

WATER LAW AND MANAGEMENT IN OKLAHOMA

Overview of Water Use and Rights Administration

Sources of water law - The right to use water, the right to regulate use of water, ownership rights in water, and the prevention of pollution to water, and water quality, are all legal matters that, to some degree or another, may be addressed by constitutional law, court-made (common) law and principles, statutes enacted by the U.S. Congress, statutes enacted by state legislatures, Indian tribal codes, federal and state agency rules, and private rights created by deeds, easements and contracts. The administration of water use and rights in Oklahoma involves consideration of these and other sources of voluminous and complex law.

Quantity distinguished from quality - Oklahoma statutes provide that the Oklahoma Water Resources Board (OWRB), through the agency's nine-member decision-making body appointed by the Governor, is responsible for the appropriation, allocation, distribution and management of water quantity in the state. The OWRB shares responsibility with six other State environmental agencies relative to water quality.

Grand River exception - An exception to the OWRB's authority to manage water quantity involves the Grand River, in northeast Oklahoma. In 1935, state law created the Grand River Dam Authority (GRDA) and provided it authority to control, store and preserve the waters of the Grand River and its tributaries.

Physical classifications of water

Most of Oklahoma's statutes on water rights and use administration are keyed to one of four physical classifications of the water: (1) stream water, (2) percolating groundwater, (3) diffused or sheet runoff water, and (4) atmospheric water, such as rain or hail.

Ownership of water

As long ago as 1890, Oklahoma Territorial statutes on property ownership, rights and obligations stated that:

“The owner of the land owns water standing thereon, or flowing under or over its surface, but not forming a definite stream. Water running in a definite stream, formed by nature over or under the surface, may be used by him as long as it remains there; but he may not prevent the natural flow of the stream, or of the natural spring from which it commences its definite course, nor pursue or pollute the same.”

This law was carried over verbatim into State of Oklahoma statutes where it remains on the books today in Title 60, Section 60 of the Oklahoma Statutes. In 1963, language was added to clarify that water running in a definite stream is “public water subject to appropriation for the benefit and welfare of the people of this state”

To summarize, the state's property ownership law dictates the following about ownership of water:

- Diffused water, i.e. water flowing over the surface of the earth and not forming a definite stream, is owned by the owner of the land. There are no statutes that specifically apply.
- Groundwater (i.e., water flowing under the surface but not forming a definite stream) is owned by the owner of the land.

- Stream water (i.e., water flowing in a definite stream) is public water subject to appropriation.
- The state property law is silent about ownership of rain or hail while it is in the atmosphere.

Although the state statute declares that stream water is “public water,” there is often a misperception that this statute creates a claim of ownership of stream water in the State of Oklahoma. The U.S. Supreme Court has characterized a state’s claim of ownership as a “legal fiction.” The Court instead recognizes that as far back as Roman law, water running in a stream was properly described as “res nullius” or “res communes,” meaning the property of no one or property of everyone, like air, natural light, or animals in the wild. And like management and use of animals in the wild that in Oklahoma are subject to hunting regulations and licensing by the Oklahoma Department of Wildlife Conservation, stream water and other physical classes of water are subject to management and use regulation by the OWRB.

General water law doctrines and principles relating to use

Controversies involving use of water, distinguished from ownership of water, have arisen for centuries. The most notable legal doctrines that have been developed by courts (common law) and legislatures (statutes) to address such water use controversies include: (1) riparian, (2) appropriation, (3) correlative rights, and (4) allocation.

Riparian rights - Generally, “riparian rights” are said to exist as an integral part of the ownership of land that happens to be geographically adjacent to or adjoining a stream or other body of water, such as a lake or pond. Some may characterize riparian rights as real property. However, a riparian right is more accurately characterized as only a right of use, or a “usufruct” or “usufructory” right. By the early 1800s, English common law recognized the principle that no one could “own” naturally running water in a stream as a property right, but that private citizens can have a right to the use of the flow. English law also recognized the concept of the usufruct, which means a qualified right to the use of property that is owned by all or no one (“res nullius” or “res communes”), so rights to the use of the flow of a stream became known as usufructory rights.

Historically, the riparian doctrine has been administered through the court system with ad hoc decisions made in individual lawsuits between riparian landowners. There is generally no permit system for riparian rights in states that follow the riparian doctrine, no applications to file, and no administrative hearings held. The riparian rights system of water use regulation evolved in the eastern U.S. where rainfall is plenty and most land tracts touched or adjoined some creek, stream or river. As a result, relatively few disputes and controversies occurred over water quantity. With plenty of water and few controversies, there is little need for regulatory oversight of a riparian system.

There are two major legal doctrines or approaches to resolve riparian rights claims to use water that have been adopted by courts over time, and two other aspects or issues involving riparian rights that have some bearing on Oklahoma water law.

Riparian rights to the natural flow (stream water) – English courts in the 1800s decided cases between riparian landowners (often conflicts between grist mill operators) by adopting the principle that any change in the natural flow of the stream by a riparian landowner that uses the water causes damages to other owners of other land riparian to the stream. Therefore, use of water that changes

the natural flow is not authorized. The practical problem with this principle is that virtually any use of the natural flow, even for very limited household use, let alone grist mills or water mills for industrial use, would alter the natural flow to some degree. Acknowledging the problem with strict compliance, state courts following the “natural flow theory” of the riparian doctrine began to make exceptions to allow limited use by riparian landowners. Today, few states can be said to follow a true “natural flow” doctrine of riparian rights.

Riparian rights to reasonable use (stream water and groundwater) – The famous case of *Tyler v. Wilkinson* between competing mill owners in Rhode Island was decided in 1827 by Justice Story (later appointed to the U.S. Supreme Court). He declared that rights between riparian landowners required a consideration of reasonableness to determine whether the change in natural flow was allowed. He also ruled that all riparian users would have to reduce their use equally in times of shortage.

Unlike an appropriation right, a riparian right (being part of the real property) is not automatically lost if the riparian landowner makes no use of the water or if the riparian landowner begins use for a period, stops use, and begins the same use or changes use in the future. Each riparian landowner has the same right, based on reasonableness.

In a state that follows the reasonable use riparian doctrine, conflicts and controversies regarding water use between riparian landowners are typically resolved in court litigation with the focus on determining reasonableness of types of use, reasonableness of volumes, and timing and methods of use among competing landowners. Due to this variability, it is clear that the doctrine of riparian rights to a reasonable use cannot provide the certainty and security necessary for substantial development (e.g., public water supply infrastructure, irrigation systems, reservoirs, etc.) of water resources required for economic growth.

In Oklahoma, despite the pre-statehood Legislature’s adoption of the natural flow language, the Oklahoma Supreme Court decided several cases before 1963 using a “reasonableness” analysis to resolve disputes between riparian landowners. In 1993, the Oklahoma Supreme Court issued its 5 to 4 opinion in *Franco-American Charolaise, Ltd. v. OWRB*¹ wherein the Court declared that Oklahoma follows the “reasonable use” doctrine, as opposed to the natural flow doctrine.

