," December 2, 2004, http://www.climatescience.gov/Library/sap/sap-guidelines.htm#drafting.
[17] http://www.climatescience.gov/Library/sap/usp/public-review-draft/invitation.php

Assessment have deeply discredited the alarmist thesis of catastrophic Man-made global warming.

*** We note that the CCSP-SPDC Charter demands that the group consist of "a balanced representation of scientific views among preeminent scientists, educators, and experts". The intent is clear and reflective of numerous statutory requirements applicable to this process and document. The requirement of balance is also implicit in FACA (e.g., § 5(b)(2)). Yet the USP FACA Author Team clearly does not comply with these requirements, and the document reflects this bias.[18]

As climate scientist Roger Pielke Jr. notes, referencing the *prima facie* bias manifested in author-selection, this document:

> "is misleading, incorrect, and a poor reflection on the government scientists whose names appear on the title page, many of whom I know and have respect for. ...
>
> So why does the report have such an advocacy focus and rely on misleading arguments? One answer is to have a look to the people chiefly responsible for the editing of the report, and also the section on natural disasters, where one person's views are reported almost exclusively to any others. Perhaps it is time to rotate control of U.S. government 'science' reports to some new faces?"[19]

We also agree with the comments of climate scientist Roger Pielke, Sr. as regards bias found in author-selection, and the document with a clarifying qualification.[20] He notes in pertinent part:

> "This US Climate Change Science Program (CCSP) report is Co-Chaired by Thomas R. Karl, Jerry Melillo, and Thomas C. Peterson with the Senior Editor and Synthesis Team Coordinator Susan J. Hassol. These are the same individuals who have led past CCSP reports (e.g. see and see), with Tom Karl and Tom Peterson deliberately excluding scientific perspectives that differ from their viewpoints (i.e. see). Susan Hassol was writer of the HBO Special 'To [sic] Hot Not to Handle'. This HBO show clearly had a specific perspective on the climate change issue, and lacked a balanced perspective. The HBO Executive Producer was Ms. Laurie David.
>
> **A clear real conflict of interest is obvious.**

---

[18] "U.S Department of Commerce Charter of the Climate Change Science Program (CCSP) Synthesis Product Development Committee [Draft]," http://www.climate.noaa.gov/ccsp/pdf/usp_draft_charter.pdf.
[19] Dr. Roger Pielke, Jr., "Draft CCSP Synthesis Report", Prometheus science blog, July 28, 2008, http://sciencepolicy.colorado.edu/prometheus/archives/climate_change/001489draft_ccsp_synthesis.html.
[20] The "specific" point of view that the HBO special bears is a political, alarmist view; the point however is that this further establishes the lack of balance and *prima facie* bias manifested by the document's authors.

> As a result, this report continues the biased narrow perspective of the earlier CCSP reports, as has been reported on a number of times on Climate Science and in other communications (e.g. see and see). …
>
> **As recommended in the Climate Science weblog [see] we need new scientists who are not encumbered by their prior advocacy positions on climate change to lead the preparation of balanced climate assessment reports.**"[21] (linked citations at "see" omitted; emphases in original)

The author roster also reveals how the drafting team replicates in great part the team behind the discredited "first" National Assessment. This bias toward alarmism is so profound that expert-reviewer comments in 2000 on that document apply even more to this document.

That is, despite the applicable restrictions, this report like its predecessor reads as if it were "written by a committee of Greenpeace, Ted Turner, Al Gore and Stephen King (for the horror lines). I saw no attempt at scientific objectivity" (Dr. John Christy, 2000).

The 2000 comment of Jae Edwards of Pacific Northwest National Laboratory rings true in the present case, that, "The current version of the report reads more like an advertising supplement to *Time Magazine* than a national assessment." As he said then about the USP's predecessor, this document is "needlessly hyperbolic."

And now as then, the assessment of James Shuttleworth of University of Arizona is on point. "Because the document retains the conventional looming gloom perspective throughout, it will likely be rejected by the majority of the population as just another tree huggers lobby piece. If its purpose is just to provide a further prop to the Kyoto agreement, so be it."

Specifically commenting on the current document, Pielke Jr. similarly notes that "the report adopts an approach to presenting the science more befitting an advocacy group, rather than a interagency science assessment. The report ignores the actual literature on economics and policy, choosing instead to present fluffy exhortations about the urgency of action and reducing emissions. I can get that level of policy discussion from any garden variety NGO, for $2 billion per year over the past 18 years, I would expect a bit more."[22]

In sum, this document embodies precisely what the Wegman Report warned policymakers against, a clique of self-referencing and self-affirming individuals with coincident professional interests:

---

[21] Dr. Roger Pielke, Sr., "Comments On The Draft CCSP Report 'Global Climate Change Impacts in the United States'", Climate Science blog, July 31, 2008, http://climatesci.org/2008/07/31/comments-on-the-draft-ccsp-report-global-climate-change-impacts-in-the-united-states/.

[22] Dr. Roger Pielke, Jr., "Draft CCSP Synthesis Report", Prometheus science blog, July 28, 2008, http://sciencepolicy.colorado.edu/prometheus/archives/climate_change/001489draft_ccsp_synthesis.html.

"The paleoclimatology community seems to be tightly coupled as indicated by our social network analysis, has rallied around the [Mann] position, and has issued an extensive series of alternative assessments most of which appear to support the conclusions of MBH98/99… Our findings from this analysis suggest that authors in the area of paleoclimate studies are closely connected and thus 'independent studies' may not be as independent as they might appear on the surface."[23]

*** That Committee concluded that "It is especially the case that authors of policy-related documents like the IPCC report, *Climate Change 2001: The Scientific Basis*, should not be the same people as those that constructed the academic papers."[24] Yet the document's thirty authors serially cite their own work – apparently more than 100 times in the Draft Synthesis Report alone.[25]

No doubt a survey of relationships as Wegman undertook as to Mann et al and those who perpetuated the "Hockey Stick" would yield similar results among this team.

CEI affirms by reference and extends the relevant comments of Roger Pielke, Sr., that the authors, including but by no means limited to "Tom Karl, Jerry Melillo, and Tom Peterson … have a conflict of interest in the assessment as they are evaluating significant portions of their own research."[26]

## IV. Specific Comments, Requests for Correction and Discussion

### A. Bias in use of images

The document uses images as part of its obvious advocacy mission. Examples include but are by no means limited to the smokestack (p. 15), which does not indicate any relevant information such as the nature of the plume and why it is shown, or other guidance as to how the image might be relevant to, let alone appropriate for, this purported scientific assessment. It must have some intended purpose, but it is not apparent which of the permissible purposes set forth in statute applies. These comments also apply to the images on pp.16-17.

---

[23] "Ad Hoc Committee Report on the 'Hockey Stick' Global Climate Reconstruction" for the Chairmen of the U.S. House Committee on Energy and Commerce and of the Subcommittee on Oversight and Investigations, Edward J. Wegman, David W. Scott, and Yasmin H. Said, National Academies of Sciences, at p. 4, available at http://www.uoguelph.ca/~rmckitri/research/WegmanReport.pdf.

[24] Id at p. 5.

[25] Thomas R. Karl, Co-chair [cited 3 times], Jerry Melillo, Co-chair [cited 7 times], Thomas C. Peterson, Co-chair [cited 7 times], David M. Anderson [cited 1 time], Donald F. Boesch [cited 3 times], Virginia Burkett [cited 5 times], Nancy B. Grimm [cited 2 times], Jerry L. Hatfield [cited 4 times], Katharine Hayhoe [cited 18 times], Anthony Janetos [cited 3 times], Jay Lawrimore [cited 1 time], Jim McCarthy [cited 5 times], Dave McGuire [cited 7 times], Evan Mills [cited 7 times], Jonathan T. Overpeck [cited 3 times], Ben Santer [cited 5 times], Michael J. Savonis [cited 2 times], Eileen Shea [cited 4 times], Bradley H. Udall [cited 1 time], John Walsh [cited 1 time], Michael F. Wehner [cited 2 times], Thomas J. Wilbanks [cited 1 time], Don Wuebbles [cited 14 times].

[26] Comments on USP submitted by Roger A. Pielke Sr., citations omitted.

Generally, the graphics, even when identified, do not indicate in credits when taken, or where, etc. (see graphics pp. 36, 39, 45, 46, 48, 49, 51, 52, 53, etc.) or if where, not when or why they were chosen (see graphics pp. 42, 43, 44) or whether or how event is attributable to climate change or just weather. Most have no explanation. Some like the fire scene on p.136 are not identified by credit, date, place, etc. at all.

Instead, all of these cited images seem to be random adornments consistent with the type of advocacy for which the authors' hired public relations assistant – their "Team Coordinator" – is typically engaged, but have no appropriate or authorized use in this document.

