

CLIMATE ALERT

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MODELS SEE HARD RAIN, DROUGHT IF CO₂ DOUBLES

The world will endure more droughts and more short periods of potentially destructive heavy rain under doubling of CO₂ according to recent simulations by two major modeling groups on opposite sides of the globe. The consistent conclusions arise from the effects of higher temperatures — associated with increasing concentrations of greenhouse gases — on the availability of water in coming years.

In a presentation at the UN Municipal Leaders' Summit in New York at the end of January, Dr. David Rind of the Goddard Institute of Space Studies presented findings on the likelihood of future drought, given GISS climate change projections. The evaluation was first published in 1990 but received surprisingly little attention at the time. A study on the possibility of periods of intense rainfall under global warming (with possible serious consequences), conducted by Dr. H. B. Gordon et al. for the CSIRO Division of Atmospheric Research in Australia, was published in the journal *Climate Dynamics* in 1992 (8: 83-102). The phenomenon has



Dr. David Rind

(continued on page 4)

Mayors From Many World Cities Join In Effort To Cut Greenhouse Gases

At a gathering of mayors from 60 cities in 20 countries, held at the UN General Assembly on January 25-26, a world campaign, "Cities for Climate Protection," was launched to reduce urban emissions of greenhouse gases. As a result of this Municipal Leaders' Summit, the campaign hopes by 1995 to enroll 100 municipalities which together account for one billion tons of global CO₂ emissions, 5 to 10 percent of the world's total.

Dr. Noel Brown, Regional Director for North America of UNEP, hosted the Summit. Co-sponsor UNEP and summit organizer the International Council for Local Environmental Initiatives (ICLEI), view cities as being on the frontline of the environment. People, economic activity and pollutants are concentrated in urban areas; more than half of the carbon dioxide and methane produced by humans come from city activities, particularly from energy use and waste disposal.



I. Larsen (Copenhagen), M. Karayalcin (Ankara), R. Galanter (Los Angeles), J. Topping, Moderator, H. Ruvin (Dade Co.)

The world campaign will recruit a broader range of municipalities to build on ICLEI's two-year-old *Urban CO₂ Reduction Project* in which 14 cities in the United States, Canada, Europe and Turkey devised their own local strategies to reduce greenhouse gas emissions and developed a broad framework for a municipal energy policy for other



Philip Jessup and Jeb Brugmann of ICLEI, David Crockett of Chattanooga

local governments to follow. The goal of this original group is to carry out a 20 percent reduction of 1988 emissions levels by 2005.

The stakes are high in this drive, Montreal Mayor Jean Dore said at the meeting. While the scientific community continues to wrestle with the dimensions of the global warming problem very disturbing questions arise. "Will world agriculture and forestry be thrown into turmoil by changing climate conditions? Will large portions of Northern Europe, Bangladesh, Northeastern China, the

(continued on page 7)

Clinton Appointments Signal Major Shift

In Environmental Perspectives, Policies

President Clinton's significant switch in environmental policy is demonstrated by the policy team, listed below, which he has chosen to carry out his plan of action.

Clinton signaled his concern for the environment early by selecting **Al Gore** as his vice presidential running mate. Author of a 1992 bestseller, *Earth in the Balance*, written while he was a senator, Gore showed impressive knowledge of environmental issues when serving on science committees in first the House and then the Senate of the U.S. Congress. He attended the UNCED meeting in June 1992 and, in fact, argued with Science Adviser Allan Bromley on the eve of the Summit about not speaking out with more urgency to then President Bush of global warming's danger.

Carol Browner, a former Gore aide, has become the new Administrator of the Environmental Protection Agency (EPA). A lawyer, she was Secretary of the Florida Department of Environmental Regulation for two years, respected for her work in putting together a state and Federal pact to restore the Everglades. She also negotiated an agreement with the Disney Company to spend \$40 million to improve a 13-square-mile ranch for wildlife in return for filling in 400 acres of wetlands.

Kathleen McGinty, Gore's principal environmental advisor since 1990 and the Senate's top staff advisor for UNCED, has been named Special Assistant to President Clinton for the Environment. A lawyer with an undergraduate degree in chemistry, she was a member of the U.S. delegation to the Antarctica Environmental Protocol Treaty negotiations in 1990.

