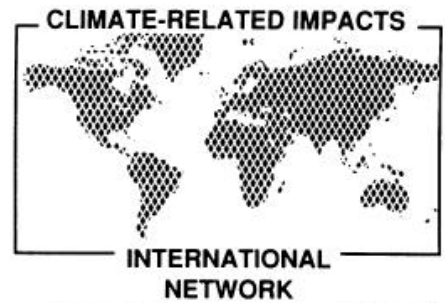


NETWORK NEWSLETTER



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EDITORIAL Global Warming Yea-sayers & Naysayers: Time to Bridge the Gap?

In many countries, when there is a change of governing political parties, there is a change in philosophy about many issues. There is a tendency to pursue new approaches and discard the old, without an objective evaluation of "worth" of many of the existing policies. Yet some of those policies may work well. The United States is not immune to this. Clinton's administration (relatively pro-environmental protection) has been replaced by the Bush administration (pro-resource use).

The Bush administration has the opportunity to take a fresh look at the global warming issue by holding its own "global warming court" that brings together the yea-sayers, the naysayers, and those "in between" in order to decide on appropriate tactical and strategic responses to this potential global threat. Such a court may find that the proverbial "glass" of evidence for human involvement in global warming is "75% full."

Bridging the gap between yea-sayers and naysayers on the prospects of global warming and the surprising adverse impacts that might ensue is not an easy task. Obviously there are lots of issues these two diametrically opposed groups can find to disagree on: is the warming caused by human activities or is it natural in origin? Can different satellite measurements be reconciled to determine the degree of atmospheric warming? Where's the missing carbon sink? And what about the cool period of 1940-70, and so forth.

There are, however, solid facts that all can (or should) agree on: seventeen of the eighteen warmest years in the twentieth century occurred since 1980. The atmosphere has warmed. The amount of carbon dioxide in the atmosphere has increased during the twentieth century.

Glaciers worldwide are noticeably retreating. And the scariest of all, large chunks of the Antarctic ice mass have broken away.

Clearly, an increasing number of scientists have been joining the ranks of those concerned about the likelihood of human interference in the natural processes that produce the earth's climate (i.e., the yea-sayers). It is time for funding agents, the media, and the political leaders who have representatives in both camps to approach the global warming issue in a collaborative way.

I myself am not sure how a global warming, natural or human-induced, will play out in the real world (as opposed to how it plays out in highly sophisticated computer models). Nevertheless, there are enough pieces of the climate change puzzle on the table to prompt rational people (including incoming policy makers) to ponder the issue more carefully and with less hype, fanfare, and acrimony toward those with opposing views. **This is not a call for more science, but a call for more common sense.**

To stand by and do nothing just for the sake of undoing the policies of a former president would be folly. With the issuance of the 2001 IPCC Report and the responses to it, it is time to tone down the rhetoric and ratchet up the interest in addressing global warming. Both yea-sayers and naysayers would concur that it is a plausible, even if they do not yet agree whether it is a real, threat.

Even though we do not think that our house will be struck by lightning, we all buy insurance against that likelihood. We just don't want to take the chance. We buy the insurance and hope it never happens. Thus, policies to deal with global warming, regardless of the human contribution to it, are a good insurance policy.

—Michael H. Glantz



LET'S HEAR FROM YOU!!

This newsletter depends on YOUR input. Please send relevant information that comes across your desk, whether it is a news item, meeting, job opening, or publication, to the address on the back cover. Information to be included in the next newsletter must be received by **31 May 2001**. If you prefer to receive the newsletter on line, please let us know at www.esig.ucar.edu/newshp and you will be reminded when a new issue is released.

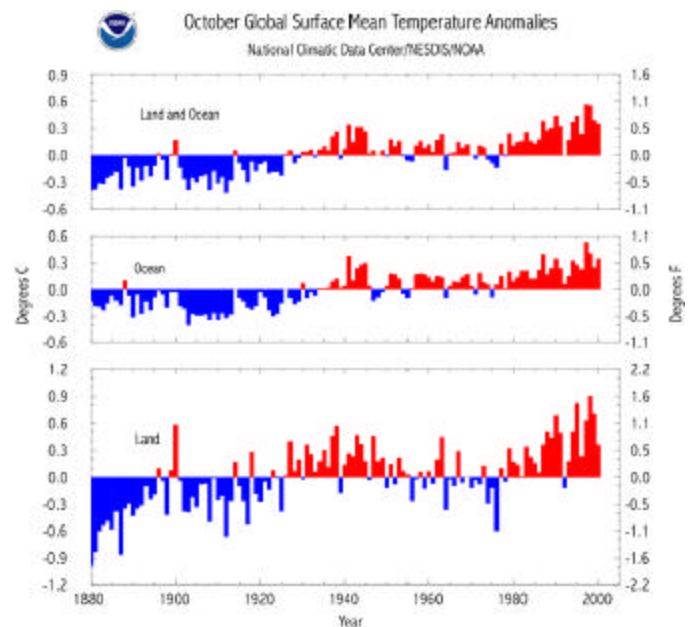
IPCC THIRD ASSESSMENT REPORT

The Intergovernmental Panel on Climate Change (IPCC) is now completing its Third Assessment Report (TAR). The working groups have had their contributions to the TAR approved by member countries in a series of meetings spanning January through March 2001. Volume I was released 22 January 2001 entitled *Climate Change 2001: The Scientific Basis* and is available in Portable Document Format (PDF) at www.ipcc.ch. In addition to this report, Volume II (impacts) and Volume III (response strategies) will be available at the Web site by early March. This report is over 1,000 pages long and has been three years in production. The full report will be published by Cambridge University Press in 2001. The Synthesis Report is developed around a suggested list of policy-relevant scientific questions the IPCC received from a large number of governments. It is being written in a non-technical style suitable for policy makers and will provide all the necessary bibliographic references to enable a deeper analysis of the questions involved. The IPCC is a common endeavor of the UN Environment Programme (UNEP) and the World Meteorological Organization (WMO). For more information, contact the IPCC Secretariat, located at WMO Headquarters, 7 bis Avenue de la Paix, PO Box 2300, 1211 Geneva 2, Switzerland; email ipcc_sec@gateway.wmo.ch

