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Monthly News Review is prepared by the Oklahoma Climatological Survey. Its purpose is to provide a summary of weather and climate news or related issues that may help guide policy-makers in the Oklahoma Weather Center. Along with weather, climate, environmental, and science issues, the review includes issues on the national and state agendas and events that affect major businesses in Oklahoma that bear some relation to demands for weather-related information. The summaries and any opinions expressed herein are those of the author, and in no way reflect positions of the Oklahoma Climatological Survey or the University of Oklahoma.

NATIONAL

FY2004 budget puts teeth into performance ratings (Government Executive 2/4/2003) – President Bush's Fiscal Year 2004 budget slashes budgets of programs deemed ineffective in a recent OMB review and rewards those deemed to be effective. This is the first budget to reflect "performance budgeting", one of the administrations five management priorities and a goal of the 1993 Government Performance and Results Act.

http://www.govexec.com/dailyfed/0203/020303a1.htm

Ridge wants states to share security burden (Government Executive 2/24/2003) – Homeland Security Secretary Tom Ridge said the nation is making progress in bolstering security, but urged the states to help share the cost burden. The federal government has undertaken security of transportation systems, border enforcement, and immigration, as well as developing a network to detect biological threats. However, problems remain integrating FEMA into homeland security. The response plan is to develop a direct line of authority from the President to the local level, with one point of contact, but local response and preparedness is a shared burden. Ridge pledged to review matching grant requirements to ease some of the problems local agencies have in acquiring equipment due to state budget deficits and wants to create a "one-stop shop" to assist local responders in seeking federal assistance.

http://www.govexec.com/dailyfed/0203/022403td1.htm

President promotes famine relief (AP/Oklahoman 2/2/2003) – President Bush is seeking a 25% increase to provide famine relief worldwide. President Bush proposed the same amount, \$1.5 billion, for famine relief in his FY 2003 budget request; Congress so far has appropriated \$850 million. In addition to the regular famine relief, President Bush requested \$100 million for a special fund for related needs, but not direct aid, and \$200 million for a special fund for Africa.

Federal government promoting white winter wheat (Oklahoman 2/2/2003) – The federal farm bill includes a \$20 million incentive program for farmers to switch from hard red wheat, favored by most winter wheat growers, to hard white wheat. The hard white wheat is used oversees for making noodles, tortillas and breads. Surveys show the U.S. could export 150 million bushels of white wheat per year, the equivalent of a typical Oklahoma crop. Many farmers have been growing red wheat for years and have been reluctant to switch, despite market trends.

Status of Legislation (newly added to report; action noted; legislation passed; legislation failed):

- Appropriations Bills: H.J. Res. 2 Omnibus Appropriations signed into law February 20.
- HR 238: "Energy Research, Development, Demonstration, and Commercial Application Act of 2003" Introduced 1/8/2003 by Rep. Boehlert; Referred to House Resources and Science committees; Referred to subcommittees; supports energy research, reduce consumption from imported sources, improve energy efficiency and supply, reduce environmental impacts, aid domestic production, and stimulate markets for advanced energy technologies.
- HR 268: "United States Weather Research Program Act of 2003" Introduced 1/8/2003 by Rep. Ehlers; Referred to House Committee on Science, Subcommittee on Environment, Technology and Standards; authorizes appropriations for the Weather Research Program for fiscal years 2004-2006; sets research priorities including forecasts of strength and landfall of hurricanes, improving forecasts of heavy precipitation and winter storms, improving flood forecasting and warning systems, improving short and medium-range (2-14 day) forecasts, and examining societal and economic impacts, including evaluating methods for delivering information to users and assessing social and economic impacts.
- HR 460: "Wildfire Prevention Act of 2003" Introduced 1/29/2003 by Rep. Hayworth; Referred to House Agriculture and Resources committees; Referred to subcommittees; establishes Institutes to conduct research on the prevention of and restoration from wildfires in the interior West.
- S 17: "Global Climate Security Act of 2003" Introduced 1/7/2003 by Sen. Daschle; Referred to Committee on Environment and Public Works; initiates federal actions to reduce risks from climate change to the economy, the environment, and quality of life (contains major provisions of climate change amendments to Energy Policy Act of 2002).
- S 139: "Climate Stewardship Act of 2003" Introduced 1/9/2003 by Sen. Lieberman; Referred to Committee on Environment and Public Works; provides for scientific research on abrupt climate change, establishes greenhouse gas emissions tradeable allowances that could be used interchangeably with passenger fuel economy standard credits, limits greenhouse gas emissions in U.S., and reduce dependence upon foreign oil.
- S 194: "National Greenhouse Gas Emissions Inventory and Registry Act of 2003" Introduced 1/17/2003 by Sen. Corzine; Referred to Committee on Environment and Public Works; establishes and inventory of greenhouse gas emissions and encourage voluntary reductions in emissions.
- S 118: "Emergency Warning Act of 2003" Introduced 1/9/2003 by Sen. Edwards; Referred to Senate Committee on Commerce, Science, and Transportation; provides for development of an all-hazards public warning system.