In the National Security Council's Office of Environmental Policy, **Eileen Claussen**, has been named

Special Assistant to the President and Senior Director for Global and Environmental Affairs, and **David Doniger** has been named Director for Global Environment. Formerly Claussen was Director of Atmospheric Programs in the Office of Air and Radiation of EPA. Doniger was a senior attorney for the Natural Resource Defense Council, working on the clean air project.

For Secretary of Energy, Clinton chose **Hazel R. O'Leary**, an executive vice president of the Northern States Power Company of Minnesota, where she oversaw a number of departments including environmental affairs. She has a law degree and was an energy regulator in the Ford and Carter administrations. The first woman to be Secretary of Energy, she is also the first Energy Secretary to have worked for an energy company.

Bruce Babbitt, a former Governor of Arizona, was a partner at the law firm of Steptoe and Johnson, with offices in Phoenix and Washington, when he was named Secretary of the Interior. Babbitt ran for president in 1988, although he withdrew fairly early in the campaign. He is president of the League of Conservation Voters.

As Assistant Secretary of the Interior, Clinton has chosen **George T. Frampton, Jr.**, president of the Wilderness Society since 1986. He was law clerk for Supreme Court Justice Harry Blackmun and a member of the Watergate special prosecution force. If confirmed, he will supervise the National Park Service and the Fish and Wildlife Service.

Secretary Babbitt has appointed **Dr. Thomas E. Lovejoy**, Assistant Secretary for External Affairs for the Smithsonian Institution and an internationally recognized conservation ecologist, as his science advisor, who will be on loan from the Smithsonian. Lovejoy will focus on

the feasibility of a national biological survey, what Babbitt refers to as an "insurance policy against environmental and economic train wrecks."

The first black to represent Mississippi in Congress, **Mike Espy** has been selected to be Secretary of Agriculture. He was assistant state attorney general in the mid-80s and before that assistant secretary of state for Mississippi and was a fellow member of the Democratic Leadership Council with Clinton.

Two-term mayor of Denver and two-term state representative, **Federico Peña** has become President Clinton's Secretary of Transportation. Peña has served on a state commission that drew up a 20-year transportation plan featuring mass transit and alternative methods of travel such as bike paths and pedestrian walkways.

This environmental and natural resources policy team is making a concerted effort to forestall normal divisive tendencies. Several cabinet members have started scheduling breakfast together to discuss key issues, a positive sign that inter-agency squabbling may be reduced and a more coherent policy on climate change and other issues may be developed.

CLIMATE ALERT

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Climate Institute News

IPCC Guidelines

When the Intergovernmental Panel on Climate Change (IPCC) completed its first Impacts Assessment in 1990, it was clear that much more work was needed to draw a credible global picture of the potential effects of climate change. Comparing impacts in different regions and different economic sectors, assessed under different methods, yielded confusing results. A compatible set of methods was needed to provide comparable regional and sectoral assessments.

Working Group II of the IPCC established an expert group to develop guidelines. The group was chaired by Dr. Shuzo Nishioka of Japan and Professor Martin Parry of the United Kingdom, both of them members of the Climate Institute Board of Directors. Their report, *Preliminary Guidelines for Assessing Impacts of Climate Change*, issued in the fall of 1992, does not seek to prescribe a single preferred method, but a range of methods, some more suitable than others to a particular task, which can yield broadly comparable results. The IPCC intends to develop and improve these guidelines.

Copies may be obtained from: The Environmental Change Unit, 1a Mansfield Road, Oxford OX1 3TB, U.K., or Center for Global Environmental Research, National Institute for Environmental Studies, 16-2 Onogawa, Tsukuba, Ibaraki 305, Japan.

Green College Centre

Under the directorship of Warden Sir Crispin Tickell, Climate Institute Chairman of the Board, a Green College Centre for Environmental Policy and Understanding has been set up with the aim of lowering the barrier between scientific research and environmental thinking on one side and politics, economics and policy formation and decision taking on the other. Scientists may find it

difficult to communicate outside their specialties; politicians, industrialists, managers, civil servants and others may find scientific and environmental considerations marginal or even unintelligible and represent an awkward intrusion into their frame of reference.

Cooperating closely with other establishments at Oxford University and with organizations in Britain and overseas, the Centre will both authorize and accept commissions for work. It is designed to increase environmental understanding and will help in policy formation, clarifying issues and making them intelligible to non specialists through public presentations, press articles, and participation in radio and television programs. It will issue short policy papers for public discussion and debate or make private recommendations to responsible bodies, encouraging them to make commissions.