Appurtenancy of riparian lands – States that endorse a riparian doctrine for water rights (natural flow or reasonable use) must also decide the geographic extent of the land area that may carry the riparian right. The “source of title” test, used in some riparian doctrine states, holds that the riparian right extends only to the smallest tract held under one title in the chain of title leading to the present owner. Following this test, the size of the riparian tract typically diminishes over the decades as tracts are subdivided (through inheritance or other development) and the new tracts do not touch the stream. This test typically results in less total volume of water that can be claimed by riparian landowners over time.

¹ *Franco-American Charolaise, Ltd. v. OWRB*, 1990 OK 44

The contrasting “unity of title” test used in other riparian doctrine states provides that if an owner of a tract of land that is riparian later acquires more land that adjoins the original riparian tract, the owner may claim a riparian right for use of water on both tracts because the adjoining tract becomes “unified” with the riparian tract as a whole. This test may result in more volume of water that can be claimed in a stream system by riparian landowners over time.

In Oklahoma, two cases² ruled that an oil company holding a lease for water use from a riparian landowner could use the water off the riparian lands for oil drilling purposes as long as that use was reasonable. With these cases, it can be argued that Oklahoma went beyond the unity of title test and allowed riparian landowners to market water for use off the riparian premises, regardless of the location of the land where the water is used.

Regulated riparianism – With the increased demand for water in the relatively water-rich eastern U.S., where the riparian rights doctrine prevails, coupled with more variability of natural rainfall (more extreme and longer droughts), some states that follow the riparian doctrine have seen a need to exercise more oversight of water use. These states have enacted laws requiring that riparian landowners obtain permits to use water, a concept that was foreign to the common law of riparian rights where rare disputes were resolved in courts.

Appropriation doctrine (stream water and groundwater) – To “appropriate” means to take for oneself or take possession of. To appropriate water means literally to take water from a watercourse (flowing stream or lake). The appropriation doctrine for water management and use evolved from local customs and laws in the early and mid-1800s, primarily from Spanish, Mexican and Mormon operations of diversions and canal systems for irrigation. These local customs and laws were developed in the arid western U.S. during the time of westward expansion by settlers and where land areas tended to be vast but sources of water were scarce. In other words, unlike the wet east where many tracts of land are riparian to a water source, most private tracts of land in the western states were not riparian to a stream, but instead were often located at some distance from a stream, requiring diversions from the water source to the location of use. Furthermore, most lands in the western U.S. at least initially were considered public lands (or in the public domain) owned by the U.S. With little private ownership of most lands, there were few instances of privately-owned riparian land for riparian water rights to exist. In 1849, the California Supreme Court, during the gold rush era, was the first to determine that local customs to resolve mining claims on public lands should be used to resolve disputes over use of water on those lands. With mining claims, the earlier claim would prevail over a later claim to mine the same land, and the failure to start mining activities, or to continue mining activities after starting, would result in a loss of the mine claim and allow others to have a similar opportunity.

Two fundamental and parallel concepts relating to mining claims and water appropriation claims were recognized:

(1) “Beneficial use” is required. Filing a piece of paper at the claim office only initiated a mine claim and the claim was lost if mining activities did not start in a certain period of time, or if the mine was later abandoned. Similarly, a claim to use water from a stream had to be confirmed by actual beneficial use of the water. The requirement for beneficial use is characterized as the “anti-

² *Martin v. British American Oil Producing Co.*, 1940 OK 218; *Smith v. Standolind Oil & Gas Co.*, 1946 OK 52

speculation” provision that prohibits the filing of paper rights to prevent others from getting a right that can be detrimental to economic development;

(2) “Priority in time gives the better right.” Similar to mining claims in California, whoever files a claim to use water from a stream first (senior), to the extent there is beneficial use of the claimed water, will be able to make persons with later (junior) claims stop diverting during times of shortage.

These two foundational elements of the appropriation doctrine, recognized over 150 years ago, remain in Oklahoma’s appropriation doctrine, as discussed below. Congress, recognizing the need for a secure and certain water rights system to encourage development and settlement of the west, passed the Desert Land Act, Reclamation Acts, and other federal laws beginning in the mid-1800s. It was thus formally and officially recognized that rights to use water in the west would be governed by appropriation laws of the states.

English rule of absolute ownership (groundwater) – During the period when English courts were developing the natural flow riparian right doctrine, a few controversies arose concerning use of groundwater. Essentially, and without modern technology and knowledge, the courts in the 1800s presumed (even noting so in opinions) that water under the surface of the earth was mysterious and incapable of broad-based regulation. Accordingly, English cases held that because the landowner owned all materials associated with the land (center of earth below to the heavens above), including groundwater, the landowner could capture and use all the groundwater found under the surface, even if use of that water harmed the adjoining landowner. Texas’ existing “rule of capture” law continues to follow this doctrine on ownership and use of groundwater.

American rule of reasonable use (groundwater) - Most early U.S. courts rejected the English rule of absolute ownership of groundwater and the perceived harsh results of that doctrine. Instead, American courts incorporated a “reasonableness” test when conflicts over groundwater use were presented. The Oklahoma Supreme Court in the 1936 case of *Canada v. City of Shawnee* specifically rejected the English rule of absolute ownership and instead adopted the American rule whereby a landowner’s use of groundwater is allowed, even if that use adversely affects a neighbor, but only if the landowner’s use is considered reasonable. One very important restriction of the American rule was also adopted by the Court in the *Canada* case -i.e., use of the groundwater off the premises from where it is pumped is *per se* unreasonable. Accordingly, under the American rule of reasonable use, Shawnee was prohibited from transporting groundwater from wells located in a farming area outside the city for use within the city.

Correlative rights (groundwater) – This water law doctrine is most associated with management and use of groundwater in California and is sometimes referred to as “strict proportional sharing.” In a drought when water levels drop, all overlying landowners must equally decrease use so everyone might have some water.

Allocation (groundwater) – A unique blend of some aspects of the reasonable use doctrine and the correlative rights doctrine was adopted in Oklahoma for use of groundwater, effective in 1973. The 1973 allocation doctrine is discussed in detail below.

Oklahoma stream water law – evolution and development

Appropriation statutes and cases before 1963 - Just seven years after adoption of the 1890 property ownership statute mentioned above, the Oklahoma Territorial Legislature adopted a comprehensive appropriation code for water use. The first section of that initial statutory appropriation law from 1897 declared over a century ago that:

“the *unappropriated waters* of the ordinary flow or underflow of every running stream or flowing river and the storm or rain waters of every river or natural stream, canyon, ravine, depression or watershed... are *hereby declared to be the property of the public* and may be acquired for appropriation for the uses and purposes and in the manner as hereinafter provided.” (Emphasis added.)

