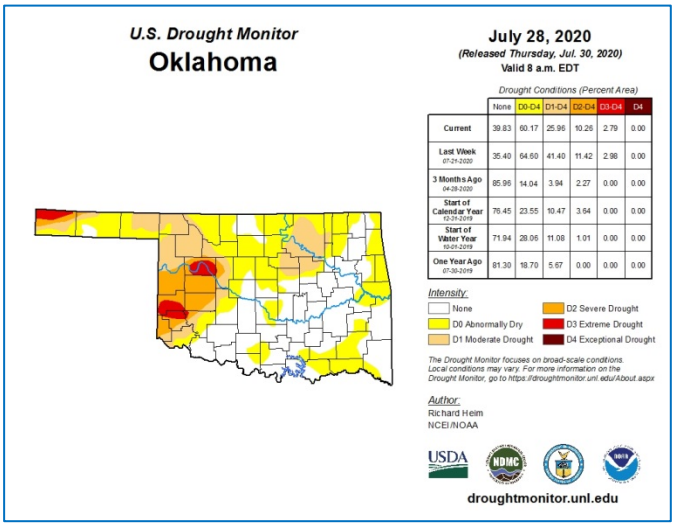
OKLAHOMA COMMISSIONERS' REPORT

Kansas-Oklahoma
Arkansas River Compact Commission
August 4, 2020

CLIMATE

Since mid-June 2020, changes in drought severity have been highly variable, with areas of improvement intertwined with areas of intensification. But overall, there was more deterioration than improvement. A few areas of rapid intensification (2 or more categories) were noted in much of the Plains.

Despite recent rains in late July, and even some localized flooding due to storm systems, severe to extreme drought has been expanding for the past few weeks and now covers much of the western half of Oklahoma.



COVID19 RESPONSE– CONTINUITY OF OPERATIONS

During the current public health situation, Oklahoma agencies have implemented "Continuity of Operations Plans" focused on the continued delivery of services and resources to all citizens. Agencies are adhering to the guidelines set forth by the Center for Disease Control and incorporated into guidance plans from the White House and Governor Kevin Stitt's office. This has included an expansion of online services and communications and a move to nearly 100 percent mobile operations through telework. The OWRB has modified operations and is assessing permanent changes, including increased online services for permitting, testing, and continuing education; optimizing administrative transactions and assistance; adopting virtual public meetings to mobile workforce model configuration.

OKLAHOMA COMPREHENSIVE WATER PLAN (OCWP) UPDATE

The OCWP is the defining water resource management guide for the state of Oklahoma. Plans for the 2025 decennial update were initiated in August, 2019 with execution of a letter agreement for Planning Assistance to States funding between the OWRB and U.S. Army Corp of Engineers and engineering

contracts will be finalized in the coming months. New to the OCWP 2025 Plan will be an emphasis on infrastructure across the water spectrum, from public drinking water and water reclamation systems, to lake and groundwater storage, to flood control and agricultural water conservation and recharge. The Plan will include a statewide assessment of water supply infrastructure, supply-demand-gap analyses, development of local and regional supply options, among other studies. Stakeholder engagement and water policy recommendation development will be conducted via live and virtual meetings with water sector and economic development groups and digital surveys to capture key water issues and concerns across the diverse areas of the state.

NEW STATEWIDE FLOOD RESILIENCY PLAN

Oklahoma Senate Bill 1269, a request bill from the OWRB, directing the agency to develop a Statewide Flood Resiliency Plan, was signed into law by Governor J. Kevin Stitt on May 18, 2020. In addition to the creation of a statewide flood mitigation plan, the law creates the State Flood Resiliency Revolving Fund to fund both the development of the Plan as well as future flood hazard mitigation projects.

The flood plan will examine flood risks, and potential flood mitigation projects beyond the local level, along an entire runoff area within a larger watershed. The plan will examine the need for additional flood risk information, such as flood maps, and will ultimately feature a State inventory of specific flood control infrastructure projects that will include cost-benefit analyses. Flood risk needs and assessments within watersheds could also be coordinated between communities in those watersheds.