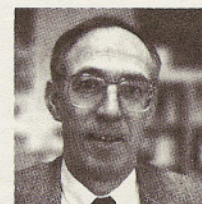
Initiatives will concentrate on areas where policy gaps are greatest: aspects of biodiversity, population, medicine, health and business practice. The commissioning fund (supplied by the Baring Foundation as a supplement to core funding from the Monument Trust) enables the Centre to draw on expertise beyond its own immediate capacities. It has developed a database and small library on key issues to enable rapid response or referral to relevant specialists.

Building links with leading local, national or international environmental organizations the Centre is in regular touch with such organizations as the Royal Society and the Natural History Museum, the Department of the Environment, the Overseas Development Administration and the Foreign and Commonwealth Office. The Director continues as an unofficial environmental advisor to the Prime Minister. He also has various international commitments to the China Council

for International Co-operation in Environment and Development and to the Advisory Council of the European Bank for Reconstruction and Development. He is chairman of the Advisory Committee on the Darwin Initiative on Biodiversity.

New Book by Andre Berger

Institute Board member Andre Berger, Professor at the Catholic University of Louvain in Belgium and director of the



Prof. Andre Berger

Georges-Lemaitre Institute of Astronomy and Geophysics, has written a book, *Le Climat de la Terre* (The Climate of the Earth), directed at the professor, the student, and the general public. At present the book has only been published in French.

Is it myth or reality that the planet is becoming asphyxiated? Berger asks. He traces the variations of climate throughout the history of the earth, the effects of man on climate and the uncertainties of the future. Berger is a mathematician who received a degree at MIT, specializing in the science of the atmosphere.

Qureshi Elected Vice President

At the March 1993 meeting of the Board of Directors, Dr. Ata Qureshi, was named vice president of the Institute. This will create for the Institute equivalent vice presidencies in two functional areas and will give Qureshi a stronger hand in dealing with the World Bank and other international organizations and in functioning outside the U.S.

Vice President Dan Power's focus is mainly on North American cities and the Leadership Council. Qureshi is Director of Global Environment Programs which has a largely international focus.

Institute Report Recommends Funding Priorities to Clinton and New Congress

The Climate Institute issued a wide-ranging report to the new administration and the 103rd Congress in January recommending climate research and response strategies for the next budgetary fiscal year. The proposed measures include support of sustainable forestry efforts in the U.S. and abroad, study of a major coastal engineering initiative to halt the disappearance of 50 square miles of Louisiana into the Gulf of Mexico each year, and a shift in U.S. energy policy away from subsidizing costs of cars and trucks and toward greater use of rail and non-polluting vehicles.

Recognizing the severe budgetary crisis the Clinton-Gore Administration and the new Congress will encounter in the face of ballooning federal deficits, the Climate Institute assembled a group of experts to conduct an assessment of short and long-term reforms which could reduce expenditures and add to revenues and allow the U.S. to implement the Climate Change Treaty. The report follows a similar effort in 1989, in the very early days of the Bush Administration, chaired by Gordon MacDonald, then Vice President and Chief Scientist of the Mitre Corporation.

To offset increased expenditures associated with the proposed reforms, the three task forces formed to conduct the assessment also recommended: savings in the federal flood insurance program which would reduce flood and erosion damages, streamlined disaster preparedness and response programs, improved storm tracking and weather forecasting accuracy to enhance economic efficiency and reduce federal liability for losses, and reduced energy and transport subsidies.

The task forces were chaired by Courtland Perkins, Retired President of the National Academy of Engineering and Chairman of the Institute's Board of Advisors, Claudine Schneider, Chair of Renew America and Director of the Artemis Project, Stephen Leatherman, Co-Chairman of the Institute and Director of the Laboratory for Coastal Research at the University of Maryland, and Lynne Edgerton, Vice President of CALSTART.

Copies of the *Report of the Committee on Funding Priorities for Climate Research and Responses* are available from the Institute.

drought has been understated in most General Circulation Models (GCMs) because of their crude treatment of ground hydrology leading to an unrealistic modeling of land surfaces. "If droughts of the severity indicated in this study come to pass," Rind concludes, "global habitability will be seriously affected."