This first comprehensive appropriation law contained specific beneficial uses for which water could be appropriated (irrigation, mining, milling water works for cities and towns, and stock raising). It also included the statement that, as between appropriators, the first in time is the first in right. The 1897 statute went on to say that the ordinary flow or underflow could not be diverted to the prejudice of the rights of the riparian landowner without consent, except by condemnation. The law also stated that after an appropriation right is established, it was unlawful for any person to divert or appropriate that water, except that landowners who abut the stream could use the running water for domestic purposes (the first domestic use exemption).

In 1905, the comprehensive appropriation law was made even clearer by the Territorial Legislature by stating in the first section that “beneficial use shall be the basis, measure and limit to the right to the use of water,” and that “priority in time shall give the better right.” These two statements are repeated verbatim in the current stream water appropriation law³ of the State of Oklahoma; these two statements reflect the foundational pillars of the appropriation doctrine followed in virtually all western states.

Also as part of early Oklahoma law, the Oklahoma Territory Supreme Court issued an opinion in September 1907⁴ that recognized the common law elements necessary to show that an appropriation right has been established: “[1] There must be the construction of ditches or channels for carrying the water; [2] the water must be diverted into the artificial channels and carried through them to the place to be used; [3] it must be actually applied to beneficial uses; and [4] he has the best right who is first in time.”

Early statutes on appropriation required the filing of an application to the State Engineer before ditches, channels or reservoirs were constructed. Permits to appropriate could be issued only after hydrologic studies were completed to indicate how much water could be appropriated. The lack of funding to conduct such studies precluded the issuance of permits for the most part, but hundreds of applications were filed. The priority date for the appropriation right under the law was the filing date of the application.

Although the Territorial Legislature and Supreme Court recognized the appropriation doctrine to regulate stream water use, Congress specified in the 1890 Organic Act that Indian Territory would follow

³ 82 O.S. §105.2

⁴ *Gates v. Settlers' Milling, Canal and Res. Co.*, 1907 OK 77, decided September 4, 1907

the common law of the State of Arkansas, which recognized the riparian rights doctrine. Oklahoma Territory statutes and decisions by the Oklahoma Territory Supreme Court did not apply to Indian Territory. However, when Oklahoma Territory and Indian Territory merged through statehood in 1907, the Oklahoma Legislature adopted statutes on water ownership and appropriation that were virtually identical to the Oklahoma Territory statutes. Regardless, the riparian doctrine lived on.

Simultaneous recognition of appropriation and riparian rights - The basic provisions of the 1905 appropriation statute became the statutory law adopted by the State Legislature and remained virtually unchanged until 1963. As noted, the Oklahoma Supreme Court issued opinions relating to controversies between riparian landowners without regard to the appropriation statutes that had been on the books from 1907 through 1963. Complicating the issue, these Oklahoma court cases relied on the “reasonableness” of the riparian use despite the statutory provision in the property statute since 1890, which provided that the landowner abutting a stream could use water in a running stream “but cannot prevent the *natural flow* of the stream.”

Irreconcilability of appropriation and riparian doctrines - In the mid-1950s, as post-war population, economic development, and water demands increased, it became clear that Oklahoma’s appropriation and riparian doctrines of water rights regulation were incompatible and irreconcilable. The riparian doctrine gives no credence to the date that others may have begun using water, and instead recognizes that a riparian landowner can initiate a use and take water out of the stream any time, preventing the flow to a water user downstream that began to appropriate water long before the riparian landowner began use. A riparian landowner who just began using water could even enjoin an upstream appropriator (who may have spent a considerable sum on infrastructure) from diverting water so it will flow downstream to the riparian lands. Thus, the certainty and security of appropriation rights, represented by a priority date and based on the amount of beneficial use, can be defeated by recognition of riparian rights to use water from the same water source.

The Water Study Committee created by the Oklahoma Legislature in 1955 reviewed and considered the implications of the irreconcilability of the appropriation doctrine and riparian doctrine. In 1957, the Oklahoma Legislature approved House Joint Resolution 502, drafted by the Water Study Committee, which adopted a State Water Policy. The policy set out fundamental framework recommendations concerning water use administration that remain in place today, over 50 years later. Some of the fundamental recommendations from HJR 502 enacted into law include: (1) creation of the OWRB to oversee and administer water rights, (2) recognition that owners of land own diffused surface water and groundwater, (3) that public waters flowing in definite streams should be subject to appropriation for the benefit of the public, and (4) domestic uses of water for land owners should be protected. The OWRB was created in 1957 during the same legislative session.

1963 Amendments to reconcile appropriation and riparian systems - In 1963, the Oklahoma Legislature implemented recommendations of HJR 507 to reconcile the incompatible stream water rights systems. A new appropriation law was passed, which reiterated that water flowing in a stream was public water subject to appropriation. The new law also specified that after 1963, all uses of water had to be authorized by permits to appropriate and that all uses of water before the 1963 law, whether the use was by riparian landowners or by non-riparian appropriators, could be recognized with a priority date

through “vested rights” proceedings conducted by the OWRB. The law specifically listed seven categories of priorities that could be recognized.

One of the most important components of the new law was the specific recognition that domestic use by riparian landowners was exempt from any permit requirement, and that appropriation permits would be prohibited from interfering with domestic uses. In other words, the riparian right to a nebulous “reasonable use” was not abolished. The riparian right was instead simply limited to “domestic use,” similar to the 1897 appropriation law. The phrase “domestic use” was also defined in the law to specifically include household uses, small gardens, orchards, and cattle watering.

By 1968, the “vested rights” proceedings had been conducted by the OWRB for all stream systems across the state except for the Grand River system (subject to the control of the GRDA). The OWRB began issuing permits to appropriate water from “definite streams.”

Stream water law – current provisions

In 1972, the Stream Water Law was amended and is now codified in Oklahoma Statutes beginning at Section 105.1 of Title 82. Most of the fundamental components of 1963 law (some of which can be found in the pre-statehood 1897 statutes) were retained, including provisions on the right of eminent domain to access water, the right to use a watercourse to transport water, the authority for any domestic user or water right holder to file suit in district court over impairment of water rights (which suits can result in stream wide adjudications), requirements about commencing works, completing works, time for putting the water to beneficial use, loss of rights if authorized amounts are not put to use, changes of rights, and setting aside unappropriated water where the United States decides to build a reservoir. A definition section was also adopted, with one of the most important definitions discussed below.

“Definite stream” – The 1972 law defined “definite stream” to mean “a watercourse in a definite, natural channel, with defined beds and banks, originating from a definite source or sources of supply. The stream may flow intermittently or at irregular intervals if that is characteristic of the sources of supply in the area.” This definition is intended to clarify that diffused surface water is not stream water subject to appropriation. It should also be noted that most water in reservoirs, lakes and ponds has long been considered water in a definite stream that is public water subject to appropriation. The Oklahoma Supreme Court confirmed that view for water in a playa lake.⁵

“Domestic use” exemption – As noted above, domestic use was defined by the 1972 law to include household uses, cattle watering, etc., which involve a de minimis amount of water. The law exempts domestic use from any permitting requirement. The law also allows a landowner to store two years’ domestic use supply in a pond that may be constructed on a definite stream.