*** These images cited above have no place in this document as presented and must be removed.

B. Document Exceeds Scope of its Authorizing Statute and Charter

Pursuant to and/or under the auspices of the Global Change Research Act of 1990, 15 U.S.C. 2921, *et seq*., Reorganization Plan No. 1 of 1977 and Executive Order 12039, NOAA et al are assigned the responsibility of producing an Assessment, as that which the document purports to be, as follows:

> "On a periodic basis (not less frequently than every 4 years), the Council, through the Committee, shall prepare and submit to the President and the Congress an assessment which –
>
> (1) integrates, evaluates, and interprets the findings of the [USGCR] Program and discusses the scientific uncertainties associated with such findings;
>
> (2) analyzes the effects of global change on the natural environment, agriculture, energy production and use, land and water resources, transportation, human health and welfare, human social systems, and biological diversity; and
>
> (3) analyzes current trends in global change both human-inducted (sic) and natural, and projects major trends for the subsequent 25 to 100 years." (15 U.S.C. 2936).

The Charter of the Climate Change Science Program (CCSP) Synthesis Product Development Committee (SPDC), the body responsible for this document, affirms the document's statutory mandate, detailed, *infra*, noting in pertinent part:[27]

> "OBJECTIVES AND DUTIES
> (1) The NOAA SPDC will develop a draft product that will integrate and evaluate the findings of the U.S. Climate Change Science Program in the context of current and projected global climate change trends, both human-induced and natural, and analyze the effects of current and projected climate change on: ecosystems and

[27] "U.S Department of Commerce Charter of the Climate Change Science Program (CCSP) Synthesis Product Development Committee [Draft]," http://www.climate.noaa.gov/ccsp/pdf/usp_draft_charter.pdf.

biological diversity; agriculture; energy production and use; land and water resources; transportation; and human health and social systems".

This prescription, too, is binding per FACA § 9(c)(B). Yet the document makes numerous statements and policy recommendations that extend well outside of the scope of the document's mandate, are not authorized and further are not supportable under the requirements of the Information Quality Act.

*** As such, all statements identified herein and which otherwise fall outside the authorized scope of work must be removed prior to final publication. For example, we vigorously dispute the risible, footnoted claim that the document makes no recommendations for regulatory action.[28] This is facially untrue as demonstrated by, but no means limited to, the following examples:

> "Response Strategies" referred to as a "portfolio of approaches" and "options" referred to as "mitigation" and "adaptation" (pp. 12-13).
>
> "Long-lived infrastructure, from power plants to roads and buildings, must be designed and built taking climate change into account.
> Long term planning will have to continually incorporate the latest information, as climate will be ever changing, requiring adaptation strategies to constantly evolve" (p. 7)
>
> Recommended policy steps require an "Urgency of Action", etc. (p. 4)

*** The document has no statutory authority to make such claims. This and all such policy advocacy is inappropriate for this document and must be removed.

*** The document also fails to satisfy the statutory requirement that it in equal part "discusses the scientific uncertainties associated with [the] findings" that it promotes. It must include such satisfactory discussion in order to be released under this authority and title, using the funds specifically appropriated for producing a "National Assessment".

C. Impermissible Claims in the Executive Summary

1. Opening breakout points are impermissible

Very much along the same line, the document opens with non-scientific, alarmist statements offered presumably for media consumption but nonetheless which are outside of the document's authorized scope. These include the Executive Summary breakout points such as "The Future is in Our Hands", "Irreversible Losses", "Urgency of Action" and "Tipping Points".

We remind the authors that Congress prescribed specific applicable parameters when authorizing and thereby when funding this particular document. This process is not

[28] Id.

instead an opportunity to grandstand, make grandiose if unsupported (and unsupportable) claims or otherwise promote a policy agenda or ideology, as this document does and as is quite obviously the long-held and clearly manifested intention of several among the document's authors. The authors must stick to the authorized mandate.

*** It turns out that many of these claims apparently made their way into the government report from the personal webpage of the document's public relations person, Susan Joy Hassol. Climate scientist Roger Pielke Jr. exposed this in detail.[29] Like the conflict presented by authors evaluating their own research, this practice and content are entirely impermissible and the content must be removed prior to publication in final and dissemination.

In addition to being mere policy/ideological "freelancing", these conclusions are misleading, inaccurate and are not supported in the document's text.

Both these headings and their subsequent text, in general and in their specifics, make "inaccurate and misleading" comments. They are misleading because of the overall message, which is unsupported and otherwise biased as described below.

*** These claims are in large part simply unsupportable, and are without specific support elsewhere in the document. They are "red meat" for media promotion of the document's self-appointed advocacy mission. Where they are supportable they say nothing about the science of climate change, and are irrelevant without context. They must be removed.

a. "Tipping Points"

The document states on p. 5, in its "Executive Summary":

> "Tipping Points
>
> The more climate changes, the more thresholds will be crossed in natural and human systems. Passing such tipping points can have unpredictable consequences due to the complexity of the climate system. Both anticipated and unanticipated impacts become more likely with increased warming. The impacts of abrupt climate changes can exceed our ability to cope."

It is instructive that although this polemical claim made it into the purported "Executive Summary", it is not in fact mentioned elsewhere in the document. This absence also reveals that such claims are not supported in the document any more than they are supported by the relevant scientific literature.

*** This is polemical, unscientific advocacy and all such statements must be removed.

[29] Roger Pielke, Jr., "Sloppy work by the CCSP", August 5, 2008, http://sciencepolicy.colorado.edu/prometheus/sloppy-work-by-the-ccsp-4497.

b. Urgency of Action/The Future is in Our Hands

The document states on p. 4, in its "Executive Summary":

> "The Future is in Our Hands
>
> Human-induced climate change is affecting us now. Its impacts on our economy, security, and quality of life will increase in the decades to come. Beyond the next few decades, when warming is "locked in" to the climate system from human activities to date, the future lies largely in our hands. Will we begin reducing heat trapping emissions now, thereby reducing future climate disruption and its impacts? Will we alter our planning and development in ways that reduce our vulnerability to the changes that are already on the way? The choices are ours."

and

> "Urgency of Action
>
> There is a growing urgency in responding to the climate challenge because choices being made now have long-term implications, and delay will be costly. Aggressive near-term actions would be required to alter the future path of human-induced warming and its impacts. Future generations will inherit the legacy of our decisions."

*** These claims presume that Man can also adopt regulations to stop the climate from changing, or at least stop it from changing to some unidentified if detectable degree. This, too, is unsupportable and surely not supported in the text to the level required of the IQA. The requested changes are that the cited, offending provisions be dropped.

*** The message that *delay will be costly* is a policy judgment, not a scientific determination. Further, a good case can be made that haste would be even more costly, so this is not a sufficiently credible claim for these purposes. Low- and non-emitting energy technologies that could quickly and affordably be scaled up to replace coal- and natural-gas-fired power plants and gasoline-fueled automobiles do not exist. However, such alternatives may be available to future generations, which will likely be much wealthier than we are—if carbon suppression policies do not sabotage economic growth. Failure to present this alternative perspective shows political bias, and in its absence this discussion must be removed.

*** This is unscientific advocacy and these statements must be removed.

2. Impermissible Claims in Executive Summary's "Key Findings"

After the above-cited Executive Summary breakout points, the document lists its "Key Findings." Specifically, the document says in pertinent part, on p. 6:

> "Once considered a problem mainly for the future, climate change is now upon us. People are at the heart of this problem: we are causing it, and we are being affected by it. The rapid onset of many aspects of climate change highlights the urgency of confronting this

> challenge without further delay. The choices that we make now will influence current and future emissions of heat-trapping gases, and can help to reduce future warming. Likewise, our decisions on whether and how to adapt to the degree of warming that is already inevitable can help us reduce the impacts of future warming.

In truth, we see very little that is rapid about the onset of recent warming. Even if one assumes that all modern warming is Man's fault, the rate of warming since 1975 is 0.16 degrees Celsius per decade. A continued warming at that rate produces a 21st century warming near the low-end of the IPCC range. We also note that there has been no net warming in the 21st century—an outcome none of the IPCC climate models predicted as well as otherwise inconsistent with the above language.

Both the slow rate of warming and the lack of warming since 2001 suggest a climate that is relatively insensitive to rising greenhouse gas concentrations. The report's dire impact projections most certainly assume – like those of the IPCC upon which it in great part relies – a greater degree of climate sensitivity than has in fact been observed.

**Although climate sensitivity assumptions are the key variable in climate impact assessments, there is no thematic discussion of climate sensitivity anywhere in the report. As such, the document fails the "balance" requirement**. Some recent research, for example Roy Spencer's satellite analysis of cirrus cloud behavior in the tropics, indicates that all IPCC models overestimate climate sensitivity.

***** **At the very least, the report should note that despite decades of research and billions in taxpayer support, the CCSP has made little if any progress in narrowing down the possible range of warming from a doubling of CO2 concentrations over pre-industrial levels.** In 1990, a doubling of CO2 was expected to produce 1.5 to 4.0 Celsius of warming, and that's about what it's still expected to produce today. Fundamental uncertainties remain regarding the key variable**. The Executive Summary and the body should mention this. Absent such balance, the document may not be disseminated.**

Further, these messages are without contextual relevance because, e.g., climate always changes; the claims' only potential relevance could be under an assumption – set forth serially in the document, if not supported to the level required of the IQA – that Man appreciably and negatively changes the climate.