Believing that among the most important greenhouse effect impacts will be changes in the magnitude and frequency of extreme events, a group of atmospheric scientists in Australia examined rainfall extremes through a CSIRO GCM. It is a subject that received only very brief coverage in the IPCC *Scientific Assessment of Climate Change* report but that has significant implications for water supplies, agriculture, urban planning, and the frequency of natural disasters, according to the CSIRO authors. The objective of their study was to examine changes in convective and non-convective rainfall when moving from current conditions to doubled CO₂ and then to examine changes in rainfall in several regions.

The model results show a marked increase in rain from "penetrating convection," the kind of precipitation associated with thunderstorms, updrafts of warm air, more frequently seen in the tropics. They found that for four regions they examined — Australia, India, western Europe and the mid-western United States — the events appeared more frequently and were larger in scope. The implication is important for potential global warming conditions: there may be a marked increase in periods of extreme rainfall.

Potentially serious implications of these findings include the increased frequency and severity of floods in most regions. While acknowledging many sources of uncertainty, the authors emphasize the need for investigators with other GCMs to examine rainfall intensity under doubled CO₂ conditions.

Models

Continued from page 1)

implications for dam safety and design, flood damage and flood protection measures, urban drainage, agriculture, erosion and the frequency of natural disasters. Despite possible increases of rain in the intense periods, total precipitation may actually decrease.

Rind's study on the prospect for future aridity was based on two drought indices which both showed increasing drought for the U.S. during the next century, the effects becoming apparent as early as the

1990s. One measure was a new one he and his colleagues developed, a supply-demand drought index (SDDI), which they compared to the Palmer Drought Severity Index (PDSI), first developed in the 60s.

The SDDI, the difference between potential evapotranspiration (Ep) and precipitation, examines the change in atmospheric demand and supply for moisture; the PDSI calculates an independent water budget. Both show a large increase in future drought over the U.S. because of warming associated with increases in trace gases.

Rind believes that the intensity of

Calendar of Climate-Related Events, 1993

July (no date given) London, England
Reconstruction of North Atlantic Climate Change Using Extinct Plant Data. NATO Advanced Research Workshop.
 Contact: M. Boulter, Palynol. Res. Unit, Univ. E. London, Romford Rd., London E15 4LZ, UK

July 5-9 Taxco, Mexico
First International Conference on Climatic Change in Mexico, sponsored by National University of Mexico, National Council for Science and Technology et al.
 Contact: Jaime Urrutia-Fucugauchi, FAX 5-550-2486

July 5-9 Beijing, PRC
International Conference on Permafrost, organized by Chinese Organizing Committee
 Contact: (U.S.) Mark Meier, 303/492-6387

July 5-9 Cracow, Poland
ENSEC '93, International Conference on Energy Systems and Ecology.
 Contact: (U.S.) George Tsatsaronis, 615/372-3681

July 7-9 Bangkok, Thailand
Workshop on Global Warming in Asia, organized by Asian Institute of Technology with the Clean Energy Research Institute, University of Miami
 Contact: S.C. Bhattacharya, FAX 662-516-2126

July 11-15 Oxford, UK
Climate Change and World Food Security, NATO Advanced Research Workshop, hosted by Environmental Change Unit, Oxford Univ.
 Contact: Martin Parry, FAX 44-865-28-11-81
July 15-16 Oxford, UK
Climate Change and World Food Security, Inaugural Oxford Environment Conference, organized by Environmental Change Unit, Oxford Univ. et al
 Contact: Caroline Sumner, FAX 44-252-792101

July 11-23 Yokohama, Japan
International Association of Hydrological Sciences and International Association of Meteorology and Atmospheric Physics, Joint Meeting
 Contact: Takeo Kinoshita, 81-298-51-1611

July 14-16 Nairobi, Kenya
Developing Large Environmental Databases for Sustainable Development, workshop
 Contact: Asbindu Singh, 605/594-6107

July 25-30 Mexico City, Mexico
4th International Conference on Desert Development, Sustainable Development for Our Common Future, organized by International Desert Development Commsn
 Contact: Manuel Anaya Garduno, ++52 595-45701

July 26-30 Henniker, NH, US
Impacts of Volcanism on Climate, Gordon Research Conference
 Contact: Louis Walter, 301/286-2538

July 27-29 Bali, Indonesia
16th Annual Conference of International Association for Energy Economics
 Contact: Antonio Arismuandar, FAX 62-21-515-133

