
Tribal Water Compact, Southeast Plan

Highlight OWRB Efforts in 2000

An ambitious attempt to resolve the Sardis Reservoir debt while initiating a ground-breaking water compact between the state and Tribal governments highlighted accomplishments of the Oklahoma Water Resources Board last year. It is with both pleasure and pride that the Water Board presents this summary of noteworthy agency activities during 2000.

State/Tribal Water Compact

In October, the State of Oklahoma and Choctaw and Chickasaw Tribal Governments signed a formal memorandum of understanding that established a course of action for establishment of a State/Tribal Water Compact. The agreement, which will unite existing state water law with century-old Native American water rights claims, represents the first step in an effort to develop a uniform water rights and water quality standards administration system in southeast Oklahoma. The MOU also provides the groundwork through which the Tribes and State will work together to achieve much-needed economic development in southeast Oklahoma.

The first State/Tribal Water Compact negotiations meeting was held November 27 at the State Capitol.

Southeast Oklahoma Water Resources Development Plan

On November 14, the Water Board and Choctaw/Chickasaw Tribes co-hosted the Joint State/Tribal Request for Qualifications (RFQ) Pre-Submittal Workshop in Oklahoma City. The RFQ process is the first relevant task addressed under HCR 1109, which directs the OWRB and Choctaw/Chickasaw Tribes to evaluate all feasible proposals for the potential development of southeast Oklahoma waters. Information collected through the RFQ's, submitted December 29, will assist the OWRB and Tribes in determining the ability of potential applicants to finance and participate in the Southeast Oklahoma Water Resources Development Plan. Approximately 40 workshop attendees represented interests in the Sardis Lake and southeast Oklahoma area, Oklahoma City and

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metropolitan area, Texas municipalities, and various engineering and private firms. Revenue ultimately generated through the final selected proposal(s) will provide for repayment of construction costs for Sardis Reservoir to the Corps of Engineers, assist in establishment of a crucial regional water supply system in the Sardis area and fulfill various other economic development objectives in southeast Oklahoma, including the area encompassed by the Choctaw and Chickasaw Nations.

Drought Monitoring and Mitigation

During the destructive drought of August-September 2000, the OWRB supported an interim legislative study investigating various short- and long-term measures to deal with Oklahoma's extensive agricultural-related losses, including those related to livestock hay shortages and the substantial resources expended to fight wildfires. The committee studied the feasibility of creating an emergency contingency fund to alleviate costs associated with current and future agricultural-related disasters.

The OWRB amplified its continuous drought monitoring duties as chair of the Water Availability and Outlook Committee of the Oklahoma Drought Management Team, created by Gov. Keating in 1996. The Drought Team held two formal meetings at OWRB offices and conducted numerous informal sessions to identify impacted sectors and identify drought mitigation options for Oklahoma.

The OWRB was successful in its efforts to secure \$150,000 in funding for two emergency drought assistance projects through the Bureau of Reclamation. Construction is imminent on a cooperative project to provide water supply for livestock and rural fire protection in Cotton County and a project in Tillman County that will extend water lines from the City of Davidson to thirsty cattle operations west of town. A second grant (\$50,000) from the Bureau of Reclamation augmented OWRB efforts to develop its drought monitoring web site. OWRB staff also worked closely with water users throughout the state to resolve water interference/shortage problems caused by the extended drought.

Beneficial Use Monitoring Program

The OWRB's Beneficial Use Monitoring Program completed its second highly successful year. A 300-page final report was submitted to the State Legislature in February 2000 and remains available for download on the OWRB's web site. The third BUMP report is in development.

Oklahoma Water Quality Standards

The Water Board promulgated groundbreaking Use Support Assessment Protocol (USAP) rules which have been nationally recognized and are now being considered as a template for other states. USAP rules prescribe how Oklahoma state agencies will make decisions regarding whether beneficial uses for individual waterbodies in the Oklahoma Water Quality Standards are impaired, threatened or supported. Specifically, they identify quality assurance and data requirements, statistical manipulation and interpretation options, and thresholds.

The OWRB led the way for the state's environmental agencies in developing Water Quality Standards Implementation Rules for Oklahoma, fulfilling requirements of SB 549, passed in 1999, which requires all state environmental agencies to promulgate into rule how the Standards will be addressed and adhered to through their individual programs. When completed, the agencies will promulgate rules stating how the Standards apply to permits, best management practices, pollution remediation, water rights and related issues.

Update of the Rural Water Survey

The OWRB initiated compilation of data to publish a third, updated survey of rural water systems in Oklahoma. Questionnaires and maps with instructions were mailed to more than 750 rural water suppliers in December 2000 for inclusion in the new "Rural Water Systems in Oklahoma" publication, anticipated for completion early in 2002.