- S 212: "High Plains Aquifer Hydrogeologic Characterization, Mapping, Modeling and Monitoring Act" Introduced 1/23/2003 by Sen. Bingaman; Referred to Senate Committee on Energy and Natural Resources; authorizes the Secretary of the Interior to cooperate with the High Plains Aquifer States to conduct a hydrogeologic characterization, mapping, modeling and monitoring program for the aquifer (originally introduced in House in 2002). *Hearing Scheduled March 6 in Subcommittee on Water and Power*.
- HR 748: Introduced 2/12/2003 by Rep. Udall; Referred to House Committee on Resources; Comment requested from CEQ; requires Council on Environmental Quality to conduct a study on urban sprawl and smart growth.

Committee Hearing: Senate Committee on Energy and Natural Resources: Water Supply Issues in the Arid West; March 18 at 10:00 a.m. Room SD-366 of the Dirksen Senate Office Building.

AGENCY NEWS

Agency budget breakdown (Government Executive 2/3/2003) – The President's Fiscal Year 2004 budget request is now available from the Office of Management and Budget: <u>http://www.whitehouse.gov/omb/budget/fy2004/</u>. A summary is available from Government Executive Magazine (<u>http://www.govexec.com/dailyfed/0203/020303cd2.htm</u>).

NOAA FY04 budget request gets 6% increase (NOAA 2/4/2003) – NOAA's Fiscal Year 2004 budget request of \$3.3 billion in an increase of \$190 million, six percent, over the President's FY 2003 request. Programmatic themes include: environmental monitoring and prediction (\$1.6 billion), ecosystem forecasting and management (\$1 billion), climate change research, observations and services (\$296 million), infrastructure, maintenance, safety and human capital (\$248 million), homeland security (\$65 million), and energy and commerce (\$116 million). Included in the latter category is \$1.2 million for the High Impact Weather program, which includes upgrading instrument packages for the NWS cooperative observer network http://www.noaanews.noaa.gov/stories/s1089.htm

White House wants independent review of Corps projects (GovExec.com 2/7/2003) – The Bush Administration's FY 2004 budget includes language that would require an independent review of proposed projects before the Corps of Engineers could approve them. In addition, the Corps could only pursue projects that have a "high net economic or environmental return to society." Environmental groups applaud the new language, noting that the proposed Corps budget matches well with their recommendations, especially in preserving wetlands and limiting other development projects.

http://www.govexec.com/dailyfed/0203/020703cd1.htm

Commerce proposes merging technology and telecom agencies (Government Executive 2/13/2003) – The Commerce Department proposed merging their Technology Administration, the National Telecommunications and Information Administration (NTIA) and the e-commerce functions fot he International Trade Administration (ITA) into one agency. Ideas for the merger began ten years ago, and an interagency technology council, designed to better coordinate programs within Commerce, has shown how the new agency could be more effective. Industry officials quickly endorsed the move, citing the problems today with having to go to multiple agencies to discuss new initiatives. The merger better reflects the market, in which technology and communications are intertwined.