***** This in turn presumes that Man can also adopt regulations to stop the climate from changing, or at least stop it from changing to some unidentified degree. This, too, is unsupported and unsupportable, and certainly not supported to the level required of the IQA. The requested changes are that the cited, offending provisions be dropped.

The authors proceed to make numerous, other statements which are not appropriate for this document.

a. "Here Now"

The document says on p. 6:

> "**1. Human-induced climate change and its impacts are apparent now throughout the United States.**
> • Global warming is unequivocal and is due primarily to human-induced emissions of heat-trapping gases and other pollutants1.
> • Observed changes in the United States include temperature increases, sea-level rise, increased heavy downpours, rapidly retreating glaciers, regional droughts, substantial changes in sensitive wildlife, earlier snowmelt, and altered timing and amount of river flows.
> • Impacts of these changes are apparent in many facets of society including health, water, food, energy, and quality of life.

The claim that "climate change is now upon us" is meaningless, given that this has never not been true. The obvious import of the combination of this with the claim that "people are at the heart of the problem" is that some appreciable and deleterious *Man-made* climate change is upon us, which as discussed elsewhere here the authors do not support with the necessary objectivity and utility.

It is true that the IPCC makes the claim that global climate change is "unequivocal", as the document claims referencing the IPCC as its authority for the claim. **This does not, however, provide license to agencies of the federal government to simply parrot such alarmism by referring back to the IPCC. The IPCC is not covered by the Information Quality Act; however, NOAA, CCSP et al and their products are.**

Further, the second bullet point clearly implies that some detectable, identifiable portion of climate changes are attributable to Man, a statement that the authors do not and cannot quantify in any meaningful way satisfactory to IQA. Also, the rest of these claims are more rhetoric than science in that they also fail to find sufficient support either in the document or in the relevant scientific literature.

*** **If this is not the case, then surely the document can more clearly articulate *what* about recent temperature is Man-made? What about regional droughts, sea level rise (but, presumably, not the recent *reduction* in the rate of increase), rainfall increases (but presumably not recent *decreases*), glacial retreat (but, presumably, not glacial *advances*), and all of the rest of the purportedly human-driven climatic phenomena are attributable to Mankind? How much of each is our doing? How the authors arrive at their conclusions is also necessary to support these claims in a document disseminated by the federal government.**

*** In truth, that is not possibly done with any credibility and certainly not rising to the standards applicable to this document. The statements in this bullet-point are not supportable to the level necessary to satisfy the IQA's requirements, and these statements must be removed.

b. More inappropriate "future is in our hands" advocacy

The document further states, on p. 6:

> "**3. The degree to which future climate will change, and the scope and magnitude of the impacts, depend on choices made now.**
> • Another 1°F of warming in the next few decades (on top of the observed 1.5°F rise) is already locked in due to past emissions.
> • The amount of warming we will experience beyond the next few decades depends upon choices about emissions made now and in the near future.
> • Lower emissions of heat-trapping gases will result in less climate change and related impacts."

Such rhetoric and the document's varied invocation of these claims are simply outside the scope of the document's authorized purview. Congress did not mandate or even authorize CCSP to tell policymakers when to act or what goals to pursue, to make such value judgments or offer such non-scientific rhetoric in this ostensibly scientific document.

*** Further, the document is rife with unsupportable statements such as "The more we mitigate (reduce emissions), the less climate change we'll experience and the less severe the impacts will be, and thus, the less adaptation will be required" (p. 12). The authors must quantify this claim; otherwise it's just a political and ideological talking point, not a scientific statement. Unless the authors provide specific and credible support for these claims, they must be dropped.

*** First, there is no credible suggestion that any policy option ever proposed would detectably impact climate, contrary to the document's next claim that we can simply avoid the alleged horrors that await us, imminently or otherwise, through laws, regulations and the gentle ministrations of bureaucrats. Unless the authors offer a credible claim to the contrary this claim, too, must be dropped throughout the document.

**Similarly, the document further violates the two relevant statutes in its claims of urgency**. The implicit argument is that if only the U.S. government urgently adopted a particular regulatory agenda then the parade of horribles projected in the document could be avoided. Once again, the document's hyperbole runs into the problem that nothing ever proposed would, even if adopted urgently (or not), have an impact on the climate that falls outside of natural variability, that is, that would be detectable from "background noise".

Nowhere has Congress tasked this body or document with producing the sort of policy and agenda advocacy with which these pages are rife, examples of which are cited above.

*** All such language is unauthorized and/or cannot be credibly supported and should be dropped.

We remind the authors again that there is no evidence that any measure ever proposed domestically or even globally would appreciably or discernibly mitigate climate change. There is nothing conceivable that we could do on the mitigation front, particularly with the "urgency" that the document advocates, that would make this statement true, and permissible. Hoffert et al (2002) remains the acknowledged, dominant thinking on the notion that Mankind can simply regulate our GHG contribution away.

*** To advocate to the contrary as the document does is without foundation and manifests an ideological argument pushing a particular agenda. It is therefore impermissible for the document, and the requested change is that all relevant language invoking this claim be dropped.

c. Faster than Expected

The document says on p. 6:

> **2. Many climatic changes are occurring faster than projected even a few years ago.**
> • Global emissions of heat-trapping gases are now increasing even more rapidly than the highest emissions scenario scientists have been analyzing.
> • Arctic sea ice and the large ice sheets on Greenland and parts of Antarctica are melting faster than expected.

The document also makes claims such as "Arctic sea ice and the large ice sheets on Greenland and parts of Antarctica are melting faster than expected." P. 6

Such claims are highly questionable for any document subject to IQA for many reasons, including the impermissibility of proceeding as if models are some form of reality against which actual reality may be held and assessed. It is the *models* that have failed to meet expectations far more than climate (see discussion, below). With the models being wrong in their projections about such phenomena and regions vastly more often than right, it is simply disingenuous to proceed from the assumption that computer modeled scenarios are legitimate, sufficiently validated, or otherwise utile for the purposes to which the authors put them in a document covered by the requirements of the Information Quality Act – as inconvenient as those may be.

**The simple truth is that while models are not illegitimate for all uses, they are not legitimate for this use, in a covered "highly influential scientific assessment" disseminated by the federal government.** To decry reality, in a scientific document no less, as proof of some theory because it didn't comport to model outputs (which often diametrically counter each other) is utterly improper under IQA.

Instead of representing science, this claim and others like it are fairly typical political rhetoric employed by proponents of the regulatory agenda that this document (improperly) advocates, but is scientifically unsupportable.

*** The requested correction is that this and all such phrases be removed.

d. Impacts

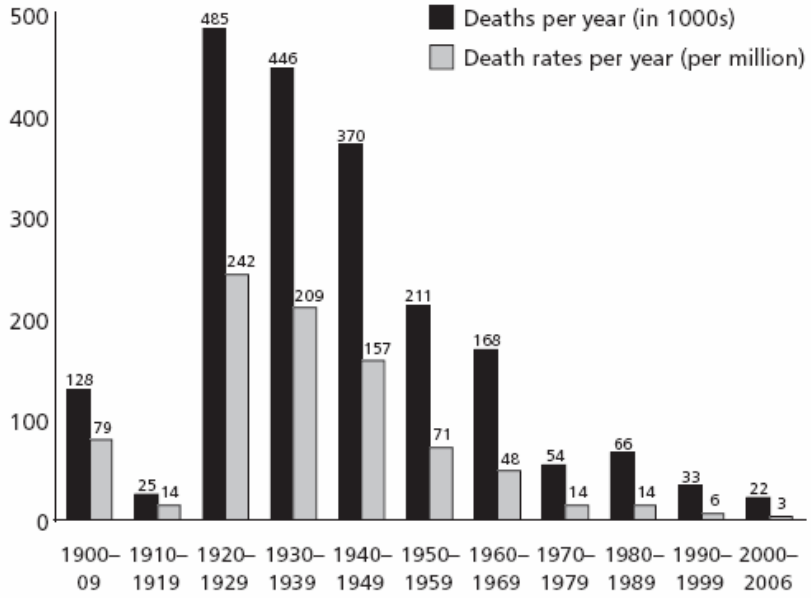
The document states, on p. 6 of its "Executive Summary":

> **4. Extreme weather and climate are having increasing impacts on society.**
> • The United States has experienced increases in heat waves, wildfires, heavy downpours, and in some regions, droughts, all of which are disrupting our lives.
> • Extreme events affect every aspect of society and nature including human health, energy, transportation, agriculture, ecosystems, and water resources.
> • Atlantic hurricane intensity has increased in recent decades and additional future increases are projected."

Although these statements are facially correct – *of course* extreme events affect energy, health, transportation, etc. – they also create a highly misleading picture, namely, that the world is becoming a more dangerous place and that global warming is to blame. This is unsupportable. In reality, mortality rates and aggregate mortality related to extreme weather have declined dramatically over the past 85 years (see chart below).[30] The 95 percent decline in aggregate mortality is particularly impressive given a nearly four-fold increase in the human population since 1920.