Procedural requirements to obtain appropriation permit - The Stream Water Law provides that any person who intends to acquire a water right in Oklahoma must file a permit application, which is considered for approval by the OWRB Board. The application must detail the applicant’s plans to use the water. Information about the proposed location and method of diversion, capacity of pumps, pipes, valves and other appurtenances must be provided, as well as the proposed place of use and details about

⁵ *Depuy v Hoeme*, 1989 OK 42

the ultimate use. For example, an irrigator must list the possible crops and cropping patterns proposed and type of irrigation system (e.g. center pivot, flood, drip, etc.). A public water supplier must provide details about the water system to be constructed. Information about any proposed storage is necessary, such as use of a lake or pond. The filing of the application becomes the priority date if the application is approved and a permit issued.

OWRB staff typically assists applicants in filling out applications or in providing information that an applicant needs for processing the application. After the application is deemed complete by OWRB staff (i.e. the application contains sufficient information that if not contested, can be approved by the OWRB), OWRB staff will instruct the applicant to issue public notice of the application. The statute requires that the notice of the application must contain essential facts about the application and must be published in a newspaper of general circulation in the county of the point of diversion and in the next county downstream. If the application is protested, the OWRB will schedule an administrative hearing before a hearing examiner. Note the diversion requirement is listed in the provision on notice. The common law of appropriation, recognized by the Oklahoma Supreme Court in 1907, required a physical diversion of water from the stream as an essential element to appropriate water. The law on notice indicates that a physical diversion requirement is still part of the law in Oklahoma.

For protested applications, the hearing examiner will gather facts, then synthesize the facts and law into a proposed findings of fact and conclusions of law to be presented to the nine-member OWRB that meets monthly. As provided in the Administrative Procedures Act (APA) that governs the OWRB hearing process, the applicant and any protestants are provided an opportunity to present their arguments to the OWRB before the OWRB votes on whether to accept the hearing examiner's proposed order. Any party that is adversely affected by the OWRB's final order may seek review in a district court according to the APA.

In addition to regular appropriation permits that authorize year round use, the OWRB may issue seasonal permits that authorize use for specified time periods during the year and term permits that authorize use for a specified term. Seasonal and term permits may be issued even if the OWRB finds no unappropriated water available. "Provisional temporary" (PT) permits may be administratively issued without notice and hearing, but authorize use for no more than 90 days. These kinds of permits are often relied on by oil and gas companies for a source of water used in the drilling of wells.

Statutory elements to obtain an appropriation permit – The Stream Water Law not only sets out the process that must be followed by an applicant to obtain a permit to appropriate, but also specifies the items that must be shown before the OWRB can issue a permit to appropriate, as follows:

1. *Whether there is unappropriated water available in the amount applied for.* This element triggers the fundamental water accounting system implemented by most states that follow the appropriation doctrine. Amounts of water that are already appropriated and amounts assumed to be needed for domestic uses are subtracted from the estimated amounts of water that would flow down the stream naturally. The remaining amount is considered unappropriated water available.
2. *Whether the applicant has a present or future need for the water and whether the proposed use is a beneficial use.* This anti-speculation element is an extension of the foundational principle that beneficial use is the basis, measure and limit of an appropriation right. This is the first of several provisions to

ensure the applicant is not merely speculating on using water and helps avoid issuing paper rights that have the effect of impeding economic development by legitimate water users.

3. *The proposed use does not interfere with domestic and existing appropriative uses.* Because it is difficult to prove a negative as seemingly required by this language, OWRB rules allow an applicant to certify and agree to a permit condition that they will not interfere with domestic uses and senior appropriations. The burden then shifts to a domestic user or senior appropriator to show that the use as proposed will interfere with their uses. The controverted matter may be resolved by the applicant agreeing to monitor and limit diversions as agreed upon by the parties.

Basin of origin protection – If the application is for transportation and use outside the stream system where the water originates (area-of-origin), the OWRB must determine that the proposed use will not interfere with existing or proposed beneficial uses within the area-of-origin in addition to making the determinations discussed above. The law goes on to provide that pending applications to use water within the area-of-origin will be considered before an application to use water outside the area-of-origin, which is a leap-frog provision that allows in-basin applications to be considered out of the usual priority date order. The OWRB must also review the uses and needs in the area-of-origin at least every five years to ensure accurate information. Permits to use water outside the area-of-origin cannot be reduced based on the five-year reviews.

Out-of-state use – In 2009, the Legislature adopted House Bill 1483. This bill added a new provision and amended a provision of the Stream Water Use Law to address out-of-state use of water. The new provision reiterated the importance of the need to comply with Oklahoma's four interstate stream compacts, and contained a provision that no permit to use water out-of-state will authorize use of water apportioned to Oklahoma by a compact unless the permit is specifically approved by the Legislature. HB 1483 also requires that before the OWRB can issue a permit to appropriate for out-of-state use, the OWRB must evaluate whether the water requested for out-of-state use could feasibly be used to alleviate shortages within the state. The applicant must designate an in-state agent for service of process and must agree to comply with any Oklahoma conditions that may conflict with conditions in the other state. Permits for out-of-state use will be subject to additional conditions based on a required 10-year review of such permits.

Beneficial use requirements and forfeitures – Even though the OWRB must determine whether a beneficial use is proposed before a permit can be issued in the first place, that is not the end of the beneficial use inquiry. As noted earlier, one of the foundational principles on which the appropriation doctrine is based and expressly stated in the Stream Water Use law is that *beneficial use is the basis, measure and limit* of an appropriation right. Due diligence is required to initially put the water to use and to continue using the water to retain the right. The appropriation right, when it becomes vested after initial use, is considered a vested right that cannot be taken without just compensation. However, it is a conditional vested right, conditioned on compliance with the requirements of the law and conditioned on continued beneficial use. If beneficial use does not begin as required, or if beneficial use stops after the initial use, the Stream Water Use law provides that the water right is lost (forfeited to the extent of nonuse), and the appropriation right holder must acknowledge and accept the law.

Specifically, the Stream Water Use law provides that works to place water to use must be initiated within two years after the permit is issued (unless the OWRB approves an extension). The law then provides that the permit holder gets seven years after permit issuance in which to put the full amount of water to use, unless the OWRB approves a Schedule of Use based on an extended time frame that is needed to put the full amount to use. Municipalities often seek approval of a Schedule of Use, because it may take up to 50 years to build a reservoir project and put all the water to use based on population projections. The municipality must have assurance through the authority of an appropriation right that the water can be used in the future to generate revenues to pay for the project over the extended period. The Stream Water Use law provides that after use begins, the amount used becomes vested and that vested amount must be used for the authorized purpose within seven continuous year periods thereafter. Amounts not used are subject to automatic forfeiture. The OWRB is authorized to hold hearings to provide an opportunity for the water right holder to demonstrate cause as to why the water right should not be declared forfeited.