July 28-August 5 Mexico City, Mexico
The Cultural and Biological Dimensions of Global Change. XII International Congress of Anthropological and Ethnological Sciences.
 Contact: L. Manzanilla, 52-5 548 -78-28

August 6-13 Beijing, China
International Association of Geodesy General Meeting, sponsored by Chinese Soc. Geodesy, Photogrammetry & Cartography et al. Session on "Global Change via Geodesy: An Interdisciplinary Approach," will cover sea level variations and ice sheet volume systems, and postglacial rebound.
 Contact: Local Organizing Comm., 86-1-8322012

August 8-14 Ibadan, Nigeria or Nairobi, Kenya
Global Climate Change and the Tropical Rainforests
 Contact: Mohammed Ellatifi, (Republic of Yemen) 967 1 250967

August 15-20 Meriden, NH, US
Global Fluxes, Climate Change and Ocean Chemistry, Gordon Research Conference
 Contact: Philip Froelich, 914/365-8485

August 16-20 Huhehot, PRC
International Symposium on Grassland Resources, sponsored by the Grassland Society of China
 Contact: Exec. Sec'y ISGR, Grassland Research Inst., Chinese Academy of Agricultural Sciences, Wulanchabu East Str. 010010, Huhehot, PRC, TELEX 85015 HUME CN

August 17-20 Baku, Azerbaijan
Energy, Environment, Economy - 2nd Baku International Symposium, sponsored by scientific-manufacturing organization GUNESH
 Contact: F. Aliyev, 123A Neftyanikov Ave., Baku, Azerbaijan

August 18-20 Washington, DC, US
1993 Symposium on Greenhouse Gas Emissions and Mitigation Research, organized by US EPA
 Contact: Kelly Janes, MD-63, US EPA, Air and Energy Engineering Research Lab. Global Warming Control Br. Research Triangle Park, NC 27711, US

August 21-26 Oppdal, Norway
Global Change and Arctic Terrestrial Ecosystems: International Conference
 Contact: Jarle Holten, 47 7 58 05 00

August 22-25 Cancun, Mexico
Heat and Mass Transfer in Energy Systems, International Symposium, sponsored by Mexican professional societies and National Univ. of Mexico
 Contact: Jaime Cervantes-De Gortari, 52-5-622-0882

August 23-27 Trondheim, Norway
Anticipated Effects of Global Change on Structure and Function of Terrestrial and Arctic Ecosystems, GCTE International Conference
 Contact: Jarle Holten, 47 7 58 05 00

August 24-26 Portland, OR, US
Creating a Forest for the 21st Century: Interdisciplinary Symposium, sponsored by

Consortium for the Social Values of Natural Resources et al
 Contact: Wash. State Univ., Conferences & Institutes, 206/840-4574

August 24-26 Sioux Falls, SD, US
Land Information from Space-Based Systems, 12th William T. Pecora Remote Sensing Symposium, sponsored by U.S. Geological Survey et al
 Contact: Robert Haas, 605/594-6007

August 24 -Sept1 Montreal, Canada
XXIInd International Population Conference
 Contact: Rejan Lachapelle, 613/951-2951

August 29-Sept 3 Qingdao, PRC
Disaster Mitigation, Scientific & Socioeconomic Aspects. HAZARDS-93 intends to discuss and review all aspects of natural and technological disasters, especially mitigation and preventive measures.
 Contact: Qin Yunshan, Local Organizing Comm., HAZARDS-93, Institute of Oceanography, Academia Sinica, 7 Non-Kai Rd., Qingdao 266071, PRC or M. I. El-Saabh, 418/724-1707

August 31 - Sept 2 Moscow, Russia
Transport Processes in the Ocean and their Laboratory Models, International Workshop sponsored by Science Applications International Corp.
 Contact: Yuli Chashechkin, 7-095-434-4341

Sept. (no date given) Galway, Ireland
Conference on Fractals, Chaos, and Predictability in Oceanography and Meteorology. American Geophysical Union, Chapman Conference
 Contact: AGU, 202/462-6900

Sept. (no date given) Montebello, Canada
Biodiversity, Temperate Ecosystems and Global Change. NATO Advanced Research Workshop
 Contact: T. Boyle, Forestry Canada, Pl. V. Masset, 21st Fl., 351 St. Joseph Blvd., Hull PQ, KIA 1G5, Canada