*** Global warming simply has had no measurable long-term adverse impact on human health and mortality. We recommend that the CCSP include this chart in the report to avoid the appearance of bias and agenda-driven science.

Figure 1 **Global death and death rates due to extreme events, 1900–2006**




[30] Indur Goklany, Death and Date Rates Due to Extreme Weather Events: Global and U.S. Trends, 1900-2006, November 2007, International Policy Network, http://www.csccc.info/reports/report_23.pdf.

Clearly, global warming is ***not*** making people more vulnerable to extreme weather. In fact, the opposite may be the case. Huang et al. (2007), was a study of major flooding events in China over the past 12,000 years which found that "cold periods in China bring catastrophic floods, droughts, dust storms, heat waves, migratory locusts and frequent famines and plagues while warm periods bring a reprieve from the misery."[31]

*** For these reasons these misleading claims must be removed. We also request that the document reference Huang to show that it is not clear or settled that warmer is always worse from the standpoint of human health and welfare.

3. Historical climate patterns no longer a guide

Finally on this front, CCSP should drop "Key Finding" #9, "Historical climate and weather patterns are no longer an adequate guide to the future." This has always been partly true and partly false. The Roman Warm Period was not an adequate guide to the Dark Ages Cold Period, which was not an adequate guide to the Medieval Warm Period, which was not an adequate guide to the Little Ice Age, which was not an adequate guide to the Current Warm Period.

*** The past is still relevant, though, as CCSP affirms on page 137 (and in its insistence on the utility of models tuned to the past). There we find that the Southwest is drought-prone, and that the ongoing 110-year drought "pales" compared to other "mega-droughts" the region experienced during the past 2000 years. In that section, CCSP clearly thinks past is prologue. The Executive Summary's end-of-days rhetoric is alarmist, contradicted by CCSP's approach on page 137, and of no scientific value. It should be dropped.

**Further, the document fails to support the claim that recent years have been so aberrant as to make past experience no longer useful in determining the future. Particularly, specific breakout points such as that the Northeast will be like the Mid-Atlantic are preposterous and not supported in the literature or the document.**

The ultimate irony in this is of course that applicable statutory restrictions are such that it is the past, and not the computer models on which the document relies for projecting future climate, upon which the document may permissibly project future climate.

*** This heading and discussion are advocacy and do not rise to the level required by relevant statutes and must be removed before final dissemination.

[31] World Climate Report, "Floods and Droughts and Global Cooling?" April 24, 2008, review of Huang, C.C., J. Pang, X. Zha, H. Su, Y. Jia, and Y. Zhu. 2007. Impact of monsoonal climatic change on Holocene overbank flooding along Sushui River, middle reach of the Yellow River, China. *Quaternary Science Reviews*, **26**, 2247–2264, http://www.worldclimatereport.com/index.php/2008/04/24/floods-and-droughts-and-global-cooling/.

4. Impermissible claims of employing "the most recent science"

The document must drop language claiming that it, e.g., "convey[s] the most relevant and up-to-date information possible" (p. 18). It inaccurately also makes this claim specifically regarding its treatment of several particular issues as well as this incorrect claim about its contents, generally.

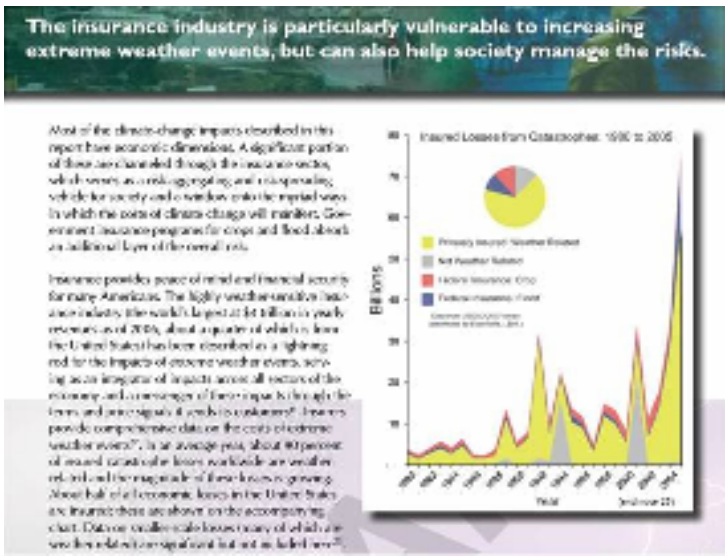
These claims are unsupportable as demonstrated in our comments as well as those by Pielke, Singer, Jawoworski, D'Aleo, Legates and others.

5. Impermissible claims of employing "the best science"

Similar to its serially inaccurate claims that particular conclusions are supported in the most recent science, the document inappropriately and wrongly claims that it is the product of "the best available science" (p. 14) and "the best available evidence" (p. 15).

This claim is so subjective as to be useless, but is also facially incorrect by any reasonable standard. For example, as climate scientist Roger Pielke Jr. notes:

> "The report claims to be focused on bringing together the 'best available science.' However in the area of my expertise, disasters and climate change, the report is an embarrassment. For example, once again, it uses the economic costs of disasters as evidence of climate change and its impacts, as shown in the following figure from the report.




Then, later in the report it discusses increasing U.S. precipitation under the heading 'Floods' and next to a picture of a flooded house (below). However, in the U.S. there has been no increase in streamflow and flood damage has *decreased* dramatically as a fraction of GDP. Thus the report reflects ignorance

on this subject or is willfully misleading. Neither prospect gives one much confidence in a government science report.


In short, in areas where I have expertise, at best the reporting of the science of climate impacts in this report is highly selective. Less generously it is misleading, incorrect, and a poor reflection on the government scientists whose names appear on the title page, many of whom I know and have respect for.[32]

We note that the above image has been photo-shopped in order to project an alarming scenario. This is needlessly alarmist and violates the objectivity requirement.

*** All such claims as described above must be dropped.

6. Impermissible Employment of "Attribution"

The document states that "The specific patterns of climatic change show that it is primarily human-induced." (p. 26).

Although anthropogenic CO2 emissions may be increasing, the rate of increase of global CO2 atmospheric content has not accelerated, suggesting uptake by the oceans and vegetation (to mankind's benefit). USP actually cites a paper finding both that CO2 emission rates are increasing, and that CO2 levels are going up more rapidly. The document therefore must answer the question begged, why there's no net warming during the period of accelerating emissions and concentrations. First, however, it must establish attribution rather than simply proclaim it or refer back to the IPCC as justification.

It is true that the IPCC makes this claim, but it is also true that the IPCC documents are not subject to (and certainly do not meet) the standards set forth in the Information Quality Act. The authors and this document, however, are, which is not a problem that is avoided by simply repeating the IPCC's talking points.

[32] Dr. Roger Pielke, Jr., "Draft CCSP Synthesis Report", Prometheus science blog, July 28, 2008, http://sciencepolicy.colorado.edu/prometheus/archives/climate_change/001489draft_ccsp_synthesis.html.

Further, the IPCC admits that it does not conduct scientific inquiry. The National Research Council is at least as authoritative for purposes of any product subject to IQA, therefore, and its work does not support these claims. For example, as four Justices detailed in the Scalia dissent to *Massachusetts v. EPA* – in which "the Court gives EPA the option of determining that the science is too uncertain to allow it to form a 'judgment' as to whether greenhouse gases endanger public welfare" – the NRC conclusions belie those promoted in the document. Quoting extensively from NRC Committee on the Science of Climate Change (2001), Justice Scalia notes that:

> "EPA *has* said precisely that ['the scientific uncertainty is so profound that it precludes EPA from making a reasoned judgment as to whether greenhouse gases contribute to global warming']—and at great length, based on information contained in a 2001 report by the National Research Council (NRC) entitled Climate Change Science: An Analysis of Some Key Questions:
>
> "As the NRC noted in its report, concentrations of [greenhouse gases (GHGs)] are increasing in the atmosphere as a result of human activities (pp. 9–12). It also noted that '[a] diverse array of evidence points to a warming of global surface air temperatures' (p. 16). The report goes on to state, however, that '[b]ecause of the large and still uncertain level of natural variability inherent in the climate record and the uncertainties in the time histories of the various forcing agents (and particularly aerosols), a [causal] linkage between the buildup of greenhouse gases in the atmosphere and the observed climate changes during the 20th century cannot be unequivocally established. The fact that the magnitude of the observed warming is large in comparison to natural variability as simulated in climate models is suggestive of such a linkage, but it does not constitute proof of one because the model simulations could be deficient in natural variability on the decadal to century time scale' (p. 17).
>
> "The NRC also observed that 'there is considerable uncertainty in current understanding of how the climate system varies naturally and reacts to emissions of [GHGs] and aerosols' (p. 1). As a result of that uncertainty, the NRC cautioned that 'current estimate of the magnitude of future warming should be regarded as tentative and subject to future adjustments (either upward or downward).' *Id.* It further advised that '[r]educing the wide range of uncertainty inherent in current model predictions of global climate change will require major advances in understanding and modeling of both (1) the factors that determine atmospheric concentrations of [GHGs] and aerosols and (2) the so-called "feedbacks" that determine the sensitivity of the climate system to a prescribed increase in [GHGs].' Id.
>
> "The science of climate change is extraordinarily complex and still evolving. Although there have been substantial advances in climate change science, there continue to be important uncertainties in our understanding of the factors that may affect future climate change and how it should be addressed. As the NRC explained, predicting future climate change necessarily involves a complex web of

