PRODUCED WATER LITIGATION

EDMOND R. McCARTHY, JR., *Austin*
McCarthy & McCarthy, LLP

State Bar of Texas
41ST ANNUAL
ADVANCED OIL, GAS, AND ENERGY RESOURCES LAW
September 7-8, 2023
Houston

CHAPTER 8

Edmond R. McCarthy, Jr.
McCarthy & McCarthy LLP

During the past four decades, Ed McCarthy has focused his practice in natural resources concentrating on water related matters. Ed is currently a partner in the Austin Law Firm of McCarthy & McCarthy LLP.

Since 1985, Ed's practice includes real property, environmental and administrative law, and government relations matters with an emphasis on water and water-related matters. He has done considerable work on matters involving endangered species, flood plain regulation and land development, surface and groundwater rights, water conservation and reuse, water and air quality, dam safety, public utilities, water district and political subdivision law, public finance matters, radioactive materials, environmental regulatory issues, eminent domain, and oil, gas and hard mineral rights and titles (including both surface strip and in-situ mining). He regularly practices before various state agencies, including the Texas Commission on Environmental Quality (and its predecessor agencies) and the Texas Water Development Board. Ed also handles matters involving the Texas Attorney General, Texas General Land Office, and the Railroad Commission of Texas and has appeared before Public Utility Commission and the Texas Department of Health. At the local level, Ed's practice includes work with, for and before the governing bodies of municipalities, counties, and local surface and groundwater districts. He has represented individuals, trade associations, and corporate and governmental Clients in the preparation, filing and negotiation of various regulatory permits, and in contested case and rulemaking proceedings before state and federal environmental regulatory agencies. In his representation of and before water districts and other political subdivisions, Ed regularly counsels and represents Clients in connection with issues arising under the Texas Public Information Act and Open Meetings laws, as well as election and public finance laws.

In addition to his administrative practice, Ed has represented his Clients in both the Courtroom and the Boardroom, as well as in legislative venues. He is a frequent presenter at Continuing Legal Education Seminars on water rights and related topics. Additionally, Ed has regularly appeared as a guest lecturer/teacher in local elementary and junior high schools and universities to discuss water and environmental law issues. As a lobbyist registered with the Texas Ethics Commission, in addition to his work before multiple regulatory agencies, Ed represents Clients before both the Texas Legislature and United States Congress in a variety of water rights, dam safety, and water district/political subdivision issues, as well as endangered species, mining and radioactive materials, and related environmental matters.

After graduating from St. Mary's Law School with distinction in May 1981, Ed served as a Briefing Attorney on the Supreme Court of Texas, assigned to former Texas Supreme Court Justices, the Honorable James Denton (deceased) and Honorable Ruby Kless Sondock. Following his tenure with the Court, Ed served as a Captain in the Judge Advocate General's Corps, United States Army assigned to the Government Appellate Division in appellate matters before the United States Court of Military Appeals and Army Court of Military Review. In 1985, Ed joined McGinnis, Lochridge & Kilgore L.L.P., and became a Partner with the law firm in January 1989, where he practiced until 2003 when he joined Jackson, Sjoberg, McCarthy & Townsend as a partner. In 2017, Ed joined his son to form McCarthy & McCarthy, LLP.

TABLE OF CONTENTS

I. Introduction

In 2013 the Texas Legislature amended the Natural Resources Code to add Chapter 122 to address issues related to the liability for handling and disposal of fluid oil and gas wastes, including produced water.[1] The new chapter provided defenses to various claims related to the treatment, handling, and disposal of these waste products by recycling for beneficial use.[2]

In 2019, to address the newly developed competing interest in the ownership of the "fluid oil and gas wastes," including the "Produced Water" component,[3] the Legislature amended Section 122.002 to provide that from and after September 1, 2019, in the absence of "an oil or gas lease, a surface use agreement, a contract, a bill of sale, or another [other] legally binding document" to the contrary, ownership the waste fluid belongs to the person who takes possession of the same for purposes of treating and applying it to a beneficial use.[4]

Before addressing the topic of the single reported appellate decision identified as "Produced Water Litigation,"[5] we need to lay a foundation. To do this there are three questions we should ask:

(i) What is "Produced Water"?

(ii) When/why did oil and gas waste be valuable?

(iii) Is Water a Mineral?

a. What is "Produced Water"?

"Produced Water" is not a statutorily defined term in Texas. It is, however, included in the statutory definition of "Fluid oil and gas waste."[6] The legislature has defined "Fluid oil and gas waste" in Chapter 122 of the Natural Resources Code as follows:

> "[W]aste containing salt or other mineralized substances, brine, hydraulic fracturing fluid, flowback water, produced water, or other fluid that arises out of or is incidental to the drilling for or production of oil or gas."[7]

In laymen's terms, produced water can be defined as the water that flows from the well bore in addition to oil, gas or other liquid streams from a producing formation. Historically, that fluid oil and gas waste was viewed strictly as an undesirable by-product of oil and gas production that had to be dealt with, *i.e.*, disposed of. Whether by custom, regulation or contract, the industry recognized that burden of disposal to fall on the producer.

b. How Did "Waste" Become a "Treasure"?