Oklahoma appropriation law and *Franco-American Charolaise* - As discussed previously, the Oklahoma Supreme Court ruled in a 1993 opinion that Oklahoma still retains riparian rights to a reasonable use instead of the natural flow riparian rights doctrine. The major significance of the *Franco* case is that it completely modified the appropriation doctrine law approved by the Legislature in 1963 that was enacted to reconcile the incompatible riparian and appropriation doctrines.

In their 5-to-4 decision, the Court ruled that if the 1963 appropriation law was interpreted to abolish riparian rights to a reasonable use, then the law would be considered an unconstitutional taking of vested rights of riparian landowners. The Court explained that the riparian right to a reasonable use was a “vested right” because courts (common law) had recognized the existence of such rights. Apparently, but without a satisfactory explanation, the court concluded that the riparian right came into existence at the time that private ownership of the tract of riparian land came into being. In some areas of the state, private property ownership came into being upon the issuance of the federal government patent, or when a patent was issued by one of the Five Tribes, or when the State of Oklahoma issued the patent. The Court also explained that the riparian landowner could initiate use of water at any time, and that the facts and circumstances prevailing at the time of a controversy would be subject to a court inquiry as to whether such use by the riparian landowner was in fact “reasonable.” If another riparian landowner initiated a new use, or if the first landowner changed use, or if a person wanted to obtain an appropriation permit from the OWRB, the Court explained that a “reasonableness” inquiry would have to be made by a court before the OWRB could move forward on the appropriation permit application. This is so, the Court said, because the riparian use that is determined “reasonable” would have to be subtracted from the amount of water available for appropriation.

The bottom line is that the Court created a super-priority for riparian uses that are determined to be “reasonable.” Within a few short months after the Court issued its *Franco* opinion in early 1993, the Oklahoma Legislature responded to the Court and its criticism that the 1963 law did not expressly extinguish the common law of riparian right to a reasonable use. The Legislature accordingly adopted a new section of the Stream Water Use law to expressly provide that the only riparian rights to be recognized are the limited riparian rights to domestic use plus the previous riparian uses that were determined to be “vested rights” to appropriate in the proceedings conducted as required by the 1963

law. There has been no final court determination as to whether the 1993 statute is effective. As a result, a cloud on appropriation rights remains.

Groundwater use regulation – evolution and current provisions

The law on groundwater use regulation has a shorter history than the counterpart laws on stream water use. Recall that the owner of the land owns water under the surface of the earth, but not forming a definite stream. There are no known underground definite streams in Oklahoma. The Oklahoma Supreme Court declared decades ago that all water under the surface of the earth is presumed to be percolating groundwater and not water in a definite stream.

American rule of reasonable use common law - The 1936 Oklahoma Supreme Court case, which declared that all water under the surface of the earth is percolating groundwater, is the same case that declared the American rule of reasonable use (as opposed to the English rule of absolute ownership) would be the common law followed in Oklahoma. However, as noted previously, a principle of the American rule of reasonable use is that water pumped from the premises had to be used on the premises, and that use off the premises is *per se* unreasonable, thus precluding municipalities and rural water districts from using groundwater.

1949 groundwater appropriation statute - The first statutory law to regulate groundwater was adopted in 1949 and replaced the common law American rule of reasonable use. The 1949 law imposed the appropriation doctrine with provisions on beneficial use and that priority in time gives the better right. The 1949 appropriation law did not directly tie use of groundwater with ownership of land. That law was soon deemed ineffective and too restrictive because groundwater use in “critical groundwater areas” was limited to the “safe annual yield” (average recharge rate). Such a restriction would have prohibited development and use of groundwater from the prolific Ogallala aquifer in western Oklahoma and the Panhandle because there is relatively little recharge of groundwater in the arid Panhandle.

1973 Oklahoma Groundwater Law allocation system - The 1949 law was completely replaced by the current Oklahoma Groundwater Law that became effective in 1973. The 1973 allocation law makes a direct connection to land ownership and ownership of groundwater (as declared by law since 1890) by tying the amount of groundwater that can be allocated by a permit to the number of surface acres that overlie the groundwater basin owned by the land owner. The Oklahoma Supreme Court determined that this new groundwater law, contrary to its later decision about the Stream Water Use law, did not result in an unconstitutional taking of the common law right to a reasonable use but was instead an authorized exercise of the police power of the state.⁶ The Oklahoma Supreme Court also determined that the off-premises restriction of the American rule of reasonable use no longer applied.⁷ The fundamental provisions of the 1973 law are as follows.

Definition of “groundwater” – Groundwater means “fresh 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.” The phrase “outside the cut bank of any definite stream” was intentionally added in a 1967 amendment to the previous law to correspond to the definition of “definite stream” found in the Stream Water Use law.

⁶ *Kline v. OWRB*, 1988 OK 18

⁷ *Texas County Irr. and Water Res. Ass’n v. OWRB*, 1984 OK 96

The addition of this phrase in the statute was significant and ensured that water under the surface in the alluvium sands and gravels (that are found along most all rivers and streams in the state) is “groundwater” that can be claimed as water “owned” by the overlying landowner instead of being “public water” subject to appropriation and use by others. Previous to this definition change, the 1897 and 1905 Territorial Statutes on the appropriation doctrine declared that the “underflow” of streams was considered property of the state (i.e. public water subject to appropriation). The underflow was understood to include water in stream alluvium areas. Later court adjudications of rights to stream systems from the 1930s confirmed and decreed that volumes of water pumped from “wells in the alluvium” along with diversions of water from the stream had been appropriated by the claimants. Whether and to what extent issues relating to conjunctive use or integrated use management could be addressed by revising the definitions of “definite stream” and “groundwater” could be the subject of further discussion.

Maximum annual yield and equal proportionate part or share – One of the most significant provisions of the 1973 allocation law directs the OWRB to determine the maximum annual yield (MAY) for each groundwater basin in the state. The law requires the OWRB to conduct hydrologic studies, or accept studies of other agencies like the U.S. Geological Survey, as a first step in the process. With this hydrologic information, the OWRB must make a “tentative determination” of the MAY based on five factors specified in the law. The law then requires the OWRB to make the hydrologic surveys available to the public and conduct a public hearing on the tentative determination in the basin area. Evidence in support or opposition to the tentative determination is received, and then the OWRB must make a final determination of the MAY to be allocated to each acre of land that overlies the basin. The amount to be allocated to each acre is known as the equal proportionate share (EPS) or part of the MAY.

The law goes on to provide that after the MAY is determined, the OWRB can issue “regular” permits that allocate the EPS for each acre of land dedicated to the permit application. The law specifically states that a regular permit “shall allocate to the applicant the proportionate part of the maximum annual yield of the basin or subbasin. The proportionate part shall be that percentage of the total annual yield of the basin or subbasin, previously determined to be the maximum annual yield as provided in Section 1020.5 of this title, which is equal to the percentage of the land overlying the fresh groundwater basin or subbasin which the applicant owns or leases and which is dedicated to the application.”⁸

It is important to note that the “allocation” of the groundwater occurs with the issuance of the permit, not at the time the MAY is determined. This view is necessary in light of the provision in the law that requires updates of hydrologic studies at least every 20 years⁹, and the law which provides that in subsequent basin hearings to update the MAY, the OWRB may “increase the amount of water allocated but shall not decrease the amount of water allocated.”¹⁰ If the allocation for each landowner occurs when the MAY is first determined, the OWRB could never decrease the MAY even if updated studies show that too much water could be withdrawn from the basin.