September 2-8 Yinchuan, Ningxia, PRC
International Symposium on the Rational Utilization of Natural Resources & Territorial Management of Arid Lands
 Contact: Internat'l Dept. of Ningxia Assoc. for Sci. & Tech., +86-951 44300 or 43588

September 5-10 Cambridge, England
Antarctica Glaciology, 5th International Symposium, cosponsored by International Glaciology Society and International Committee on Snow and Ice
 Contact: Anne Hall, 0223 61188

September 6-10 Bergen, Norway
Technical Conference on Space-based Ocean Observations

September 12-18 Calgary, Alberta, Canada
13th International Congress of Biometeorology—Adaptations to Global Atmospheric Change and Variability, hosted by International Society of Biometeorology.
 Contact: N.N. Barthakur, 514/398-7938

September 13-17 Carqueiranne, France
4th International Conference on CO2 Measurement and Analysis
 Contact: Martine Revillon, 33 1 40 41 20 08

Calendar of Climate-Related Events, 1993

September 18-20 *Prague, Czech Republic*
Evaluation of Integrated Monitoring in Small Catchments, a BIOGEMON Symposium on Ecosystem Behavior

Contact: Tom Paces, Czech Geological Survey, Malostranske namesti 19, 118 21 Prague 1 Czech Republic

September 20-22 *Manchester, England*
Partnerships for Change, sponsored by UK Dept. of the Environment to provide opportunity for NGOs, business and local governments to exchange experience in moving toward sustainable government

Contact: Craig Jones, 44-71-276-8843

September 20-24 *Silsoe, UK*
Soil Responses to Climate Change: Implications for Natural and Managed Ecosystems. NATO Advanced Research Workshop

Contact: P. Loveland, Soil Survey Ctr., Cranfield Inst. Technol., Silsoe MK45 4DT, UK

September 21-23 *Vancouver, BC, Canada*
Control of Ozone-Depleting Substances: Scientific Assessment, Government Initiatives and Industry Response, an international specialty conference sponsored by Air & Waste Management Assoc.

Contact: Marci Mazzei, 412/232-3444, x. 3142

September 24-28 *New Delhi, India*
Global Forum on Environmental and Development Education, organized by Indian Environmental Society

Contact: Indian Env. Soc., 91-11-222-3311

Sept. 27-Oct. 1 *La Londe Les Maures, France*
Global Precipitation and Climate Change. NATO Advanced Research Workshop

Contact: M. Desbois, Lab. Mtor Dyn., Ecole Polytech., 91128 Palaiseu Cedex, France

Sept. 28-Oct. 1 *Barcelona, Spain*
International Conference on Environmental Pollution: Science, Policy and Engineering

Contact: ICEP Conf. Office, 44 71 930 6825

September 28-October 2 *Kiel, Germany*
International Conference on the State of the Art in Ecological Modeling

Contact: Sven Jorgensen, +45 3757 44

Oct. (no date given) *Mexico City, Mexico*
6th National Conference on Meteorology and 2nd Iberoamerican Congress on Atmospheric Environment, sponsored by Mexican Meteorological Society et al.

Contact: Roberto Castillo, 271-06028

Oct. (no date given) *Banff, Alberta, Canada*
Evaluating and Monitoring the Health of Large-Scale Ecosystems. NATO Advanced Research Workshop

Contact: D. Rapport, Dept. Biol., Univ. Ottawa, 30 Marie Curie, Ottawa ON K1N 6N5, Canada

October 3-6 *Savannah, GA, US*
National Conference on Renewable Energy, sponsored by National Assoc. of Regulatory Utility Commissioners

Contact: Ann Thompson, 202/898-2200

October 4-8 *Reykjavik, Iceland*
Ecological Effects of Arctic Airborne Contaminants, International Conference sponsored by U.S. Environmental Protection Agency et al.