Allowing the fluid waste stream from oil and gas operations to flow across the ground and threaten to pollute the surface or nearby surface streams was not an option. Unlike water in its natural state, the fluid oil and gas waste is not susceptible to "evaporation." The

[1] *See* Acts 2013, 83rd Leg., R.S., Ch. 209, 2013 Tex. Gen. Laws 896 (codified as Chapter 122, Texas Natural Resources Code).
[2] *Id.*, *see* Tex. Nat. Res. Code §§122.001-122.004.
[3] Tex. Nat. Res. Code §§122.001(2).
[4] *See* Acts 2019, 86th Leg., R.S., Ch. 147, 2019 Tex. Gen. Laws 254 (amending Section 122.002, Texas Natural Resources Code).
[5] *Cactus Water Services LLC v. COG Operating LLC*, 2023 Tex. App. LEXIS 5600 (Tex. App. – El Paso July 28, 2023, no pet.).
[6] Tex. Nat. Res. Code § 122.001(2).
[7] *Id*. (emphasis added).

potential for groundwater pollution resulting from seepage of the waste fluids left in unlined ponds similarly presented an unacceptable risk. Equally undesirable was the potential threat to wildlife, particularly migratory birds, mistaking the ponds for freshwater way-stops safe for landing, resting, even feeding. Where was the value in this nuisance byproduct?

Historically, deep well injection disposal targeting primarily in aquifers with water quality unsuitable for drinking (with or without treatment) was the viable solution.[8] Over time, the proliferation of deep well injection disposal of oil and gas fluid wastes, however, took a toll. Poor well construction of injection wells, deteriorating well bore casings, natural migration of the wastes in subsurface formations resulted in pollution of higher quality groundwater in other aquifers or water bearing formations. Pollution not only impacted water quality in neighboring fresh(er) groundwater bearing strata, but led to litigation.

Pollution was not the only threat that the continued reliance on deep well injection disposal posed. Since the turn of the century, earthquakes in West Texas have become a regular occurrence. This development of seismic events sparked response from the Railroad Commission in the form of curtailments of use of deep well injection disposal, development of shallower disposal wells, and initiation of development of Seismic Response Plans on a regional basis intended to address locally monitored seismic activity to avoid damaging earthquakes.[9]

The increased seismic activity also encouraged efforts to incentivize recycling of oil and gas fluid waste streams in lieu of deep well injection.[10] Earthquakes, however, were not the sole driving force behind the change of direction in solving the waste disposal issue that resulted in the development of the recycle/reuse concept.[11]

---

[8] PRODUCED WATER CONSORTIUM, *BENEFICIAL USE OF PRODUCED WATER IN TEXAS: CHALLENGES, OPPORTUNITIES AND THE PATH FORWARD*, 10 (2022); *see also* Cooney & Watson, *Produced Water*, Ch. 14, 24th Annual Changing Face of Water Law (SBOT February 23-24, 2023).

[9] *See* Wright, *Oil, Water, Earthquakes and Opportunities* (January 31, 2022) (available on-line at https://www.rrc.texas.gov/news/013122-commissioner-wright-op-ed/); *Railroad Commission Taking Expedited Action in West Texas Seismicity Response* (December 13, 2022) (available on-line at https://www.rrc.texas.gov/news/121322-ncr-sra-seismic-activity-statement/).

[10] *See generally* Wright, *Oil, Water, Earthquakes and Opportunities* (January 31, 2022) (available on-line at https://www.rrc.texas.gov/news/013122-commissioner-wright-op-ed/); *Railroad Commission Taking Expedited Action in West Texas Seismicity Response* (December 13, 2022) (available on-line at https://www.rrc.texas.gov/news/121322-ncr-sra-seismic-activity-statement/); Cooney & Watson, *Produced Water*, Ch. 14, 24th Annual Changing Face of Water Law (SBOT February 23-24, 2023); *see also* Acts 2013, 83rd Leg., R.S., Ch. 209, 2013 Tex. Gen. Laws 896 (codified as Chapter 122, Texas Natural Resources Code); Acts 2019, 86th Leg., R.S., Ch. 147, 2019 Tex. Gen. Laws 254 (amending Section 122.002, Texas Natural Resources Code); *See generally* PRODUCED WATER CONSORTIUM, *BENEFICIAL USE OF PRODUCED WATER IN TEXAS: CHALLENGES, OPPORTUNITIES AND THE PATH FORWARD* (2022) (Report to the Texas Legislature); Acts 2021, 87th Tex. Leg., R.S., ch. 941, 2021 Tex. Gen. Laws ____ (SB 601 creating the Texas Produced Water Consortium)(Chapter not yet available from Texas Legislative Reference Library on-line).

[11] *See generally* PRODUCED WATER CONSORTIUM, *BENEFICIAL USE OF PRODUCED WATER IN TEXAS: CHALLENGES, OPPORTUNITIES AND THE PATH FORWARD*, 9-10 (2022); *see also* Wright, *Oil, Water, Earthquakes and Opportunities* (January 31, 2022) (available on-line at https://www.rrc.texas.gov/news/013122-commissioner-wright-op-ed/); *Railroad Commission Taking Expedited Action in West Texas Seismicity*

During the past decade the longstanding "burden" of waste disposal suddenly became a potential "revenue center," or at least a readily available alternative to fresh water supplies for production operators. What triggered the sudden "about face?" In a word – "Fracing."

The massive volume of fluid, largely water based, required for frac jobs quickly got the industry's attention.[12] The opportunity to reopen plays in once abandoned fields that hydraulic fracturing technology provided was phenomenal.

