



Oklahoma Water Law and Administration

Administration and Management of Water Resources

Oklahoma's water resources -- with the sole exception of surface supplies in the Grand River Basin, which are under the jurisdiction of the Grand River Dam Authority (GRDA) -- are administered by the Oklahoma Water Resources Board. The agency's nine-member decision-making body, appointed by the Governor, is responsible for the appropriation, distribution and management of waters in the state. Any person who intends to acquire a water right must file a permit application which is considered for approval by the Board. Stream water is considered to be public water subject to appropriation while groundwater is private property that belongs to the overlying surface owner but is subject to regulation by the OWRB.

A fundamental requirement in the administration of water rights is that the permit holder put the allocated water to beneficial use. Beneficial uses of water include agriculture, irrigation, water supply, hydroelectric power generation, municipal, industrial, navigation, recreation, and fish and wildlife propagation. While state law recognizes no priority among these uses, water needed for public supply (including drinking and domestic use) and vital economic activities generally receives precedence during drought and related local water emergencies. Permits are not required for household or domestic purposes, defined as the use of water "for household purposes, for farm and domestic animals up to the normal grazing capacity of the land and for the irrigation of land not exceeding a total of three acres in area for the growing of gardens, orchards and lawns." Oklahoma stream and groundwater law are discussed more in depth in their respective sections.

To most efficiently manage the state's abundant water resources -- and to determine the amount of water available for appropriation to users in Oklahoma -- the OWRB has divided the state into distinct hydrologic units, including 49 stream systems and 46 groundwater basins. Results from studies of these recognized subsystems and subbasins dictate the reasonable withdrawal of water resources while generally reserving supplies for future use.

Hydrologic studies of Oklahoma's stream systems depend, to a great degree, upon data gathered at streamflow gages and water quality gaging stations operated throughout the state. This monitoring effort not only facilitates the adjudication of water rights, it also assists in prediction of flooding events, protection of water resources in the areas of origin, development of reservoir operation plans and related planning and management strategies. Hydrologic studies have been completed on 48 of the state's 49 subbasins (23 in the Red River Basin and 26 in the Arkansas River Basin). The Grand River Basin is subject to administration by the GRDA.

The OWRB also conducts or supervises studies of reservoir yield which are critical in determining the amount of water supply available for use by municipalities, rural water districts and industries. An estimate of the amount of water (normally depicted in millions of gallons per day) which can be dependably appropriated from a specific source, yield is determined by inflow, evaporation and related factors.

Hydrogeologic investigations, also conducted by the OWRB, accurately determine how much water can be safely withdrawn from Oklahoma's 46 identified groundwater basins (26 "major" alluvial and terrace basins producing in excess of 150 gallons per minute, or more than 50 gpm for bedrock aquifers; 13 minor bedrock formations; and 10 minor alluvial and terrace formations). This figure, called the maximum annual yield, is considered to be the amount of water that can be withdrawn from an aquifer without entirely depleting its supply throughout the minimum basin life which, in Oklahoma, is considered to be a period of 20 years.

To arrive at a basin's maximum annual yield, investigators map the total land overlying the basin and estimate the

amount of water in storage (utilizing data obtained from hundreds of wells through the OWRB's annual well measurement program), rate of natural recharge and total discharge (including that amount currently allocated to water right holders), transmissibility (the rate at which water moves through the formation) and potential for pollution from natural sources. The balance of the available water is then allocated proportionately to each acre of land overlying the basin. Hearings are held to allow public input into the determinations prior to final consideration of the prorated amount by the Water Board.

As mentioned, Grand River Dam Authority, established by the State Legislature in 1935, is responsible for administering water resources in the Grand River Basin, including portions of 24 counties in northeast Oklahoma. Expressly, the agency is a public corporation created to control, store, preserve and distribute waters of the Grand River and its tributaries for any useful purpose. The entity is self-sustaining with revenue derived from the sale of power and water. Instead of actual appropriation of waters, the agency enters into repayment contracts for the use of surface water resources in the basin. Groundwater use in the basin remains under jurisdiction of the OWRB. In addition to general control and management of river/tributary waters and hydropower projects at Grand Lake and Lake Hudson, GRDA operates and maintains an integrated electric transmission system, including some 2,090 miles of line and related switching stations and transformer substations.