The OWRB and other hazard mitigation and infrastructure agencies – including the Oklahoma Floodplain Managers Association, Oklahoma Emergency Management, Federal Emergency Management Agency, Oklahoma Conservation Commission, Oklahoma Department of Commerce, Oklahoma Department of Transportation, U.S. Army Corps of Engineers, and the Natural Resources Conservation Service – have already began initial collaboration for the plan.

OCWP INSTREAM FLOW WORKGROUP

Consideration of an ISF program is a priority recommendation of the 2012 OCWP Update. The OWRB conducted an ISF Pilot Study in the Upper Illinois River Basin in northeast Oklahoma. The pilot study included technical studies initiated by OWRB, following the Instream Flow Incremental Methodology (IFIM). In June 2019, the ISF team presented the draft IFIM Pilot Study with recommendations to the ISF Advisory Work Group and the group discussed various approaches other states have adopted. Although no consensus was reached by the group on a single approach, most members agreed that assessing potential economic impacts of various scenarios that promote consumptive and non-consumptive uses is warranted to promote long range economic development in the diverse areas of the state.

STRATEGIC PARTNERSHIP ALLIANCE

In September 2019, the Governor J. Kevin Stitt, Secretary Kenneth Wagner, the Oklahoma Water Resources Board, Oklahoma Department of Environmental Quality, and the Oklahoma Rural Water Association announced the formal creation of a Strategic Partnership Alliance between the

organizations. The alliance agreement commits the organizations to collaborate and combine resources to improve the sustainability of Oklahoma rural and small community water and wastewater systems while meeting their own mission. Similar to systems across the nation, many of Oklahoma's rural communities struggle with aging, inadequate water and wastewater systems, many of which experiencing system losses upwards of 30 percent, reaching 60-70 percent as reveled the OWRA's Leak Detection Team. With an initial goal of reducing rural water leakage by half, most attempts have exceeded those expectations. The program also provides training and assistance to help small communities run local systems more sustainably drawing from modern business practices and principles.

2020 OKLAHOMA LEGISLATIVE SESSION

During the 2020 Oklahoma legislative session two bills related to Oklahoma water law and water resource management programs were approved.

SB 1269, or the Oklahoma Flood Resiliency Act, directs the OWRB to create a statewide flood mitigation plan. The law also creates the State Flood Resiliency Revolving Fund to fund both the development of the Plan and future flood hazard mitigation projects. This legislation was requested by the OWRB.

SB 1875, or the Oil and Gas Produced Water and Waste Recycling Act, establishes which parties are responsible for disposal or processing of oil and gas water and waste. The legislation was requested by parties who are interested in promoting the reuse of produced water for energy production in lieu of freshwater resources when feasible.

ILLINOIS RIVER JOINT STUDY COMMITTEE

OWRB staff, in collaboration with Oklahoma sister environmental agencies and the Arkansas Department of Environmental Quality, are engaged in various efforts to address the Illinois River Joint Study Committee Final Report recommendations.

ARKANSAS RIVER BASIN INFRASTRUCTURE INVESTMENT

The OWRB approved funding for 34 water & wastewater projects totaling nearly $313,290,192 million in the Stream Compact basin from June 2019 to June 2020:

Wastewater System Projects

- $11,415,000 loan for Broken Arrow Municipal Authority
- $43,310 loan for Cameron Public Works Authority
- $505,000 loan for Carney Public Utilities Authority
- $11,373,000 loan for Coweta Public Works Authority
- $209,250 loan for Dewar Public Works Authority
- $36,130 loan for East Central Oklahoma Water Authority
- $10,431,584 loan for Enid Municipal Authority
- $440,000 loan for Haileyville Public Works Authority
- $580,000 loan for Hartshorne Public Works Authority
- $2,600,000 loan for Inola Public Works Authority
- $4,328,000 loan for Kingfisher Public Works Authority
- $6,280,000 loan for Miami Special Utilities Authority
- $78,000 loan for Meeker Public Works Authority

