

# MONTHLY NEWS REVIEW

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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

**Budget reconciliation** (National Journal 4/16/2003) – The House and Senate have been unable to come to terms on a budget reconciliation bill that would accommodate a tax cut. Earlier, the Senate passed a bill that limited the tax cut to \$350 billion, while the House passed the president's full request of \$726 billion. After much parliamentary maneuvering, it appears that absolutely nothing has been resolved. While legislative leaders planned to work out the differences in conference, the conference committee chairman, Charles Grassley, had cut a deal with Republican holdouts on the larger tax cuts to keep the conference bill to \$350 million. At that point, House Speaker Dennis Hastert, said that the House and Senate leadership had a deal and that the conference chairman was irrelevant. In the end, the budget bills had little to do with reconciliation.

<http://www.govexec.com/dailyfed/0403/041603bb.htm>

**Energy bill debate heats up again** (AP/Oklahoman 4/12/2003) – The House of Representatives approved an energy bill that includes \$19 billion in tax breaks for energy companies and power producers and includes language that opens up oil exploration in parts of the Arctic National Wildlife Refuge (ANWR). In the budget reconciliation debate, the Senate rejected a provision for ANWR drilling. Also, the incentives in the Senate's tax measure are focused more on renewable energy, while the House energy bill focuses more on fossil fuels. The House also rejected a proposal that would increase fuel efficiency standards for sport utility vehicles and omitted continuation of the \$2,000 tax credit for hybrid vehicles. The Senate is expected to take up energy legislation in May.

**Solar power added to energy bill** (Government Executive 4/17/2003) – An amendment to the Energy Policy Act of 2003 (HR 6) provides \$263 million over the next five years to install photovoltaic solar electrical systems in federal buildings. The legislation requires installation of 20,000 systems by 2010.

<http://www.govexec.com/dailyfed/0403/041703t1.htm>

**State and local officials question homeland security price tag** (National Journal 4/21/2003) – State and local officials are finding a way to manage homeland security preparedness with limited resources. When the national alert level was raised to orange in March, St. Louis officials checked local information sources more frequently rather than paying for police overtime. The U.S. Conference of Mayors estimates that cities spend \$70 million more on homeland security every week when the threat level is changed from Yellow to Orange. Some officials worry that the money isn't being well-spent. Cities that are more attractive targets claim the need for federal assistance, and are among the least inclined to look at cost-benefit analyses of efforts. Both the Office of Management and Budget and the General Accounting Office are looking at cost-benefit analyses for homeland security, and by summer may have some advice to give to cities and states. However, cost-benefit analyses in security are difficult. H. Keith Florig, a risk-management expert at Carnegie Mellon University, calls it "the Jell-O problem", in which changing security structures always leave a vulnerability to which terrorists will gravitate, much like "squishing Jell-O in your hand." Academics are devising models of terrorist groups, likely targets, and weapons to assist in risk management decisions.

<http://www.govexec.com/dailyfed/0403/042103nj1.htm>

**Senator seeks flexibility for first responders** (Congress Daily 4/28/2003) – Senator Susan Collins (R-ME) says that the current structure for funding state and local preparedness is too restrictive. Present practices require that every state must spend the same percentage on each category – 70% for equipment, 18% for exercises, 7% for planning, and 5% on training. Collins is sponsoring two bills designed to increase flexibility and coordination with state and local officials. One bill would provide more discretion to how state’s money is allocated and the other would move the Office of Domestic Preparedness to directly under the Homeland Security Director. Both bills have the administration’s backing, according to a committee spokesman. Director Ridge has also sought to change the funding formula from strictly population-based to reflect additional measures of vulnerability or likelihood of attack. Senator Collins’ colleague, Olympia Snowe (R-ME) also introduced legislation that would allow jurisdictions to use up to 20 percent of equipment funds for training personnel on use of that equipment and would allow states to use funds for planning and support of smaller communities.

<http://www.govexec.com/dailyfed/0403/042803cdam1.htm>

**Homeland tech to specify research areas** (National Journal’s Technology Daily 4/22/2003) – Charles McQueary, who is in charge of science and technology at the Homeland Security Department, expects to announce new opportunities for research. Homeland Security has requested reprogramming \$200 million from a fiscal 2003 Defense Department appropriation to use on radiological, chemical, and systems engineering areas. The department is open to new ideas, but wants to see how proposals fit within the larger system of national security.

<http://www.govexec.com/dailyfed/0403/042203td1.htm>

**‘Homeland Security’ used to justify budget requests** (National Journal 4/7/2003) – Nearly every fiscal year 2004 budget request is related in some way to Homeland Security, according to House Appropriations Committee Chairman Bill Young (R-FL). Senator John McCain (R-AZ) likens the bandwagon effect to “war profiteering.” Rep. Harold Rogers (R-KY), chairman of the House Appropriations Homeland Security Subcommittee, noted that the panel has a “large and undefined mission” when determining what to fund. At the heart of the issue is how funding in the supplemental appropriations bill will be spent, particularly as to whether funding will be directed to projects or locations specified by Congress or whether the administration will have flexibility in determining what projects to fund. The White House views these as ‘Congressional earmarks’ while Congress views them as necessary provisions as the body that authorizes expenditures. “We didn’t just create huge slush funds for agencies,” remarked Chairman Young.

<http://www.govexec.com/dailyfed/0403/040703nj2.htm>

**Homeland Security allots \$100 million for preparedness** (Government Executive 4/8/2003) – The Homeland Security Department announced the availability of \$100 million for emergency preparedness in major U.S. cities, on top of previous funds. The funds can be used for improving the ability of local governments to prepare for and respond to potential threats, including terrorist activities. In addition, the emergency preparedness and response directorate will be divided into four disciplines: preparedness, mitigation, response, and recovery, along the lines of traditional emergency management structures. Other initiatives include the National Incident Management System (NIMS) to coordinate response capabilities among various governmental arenas and \$200 million to update the national flood-mapping system.