⁸ 82 O.S. §1020.9(B)

⁹ 82 O.S. §1020.4(C)

¹⁰ 82 O.S. §1020.6(D)

“Temporary” permits (before MAY determined) – The 1973 Oklahoma Groundwater Law anticipated that in transitioning to the new allocation system, it would take some time for the OWRB to conduct hydrologic surveys and determine the MAY for all groundwater basins in the state. Accordingly, the Legislature provided authority for the OWRB to issue “temporary” permits to use groundwater before the determination of the MAY for a basin. The law provides that “the water allocated by a temporary permit shall not be less than two (2) acre-feet annually for each acre of land owned or leased by the applicant.” These kinds of permits are “revalidated” annually, with the request to revalidate being part of the annual water use report that is required to be filed each year with the OWRB. Revalidations can be protested, but only changes of conditions can be presented at the hearing on revalidation. In light of the high costs and limited budgets, studies and determinations of the MAY have not been completed for many basins in the state. Accordingly, some “temporary” permits issued in 1973 are still being revalidated after more than 35 years.

Procedural requirements to obtain a permit to use groundwater – Similar to the procedures followed to obtain a permit to use stream water, the Oklahoma Groundwater Law requires the filing of an application before groundwater is used (the law allows test wells to be drilled before an application is filed, however). Staff typically provides assistance to applicants to fill out applications. The application requires submittal information about ownership (or leasehold or other interest in the land), well locations, type of use and place of use. After the application is deemed complete, staff then instructs the applicant to publish notice of the application in a newspaper of general circulation in the county where the wells and land is located. Unlike a stream water permit application, certified mail notice must also be given to owners of land located within a quarter mile of a proposed or existing well that the applicant intends to use. If the application is protested, a hearing examiner will schedule a hearing, and the parties have the opportunity to provide evidence in support of, or opposition to, the application. The hearing examiner then provides proposed findings, conclusions and order to the nine-member OWRB to be considered at their monthly meeting where the parties may present oral arguments. The final order of the OWRB is subject to review in district court under the APA.

In addition to “regular” and “temporary” permits, the OWRB is also authorized to issue a 6-month “special” permit for quantities of water greater than can be allocated by a regular or temporary permit. Like the Stream Water Use law, “provisional temporary” (PT) permits may be administratively granted without notice and hearing, but are effective for no more than 90 days. Most oil and gas companies rely on PT permits for water needed for their short term well drilling activities.

Statutory elements to obtain a permit – Whether a “regular” or “temporary” permit is sought, the law provides that certain matters must be determined by the OWRB before the permit can be issued.

1. *Whether the lands owned or leased by the applicant overlie a fresh groundwater basin.* Virtually all lands in Oklahoma overlie some groundwater basin, whether major or minor, so this is rarely an issue. However, the issue of ownership or leasehold interest is sometimes in controversy. The OWRB is not a court of general jurisdiction to adjudicate title to lands and simply relies on photocopies of deeds or leases to confirm the applicant’s interest in the land acreage described in the application. If a protestant disputes ownership, the OWRB stops the proceedings to allow the parties to resolve the dispute in a district court before the OWRB will move forward.

2. *The use proposed is a beneficial use.* The law does not define beneficial use, but OWRB rules define “beneficial use” as the quantity of groundwater when reasonable intelligence and reasonable diligence are exercised in its application to a lawful purpose and is economically necessary for that purpose. Examples include municipal, industrial, agriculture, irrigation, recreation, fish and wildlife.
3. *Waste as specified by law will not occur.* Section 1020.15 enumerates 10 activities that constitute “waste.” One of these items is the permitting or causing the pollution of a fresh water strata or basins through any act. This provision became the subject of significant controversy when oil and gas companies began using groundwater in secondary and tertiary recovery projects. This provision was revised in 2001 to preclude the OWRB from making a determination about waste by pollution relating to activities regulated by the Department of Environmental Quality (e.g. municipal and industrial wastewater discharging) or the Department of Agriculture, Food and Forestry (e.g. confined animal feeding operations).

If these three items are shown in favor of an applicant, the law provides that the OWRB “shall” issue the permit (i.e., issuance is mandatory, no discretion).

Well spacing, location exceptions and other conditions – The Oklahoma Groundwater Law authorizes the OWRB to establish well spacing (i.e. the distance between water wells) and location exceptions. However, the statute was interpreted by the Attorney General as limiting the OWRB’s authority only for those basins where the MAY has been determined (and regular permits are issued). A requirement to have wells spaced at some distance one from another is a method to reduce or avoid pumping interference that can be caused when wells are pumping at the same time (referred to as the “cone of depression effect”). Well pumping interference can be affected in ways other than the distance that the wells are spaced apart. The pumping capacity of the well, the number of hours in a day that the well is pumping, the depth of perforations of the well, and the level of sealing the well can all play a part in the extent of interference. Separate from the well spacing and location exception sections of the law, the law provides the Board shall specify the location of the permitted well or wells “and other terms and conditions as specified by the Board, including, but not limited to, the rate of withdrawal, the level of perforating and the level of sealing the well.” Accordingly, the Board can address well interference issues that may be raised in basins for which the MAY has not been determined, although such matters require a significant amount of information and efforts to conduct computer modeling to predict effects in order to impose proper terms and conditions.

Metering – The groundwater law authorizes the OWRB to require meters to be placed on wells, but only in a rare instance where a majority of landowners overlying a basin request the meter. With hundreds of thousands of landowners overlying each basin, this provision has never been activated. On occasion, an applicant will voluntarily agree to install a meter to address a concern of a protestant. Public water supply wells are required to be metered by Oklahoma Department of Environmental Quality rules.

Platted lands and municipal use of groundwater – The Oklahoma Groundwater Law allows municipalities to regulate domestic and industrial wells within its corporate limits.¹¹ This provision has been interpreted to mean that municipalities cannot prohibit (as opposed to regulate) a landowner from

¹¹ 82 O.S. §1020.21

using groundwater owned by the landowner. The law also provides that municipalities may use groundwater allocated to platted lands within its corporate limits on the condition that a permit is obtained from the OWRB, the wells are located within 600 feet of the corporate boundaries, and the wells are located on the platted land.

Domestic use exemption – Like the Stream Water Use law, the Oklahoma Groundwater Law exempts domestic use from the permitting requirements of the law.¹² However, the exemption specifically provides that “wells for domestic use are subject to sanctions against waste.” In other words, a well used for domestic use can nevertheless be subject to an order of the OWRB to plug it if the well (due to faulty casing, etc.) is causing pollution of the groundwater.