Historically the industry relied upon "fresh water" or "salt water" sources available under existing leases. Whether the lease expressly authorized an operator to use groundwater from the lease, or was available as a matter of common law,[13] so long as the lease did not prohibit such use the water was plentiful in many areas. Refinement in frac technology, and the development of horizontal drilling, however, caused the volumes of water used in frac jobs to skyrocket. This increased demand gathered large amounts of unwanted publicity. The term "waste," not "oil and gas fluids waste," became associated with the industry due to the voluminous quantity of water used to produce a single barrel of oil.

Bad "PR" was fueled by the more frequent occurrence of prolonged periods of drought that Texas began to experience. Although drought was not an uncommon event in Texas history,[14] it was certainly a factor that went "viral" with the increased presence of "social media" in the lives of Texans and the growing discussion of "climate change." A further aggravating factor was the reality of limited availability of fresh drinking water supplies in West Texas and the Permian Basin where fracing had facilitated numerous new or reopened oil and gas plays. The increased volume of water demand to support the frac operations and, the initial preference for "fresher" less saline or "brackish" water sources, threatened the availability of fresh water for human consumption.

Again, technological advances allowed lower quality water to be a viable fluid component for fracing. Coupled with the curtailment of deep well injection disposal sites and impact of droughts, and the growing volume of oil and gas waste fluids in need of disposal, a new industry was born. While more the consequence of necessity, rather than being an economic boon, recycling of these oil and gas waste fluids began to trend.[15]

The trend, however, was slow to jump-start. There was little to no infrastructure in place to handle the collection and recycling operation. Transportation facilities, *i.e.*, pipelines, were non-existent. Trucking is

---

Response (December 13, 2022) (available on-line at https://www.rrc.texas.gov/news/121322-ncr-sra-seismic-activity-statement/); Cooney & Watson, *Produced Water*, Ch. 14, 24th Annual Changing Face of Water Law (SBOT February 23-24, 2023).

[12] PRODUCED WATER CONSORTIUM, *BENEFICIAL USE OF PRODUCED WATER IN TEXAS: CHALLENGES, OPPORTUNITIES AND THE PATH FORWARD*, 12 (2022)(estimated 3.93Bbbls of produced water generated in 2019).

[13] *See Sun Oil Co. v. Whitaker*, 483 S.W.2d 808, 811 (Tex. 1972); *Acker v. Quinn*, 464 S.W.2d 348, 352 (Tex. 1971).

[14] *In Re: The Adjudication Of The Water Rights Of The Upper Guadalupe Segment Of The Guadalupe River Basin*, 642 S.W.2d 438, 441 (Tex. 1982) ("The story of water law in Texas is also the story of its droughts.").

[15] *Cactus Water Services LLC v. COG Operating LLC*, 2023 Tex. App. LEXIS 5600 *5 (Tex. App. – El Paso July 28, 2023, no pet.)(citing Mathews, *The Next Big Bet in Fracking: Water*, The Wall Street Journal (August 22, 2018) (available on-line at https://www.wsj.com/articles/the-next-big-bet-in-fracking-water-1534930200).

expensive. These factors increased the cost of recycling. Moreover, the volume of these "fluid wastes," once recycled, typically involved quantities that exceeded what individual operators needed, much less could handle, depending upon the level of ongoing operations.

Moreover, the concept of "selling" recycled wastes, raised eyebrows and suspicions/concerns. There were no standards of quality for the recycled wastes due to the different frac "cocktails" operators used, no oversight, and no standards for the quality level of the recycled waste. Questions of liability shadowed the industry as it struggled with proper disposal questions, threats of litigation due to blame for upsets, or well damage that might be blamed on a recycled product.

Some of these issues/questions began to be addressed in 2013, with enactment of Chapter 122, Texas Natural Resources Code,[16] as the same was amended in effective September 1, 2019.[17] In the 86th Legislative Session, House Bill 2767 was in enacted amending Chapter 122 in an apparent effort to create "certainty" as to the ownership of the "fluid oil and gas waste,"[18] which includes the undefined component - "Produced Water." Both the market demand and availability of recycled "Produced Water," however, was growing. While historically it was treated as a waste and the disposal responsibility of the oil and gas operator/lessee, with the evolution of a market for the treatment and recycling of the produced water for a profit, the market for the Produced Water has become competitive.[19]

II. Groundwater 101

a. Introduction

To understand water supply source issues, it is important to have a basic understanding of Texas Water Law. Texas has two separate and distinct statutory and regulatory systems that govern "water." One system regulates our "State owned" surface water,[20] and the other which applies to "privately owned" groundwater.[21]

The water in Texas rivers and streams, as well as our lakes and reservoirs, Texas' bay and estuary systems, and the portion of the Gulf of Mexico within the State's 10-mile jurisdictional boundary limits, is classified as "surface water" owned by the State.[22] Water found percolating and oozing through the ground, which finds outlets from our springs, and seeps in the ground is given the legal

[16] *See* Acts 2013, 83rd Leg., R.S., Ch. 209, 2013 Tex. Gen. Laws 896 (codified as Chapter 122, Texas Natural Resources Code).

[17] *See* Acts 2019, 86th Leg., R.S., Ch. 147, 2019 Tex. Gen. Laws 254 (amending Section 122.002, Texas Natural Resources Code).

