from the desk of Gary Sherrer

It was my pleasure on October 11 to attend a ceremony in McAlester in which the Oklahoma Water Resources Board made the 1996 Sardis Lake water storage payment to the U.S. Army Corps of Engineers.

Senator Gene Stipe and Representative Mike Mass presented the $508,030 check to Lt. Col. Tom Frendak, Deputy Commander of the Corps’ Tulsa District. After that ceremony, federal, state and local officials met to discuss issues surrounding commencement of a Sardis Lake Water Authority (SLWA) project to provide water from Sardis to area water users.

I also signed two agreements permitting access to federal land by SLWA to establish water lines and related facilities. The payment and agreements suspend through May, legal action by the federal government to declare Oklahoma in default of the water storage obligation.

It gives the Water Resources Board and local citizens another year to investigate a workable debt repayment plan. Our work there represents a major hurdle in our continuing effort to get water to folks around Sardis Lake.

The Seventeenth Annual Governor's Water Conference will examine the opportunities for forging partnerships between federal, state and local agencies in accomplishing major water resource initiatives of the future. The theme is “Working Together in Managing 21st Century Water Resources.”

The annual conference will be held at the Marriott Hotel in Oklahoma City, with registration beginning at 8 a.m.; the morning session at 8:30. Water Resources Board Chairman J. Ross Kirtley will open the meeting and introduce keynote speaker J.D. Williams, Washington, D.C., attorney and expert on legal and political affairs. Williams was an associate of the late Robert S. Kerr during the years of Congressional authorization of funds for the McClellan-Kerr Arkansas River Navigation System. He is the founder and senior partner in the Washington law firm of Williams and Jensen. He is a popular speaker and the colorful subject of articles in The Wall Street Journal, The Washington Star, The New York Times, Dunn’s Business Month, Esquire, Forbes and other publications.

Following Williams’ address, four respected authorities in finance will discuss “Partners in Oklahoma Infrastructure Financing,” describing options and opportunities open to cities, towns, rural water districts and user groups. Panelists will be James G. Fulmer, president and CEO of Oklahoma Finance Authorities; Charles P. Rainbolt, state director of Rural Development; Joe S. Freeman, chief of the OWRB Financial Assistance Division; and J.D. Williams of Williams and Jensen.

The Seventeenth Governor’s Water Conference will explore 21st Century partnerships in planning, development, regulation.
division; and Leo Presley, director of the Oklahoma Department of Commerce. Panel moderator will be Gary L. Sherrer, OWRB executive director.

William B. Hathaway, Director of the Water Quality Protection Division, Region 6 of the Environmental Protection Agency, will be next to the podium with remarks concerning EPA's new partnerships with the states in accomplishing regulatory missions. Hathaway joined EPA in 1964, and has played a significant role in the agency's major efforts. In 1992, he received the Presidential Award of Meritorious Executive.

"Teamwork in Tempering Drought" is the topic of Dr. Don Wilhite's address. Wilhite is a professor of agricultural climatology and director of the National Drought Mitigation Center and the International Drought Information Center at the University of Nebraska at Lincoln. He specializes in studies of the impacts of drought on society and societal response to climatic events, particularly drought. Under United Nations sponsorship, Wilhite wrote a guidebook on drought preparedness for developing countries, and he is the author of a number of other scholarly texts and more than 70 journal articles on drought.

Covering the opposite end of the climatic spectrum, will be Patrick H. Sweeney, president of Weather Modification, Inc., Fargo, N.D., who will speak on cloud seeding as a long-term water management tool. WMI, midway in a one-year contract with the State of Oklahoma, is well known for successful cloud seeding and hail suppression programs in the northern Great Plains, throughout the U.S., Mexico, Europe, the Middle East and Africa.

The session preceding lunch is reserved for remarks by members of the Oklahoma Congressional Delegation.

The featured speaker on the luncheon program, underway at 12:30, will be Governor Frank Keating. Members of the Oklahoma Legislature are also invited to share their expectations for the 1997 Legislative Session.

Presentation of Oklahoma Water Pioneer Awards will close the Seventeenth Annual Governor's Water Conference.

The Water Pioneer Award was introduced at the 1985 Governor's Water Conference and continues to recognize lifelong achievements in the development, conservation and protection of Oklahoma's water resources.

The Governor's Water Conference is sponsored by 26 water related organizations and coordinated by the Oklahoma Water Resources Board. Registration costs $30 and includes luncheon. The Marriott Hotel, 3233 Northwest Expressway, offers a special Conference room rate of $95, single or double, through November 11. Please make room reservations by calling the Marriott Hotel at (405) 842-6633.