<http://www.govexec.com/dailyfed/0403/040803td2.htm>

**Power shifts to executive branch** (National Journal 4/7/2003) – Nearly ten years after Bill Clinton argued that he was still relevant, the pendulum of power has swung back to the executive branch. Led by an assertive president, the executive branch has dominated the Congressional agenda, setting the tone for what is to be debated. Increased presidential power is more than a result of the usual wartime shift, it is symptomatic of an administration willing to take initiatives and a Congress failing to exercise the powers given to it by the Constitution. While congressmen have been critical of administration proposals, it has not aggressively exercised its oversight authority. According to James Lindsay with the Brookings Institution, “the imperial presidency may have gone into remission after Vietnam, but it didn’t die.” Historians and political scientists note the constant flow of power between the two branches, with presidential authority greatest during the height of the cold war in the 1950s and 1960s and then Congress reasserting itself after Vietnam and Watergate. Members of Congress also point to the persistent ‘stonewalling’ of administration officials, noting they have often resorted to threats, subpoenas, and even lawsuits to get officials to testify.

<http://www.govexec.com/dailyfed/0403/040703nj1.htm>

**‘Fast Track’ reorganization authority** (Government Executive 4/3/2003) – House Government Reform Committee Chairman Tom Davis (R-VA) is pushing to reinstate the president’s authority to reorganize federal agencies. The provision, established in the 1932 Economy Act, granted executive branch officials broad powers to reorganize agencies while limiting debate in Congress. President Reagan let the authority lapse in 1984. According to OMB officials, without fast-track authority, presidents lack the “ability to bring sense to the chaos that is the federal government.” The National Commission on the Public Service endorsed fast-track authority in its January 7 report, and it is a key component of President Bush’s management agenda. Federal union leaders express concerns about the ability for employees and other government stakeholders to provide input, which is usually channeled through committee hearings. As an example, Colleen Kelley, president of the National Treasury Employees Union, cites the recent creation of the Homeland Security Department. President Bush’s proposal did not include whistleblower protections, a provision that was only added after lengthy congressional debate. Comptroller General David Walker suggested that perhaps separate laws could suffice, in which substantive reorganizations require full congressional input and debate, while transferring agencies to new organizational structures may not. [*Note: The article notes that fast-track authority was in place from 1932-1984 ... a period that was not noted for restraint on the growth of bureaucracy, and in fact necessitated civil service reforms (1978) to allow the president more control of agencies.*]

<http://www.govexec.com/dailyfed/0403/040303a1.htm>

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

- HR 6 – “Energy Policy Act of 2003” – Introduced 4/7/2003 by Rep. Tauzin [LA-3]; passed House 247-175 on 4/11/2003; Placed on Senate Legislative Calendar 5/5/2003; Omnibus energy legislation including: Division A – Energy and Commerce - (Title I) Energy Conservation, (Title II) Oil and Gas, (Title III) Hydroelectric, (Title IV) Nuclear Matters, (Title V) Vehicles and Fuels, (Title VI) Electricity, (Title VII) Motor Fuels, (Title VIII) Automobile Efficiency, (Title IV); Division B – Science, Research and Development – Energy Efficiency, Distributed Energy and Electric Energy Systems, Renewable Energy, Nuclear Energy, Fossil Energy, Science, Energy and Environment, and Management. (Present bill stands at 780 pages).
- HR 135 – Introduced by Rep. Linder [GA-7] on 1/7/2003; Referred to House (1) Resources and (2) Transportation and Infrastructure Committees; Hearings held in Resources Subcommittee on Water and Power (4/1/2003) and forwarded to Full Committee by Voice Vote; Still in Transportation and Infrastructure Subcommittee on Water Resources and Environment with Hearings Held 5/7/2003; Establishes the “Twenty-First Century Water Commission” to study and develop recommendations for a comprehensive water strategy to address future water needs.
- HR 238: “Energy Research, Development, Demonstration, and Commercial Application Act of 2003” – Introduced 1/8/2003 by Rep. Boehlert [NY-24]; 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 [MI-3]; 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 [AZ-5]; 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.
- HR 748: - Introduced 2/12/2003 by Rep. Udall [CO-2]; 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.

- HR 1346 – Introduced in House 3/19/2003 by Rep. Turner [OH-3]; Referred to House Committee on Government Reform and Reported favorably (3/20/2003); Referred to House Committee on Transportation and Infrastructure; encourages Federal procurement policies that enhance energy efficiency and reduce dependency on non-renewable energy sources.
- S 17: “Global Climate Security Act of 2003” – Introduced 1/7/2003 by Sen. Daschle [SD]; 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 118: “Emergency Warning Act of 2003” – Introduced 1/9/2003 by Sen. Edwards [NC]; Referred to Senate Committee on Commerce, Science, and Transportation; provides for development of an all-hazards public warning system.
- S 139: “Climate Stewardship Act of 2003” – Introduced 1/9/2003 by Sen. Lieberman [CT]; 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 [NJ]; Referred to Committee on Environment and Public Works; establishes and inventory of greenhouse gas emissions and encourage voluntary reductions in emissions.
- S 196 – Digital and Wireless Network Technology Program Act of 2003; Introduced in Senate 1/17/2003 by Sen. Allen [VA]; Passed Senate 97-0 (4/30/2003); Referred to House (1) Science and (2) Education and Workforce Committees; establishes \$250 million program in National Science Foundation to improve access to and use of digital and wireless network technology at minority-serving institutions; includes efforts to increase scientific, mathematical, engineering, and technology instructions and research.
- S 212.RFH: “High Plains Aquifer Hydrogeologic Characterization, Mapping, Modeling and Monitoring Act” – Introduced 1/23/2003 by Sen. Bingaman [NM]; Passed Senate by Unanimous Consent (4/7/2003); Referred to House Committee on Resources, Subcommittee on Water and Power; Executive Comment requested from Interior; 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).

- S 321 – Firefighting Research and Coordination Act; Introduced in Senate 2/5/2003 by Sen. McCain [AZ]; Referred to Committee on Commerce, Science, and Transportation; Hearings held on 4/30/2003; provides for development of new technology and methods (“a scientific basis”) for new firefighting technology standards, improve coordination and training, and improving response to emergencies.
  - Related Bill (identical): H.R. 545; Introduced in House 2/5/2003 by Rep. Camp [MI-4]; referred to House Committee on Science, Subcommittees on (1) Environment, Technology, and Standards, and (2) Research.
  
- S 515 – Introduced in Senate 3/5/2003 by Sen. Crapo [ID]; Reported favorably from Committee on Environment and Public Works 4/9/2003; Would provide additional authority to the Office of EPA Ombudsman, making the office independent within the agency.
  - Related Bill (identical): H.R. 347; Introduced in House 1/27/2003 by Rep. Bilirakis [FL-9]; referred to House Committee on Energy and Commerce, Subcommittee on Environment and Hazardous Materials (2/3/2003).
  