[18] *Id.*; *see generally* Cooney & Watson, *Produced Water,* Ch. 14, 24th Annual Changing Face of Water Law (SBOT February 23-24, 2023); Biedrzycki, *Produced Water: The Next "Title" Wave Of Litigation,* Ch. 16, 8th Annual Oil And Gas Disputes (SBOT January 21-22, 2022); Cusimano, *Texas Law Of Produced Water Ownership*, Ch. 2, 38th Annual Advanced Oil Gas, And Energy Resources Law (SBOT September 24-25, 2020).

[19] *See Cactus Water Services, LLC v. COG Operating, LLC,* 2023 Tex. App. LEXIS 5600 *5 (Tex. App. – El Paso July 28, 2023, no pet.); *see generally* Cooney & Watson, *Produced Water,* Ch. 14, 24th Annual Changing Face of Water Law (SBOT February 23-24, 2023); Biedrzycki, *Produced Water: The Next "Title" Wave Of Litigation,* Ch. 16, 8th Annual Oil And Gas Disputes (SBOT January 21-22, 2022); Cusimano, *Texas Law Of Produced Water Ownership*, Ch. 2, 38th Annual Advanced Oil Gas, And Energy Resources Law (SBOT September 24-25, 2020).

[20] Texas Water Code §§ 11.021-11.023, 11.081-11.082, 11.121; *see generally* 30 TAC Chapters 2958 & 297.

[21] Texas Water Code § 36.002; *e.g. Coyote Lake Ranch LLC v. Lubbock,* 498 S.W.3d 53, 58 (Tex. 2016); *EAA v. Day*, 369 S.W.3d 814, 823 (Tex. 2012).

[22] *See* Texas Water Code §§ 11.021.

classification of "groundwater."[23] Groundwater in Texas is private property. It is owned by the owner of the surface of the land overlying it.[24] Groundwater, however, can lose its private property character and become state water if it is allowed to flow into a state watercourse.[25]

Both the ownership of, and regulatory scheme governing water in Texas is dependent upon its classification. State owned surface water may only be used pursuant to a water right granted by the State,[26] or in accordance with a statutorily recognized "exemption."[27] Although privately owned, groundwater is subject to the "Rule of Capture," as modified by the Texas Legislature in the exercise of the State's "police powers," including regulation by one of Texas' 100 local groundwater conservation districts.[28]

b. Groundwater Law Overview

In Texas, groundwater in place is private property and, unless severed, belongs to the owner of the surface.[29] Not only is the property right absolute and exclusive, it is constitutionally protected. However, like oil and gas, groundwater is subject to both the "Rule of Capture,"[30] and the state's "Police Power."[31] Groundwater may also be subject to regulation by one, or more, of Texas' 100 local groundwater conservation districts.[32]

The applicability of the Rule of Capture to Texas groundwater was first recognized in 1904, by the Texas Supreme Court in *Houston and Texas Central Railroad Company v. East*.[33] In *East*, the Texas Supreme Court adopted the so-called "Rule of Capture" from the English case of *Acton v. Blundell*,[34] and concluded that the owner of the surface of the property had the right to dig and to capture the water from beneath his property even if it affected his neighbor.[35]

Unlike Texas oil and gas production, which is regulated by the Railroad Commission of Texas, Texas has no statewide agency charged with responsibility for the management and regulation of our groundwater resources. Instead, Texas relies upon its preferred form of groundwater management, local groundwater conservation districts.[36] The TCEQ has limited authority over local groundwater conservation districts.[37]

---

[23] *See id*. § 36.001(5).

[24] *See* Texas Water Code § 36.002; *Coyote Lake Ranch LLC v. Lubbock*, 498 S.W.3d 53, 588, n. 10 (Tex. 2016); *EAA v. Day*, 369 S.W.3d 814 (Tex. 2012); *San Marcos v. TCEQ*, 128 S.W.3d 264, 278 (Tex. App. – Austin 2004, pet. denied).

[25] *See EAA v. Day*, 369 S.W.3d 814, 822-23 (Tex. 2012).

[26] *See id.* §§ 11.081-11.082, 11.121, 11.143.

[27] *See id.* §§ 11.142-11.1422.

[28] *See* Drummond, Sherman & McCarthy, "The Rule of Capture in Texas – Still Misunderstood After All these Years," 37 TEX. TECH L. REV. 1 (2004); *see generally* TEXAS WATER CODE Ch. 36.

[29] For a more detailed discussion of Texas' groundwater jurisprudence, please see the article in the Journal of the Texas Supreme Court Historical Society, entitled *It's the Law – You Own the Water Under Your Land: The Evolution of Texas Groundwater Law*, 7 Tx Sup Ct Hist Soc. J. No. 1 at 12 (Fall 2017).

[30] *Houston & Texas Central RR Co. v. East*, 89 S.W. 279, 281-82 (Tex. 1904).

[31] *See Corpus Christi v. Pleasanton*, 276 S.W.2d 798, 807 (Tex. 1955) (Wilson, J., dissenting).

[32] *Edwards Aquifer Authority v. Day*, 369 S.W.3d 814, 817-18 (Tex. 2012); *see also Texas Company v. Burkett*, 296 S.W.2d 73 (Tex. 1927); *Pecos County WCID No. 1 v. Williams*, 271 S.W.2d 503 (Tex. Civ. App.—El Paso 1954, writ ref'd n.r.e.).

[33] 81 S.W.279 (Tex. 1904).

[34] 12 Mees & W (1843).