http://www.govexec.com/dailyfed/0203/021303td1.htm

NASA selects UCAR to run GLOBE program (NASA 2/28/2003) – The University Corporation for Atmospheric Research (UCAR) in Boulder, Colorado, will take over operation of the GLOBE program from NASA. GLOBE is an interagency program of educational outreach. UCAR, which was selected from 14 respondents to a Cooperative Agreement Notice, will receive \$26 million to run the program through 2008. Dr. Jack Fellows of UCAR is principal investigator.

http://www.gsfc.nasa.gov/news-release/releases/2003/h03-087.htm

EPA considering new Clean Water Rules (Government Executive 2/13/2003) – For nearly a decade, the Environmental Protection Agency has been struggling with reforming the Clean Water Act program. The program requires that total maximum daily load (TMDL) values be set by the EPA or by states for bodies of water impaired by contamination. The original rules proved costly and complex. The EPA is now reportedly considering implementing an emissions trading scheme, similar to that used successfully under the Clean Air Act. . http://www.govexec.com/dailyfed/0203/021303cdam1.htm

EPA plans new standards on evaluating cancer risks (Washington Post 3/4/2003) – The Environmental Protection Agency announced new standards on evaluating cancer risks. The standards place a higher premium on chemicals that can cause genetic damage and assesses risks according to age group. For example, children under two years of age are considered ten times the risk as adults, while children between 2 and 15 are considered three times as vulnerable. The standards have not been changed since 1986, and new scientific research has better delineated risks than the across-the-board approaches used in the earlier rules. The new standards will be open for public comment for sixty days and then undergo a review by an independent scientific advisory board.

Federal workers staying longer (Government Executive 2/20/2003) – The expected surge in federal retirements has not materialized as expected. For the last two years, retirements have fallen more than 20 percent below Office of Personnel Management projections. Reasons cited for delayed retirement are the economy, with poor performance of retirement savings plans and a decline in private-sector opportunities, longevity, hopes for buyout offers, and a renewed sense of purpose as agencies tackle homeland security issues. More than one third of the federal workforce – 38.5% - has more than 20 years in federal service, as compared to 32.3% in 1996. http://www.govexec.com/dailyfed/0203/022003b1.htm

Managers want help defining performance (Government Executive 2/27/2003) – Federal managers support linking agency budgets to performance measures, one of five management initiatives in the president's management agenda, but say they need more direction from OMB on measuring performance. In particular, managers would like more guidance on how to measure performance accurately and would like OMB to provide examples of agencies that have succeeded. Others said they would like guidelines for reporting simplified, noting inconsistencies between OMB's Program Assessment Rating Tool (PART) and requirements of the 1993 Government Performance and Results Act (GPRA), both of which require means of measuring progress. Other issues highlighted were an insufficient amount of time for examiners to conduct their reviews, delays in the fiscal year 2003 budget process, and lack of buy-in by Congress. Some argued that managers of "ineffective" programs should be replaced rather than cutting funding.

http://www.govexec.com/dailiyfed/0203/022703a2.htm

STATE / LOCAL

Brad Henry urges lawmakers to "get over it" (AP/Oklahoman 2/8/2003) – Governor Brad Henry, speaking at the Oklahoma Press Association's convention, said lawmakers need to set aside differences of politics, race, religion, rural-versus-urban, and the "Tulsa-Oklahoma City thing." The Governor said: "get over it … it's time to move on. It's time to move this state forward." Henry cited how he exceeded expectations to become governor and said it is mostly attitude; Oklahoma just has to envision the possibilities in order to realize goals.

Governor's budget adds to education, cuts other agencies (Oklahoman 2/4/2003) – Governor Henry's first budget targets cuts to compensate for an expected \$600 million shortfall, but does not provide for an across-the-board cut. In his State of the State speech, Governor Henry pointed toward \$221 million in budget reductions that will provide for a \$262 million increase in education expenditures. In addition to the cuts, Henry's budget would be supplemented with \$75 million supplemental appropriations for FY 2003 and \$154 million in revenue-generating proposals. Scott Meacham, director of the Office of State Finance, used a zero-based budgeting process to arrive at agency recommendations. Thirty-six million dollars of the savings will come from refinancing debt.