The 1980 Oklahoma Comprehensive Water Plan recognized the concept of federal reserved rights as well as the Winters Doctrine, derived from *Winters v. U.S.* That 1908 federal court case declared that when the federal government reserved lands from the public domain for the nation's Indian populations, sufficient waters were also reserved, by implication, to allow the Indians to live on those lands. Several areas in western Oklahoma were reserved for various Indian tribes, but most of that land was allotted -- i.e., transferred out of tribal ownership -- to individuals before statehood and, therefore, no reservations exist today in the state. In the eastern portion of Oklahoma ("Indian Territory," prior to statehood), several large areas of land were granted to Indian tribes by the federal government.

While most of these areas have been allotted, a question has arisen regarding original tribal ownership of appurtenant waters and rights to the use of water within original boundaries of those lands. The federal court case, *U.S. v. GRDA*, indicated that the state did not obtain rights to use water for hydroelectric power in an area that had been transferred prior to statehood from the federal government to the Cherokee Nation. Obviously, recognition of tribal sovereignty will be a key element in addressing future Native American water rights claims.

To resolve and prevent disputes over waters shared with neighboring states, Oklahoma participates in four interstate stream compacts: the Arkansas River Compact with Arkansas; the Arkansas River Compact with Kansas; the Red River Compact with Arkansas, Louisiana and Texas; and the Canadian River Compact with New Mexico and Texas. Compacts clearly spell out how much water a signatory state is allowed to develop or store on an interstate stream. Although the compacts continue to address problems concerning quantities and equitable development of river waters, annual meetings of the compact commissions deal increasingly with quality and pollution problems.

Stream Water Law

As defined by state law, stream water is that which occurs in a "definite stream," meaning "a watercourse in a definite, natural channel, with defined beds and banks, originating from a definite source or sources of supply." Although appropriative rights are fundamental to the use of stream water in Oklahoma, exceptions are made for domestic uses by the riparian landowner and the capture and storage of diffused surface water on the landowner's property, provided the natural flow of the stream as it enters his land is maintained. "Diffused" surface water -- which, according to OWRB rules and regulations, is "water that occurs, in its natural state, in places on the surface of the ground other than in a definite stream or lake or pond" -- is not subject to state regulation or use.

The basic principle of the appropriation doctrine is that the first person to exercise a water right establishes a right that is superior to later appropriators. Developed to resolve competing claims to the use of water for mining purposes

during expansion of the western U.S., appropriation is defined as "the right to use water in a definite stream or impoundment thereon for a beneficial use with priority in time giving the better right."

In an attempt to more fairly allocate waters of the state and simplify existing water right laws, the State Legislature passed major amendments to state stream water law in 1963. An important provision of the new law required the OWRB to accurately determine the amount of available water in Oklahoma's rivers, streams and lakes for appropriation to prospective users. In fairness to existing stream water rights holders, the OWRB was also required to determine those with "vested" rights -- i.e., those in effect before enactment of the 1963 law. Vested right holders were allowed to continue use of their previously appropriated amount of water.

Under existing Oklahoma water law, as set forth in the Stream Water Use Act (as amended in 1991), a permit application for any use of water must be filed prior to the applicant's commencement of construction of facilities needed to put the water to use and/or actual diversion of water. The Act also requires that notice of the application be published in newspapers in the county where the diversion is to take place and in the adjacent downstream county. Any interested party, especially those whose interests could be affected by the proposed use of water, may appear at the required hearing to protest issuance of the permit. The applicant must establish that unappropriated water is available in the amount applied for; there is a present or future need for the water and the intended use is beneficial; the use of water will not interfere with domestic or existing appropriative uses; and, if the application is for the transportation of water for use outside the area where the water originates, the use must not interfere with existing or proposed beneficial uses within the stream system and the needs of the area's water users.

If the four elements are satisfied, the permit is approved. However, certain conditions may be placed upon the permit to protect existing rights and uses, current stream flows and to address other issues of importance. The permit is also usually conditioned upon timely construction of works and commencement of use (normally two years) and upon full use of the annually authorized amount within the

seven-year period following permit issuance and at least once in a continuous seven-year period thereafter. If water authorized by regular permit is not put to beneficial use within the specified time, the OWRB may reduce or cancel the unused amount and return the water to the public domain for appropriation to others. However, when full use of the permitted water is contingent upon a pending project, the permit can be conditioned upon a schedule allowing phased-in use over a longer period of time.

