

Annual Report of OWRB Activities for 2012

Initial Implementation of the *Oklahoma Comprehensive Water Plan*

State Legislative leaders responded positively to the *2012 Update of the Oklahoma Comprehensive Water Plan*, providing both substantive water policy legislation and funding for implementation. As a result, the OWRB and related agencies now possess both the directive and tools necessary to meet Oklahoma's water challenges through revitalized and innovative water management and protection programs. In all, accomplishments from the 2012 legislative session will accelerate implementation of at least half of the eight priority recommendations included in the *2012 OCWP Update* (Water Quality and Quantity Monitoring; Water Supply Reliability; Water Conservation, Efficiency, Recycling and Reuse; and Water Project and Infrastructure Funding). Additional legislation providing for improved enforcement of water well drilling regulations and enhanced floodplain management rules address at least two OCWP supporting recommendations.

Water for 2060 Advisory Council

With passage of the Water for 2060 Act (HB 3055), Oklahoma became the first state in the nation to establish a bold, statewide goal of consuming no more fresh water in 2060 than is consumed today. The OWRB has partnered with the U.S. Army Corps of Engineers and its contractors, through the Corps' Planning Assistance to State Program, to begin preliminary work required to support the new Water for 2060 Advisory Council, chaired by the OWRB Executive Director. The Council's fifteen members—to be appointed by the Governor, Speaker of the House, and President Pro-Tempore of the Senate—are charged with studying and recommending appropriate water conservation practices, incentives, and educational programs to moderate statewide water usage while preserving Oklahoma's population growth and economic development goals. Council meetings will commence once appointments are completed.

Passage of State Question 764

Passage of State Question 764 in November allows the OWRB's Financial Assistance Program to meet much of the state's projected \$82 billion water and wastewater financing need. The new Water Infrastructure Credit Enhancement Reserve Fund, created through a constitutional amendment approved by voters, essentially establishes a \$300 million pledge of credit that enables the OWRB to leverage funds in the bond market as water and sewer projects become ready for construction.

Water Monitoring and Analysis

The FY-2013 budget included an additional \$2 million in appropriations to the OWRB and Conservation Commission to expand and integrate the state's water quality and quantity monitoring programs, another key grass-roots provision of the OCWP. This funding will ensure continued improvement in managing Oklahoma's water resources for future needs.

In 2012, the OWRB initiated the state's first comprehensive groundwater monitoring program. The agency's existing network of water wells was refined and expanded in close cooperation with various stakeholders, peer agencies, and landowners. With a specific component to assess groundwater quality, initial groundwater sampling will begin in the spring of 2013. Long-term monitoring will provide essential data to assess trends over time and assist in water supply management decisions.

The Legislature also extended utilization of Gross Production Tax proceeds for OCWP implementation, particularly updates of hydrologic studies and enhancement of water management and modeling tools. Through this approximately \$1.3 million, the OWRB and its many partners will address the OCWP's specific recommendation calling for completion or update of all surface and groundwater basin studies across the state within 10 years (by 2022). Advanced tools and resources applied to this effort will provide fundamental information to ensure accurate allocation of waters by enhancing the forecasting of potential water shortages in a stream basin or aquifer and enabling a more accurate evaluation of various water use scenarios.

Instream Flow Workgroup

The OWRB initiated work with the U.S. Army Corps of Engineers and its contractors to implement the OCWP instream flow recommendation. In early 2013, the OCWP Instream Flow Workgroup—originally commissioned during the update process to conduct an independent technical, legal, and policy analysis of a potential instream flow program in Oklahoma—will begin meeting to craft recommendations for the most efficient, feasible method for balancing the water needs of consumptive users with those that rely upon water flowing in streams and lakes for economic development and recreation.

OCWP Public Water Supply Planning Guide

Throughout the five-year 2012 OCWP Update process, considerable attention was given to creating both sensible and functional planning documents to serve as indispensable technical resources for water providers, policy makers, and water users in making informed decisions concerning future local and regional water use and management. In addition to 13 Watershed Planning Region Reports and various other supporting materials and modeling tools, in late 2012 the OWRB also published the *OCWP Public Water Supply Planning Guide*, which provides more than 770 water systems with a primer for data collection, identifying gaps between existing infrastructure and supply and future needs, and strategies to close identified gaps. In November, OWRB staff mailed copies of the *OCWP Executive Report, Planning Guide*, and appropriate *Regional Reports* to all identified water systems in the state.