- S 791 – Introduced in Senate 4/3/2003 by Sen. Inhofe [OK]; Reported favorably (4/9/2003) by Environment and Public Works Committee; would amend Clean Air Act to establish a renewable fuels program and set standards by 2005, encourage the use of ethanol, and phase out MTBE.



## AGENCY NEWS

**Army Corps plans major reorganization** (Government Executive 4/29/2003) – The Army Corps of Engineers will prepare a restructuring plan this summer, which will be finalized by October 1, according to Lt. Gen. Robert Flowers, the agency's chief. A draft plan has been developed, based on input from lawmakers, customers, leadership, and employees. The Corps last underwent a reorganization in 1997, when twelve divisions were consolidated into eight. Management funds have been level since 1994, and when factoring inflation has actually reduced available funds by 30 percent, leading to elimination of about 500 full-time positions. The plan would devolve implementation decisions to division offices, while focusing national headquarters on policy and planning missions.

<http://www.govexec.com/dailyfed/0403/042903a1.htm>

**NOAA releases new strategic plan** (NOAA 3/31/2003) – The National Oceanic and Atmospheric Administration released its new strategic plan. The process of formalizing the plan included a series of regional meetings to allow stakeholder input and public comment. The plan uses a flexible, rolling horizon rather than a fixed time span, the latter of which is more typical of agency five-year plans. The goals and actions will guide NOAA's strategic management process. The plan focuses on improving the health and productivity of coastal and ocean ecosystems, better predicting climate, weather, and water changes for decision makers, and improving the safety, efficiency, and environmental compatibility of commerce and transportation. The plan supports the president's Management Agenda and seeks to strengthen integration across the agency, increase efficiency, and promote increased responsiveness to customer needs. The strategic plan is available from the NOAA website: <http://www.osp.noaa.gov/>.

<http://www.publicaffairs.noaa.gov/releases2003/mar03/noaa03038.html>

**NOAA brings new website on line** (NOAA 4/21/2003) – The National Oceanic and Atmospheric Administration brought a redesigned website online. The web site replaces an earlier version that PC Magazine dubbed one of the sites "you won't be able to imagine life before them." The site includes front-page links to weather conditions, beach temperatures, navigation charts, droughts and fire weather information, and satellite images of world events. NOAA's web site is: <http://www.noaa.gov>.

<http://www.publicaffairs.noaa.gov/releases2003/apr03/noaa03043.html>

**NOAA breaks ground on new satellite center** (NOAA 4/11/2003) – The National Oceanic and Atmospheric Administration and General Services Administration broke ground on a new \$61 million Satellite Operations Center in Suitland, Maryland. The new building, scheduled to open in 2005, will house environmental satellite operations. The new facility will replace the operations facility currently located in a World War II-era building. The facility will provide command, control, and communications for NOAA's GOES and POES satellite and the Department of Defense Meteorological Satellite Program (DMSP). Planned NPOES and GOES-R series, expected to launch in 2012, will also be operated from the new building. The facility will also process satellite data to support research and operations. Several search-and-rescue programs will also use the facilities to locate emergency beacons.

<http://www.publicaffairs.noaa.gov/releases2003/apr03/noaa03042.html>

**White House cybersecurity chief resigns** (Government Executive 4/22/2003) – Howard Schmidt, the top White House cybersecurity official, announced his resignation effective at the end of April. Schmidt, who had been on the job only four months, is leaving to pursue a career in the private sector. Some speculate that the office will be diminished in importance in the wake of Schmidt's departure. Some technology experts admonished the White House to use its leverage, such as agency purchases, to force the private sector to develop more secure products. Others have advocated letting the market take control of security issues.

<http://www.govexec.com/dailyfed/0403/042203h1.htm>

**Senate committee expands power of EPA ombudsman** (CongressDaily 4/10/2003) – The Senate Environment and Public Works Committee approved legislation allowing the EPA ombudsman to issue subpoenas while investigating complaints. The measure, S. 515, was passed over the objections of EPA Administrator Todd Whitman, who claimed that the ombudsman powers would hamper EPA's enforcement efforts.

<http://www.govexec.com/dailyfed/0403/041003cdam3.htm>

**Lucas accuses Agriculture Department of hijacking funds** (Oklahoman 5/3/2003) – Representative Frank Lucas accused U.S. Agriculture Department officials of siphoning money from the Environmental Quality Incentives Program to technical assistance for other conservation programs. The farm bill included \$695 million for fiscal year 2003 for programs aimed at water and soil conservation, especially regarding livestock-related problems. Instead, much of the money is being used for the Wetlands Reserve Program. USDA officials cite the FY03 spending bill, which stipulated that funding be "donated" from the Environmental Quality Incentives Program and several others.

**Single source for grant information by October 2003** (National Journal's Technology Daily 4/29/2003) – Administration officials are working to develop a single Web site for posting information on all available grants and streamlining the grant application process. The new system is expected to go online by October 2003. Multiple standards and electronic grant systems by separate agencies have made the grant application process difficult, according to surveys of grant recipients. The Health and Human Services Department is the lead agency.

<http://www.govexec.com/dailyfed/0403/042903td2.htm>

**GAO issues report on management and mission** (Government Executive 4/21/2003) – A new GAO report (03-446) reviewed several federal agencies on how they align management strategies with program goals. The GAO, which brought management issues to the forefront in the late 1990s, reviewed the Federal Emergency Management Agency, the General Services Administration, the Internal Revenue Service, the Social Security Administration, the Coast Guard, and the U.S. Geological Survey. Successful efforts made human resources managers and line supervisors accountable for results and created workforce councils, composed of senior agency officials and human capital leaders, to integrate efforts. The groups meet regularly to review progress and monitor procedures.

<http://www.govexec.com/dailyfed/0403/042103t1.htm>

## **STATE / LOCAL**

**State muddles through another month** (Oklahoman 4/16/2003) – March revenues were 12.1% below projections, and 0.4% below fiscal year 2002 revenues, according to officials with the Office of State Finance. The revenue figures were in line with expectations set earlier this year. Budget cuts, which were put into place in March, will remain in effect, but no additional cuts are necessary at this time. Revenues were down across-the-board, with the exception of gross production taxes which came in significantly higher than expectations.