JANUARY-OCTOBER US TEMPS WARMEST ON RECORD

Thirteen of the past January-October periods in the United States have seen above-average temperatures and have contributed to a temperature rise of 1.0°F since records began in 1895, according to the US National Climatic Data Center. Data collected by

NOAA's polar-orbiting satellites and analyzed by NASA and the Global Hydrology and Climate Center at the University of Alabama in Huntsville also indicate that temperatures in the lower half of the atmosphere (lowest 8 km) were the warmest on record (1979-2000) over the United States. The global mean temperature (land and ocean combined) for 1999 was the fifth-warmest on record since 1880. Globally, the departure from the long-term average (1880-1998) was 0.41°C (0.74°F). The warmest and second-warmest years were 1998 and 1997. The top six warmest years occurred during the 1990s. Each year of this decade has been one of the top 15 warmest of the century. (from www.solcomhouse.com)



KNOWLEDGE NETWORK FOR INDIA

The increasing frequency of natural disasters in India has caused policymakers, research scientists, disaster managers, and central and state governments to take a look at how better to address them. In October 2000, the Government of India established a committee to tackle the multiple facets of natural disasters in India. One of the committee's decisions was to set up a National Natural Disaster Knowledge Network (Nanadisk-Net), which will be coordinated by R.K. Bhandari, Head, International Science and Technology Affairs Directorate of the Council of Scientific and Industrial Research. The Knowledge Network is being planned as a "network of networks" to coordinate an interactive, simultaneous dialogue with all the players dealing with natural disasters. The Knowledge Network

aims to ensure a swift flow of information by learning from each disaster. For more information, please contact the Asian Disaster Preparedness Center Web site (www.adpc.ait.ac.th) or write to the Editor, Asian Disaster Management News, ADPC, PO Box 4, Klong Luang, Pathumthani 12120, Thailand.

“DEAD ZONES” AND DUCKS UNLIMITED

“Dead zones” are becoming more common worldwide in areas where coastal waters are swamped with nutrients, particularly nitrogen, from sewage or fertilizer. The excess nitrogen allows algae populations to explode. Dead algae in turn feed bacteria, which absorb most of the oxygen in the water. Shellfish suffocate, and fish must swim to more healthful waters. The Gulf of Mexico's “dead zone” swells each summer to about 18,000 square kilometers, roughly the size of New Jersey. Researchers blame the 1.6 million metric tons of nitrogen that wash down the Mississippi River each year. Excess nutrients may come from a wide range of sources: runoff from developed land, atmospheric deposition, soil erosion, and agricultural fertilizers.

Ducks Unlimited, an international leader in wetlands conservation, has drawn an interactive map of the Mississippi River to illustrate the mobility of nonpoint source pollutants (NPS). These NPS produce the “dead zone.” Wetlands serve as natural water filters, and the United States has already lost half of its wetlands. Wetlands can remove up to 80% of the nitrogen from incoming water. Ducks Unlimited is working with farmers who are restoring and fortifying their wetlands to stop the runoff of fertilizers. To see Ducks Unlimited's interactive map, see www.ducks.org/news/deadzone.asp. For more information, contact Tildy LaFarge, Manager of Media Relations, Ducks Unlimited, Inc., tel: 1- 901-758-3859; email mlafarge@ducks.org

IMPLICATIONS OF CLIMATE CHANGE FOR NORTHERN IRELAND

Queen's University Belfast (QUB) will carry out the first-ever evaluation of the potential implications of future climate change for Northern Ireland. QUB (with consortium partners Napier University and the University of Edinburgh) has successfully obtained funding from the Department of the Environment in Northern Ireland, in conjunction with SNIFFER (Scotland and Northern Ireland Forum for Environmental Research), to conduct a Scoping Study on “Implications of Climate Change for Northern Ireland: Informing Strategy Development.” This is the first step in developing a climate change strategy

for Northern Ireland. Climate change has broad implications for the people, economy, and the natural and built environment of Northern Ireland. Its unique location, heritage, and history mean that impacts in this area are likely to differ markedly from those for other UK regions. Work for the project will be carried out during the first half of 2001. For more details, contact David Favis-Mortlock at d.favis-mortlock@qub.ac.uk or tel: 44-28-9024-5133 or see Queen's University Belfast Web site at www.qub.ac.uk

MILLENNIUM ECOSYSTEMS ASSESSMENT

The Millennium Ecosystem Assessment (MEA) is a proposed international ecosystem assessment. It is designed to improve the management of ecosystems around the world by helping to bring the best available information and knowledge about the condition and future prospects of ecosystem to bear on policy and management decisions. The four-year MEA will be launched in 2001 by the World Resources Institute (WRI), the UN Environment Programme (UNEP), the World Bank, the Global Environmental Facility (GEF), and other international agencies. The MEA is expected to fill in the data gaps identified by five *Pilot Analysis of Global Ecosystems* (PAGE) reports which will involve the participation of hundreds of the world's leading scientists. The first of these reports, *Agroecosystems*, was recently released by the International Food Policy Research Institute (IFPRI) and the WRI. The PAGE reports will also cover fresh water, coastal, forest, and grassland ecosystems. Taken together, these reports are the first such comprehensive assessment of the state of the world's ecosystems. For more information about the PAGE reports, contact Adlai Amor, Media Director, WRI at aamor@wri.org or tel: 1-202-258-1890. If you are interested in becoming involved in the MEA, please see the Web site at www.ma-secretariat.org or contact Valerie Thompson, Interim Millennium Assessment Secretariat, c/o WRI, 10 G St. NE, Washington, DC 20002; tel: 1-202-729-7794; fax: 1-202-729-7610, email valeriet@wri.org