[35] *Houston and Texas Central Railroad Company v. East*, 81 S.W. 279, 280 (Tex. 1904).

[36] Texas Water Code § 36.015(b); *see Sipriano v. Great Spring Waters of America*, 1 S.W.3d 75, 79 (Tex. 1999).

[37] *See* Texas Water Code §§ 12.081, 36.301-36.310.

The Legislature enacted Texas' first groundwater legislation in 1949 pursuant to the Conservation Amendment adopted in 1917.[38] The first groundwater district was created in the 1950s, pursuant to the Groundwater Conservation District Act of 1949.[39] The Texas Legislature has modified the Rule of Capture in Texas by enacting laws empowering groundwater districts to regulate the production of the resource.[40] Currently, Texas has 100 active groundwater conservation districts statewide.[41]

Until groundwater finds its way into a state watercourse (irrespective of its navigability), it is privately owned. While not classified as a "mineral,"[42] groundwater, like oil and gas, can be severed from the surface and sold separately.[43] Despite its private ownership, however, like oil and gas it is subject to the police powers of the state to regulate groundwater production.[44] Accordingly, a landowner may be required to secure a permit to produce his groundwater from a local groundwater conservation district.[45] If the landowner proposes to store the produced groundwater in an impoundment that is located on a state watercourse and, thereafter, divert it for any beneficial use, including oil and gas operations, the landowner will have to obtain a so-called "bed and banks permit" from the TCEQ to pump the groundwater out of the pond for the beneficial use.[46]

With one exception, groundwater loses its characteristic as "private property," and becomes "state water," once it is discharged into a state watercourse. The exception involves the transport of the groundwater in a watercourse pursuant to a bed and banks permit issued by the TCEQ authorizing the use of the watercourse to transport the groundwater from the point of discharge to the point of diversion for beneficial use.[47]

A different type of permit may be required if the well from which the water is

---

[38] Tex. Const. Art XVI, § 59; *see* Hutchins, The Texas Law Of Water Rights, 588 & n.62 (1961) (*citing* Act of May 19, 1949, 51st Leg., R.S., ch. 306, §§ 1, 3c, 1949 Tex. Gen. Laws 559).

[39] Act of May 19, 1949, 51st Leg., R.S., ch. 306, §§ 1, 3c, 1949 Tex. Gen. Laws 559; *see EAA v. Day*, 369 S.W.3d 814, 833 & n. 107 (Tex. 2012); *see generally* Hutchins, The Texas Law Of Water Rights, 588 & n.62 (1961).

[40] *See, e.g.*, Texas Water Code §§ 36.0015, 36.113-36.117.

[41] *See* Appendix "A" – Map of Texas identifying active groundwater conservation districts.

[42] *Fleming Foundation v. Texaco, Inc.*, 337 S.W.2d 846, 851 (Tex. Civ. App.—Amarillo 1960, writ ref'd n.r.e.) (water is not a "mineral" within the meaning of the phrase "all oil, gas and other minerals" in an oil and gas lease) *Sun Oil Co. v. Whitaker* , 483 S.W.2d 808, 813 n.2 (ex. 1972) (Daniel J., dissenting); *see* Texas Nat. Res. Code §53.1631(a) ("Unless otherwise expressly provided by statute, deed, patent, or other grant from the State of Texas, groundwater shall not be considered a mineral in any past or future reservation of title or rights to minerals by the State of Texas.").

[43] *Coyote Lake Ranch LLC v. City of Lubbock*, 498 S.W.3d 53 (Tex. 2016); *see Robinson v. Robbins Petroleum Corp., Inc*., 501 S.W.2d 865, 867 (Tex. 1973) (ownership of groundwater is "an incident of surface ownership in the absence of specific conveyancing language to the contrary"); *Sun Oil Co. v. Whitaker* , 483 S.W.2d at 811; *Pfluger v. Clack*, 897 S.W.2d 956, 959 (Tex. App.—Eastland 1995, writ denied) (water, surface or subsurface, unsevered expressly by conveyance or reservation, is part of surface estate); *see generally Evans v. Ropte*, 96 S.W.2d 973 (Tex. 1936); *City of Del Rio v. Clayton Sam Colt Hamilton Tr.*, 269 S.W.3d 613, 617–18 (Tex. App.—San Antonio 2008, pet. denied); Tex. Prop. Code § 5.001; Sherman & McCarthy, "The Rule of Capture in Texas – Still Misunderstood After All these Years," 37 TEX. TECH L. REV. 1, 78 (2004).

[44] *EAA v. Day*, 369 S.W.3d 814, 832-834 (Tex. 2012).

[45] *See* Texas Water Code Ch. 36.

[46] *See* Texas Water Code §§ 11.042, 11.121; *see generally EAA v. Day*, 369 S.W.3d 814, 823 (Tex. 2012); *City of San Marcos v. TCEQ*, 128 S.W.3d 264, 277 (Tex. App. – Austin 2004, pet. denied).