**Legislature agrees on \$1.95 billion package for schools** (Oklahoman 4/2/2003) – Legislative leaders and the Governor came to agreement on a \$1.95 billion financing package for common education in Fiscal Year 2004. The funding is slightly larger than the \$1.87 billion that schools are expecting to receive this year. The increase, while less than some education advocates would like, promise to reduce classroom cuts that were being planned for next school year. The budget is slightly less than what schools received in 2001.

**Legislative leaders and governor reach budget agreement** (Oklahoman 4/9/2003) – Governor Brad Henry and leadership from both parties reach agreement on a \$5 billion state budget for fiscal year 2004. The budget increases some fees and cigarette taxes, but otherwise does not include any general tax increase. More than half the budget - \$2.875 billion – is set for common education, higher education, and CareerTech. Fee increases and bond refinancing are expected to produce \$227 million in additional revenues for lawmakers to allocate. Several Republican initiatives are part of the agreement, including funding common education first, restricting use of rainy day funds, incentives to consolidate school districts, using zero-based budgeting, and eliminating shortfalls in the ad valorem reimbursement fund.

**Audit alleges misconduct in fuel storage tank funds** (Oklahoman 4/30/2003) – An audit by MSI Barnes & Associates, requested by the Oklahoma Legislature, revealed fraud and abuse that might have contributed to tens of millions of dollars in misspent funds. The audit investigated use of funds from the Oklahoma Petroleum Storage Tank Release Indemnity Fund, a fund designated for cleanup of abandoned or leaking underground storage tanks. Several instances of criminal activity were turned over to the Oklahoma Attorney General’s office. State Auditor and Inspector Jeff McMahan has been asked to assist in the investigation. As much as \$35 million may have been misspent in the “pay for performance” contracts alone, according to the report. Issues cited include not taking required bids, manipulating data, and multiple charges for the same purchases. Tom Daxon, administrator for the Corporation Commission, said that despite the problems uncovered by the audit, he hopes the program is not abandoned. The Legislature’s appropriation of \$38 million from the fund last year for the purposes of building a National Weather Center in Norman and a bioterrorism research center in Stillwater has added to the controversy surrounding the fund.

**State gets \$1 million gift for science programs** (Oklahoman 5/1/2003) – The Oklahoma Energy Resources Board donated \$1 million to launch the “Power Campaign”, a challenge to raise \$5 million total for school science programs. The campaign will run from late August until Thanksgiving. The grant provides money for purchasing science equipment. School districts will fill out a grant application before funding is distributed.

**Henry reaches 100-day milestone** (Oklahoman 4/21/2003) – Governor Brad Henry is comfortable in his new job, and has achieved some impressive results early in his term. Notable successes include passage of a bill referring the question of a state lottery to a vote of the people. Proceeds from the lottery would go to education. Another major accomplishment is the mark set in his budget. Unlike many budgets produced by Oklahoma’s governors, Henry’s budget actually became the blueprint for the budget adopted by the House and Senate. Although complaints came from both sides of the aisle, Henry’s budget – and negotiation skills gained in his ten years in the state Senate – became the template for legislative action.

**Governor challenges agriculture board** (Oklahoman 3/31/2003) – When Governor Henry chose Terry Peach as his Secretary of Agriculture, he set up a challenge to the state Board of Agriculture, where Keating’s Secretary of Agriculture now serves as Commissioner. In past administrations, the Commissioner often resigned to allow the Governor’s Secretary of Agriculture to serve in both positions, but this is not likely to be the case this time. Under the Oklahoma Constitution, the Board of Agriculture has regulatory duties over agricultural activities in the state. Commissioner Dennis Howard was a vocal advocate of water resources protection and air quality standards. It is not certain how Terry Peach may differ, although it was noted that Governor Henry accepted more than \$16,400 from individuals and organizations tied to the hog and poultry industries.

**House approves water use restrictions** (Oklahoman 4/3/2003) – The House approved Senate Bill 288, which limits how much groundwater can be taken from a local area. Under existing law, groundwater withdrawals must not harm the annual yield of a basin for at least 20 years. The bill under consideration would extend that time. It also places a moratorium on use of water outside of a county overlying the basin until a comprehensive study is completed to determine the aquifer’s sustainable yield. The measure, similar to House Bill 1083, is aimed at limiting impacts of the planned water development project in the Arbuckle-Simpson aquifer, which would transfer water to towns in Canadian County.

**Wheat harvest projected to be among top 5** (Oklahoman 5/3/2003) – Agriculture experts expect this year’s wheat crop to rank in the top 5 in the last 25 years. A survey of farms in Oklahoma shows that freeze damage was minimal and that precipitation, while below normal, came at the right times to aid wheat growth. North central Oklahoma has the best prospects, with substantial increases over last year in Major, Woodward, Woods, and Alfalfa counties. With six weeks to go before harvest, however, some cautioned that yields can quickly decline by more than 30 percent if drought conditions worsen. Surveys indicate that between 4.5 and 5.04 million acres were planted this year, compared to 3.5 million acres a year ago.

### **Oklahoma Legislation:**

*Bills listed in the last issue as failing have been removed from this list. See the April summary for more details.*

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, Passed Senate 43-0, In Conference.**

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, Passed Senate 27-13, In Conference.**

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, Passed Senate 41-0, In Conference.**

HJR 1024: Amend Oklahoma Constitution to authorize a program for beneficial utilization and protection of natural resources; dedicates revenues for programs, mitigation, and liability. **Passed House 98-1, Failed Senate 22-18, Motion to Reconsider expired.**

SB 342: Funding for the Oklahoma Wind Power Initiative at EVAC. **Passed Senate 42-0, Passed House 87-11, Conference Requested.**

SB 429: Tax credit for new ethanol production facilities. **Passed Senate 43-0, Passed House 96-3, In Conference.**

SB 547: Modifies appointment of state climatologist; requires the Oklahoma Climatological Survey to maintain and operate the Oklahoma Mesonet. **Passed Senate 41-0, Passed House 101-0, Senate considering House Amendments.**

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”. **Passed Senate 40-0, Passed House 88-6, In Conference.**

SB 826: **Creates office of Homeland Security within the Department of Public Safety. Passed Senate 40-0, Passed House 91-1, In Conference.**

## **BUSINESS / ECONOMY**

**Economic outlook positive in April** (AP/Oklahoman 4/30/2003) – Consumer confidence rose 19.6 points to 81.0 in April, marking the largest rise in more than a decade. Like its previous 21.7-point gain that came on the heels of the Persian Gulf War, the increase is attributed to the end of the war in Iraq. Analysts expect much of the gain to evaporate, but the survey pointed out other positive, more lasting signals. The survey showed a “brisk” 1.3% increase in wages and benefits during the first three months of 2003, the biggest increase in nearly 13 years. Benefit costs, particularly health insurance and vacations, accounted for a much of the rise, but wages rose one percent, double the rate of the previous three months. Income growth is considered a key measure, because two-thirds of the U.S. economy is dependent upon consumer spending.