The Pembina Institute is an independent, citizen-based think tank, an activist public interest organization, and a non-profit consulting group with a reputation for technically reliable and innovative results. Their work focuses on three related themes: (1) energy and the environment, (2) environmental economics, and (3)

sustainable resource management. They use a multidisciplinary approach to catalyze action by bringing together key players and driving for creative solutions. The Pembina Institute operates from a head office in Drayton Valley, Alberta, Canada, with several satellite offices in other parts of Canada. Various charitable environmental education and research programs are carried out in conjunction with the Pembina Institute's sister organization, the GAIA Foundation for Earth Education. For more information about the Institute, visit the Web site at www.pembina.org or write to Pembina Institute, Box 7558, Drayton Valley, Alberta, Canada T7A 1S7; tel: 1-780-542-6272; fax: 1-780-542-6464; email piad@pembina.org

EARTH DAY 2001: ENERGY AND GLOBAL WARMING

Earth Day Network is the international organization coordinating Earth Day events and campaigns worldwide. Earth Day Network has chosen "Energy and Global Warming" as the special focus for Earth Day 2001 (April 22). Burning fossil fuels to produce energy causes global warming and other serious environmental problems. By adopting energy efficiency and clean energy solutions, individuals, businesses, campuses, communities, and nations around the world can lead the way to a clean energy future. For more information, see the Web site at www.earthday.net or write to Earth Day Network, 811 First Ave., Suite 454, Seattle, WA 98104 USA; tel: 1-206-876-2000; fax: 1-206-876-2015; email earthday@earthday.net



INTERNATIONAL POPS ELIMINATION NETWORK

The International POPs (Persistent Organic Pollutants) Elimination Network (IPEN) is a global network of public interest non-governmental organizations united in support of a common POPs Elimination Platform. The mission of IPEN, achieved through its participating organizations, is to work for the global elimination of POPs on an expedited (yet socially equitable) basis. On December 10, 2000 in Johannesburg, South Africa, delegates from 122 nations reached an agreement to control risks to health and the environment posed by 12 POPs by reducing or eliminating the production and release of identified chemicals into the environment. Of all the pollutants released into the environment every year by human activity, these POPs are among the most dangerous and can persist in the environment for years

before breaking down. The agreement will be signed at a diplomatic conference in Stockholm, Sweden, on 22-23 May 2001 and will go into effect once 50 countries have ratified it. For more information, see the IPEN Web site at www.ipen.org or contact Karen Perry, IPEN Coordinator, Physicians for Social Responsibility, at tel: 1-202-898-0150 Ext. 249 or email kperry@psr.org

SIDS-CARIBBEAN

The World Meteorological Organization (WMO) will be the agency in charge of a project beginning in 2001 and running for three years on "Preparedness to Climate Variability and Global Change in Small Island Developing States, Caribbean Region" (SIDS-Caribbean). The overall objective of this project is to provide the necessary facilities in support of improved planning for sustainable development in the Caribbean region by strengthening the national meteorological services of the area. Damage caused by Hurricanes Mitch and Georges underscored the ecological and socio-economic vulnerability of the Caribbean and Central American region. In November 2000, an agreement was signed between the WMO and the Government of Finland, which will provide financial support for the project. The Government of Finland and the WMO have actively cooperated in various areas, including the implementation of projects for the Southern African Development Community (SADC) as well as through the WMO Voluntary Cooperation Programme. For more information, please contact Taysir M. Al-Ghanem, Information and Public Affairs, WMO, 7 bis, avenue de la Paix, CH-1211, Geneva 2, Switzerland; tel: 41-22-730-8315; fax: 41-22-733-2829; email ipa@gateway.wmo.ch; Web site: www.wmo.ch



PROVENTION CONSORTIUM

The ProVention Consortium is a global coalition of governments, international organizations, academic institutions, the private sector, and civil society organizations aimed at reducing disaster impacts in developing countries. The Consortium functions as a network to share knowledge and to connect and leverage resources to reduce disaster risk. It focuses on synergy and coordination so that efforts and benefits are shared. The need to reduce disasters in developing countries is urgent. The ProVention Consortium projects focus on the links between disasters, poverty, and the environment. For more information, see the Web site at

www.proventionconsortium.org or email the sister organization (Disaster Management Facility) at dmf@worldbank.org

COLUMBIA UNIVERSITY'S BIOSPHERE 2 CENTER

Columbia University has spent the past five years re-engineering the Biosphere 2 Center in Oracle, Arizona USA to create a national user facility for earth system science, engineering, and education. The facility will be available to researchers from around the globe, providing an opportunity to isolate, study, and model ecosystems at a scale of observation currently unavailable to laboratory scientists. The Biosphere 2 Center laboratory is equipped to allow researchers to conduct controlled experiments that imitate regional and global activities and to replicate ecosystems with mass, material, and energy balancing measurements. Scientists will be able to better perform the kinds of studies needed to manage ecosystems, making them less vulnerable to environmental change. The US Department of Energy and Columbia University will develop a science planning framework for the Biosphere Center. This effort includes workshops to bring together scientists for research on global climate change and earth system sustainability. The Biosphere 2 Center also offers semester and summer programs for high school and undergraduate students. For more information, see the Web site at www.bio2.edu or write to Biosphere 2 Center, 32540 S. Biosphere Rd., Oracle, AZ USA 85623; tel: 1-520-896-6400; fax: 1-520-896-6471.