> economic and physical factors including: Our ability to predict future global anthropogenic emissions of GHGs and aerosols; the fate of these emissions once they enter the atmosphere (e.g., what percentage are absorbed by vegetation or are taken up by the oceans); the impact of those emissions that remain in the atmosphere on the radiative properties of the atmosphere; changes in critically important climate feedbacks (*e.g.*, changes in cloud cover and ocean circulation); changes in temperature characteristics (*e.g.*, average temperatures, shifts in daytime and evening temperatures); changes in other climatic parameters (*e.g.*, shifts in precipitation, storms); and ultimately the impact of such changes on human health and welfare (*e.g.*, increases or decreases in agricultural productivity, human health impacts). The NRC noted, in particular, that '[t]he understanding of the relationships between weather/climate and human health is in its infancy and therefore the health consequences of climate change are poorly understood' (p. 20). Substantial scientific uncertainties limit our ability to assess each of these factors and to separate out those changes resulting from natural variability from those that are directly the result of increases in anthropogenic GHGs.
>
> "Reducing the wide range of uncertainty inherent in current model predictions will require major advances in understanding and modeling of the factors that determine atmospheric concentrations of greenhouse gases and aerosols, and the processes that determine the sensitivity of the climate system." 68 Fed. Reg. 52930."[33]

In reality, attribution as such is not permissible in an IQA-covered document. The term itself is a way to get around the inability to move past equating correlation with causation. Of course, other correlations present even stronger relationships to global temperatures than Man's CO2 emissions – for example the sun, and decadal and multi-decadal ocean processes – which completely guts the sophistry of then moving from correlation to "probability". The document's employment of "attribution" involves ignoring or explaining away (unconvincingly) alternative theories to the one they hold so dearly and from which their claims flow.

Yet the document fails to make the case that man has anything more than a minor influence on the climate, for example it fails to explain away the "fingerprint" of greenhouse forcing – a warming trend increasing with altitude in the tropical troposphere – which absence of increased temperature trends even CCSP acknowledges (in its Figure 57E (CCSP 2006)).[34] As Singer et al. note, "This mismatch of observed and calculated fingerprints clearly falsifies the hypothesis of anthropogenic global warming (AGW). We must conclude therefore that anthropogenic GH gases can contribute only in a minor way to the current warming, which is mainly of natural origin."[35]

---

[33] *Massachusetts v. Environmental Protection Agency*, Scalia dissenting joined by C.J. Roberts, J. Thomas, J. Alito, 549 US 497 (2007), at pp. 6-8 http://www.supremecourtus.gov/opinions/06pdf/05-1120.pdf.
[34] "Nature, Not Human Activity, Rules the Climate", Singer et al., The Heartland Institute (2008), http://www.heartland.org/pdf/22835.pdf," Discussion pp. 4-7.
[35] Id.

Regarding the initial claim of attribution, and all that flow from it, we refer to and incorporate by reference the Comments of Roger Pielke Sr. submitted to NOAA, concluding on this point that:

> the scientific evidence presented in the 2005 NRC report supports the perspective that
>
> **The human influence on the climate system is significant and involves a diverse range of first-order climate forcings, including, but not limited to the human input of CO2**;
>
> **and does not support the draft CCSP Karl et al report perspective that The human influence is dominated by the emissions into the atmosphere of greenhouse gases, particularly carbon dioxide.**
>
> The draft CCSP report did not even include the findings from the 2005 NRC report in their assessment! To attribute and predict future *"global climate change impacts in the United States"* without including the role of other human climate forcings, as well as the role natural climate variations, results in a clearly biased and erroneous assessment of climate science and climate impacts with which to communicate to policymakers." (emphasis in Peilke's original)

*** The document's claims of attribution neither represent nor are grounded in the best science or the most recent science, are not supported or supportable to the level required by relevant statutes, and must be removed.

7. Impermissible Reliance upon Modeled Scenarios, Generally

> **The document relies on computer model-generated scenarios for most of its content. This is impermissible given models' acknowledged flaws and lack of utility for the purposes employed. Despite watering down its own past admissions of this, even the Fourth Assessment Report (AR4) acknowledges that "More generally, the set of available models may share fundamental inadequacies, the effects of which cannot be quantified."[36]**
>
> **Further, the authors inexplicably fail to account for key recent research confirming this truth (specifically Douglass et al. (2007), Keenlyside et al. (2008) and Spencer (2008)).**
>
> **Defenses that "scientists extensively use" these models, that they "have extensively matured" and that they are performed "on the most powerful computers available" are inapposite in the face of models' output, particularly as applied in the document, not rising to the level required by**

[36] IPCC AR4 WG1, Chapter 10, Global Climate Projections, p. 805, http://ipcc-wg1.ucar.edu/wg1/Report/AR4WG1_Print_Ch10.pdf.

**the Information Quality Act. No such rationalization can trump a statutory standard for "quality" in any covered document.**

**The same is true about any claim that *to not rely on model projections would result in a far-less robust or detailed document.* The Act is clear that disseminating nothing is preferable to disseminating information that does not meet its requirements. IQA was specifically enacted to mitigate the flood of alarmist claims cloaked in the mantle of "government science".**

"Models will always be constrained by computational limitations, assumptions, and knowledge gaps. They can best be viewed as tools to help inform decisions rather than as machines to generate truth or make decisions."[37] As such, it is important for these purposes to note the distinction between a regulatory agency basing or justifying a regulation or decision on the basis of models, and disseminating the models' output as credible as part of any "highly influential scientific assessment". The former likely does not implicate the IQA, the latter inarguably does.

Climate models are not suited for the purpose to which the document puts them, and if disseminated the proposed use of model outputs would flagrantly and serially violate IQA. We fully appreciate that the climate is too big and complex to isolate any part of it to perform controlled experiments and that, as a result, scientists use virtual experiments — models. Models have their limits and are only as good as their assumptions, which we recognize, appreciate, and note is only relevant to the demerit column for purposes of determining their usefulness for the purpose to which the authors put them here.

Regardless as to how models perform when compared with, say, throwing darts against a board, their outputs do not yet rise – and, we also fully appreciate, may never rise – to the level required by applicable statutes. This is not our burden, but the authors'.

An honest and accurate assessment of the state of climate modeling and the usefulness of models' output for the purpose of credibly projecting future climate – particularly at the regional level – demands that the document remove all references to climate modeled scenarios that seemingly carry the imprimatur of the federal government. Yet the document relies upon computer model generated scenarios for nearly the totality of its content. This is clearly impermissible.

Equally impermissible is the claim, put forward repeatedly, that the CCSP knows how bad (Man-made) global warming is going to be, the only variable being how fast emissions are going to increase. As noted earlier, this assumes that climate sensitivity is a known quantity. It isn't. Climate sensitivity is the core scientific issue. **This report should not be published without a robust thematic discussion of climate sensitivity including detailed discussion of recent research. Absent that, it is incomplete, surely neither the best nor most recent science, and not objective.** The discussion should

[37] "Models in Environmental Regulatory Decision Making", Committee on Models in the Regulatory Decision Process, National Research Council (National Academies Press, 2007), p. 2.

note that little progress has been made in resolving this core issue, and that recent work, cited herein, suggests that all IPCC models may overestimate climate sensitivity.

The underlying report purportedly synthesized in "Climate Models: An Assessment of Strengths and Limitations Final Report, Synthesis and Assessment Product 3.1",[38] was published on July 31, 2008, well after the Synthesis was completed. That document claims in pertinent part about models: "They successfully simulate a growing set of processes and phenomena; this set intersects with, but does not fully cover, the set of processes and phenomena of central importance for attribution of past climate changes and the projection of future changes." Despite its optimistic spin the former part is surely subject to challenge, but the latter in fact makes much of our argument for us that model outputs – particularly as employed in the document – do not rise to the required level of validity or verifiability to be considered sound science.

This is because factors that affect the global climate and their various "forcing" effects remain highly uncertain, and are most likely in many respects unknown.