Contact: Debra Steward, 301/770-3153

October 7-9 *Urbana, IL, US*
Water Resources Management in the Middle East: Future Perspective, International Symposium

Contact: Glenn Stout, 217/333-6275

October 11-15 *Atlanta, GA, US*
International Symposium on Optical Sensing for Environmental Monitoring

Contact: Marci Mazzei, 412/232-3444

October 14-17 *Dresden, Germany*
Environmental Consciousness & the Mass Media, International Congress for scholars, scientists, media professionals and environmental activists

Contact: Patrick Wilkinson, Deutsches Hygiene-Museum, Lingnerplatz 1, DO 8010 Dresden, Germany

October 17-22 *Capetown, South Africa*
8th Southern African Marine Science Symposium: Marine Science for a Sustainable Future

Contact: SAMSS Secretariat, 27 21 2681

Oct. 17-23 *Linoperamata, Crete, Greece*
Diachronic Climatic Impacts on Water Resources with Emphasis on Mediterranean Region. NATO Advanced Research Workshop

Contact: A. Angelakis, Nat. Found. for Rural Res., Inst. Agric. Res., POB 1841, 7110 Iraklio, Greece.

October 20-22 *Washington, DC, US*
CFC and Halon Alternatives, International Conference, sponsored by The Alliance for Responsible CFC Policy. Washington Hilton.

Contact: Heather Tardel, 301/695-3762

October 22-26 *Aussois, France*
Strategies for the Use of Paleoclimatic Data Sets in Climate Model Intercomparison and Evaluation. NATO Advanced Research Workshop

Contact: J. Guiot, CNRS, UA 1152, Lab Botanique, 13397 Marseilles Cedex 13, France

October 23-28 *Montreal, Canada*
Growth and Environment: Challenging Extreme Frontiers. 2nd International Design for Extreme Environments Assembly, hosted by Centre for Northern Studies and Research, McGill University

Contact: IDEAA Two, 514/398-6052

October 25-29 *Paris, France*
The Solar Engine and its Influence on Terrestrial Atmosphere and Climate. NATO Advanced Research Workshop

Contact: E. Nesme-Ribes, Observatoire Paris, Dpt. Astron., 5 Pl. Janssen, 92195 Meudon, France

October 25-30 *Seattle, WA, US*
North Pacific Marine Science Organization, 2nd Annual Meeting

Contact: PICES Secretariat, 604/363-6366

October 27-28 *Washington, DC, US*
Earth Observations & Global Change Decision Making: A National Partnership, Global Change: A New Challenge for Decision Making. Environmental Research Institute of Michigan Conference.

Contact: ERIM Conferences, 313/994-1200

November 8-10 *Victoria, B.C., Canada*
Transboundary/International Issues Conference sponsored by Pacific Northwest International Section, Air & Waste Management Assoc., Half the meeting will cover air issues including climate change, ozone depletion and CFCs.

Contact: Mike Williams, Capital Regional District, POB 1000, Victoria BC V8W 2S6, Canada

Nov. 29-Dec. 3 *Valencia, Spain*
Technical Meeting on Air Pollution Modeling and its Application, 20th International Meeting sponsored by Centro de Estudios Ambientales del Mediterraneo, NATO, EURASAP et al

Contact: Sven-Erik Gryning, Dept. Meteor., Riso Nat. Lab., DK-4000 Roskilde, Denmark

December 6-10 *Perth, Australia*
Modeling Change in Environment and Socioeconomic Systems, sponsored by International Environmetrics Society, International Society for Ecological Modeling et al., University of Western Australia

Contact: Tony Jakeman, 61-6-249-4742

December 13-15 *Maastricht, Netherlands*
Non-CO2 Greenhouse Gases: Why and How to Control? International Symposium organized by the Society for Clean Air in The Netherlands. The European Symposium on Environmental Protection.

Contact: Vereniging LUCHT, 31 15 696884

LEATHERMAN WINS FILM PRIZE

CINE 1992, the Council on International Nontheatrical Events, has awarded the Golden Eagle Award to Institute Co-Chairman Stephen P. Leatherman for his 30-minute television program, "Vanishing Lands." The film was selected for "its excellence to represent the United States of America in international film and video events abroad." Dr. Leatherman is director of the Laboratory for Coastal Research at the University of Maryland.

"Vanishing Lands" shows how burgeoning coastal populations are on a collision course with rising sea impacts: beach erosion and disappearing wetlands, in the Chesapeake Bay, the Mississippi Delta and the Netherlands lowlands.

To order a VHS videocassette of the film, contact University of Maryland Foundation, FAX 301/314-9299.

Mayors

(continued from page 1)

island nations of the South Pacific, the Yucatan Peninsula, Southeastern U.S. and many other places be submerged ... in the next century? Will millions of refugees, fleeing ecological disaster in southern areas where national governments lack the resources to adapt, head for richer northern industrialized areas in unprecedented migrations?"