The Board may issue five types of permits for stream water use: regular, authorizing the holder to appropriate water year around; seasonal, allowing diversion of water for specified periods; temporary, authorizing water use for up to three months; term, spelling out water use for a given number of years; and provisional temporary, which is nonrenewable, allowing appropriation for up to 90 days. The provisional temporary permit is the only one that does not require a public hearing and subsequent approval by the Board. Permits for the use of stream water may be transferred or assigned, although those authorized for irrigation purposes remain appurtenant to the lands irrigated.

In addition to stream water appropriation law, the state also recognizes a second precept of water use called the "riparian" doctrine. This doctrine recognizes that owners of land bordering a stream have rights to the "reasonable" use of water flowing in the stream. The date that a riparian right claim is made is irrelevant and the right is not lost if the use is discontinued.

Generally, riparian rights are followed in water-rich states in the eastern U.S. while appropriative rights are recognized in water-short western states. Conflicts between the two doctrine have arisen in states, such as Oklahoma, which possess divergent geographic and climatic characteristics. Prior to 1963, Oklahoma recognized both the appropriation and riparian doctrines and two theories were employed to resolve controversies between conflicting riparian and appropriative uses of water. One was that the riparian landowner could use the water as long as the natural flow of the stream was not diminished; the other theory espoused that the landowner could use a "reasonable" amount of the water while also considering oth-

er prospective users along the stream.

In 1963, as a result of a study committee recommendation, the Legislature amended statutes which implied that the appropriation doctrine would prevail in Oklahoma. In 1993, the Supreme Court finalized its ruling in *Franco-American Charolaise, Ltd. v. OWRB* and City of Ada, a landmark case. The Court's opinion was interpreted by many to give riparian rights priority over appropriative rights. Immediately after issuance of that final opinion, corrective legislation was adopted to express directly that riparian rights were abolished by the 1963 statutes. That legislation has been challenged in court.

Groundwater Law

Groundwater use and regulation in Oklahoma is heavily steeped in state property statutes which provide that "the owner of the land owns water standing thereon, or flowing over or under its surface but not forming a definite stream." However, to more fully preserve future supplies, groundwater resources are subject to reasonable regulation. Like stream water, use for domestic purposes is exempt from permit requirements, although prohibitions against waste still apply. Early laws impacting the use of groundwater -- defined in Oklahoma as "water under the surface of the earth regardless of the geologic structure in which it is standing or moving outside the cut bank of any definite stream" -- followed the appropriation doctrine of "first in time is first in right."

Current Oklahoma groundwater law, originally passed in 1972 (with latest amendments in 1995), removed any reference to priority in time and changed the regulatory scheme from the appropriation process to an allocation system tied directly to the amount of land overlying a groundwater basin. The allocation system provides that landowners or their lessees may obtain a permit from the OWRB for the use of water from a common basin, the amount of which is based upon the number of acres of the applicant's land that overlies the basin.

As with the state's stream water law, the 1972 Oklahoma Groundwater Law acknowledged that uses established under previous laws relating to groundwater use should be recognized as valid. The new law determined that existing water right holders or applicants seeking rights before enactment of the current law

should be allowed to continue use of their previously authorized amount. These earlier claims are referred to as "prior rights."

Due to the length of time necessary to determine the amount of water available in the state's many groundwater basins and subbasins through maximum annual yield studies, the 1972 law allows the issuance of "temporary" permits. These permits -- granted in basins where maximum annual yield determinations have not yet been completed and approved and the amount of water available for use reliably prorated -- are for two acre-feet of water for each acre of land owned or leased by the applicant and dedicated to the application. This figure is presumed to be maximum amount needed by Oklahoma irrigators.

Before commencement of drilling or actual use of the water for any purpose other than domestic, persons intending to use groundwater must submit a permit application to the OWRB. Normally, the applicant must publish notice of the hearing on the application in a newspaper in the county where the well(s) is to be located and give notice by certified mail to all adjacent landowners having wells within a $\frac{1}{4}$ -mile radius of the proposed well site. At the hearing, the Board must determine that the applicant owns or leases the land; the land overlies a fresh groundwater basin or subbasin; the proposed use is beneficial; and waste by depletion or pollution will not occur.