[47] *See* Texas Water CODE § 11.042; *EAA v. Day*, 369 S.W.3d 814, 822-823 (Tex. 2012); *see generally City of San Marcos v. TCEQ*, 128 S.W.3d 264, 277 (Tex. Ap. – Austin 2004, pet. denied).

to be pumped is located within the boundaries of a local groundwater conservation district. Whether a permit is required by the local groundwater conservation district depends upon a variety of factors, including (i) the type of use, (ii) the district's philosophy about such use, (iii) the district's rules, (iv) the location of the well and/or (v) the planned use for the groundwater. Section 36.117, Texas Water Code, contains "exemptions" from permitting requirements generally applicable to the production of groundwater from wells located within the boundaries of the local groundwater conservation district. Subsection (a) authorizes districts to adopt rules granting exemptions from the district's permitting requirements. Subsection (b) prescribes certain express statutory exemptions from permitting, including the following:

(i) an exemption for domestic use, including poultry and livestock water, provided the well is located on a tract at least 10 acres in size, and the well is completed in a manner that limits its production to no more than 25,000 gallons per day;[48] and

(ii) an exemption for drilling a water well to be "used solely to supply water for a rig that is actively engaged in drilling or exploration operations for an oil and gas well permitted by the Railroad Commission of Texas provided that the person holding the [Railroad Commission] permit is responsible for drilling and operating the water well *and* the water well is located on the same lease or field associated with the drilling rig; …".[49] Depending upon the groundwater district, this language may allow for broad use of groundwater in all aspects of oil and gas operations. Some districts, however, narrowly interpret the language of the exemption keying in on the phrase "engaged in drilling or exploration operations".[50]

(iii) an exemption for drilling a water well to be under a permit issued by the Railroad Commission of Texas under Chapter 134, Natural Resources Code, or for production from the well to the extent the withdrawals are required for mining activities regardless of any subsequent use of the water.[51]

Irrespective of whether the production of groundwater from a well is exempt under Section 36.117, the owner or operator of the well is required to comply with the following:

1. The well must be registered in accordance with rules promulgated by the District;[52]

2. The well must be equipped and maintained in conformance with the GCD's rules related to the installation of casing, pipe, and fittings necessary to prevent the escape of groundwater from one groundwater reservoir into another which does not contain groundwater, as well as prevent the pollution or harmful alteration of the character of the water in the groundwater reservoir;[53]

[48] *See* Texas Water Code § 36.117(b)(1).
[49] *See id.*
[50] *See id.*
[51] *See* Texas Water Code § 36.117(b)(3).
[52] *See id,* § 36.117(h)(1).
[53] *See id.* § 36.117(h)(2).

3. The driller shall file with the district a copy of the well log prescribed by Section 1901.251, Texas Occupations Code, and, if available, a copy of the geophysical log;[54]

4. If the groundwater produced from an exempt well is transported outside of the District for beneficial use, the water becomes subject to payment of any lawfully adopted production fees or transport fees;[55] and

5. Drilling a well and temporary using the water produced for a period not to exceed 180 days for the purpose of drilling a groundwater well permitted by the district.[56]

Additionally, notwithstanding the fact that groundwater may be produced pursuant to an exemption for domestic use from wells capable of producing less than 25,000 gallons per day,[57] if the water produced is going to be used to supply domestic water to a subdivision, it must be permitted.[58]

c. Ownership of Groundwater

Originating as water found in the ground mixed (or in solution) in an oil or gas producing formation, produced water by definition is "groundwater" under Texas law.[59] The Texas Legislature has defined "groundwater" in Chapters 35 and 36 of the Texas Water Code as follows:

> **"Groundwater"** means water percolating below the surface of the earth.[60]

Groundwater *in situ* is owned by the surface owner *unless* the groundwater estate has been severed from the surface estate.[61] The owner of the mineral estate, or a lessee under an oil and gas lease, is considered to be the "dominant estate." Accordingly, it is authorized to use as much of the surface estate as is reasonably necessary to develop the mineral estate absent an express contractual limitation or prohibition to the same.[62] This includes the right to use groundwater; however, that right it is only a usufruct associated with development rights appurtenant to the mineral estate.[63] It is not a transfer of title in or to the groundwater *in situ*. Inherent with principle is the conclusion that the title to the groundwater produced with the oil and gas is in the surface owner.

---

[54] *See id*. § 36.117(i).
[55] *See id*. § 36.117(k); *cf., id*. §§ 36.205 (authorizing the adoption of fees), 36,122 (authorizing the assessment of export fees).
[56] *See id*. § 36.117(b)(4). This is a new exempt use effective September 1, 2023, authorize by Senate Bill 1746. *See* Acts of 2023, 88th Leg., R.S., Ch. 941 §1, 2023 Tex. Gen. Laws ___.
[57] *See id.* § 36.117(b)(1).
[58] *See id.* § 36.117(j).
[59] *See* Texas Wate Code §§35.002(5); 36.001(5).
[60] *Id*.
[61] *Coyote Lake Ranch LLC v. City of Lubbock*, 498 S.W.3d 53, 58-61 & n. 17 (Tex. 2016) (recognizing the analogies between oil and gas in place and groundwater in place beneath the surface); *EAA v. Day*, 369 S.W.3d 814, 817, 823 (Tex. 2012) ("we held long ago that oil and gas was owned in place, and we find no reason to treat groundwater differently"); *cf., See Robinson v. Robbins Petroleum Corp.*, 501 S.W.2d 865, 867 (Tex. 1973) ("In either case the water itself is an incident of surface ownership in the absence of specific conveyancing language to the contrary. And in our case the saline content has no consequence upon ownership.").
see generally Cowan v. Hardeman, 26 Tex. 217, 223 (1862).
[62] *See Sun Oil Co. v. Whitaker*, 483 S.W.2d 808, 811 (Tex. 1972).
[63] *Id.; see Coyote Lake Ranch LLC v. City of Lubbock*, 498 S.W.3d 53, 66 & n.1 (Tex. 2016)(Boyd J., concurring)(citing *Sun Oil Co. v. Whitaker*, 483 S.W.2d 808, 811 (Tex. 1972)); *Robinson v. Robbins Petroleum*, 501 S.W.2d 865, 867 (Tex. 1973).

d. Is "Water" A "Mineral" in Texas?