Henry budget includes tap fee (Oklahoman 2/5/2003) – Governor Henry's budget proposal includes a fifty-cent per-month fee on each user of municipal water sources. The fee would raise \$9 million per year, half of which would be spent on the state's comprehensive water planning process and half of which would be used to secure federal grants for water and wastewater infrastructure loans. Funding would be provided to the Oklahoma Water Resources Board.

Final 2004 budget figures certified (Oklahoman 2/19/2003) – The Oklahoma Board of Equalization certified final figures for 2004. The revised figures show \$4.922 billion in revenue, down \$677.6 million from fiscal year 2003 appropriations and \$330 million below current operating levels. The revised figures include a decrease of \$84.6 million resulting from sluggish corporate taxes, which have not rebounded as earlier projected. Fiscal year 2003 revenues have so far missed the estimate by 10.9%.

January revenues down, but finance chief cautiously optimistic (Oklahoman 2/12/2003) – Despite falling 17.3 percent below estimated revenues in January, Oklahoma's Office of State Finance Director Scott Meacham is not too worried. Much of the drop in revenues in January was attributable to a 3-fold increase in state income tax refunds. Meacham said more people are filing earlier this year, meaning fewer refunds will go out in later months. Gross production taxes, based on oil and gas revenues, exceeded expectations by \$4.7 million, or 18.5%. With high gas prices continuing through the next several months, this source of revenue should remain strong.

State gets federal funds to study aquifer (AP/Oklahoman 2/15/2003) – Representative Brad Carson announced \$500,000 in federal funds to study the Arbuckle-Simpson aquifer in south-central Oklahoma. The aquifer is at the center of a controversy over developing water supplies for use in Canadian County communities.

Ag groups seek new leader (Oklahoman 2/15/2003) – Agriculture associations are putting forward several candidates to replace state agriculture secretary Dennis Howard. Howard has been at-odds with the hog farm industry for much of his tenure. Most of those being promoted have been involved with agriculture organizations or lobbying over the past several years. Howard was appointed Secretary in 1995 by Governor Keating, and will remain as Commissioner of Agriculture, elected in the latter role by the Agriculture Board. Governor Henry has 45 days from his inauguration to fill all cabinet posts.

Corps of Engineers reduces staff (Oklahoman 2/5/2003) – The U.S. Army Corps of Engineers will cut 120 jobs in the Tulsa District through retirement and attrition. Savings, \$8.67 million total, will be used for overdue repairs at some of the 38 lakes it manages in Oklahoma, northern Texas, and southern Kansas. The move cuts the 11 field offices in the district to 5. Most of the affected positions are in middle and upper management.

Hog companies want state funds for odor abatement (Oklahoman 2/19/2003) – Lobbyists for the hog industry are seeking a rebate on the cost of odor abatement. The industry pays 80 cents per large animal to the state to cover costs of regulatory inspections. The lobbyists are seeking a rebate of between 25 percent and 75% of those fees for use in odor-controlling activities. State officials say that although the industry paid \$591,000 last year, oversight activities cost the state \$824,000.

Oklahoma Legislation:

HB 1038: requires hydrologic surveys before setting maximum annual yield for a groundwater basin; requires hearing before issuing permits. Died in Committee.

HB 1051: "Oklahoma Carbon Sequestration Enhancement Act"; develops plan to quantify carbon sequestration activities; creates advisory committee to Conservation Commission; identify opportunities to participate in marketing & credits. Passed House 100-0.

HB 1082 / SB 800: shell bill; "Government Reorganization Act of 2003" / "State Agency Consolidation Act of 2003". HB1082 passed House 79-20 (transferring duties from ABLE Commission to OSBI); SB 800 Died in Committee.

HB 1083: sets criteria for determining maximum annual yield for aquifers, based upon a minimum basin life of 100 years; restricts permits for use outside of counties overlaying the aquifer. Passed House 82-16.

HB 1421 / SB 304: places a moratorium on temporary groundwater permits until Water Resources Board develops rules to protect groundwater quality. HB 1421 Died in Committee; SB 304 Reported from Committee (Do Pass as Amended).