For further information or to register for the Conference, please call the Oklahoma Water Resources Board, (405) 530-8800. To register by mail, please complete the form below, enclose check or purchase order payable to the Governor's Water Conference, and mail to 3800 N. Classen, Oklahoma City. OK 73118.

Register here for the WATER CONFERENCE

Please mail completed form with your $30 check or purchase order to: Governor's Water Conference
3800 N. Classen Boulevard
Oklahoma City, OK 73118

Name _______________________________________
Organization ___________________________________
Address _______________________________________
City ___________________ State ___________ Zip _______
Phone (_____) _______________________

March of Dimes Ambassador Emily Brown sits astride a Harley in front of the Capitol as bikers prepare for the benefit ride to Lake Overholser.

Emily's Campaign Rides On

Emily Lane Brown, daughter of OWRB secretary Kim Brown and her husband, Dean, rolls on in her efforts to raise money as 1996 Ambassador for the March of Dimes Birth Defects Foundation, Western Oklahoma Chapter. One of the many events in which Emily has participated was the Bikers for Babies ride on September 22 in Oklahoma City in which several hundred motorcyclists rode from the State Capitol to Lake Overholser. The ride contributed $8000 to the March of Dimes Birth Defects Foundation.

Emily was born December 29, 1994 with Phocomelia, the absence of a left arm, just below the shoulder. She made her debut as March of Dimes Ambassador in May.
Floodplain Managers Meet

Albert Ashwood, chairman of the Oklahoma Floodplain Management Association, announces Water Resources Board member Lonnie Farmer, mayor of Davidson, was named Elected Official of the Year at OFMA's Sixth Annual Conference September 13 at Western Hills Lodge. Each year, OFMA recognizes an elected official whose public policies demonstrate excellence in addressing present and future floodplain management needs. Farmer was responsible for enrolling the town of Davidson in the National Flood Insurance Program.

Marsha Blair, town administrator of Slaughterville, was recognized as Floodplain Manager of the Year for her efforts in administering the program.

The Association also elected officers for 1997. They are: T.J. Davis, Sand Springs, chairman; Donetta Blanot, OWRB, vice-chair; Neill Pulliam, FHC, Inc., secretary; and Carolyn Schultz, Tulsa District Corps of Engineers, treasurer.

Boundary Settlement Closer

After 200 years and negotiation by two previous commissions, the Oklahoma Red River Boundary Commission has agreed on how to locate the Texas-Oklahoma boundary. The commission, headed by Oklahoma Senator Robert M. Kerr, met in Frederick, Oklahoma, on October 4. The border was first negotiated in 1819 by John Quincy Adams as the boundary separating the U.S. and Mexico. Adams claimed the south bank for the U.S. However, the question remains, which south bank?

Last year, Oklahoma and Texas each created their own boundary commission to pick up where previous ones had left off. After two meetings, their charge still remains determining the location of the south bank. A third meeting is scheduled for November 8.

The Texas Commission, led by attorney Bill Abney, suggested that the boundary should be historically significant, practical and economical. The three possible boundaries are the south bedrock "high bluff bank;" the south line of the "active water course;" and the south "permanent vegetation line." Texas commissioners favor the south vegetation line, while Oklahoma commissioners continue deliberations on its suitability. It would require no surveying, construction or cost. According to Senator Kerr, an important principle upon which all agree is that no private property will be taken from individuals. Meetings continue, and once agreement is reached, the commissioners will submit proposals to their respective legislatures.

OWRB Executive Director Gary Sherer serves on the Oklahoma Red River Boundary Commission, along with Senators Kerr, Jack Bell, Gilmer Capps, Carol Martin, Billy Mickler, Darryl Roberts and Sam Helton; Representatives Randall Erwin, Terry Matlock, Bill Smith, and Fred Stanley; and Attorney General Drew Edmondson.

ODOT Wins NWC Award

The Waterways Division of the Oklahoma Department of Transportation won the Best in Show award in the National Waterways Conference's first Waterways Literature and Promotional Materials Competition at the NWC Annual Meeting in St. Louis last month.

The winning entry was a trayliner for McDonald's restaurants in Oklahoma in celebration of the McClellan-Kerr Arkansas River Navigation System's 25th anniversary. The trayliners, developed in conjunction with the Oklahoma Alliance for Geographic Education, boosted the economic, environmental and safety advantages of barge transportation. The trayliners were distributed to 110,000 McDonald's customers in Oklahoma.