- $1,947,000 loan for Oklahoma City Water Utilities Trust
- $4,650,000 loan for Oklahoma City Water Utilities Trust
- $28,170,000 loan for Owasso Public Works Authority
- $99,999 grant for Porum Public Works Authority
- $740,000 loan for Roland Utility Authority
- $37,920,000 loan for Shawnee Municipal Authority
- $10,626,000 loan for the Tulsa Metropolitan Utility Authority
- $14,835,000 loan for Wagoner County RWSG & SWMD #4
- $37,575 loan for Westville Utility Authority

TOTAL: $147,344,848

- Water System Projects:
  - $8,291,000 loan for Collinsville Municipal Authority
  - $1,100,000 loan for East Central Oklahoma Water Authority
  - $40,000,000 loan for Edmond Public Works Authority
  - $9,675,000 loan for Locust Grove Public Works Authority
  - $490,000 loan for McIntosh County RWS & SWD #2
  - $2,785,000 loan for Miami Special Utilities Authority
  - $4,700,000 loan for Nicoma Park Development Authority
  - $21,750,014 loan for Oklahoma City Water Utilities Trust
  - $74,000,000 loan for Oklahoma City Water Utilities Trust
  - $700,000 loan for Okmulgee Municipal Authority
  - $2,359,000 loan for Roland Utility Authority
  - $95,330 loan Weleetka Public Works Authority

TOTAL: $165,945,344

HYDROLOGIC INVESTIGATIONS IN THE ARKANSAS RIVER BASIN

The OWRB conducts statutorily mandated hydrologic investigations to determine the amount of fresh groundwater available for appropriation. Several of these investigations are currently underway in the Arkansas River basin including:

- The OWRB initiated a hydrologic investigation of the Salt Fork of Arkansas River aquifer in August 2018 through a contract with the United States Geological Survey (USGS).
- The OWRB also has an ongoing hydrologic investigation of the Boone minor aquifer and Roubidoux major aquifer through a contract with the USGS, initiated in 2017.
- Third, the OWRB is in the final stages of an in-house review for the hydrologic investigation report on the Cimarron Alluvial aquifer, which will then be peer-reviewed by the USGS prior to publishing.
- The OWRB has initiated a study on the Ada-Vamoosa aquifer. The Ada-Vamoosa aquifer is currently in the field work portion of the study and will be handled in-house and peer-reviewed by the USGS.

KAW LAKE WATER SUPPLY PROGRAM - CITY OF ENID, OK

The City of Enid's Kaw Lake Alternative Water Supply Program will ensure the long-term availability of water to Enid residents, Vance Air Force Base, Woodring Regional Airport, local and

outlying industry, neighboring municipalities, and rural water customers. The project consists of four primary infrastructure construction projects: a micro-tunnel intake to withdraw water from Kaw Lake; 70-miles of raw water conveyance pipeline; a new 10.5 million gallons per day (MGD) water treatment plant; and distribution system improvements. The purpose of the program is to ensure sufficient water quantity to meet population projections, reduce average day demand on the regional aquifers by 65 percent, and remove 7.5 miles of cast iron pipe, which reduces pipes with lead-sealed joints. The OWRB has funded approximately $120 million of the project through its financial assistance programs and is developing a financial structure for an additional $200 million in funding to complete the projects.

FLOODPLAIN MANAGEMENT – 2019 FLOOD

Oklahoma experienced substantial flooding in the summer of 2019, particularly in the northeast region on the Arkansas River. Extreme releases of water from major reservoirs impacted communities throughout the Arkansas River basin.