ENVIRONMENTAL SUSTAINABILITY INDEX

The Environmental Sustainability Index (ESI) is a measure of overall progress toward environmental sustainability that has been developed for 122 countries. The ESI scores are based on a set of 22 core indicators, each of which combines 2 to 6 variables. The ESI permits cross-national comparisons of environmental progress in a systematic and quantitative fashion. It is the result of a collaboration among the World Economic Forum's "Global Leaders for Tomorrow" Task Force, the Yale Center for Environmental Law and Policy, and the Columbia University Center for International Earth Science Information Network (CIESIN). The ESI was released at the Annual Meeting of the World Economic Forum in Davos, Switzerland in January 2001. The three top nations in environmental sustainability, according to the ESI, are Finland, Norway, and Canada. To view the ranking of the 122 countries, see the Web site at www.ciesin.columbia.edu/indicators/ESI/rank.html or

contact CIESIN at ciesin.info@ciesin.columbia.edu or write to CIESIN, Columbia University, PO Box 1000, 61 Route 9W, Palisades, NY 10964 USA, tel: 1-845-365-8988; fax: 1-845-365-8922; www.ciesin.columbia.edu

RIO+10: WORLD SUMMIT ON SUSTAINABLE DEVELOPMENT

The 55th Session of the UN General Assembly on Environment and Sustainable Development (UNED) agreed to give Earth Summit 2002 the official title of "World Summit on Sustainable Development." It also agreed that the Summit will be held in Johannesburg, South Africa. By taking place in a Southern country in Africa, it will help to draw international attention to the critical needs of the region. Rio+10 will offer an opportunity to strengthen the global commitment to sustainable development. Ratification of agreements such as the Kyoto and Biosafety Protocols, along with other outstanding agreements such as those for Persistent Organic Pollutants (POPs) and Migratory and Straddling Fish Stocks could be a part of this commitment. The UN Commission on Sustainable Development (CSD) will hold its ninth session in April 2001 to draw up the first global preparatory committee for the Summit. For more information, see the Web site at www.earthsummit2002.org or write to Rosalie Gardiner, Policy Coordinator, UNED Forum, 3 Whitehall Court, London SW1A 2EL, UK; tel: 44-20-7839-7171; fax 44-20-7930-5893; email rgardiner@earthsummit2002.org

NEW CLIMATE CENTER OPENS IN UK

A new interdisciplinary climate change research center was recently opened at the University of East Anglia in Norwich, UK, with partners across the UK. The Tyndall Centre, named after the 19th century scientist John Tyndall, will foster climate scientists, social scientists, economists and engineers to work together to study both the causes and consequences of climate change. The Center's headquarters are at the University, with regional offices at the University of Science and Technology in Manchester and the University of Southampton. For more information, see the Web site at www.tyndall.uea.ac.uk or email s.torok@uea.ac.uk to be added to the Tyndall Centre mailing list.

Job Opportunities and Internships

The University Corporation for Atmospheric Research (UCAR) in collaboration with the NWS/OHD Hydrology Laboratory (HL) Silver Springs, Maryland, seeks an individual with experience in using terrain data sets and Geographic Information Systems (GIS) for watershed and river modeling applications. The selected individual will work with a team of scientists performing research in various aspects of the hydrologic cycle while focusing upon the development and improvement of flood-forecast mapping products (mapping of forecasted flooded areas). A postgraduate degree in engineering or in physical or natural science plus experience in using terrain data sets and GIS for watershed and river modeling applications will be required. Training in watershed hydrology and river mechanics is strongly desired. For further information, please contact Janice M. Sylvestre, tel: 1-301-713-0640 x163; fax: 1-301-713-0963 or via email janice.sylvestre@noaa.gov. As UCAR employees, visiting scientists will be covered by all UCAR policies and benefits. UCAR will help international visitors obtain a visa. Application deadline is **31 March 2001**. Send applications to UCAR/Visiting Scientist Programs, PO Box 3000, Boulder, CO 80307-3000, USA. Full text announcement available on the Web at www.vsp.ucar.edu. For further information, please call 303-497-8649 or send email to vsp@ucar.edu. *UCAR is an Equal Opportunity/Affirmative Action Employer.*

The University Corporation for Atmospheric Research (UCAR) **Visiting Scientist Program**, in cooperation with the National Oceanic and Atmospheric Administration (NOAA), National Weather Service (NWS), and the Office of Hydrologic Development (OHD), are announcing a new visiting scientist position. The OHD Visiting Scientist Program provides hydrologic/hydrometeorologic and hydraulic research opportunities at the NWS/OHD/Hydrology Laboratory (HL) in Silver Spring, Maryland. Applications are being sought for a visiting scientist to participate on a team conducting applied research, development and implementation of dynamic streamflow routing capabilities using the NWS River Forecast System (NWSRFS) operation, FLDWAV, for NWS operations. Applicants should have an MS or PhD in hydrology, hydraulic engineering, applied mathematics, or a related field. Responsibilities also include preparation of user manuals and related documentation, writing of technical reports, and papers. The program offers one to three year visiting scientists appointments, reviewed annually. Fellows receive a fixed annual stipend. A relocation allowance is provided as well as an allowance for scientific travel and other

support costs. Application deadline is **31 March 2001**. Send applications to UCAR/Visiting Scientist Programs, PO Box 3000, Boulder, CO 80307-3000, USA. The full text announcement available on the Web at www.vsp.ucar.edu, tel: 1-303-497-8649 or email to vsp@ucar.edu

The National Ice Center (NIC) has teamed with the University Corporation for Atmospheric Research (UCAR) to provide a **Visiting Scientist Appointment** in the Science and Applied Technology Department at NIC. This multi-agency fellowship program is sponsored by ONR, NOAA and NASA and is managed through the UCAR Visiting Scientist Programs. This position offers the opportunity to conduct applications-oriented research of relevance to the NIC ice-monitoring mission. The program offers up to a 3-year visiting research appointment, reviewed annually. Applicants will have a strong background in remote sensing, ice modeling, or ice physics research. Fellowship awards will be announced in early summer 2001; review of application materials will begin on **15 April 2001**. The position will remain open until filled. Send applications to: UCAR/Visiting Scientist Program, PO Box 3000, Boulder, CO 80307-3000, USA. The full text announcement available on the Web at www.vsp.ucar.edu. For further information, please call 1-303-497-8649 or send e-mail to vsp@ucar.edu.