Planning and Technical Studies

During 2000, the OWRB completed four studies in cooperation with the U.S. Army Corps of Engineers under authority of the Corps' Planning Assistance to the States Program:

- ◆ An investigation of a potential regional water treatment and distribution system in the Lake Tenkiller area.
- ◆ A study examining the marketing potential of the McClellan-Kerr Arkansas River Navigation.
- ◆ A geotechnical study of the proposed Mangum Lake reservoir site in southwest Oklahoma. Study results indicated that the location is unsuitable due to gypsum/salt deposits and recommended other potential sites for further study.
- ◆ A geotechnical study on the proposed Holson Creek reservoir site in east central Oklahoma. Study results indicated that the site is unsuitable due to fracturing and faults in the area.

Two special studies were completed during 2000. One study, conducted in cooperation with the Oklahoma Conservation Commission, evaluated groundwater which drains into Twin Caves, near Grand Lake. The second study resulted in identification of groundwater quantity and quality contributions to Lakes Eucha and Spavinaw.

The OWRB also initiated an instream flow study of the Baron Fork River, in eastern Oklahoma, in cooperation with Oklahoma State University. The study seeks to quantify instream flow requirements sufficient to protect the river's environmental benefits while balancing the water supply needs of area residents.



Meteorologists and pilots with the Oklahoma Weather Modification Program utilize two radar bases, high-precision aircraft and a host of sophisticated weather tracking and evaluation tools to pinpoint prime cloud seeding opportunities throughout the state.

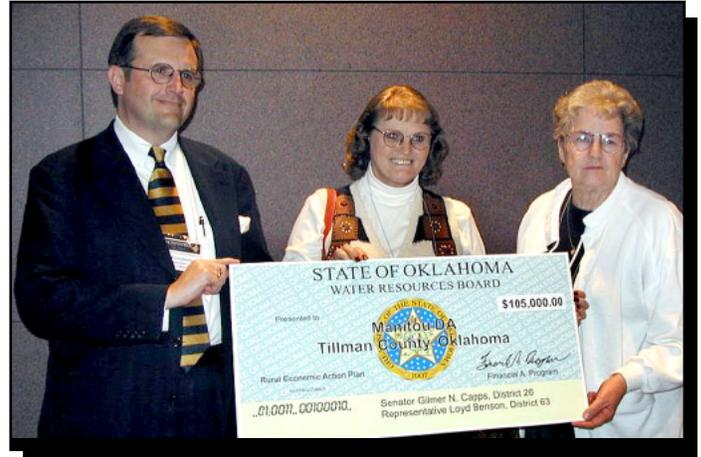
2000 project season; 156 total seeding flights were flown last year — 86 for hail suppression and 70 for rainfall enhancement. The program, initiated in 1996, completed its fifth year of operations.

Financial Assistance Programs

In June, the Water Board closed a \$2.3 million two-year note issue that resulted in the receipt of a \$10,996,702

EPA capitalization grant to help sustain the Board's Clean Water State Revolving Fund loan program. This was the seventh consecutive year that the Board has issued debt to obtain state matching funds without the assistance of any appropriated dollars for the program. The CWSRF debt issuances have resulted in approximately \$73.6 million in capitalization grants for the State of Oklahoma.

During 2000, the Financial Assistance Division completed its eighth Drinking Water State Revolving Fund loan.



During 2000, the OWRB's Financial Assistance Program provided more than \$6.6 million in emergency program and REAP grants and many millions more in loan funds to subsidize the water/wastewater system needs of Oklahoma communities.

Although the DWSRF is the Board's newest loan initiative and, therefore, only minimal funding has been made available for the program, the OWRB has closed 31 percent of all DWSRF loans that have been provided in EPA's five-state Region Six area. In comparison, the State of Texas has completed nine DWSRF loans, only one more than in Oklahoma.

The OWRB's Revenue Bond Issue Loan program was substantially strengthened in 2000. The Board's bond loan portfolio increased to 85 percent ratable from a low of less than 80 percent earlier in the year. The Board approved more than \$62.9 million dollars in loans during 2000. This amount accounts for almost 10 percent of all loans approved in the 15-year history of the Board's loan programs. Total loan amounts outstanding (bond issue, CWSRF and DWSRF) increased to \$320.8 million dollars. Total loan program assets increased to more than \$470.3 million during 2000.

The Board's Emergency Grant and Rural Economic Action Plan (REAP) programs continued to fund the water/sewer infrastructure needs of Oklahoma cities, towns and rural water districts. During 2000, the Board approved 17 emergency grants for \$1,136,479 and 67 REAP grants for approximately \$5.5 million.