- 489 NFIP claims from 5/7/2019 to 8/26/2019 totaling nearly $33.3 million
- 40 Disaster Declared Counties
- 27 Individual Assistance Counties
- 196 Impacted National Flood Insurance Program (NFIP) Participating Towns/Cities
- 210 Impacted non-NFIP Participating Towns/Cities
- 7 NFIP CRS Communities in Declared Counties: Enid, Bartlesville, Stillwater, Sand Springs, Tulsa, Broken Arrow, Dewey
- 10 Disaster Declared Counties NOT participating in NFIP
- 2,375 dams in Declared Counties (201 are High Hazard Class)
- The OWRB worked closely with communities throughout the state in 2019 to identify flood risks and update flood maps through FEMA's Cooperating Technical Partners program with six active mapping update and discovery projects.

The OWRB acts as the State Floodplain Board and NFIP coordinating agency, as directed by the Oklahoma Floodplain Management Act. The agency has begun identifying funding partners to initiate development of Oklahoma's first statewide flood plan, which will identify flood risks and potential flood mitigation projects on a watershed basis. The plan will also examine the need for additional flood risk information, such as flood maps, and will ultimately feature a state inventory of specific flood control infrastructure projects that will include cost-benefit analyses.

WATER RIGHTS PERMITTING

The OWRB appropriates fresh water resources as directed by Oklahoma statutes. Currently, there are 13,220 active long-term permits for more than 6.9 million acre-feet per year. The OWRB's permitting staff issued 35 groundwater permits in FY-2020 totaling 25,962.2 acre-feet, and 55 stream water permits totaling 25,568.2 acre-feet, along with 880 provisional temporary permits totaling 38.821 acre-feet. To support water rights administration, the agency conducted surface water allocation modeling and availability analyses, coordinated statewide water use reporting, and responded to public complaints.

DAM SAFETY PROGRAM

Last year, the Oklahoma Dam Safety Program contracted with Applied Weather Associates, in coordination with the Arkansas, Louisiana, and Missouri state dam safety programs, to complete a regional Probable Maximum Precipitation study. Information obtained from the study was used to update the OWRB's administrative rules (OAC 785 Chapter 25) for future spillway design, replacing precipitation values published by the National Weather Service in 1978. The rules governing dam inspections were also amended to clarify the minimum standards required for written dam inspection reports.

During past year, the OWRB Dam Safety staff worked closely with several high hazard dam owners to update and complete their Emergency Action Plans. Following FEMA's release of a Notice of Funding Opportunity for FY 2020 High Hazard Potential Dams Rehabilitation Grant, program staff began assisting dam owners that may be eligible for the grant with preparing and submitting the required documents.

WELL DRILLER AND PUMP INSTALLER PROGRAM

There are currently 379 well drilling and pump contractors licensed by the OWRB. The OWRB frequently provides technical assistance for water well drilling and pump contractors and for the public at large. The OWRB also assists drillers with required well log reporting, and to date, more than 200,000 well logs are available to the public online. Every year, the OWRB cooperates with the Oklahoma Ground Water Association to provide continuing education training, which is required for water well and pump contractors to maintain a license. The OWRB continues to work with the Well Driller Advisory Council and stakeholders to develop, update, and advance water well drilling rules. Finally, in response to the ongoing public health situation, the program has been working to institute online certification testing for firms and operators.

WATER QUALITY MONITORING, MAPPING, AND STANDARDS

Beneficial Use Monitoring Program (BUMP)- The water data contained in the OWRB's 2018 BUMP reports is collected from 155 lakes and streams at approximately 600 sites throughout Oklahoma.. The Groundwater Monitoring and Assessment Program, added to BUMP in 2012, consists of a network of approximately 750 wells in Oklahoma's 21 major aquifers, where the OWRB monitors both water levels and water quality. For additional information, visit www.owrb.ok.gov/bump.

Water Quality Standards - As part of the 2019 OWRB rulemaking the water quality standards variance provision was revised. A water quality standards variance is a time-limited beneficial use and criterion for a specific pollutant that reflects the highest attainable water quality condition during the term of the water quality standards variance. A water quality standards variance is a regulatory tool to guide and direct incremental improvements in water quality in situations where a waterbody's beneficial use is not currently being met, but is attainable in the future.