The Network Scholarship Programs Department of the Open Society Institute is pleased to offer supplementary grants to students from selected countries of Eastern and Central Europe and the former Soviet Union. The purpose of the program is to enable qualified students to pursue doctoral studies in the Humanities and Social Sciences at accredited universities in Western Europe, Asia, Australia and North America. The grants will provide supplemental funding for one year of study with the option to apply for a second year. Reapplication procedures will be outlined in the 2002-3 application form. Renewal grants will be competed and are not guaranteed. Only students who have been accepted into a full-time doctoral (PhD) program at an accredited university are eligible to apply. Candidates must demonstrate proficiency in the spoken and written language of their host institution. The deadline for receiving applications for the 2001/2002 academic year is: For students pursuing PH.D. in **North America, Asia, Australia: 1 April 2001**. For students pursuing PH.D. in **Western Europe: 1 June 2001**. Please mail applications to Vera Johnson, Global Supplementary Grant Program, Open Society Institute, 400 West 59th Street, New York, NY 10019. Tel: 1-212-548-0175; fax: 1-212-548-4652; Email: vjohnson@sorosny.org. Additional information can be found at the Web site at www.soros.org. In Kazakstan: Aizan Mukanbetkalieva,

Soros Educational Advising Center, 171 Tulebaev Street, Almaty 480021. Tel/Fax: (3272) 696725, 696995. Email: resource@resource.samal.kz. Web: _eac.samal.kz

Past Meetings

A major regional workshop entitled **CDM: The Challenges of Securing Financing and Ensuring Capacity Building** was held 8-10 May 2000 in Cape Town, South Africa. A one-day seminar on Climate Change and Development included officials of Ministries of Finance, Development and Planning, Energy, Transport and Agriculture, as well as private sector representatives and academic groups. The purpose of this seminar was to highlight climate change-related issues and to emphasize the linkages among national development, local environmental problems, and global environmental priorities. The two-day workshop concentrated on problems relating to the implementation of the CDM (Clean Development Mechanism) of the Kyoto Protocol and identified the challenges and opportunities associated with the CDM in Africa, with special focus on issues of finance and capacity building. The principal target audience included a cross-section of stakeholders, 75% of whom came from the African region. For more information, see the Fall 2000 issue of the Pacific Institute Report, or contact the Pacific Institute, 654 13th St., Oakland, CA 94612 USA; fax: 1-510-251-2203; email: pistaff@pacinst.org; Web: www.pacinst.org

The First Meeting of the Club of Tokyo for a Global Water Policy Dialogue convened 25-26 September 2000 in Tokyo, Japan. The Club of Tokyo was established as an informal network of the most influential water and development professionals of the world who can influence and informally give direction to global discussions and an agenda on water. In this first meeting, members were asked to identify one water issue which they considered to be the most important for the next 10 years. Two priority issues were identified: analysis and review of established paradigms with the objective of finding implementable frameworks, and water pricing and cost-recovery. Background papers prepared by members of the club on priority water issues will be published in a book by Oxford University Press. For a copy of the report or for more information, contact Cecilia Tortajada, Third World Centre for Water Management, Avenida Manantial Oriente No. 27, Los Clubes, Atizapan, Estado de Mexico, 52958 Mexico; tel: 52-5-379-5429; fax: 52-5-379-5439.

A Symposium and Workshop to Address Nature, Water, Culture, and Livelihood in the Lower Colorado River Basin and Delta, hosted by the Udall Center and UC MEXUS, was held 29 September 2000 in Riverside, California. Attended by 230 people from the US, Mexico, and a number of Native nations, the conference addressed questions about management and policy in the Lower Colorado River watershed, the Colorado River Delta, and the Upper Gulf of California. The event aimed to initiate and further a dialogue among various stakeholders of the Lower Colorado River Delta and Basin: policy makers, managers, water users, community members, and researchers from both side of the US-Mexico border. Contact the Udall Center for Studies in Public Policy, University of Arizona, 803 E. First St., Tucson, AZ 85719 USA; fax: 1-520-884-4702; email: udallctr@u.Arizona.edu; Web: udallcenter.arizona.edu

A Workshop on Drought-Related Issues in Fars Province, Iran: Critical Points and Resolutions was held 18-19 October 2000 at Shiraz University in Iran. Topics included: introduction of several important drought indices and computer models for determining optimal water allocation from storage dams and optimal irrigation depth for achieving maximum benefit; discussion of criteria for allocation of drought funds; comparison of the weather situation of the 1999-2000 agricultural year with corresponding long-term values; evaluation of devastating effects of drought on wetlands and ecological zones of Fars province; and analysis of long-term rainfall data of Shiraz. Readers with suggestions or comments about the workshop are kindly requested to contact Dr. M.J. Nazemosadat, Irrigation Department, Faculty of Agriculture, Shiraz University, Shiraz, Islamic Republic of Iran; email jafar@hafez.shirazu.ac.ir

The Ninth International Coral Reef Symposium was held 23-27 October 2000 in Bali, Indonesia. Held every four years, this year's symposium theme was "World Coral Reefs in the New Millennium: Bridging Research and Management for Sustainable Development." Over 1,500 scientists from more than 50 countries discussed breakthroughs in understanding the health of coral reefs and addressed the serious degradation that coral reefs are suffering. A nine-member scientific panel representing the majority of scientists at the symposium and including some of the world's pre-eminent marine biologists called upon the nations of the world to reduce their emissions of heat-trapping greenhouse gases. The majority of scientists at the conference agreed that climate change is having a significant impact on the world's coral reefs. Other scientific panels emphasized the need to address destructive fishing practices. See

the Web site at www.nova.edu/ocean/9icrs for more information.