We first note the admissions of individuals to whom the authors otherwise look for guidance. First, from Kevin Trenberth IPCC Lead Author Chapter 3 of WG1 on *Nature's* Weblog in 2007:

> "None of the models used by IPCC are initialized to the observed state and none of the climate states in the models correspond even remotely to the current observed climate. In particular, the state of the oceans, sea ice, and soil moisture has no relationship to the observed state at any recent time in any of the IPCC models. There is neither an El Niño sequence nor any Pacific Decadal Oscillation that replicates the recent past; yet these are critical modes of variability that affect Pacific Rim countries and beyond.
>
> The Atlantic Multidecadal Oscillation, that may depend on the thermohaline circulation and thus ocean currents in the Atlantic, is not set up to match today's state, but it is a critical component of the Atlantic hurricanes and it undoubtedly affects forecasts for the next decade from Brazil to Europe. Moreover, the starting climate state in several of the models may depart significantly from the real climate owing to model errors. I postulate that regional climate change is impossible to deal with properly unless the models are initialized."

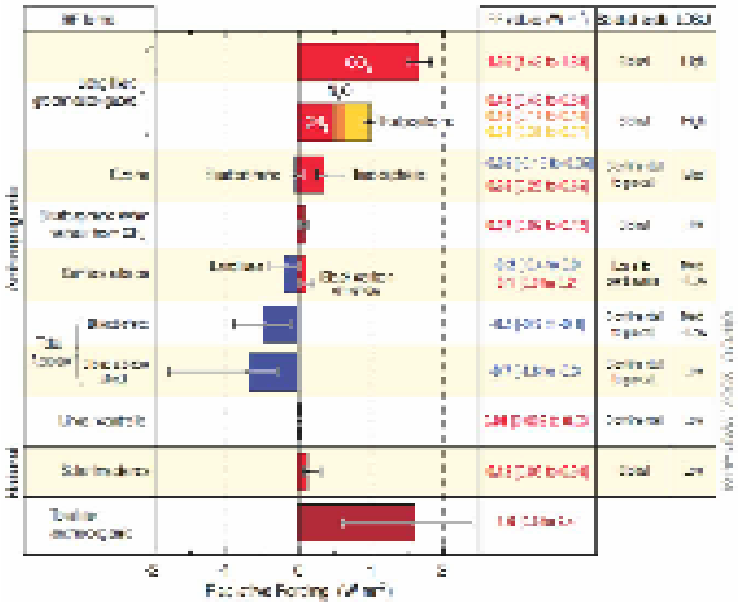
IPCC Lead Author Jim Renwick of New Zealand's National Institute of Water and Atmospheric Research also admits that "Climate prediction is hard, half of the variability in the climate system is not predictable, so we don't expect to do terrifically well."[39]

---

[38] CCSP, available at http://www.climatescience.gov/Library/sap/sap3-1/final-report/default.htm.
[39] Quoted in "World climate predictors right only half the time", News Release, New Zealand Climate Science Coalition, June 7, 2007, available at http://nzclimatescience.net/index.php?option=com_content&task=view&id=23&Itemid=32.

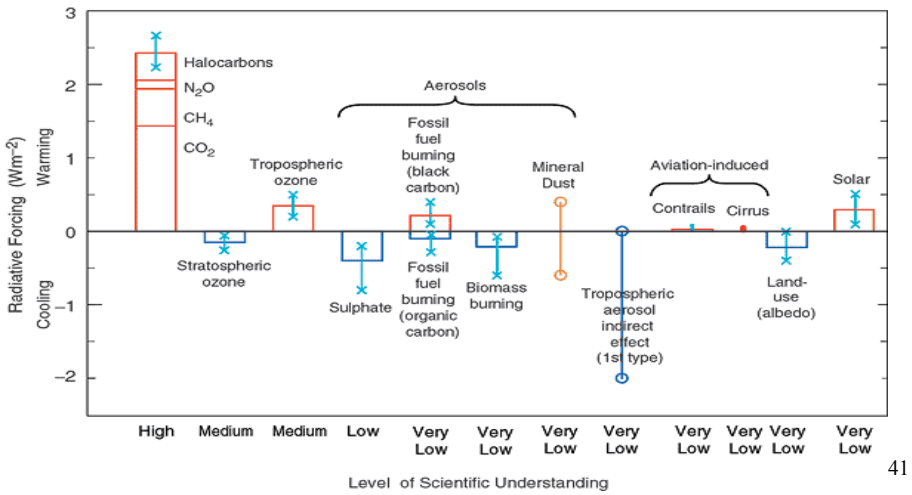
For example, of the 9 "forcings", the IPCC admits to a "level of scientific understanding" as "low" for 4 of them, a "medium-low" for 2 forcings, "medium" for 1, and "high" for 2. It is certainly hard for those not used to IPCC advocacy to imagine how it can *excludes water vapor altogether* from its list of greenhouse gases, given that water vapor is responsible for somewhere above 95% of the greenhouse effect and is closely related to clouds – another key forcing the IPCC (And therefore the document's authors) do not understand. But there is no need to consider it given the IPCC's admission that the impact of water vapor on climate change "is not well understood".[40]

We note also that the authors reproduce the following chart, yet **conveniently crop the column showing level of scientific understanding**. Such manifestations of author intent and bias embody our arguments as to numerous violations of the IQA.



The IPCC's lack of scientific understanding compounded with claims of near-certainty is further compounded by having, by bureaucratic fiat, reconfigured what constitute – that is, redefined the universe of – climate forcings, from its 2001 report (below). These limitations directly apply to the document and its models. All of which is to say, in sum, that the IPCC (and the document's authors) remain unsure what the major drivers of climate are, or at least have quite recently changed their collective mind about the matter.

40



[41]

**It is inarguable that climate model outputs do not satisfy IQA requirements. As this document relies on climate model outputs – and at the regional level, no less – for the bulk of its content, and is covered by the IQA, the document must be substantially rewritten to drop such model-based claims prior to dissemination.**

To make matters worse, as climate scientist Roy Spencer asks rhetorically, "Why are ALL of the 20+ IPCC climate models more sensitive in their total cloud feedback than published estimates of cloud feedbacks in the real climate system (Forster and Gregory, J. Climate, 2006)? If the answer is that 'there are huge error bars on our observational estimates of feedback', then doesn't that mean that it is just as likely that the real climate system is very insensitive (making manmade global warming a non-problem) as it is to be as sensitive as the IPCC models claim it is?"[42]

On a related note, in the days since the USP draft was released researchers published what is ultimately a fairly obvious point but again damning to the authors' attempt to use climate model projections in a document subject to the IQA: computer climate models are missing aerosols. "'Because of the large uncertainty we have in the radiative forcing of aerosols, there is a corresponding large uncertainty in the degree of radiative forcing overall', [Arizona State's Peter] Crozier said. 'This introduces a large uncertainty in the degree of warming predicted by climate change models.'"[43]

Further, the document makes claims that one phenomenon or another is "consistent with" what models predict/project or what they lead us to expect under anthropogenic global warming (e.g., pp. 70, 120, 137, 144). Putting the impermissibility

---

[41] United Nations Intergovernmental Panel on Climate Change, Third Assessment Report, 2001b, p 37.
[42] Roy W. Spencer, "Hey, Nobel Prize winners, answer me this", Science and Public Policy Institute, March 15, 2008, available at http://scienceandpublicpolicy.org/images/stories/papers/commentaries/nobel_winners_answer_me.pdf.
[43] See, e.g., "Climate Change Models May Be Inaccurate", USTINet News, August 12, 2008, at http://news.usti.net/home/news/cn/?/tw.top/2/wed/dg/Uus-climatemodels.RjIW_IaB.html, referencing Crozier et al. appearing in the August 8, 2008 issue of *Science*.

of such cherry-picking into perspective, consider how models are wrong on rainfall,[44] which is another way of saying that observations are inconsistent with the models, in National Assessment-speak. They are wrong on GHG concentrations and behavior.[45] Models are wrong on Antarctica,[46] on Andean snowpack CITE, on Bangladesh,[47] on ocean temperatures,[48] and wrong on the Northwest Passage.[49]

Pielke takes to task the common definition for these purposes of being "consistent with" the models for simply meaning that "an observation, with its corresponding uncertainty range, overlaps with the spread of the entire ensemble of model realizations. This is the exact same definition of 'consistent with' that I have criticized here on many occasions. Why? Because it means that the greater the uncertainty in modeling -- that is, the greater the spread in outcomes across model realizations -- the more likely that observations will be 'consistent with' the models. More models, more outcomes, greater consistency – but less certainty. It is in this way that pretty much any observation becomes 'consistent with' the models."[50]

Humorously, various models which we are gravely instructed to grant equal credibility provide wildly contradictory outcomes, all of which we must respect with solemnity. This was particularly true in the document's 2000 predecessor and, as noted above, is once again in the current attempt to cow policymakers into a particular agenda.

There's been no net global warming in the 21st century. Although seldom reported by the mainstream media, it's quite a story, because no climate model predicted it.

---

[44] Frank J. Wentz, Lucrezia Ricciardulli, Kyle Hilburn, and Carl Mears: How Much More Rain Will Global Warming Bring? Published online 31 May 2007 [DOI: 10.1126/science.1140746] (in Science Express Reports).