HB 1512: "Oklahoma Emergency Management Act of 2003" – sets requirements for emergency management offices and personnel; requires emergency preparedness plans; defines makeup of advisory councils; defines hazard mitigation and management programs. Passed House 101-0.

HB 1610: creates continuing, revolving funds in Corporation Commission to respond to emergency situations of leaking storage tanks; funds received from federal government, state match, and private sources; expenditures recovered from entity responsible for tank. Died in Committee.

HB 1626: commissions a study by the Joint Electric Utility Task Force to examine issues relating to restructuring the electric utility industry; bill appears identical to one submitted in 1997 session (deadlines reflect milestones in 1997-2002). Died in Committee.

HB 1636: "Oklahoma Net Metering Act"; establishes criteria for net metering (the sale of excess electricity from small energy systems to utilities). Died in Committee.

HB 1660 / SB 222: exempts farm ponds, wetlands not under federal jurisdiction, and waste treatment systems from "waters of the state" definition, which defines bodies covered in Clean Water Act. HB 1660 Died in Committee; SB 222 Died in Committee.

HB 1679: creates Statewide Water Policy Planning Commission; moratorium on sale of waters outside of Oklahoma. Reported from Committee (Do Pass, amended by committee substitute).

HB 1728: requires all environmental agencies to create Water Quality Standards Implementation plans with review every 3 years; adds regulations on nonpoint sources for high quality or sensitive water supplies; encourages the development of studies and public education. Died in Committee.

HB 1763: creates Agricultural Policy Legislative Advisory Committee to offer recommendations to increase the viability of agriculture in Oklahoma. Died in Committee.

HJR 1024: Amend Oklahoma Constitution to authorize a program for beneficial utilization and protection of natural resources; dedicates revenues for programs, mitigation, and liability. Reported from Committee (Do Pass).

SB 309: Prohibits new or expanding poultry feeding operations within a one-hundred year flood plain or within one mile of state waters. Reported from Committee (Do Pass as Amended).

SB 316: Amends Oklahoma Water Quality Standards; provides federal standards shall be used for groundwater until OWRB creates such standards. Died in Committee.

SB 342: Funding for the Oklahoma Wind Power Initiative at EVAC. Passed Senate 42-0.

SB 387: Requires OWRB to do a hydrologic study of groundwater and its relationship to surface waters before issuing permits; to not exceed a one-hundred year life of the basin; prohibits permits for use outside of basin in most cases. Died in Committee.

SB 429: Tax credit for new ethanol production facilities. Passed Senate 43-0.

SB 547: Modifies appointment of state climatologist; requires the Oklahoma Climatological Survey to maintain and operate the Oklahoma Mesonetwork. Passed Senate 41-0.

SB 556: Creates Oklahoma Telecommunications Authority to "plan, promote, coordinate and develop a communications infrastructure that will provide a seamless delivery system for voice, data and video capacity throughout the state". Reported from Committee (Do Pass as Amended).

SJR 8: Voluntary goals to promote renewable energy; creates the Renewable Energy Panel. Passed Senate 35-11.

BUSINESS / ECONOMY

Greenspan urges caution on budget (AP/Oklahoman 2/12/2003) – Federal Reserve Chairman Alan Greenspan testified to Congress that the economy is poised for a significant rebound, once uncertainty surrounding Iraq has passed. Greenspan echoed earlier concerns about soaring budget deficits, and suggested that the economy does not need a further stimulus package that would accelerate deficit spending. His worries are compounded by longer-term impacts of the coming retirement of the baby boom generation and demands that will place upon the federal budget.

Gas reserves headed for all-time low (Oklahoman 2/8/2003) – Just a few months ago, people were talking about the glut of natural gas. Now, reserves appear to be headed toward their lowest level on record. A cold winter, especially in the northeast, and low production have shrunk the near-capacity 3.2 trillion cubic feet of natural gas in storage to 1.5 trillion cubic feet. With projections of continued cold weather in the weeks ahead, analysts expect gas reserves to decline to about 600 billion cubic feet by the end of winter. Demand has driven prices over \$5 per thousand cubic feet, and prices should hold in the range of \$4 to \$.50 throughout the spring and summer. Some industry experts are even concerned that getting below the previous low of 700 billion cubic feet problems in extracting gas from the underground caverns, due to a lack of pressure.