**Economic signals mixed** (USA Today 4/24/2003) – The Federal Reserve’s “Beige Book” survey showed continued weakness in the U.S. economy, but some positive signs emerged. The survey, named for the color of its cover, cited weak consumer spending, soft labor markets, climbing office vacancy rates, and cautious business investing as concerns. The report also noted optimism among retailers, a declining rate of layoffs, increased travel in some regions, and home refinancing as positive indications. The survey covered a six-week period ending just before the fall of Baghdad. The tenth district, which includes Oklahoma, showed “some signs of weakening”, including depressed retail sales, slower manufacturing activity, and a down commercial real estate market.

**Fed Chief sees gradual growth** (AP/Oklahoman 5/1/2003) – Federal Reserve Chairman Alan Greenspan testified that he expects gradual improvement in the economy, now that the war in Iraq is ended, but he left the door open for further stimuli should it not recover as expected. Despite war uncertainties, higher energy prices, and shaky consumer confidence, the economy grew at a rate of 1.6 percent in the first quarter of the calendar year. Greenspan noted that “a number of elements” are working in the direction of improvement during the second half of the year. The Chairman also repeated his opposition to increasing federal deficits, noting that any tax cuts should be offset by spending cuts or other tax increases.

**Fed developing plans to spur economy** (AP/Oklahoman 4/8/2003) – The Federal Reserve is considering several options to prop up the fragile economy. Options include purchasing longer-term securities, lending to commercial banks, and capping potential future rate increases. During World War II, the Fed purchased long-term Treasury securities, instead of its typical focus on short-term securities, in order to keep borrowing costs down. It also has experimented with direct lending, with the most recent example being \$46 billion lent to banks on September 12, 2001. The fed is concerned about potential deflation, and is moving to spark the economy before falling prices can become entrenched.

**Devon Energy becomes Oklahoma’s largest company** (Oklahoman 4/26/2003) – With the merger of Ocean Energy, Devon Energy, Inc., based in Oklahoma City, became the largest publicly traded company in the state and the largest independent oil and gas company in the nation. The merger gives Devon proven oil and gas reserves of about 2.2 billion barrels of oil equivalent, 84% of which is in North America. The merger is Devon’s sixth since 1997, and third major transaction in less than two years.

**Natural gas prices expected to remain high through summer** (Oklahoman 4/3/2003) – High withdrawals of natural gas from storage during the latter half of the winter dropped storage to near-record lows. The demand created to fill storage before next winter means that prices are likely to remain high through the summer. Experts predict gas prices for the year to range from \$4.40 to \$6 per thousand cubic feet, well above the \$2 levels seen the last two summers. Analysts note that even with a 26% increase in drilling rigs as compared to the same time last year, production may still not meet demand. A hot summer could reduce the amount put into storage and lead to shortages next winter. Analysts expect between 2.6 and 2.8 trillion cubic feet to be available at the beginning of next winter; 3.2 trillion cubic feet were available at the start of last winter.

**State oil and gas production decline five percent** (Oklahoman 4/5/2003) – Natural gas production in Oklahoma declined by six percent and oil by four percent in the past year. The figures, which are in line with national trends, were attributable to two main factors: a declining number of new wells drilled and decreasing rates on new gas wells. Low oil and gas prices over the past two years have contributed to the decline in exploration. Declining production rates are perhaps more worrisome. In the early 1980s, natural gas wells would on average produce about 80 to 90 percent of the initial amount a year later. Now, new wells are only producing about half as much after a year of operation. Part of the problem is due to the types of reservoirs tapped, but also technological advances have allowed higher production during the first year of operation, tapping wells much more quickly than before. Analysts have noted the problems in keeping up with demand, and worry that the industry will not be able to increase production sufficiently to match new demands. Oil and gas revenues account for ten percent of Oklahoma's annual budget.

**FPL announces new wind farm near Woodward** (Oklahoman 4/29/2003) – FPL energy announced plans to build a 51-megawatt wind farm northwest of Woodward. Energy produced from the wind farm will be sold to the Oklahoma Municipal Power Authority (OMPA). The wind farm will have 34 1.5-megawatt turbines on 1,200 acres along the Harper and Woodward County lines in northwest Oklahoma. The turbines will produce enough energy to power 15,000 homes. FPL won the bid from OMPA in early April and expects to have the facility operational by the end of the year. OMPA, which distributes energy to 35 municipally-owned electric systems, will also build a natural gas-fired generation near Ponca City, which it can use to supplement the intermittent nature of wind power. Recently, Western Farmers Electric Cooperative announced plans to build a 64-megawatt wind farm near Lawton and Oklahoma Gas & Electric plans to build a 50-megawatt facility in Oklahoma by the end of the year.

**State Farm adds customers in Oklahoma** (Oklahoman 4/3/2003) – State Farm, the largest insurance provider in Oklahoma, ended its nine-month moratorium on new homeowner policies. The moratorium was established in response to excessive growth of six percent, well above the two percent growth the company had projected. Slowing growth and higher insurance rates have tempered demand, allowing the company to resume issuing new policies. Rates have increased due to weather-related claims, increased costs of building materials, the greater use of electronics in homes, and the poor performance of investments, which had been used in previous years to partially offset claims costs.