To date, water has not been classified as a "Mineral" by either the Texas Legislature or our Courts. In *Dyegard Land Partnership v. Hoover*,[64] the Fort Worth Court Appeals concluded that the term "minerals" in a covenant did *not* include "water" as a matter of law. The Court observed that its decision was "based on prior judicial interpretation as well as the separate treatment of minerals and water by both courts and the legislature in Texas for many years."[65] Citing the Amarillo Court of Appeals 1960 decision in *Fleming Foundation v. Texaco, Inc.*,[66] the Fort Worth Court concurred that water was *not* a mineral under Texas law.[67]

The *Dyegard* Court also cited to the definition of "Minerals" in the Texas Property Code, noting that it did *not* include "Water."[68] The Court elaborated on its basis for its analysis, which was summarized as follows:

> That underground water is not ordinarily and naturally considered a mineral in this state is further supported by the difference between the way underground water has been dealt with by Texas law and the manner in which Texas law has addressed oil and gas and other minerals.[69]

*** * ***

> Legislation regulating water, including groundwater, is now found in the Texas Water Code. In contrast, legislation governing oil, gas, and other minerals is collected in the Texas Natural Resources Code. The differences between the law governing underground water and that governing oil, gas and other minerals are now so intricately woven into the fabric of Texas jurisprudence as to constitute a backdrop against which this issue must be viewed, precluding underground water from being considered as included in the term "minerals."[70]

In the 1960 decision *Fleming Foundation v. Texaco, Inc.*,[71] the Amarillo Court of Appeals held:

> We approve the holding of the Oklahoma Court in the case of *Vogel et al. v. Cobb, Okl., 141 P.2d 276, 148 A.L.R. 774*, where it held "other minerals" referred to minerals of the same generic class as oil and gas and did not include water. We think the holding in the *Vogel v. Cobb* case should be

[64] 39 S.W.3d 300 (Tex. App. – Fort Worth 2001, no pet.).
[65] *Id.* at 310.
[66] *337 S.W.2d 846, 851-52* (Tex. Civ. App.--Amarillo 1960, writ ref'd n.r.e.).
[67] *Dyegard Land Partnership v. Hoover*, 39 S.W.3d 300, 310 (Tex. App. – Fort Worth 2001, no pet.) (citing *Fleming Foundation v. Texaco, Inc., 337 S.W.2d 846, 851-52* (Tex. Civ. App.--Amarillo 1960, writ ref'd n.r.e.)("the reservation in a deed of an interest in oil, gas, and "other minerals" does *not* include water.").
[68] *Dyegard Land Partnership v. Hoover*, 39 S.W.3d 300, 311 (Tex. App. – Fort Worth 2001, no pet.) (citing Tex. Prop. Code § 75.001(a)(1) defining "minerals").
[69] *Id.* at 311.
[70] *Id.* at 312.
[71] *337 S.W.2d 846, 851-52* (Tex. Civ. App.--Amarillo 1960, writ ref'd n.r.e.).

> the rule in this state and we hold that [ ] the reservation of oil, gas and other minerals does not include the sub-surface water.[72]

The following discussion from the Texas Supreme Court's 1984 decision in *Moser v U.S. Steel*,[73] provides an excellent summary of the Court's analysis of whether a substance is a "mineral" under Texas law with the scope of "oil, gas and other minerals":

> In Texas, the mineral estate may be severed from the surface estate by a grant of the minerals in a deed or lease, or by reservation in a conveyance. *See Humphreys-Mexia Co. v. Gammon, 113 Tex. 247, 254 S.W. 296 (1923)*. This severance is often accomplished by a grant or reservation of "oil, gas and other minerals." Consequently, Texas courts have had many occasions to construe the scope of the term "other minerals." We have determined that some unnamed substances have been impliedly conveyed or reserved in mineral conveyances by cataloging each, on a substance-by-substance basis, as part of the surface or mineral estate as a matter of law. *See, e.g., Sun Oil Co. v. Whitaker, 483 S.W.2d 808 (Tex. 1972)* (fresh water not included in mineral estate reservation of "oil, gas, and other minerals"); *Heinatz v. Allen, 147 Tex. 512, 217 S.W.2d 994 (1949)* (devise of "mineral rights" held not to include limestone and building stone); *Atwood v. Rodman, 355 S.W.2d 206* (Tex. Civ. App.--El Paso 1962, writ ref'd n.r.e.) ("oil, gas, and other minerals" did not include limestone, caliche, and surface shale); *Union Sulphur Co. v. Texas Gulf Sulphur Co., 42 S.W.2d 182* (Tex. Civ. App.--Austin 1931, writ ref'd) (solid sulphur deposits conveyed by ordinary oil and gas lease); *Praeletorian Diamond Oil Ass'n v. Garvey, 15 S.W.2d 698* (Tex. Civ. App.--Beaumont 1929, writ ref'd) (gravel and sand not intended to be included in lease for "oil and other minerals"); *Reed v. Wylie, 597 S.W.2d 743 (Tex. 1980)* (near surface lignite, iron and coal is part of the surface estate as a matter of law).
>
> In making these determinations of ownership, our courts have considered a number of construction aids. We have refused to employ the *ejusdem generis* rule of construction to limit the term "oil, gas and other minerals" to hydrocarbons. *Southland Royalty Co. v. Pan American Petroleum Corp., 378 S.W.2d 50 (Tex. 1964)*. Likewise, we have acknowledged that the scientific or technical definition of a disputed substance is not determinative of whether it is a mineral,

[72] *Id*. at 852 (emphasis added).