February retail sales snowed under (AP/Oklahoman 2/25/2003) – The East Coast snowstorm at Presidents Day cut into already-weak sales, according to major retailers. Retailers were looking toward Presidents Day sales to help raise revenues, but the snowstorm shut down much of their traffic during the critical sales period.

OG&E releases bid request for wind power (Oklahoman 2/20/2003) – Oklahoma Gas and Electric released a request for proposals to build a 50-megawatt wind power generator in Oklahoma. Power from the system would be supplied to customers at a 'green energy' pricing surcharge. It is not yet clear if customers who opt for the renewable energy choice would no longer be subject to the fuel cost adjustment fee, which reflects price variability of more traditional gas and coal sources of energy. In addition to the OG&E request, Western Farmers Electric Cooperative has announced a 64-megawatt wind energy project near Lawton and Oklahoma Municipal Power Authority is working on a 50-megawatt project.

WEATHER

Drought worsens in the West (NOAA 2/11/2003) – Several states in the Great Plains and Western United States are experiencing one of the worst droughts in more than a century. Drought forecasts indicate that precipitation deficits are likely to continue, especially across the northern states. Last summer, more than one third of the U.S. was classified as severe to extreme drought conditions. Already this year, one fifth of the nation is classified as severe drought. Colorado recorded its driest year on record last year, and Nebraska, Wyoming and Nevada were all in the fifth percentile. Drought conditions are updated weekly at the Drought Monitor (http://www.drought.unl.edu/dm/monitor.html). The Climate Prediction Center issues monthly outlooks (http://www.noaanews.noaa.gov/stories/s1094.htm

El Nino shows signs of weakening (NOAA 2/6/2003) – Temperature trends in the equatorial Pacific Ocean and computer models indicate that El Nino is beginning to weaken, with nearnormal ocean temperatures expected to return during May through October. Jim Laver, director of the Climate Prediction Center, said impacts were similar to previous El Nino events, but not as intense. Laver attributed increased storm activity in the southern and eastern United States and above-normal temperatures and below-normal precipitation across the northern U.S. to El Nino, although noting frequent cold-air intrusions during the winter. California has not received as much rainfall as associated with past events, but most rainfall comes in the January-March timeframe so the book is not yet closed on the impacts of the current event. http://www.noaanews.noaa.gov/stories/s1091.htm

Disaster declared for December 2002 ice storm (Oklahoman 2/5/2003) – Fourteen Oklahoma counties were declared disaster areas for an ice storm that hit the area on December 3-4, 2002. The event caused \$4.8 million in damages, with most local governmental costs attributed to road and bridge repair, debris removal, and overtime pay. Several rural electric cooperatives sustained damage to power lines and poles [Ed. Note: The Oklahoma Climatological Survey prepared an Event Summary of the Icestorm (Derek Arndt, author). For the summary and the previous event (January 2002; Gary McManus author) see http://climate.ocs.ou.edu/event_summary.html.]

NASA releases on-line storm tracks site (NASA 2/11/2003) – A new website allows people to look up extra-tropical storm tracks for any selected season between 1961 and 1998. The atlas was developed for use by climatologists, but NASA discovered a much wider audience had an interest in the product. Maps include frequency, intensity, individual storm tracks, based on the NCEP Reanalysis Project. The website is: <u>http://www.giss.nasa.gov/data/stormtracks/</u>. http://www.gsfc.nasa.gov/news-release/releases/2003/03-12.htm

Snowpack study underway (NOAA 2/10/2003) – Scientists and students from six federal agencies and many universities will undertake a study of snowpack formation in the Rockies. The 2003 Cold Land Process Experiment (CLPX) runs from February 19-25 and March 25-31 in the central Rocky Mountains. Direct snow depth measurements will be compared to airborne and spaceborne sensors. The goals of the experiment are to improve seasonal water supply and flood forecasts in the area and to validate liquid-equivalent estimates from multiple sensors. http://www.noaanews.noaa.gov/stories/s1092.htm