The **25th Climate Diagnostics and Prediction Workshop** was held 23-27 October 2000 at the International Research Institute for climate prediction (IRI) in Palisades, New York. Topics included review and assessment of recent climate anomalies—their impacts and skill of their predictions; diagnosis and prediction of global-scale modes of variability; diagnosis and prediction of regional monsoon characteristics and associated teleconnections; diagnosis and prediction of links between climate variability and extreme events; and climate impacts and applications to hydrology, human health, and government planning. Contact IRI, 61 Rt. 9W, PO Box 1000, Palisades, NY 10964 USA; fax: 1-845-680-4866; Web: iri.ldeo.columbia.edu

The International Global Atmospheric Chemistry (IGAC) Symposium **From Local to Global, From Air Pollution to Climate Change** was held 22-23 January 2001 in Bangkok, Thailand. The objective was to bring scientists together to discuss current knowledge regarding atmospheric chemistry in the tropics. Themes of the conference were: urban air pollution, land use change/management and atmospheric change, impacts of biomass burning in the tropics, and from air pollution to climate change. Contact IGAC Symposium Secretariat, SARCS Secretariat, Environment Research Institute, Chulalongkorn University, Bangkok, Thailand 10330; fax: 66-2-255-4967; Web: www.start.or.th/IGAC_Sym

The Delhi Sustainable Development Summit, “**Poverty: The Global Challenge for Governments, Industry, Scientists, and Civil Society**” was held 7-9 February 2001 in New Delhi, India. The summit brought together the leaders of government, industry, academia, research institutions, and civil society as well as leaders from bilateral and multilateral organizations involved in development-related activities to discuss two major challenges: 1) major damage to the environment and the earth's natural resources including the threat of climate change, and 2) the continued existence of poverty in several parts of the globe with an estimated number of 2.8 billion people living at incomes below \$2/day. Both of these challenges underline the importance of all countries in the world pursuing the goal of sustainable development. For further details, contact Ms. Sangeeta Singh, TERI, Darbari Seth Block, Habitat Place, Lodhi Road, New Delhi 110003, India; fax: 91-11-468-2144; email: ssingh@teri.res.in; Web: teriin.org/dsds

Upcoming Meetings

An international conference on **Coastal Cities, Towns/Villages of the Azov-Black Seas Region: Conjointly toward Sustainable Development** will be held *12-16 March 2001* in Sevastopol, Ukraine. The main conference goal is to generate suggestions on how Azov and Black Sea coastal cities, towns, and villages can move toward sustainable development. Topics will include: methods of identification and evaluation of sustainable development, connections between socio-economical and environmental problems, and effective cooperation of different sectors towards sustainable development. Mayors, municipal managers, researchers, scientists, NGO leaders, and anyone working for a transition to worldwide sustainable development should attend. For more information, contact Dr. N.V. Shadrin, IBSS, 2, Nakhimov Ave., Sevastopol, 99011, Ukraine; email: shadrn@fossil.ukrcom.sebastopol.ua; tel: 38-0692-573731.

The **Hemispheric Conference on Vulnerability Reduction of Trade Corridors to Socio-Natural Disasters** will be held *26-28 March 2001* in Mendoza, Argentina. This conference will bring together specialists from agriculture, energy, transportation, development, socio-natural hazard and risk management, and international finance representing both the public and private sectors. Specialists will discuss current vulnerability issues related to the infrastructure and production capability of the agriculture, energy, and transportation sectors in the context of trade corridors and will also prepare agendas for training, research, technology transfer and technical assistance for pre-investment studies to reduce natural disasters. By the end of the conference, the socio-natural hazard and risk management specialists will have a greater appreciation of the development plans and perceived natural hazard vulnerability of the three sectors in the context of trade corridors. Contact Laura Acquaviva, TCC Secretariat; phone: 54-261-496-3791; fax: 54-261-452-5378; email: lauacqua@cpsarg.com; internet: www.transport-americas.org/events-english.htm

The **National Symposium on Mitigating Severe Weather Impacts Design for Disaster Reduction** will be held *31 March-5 April 2001* in Tulsa, Oklahoma. This symposium will address the issues of severe weather impacts on society, best methods to mitigate disasters and new technologies for disseminating information and warnings. Anticipated topics will range from severe storms, extreme temperature, ice, lightning, hail, fire and

wind damage, flooding, drought, water supply and energy. The symposium will bring together stakeholder organizations to help develop strategies to improve the safety and well being of society before a natural hazard becomes a disaster. Participants will include private industry, associations, city officials, city planners, community developers, lawmakers, engineers, architects, energy industry, government agencies, tribal governments, flood plain managers, emergency managers, and the general public and academia. For more information, contact Cindy Ward, Manager of Special Projects, International Center for Natural Hazards and Disaster Research, University of Oklahoma, 710 Asp Ave., Suite 8, Norman, OK 73069 USA; tel: 1-405-447-8418; fax: 405-447-8455; email: cward@ou.edu