Glen Cheatham and Carol King of the Oklahoma Department of Transportation's Tulsa office, and Linda S. Beckham of the Oklahoma Alliance for Geographic Education accepted the award. In addition to the top prize, ODOT won five other awards and the Tulsa Port of Catoosa received five honors, all celebrating the Oklahoma waterway's 25th anniversary. The competition attracted 45 entries in eight categories.
Volunteers Label Storm Drains

Juli Watterson and Christy Hobbs of the OWRB Water Quality division, led volunteers from Enid High School and the community in a project to label storm sewers in Enid’s Meadow Lake watershed October 16. The labels cautioned citizens that hazardous materials poured in the storm drains eventually find their way into Meadow Lake’s waters.

Watterson coordinated the project with EPA, the Water Board, Enid High School, the City of Enid and the OSU Cooperative Extension. In a 2-hour evening session, volunteers affixed 10 labels to drains throughout Meadow Lake’s drainage basin.

This project is part of an ongoing effort to clean up the lake and reduce nonpoint source pollution in the watershed. Meadow Lake has been a successful EPA-OWRB Clean Lakes restoration project. Students participating in the program are students of EHS biology teacher Adrienne Nixon and chemistry teachers Terry Sacket and Lisa Burkhart.

Enid Water Watch volunteers labeled all storm drains that could contribute pollution to Meadow Lake.

Water Board, DEQ Investigate Well Pollution

Complaints by homeowners concerning unusual odor and taste of their well water brought crews from the Water Resources Board and the Oklahoma Department of Environmental Quality to the northeastern corner of the state recently for a program of extensive water sampling. Investigators from the two agencies chose for testing all wells in a mile-wide corridor along Honey Creek and Cave Springs Branch near the Missouri border in Delaware County.

Residents in the area are concerned about the impact of pollution on their health as well as its effect on an economy reliant on tourism and water recreation.

On September 9-10, five DEQ teams sampled 55 wells for total coliform, fecal coliform and E. coli, all bacteria that can affect human health. According to DEQ, coliform bacteria can come from a number of sources — soil, grain, animal or human waste material and others. The presence of total coliform in a water sample often indicates unsafe well construction, location or activities that may allow further pollution. Fecal coliform indicates the well has been contaminated by human or animal waste. Of greatest concern to DEQ investigators is E. coli and they warn that a water supply with E. coli traces should not be used for drinking water without boiling or disinfecting.

In the 55 wells sampled, 31 water samples tested positive for total coliform; five of those positive for fecal coliform; and four positive for E. coli. Investigators also tested for the presence of arsenic and nitrates and analyzed turbidity -- or clarity -- of the water drawn from the wells.

Since age, poor well construction, leaky well seals and location near pollution sources can all affect water quality. DEQ, as lead agency, asked OWRB to participate. Gary Glover, who administers the OWRB drillers and pump contractors program, routinely inspects water wells for compliance with minimum well construction standards.

Glover and a team of four from the Water Resources Board inspected 47 wells for construction faults which could potentially admit contamination. Glover and his experts meticulously inspected the wells for integrity of cement surface seals and sanitary seals, casing height above the ground surface, and proximity to house foundations, septic systems, and animal confinement areas. Of the 46 under scrutiny, inspectors found deficiencies in 39 of the wells.

Glover points out that some of the wells were drilled 60 to 80 years ago, long before the state adopted minimum standards for the construction of water wells. The Water Resources Board established minimum construction standards for domestic wells in 1982.

"Age can be a factor, and I suspect some of those wells are contaminated as a result of locations too near septic systems and livestock areas," Glover said.

Once repairs are completed or wells replaced, he recommends well own-

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AMOUNT OF CHLORINE BLEACH NEEDED

<table>
<thead>
<tr>
<th>DEPTH OF WELL</th>
<th>3 in.</th>
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<th>9 in.</th>
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<tr>
<td>50 ft.</td>
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<td>8 oz.</td>
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<td>100 ft.</td>
<td>6 oz.</td>
<td>20 oz.</td>
<td>50 oz.</td>
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<tr>
<td>150 ft.</td>
<td>8 oz.</td>
<td>30 oz.</td>
<td>75 oz.</td>
<td>150 oz.</td>
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8 oz. = 1 cup | 25 oz. = @ 3 cups | 50 oz. = 6 1/4 cups | 100 oz. = 12 1/2 cups | 150 oz. = 19 cups 1 1/4 gals

Continued on page 5
Wells, continued from page 4

ers near Grove, and well owners in all rural areas, regularly disinfect their wells used for drinking water. Glover points out that a well should be disinfected when it is newly drilled; after completion of any repairs to the well or pumping equipment; or when an unsafe sample has been reported. "Ordinary liquid laundry bleach contains 5.25 percent chlorine, and it works fine as a disinfectant," said Glover. However, he warned against using scented bleach because that will contaminate the well.