Sensitive sole source groundwater basin and conjunctive management – In 2003, as a result of a proposal to pump groundwater from the Arbuckle-Simpson Groundwater Basin to supply municipalities in central Oklahoma, the Legislature enacted Senate Bill 288 to amend the Oklahoma Groundwater Law in two significant ways. First, for any “sensitive sole source groundwater basin” (defined as a groundwater basin any part of which has been designated by the EPA as a “sole source aquifer” plus a 5-mile buffer zone), a moratorium was imposed on use of groundwater away from the basin. The moratorium is in effect until the OWRB determines a MAY that would ensure that permits issued to pump water from such a basin “will not reduce the natural flow of water” from basin area streams or springs. SB 288 also added a new requirement before the OWRB could issue a permit to pump groundwater from such a basin, i.e. whether “the proposed use is not likely to degrade or interfere” with the flow of water from basin area streams and springs.

Since the complete separation in the laws on the use of stream water and use of groundwater, clarified with the 1967 amendment to the definition of “groundwater” to include water in the alluvium of streams, SB 288 is the first statutory recognition that the use of one category of water (groundwater) can affect the other category of water (stream water) and that a conjunctive or integrated management approach is needed in certain instances.

Diffused surface water, flooding and floodplain management -

As discussed above, diffused surface water, like groundwater, is owned by the land owner. While there are no state statutes governing the consumptive use of diffused surface water like stream water and groundwater, there are several court cases and principles that can affect how a landowner can manage diffused surface water. In Oklahoma, the “common enemy doctrine” that allows the diversion of water onto lands of another to prevent damage to the diverter’s land is modified by the “rule of reason” principle that any such diversion must be done reasonably and with due regard to the rights of others.¹³

Another body of law and regulations that may apply to diffused surface water includes the National Flood Insurance Program (NFIP) and the Oklahoma Floodplain Management Act. Under the NFIP, Federal Emergency Management Agency regulations and State law, counties and municipalities that choose to participate in the program must establish a local floodplain management program that restricts development in floodplains and requires development permits. Besides reducing life and property

¹² 82 O.S. §1020.3

¹³ *Haskins v. Felder*, 1954 OK 102

damages, the benefit to the local communities is that their citizens can obtain low cost, subsidized flood insurance on property within participating communities. Federally backed mortgages and most private mortgage companies will not loan money on property in a floodplain unless flood insurance is obtained. Non-subsidized flood insurance premiums for property that is not in a participating community can be extremely costly and even preclude property transfers where a mortgage is involved.

Atmospheric water and weather modification – The OWRB administers the Oklahoma Weather Modification Act found in 82 O.S. §1087.1 and following. That act authorizes the OWRB to issue licenses to operators and permits for specific operations for weather modification activities. Weather modification includes two major aspects: (1) rainfall enhancement, and (2) hail suppression. While rainfall enhancement can theoretically result in significant positive benefits for large areas of agriculture production, hail suppression can result in significant savings for property insurance companies. There are at least three notable problems involved in implementing a weather modification project: (1) significant start up costs with high cost of airplanes and pilots on standby for weeks and months to be ready to take advantage of appropriate weather conditions to seed clouds; (2) significant potential liabilities, and resulting high insurance costs, from hundreds or thousands of property owners that may claim too much rainfall was created that caused flooding and damages and from property owners that claim hail was increased instead of decreased; and (3) insufficient studies that confirm whether cloud seeding works and provides benefits, at least to the degree necessary to justify the significant costs. The last project that operated in the state was funded by Rainy Day Funds approved by the Legislature during the Keating Administration.

Interstate Stream Water Compacts

There are three methods to address disputes and controversies about water flowing between two or more states: (1) equitable apportionment where the U.S. Supreme Court in expensive long-term litigation must decide the equities that exist to divide the water; (2) direct Congressional apportionment, where Congress divides the water as set forth in a federal statute; and (3) interstate agreed apportionment by negotiated compact that is approved by Congress.

States have the most input on how interstate water is divided by negotiating a compact agreement that apportions the water. Under the U.S. Constitution¹⁴, no State shall without the consent of Congress, enter into any agreement or Compact with another State. The State of Oklahoma has chosen the compact method to apportion virtually all water that flows into or out of the State of Oklahoma. There are four compacts to which Oklahoma is a party: Canadian River Compact with New Mexico and Texas (1950), Kansas-Oklahoma Arkansas River Compact with Kansas (1965), Arkansas-Oklahoma Arkansas River Compact with Arkansas (1970); and Red River Compact with Arkansas, Louisiana and Texas (1980).

By virtue of the Constitutional requirement for Congress' consent, compacts are enacted in federal statutes, as well as the statutes of each of the agreeing states. Among other things, interstate stream compacts apportion the waters in major streams and their tributaries between or among the agreeing states. These compacts also establish interstate agencies known as Compact Commissions, consisting of one or more commissioners from each state, plus one or more non-voting federal commissioners. The Compact Commissions meet annually (at rotating locations in the member states) to receive reports

¹⁴ Article I, Section 10, Cl. 3

regarding stream flows, amount of water stored in reservoirs, and water quality, and to conduct other business to administer the compact provisions. Compact Commissions are assisted by several standing committees staffed by personnel of appropriate member state agencies. Such committees usually include a budget committee, engineering committee, and legal committee. The Arkansas-Oklahoma Arkansas River Compact Commission and the Red River Compact Commission also include a standing environmental committee. Usually compact commissions are unable to take significant action in controversial matters because unanimous votes are required.

Federal Rights

Navigation, commerce and supremacy - The authority of the U.S. government to regulate navigation has its roots from the common law of England, which recognized that the sovereign King controlled the seas and submerged lands near the shore to control port placement and operations. Although the ownership of the beds of rivers was later determined to be held by the States, the U.S. Constitution gave to Congress the authority to regulate commerce among the States. Because waterways were used to transport goods among the States early on, Congress began to enact laws about navigation that affected the use of water. Therefore, while States may claim ownership of the beds of rivers based on the equal footing doctrine, the Commerce clause established a “navigation servitude” on all lands and on all state-created water rights allowing Congress to enact laws that have the effect of overriding state laws on water use. This “navigation servitude” is described to exist on lands and water up to the “ordinary high water mark” of navigable streams.

The Commerce Clause of the U.S. Constitution has also been interpreted to allow Congress to regulate water used for hydropower purposes. Accordingly, the U.S. Supreme Court ruled that a State cannot usurp the Federal Power Act and prohibit a hydropower project from operating by denying a water use permit to the operator.¹⁵ The U.S. Supreme Court has recognized, however, that Congress, through the Clean Water Act and its Section 401 provision about state water quality certifications of federal permits and licenses, does provide the States with limited “veto” power over hydroelectric projects if the state withholds a water quality certification for the federal license.¹⁶

Another exception to the navigation and hydropower supreme authority of the federal government was created by Congress. The O’Mahoney-Milliken Amendment to the Flood Control Act of 1944 says that use of water for navigation or hydropower in states like Oklahoma cannot conflict with “beneficial consumptive uses” in those states. In other words, if a municipality or irrigator with a state water right diverts water upstream from a navigation channel or upstream from a hydropower facility, the federal government cannot prevent the municipality or irrigator from using the water.