Water Quality Studies and Projects

The Water Quality Division completed several vitally important Clean Lakes Program projects, including:

- ◆ a revegetation project at Lake Wister to control sediment loading problems;

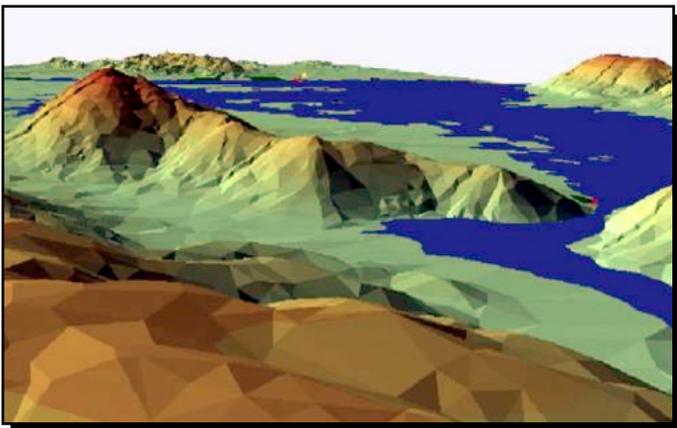
- ◆ the Meadow Lake (Enid) Clean Lakes Program restoration project;
- ◆ a Clean Lakes Program study on Arcadia to investigate ongoing or potential problems with the City of Edmond's water supply reservoir;
- ◆ a four-year Clean Lakes Program project to restore the recreational benefits of Carmen Lake, in north central Oklahoma; and
- ◆ a special study of southwest Oklahoma's Lake Frederick to mitigate deteriorating water quality in the reservoir.

In addition, two far-reaching water quality studies – involving the City of Tulsa's water supply in the Eucha/Spavinaw watershed and Oklahoma City's multi-reservoir water system — also neared completion at the closing of 2000. The studies seek to assess the impacts of suspected contaminants from poultry and confined animal feeding operations, respectively, to those valuable water resources

Technology Development and Implementation

The agency continued to maximize efficiency through investment in emerging technologies, including the OWRB's Geographic Information System (GIS) – implemented, developed and maintained by the OWRB's Information Services Section – which continued to play an invaluable role in the planning and policy-making decisions of various agency projects:

- ◆ GIS tools have enabled the OWRB to comprehensively analyze the hydrological makeup of southeast Oklahoma's water resources, including surface water availability and lake storage capacities, under the Southeast Oklahoma Water Resources Development Plan.
- ◆ GIS coverages were finalized for the Lugert-Altus



The Board's GIS has provided unique and invaluable 3D perspectives of Sardis Lake and surrounding topography in the Kiamichi River Basin.

Irrigation District Project. The resulting enhanced ability to display and demonstrate the District's irrigation canals, water flow control structures and related facilities will enable the District to optimize its water usage.

- ◆ Bathymetric mapping and volumetric studies were completed on eight lakes in the state (Eucha and Spavinaw for the City of Tulsa, Frederick Lake for the City of Frederick, and Atoka, Draper, Hefner, McGee Creek, and Overholser lakes for the City of Oklahoma City). The studies included 3D and contour mapping to determine current lake storage capacities.
- ◆ GIS assisted the agency's Dam Safety Program in several dam breach analysis projects during the year. GIS enabled staff to predict areas of floodwater inundation resulting from a dam breach. 3D maps and graphics were produced to help identify the effected areas.
- ◆ The OWRB's GIS and Global Positioning System (GPS) were used to map and display more than 900 individual plant locations around Lake Wister for the Plant Inventory and Growth Study. The data will be used to track and monitor the growth of aquatic plants around the lake.
- ◆ Customized maps and GIS programs were created to facilitate the distribution of wetland maps to the public. The maps and programs allow staff to quickly locate and reproduce requested maps.
- ◆ The Information Services Section continued implementation and refinement of the agency's electronic document management and workflow system for water rights administration, including the imaging of 61,806 pages of water rights and well log documents.

OWRB Web Site

The Information Services Section and various OWRB staff expanded, maintained and improved the OWRB's award-winning web site, including the Drought and Water Resource Monitoring and Oklahoma Weather Modification Program pages. In addition, continued development and expansion of online agency forms, reports, rules, financial documents and related materials during the year resulted in a noticeable decrease in staff time/workload as well as postage expenses.

During 2000, the agency also established the intra-agency Web Site Development Team to identify web issues, assess agency needs and plan web site development. A web site plan was developed to outline incremental phases for implementing the agency's web site goals. In addition, the OWRB's Data Collection and Dissemination Committee initiated a comprehensive inventory and evaluation of the agency's extensive set of stored data for eventual public distribution.