The Department of Environmental Quality (DEQ) recommends these steps in disinfecting a well:

✓ Pump the well enough in advance to completely remove sediment and other debris left by well construction or repairs.

✓ Add enough chlorine to make 50 to 100-parts per million (ppm) solution. (See Table.)

✓ Circulate the solution by pumping the discharge back into the well. This can be done by inserting a garden hose through the well seal at the top of the well and pumping until the chlorine is thoroughly mixed -- at least 15 minutes.

✓ Open each water tap in the system until a strong chlorine odor is present, then close the tap. This will also disinfect the house service lines.

✓ Let the chlorine stand at least 24 hours, if possible, but no less than two hours.

✓ Flush the system thoroughly by opening taps and allowing water to flow until chlorine odor is no longer present.

The volume of laundry bleach needed to make a 50 ppm solution may be doubled to make a 100 ppm solution.

For more information on sanitizing wells, call the Department of Environmental Quality at 1-800-869-1400.

Water Board Celebrates "Day of Caring"

Staff of the Water Resources Board visited the children of Special Care School in northwest Oklahoma City on September 13, in observance of United Way's "Day of Caring."

It was the second annual observance for the 26 OWRB-ers, who pitched in to shape up the grounds, help with office tasks and entertain the children with a puppet show and party. The children ages six months to 18 years, were treated to cupcakes, punch and cookies and party decorations provided by Water Board employees.

Gary Sherrer, OWRB executive director, approved the half-day outing in appreciation for United Way assistance to the Water Resources Board following the April 1995 bombing. "Our people felt like it was a way of repaying in some measure the kindnesses expressed by the community following the bombing," said Sherrer.

Shelly Bacon and Laura Oak of the Board's Financial Assistance division coordinated the OWRB "Day of Caring" activities. The Water Board's celebration was one of 50 such efforts by volunteers representing industry, business and government in the Oklahoma City metro area.

Jpper left: Mike McGaugh, cartographic drafter in the OWRB Administrative Services Division, pruned trees and tidied the grounds.

Jpper right: Jann Hook, Information services Section Head, was one of five OWRB painters who applied fresh, new paint to classroom walls.

Center: Gene Doussett, left, Planning and Management division, and Tiger Feng, Financial Assistance division, assisted in yardwork.

Bottom: Laura Oak and Marc Hullinger, of the Financial Assistance division, enjoy the role of puppeteers while performing for the children at Special Care, Inc.
At the October 8 Board Meeting:

The October 8 Board meeting was held in the Oklahoma Department of Wildlife Conservation Auditorium. In a lengthy Financial Assistance division agenda, chief Joe Freeman asked and received Board approval for nine grants, two loans and three wastewater facility construction loans (listed in adjacent Table.) The large number of grants was made possible by the Board’s $475,738 earnings on bond issue reserve funds.

On the Planning and Management agenda, the Board approved five temporary permits and two regular permits for the use of groundwater; amended two temporary and one regular groundwater permit; approved one term permit and one regular permit for the use of stream water.

Among permits approved by the Board was the protested application of Kronseder Farms, Inc., and Pig Improvement Corp., in Woodward County. Applicants originally had requested 4,520 acre-feet of water per year to be withdrawn from 45 wells. The application was revised to request 2,920 acre-feet of groundwater to be taken from 27 wells. Of the total allocation, 2,817 acre-feet will be pumped from the North Canadian River Groundwater Basin under a regular permit; 103 acre-feet from the Marlow Formation under terms of a temporary groundwater permit. Local landowner Mark Mayo urged a different interpretation of the permit requirement to put allocated water to beneficial use declaring that “agriculture” should not include mass pig factories. Mayo said he feared that the huge operations would make part of the state uninhabitable.

New Driller/Pump Contractor licenses were approved for Marty Weder, Dennis Neitzel, Kenneth Turk, Jim Norton, Calvin Madsen, William Glunt and Marty Osborn. Three licensed firms added operators/activities: Craig Water Well Service, Jim Craig; Water Right Irrigation, Inc., Terrence Hager; AAA Drilling Company, Roy Knight.

Administrative Services Division Chief Jim Schuele reviewed for Board members the OWRB FY-98 budget request, noting that it represented a 13 percent decrease over last year’s budget.

### FINANCIAL ASSISTANCE PROGRAM UPDATE

**Approved at October 1996 Board Meeting**

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Mary E. Whitlow, Editor
Barry Fogerty, Writer, Photographer
James Leewright, Typography and Layout

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