[45] http://www.sciencedaily.com/releases/2008/06/080625140656.htm
Destruction Of Greenhouse Gases Over Tropical Atlantic May Ease Global Warming

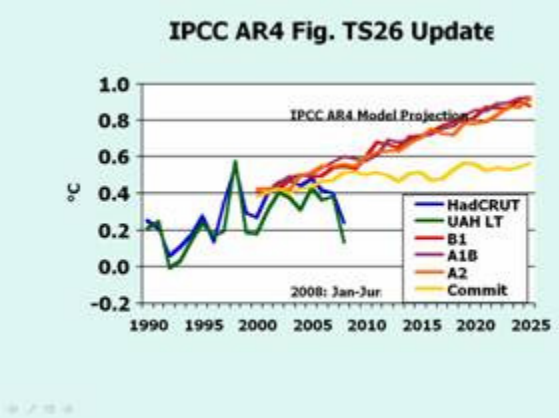
[46] Models are wrong on Antarctic warming: AGU & National Center for Atmospheric Research, AGU Release No. 08-17; "Climate Models Overheat Antarctica", 7 May 2008, http://news.yahoo.com/s/livescience/20080507/sc_livescience/coldwaterthrownonantarcticwarmingpredictions;_ylt=Ajf9979PST5RBDjgUP5IUoEPLBIF. Citing Monaghan, A. J., D. H. Bromwich, and D. P. Schneider (2008), Twentieth century Antarctic air temperature and snowfall simulations by IPCC climate models, Geophys. Res. Lett., 35, L07502, doi:10.1029/2007GL032630.

[47] "Bangladesh gaining land, not losing: scientists," Agence France-Press, July 30, 2008, http://news.yahoo.com/s/afp/20080730/sc_afp/bangladeshenvironmentunclimatewarming_080730134111;_ylt=Ai1fEIqHFVyfguECUfbGjKvPOrgF.

[48] Willis et al (2008), reported at "The Mystery of Global Warming's Missing Heat", National Public Radio, March 2, 2008, http://www.npr.org/templates/story/story.php?storyId=88520025.

[49] http://www.realclimate.org/index.php/archives/2008/06/north-pole-notes/#comment-91087
The MODID satellites provide near real-time visible/actual photos of the Arctic Ocean from space. Satellite photo at http://rapidfire.sci.gsfc.nasa.gov/realtime/single.php?2008181/crefl1_143.A2008181053500-2008181053959.4km.jpg (this one was June 29 when post made). http://rapidfire.sci.gsfc.nasa.gov/realtime/single.php?2008181/crefl1_143.A2008181021500-2008181021959.4km.jpg

[50] http://sciencepolicy.colorado.edu/prometheus/archives/climate_change/001420teats_on_a_bull.html




This graph, courtesy of atmospheric scientist John Christy, shows how climate models and reality diverge. The red, purple, and orange lines are model forecasts of global temperatures under different emission scenarios. The yellow line shows how much warming we are supposedly "committed to" even if CO2 concentrations don't change. The blue and green lines are actual temperatures as measured by ground-based (HadCrut) and satellite (UAH LT) monitoring systems.

What's really rather remarkable is that, since 2000, the rates at which CO2 emissions and concentrations are increasing have accelerated.

According to a study[51] cited by the CCSP on page 21, fossil fuel and cement emissions increased by 3.3 percent per year during 2000-2006, compared to 1.3 percent per year in the 1990s. Similarly, atmospheric CO2 concentrations increased by 1.93 parts per million per year during 2000-2006, compared to 1.58 ppm in the 1990s.

And yet, despite accelerating emission rates and concentrations, there's been no net warming in the 21st century.

"Skeptics" have long said climate models aren't accurate enough to base policy decisions on. That may be more true now than ever. **Here we emphasize that it is not an appropriate response or refutation to simply claim that the document employs projections from the best that climate modeling has to offer; the controlling fact is that the best that climate models have to offer are not sufficiently credible, verifiable or replicable to rise to the level of sound science as required by the relevant statutes.**

**Critically, models are now demonstrably and fatally wrong on the threshold question of climate sensitivity**. As such, their output may not be disseminated by the federal government pursuant to the requirements of the IQA. Prominent climate modelers admitted that model output reflected very little of reality, and that a dedicated effort to

[51] Canadell et al. 2007. Contributions to accelerating atmospheric CO2 growth from economic activity, carbon intensity, and efficiency of natural sinks. Proceedings of the National Academy of Sciences, 104 (47) 18866-18870.5.

revise (improve) GCMs was now underway to try and incorporate some real-world influences.[52] A more damning indictment of models' lack of suitability for purpose is difficult to imagine, and this paper fatally wounds the document.

That paper, Keenlyside et al., only led to claims not dissimilar to the document at issue here that nothing is inconsistent with modeled scenarios and greenhouse warming theory, and even global cooling is consistent with global warming. "This means that from a practical standpoint climate models are of no practical use beyond providing some intellectual authority in the promotional battle over global climate policy."[53]

Keenlyside and calls for a "Manhattan-style Project" to improve climate models are admissions (or accusations) that the models on which the document is based do not take reality into account with anything remotely approaching the relevant statutory requirements.

*Science* Magazine*'s* online publication, *Science Digest*, offered up this truth with "Like It Or Not, Uncertainty And Climate Change Go Hand-in-hand".[54] The matter on which the researchers reported revolved around the key climate sensitivity question. One of the study's authors, a University of Washington associate professor of earth and space sciences named Gerard Roe, even asserted that "Uncertainty and sensitivity have to go hand in hand. They're inextricable".[55]

*New Scientist* Magazine, in its piece on the issue "Climate is too complex for accurate predictions", plainly stated that "A better estimate of sensitivity is the holy grail of climate research, but it is time to 'call off the quest', according to a commentary published alongside the paper" (citing Roe et al., Science 2007).[56]

For these purposes, however, it is sufficient to note that Stephen Schwartz's research out of Brookhaven National Laboratory had emerged just prior to this piece suggesting that the climate's sensitivity is really one-third of what the IPCC claims. Then, research was published noting that computer models purporting to demonstrate that the warming is anthropogenic rather than natural are tuned to assume a *high* climate sensitivity (Akasofu 2008), and high climate sensitivity is now known to be wrong (Douglass 2007; Lindzen 2008).

---

[52] "Advancing decadal-scale climate prediction in the North Atlantic sector", Nature, Vol 453| 1 May 2008| doi:10.1038/nature06921 N. S. Keenlyside1, M. Latif, J. Jungclaus, L. Kornblueh & E. Roeckner, http://www.nature.com/nature/journal/v453/n7191/pdf/nature06921.pdf (subscription required), otherwise available at http://wattsupwiththat.files.wordpress.com/2008/05/keenlyside_nature_may_2008.pdf.
[53] Roger Pielke Jr., "Global Cooling Consistent With Global Warming", April 30, 2008, Prometheus, http://sciencepolicy.colorado.edu/prometheus/archives/climate_change/001413global_cooling_consi.html.
[54] "Like It Or Not, Uncertainty And Climate Change Go Hand-in-hand," *Science Digest*, October, 27, 2007, http://www.sciencedaily.com/releases/2007/10/071025143339.htm.
[55] Id.
[56] "Climate is too complex for accurate predictions", *New Scientist*, October 25, 2007, http://environment.newscientist.com/article/dn12833-climate-is-too-complex-for-accurate-predictions.html.

*New Scientist* quoted Pielke, Jr. as saying "This finding [Roe et al.] reinforces not only that climate policies will necessarily be made in the face of deep, irreducible uncertainties. But also the uncomfortable reality – for climate modellers – that finite research dollars invested in ever more sophisticated climate models offer very little marginal benefit to decision makers."[57]

We also note that the IPCC admits the same thing, stripped of specifics and emphasis, "More generally, the set of available models may share fundamental inadequacies, the effects of which cannot be quantified."[58]

In a published opinion piece[59] climate scientist Roger Pielke Jr. argued that "Scientists advocating for action are overselling the predictive capabilities of climate models" when it comes to "the highly politicized issue of climate change."

Pielke Jr. documents his experience that:

> "Scientists oversell the predictive capacity of climate models when they claim that the most recent weather events occurring around the world are consistent with predictions from climate models. … The implication of such statements of course is that models are reliable and offer accurate predictions that have been borne out by experience. But unfortunately, the real answer is that saying that any recent weather events are 'consistent with' model predictions is an empty statement. … If climate models are designed to make predictions about trends in the global climate system over several decades, then there is nothing that can be said about a model's accuracy on time scales of less than a decade, much less one fire season, or a few heat waves, or any other transient phenomena. Consequently, any claim that recently observed weather events are 'consistent with' predictions is actually quite misleading."

Pielke's conclusion – "[b]ut action on climate change makes sense even if many climate scientists oversell predictive capabilities" – and that it is shared by the authors does not void the applicable requirements of the IQA. Such "action" is the purview of policymakers, and the overheated attempts in the document to persuade or pressure policymakers into a particular decision is not appropriate and, as specifically urged, impermissible.

