

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: 2897
FolderID:

Folder Title:
Twenty-Three Questions

Stack:	Row:	Section:	Shelf:	Position:
S	61	6	3	1

GLOBAL CHANGE RESEARCH
Principal Scientific Inquiries
Results of December 12, 1989, Roundtable Discussion

1. What is the best way to develop maps of the earth's surface, showing population, land use, type of vegetation, soil type, man-made environmental damage, etc.?
2. What is the nature of the change in stratospheric ozone? Where is it occurring and why?
3. Is the self-cleansing capacity of the troposphere changing? What is the concentration and distribution of hydroxyl ions in the atmosphere?
4. What is the CO₂ budget of the earth? Where is it coming from? Where is it going? Where is it stored? What are the mechanisms by which it is absorbed and released?
5. What are the sources and sinks of nitrous oxide? What are the sources and sinks of methane?
6. What other trace gases impact global warming? How might we identify them?
7. How do we better understand ocean circulation? How are the oceans and the atmosphere coupled? What is the thermal inertia of the ocean, and is it changing?
8. How do tropospheric aerosols such as sulfate affect the chemistry and temperature of the atmosphere?
9. What is the distribution of clouds? How does the distribution of clouds change as the mean global temperature changes?
10. What is the amount of land and sea ice on the earth's surface? How has it changed over time? Why?
11. What is happening to the surface temperature of the earth? How can we get better measurements?

12. What causes decadal (ten years) changes in temperature, regional climate, precipitation, soil moisture, and other climatic variables?
13. What is the impact of ultraviolet radiation on the absorption of CO_2 by plankton and plants?
14. What is the response of forests to climatic change, man-made pollution, and other insults?
15. What is the amount, distribution and climate system impact of water vapor in the troposphere and the stratosphere?
16. What is the concentration of CO_2 over different types of forests, under different conditions?
17. What additional data can be derived from the Vostok ice core, similar ice cores, and other paleoclimatic indicators?
18. What happened during the glacial and interglacial periods to rain forests and low latitude ocean temperatures?
19. Where does it rain? How much does it rain? What can we find out about the changes in those patterns?
20. How does the distribution of clouds and water vapor in the atmosphere vary with altitude, latitude, and type of clouds? How sensitive is that distribution to temperature changes?
21. What is the nature of the evapotranspiration? What can we learn about the water budget of plants and forests?
22. What is the water budget of soil? What happens to soil moisture under different conditions?
23. What affects the chemistry of soils? How sensitive are soils to insults such as acid precipitation, fertilizer, ultraviolet radiation, and other factors?