Water Use Permitting

In 2012, the OWRB experienced another considerable increase in water use permit applications. New applications for stream and groundwater permits have more than doubled in the last five years, while the number of requests for amendments to existing permits has more than tripled. Staff processed 2,442 Provisional Temporary (90 day) permits, more than 800 permits above the five-year average (1,616).

Increases in water use during the year were primarily due to oil and gas production and farming. Applicants were most interested in groundwater, especially in west and northwest Oklahoma where stream flows were greatly reduced due to continued drought conditions.

Staff also responded to numerous calls from water users concerned about shortages—even more than during the 2006 drought. A number of investigations were conducted in response to complaints about dry or depleted creeks, declining water levels in wells, and interference between junior and senior water right holders.

In April, the OWRB introduced same-day online approval of provisional temporary permits. This new web-based program provides enhanced convenience to Oklahoma water users, promotes the state's energy industry, and saves considerable staff time. Provisional temporary permits, typically authorizing a relatively small amount of water, are the most common type of permit administered by the OWRB, and are primarily utilized for oil and gas production.

Hydrologic Studies

The OWRB began the Rush Springs Aquifer Study in 2011-2012 in conjunction with a hydrologic investigation and stream water allocation model of the Upper Washita River. The Rush Springs aquifer is an important source of irrigation and municipal water supply in the west-central portion of the state. The OWRB will be working cooperatively on the project with the Bureau of Reclamation and the Ft. Cobb and Foss Reservoir Master Conservancy Districts.

The Garber-Wellington Water Management Study, focusing on the physical properties and future management of central Oklahoma's primary groundwater source, was completed in 2011 and the final report and groundwater flow model are under review. The OWRB expects to publish the report by September 2013.

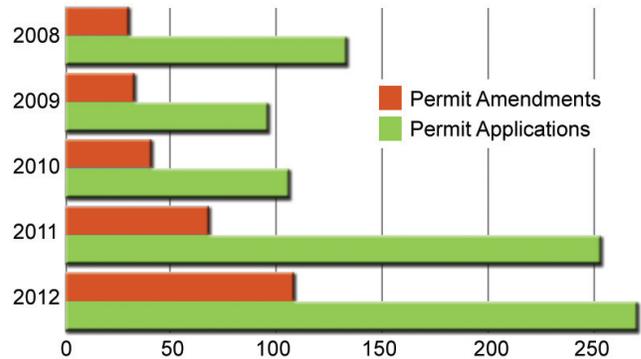
The OWRB is initiating 20-year updates on hydrologic studies for the Enid Isolated Terrace and Elk City Sandstone aquifers; anticipated completion of this work is late 2014. Under contract with the U.S. Geological Survey, the OWRB will conduct a 20-year update of the groundwater study for the North Canadian River Alluvium and Terrace Groundwater Basin from the Beaver-Harper County line to Lake Overholser at the Canadian-Oklahoma County line. The investigation will determine if there has been any significant depletion in the basin and develop a new groundwater flow model. Work is anticipated to be completed by late 2013. The USGS has also been contracted to begin a basin study of the Canadian River Alluvium and Terrace aquifer and a 20-year update of the North Fork of the Red River Alluvium and Terrace aquifer.

In March 2012, the Board issued a tentative determination of the Maximum Annual Yield for the Arbuckle-Simpson Groundwater Basin. A public hearing on the tentative yield was held in May. At the conclusion of 2012, the matter remained under advisement of the hearing examiner.