Proprietary (property) rights of the United States and federal reserved rights – Article 4, Section 3, Clause 2 of the U.S. Constitution says that Congress shall have the power to make rules and regulations respecting property belonging to the U.S. Under this clause, Congress or Presidents through executive orders have created National Parks, National Monuments, National Recreation Areas, National Forests, National Wildlife Refuges, and National Fish Hatcheries from public lands or from lands otherwise acquired by the federal government. If water is needed to fulfill the primary purposes of those federal

¹⁵ *First Iowa Hydro-Electric Cooperative v. Federal Power Comm.*, 328 U.S. 152 (1946)

¹⁶ *PUD No. 1 of Jefferson County v. Washington Dept. of Ecology*, 511 U.S. 700 (1974)

enclaves, courts have approved federal reserved rights claims to use such waters without the need for the federal government to obtain a state issued permit. Somewhat like Indian water rights, the federal government can make the claim for a reserved right even if the federal law or executive order did not mention water. The priority date for federal reserved rights claims is the date of the federal law or executive order creating the federal enclave. The federal reserved right is then administered alongside other state-issued appropriation rights in priority order.

Indian and Federal Reserved Water Rights

The concept of federal reserved rights, including water rights afforded to Oklahoma's Indian Tribes, largely originates in the Winters Doctrine, derived from the *Winters v. U.S.* federal court decision.

In the early 1830s, the U.S. entered into treaties with officials of five southeastern Tribes – the Cherokee, Muscogee (Creek), Choctaw, Chickasaw and Seminole Nations – pursuant to which those Tribes exchanged their homelands in Georgia, North Carolina, Tennessee, Mississippi, Alabama and Florida for lands in what would become the State of Oklahoma. What resulted was the forced migration of citizens of these Tribes, referred to as the Trails of Tears. Following the Civil War, similar treaties were entered into with additional Tribes that exchanged their lands for lands in Oklahoma.

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. 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. Today, Oklahoma is home to 39 Tribes, and all continue to exercise their inherent authority established through treaties with the federal government.

In 1908, the U.S. Supreme Court declared in the *Winters* case 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 Indian citizens to live on those lands. Despite this landmark ruling, some uncertainty exists concerning original tribal ownership of appurtenant waters and rights to the use of water within original tribal boundaries.

Although the question has not been fully litigated, Oklahoma Tribes have long claimed *Winters* rights. The Five Tribes, who received their lands in fee simple, make the additional or alternative claim that their treaties with the U.S. provide an even stronger claim. Federal judicial rules of treaty construction – that treaties with Tribes are to be interpreted as the Indians would have understood them, that ambiguities in Indian treaties are to be resolved in the Tribes' favor, and that treaties are to be liberally construed in favor of the Indians – tend to favor the tribal position. Another key question that remains unresolved is when treaty-based water rights are recognized to exist versus when they were possibly abrogated.

Federal rules concerning tribal civil regulatory jurisdiction, virtually all of which have been judicially created, are difficult to apply. The prevailing standard for tribal civil jurisdiction over non-Indians, for example, provides that Tribes can exercise such jurisdiction (at least on non-Indian-owned fee lands) only if the non-Indian is engaged in a consensual commercial relationship with the Tribe or if the acts of the non-Indian "threaten, or have some direct effect upon, the political integrity, economic security, or health or welfare of the Tribe." The ambiguities in this standard often lead to uncertainty as to which sovereign has the authority to regulate.

These lingering uncertainties, together with the formidable costs and potential complexity of litigation, have resulted in the State of Oklahoma and Tribes so far refraining from pressing judicial claims to ownership of, or jurisdiction over, water. Uncertainty, however, inhibits economic growth and complicates both protection of the environment and the responsible use of natural resources.

States and Tribes, as well as Tribes and the federal government, have addressed both jurisdictional and rights ambiguities by cooperative resolution, often in the form of a compact. Oklahoma has been a national leader in compacting to resolve uncertainty in other civil jurisdictional areas, including car tags and tobacco taxes, and that experience could prove helpful should the State decide to resolve water jurisdictional issues through negotiation. Negotiation would also allow the State and Tribes, rather than the federal judicial branch, to assume the primary role in addressing tribal sovereignty and associated water rights claims.

Water Quality and Pollution Control

The quality of surface and groundwaters in Oklahoma is of significant importance to the state's general public health and prosperity. Water ownership and rights do not include the right to pollute or degrade fresh water resources. Numerous agencies and organizations have been afforded responsibilities related to the enforcement of state and federal pollution laws. Specifically, the Oklahoma Department of Environmental Quality oversees the majority of the state's environmental protection and management programs. In addition, potentially harmful pollutants from both point and nonpoint sources are closely monitored by numerous entities to ensure that Oklahoma's rivers, streams and lakes receive at least adequate protection.

While the state originally passed laws to curb water pollution in the 1920s, 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 implemented 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 wastewater 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), promulgated as rules by the OWRB and reviewed at least every three years, are the cornerstone of the state's water quality 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 that specify treatment levels required of industrial and municipal wastewaters.

The designation and protection of beneficial uses – similar in concept, though separate from the strategy utilized in state water management and use programs – is vital to implementation of water quality standards. Currently recognized beneficial uses for the Water Quality Standards program (not to be confused with beneficial use requirements relating to water use) 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 those invaluable resources. Through assignment of as many beneficial uses as are attainable, standards assure that existing water quality is not unduly impacted. Narrative and numerical criteria set forth in the OWQS are used by regulating state agencies to ensure attainment of beneficial uses and limit waste and pollution of state waters. All designated uses receive water quality protection because each use 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 650,000 lake surface acres. Beneficial uses designations have also been assigned to the state's major groundwater basins.

Through the efforts of numerous agencies and organizations, Oklahoma has made tremendous strides in limiting pollution from point sources, including municipal and industrial stormwaters. Similarly, the state has made great progress in minimizing impacts from nonpoint sources, such as agricultural operations, silviculture, urban areas, and various other nonpoint source-related activities. Efforts have been undertaken to encourage owners and operators of lands to adopt practices that minimize the contributions of nonpoint source pollutants to state waters. However, while these 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 holistic strategy, which takes into account all threats to human health and ecological integrity within the watershed, places greater emphasis 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, more cost-efficient fashion.

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. 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 created an all-citizen rulemaking and appellate board for complaint, permit, and penalty matters. Other agencies with authority to manage and regulate activities that can impact water quality are in the list of defined "state environmental agencies" that include Oklahoma Department of Environmental Quality; Oklahoma Water Resources Board; Oklahoma Department of Agriculture, Food and Forestry; Oklahoma Corporation Commission; Oklahoma Conservation Commission; Oklahoma Department of Mines; Oklahoma Department of Public Safety; and Oklahoma Department of Labor.