## **WEATHER**

**Storms kill more men than women** (University of Pittsburgh 4/28/23) – A study conducted by the University of Pittsburgh Medical Center found that men are more than twice as likely to die during thunderstorms than are women, and most cases involve a vehicle or sports. Flash floods and lightning strikes are the primary culprits. For the flash flood cases, many were associated with attempts to drive through the water; lightning took its toll on those engaged in sports or recreational activities or work-related activities. Two thirds of the 1442 deaths studied, encompassing the period 1994-2000, occurred outside the home. The most frequent activities at the time of death for each of the categories were: for flash floods – driving (65%); from lightning – sports and recreation (36%) or work (22%); from tornadoes – outdoor activities (40%) or driving (23%); and high winds – driving (36%) or boating/fishing (23%).  
[http://www.eurekalert.org/pub\\_releases/2003-04/uopm-sdo042403.php](http://www.eurekalert.org/pub_releases/2003-04/uopm-sdo042403.php)

**Wildfire detection gets boost from NASA** (Rochester Institute of Technology 4/9/2003) – A new tool developed by the Rochester Institute of Technology will help detect wildfires as small as a foot in diameter from an altitude of 10,000 feet. The Wildfire Airborne Sensor Program (WASP) is a remote sensing tool that combines high-resolution visible digital “mapping” cameras with a geographic positioning system and data interpretation. Three infrared cameras, each of which reads a different spectral band, are mounted on an aircraft. Data from each camera are combined to produce a mosaic, which is then spectrally analyzed to detect a fire.  
[http://www.eurekalert.org/pub\\_releases/2003-04/riot-nwr040903.php](http://www.eurekalert.org/pub_releases/2003-04/riot-nwr040903.php)

**Check the bacteria beach forecast** (USGS 3/20/2003) – The U.S. Geological Survey developed a method to predict E. Coli bacteria levels at Lake Erie urban beaches. The method takes into account weather and environmental conditions and can make a forecast within two hours of data collection. The technique improves upon existing practices, which take at least 18 hours to provide results. Factors vary by location. Lake Erie beaches included factors such as wave height, number of birds on the beach, lake-current direction, rainfall, turbidity, and streamflow of a nearby river. An inland lake included factors such as time of the year, wind direction and speed, number of birds, and rainfall. It is adaptable to other locations, provided local environmental factors are considered.  
[http://www.usgs.gov/public/press/public\\_affairs/press\\_releases/pr1740m.html](http://www.usgs.gov/public/press/public_affairs/press_releases/pr1740m.html)



## CLIMATE

**Middle Ages were warmer than present** (Harvard University 3/31/2003) – Researchers at Harvard University have assembled a review of more than 200 climate studies that leads them to conclude that the 20<sup>th</sup> century is neither the warmest nor has the most extreme weather in recent history. The study confirmed that the Medieval Warm Period of 800 to 1300 A.D. and the Little Ice Age of 1300 to 1900 were worldwide phenomena, and not just limited to Europe and North America. The study reviewed more than 240 research papers and a variety of indices, including tree rings, ice cores, and historical accounts. Their findings indicated that 20<sup>th</sup> century temperatures are generally cooler than during the peak of medieval warmth. The research was conducted by Willie Soon and Sallie Baliunas (Smithsonian), Craig Idso and Sherwood Idso (Center for the Study of Carbon Dioxide and Global Change) and David Legates (Center for Climatic Research, University of Delaware). The research will appear in the Energy and Environment Journal and a shorter paper appeared in the January 31, 2003 issue of Climate Research. The study was funded by NASA, the Air Force Office of Scientific Research, NOAA, and the American Petroleum Institute.

<http://cfa-www.harvard.edu/press/pr0310.html>

**El Nino linked to air pollution** (NASA 4/2/2003) – The most intense global pollution from fires occurred during droughts caused by El Nino, particularly those during 1997 and 1998. Researchers at Harvard university used satellite Ozone mapping data to quantify smoke from biomass burning over a 20-year period. Biomass burning produces as much pollution as the use of fossil fuels; in fact drought-induced fires during the 1997-98 El Nino event produced 30% more carbon monoxide than what was emitted from fossil fuel combustion. The study was published in the Journal of Geophysical Research – Atmospheres.

<http://www.gsfc.nasa.gov/news-release/releases/2003/h03-128.htm>

**NASA begins continuous monitoring of Earth's carbon** (NASA 4/23/2003) – Using a variety of satellite and surface-based measurements, NASA has begun near-weekly production of composite maps of “net primary production” of carbon. The composite maps, updated every eight days, indicates how much carbon dioxide is taken up by vegetation in photosynthesis and released during respiration. “We are literally watching the global garden grow” says Steve Running, Science Team member. In addition to monitoring net carbon storage, the maps can be used to monitor desertification, the effects of droughts, and impacts of climate change on vegetation. The new maps may also help better manage crop production, rangeland grazing, and forest management. Movies of the images show an almost immediate response of land plants to changing weather patterns, as well as seasonal cycles. It also shows that photosynthesis in the oceans is roughly equal to the land.

<http://www.gsfc.nasa.gov/news-release/releases/2003/03-41.htm>

## **ENVIRONMENT**

**Pollution declines** (AP/Oklahoman 4/17/2003) – A new study shows that air pollution in North America has declined 5% in five years. The Commission for Environmental Cooperation, set up as part of the North American Free Trade Agreement, noted a 28% decline in chemicals emitted into the air and 41% increase in chemicals sent to landfills. A total of 3.6 million tons of pollution was either emitted or transferred off-site in 2000, 1.5 million tons of it going into the air, water or ground, according to the study.

**Emissions standards effective** (National Academies 4/23/2003) – Carbon monoxide emissions controls have been remarkably effective, according to a recent study by the National Research Council. Since the early 1970s, violations of carbon monoxide standards have declined dramatically. Today, only a few locations, principally affected by local topography and inversions, suffer violations. The report attributes improvement to emissions controls on vehicles developed in the 1970s and an aggressive carbon monoxide monitoring network. Although violations are few and emissions controls on carbon dioxide do not need to be tightened, according to the report, monitoring is still essential. Other pollutants often accompany carbon monoxide, and detecting increased levels of carbon monoxide can serve as an indication of other more serious health problems.

<http://www4.nationalacademies.org/news.nsf/isbn/0309089239?OpenDocument>

**Clean Air hearing held** (NRCS 4/21/2003) – On April 8, the Senate Environment and Public Works Committee's Clean Air, Climate Change, and Nuclear Safety Subcommittee held hearings on pending legislation to amend the Clean Air Act. Proposed changes would expand the cap and trade program with the goal of reducing pollution. EPA Administrator Whitman supported the legislation that includes the Administration's Clean Skies Program for reducing mercury, nitrous oxide, and sulfur dioxide. Others testified that the program should be expanded to include carbon dioxide and carbon trading programs.

**California farmers need air pollution permits** (AP/Oklahoman 4/5/2003) – Farmers in California are now required to obtain permits to operate stationary equipment, such as irrigation pumps. Until now, farmers have been exempt from Clean Air Act requirements, even though findings suggest that agricultural production sources account for most of the soot and one-quarter of the smog production in California's central valley. Farmers must obtain a permit for stationary diesel fuel engines by May 14 and by August 1 for natural-gas engines. Cranes, bulldozers, harvesters, tractors or mobile generators are exempt from the rules.