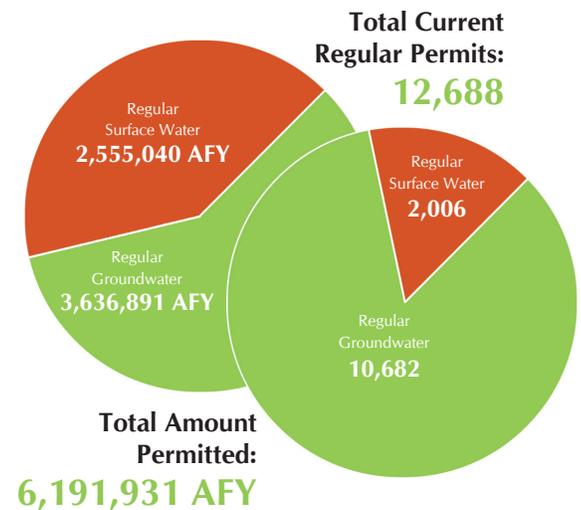
Floodplain Management

In coordination with the Federal Emergency Management Agency (FEMA), the OWRB completed the six-year Map Modernization (Map Mod) program in 2012. Map Mod provided 41 counties and more than 200 municipalities with updated, digitized Flood Insurance Rate Maps (FIRMs).

Permit Applications and Amendments for the Past Five Years (2008-2012)



Note: Chart does not include Provisional Temporary Permits.



OWRB hydrologist, Jessica Magers, looks for wells in the Rush Springs Aquifer that are suitable for groundwater level recorders.

With assistance from the Oklahoma Floodplain Managers Association (OFMA), the OWRB provided 16 training opportunities in 2012 and also monitored the week-long “Managing Floodplain Development through the NFIP” class, required of managers to achieve Certified Floodplain Management (CFM) status.

Well Driller and Pump Contractor Program

During 2012, OWRB staff licensed 21 new Well Drilling and Pump Installer firms and 56 new operators, and they maintained licenses for 361 licensed firms and 645 licensed operators. The OWRB also received reports for 3,192 water wells, 1,916 monitoring wells/geotechnical borings, and 927 heat exchange wells completed in 2012. Staff maintains a well log database of more than 147,000 well completion, boring, geothermal, and plugging records that are accessible to the public.

Dam Safety

OWRB staff completed more than 300 site visits to verify structure type and measure dimensions of bridges, culverts, and other drainages associated with dams. With this information, more than 67 simplified breach inundation maps were completed. As part of an effort to update the OWRB dam inventory database, dozens of dams currently meeting jurisdictional size, though not in inventory, have been identified through utilization of the new dam inventory online viewer created by OWRB GIS staff.

In conjunction with a private engineering firm, OWRB staff produced 10 breach inundation maps for selected high hazard potential dam owners to include in their Emergency Action Plans (EAPs). In Norman, the OWRB cooperated with city engineers and residents to rehabilitate and develop an emergency action plan for a high hazard dam.

Water Quality Standards

During 2012, several important revisions to Oklahoma’s Water Quality standards were proposed, including 1) new human health criteria for four new pollutants to be added and criteria for 21 existing priority pollutants recalculated for carcinogens and noncarcinogens; 2) amendments to Appendix H, Beneficial Use Designations for Certain Limited Areas of Groundwater limiting future uses of groundwater at several sites and providing information necessary to protect public health; and 3) designation of the Arbuckle-Simpson aquifer as Class I Special Source Groundwater, a designation currently applicable to only small portions of the aquifer.

OWRB staff completed the ten-year review of Oklahoma’s .037 milligram/liter phosphorus standard for Oklahoma’s six Scenic Rivers. A technical advisory group—consisting of state, federal, and tribal officials and point and nonpoint source dischargers from both Oklahoma and Arkansas—was formed to evaluate the current appropriateness of the numerical standard based on the latest, best scientific information available. Though no consensus was reached between Oklahoma and Arkansas members, the majority of the working group concluded that current information supports the existing criterion and no change is necessary. It further recommended that an additional study documenting chemical, physical and biological integrity should occur to guide future water quality management of these waters. In addition to the primary workgroup report, Arkansas members prepared and formally submitted a separate report entitled “Arkansas TAG Members’ Minority Report to OWRB.”

Lake Rehabilitation

Lake revegetation projects were completed in 2012 at Eucha and Fort Cobb: more than 8,000 wetland plants were established at Eucha on 6,400 square feet of floating islands consisting of recycled plastic; 2,000 aquatic plants were placed in enclosed pens and cages at Fort Cobb. Work also continued at Stanley Draper, Grand, and Hudson Lakes to establish and spread the growth of native plants. OWRB staff continued to work cooperatively with the Central Oklahoma Master Conservancy District (COMCD) to monitor and improve water quality in Lake Thunderbird where a new system was implemented to oxygenate lake water. Monitoring results are positive and it is probable that COMCD will continue to operate the system to improve the quality of raw water supplied to Norman, Del City, and Midwest City.