The XXIIth Global Warming International Conference & Expo will be held *8-11 April 2001* in Cambridge, United Kingdom. The overview of the conference is "Kyoto Compliance Review." Themes include: global warming and climate change, climate history and climate future, human health in a changing climate, the ocean and global warming, global and regional natural resource management, natural resource management and carbon budget, strategies for mitigation of greenhouse gas emissions, international law and policy making, and sustainable environment and health for the 21st century. Contact GWXII International Conference Program Committee, c/o the Global Warming International Center, 22W381 75th St., Naperville IL 60565 USA; tel: 1-630-910-1551 fax: 1-630-910-1561; email: gw12@globalwarming.net; Web: GlobalWarming.net

The 19th European Regional Conference: Sustainable Use of Land & Water will be held *4-8 June 2001* in Brno and Prague, Czech Republic. The conference will focus on the problems of sustainable development in Europe. Participants from non-European countries will be given an opportunity to contribute to the conference. This conference is open to anybody from any part of the world. It intends to be a multidisciplinary meeting, not a purely scientific one. The conference will be a gathering of professionals who are involved in sustainable use of land and water. A special focus is on developing new East-West relations within Europe (in its broadest geographical sense) and beyond. The three main sub-topics are: minimization of impacts of extreme hydrological events in Europe, exploitation of irrigation and drainage systems, and principles of water management and agricultural policies of the European Union. Early registration is due by 31 March 2001. Contact Kongresove centrum Brno a.s., attn. Ing. Stanislav Novak, P.O.B. 22, Vystaviste 1, 647 00 Brno, Czech Republic; tel: 420-5-4115-8601; fax: 420-5-4321-1221; email: snovak@bv.vz; Web: www.vumop.tel.cz

A **Communications Workshop** involving environment and health communications experts from the Caribbean, including international and regional intergovernmental agencies operating in the Caribbean, is tentatively scheduled for *5-8 June 2001* in Antigua. Journalists are expected to play a role in examining current strategies to foster greater awareness of environment and health issues in the Caribbean. The conference would benefit international journalists and communications specialists. For more information, contact Wesley Gibbings, Communications Consultant, Caribbean Environmental Health Institute, PO Box 1111, Castries, St. Lucia; tel: 758-452-2501; email: wgibbings@yahoo.com

The 10th Congress of the Federation of International Studies on Latin American and the Caribbean will be held *26-29 June 2001* in Moscow, Russia. The congress will include a section on natural disaster vulnerability of Latin American urban settlements, with sessions on: vulnerability and poverty; past experiences—earthquakes, volcanic eruptions, hurricanes and natural catastrophes from a historical perspective; pre-Columbian and colonial settlements in the face of natural catastrophes; and liberalism, market and environmental degradation related to increased vulnerability. For more information, contact INCIHUSA-CRICYT, CC 131 (5500) Mendoza, Argentina; fax: 54-261-428-7370; email: jeferna@lab.cricyt.edu.ar or gascon@lab.cricyt.edu.ar; Web (in Spanish): www.cricyt.edu.ar/congresos/fuealc.htm

The International Association for Meteorology and Atmospheric Sciences (IAMAS) Assembly will take place *10-18 July 2001* in Innsbruck, Austria. The assembly is structured around 11 major themes: climate and climate change, climate variability, land-surface interactions, atmospheric radiation, clouds and precipitation, weather systems, atmospheric chemistry, middle atmosphere (stratosphere) dynamics, middle atmosphere (stratosphere) chemistry, planetary atmosphere and their evolution, and observing systems and data assimilation. There will also be two special symposia, the first of which is a report from members of the Working Group I of the Intergovernmental Panel for Climate Change (IPCC) on results leading to the Third Assessment Report. The second symposium is a joint venture between IAMAS and the International Association of Hydrology (IAHS) highlighting the assessment of rainfall from convective cloud systems. Contact the Conference Secretariat, IAMAS 2001, c/o PCO Tyrol Congress Innsbruck GmbH, Rennweg 3, A-6020 Innsbruck, Austria; fax: 43-512-575-607; tel: 43-512-575-600; email: IAMAS@congress-innsbruck.at; Web: meteo.uibk.ac.at/IAMAS2001 or iamas.org

2001 International Conference on Disaster Management will be held *6-10 August 2001* in Orlando, Florida, USA. This conference will bring together the many disciplines involved in both natural and man-made disasters to encourage a cross-pollination of ideas and techniques. This sharing of ideas and experiences across disciplines, disaster types and continents will help lead to important innovations in disaster management. The conference will emphasize response and recovery lessons learned by professionals involved in disasters around the world, state-of-the-art programs and strategies worthy of emulation, and new ideas being tested or considered. For registration information or to submit an abstract, contact the International Conference on Disaster Management, 2952 Wellington Circle, Tallahassee, FL 32308 USA; tel: 1-850-906-9221; fax: 1-850-906-9221; or visit the web at www.Disastermeeting.com

The **2001 Open Meeting of the Human Dimensions of Global Environmental Change Research Community** will take place *6-8 October 2001* in Rio de Janeiro, Brazil. Themes of the meeting will address the challenges of integration in human dimensions research across disciplines, across hemispheres, and across the science/policy interface. Urban sustainability, vulnerability, and poverty and the environment will also be addressed. One plenary talk will discuss the climate change issue in the post-Kyoto era and the implications for human dimensions research. There will also be a large number of sessions devoted to the presentation of research on the human dimensions of global environmental change, including topics such as land use and land cover change, sustainable development, integrated assessment, environment and health, environmental and ecological economics and the science/policy interface. The Committee seeks the participation of researchers from a broad range of disciplines, especially researchers from developing countries and young researchers, for whom efforts will be made to provide financial support. The deadline for abstract submission is 29 March 2001. See the Web site at sedac.ciesin.org/openmeeting/ or contact the Interamerican Institute for Global Change Research, Av. dos Astronautas, 1758 CEP 12227-010 São José dos Campos São Paulo, Brazil; fax: 55-12-341-4410; email: open.meeting@ciesin.org