**Neighbors fight wetlands project** (AP/Oklahoman 4/7/2003) – Neighbors of a Ramona, OK property owner are challenging his decision to develop a 186-acre wetlands project on his land. The project is funded by the Natural Resources Conservation Service, which, according to the landowner, assured him that local permits would not be required. Neighbors claim that both a local floodplain management board and the Federal Emergency Management Agency require permits. The neighbors are concerned that altering the flow of water could create flooding problems on adjacent lands. A judge's decision is expected soon.

**Gulf Coast sinking** (NOAA 4/16/2003) – An analysis by the National Oceanic and Atmospheric Administration and National Geodetic Survey shows portions of coastal Louisiana and Mississippi are sinking at the rate of up to one foot per decade. At the present rate of subsidence, 15,000 square miles of land in Louisiana could be below sea level within the next 70 years. The improved mapping will be coupled with forecast models to improve storm surge and flood forecasts. In addition, NOAA is working with state and local agencies to assess vulnerability and develop long-term coastal reclamation to halt the subsidence.

<http://www.publicaffairs.noaa.gov/releases2003/apr03/noaa03r248.html>

**'Black Tide' caused extensive coral damage** (NASA 4/17/2003) – In January 2002, a massive algae bloom, related to but more extensive than the annual 'red-tide', developed off southern Florida. The bloom appeared as black water on satellite images. The bloom contained a high abundance of microscopic plants, fed by nutrients from runoff from winter storms in the Everglades. The bloom decreased sunlight penetrating the oceans surface, leading to a 70 percent decrease in stony coral cover, a 40% reduction of coral species, and a near-elimination of sponge colonies at two reef sites after the dark water passed. The water circulated for nearly 4 months between the Florida mainland and the Keys, before passing out into the Atlantic where the toxins and microscopic plants were dispersed. The study was featured in a recent issue of Geophysical Research Letters.

<http://www.gsfc.nasa.gov/news-release/releases/2003/03-39.htm>

**Chicken lagoons investigated** (Oklahoman 3/30/2003) – Oklahoma officials are claiming that Missouri lagoons containing chicken waste are leaking more than allowable standards. The difficulty is that while Oklahoma allows a rate of 500 gallons per acre of surface water per day, Missouri standards are less stringent. The lagoons, owned by Simmons Foods, Inc., have been documented as leaking 900 gallons per acre of surface water per day. The discharge goes into tributaries feeding into Grand Lake in northeastern Oklahoma. When asked about Missouri's standards, a regional director for the Missouri Department of Natural Resources declined to release the figures because of pending litigation. [*Note: wouldn't these standards fall under open records acts requirements?*]

**Litter study results not promising** (AP/Oklahoman 4/15/2003) – Research conducted by the University of Arkansas and USDA Agricultural Research Service showed inconclusive results in a test designed to reduce phosphorus content in runoff from chicken litter applications. The process being tested involved drying the litter and making pellets. In a field test, the pellets were compared to direct application of raw litter and litter treated with aluminum sulfate. Runoff from each 5-foot by 20-foot section was tested for phosphorus and nitrogen. Researchers had expected that the pellets would decrease the surface area of litter exposed to rainwater, but no conclusions could be drawn. The researchers pointed out that the source of the litter in the three test applications were of unknown origin, and plan to repeat the experiment using litter from a single source with a common diet.

**Carson says conflict of interest hampers Tar Creek cleanup** (AP/Oklahoman 4/26/2003) – The Tar Creek watershed in northeastern Oklahoma has been on the EPA Superfund list for two decades at a cost of \$100 million, but little tangible assistance has come to area residents. Representative Brad Carson, whose district includes the area, says that conflicts of interest between various federal agencies and Indian lands may be to blame for the delays. A report is expected to be released soon by the White House Council on Environmental Quality. Several prominent officials have advocated relocating residents and creating a wetlands, but local opposition to buyouts make some legislators more cautious. The 40-square mile site is dotted with mountains of lead-contaminated mine waste, mine collapses, and open shafts.

**Carson plans to introduce Tar Creek legislation** (Oklahoman 5/2/2003) – Representative Brad Carson announced his plans to introduce legislation that would provide \$50 million to buy out homes and businesses in Picher and Cardin, the two towns in the Tar Creek watershed most affected by the mining waste. The announcement came at the same time as Senator Jim Inhofe announced an agreement between the EPA, Interior Department, and the Army Corps of Engineers on a plan to clean up the watershed. Carson's plan mirrors one introduced by Governor Frank Keating in 2000, in which the area would be turned into wetlands, grasslands, and lakes. The White House Council on Environmental Quality has been studying the proposal, but its report has not yet been released. Inhofe, chairman of the Senate Committee on Environment and Public Works, rejected the Keating Task Force proposal and sought cooperation among the three affected federal agencies to devise a solution instead.

**Inhofe says Carson lacks scientific and technical expertise** (Oklahoman 5/3/2003) – Senator Jim Inhofe criticized Representative Brad Carson's plan for buying out homes in Picher and Cardin. Inhofe claims the problems in the Tar Creek watershed are more involved than moving people away from the area, and said that Carson lacks scientific and technical expertise to devise a proposal addressing rehabilitation of Tar Creek. A spokesman for Inhofe said that the Senator wanted to see the analysis from the White House Council on Environmental Quality before making any judgment on alternatives. Inhofe, meanwhile, praised an agreement by three federal agencies to coordinate efforts on the problem, even though the agreement offered few specific proposals. Carson, Governor Henry and former Governor Keating have all expressed frustration at how long federal agencies have taken in devising a plan.

## **SCIENCE & TECHNOLOGY**

**Lawmakers criticize science funding imbalance** (National Journal's Technology Daily 4/3/2003) – Senators on both sides of the aisle criticized the administration on its failure to follow through on proposed increases in the National Science Foundation budget. Under an agreement last fall, the NSF was slated to double its budget by 2008 in order to come into parity with the life sciences budgets of other agencies. Senators Kit Bond (R-MO) and Barbara Mikulski (D-MD) noted the proposed FY04 budget includes only a 3.2% increase in NSF funding, even though the President's Council of Advisors on Science and Technology recommended a more substantial increase. The senators also criticized the 70 percent cut in funding for the "tech talent" program aimed at undergraduates in engineering and mathematics. Another target of criticism was the NSF's perceived delays in implementing recommended changes for their management of large facility projects, especially given that NSF has not sought additional funding to hire necessary personnel to implement those changes. Senator Bond said the disparity in funding "has put our nation's capabilities for scientific innovation at risk and, equally important, at risk of falling behind other industrial nations."