In fact, although the document claims that models perform well when asked to hindcast, this is a false construct. Modelers merely tune the models to replicate past conditions, a task at which it is nearly impossible to fail; going forward, they continue to fail to perform at any reliable level. **This is the reason the document does not show**

---

[57] Id.
[58] IPCC AR4 WG1, Chapter 10, Global Climate Projections, p. 805, http://ipcc-wg1.ucar.edu/wg1/Report/AR4WG1_Print_Ch10.pdf.
[59] Roger Peilke, Jr., "Overheated Claims", National Post (Canada), June 17, 2008, http://network.nationalpost.com/np/blogs/fpcomment/archive/2008/06/17/overheated-claims.aspx

**how models perform against actual data: their record is wretched and proves on its face that their output is impermissible under the relevant statutes.**

A more detailed view of the disparity between observations and modelled projections was starkly presented in Douglass et al in the Journal of the Royal Meteorological Society.[60] As stated in its Abstract:

> "Model results and observed temperature trends are in disagreement in most of the tropical troposphere, being separated by more than twice the uncertainty of the model mean. In layers near 5 km, the modelled trend is 100 to 300% higher than observed, and, above 8 km, modelled and observed trends have opposite signs. These conclusions contrast strongly with those of recent publications based on essentially the same data."

The document not only does not rebut this important, recent research but fails, as with most other confounding work cited herein, to even mention it. The authors simply presume one position, upon which they premise the entirety of the document.

**Further, this document impermissibly extends the already suspect and surely also impermissible practice of promoting computer model generated scenarios to a regional level at which the computer models are even less credible**. Computer generated climate projections may not be made with sufficient confidence to satisfy the requirements of information disseminated by the federal government.

The Hadley Center famously acknowledged in a disclaimer on its website several years ago that "in areas where coasts and mountains have significant effect on weather [and this will be true for most parts of the world], scenarios based on global models will fail to capture the regional detail needed for vulnerability assessments at a national level."[61]

After much derision resulted from this admission, the statement was altered but its substance remained. More important, nothing has occurred to defeat the admission.

In fact, "climate scientists are acutely aware that the IPCC's predictions of how the global change will affect local climates are little more than guesswork."[62] This holds equally true of course for the USP repetition of IPCC model claims, and mistakes.

**Recent research also affirms that the document's dissemination of regional climate projections is simply unsupportable particularly over the timescales which the document purports to offer credible projections**.

---

[60] David Douglass, John Christy, Benjamin Pearson, and S. Fred Singer, "A comparison of tropical temperature trends with model predictions," *International Journal of Climatology* of the Royal Meteorological Society, December 2007 [DOI: 10.1002/joc.1651], available at http://icecap.us/images/uploads/DOUGLASPAPER.pdf.

[61] http://www.met-office.gov.uk/research/hadleycentre/

[62] Fred Pearce, "Poor forecasting undermines climate debate", *New Scientist*, May 1, 2008, edition 2654, citing comments from Tim Palmer of the European Centre for Medium Range Weather Forecasting.

We ask the authors to consider a new paper by Koutsoyiannis et al., demonstrating climate models' lack of any predictive value, particularly at the level the document purports to project future climate.[63] 18 years of climate model predictions for temperature and precipitation at 8 locations worldwide were evaluated.

The Abstract states:

> Geographically distributed predictions of future climate, obtained through climate models, are widely used in hydrology and many other disciplines, typically without assessing their reliability. Here we compare the output of various models to temperature and precipitation observations from eight stations with long (over 100 years) records from around the globe. The results show that models perform poorly, even at a climatic (30-year) scale. Thus local model projections cannot be credible, whereas a common argument that models can perform better at larger spatial scales is unsupported.

An extract from the conclusions tells the damning tale rather neatly:

> "**At the annual and the climatic (30-year) scales, GCM interpolated series are irrelevant to reality**. GCMs do not reproduce natural over-year fluctuations and, generally, underestimate the variance and the Hurst coefficient of the observed series. Even worse, when the GCM time series imply a Hurst coefficient greater than 0.5, this results from a monotonic trend, whereas in historical data the high values of the Hurst coefficient are a result of large-scale over-year fluctuations (i.e. successions of upward and downward 'trends'. The huge negative values of coefficients of efficiency show that model predictions are much poorer than an elementary prediction based on the time average. This makes future climate projections at the examined locations not credible. Whether or not this conclusion extends to other locations requires expansion of the study, which we have planned. However, the poor GCM performance in all eight locations examined in this study allows little hope, if any. An argument that the poor performance applies merely to the point basis of our comparison, whereas aggregation at large spatial scales would show that GCM outputs are credible, is an unproved conjecture and, in our opinion, a false one." (emphasis added)

As Pielke Sr. notes, "A fundamental and societally relevant conclusion from this study is that the use of the IPCC model predictions as a basis for policy making is invalid and seriously misleading."[64] As such, the document impermissibly uses their output, and these conclusions must be dropped. **The authors may not simply refer back to their**

[63] Koutsoyiannis, D., A. Efstratiadis, N. Mamassis, and A. Christofides, 2008: On the credibility of climate predictions, Hydrological Sciences Journal, 53 (4), 671-684, available at http://www.itia.ntua.gr/getfile/864/2/documents/2008HSJClimPredictions.pdf.

[64] Roger Pielke, Sr. "On the Credibility of Climate Predictions by Koutsoyiannis et al. 2008", Prometheus, July 31, 2008, http://climatesci.org/2008/07/31/on-the-credibility-of-climate-predictions-by-koutsoyiannis-et-al/.

**own Assessment (3.1) to waive away the preponderance of the actual research. They must address the state of the science, in a balanced way, to comply with the statute.**

We also note how experts admit the models' inability to do precisely that which the document promotes them as doing – which is providing credible predictions or even projections, "story lines", or however one chooses to euphemize their output.[65]

Also, "Internationally renowned scientist Dr. Antonino Zichichi, president of the World Federation of Scientists and a retired professor of advanced physics at the University of Bologna, has also taken climate models to task. According to an April 27, 2007 article Zichichi, who has published over 800 scientific papers, said 'the mathematical models used by the [UN's] IPCC do not correspond to the criteria of the scientific method.'"[66]

**It is insufficient to dismiss criticism by noting that the document simply makes *projections* and the (generally alarmist) outcomes are not offered as predictions. The guiding standards are those established by the IQA, and the models' output and the document fail to satisfy them.**

The IPCC's own Glossary says of "climate projection" states: "A projection of the response of the climate system to emission or concentration scenarios of greenhouse gases and aerosols, or radiative forcing scenarios, often based upon simulations by climate models. **Climate projections are distinguished from climate predictions in order to emphasize that climate projections depend upon the emission/ concentration/radiative forcing scenario used, which are based on assumptions concerning, for example, future socioeconomic and technological developments that may or may not be realised and are therefore subject to substantial uncertainty**."

******* **These models have never been validated, and it is now commonly understood that they cannot be**. As such, their outputs are impermissible in this document for the purposes employed, and projections premised in them must be dropped.

******* Further, please explain why each of the authorities cited above as running counter to the document's claims do not in fact represent substantive challenge, why they are not discussed, considered, mentioned or otherwise are not reflected in the document.

## IV. Concluding Comments

The Unified Synthesis Product violates the letter and/or spirit of the Information Quality Act and/or USGCRA on most pages and possibly every page. It is therefore unfit to serve as the basis for policy, as it is intended and also unfit for dissemination.

---

[65] See, e.g., Allen and Frame, "Call Off the Quest", *Science*, October 26, 2007: Vol. 318. no. 5850, pp. 582 – 583 DOI: 10.1126/science.1149988.

[66] Floor speech, Senator James Inhofe, "2007: Global Warming Alarmism Reaches A 'Tipping Point'", October 26, 2007, http://epw.senate.gov/public/index.cfm?FuseAction=PressRoom.Speeches&ContentRecord_id=DCEB518C-802A-23AD-45BF-894A13435A08.

We have identified, above, select violations, errors, misstatements, or claims otherwise incompatible with the relevant, applicable statutory authorities. Therefore, with these Comments being per NOAA part of a "peer review" process we argue that all suggested changes must be made and/or our cited authorities and claims satisfactorily addressed in the document or in a response explaining why they are not addressed, *in toto*.

The violations, etc., are so widespread and prevalent throughout the document that we also argue it is beyond repair and should not be published in final. Had it already been disseminated we note that withdrawing the document is not only an acceptable remedy under relevant laws, it is quite clearly preferable to publishing a document that does not satisfy the relevant standards for content and quality.

In fact, the document is not permissibly either produced as a National Assessment under USGCRA or disseminated by the federal government, due to IQA's requirements.

We therefore also request that the document be withheld until a satisfactory, legally permissible version is prepared. One obvious next step toward that end is to empanel a balanced team of authors to produce a balanced document fairly addressing and articulating the state of the science, meeting the requirements of USGCRA and not going beyond the prescribed content, avoiding climate model-based projections particularly at the regional level, and otherwise meeting the IQA's requirements for quality, including objectivity, utility and integrity.