

FOIA MARKER

**This is not a textual record. This is used as an
administrative marker by the William J. Clinton
Presidential Library Staff.**

Collection/Record Group: Clinton Presidential Records
Subgroup/Office of Origin: Council on Environmental Quality
Series/Staff Member: Kathleen (Katie) McGinty
Subseries:

OA/ID Number: 2896
FolderID:

Folder Title:
Coral Bleaching - Questions for Panel

Stack:	Row:	Section:	Shelf:	Position:
S	61	6	3	2

QUESTIONS FOR ATMOSPHERIC SCIENTISTS:

Background:

1. JONES: Together with Tom Wigley, Jones has collected, analyzed and corrected for errors, every available historical land - based and sea - based temperature record. (Typical corrections in water measurements included, for example, compensating for what type of bucket (canvas, wood, etc.) was used to collect water samples.) Jones reports (in Sci Am) two conclusions from this work: [1] "global climate varies considerably from year to year", and [2] "we can state unequivocally that global temperatures have risen (0.5 degree C) over the past century".

Jones has also recently finished an analysis of the "urban heat island effect" -- i.e., local warming caused by the effects of urban development. After examining an extensive set of rural station temperature data for European parts of the Soviet Union, eastern Australia and eastern China, Jones refutes the suggestion that this effect is responsible for the 0.5 degree increase in global temps. At most, Jones reports that the heat island effect is responsible for an increase an order of magnitude smaller (0.05 degrees) than the observed warming. (Nature).

~~***~~ ***** NEW DATA ***** ~~**~~ Jones will offer data for 1990. In his testimony he says:

THE FIRST FEW MONTHS OF 1990 HAVE BEEN EXCEPTIONALLY WARM, MOST NOTABLY MARCH. THIS MONTH IS CLEARLY THE MOST ANOMALOUSLY WARM MONTH YET RECORDED. ASSOCIATED WITH THIS WARMTH, THE NORTHERN HEMISPHERE HAS EXPERIENCED THE LEAST SNOW COVER EXTENT DURING THE LATE WINTER AND SPRING OF THE ENTIRE SATELLITE RECORD (1970 TO DATE). THE AVERAGE TEMP FOR THE CURRENT YEAR SHOULD EASILY MAKE IT THE WARMEST YEAR YET RECORDED.

2. SPENCER:

In contrast to Jones' surface temperature measurements, Spencer (together with John Christy -- both from NASA) measured global average temperatures by analyzing the first 10 years (1979 to 1988) of NOAA satellite measurements. The importance of Spencer and Christy's work is that they have identified a new and much more precise METHOD OF MEASURING global average temperatures. (The satellites use "microwave sounding units -- MSU's" -- to measure thermal emissions in the atmosphere. The MSU's give an average temperature for a column of air stretching from the surface to 6 miles into the troposphere). Because they reported "no obvious (temperature) trend" for the 10 year period, however, the study has been cited as proof that we are not experiencing greenhouse warming.

Be sure to ask him about this. And he asks me that you ask him how he is so sure of this

Date: October 1, 1990

To: Albert Gore Jr.

S, Leon Fuerth

From: Rick Adcock

Just got a call from Stockholm from Irving Mintzer, who's over there monitoring the developments in preparatory meetings for the 2nd World Climate Conference. Recall, that's the conference for which the IPCC prepared its reports. Recall also that Sununu has referred to the Working Group I (scientific) report as a political document (because he doesn't agree with it).

The 2nd World Climate Conference will occur in two parts. The first week will be a SCIENTIFIC AND TECHNICAL MEETING, and the first few days of the next week will be the MINISTERIAL MEETING.

Mintzer called to give me the heads-up that the US is busy torpedoing the 2nd WCC. Apparently what I'm about to describe happened over the weekend, and Mintzer will be spending the day trying to confirm the details... but for now, our best information is as follows (this information should be regarded as preliminary and it needs to be confirmed later today):

Obasi (head of WMO, whom you met several months ago) has apparently struck a deal with the US reps at the preparatory meeting -- in return for a US commitment to fund WMO's World Climate Research Program, Obasi has agreed to sever the link between the SCIENTIFIC/TECHNICAL MEETING and its reports, and the MINISTERIAL MEETING. This has the effect of keeping the WG1 scientific report (which is among the "reports" that will be presented at the SCIENTIFIC/TECHNICAL MEETING) from playing directly into the MINISTERIAL MEETING. As originally constructed, of course, the SCIENTIFIC/TECHNICAL MEETING was to evaluate the IPCC reports and pass them on the MINISTERIAL MEETING, where they were to be used as the basis for drafting the all-important ministerial statement, which is the substantive product of the 2nd WCC.

In addition, the US has orchestrated the development of a number of amendments to the ministerial statement, which means that the US wants the MINISTERIAL MEETING to turn into a 3-day shouting match about where the statement should say "might" and where it should say "will", rather than the ministers using the time to draft a consensus response strategy. In short, it sounds like the US is cleverly attempting to undermine the effectiveness of the 2nd WCC, in spite of the 2 years and 100's of thousands of man-hours spent preparing for the meeting through the IPCC process.

I asked Mintzer where Tolba was in all of this, but he claimed that the meeting is predominated by WMO, and Obasi is controlling it. US official spearheading this effort is J.R. Spradley, Spl. Ass. to U-Sec. of Comm for Int'l Env. Affairs.

####

QUESTIONS FOR DR. M. GRANT GROSS — NSF

1. Dr. Gross, I appreciate your testimony on National Science Foundation programs regarding coral bleaching.

- How much money did NSF spend last year on understanding coral reef ecology?
- What part of those funds was directed towards understanding coral bleaching?

2. You state that the most commonly accepted explanation for the increase in coral bleaching is elevated sea water temperatures. Later, in the same paragraph, you state that many scientists believe that the increased temperatures during the 1980's may be enough to trigger the observed coral bleaching, but that we cannot yet prove this hypothesis.

- Do you agree that the 1980s were characterized by increased temperatures?
- What do you think are the missing pieces of evidence that could prove or disprove this hypothesis?

3. As indicated in your testimony, NSF is currently funding several studies involving coral bleaching. You have heard the testimony from earlier witnesses about their research as well.

- Based on your knowledge of the problem, how serious is coral bleaching as compared to other pressing environmental issues?
- Does coral bleaching warrant greater attention from the scientific community? Please explain.

4. Your testimony discusses the relationship between coral bleaching and El Nino events (ocean warming events that occur on seasonal or interannual timescales).

- Do natural variations in ocean temperatures such as the El Nino phenomena adequately explain coral bleaching events? Why or why not?

QUESTION FOR DR. COURTNEY RIORDAN -- EPA

You state that the EPA is not currently working in the specific area of coral bleaching. In the report accompanying the Presidents 1991 Global Change Research Program budget request, however, EPA requests \$26 million to use, in part, to "quantify and model the consequences of climate change on ecosystems." Moreover, the request states that "special emphasis will be given to climate sensitive regions." Clearly, coral reefs are just such systems. In what way do you expect EPA's activities with respect to coral reefs -- and with respect to the oceans as an integral part of our global climatic balance -- will intensify in 1991. Please be specific as to the initiatives you foresee and had in mind in requesting the \$26 million appropriation.