If the four elements are satisfied, the Board will issue one of four types of groundwater permits: regular, temporary, special and provisional temporary. A regular permit is approved for a proportionate amount of water determined by the maximum annual yield of the basin and the percentage of the land overlying the basin which is owned or leased by the applicant. As mentioned previously, for basins in which no hydrologic survey has been conducted and no maximum annual yield determined, the OWRB issues a temporary permit allowing the withdrawal of two acre-feet of water per acre owned or leased; a regular permit may then be issued upon determination of the basin's yield. Special permits, renewable three times, allow six-month water use in excess of that allocated under a regular or temporary permit. Provisional temporary permits, frequently sought by oil companies requiring water for the drilling of oil and gas wells, allow use for up

to 60 days. Provisional temporary permits may be approved by the executive director of the OWRB and do not require public notice and hearing. Like with stream water, groundwater permits may be either transferred or assigned.

WATER QUALITY AND POLLUTION CONTROL

Because the right to ownership and use of water does not include the right to pollute or degrade fresh water resources, numerous agencies and organizations have responsibilities related to the enforcement of state and federal pollution laws. The quality of surface and groundwaters is of enormous importance to public health and prosperity in Oklahoma and, as a result, potentially harmful pollutants from both point and nonpoint sources are closely monitored to ensure that Oklahoma rivers, streams and lakes receive at least adequate protection.

While the state originally passed laws to curb water pollution in the 1920's, it was through passage of the 1955 Pollution Remedies Act that Oklahoma made monumental strides toward public health and environmental protection. That law -- which was more fully enacted with passage of the federal Clean Water Act in 1977 -- required regulation of discharges to state waters, provided for the protection of certain beneficial uses of stream water, and spawned adoption of Oklahoma's first standards for water quality in 1968.

Today, municipalities and industries must acquire waste discharge permits and adequately treat their wastewaters prior to release to ensure that the quality of receiving waters is not impaired. Oklahoma Water Quality Standards (OWQS), maintained by the OWRB and revised at least every three years, are the cornerstone of this regulation. Standards serve to enhance water quality, protect beneficial uses and aid in the prevention, control and abatement of water pollution. In particular, standards are critical to the development of water quality-based discharge permits which specify treatment levels required of industrial and municipal wastewaters.

Identification and protection of beneficial uses -- similar in concept, though separate from the strategy utilized in state water management and use programs -- is vital to water quality standards implementation. Currently recognized beneficial uses include water supply, fish and

wildlife propagation, agriculture, industrial and municipal cooling water, recreation, aesthetics, navigation and hydropower. Physical, chemical and biological data on Oklahoma's rivers, streams and lakes are used to ascertain the condition of individual waters, determine appropriate present and future beneficial uses and thus set realistic water quality standards to protect them. Through assignment of as many beneficial uses as are attainable, standards assure that existing water quality is not unduly impacted. Narrative and numerical criteria imposed in the OWQS ensure attainment of beneficial uses as well as limit waste and pollution of state waters. All uses receive equal protection, for each has its unique environmental and economic importance to Oklahoma. Although all of Oklahoma's surface waters receive protection through the OWQS, specific protection is afforded to approximately 27,000 stream and river miles and 5,000 lakes. Beneficial uses have also been assigned to the state's major groundwater basins.

Through the efforts of numerous agencies and organizations, the state has made great strides in limiting pollution from point sources, including municipal and industrial stormwaters. Now the state has turned its attention to minimizing impacts from agriculture, silviculture, urban areas and various other nonpoint source related activities. Efforts have been undertaken to encourage owners and operators of lands to adopt practices which minimize the likelihood of nonpoint source problems. While these primarily voluntary efforts have met with some success, water quality degradation continues to occur in many state waterbodies.

A major ongoing state effort to address pollution reduction is development and implementation of the "whole basin planning approach." This comprehensive, or holistic, strategy takes into account all threats to human health and ecological integrity within a specific watershed. Greater emphasis is placed on all aspects of water quality, including chemical quality (toxic and conventional pollutants), physical quality (such as temperature, flow and circulation), habitat quality (such as channel morphology, composition and health of biotic communities) and biodiversity (i.e., species number and range). Using this information, flexible mitigation strategies for a specific watershed can be developed to address problem areas

in a prioritized, cost-effective manner.

The current manner in which state and federal agencies approach water quality regulation in Oklahoma has been greatly affected by passage of House Bill 2227, a measure passed in 1993 to mend the state's fragmented environmental regulatory structure and better utilize limited financial and workforce resources. Through realignment of the responsibilities of eight agencies into one primary agency, the Oklahoma Department of Environmental Quality (ODEQ), the goal of HB 2227 was to eliminate the jurisdictional overlap and duplication of effort of state environmental agencies, provide for consistency of regulation between agencies and improve the way in which citizen pollution complaints are addressed.