CLIMATE

National Academy of Sciences critical of climate change plan (National Academies 2/25/2003) – A review of the Bush Administration's climate change strategic plan revealed major flaws, according to a review by the National Research Council. The review, requested by the Bush Administration, concludes that the U.S. Climate Change Science Program's strategic plan "lacks a clear guiding vision and does not sufficiently meet the needs of decision-makers." The report also notes that promised funds for research initiatives are not forthcoming in the FY2004 budget request. The report calls for clear articulation of goals and priorities, means of measuring progress, clear timetables, and an assessment of whether current research efforts are capable of meeting the goals. The plan focuses too heavily on U.S. activities, neglecting the importance of international cooperation, and insufficient focus on studying the effects of climate change on societies and ecosystems, according to the review panel. In addition, management systems may not be adequate to ensure inter-agency cooperation toward the goals. Despite these criticisms, the report endorsed the focus on applied research in support of decision-making. http://www.nationalacademies.org/

States target greenhouse gases (Stateline 2/13/2003) – Some states are moving forward with regulations on utility emissions or carbon dioxide from vehicles. California, New York, and Massachusetts are some of the states that recently implemented or proposed measures to reduce pollutants. The moves fill a void in President Bush's "Clear Skies" initiative, which governs emissions of mercury, sulfur dioxide and nitrogen oxide but does not cover carbon dioxide. http://www.stateline.org/story.do;jsessionid=amsld69rf1?storyId=287775

Ocean temperature shifts may precede 'megadroughts' (USGS 2/14/2003) – In a forthcoming study in Geophysical Research Letters, researchers show that multi-decadal droughts across the Western United States and Great Plains are associated with cold waters in the tropical Pacific Ocean and warm waters in the North Atlantic. The study uses 750 years of tree ring data to identify long-term droughts, such as occurred in the 1500s and the 1950s. Precipitation patterns, deduced from the tree rings, were then compared to ocean temperatures during the last century. The researchers found oscillations in precipitation that last between 40 and 70 years. These oscillations are not cyclical; hey are the result of complex linkages between seasonal precipitation and ocean temperatures. However, when the pattern of a cold tropical Pacific and warm North Atlantic coincide, these individual point oscillations synchronize, resulting in "megadroughts". Similar conditions have been in place since 1998, which coincides with the onset of the current regional drought.

http://www.usgs.gov/public/press/public_affairs/press_releases/pr1727m.html

Asian pollution changing climate (National Geographic 2/10/2003) – Aerosols, primarily from burning wood or coal, are being transported eastward from industrializing centers in Asia. The particulates are components in the production of acid rain, and also act to cool the Earth's surface. The cooling in downwind areas creates temperature gradients that may increase the severity of storms.

http://news.nationalgeographic.com/news/2003/02/0210_030210_TVdust.html

ENVIRONMENT

Belgium home to world's dirtiest water (New Scientist 3/5/2003) – The United Nation's first World Water Development Report lists Belgium last among countries in rankings of water quality. India, Jordan, and nine African countries make up the remainder of the "dirty dozen". Finland, Canada, and New Zealand have the world's cleanest waters, with Britain fourth, the United States 12th and Australia the 20th cleanest. Germany is the second-dirtiest of European countries, ranking 57th cleanest overall and well above the median. The report is available from UNESCO: <u>http://www.unesco.org/water/wwap/wwdr/</u>.

http://www.newscientist.com/news/news.jsp?id=ns99993458

U.N. report shows hunger declining (New Scientist 3/4/2003) – The United Nations Food and Agriculture Organization projects that chronic hunger will decline from 776 million people now to 440 million in 2030. In order to meet this projection, global grain production will need to increase 1.2% annually, which is 17% greater than the 1990s average. The FAO thinks that is a realistic prospect, but that rich countries will need to export more. Other experts are skeptical, noting declining growth rates in grain production since the 1980s. While hunger overall is expected to increase, the FAO notes that Africa and south Asia are not likely to improve as much as poverty will continue in those regions.

http://www.newscientist.com/news/news.jsp?id=ns99993457

Arkansas approves water legislation (AP 2/21/2003) – The Arkansas House of Representatives approved legislation that would give sanitation authorities power to undertake public works projects, including collecting and disposing of wastewater and sludge, including the power of eminent domain. The legislation is aimed at providing authority for cleaning up sources of phosphorus in eastern Arkansas, which is central to ongoing negotiations and litigation over pollution in eastern Oklahoma rivers. The legislation heads to the state Senate.