Three action programs were developed for the upcoming phase of the campaign:

- Green Buildings
- Green Fleets
- Energy Partners

Because buildings account for 25 percent of electricity use, the payback in reducing their energy use can be high. Municipalities which become signatories to the campaign will pledge to reduce energy use and CO₂ emissions in city buildings and facilities by 20 percent in 10 years through retrofitting energy efficiency measures such as high efficiency lighting and computer controlled heating and cooling systems, on-site co-generation systems for space

conditioning and electrical needs, high efficiency windows, solar hot water heaters and solar photo voltaic cells. Municipal investment in these energy efficiency measures can bring many benefits, ICLEI points out, saving money, creating jobs and improving the quality of life.

Green Fleets will focus on reducing energy use and CO₂ emissions by 20 percent in 10 years through replacement of old vehicles with those having higher average fuel economy, using alternative fuels such as natural gas or electricity in city vehicles, and substituting public transit or bicycles for municipal travel when appropriate.

Energy Partners, conceived jointly by the City of Amsterdam and ICLEI, would create an Energy Partners Fund with cities in the developed world using a portion of the savings from their energy efficiency investments to support projects in developing world cities.

The specific goals of the world campaign are to:

- strengthen local commitment to lower emissions
- provide analytical tools for developing appropriate policies

- encourage innovative model projects to lower energy use
- provide a collective voice so that municipal level actions are included in national action plans and international agreements.

The changes we are being forced to make should improve the quality of life in our cities and strengthen our economies, Mayor Dore said. While the problems are concentrated in cities, it is in the cities where answers will arrive, where new ideas and new economic activity that spell sustainable development must emerge.

CORRECTION

An article, "Possible Harm to Plants from CO₂ Increase," in the "Climate News Around the World" page of *Climate Alert*, Vol. 5, No. 3, July/August 1992, incorrectly stated that "food production may be reduced by increased CO₂..." Data from previously published studies indicate that the growth stimulating effects of elevated CO₂ will be particularly pronounced when plants receive high nutrient supply, as is typically the case in agronomic food production.

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President Promises Limits to Greenhouse Gas Emissions, Supports Biodiversity Pact

President Clinton announced two significant steps in his first major environmental speech, commemorating Earth Day, in late April. He said the United States would commit to specific targets to reduce the emissions of greenhouse gases that contribute to the threat of global warming, and he promised that the U.S. would sign the Convention on Biological Diversity, already signed by over 150 countries at the Earth Summit in June 1992.

Clinton stated that the U.S. would reduce emissions of greenhouse gases to their 1990 levels by the year 2000. Further details of the limitations are being worked out and will be spelled out in a National Action Plan still under development.

The Bush Administration refused to sign the biodiversity treaty, which aimed at protecting threatened plants and wildlife, for fear of unfairly

penalizing some American companies. The treaty must first be signed by the Clinton Administration and then approved by a vote of two-thirds of the Senate. It will not go into effect until it has been ratified by 30 countries.

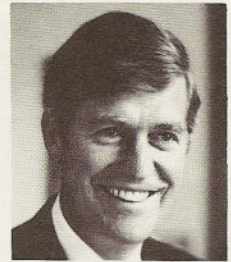
Earlier, the Clinton administration proposed two other environmental initiatives: abolishing the Council on Environmental Quality (CEQ) and elevating the status of environmental issues in the State Department.

Clinton and Vice President Gore intend to replace CEQ by an Office of Environmental Policy that will be given a voice in environmental decision-making in the White House. They propose to elevate EPA to cabinet level; CEQ, which can only be abolished by Congress, would not be eliminated until EPA's status changes.

Timothy E. Wirth, the senior

Senator from Colorado who decided in 1992 not to run for a second term, has been confirmed for a top State Department position as "Counselor," a position likely soon be renamed "Undersecretary for Global Affairs," with responsibilities for new moves on global warming and on the biodiversity treaty.

As a member of the Senate Energy and Natural Resources Committee and chairman of the subcommittee on Energy Regulation and Conservation, Wirth gained a reputation as a knowledgeable authority on the nation's environment, the greenhouse effect and other global environmental issues.



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Address correction requested

Inside:

Clinton appointments
signal new environmental
policies and perspectives

The Climate Institute is a private nonprofit organization formed to advance public understanding of climate change including the greenhouse effect and of strategies to avert stratospheric ozone depletion.