Specifically, HB 2227 consolidated air quality, solid and hazardous waste, and certain water quality functions into the ODEQ and established jurisdictional powers among state environmental support agencies. The measure also directed the Oklahoma Conservation Commission to supervise the management of pollution complaints through local conservation districts and created an all-citizen rule-making and appellate board for complaint, permit or penalty matters.

STATE AND FEDERAL WATER AGENCIES

The major water and water quality related duties and programs of state and federal agencies are summarized below.

The Oklahoma State Department of Agriculture enforces rules and regulations relating to the state's agricultural industry. The agency has specific duties and responsibilities in the areas of pesticide use, storage, registration and application; fertilizer use and storage; confined animal feeding operations; and forestry operations.

The Oklahoma Biological Survey, under direction of the University of Oklahoma, identifies and surveys biological resources of the state. The agency also administers the state's Natural Heritage Program.

The Oklahoma Department of Civil Emergency Management implements and coordinates the development of programs and plans to minimize the effects of natural disasters upon the people of Oklahoma.

The Oklahoma Climatological Survey, which is under the direction of the

University of Oklahoma, is responsible for the accumulation and dissemination of climatological data collected throughout the state and determines state policy regarding climate-related issues. The agency also serves as the data collection and dissemination center for the Oklahoma Mesonet.

The Oklahoma Department of Commerce, the state's lead agency for the creation of jobs and the promotion of economic development, administers federal funds for planning assistance to state agencies, substate districts and local communities. The Community Development Block Grant Program is the major funding source administered by the ODOC for improvements to water supply systems. Oklahoma's 11 substate planning districts, regional entities funded by the federal government through the Economic Development Administration and state through the ODOC, encourage and coordinate social and economic development at the local level.

The Oklahoma Conservation Commission develops and administers programs to control and prevent soil erosion; prevent floodwater and sediment damage; reduce nonpoint source pollution; promote implementation of Geographic Information System (GIS) technology in Oklahoma; protect state wetlands; and further the conservation, development and utilization of the state's renewable resources. With assistance from Oklahoma's 88 conservation districts, the agency is involved in land use planning, reclamation of abandoned mine lands, water quality monitoring and in the overall conservation of soil, water, wildlife and forestry resources.

The Oklahoma Corporation Commission regulates oil and gas activities in the state to prevent pollution of Oklahoma's surface and groundwater resources. The Commission has jurisdiction over salt water, mineral brines, waste oil, and other deleterious substances produced from, obtained or used in connection with the drilling, development, production and processing of oil and gas. The Commission also regulates transportation and transmission companies, public utilities, motor carriers and pipeline safety.

The Oklahoma Department of Environmental Quality supervises the majority of the state's environmental protection and management programs. The ODEQ has jurisdiction over a number of water-

related, environmental areas, including treatment and discharge of industrial and municipal wastewaters and stormwaters; nonpoint source discharges and pollution (excluding those associated with agricultural or oil and gas related activities); public and private water supplies; underground injection control (excluding brine recovery, saltwater disposal or secondary/tertiary oil recovery); fresh water well-head protection; enforcement of Oklahoma's Water Quality Standards; and development and update of the state's Water Quality Management Plan. In addition, the ODEQ has jurisdiction over air quality, hazardous and solid waste, radioactive waste, Superfund program activities and emergency response.

The Oklahoma Geological Survey collects and disseminates information on the geology, mineral, energy and water resources of the state.

The Grand River Dam Authority controls the waters of the Grand River and its tributaries.

The Oklahoma State Department of Health administers programs to promote health and prevent disease throughout the state. The agency, assisted by 69 county health departments, is responsible for all municipal drinking water and sewer systems in Oklahoma.

The Oklahoma Department of Mines is the environmental regulatory authority empowered to execute, enforce and implement provisions of state and federally mandated programs in the area of health, safety, mining and land reclamation practices associated with surface and subsurface mining.

The Oklahoma Scenic Rivers Commission fosters programs to develop and protect the state's scenic river areas and adjacent lands.

The Oklahoma Department of Tourism and Recreation promotes tourism and recreation in the state and develops, operates and maintains state parks, recreation areas and lodges.

The Oklahoma Department of Transportation is the coordinating agency for the state's transportation systems, including the McClellan-Kerr Arkansas River Navigation System. Under the agency's jurisdiction are the Port Authority and Oklahoma Waterways Advisory Board.