Financial Assistance Programs

In 2012, the OWRB’S Financial Assistance Program (FAP) approved 56 grants and loans totaling almost \$142 million to address the water and wastewater infrastructure needs of Oklahoma communities and rural water/sewer districts. Five of these grants addressed water needs resulting from the Drought Emergency declared by Governor Fallin in July. Additionally, the Program closed six bond issues last year, two for the State Revolving Fund in the amounts of \$86.5 million for Clean Water and \$49.3 million for Drinking Water, and four for the State Loan Program totaling \$81.1 million. OWRB



Construction of the new aeration basin at the Eufaula wastewater treatment plant. The \$4,035,000 CWSRF project is expected to be completed by April of 2013.

financing in 2012 saved communities and water systems more than \$44 million over traditional financing avenues. In 2012, the OWRB reached the \$1 billion milestone in total FAP savings.

Legal Developments

In January 2012, the Tarrant Regional Water District filed a petition with the U.S. Supreme Court asking the Court to review the July 2011 opinion of the federal 10th Circuit Court of Appeals that upheld Oklahoma's laws relating to permit applications to use stream water out of state. Soon thereafter, the Supreme Court ordered the Solicitor General to file a brief stating his views on whether the Court should take the case. In November 2012, the Solicitor General recommended that the Supreme Court should indeed hear the case. The Supreme Court's decision on whether to review the lower court decision is expected in January 2013.

In response to a federal lawsuit filed by the Chickasaw and Choctaw Nations in August 2011 against Governor Fallin and OWRB members, in February 2012 the Office of Attorney General asked the Oklahoma Supreme Court to take jurisdiction of a stream adjudication for the Kiamichi, Muddy Boggy, and Clear Boggy stream systems. The Tribes had asked the federal court for an order to prevent Oklahoma City and others from taking water from anywhere in roughly the southeast quarter of the state (within the Nations' territorial boundaries) unless adjudication is completed. The Oklahoma Supreme Court accepted the OWRB's case. However, the U.S. government, on behalf of the Tribes, removed the state case to the federal court. Subsequently, the federal court judge ordered the Indian Tribes, Governor Fallin and OWRB members to mediate the dispute over Indian water rights. Mediation settlement efforts are ongoing.

A case involving a disputed permit to use groundwater remains active in Tillman County District Court. A case involving the hazard classification of a dam in Sequoyah County remains active; a hearing in that case is scheduled for March 2013.

In May 2012, a public hearing on the Tentative Order for the Arbuckle-Simpson Groundwater Basin Maximum Annual Yield was conducted in Sulphur. Administrative proceedings on that matter are ongoing. ♦

FY 12 Expenditures and FY 13 Budget

	FY 12 Expended	FY 13 Budgeted
Administration	\$2,694,047.87	\$2,447,895.00
Water Quality	3,181,976.75	3,792,925.00
Financial Assistance	2,397,490.13	3,416,315.00
Planning & Management	3,369,325.63	5,067,707.00
Secretary of Environment	7,236,106.81	13,564,342.00
Information Technology	—	1,390,693.00
Totals	\$18,878,947.19	\$29,679,877.00
Fund Name		
General Appropriations	\$3,959,425.45	\$5,371,606.00
Drillers & Installers Indemnity Fund	4,300.00	50,000.00
OWRB Revolving Fund	2,004,982.20	1,060,971.00
Water Resources Revolving Fund	763,088.90	1,048,392.00
Drillers & Installers Regulation Fund	12,500.00	25,474.00
Water Infrastructure Development Fund	848,042.67	1,682,779.00
Federal Funds - OWRB	1,696,060.65	3,541,212.00
Federal Funds - OSE	7,071,414.44	9,442,732.00
Environmental Remediation Fund	0.00	3,961,308.00
USGS Cooperative Agreement	399,552.00	291,752.00
American Recovery & Reinvestment Act Fund	10,067.00	0.00
DW Loan Administration Fund	465,291.23	1,182,129.00
CW Loan Administration Fund	1,644,222.65	1,321,522.00
CW Loan Fund	0.00	700,000.00
Totals	\$18,878,947.19	\$29,679,877.00