The **9th International Conference on the Conservation and Management of Lakes** will be held *11-16 November 2001* in Otsu, Shiga, Japan. This year's conference theme is "Partnerships for Sustainable Life in Lake Environments: Making Global Freshwater Mandates Work." Conference attendees will have a chance to create and strengthen partnerships among people working on lakes and reservoirs and other

freshwater issues of local to global significance, including climate change. The conference aims to attract people working in many fields from various regions to participate in discussions on how lifestyles and industry structure should be changed to build a sustainable society. Paper submission deadline is 31 March 2001. Contact the Conference Secretariat, 9th International Conference on the Conservation and Management of Lakes, c/o Shiga Prefectural Government, 4-1-1 Kyomachi, Otsu, Shiga 520-8577, Japan; tel: 81-77-528-3466; fax: 81-77-528-4849; email: info@biwako2001.com; Web: www.biwako2001.com

The **First Intergovernmental Review Meeting on the Implementation of the Global Programme of Action (GPA) for the Protection of the Marine Environment from Land-based Activities** will convene *19-23 November 2001* in Montreal, Canada. The GPA aims at addressing major threats to the health, productivity and biodiversity of the marine and coastal environment resulting from human activities on land. The GPA recommends an integrated, multi-sectoral approach and recognizes the need for serious commitment and preventive action at all levels. The specific objectives of the meeting include: review progress on implementation of GPA at all levels; review results of scientific assessments regarding land-based impacts upon the marine environment; review coordination and collaboration among regional and global organizations and institutions; and consider the need for international rules, recommended practices, and procedures. For more information, contact the UNEP/GPA Coordination Office, PO Box 16227, 2500 BE, The Hague, the Netherlands; email: gpa@unep.nl; Web: www.gpa.unep.org

An international symposium, **Rural Community Interaction and Workshop on Alternative Ways to Combat Desertification: Connecting Community Action with Science and Common Sense** will be held *8-20 April 2002* in Cape Town, South Africa, as well as in selected rural communities, and Gobabeb, Namibia. Topics include: the role of regional, local and community structures in combating desertification; alternative forms of income generation; land tenure in the context of desertification; and monitoring and evaluation of land use and community development. Scientists, land managers, government and non-governmental organizations, community leaders and interested community members, young practitioners working with programs to combat desertification, and students in the environmental and development fields are all invited to participate. Recognizing the important role women play in regions affected by desertification, full participation by women, as well as men, is encouraged. Abstracts are due no later than 31 March 2001. For more information,

contact Ms. Roben Penny, Woodbine, Essex Road, Kalk Bay, 7975 Cape Town, South Africa; tel/fax: 27-21-788-1285; email: robenpen@jaywalk.com; or contact Mr. Beaumont McClure, Special Assistant for International Programs, BLM, Arizona State Office, 222 North Central Ave., Phoenix, AZ 85004 USA; tel: 602-417-9430; fax: 1-602-417-9398; Web: des2002.az.blm.gov

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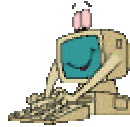
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Web sites of Interest



www.climatechangesolutions.com

An online resource center of success stories on how to reduce greenhouse gas (GHG) emissions. Provides detailed information on the economic and environmental benefits of GHG successes. In English and French.

ternandplover.unl.edu

The Tern and Plover Conservation Partnership is a collaborative effort between the University of Nebraska Cooperative Extension and several public and private partners to study and protect endangered least terns and piping plovers.

www.blakexpeditions.com

The objective of blakexpeditions is to help protect life in, on, and around the waters of the world, through the undertaking of voyages to areas of the world that are key to the planet's ecosystem, including the Antarctic, the Arctic and the great rivers. They will convey their experiences through the Web site, educational programs, and informative media.

www.anglia.ac.uk/geography/radix/

Radix (Radical Interpretations of Disaster) was inspired by the earthquakes in El Salvador and India. It is meant as a home for discussion, working papers, opinion pieces, resources, and links to help develop radical interpretations and radical solutions for all disasters in all parts of Planet Earth.

www.nilebasin.com/discus/

A new Nile Basin Society discussion forum has been launched, aimed at providing timely information to the Nile Basin countries. It is hoped it will foster a cooperative spirit between these countries.

www.sustainableenergy.org

A new Web site launched by the Sustainable Energy Coalition will help reporters and others find experts on a wide range of energy issues from renewable energy technologies to climate change.

www.worldwaterday.org

March 22 is World Water Day. Join in support by visiting the Web site maintained by the International Water and Sanitations Centre (IRC). This year the lead agency for World Water Day is the World Health Organization.

www.woza.co.za/eco

Eco has launched a new environmental new Web site in South Africa. Among other links, a southern Africa environmental encyclopedia and network directory is available (add /news/dec00/enviro12.htm to above link for encyclopedia info).

www.websites.ru

This Web site contains regional news and comments, live radio and TV channels, search tools, and a forum to discuss current events in Russia, Ex-USSR, and countries of Eastern Europe.

www.knownet.org

The KnowNet Initiative centers around using and propagating information and communication technology and remote volunteering to help more people access information and empower communities.

The NETWORK NEWSLETTER is intended for those interested and involved in climate-related impact assessment. It is hoped that it will serve to foster a growing network by keeping the community up to date on the many activities in this wide and varied field. Your involvement in supplying relevant information is essential to the success of this endeavor.

NETWORK NEWSLETTER

tel: 1-303-497-8134; fax: 1-303-497-8125
E-mail: jan@ucar.edu
www.esig.ucar.edu/newshp

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