The University Center For Water Research at Oklahoma State University promotes and coordinates research of state and national interest to help decision-

makers plan for the availability of water in adequate quality and quantity for all citizens. The UCWR is comprised of the Oklahoma Water Research Institute, the State Water Research Center, and the National Center for Groundwater Research.

The Oklahoma Water Resources Board promulgates and adopts water quality standards and related implementation documents for the state as well as directs programs to assess and improve lake water quality. The agency also administers state water laws through the issuance of stream and groundwater permits; investigates stream and groundwater resources; approves and assists irrigation district organization; ensures the safety of water works projects; administers the state dam safety program; supervises state weather modification activities; establishes water well construction standards; and licenses water well drillers. The OWRB also administers the Financial Assistance Program for water/wastewater projects; coordinates the National Flood Insurance Program in Oklahoma; negotiates and administers interstate stream compacts; and updates the state water plan.

The Oklahoma Department of Wildlife Conservation enforces state fishing and hunting laws and, in general, protects and manages the state's wildlife resources. The agency ensures that water resource projects and programs -- such as reservoir construction and management, water quality standards development, Section 404 permits and pollution related activities -- properly consider and provide for Oklahoma's fish and wildlife.

Federal agencies active in Oklahoma which are also involved in water quality matters include the following:

The federal Agricultural Stabilization and Conservation Service (Consolidated Farm Service Agency) administers the Conservation Reserve Program (CRP), Agricultural Conservation Program (ACP) and Swampbuster and Sodbuster provisions of the Food Security Act of 1985. The objective of the CRP is to conserve and improve soil and water resources on highly erodible cropland while the ACP provides cost-sharing with farmers to carry out farm-related conservation and environmental measures.

The U.S. Army Corps of Engineers has major responsibilities in flood protection, navigation and the planning and development of multipurpose water resource

projects. The Corps also regulates the disposal of dredge and fill material in navigable waters under the Section 404 (Clean Water Act) permit program.

The Bureau of Reclamation assists in the development and conservation of water, power and related land resources throughout the western United States. Bureau projects are operated to serve municipal and industrial, irrigation, water quality improvement and flood control purposes.

The Department of Civil Emergency Management prepares, implements and coordinates disaster plans and operations relating to droughts, floods, storms etc.

The Federal Emergency Management Agency administers the National Flood Insurance Program which provides low-cost insurance for residents in flood-prone areas to encourage community floodplain management and land use measures. FEMA also provides assistance to states, local entities and ordinances in response to flood, drought and other natural disasters.

The Federal Energy Regulatory Commission provides technical assistance and review of water resource development projects in which hydroelectric power generation is among the project purposes. FERC, an agency of the U.S. Department of Energy, also licenses hydropower projects developed by non-federal entities.

The U.S. Environmental Protection Agency administers numerous federal environmental laws regulating water quality, such as the Clean Water Act, Safe Drinking Water Act, Resource Conservation and Recovery Act, Superfund program and National Environmental Policy Act. EPA accomplishes this duty by setting national water quality standards used to develop site-specific waste discharge permits, enforcing those permits, and providing technical, emergency, and grant assistance to state and local governments. In addition, EPA is the lead federal agency for administering the Wastewater Facility Construction Loan Account-State Revolving Fund.

The U.S. Fish and Wildlife Service assists states in the planning and development of projects to restore and manage fish and wildlife resources.

The U.S. Geological Survey investigates the occurrence, quantity, quality, distribution, use and movement of the nation's surface and groundwater resources. Oklahoma cooperates with the

USGS in maintaining stream gaging stations throughout the state.

The Bureau of Indian Affairs represents Native American water rights interests throughout the U.S. and Oklahoma.

The Natural Resources Conservation Service, formally the Soil Conservation Service, is responsible for developing and implementing soil and water conservation programs in cooperation with landowners, community planning agencies, and federal, state and local agencies. The NRCS assists in agricultural pollution control, environmental improvement and rural community development. The agency also provides technical help to local conservation districts and consultation to individuals and organizations.

Rural Development, formerly Farmers Home Administration, provides grants to farmers and local entities of government for irrigation and drainage systems, watershed protection and flood prevention projects and community waste disposal and water supply systems for rural communities with a population of 10,000 or less.

The Southwestern Power Administration, an arm of the Department of Energy, markets power produced at federal dams in the southwest U.S.

The National Weather Service supervises meteorological activities, develops hydrologic forecasts and provides climatological services throughout the U.S.