<http://www.govexec.com/dailyfed/0403/040303td1.htm>

**Representative taking stock of research and development projects** (National Journal's Technology Daily 4/7/2003) – Florida Representative Adam Putnam plans to take a close look at the federal research agenda. Putnam, chairman of the House Government Reform Technology, Information Policy, Intergovernmental Relations and the Census Subcommittee, wants to look at how federal research dollars are spent. This would include reviewing efforts at federal departments as well as projects outsourced to private institutions and universities. In addition, Putnam plans to review progress on the federal government's 24 e-government initiatives, with particular attention to digital archives and standards to store electronic documents.

<http://www.govexec.com/dailyfed/0403/040703td1.htm>

**National Academy president urges science in policy making** (National Academies 4/28/2003) – In an address to the Academy's 140<sup>th</sup> annual meeting, National Academy of Sciences president Bruce Alberts said scientists can help governments by providing scientific evidence necessary for sound policy-making. In his address, Alberts stated: "Because our reports are based on the best science, their truths will be long-lasting, surviving long after the personalities and politics of the day have disappeared." The National Academy is pivotal in bringing science to the world, especially in developing countries, according to Alberts. Recommendations from the Academy have also helped structure America's response to terrorism, including creation of an Undersecretary for Science and Technology within the Department of Homeland Security. Alberts called upon the scientific community to change incentive structures which he termed "much too risk averse" for young scientists. Reviewer, Alberts cautions, tend to invest in 'safe science', creating a damping effect on innovation. He cites work-force skills that include "a high capacity for abstract, conceptual thinking and the ability to apply that thinking to complex real-world problems that are nonstandard, full of ambiguities, and have more than one right answer" and argues that science education must focus more on "learning how to learn" rather than imparting knowledge of past discoveries.

<http://www4.nationalacademies.org/nas/nashome.nsf/urlinks/NAS-5LWKA9>

**New R&D system needed for education** (National Academies 4/3/2003) – A new report by the National Research Council, “Strategic Education Research Partnership”, concludes that more work needs to be done in order to better link scientists with educators. The report proposes the creation of a Strategic Education Research Partnership (SERP) that would “marshal scientific knowledge, financial resources, and the expertise of teachers to considerably boost student achievement.” Through SERP, scientists, educators, and policy-makers would collaborate on research-based knowledge to critically assess what works and expand the most effective approaches. The Partnership would consist of a central headquarters that would oversee a program of research and dissemination of results, teams of highly skilled practitioners and researchers to study specific topics, and field sites that would participate in studies, similar to teaching hospitals in the medical profession. Implementing the partnership would involve a compact of states, federal authorities, science foundations, and businesses. The price tag, the NRC estimates, would be \$500 million over a seven to ten year period, which is equivalent to only 0.5% of the national education budget.

<http://www4.nationalacademies.org/news.nsf/isbn/0309088798?OpenDocument>

**Keck Futures Initiative boost to interdisciplinary research** (National Academies 4/15/2003) – The W.M. Keck Foundation and the National Academies of Sciences are undertaking a 15-year, \$40 million initiative to improve interdisciplinary research. The *Futures Initiative* is designed to break down conceptual and institutional barriers to interdisciplinary research and to stimulate new modes of inquiry, providing a counterbalance to the tendency to isolate research within academic fields. The initiative will feature semi-annual gatherings of outstanding researchers from diverse disciplines, award seed grants, reward talented communicators who can synthesize technical issues, and conduct studies on ways to facilitate productive interdisciplinary research.

<http://www4.nationalacademies.org/news.nsf/isbn/04152003?OpenDocument>

**Bridging the Internet divide** (UCAR 4/7/2003) – A recent study conducted by Andrew Gettelman at NCAR highlights the problems of getting information in the developing world. National meteorological services rely on poor-quality information from neighboring countries and have few predictive tools to aid them in forecasting and warning. The information divide mirrors the digital divide, according to Gettelman. Due to a lack of communications infrastructure, even good information from the more developed countries cannot be effectively transmitted to national met services, much less the affected public. The divide also impedes the ability to collect observations, for either climate or weather, from the developing countries.

<http://www.ucar.edu/communications/newsreleases/2003/gettelman.html>

**NSF at cutting edge of data mining** (National Journal’s Technology Daily 4/18/2003) – The National Science Foundation is providing \$4 million over two years as part of the Management of Knowledge Intensive Dynamic Systems (MKIDS) program. MKIDS is designed to search vast amounts of data and pinpoint events of interest. Anticipated applications including developing technology that will help organizations make better decisions and monitoring an organization’s response to decisions. A project at Carnegie Mellon University will use e-mail, phone calls, and personnel databases to extrapolate an organization’s structure and highlight likely failure points. NSF has been a leader in information technology and nanotechnology in recent years.

<http://www.govexec.com/dailyfed/0403/041803td1.htm>

**Genome research completed** (AP/Oklahoman 4/15/2003) – An international consortium of scientists announced that the human genome has been mapped to an accuracy of 99.99 percent. The ‘rough draft’ was completed in 2000. The human genome contains 3.12 billion pairs of chemicals that compose between 35,000 and 40,000 genes. The project was begun in 1990, and expected to take 15 years to complete. It was completed two years ahead of schedule, and its \$2.7 billion cost was under budget. The database, which is public, is expected to be the basis for rapid advancements in biology and medicine.

**Fingers move water deep in soil** (EurekAlert! 2/14/2003) – Researchers at the University of California-Riverside found the development of fingers that move water through coarse soil. The researchers used three years of field experiments and observations to construct a model for distribution of rainfall and irrigation. The results showed the development of narrow channels, called fingers, in coarse soil, even when there are no apparent cracks or holes. As little as five centimeters of water in dry soil can develop fingers that move more than one meter. The pathways remain active for as long as a month later, moving subsequent water to the same places. The findings suggest that longer, less frequent watering might decrease the possibility of developing fingers, which in turn reduces the transport of water and chemicals below the root zone of plants.

[http://www.eurekalert.org/pub\\_releases/2003-02/asoa-dwf021103.php](http://www.eurekalert.org/pub_releases/2003-02/asoa-dwf021103.php)