City purchasing conservation easements (AP/Oklahoman 2/4/2003) – The Tulsa Metropolitan Utility Authority has applied for \$1.3 million in federal aid to purchase conservation easements along Spavinaw Creek, which feeds into Lake Eucha, one of Tulsa's primary water sources. The easements grant restrictions on future development of the land, including prohibiting hog or poultry operations, and allow a 100-foot buffer of natural vegetation along the banks. Landowners receive a one-time tax deduction equal to the lost value on their property.

Groundwater withdrawals unsettling in Arizona (USGS 2/24/2003) – The U.S. Geological Survey's satellite mapping revealed that the earth has subsided as much as four inches in parts of the Mojave Desert in southern California. The subsidence, which occurred between 1992 and 1999, is attributed to declining water levels and is described in some areas a "significant." Lead scientist Michelle Sneed noted that compaction of the aquifer may be permanent. Water levels in the area declined more than 100 feet between the 1950s and 1990s.

http://www.usgs.gov/public/press/public_affairs/press_releases/pr1729m.html

SCIENCE & TECHNOLOGY

White House adviser urges funding equality for all sciences (Government Executive 2/27/2003) – Office of Science and Technology Policy Director John Marburger testified to the House Appropriations subcommittee that the President's budget is moving toward a balance in funding between the physical and life sciences. In the 1990s, Congress doubled funding for the National Institutes of Health, which outpaced increases for the National Science Foundation, the Energy Department, and other agencies involved in Research and Development. President Bush's 2004 budget request includes a three percent increase to NSF and an additional \$55 million to Energy's science programs. Earlier this month, the administration was criticized for not increasing funding for physical sciences, and several lawmakers said they would seek additional increases during the appropriations process.

http://www.govexec.com/dailyfed/0203/022703td1.htm

Administration scrutinizes IT spending (Government Executive 2/4/2003) – New OMB rules would require agencies to justify their IT expenditures. The Office of Management and Budget cited few information-technology initiatives over the last several years that have "significantly improved service to the taxpayer." The new rules would require each agency to submit explanations for spending on their IT projects. Combined, IT expenditures account for \$59 billion of the fiscal year 2004 budget.

http://www.govexec.com/dailyfed/0203/020303td1.htm

Published Researchers should share data (National Academies 2/7/2003) – Authors of scientific papers, whether working in academia, government, or a commercial enterprise, should allow unrestricted access to data and materials integral to their published findings to support further research, says a report for the National Academies' Board on Life Sciences. Universal adherence to a principle of full disclosure will promote cooperation in the scientific community, maintain the value of publication, and promote the progress of science, according to the report. http://www.nap.edu/catalog/10613.html?onpi_topnews_020703

Farewell Pioneer 10 (NASA 2/25/2003) – After more than thirty years, NASA has officially said goodbye to Pioneer 10. The spacecraft was launched on March 2, 1972, and became the first manmade object to travel beyond the solar system. The spacecraft was designed for a 21-month journey to study Jupiter, but continued to communicate until its last, very weak signal was received on January 22 of this year. The spacecraft traveled at a speed of 32,400 miles per hour, passing the moon in just 11 hours and Mars in twelve weeks. It accelerated to a speed of 82,000 mph as it passed Jupiter in December 1973 and passed Pluto's orbit in 1983. Although its science mission ended in March 1997, NASA continued to track its location as long as possible. At last contact, Pioneer 10 was 7.6 billion miles from Earth. It's course will take it to the red star Aldebaran in the constellation Taurus, with an expected arrival in about two million years. Pioneer 10 carries a gold plaque that describes the human race. More information on Pioneer 10 is at: <u>http://nssdc.gsfc.nasa.gov/nmc/tmp/1972-012A.html</u>.

http://nssdc.gsfc.nasa.gov/planetary/text/pion10_pr_20030225.txt