[73] 676 S.W.2d 99 (Tex. 1984).

because the term "other minerals" would then "embrace not only metallic minerals, oil, gas, stone, sand, gravel, and many other substances, but even the soil itself." *Heinatz v. Allen, 147 Tex. 512, 217 S.W.2d 994, 997 (1949)*. Such a construction would eliminate any distinction between the surface and the mineral estates. We have, however, approved of considering whether the substance is thought to be a mineral within the ordinary and natural meaning of the term. *See Heinatz v. Allen, 217 S.W.2d at 997*; *Psencik v. Wessels, 205 S.W.2d 658, 660-61* (Tex. Civ. App.--Austin 1947, writ ref'd). The knowledge of the parties of the value, or even the existence of the substance at the time the conveyance was executed has been found to be irrelevant to its inclusion or exclusion from a grant of minerals. *See Cain v. Neumann, 316 S.W.2d 915, 922* (Tex. Civ. App.--San Antonio 1958, no writ). *Accord Barden v.* 676 S.W.2d 99, *101; 1984 Tex. LEXIS 372, **5 *Northern Pacific Ry., 154 U.S. 288, 314, 38 L. Ed. 992, 14 S. Ct. 1030 (1893)* ("[T]he knowledge or want of knowledge at the time [of the grant] by the grantee in such cases, of the property reserved in no respect affects the transfer to him of the title to it."). In *Acker v. Guinn, 464 S.W.2d 348 (Tex. 1971)*, we quoted with approval Professor Eugene Kuntz' theory that the proper focus when construing an implied grant of minerals is the general, rather than the specific, intent of the parties. We adopted the view that the general intent of parties executing a mineral deed or lease is presumed to be an intent to sever the mineral and surface estates, convey all valuable substances to the mineral owner regardless of whether their presence or value was known at the time of conveyance, and to preserve the uses incident to each estate. *Id. at 352*; Kuntz, *The Law Relating to Oil and Gas in Wyoming*, 3 Wyo. L.J. 107, 112 (1949).[74]

* * *

We now hold a severance of minerals in an oil, gas and other minerals clause includes all substances within the ordinary and natural meaning of that word, whether their presence or value is known at the time of severance. *Heinatz v. Allen, 147 Tex. 512, 217 S.W.2d 994 (1949)*; *Cain v. Neumann, 316 S.W.2d 915* (Tex. Civ. App --San Antonio 1958, no writ). We also hold uranium is a mineral within the ordinary and natural meaning of the word and was retained in the Gefferts' conveyance of the 6.77 acre

[74] *Id*. at 101-102.

> tract to the Mosers. We continue to adhere, however, to our previous decisions which held certain substances to belong to the surface estate as a matter of law. *See, e.g., Heinatz v. Allen, 147 Tex. 512, 217 S.W.2d* ***[**11]*** *994 (1949)* (building stone and limestone); *Atwood v. Rodman, 355 S.W.2d 206* (Tex. Civ. App.--El Paso 1962, writ ref'd n.r.e.) (limestone, caliche, and surface shale); *Fleming Foundation v. Texaco, 337 S.W.2d 846* (Tex. Civ. App.--Amarillo 1960, writ ref'd n.r.e.) (water); *Psencik v. Wessels, 205 S.W.2d 658* (Tex. Civ. App.--Austin 1947, writ ref'd) (sand and gravel); *Reed v. Wylie, 597 S.W.2d 743* Tex. 1980) (near surface lignite, iron and coal).

In *Robinson v Robbins Petroleum Corp.,*[75] decided by the Texas Supreme Court a little more than a decade prior to *Moser,*[76] the Court held that "salt water" was not included in the conveyance of oil, gas and other minerals under either an oil and gas lease or a subsequent deed.[77] Robinson acquired the affected property in 1964 by deed, which was subject to a 1946 oil and gas lease granted to Robbins Petroleum by Robinson's predecessor D.V. Waggoner et al, and held by production.[78] Robbins had used salt water from the property to facilitate secondary recovery production efforts – waterflooding was being to repressurize the formation in a waterflood unit that included lands beyond the Robinson property, which was the source of the salt water used for the water flood.[79] Robison was seeking damages for the value of the saltwater used to waterflood offsite properties.[80] The operator, Robbins Petroleum, defended the use of the saltwater free of cost on the theory that the salt water was a mineral covered by the lease.[81] The lease provided as follows:

> The lease "grants, leases and lets exclusively unto Lessee for the purpose of investigating, exploring, prospecting, drilling and mining for and producing oil, gas, and all other minerals. . . "[82]

The Court held that the water was part of the "surface estate" citing its decision in *Sun Oil Co. v Whitaker*,[83] but noted that it was not considered a mineral despite the presence of salt in solution.[84] In fact, the Court went to some lengths to make clear that water in its natural state was rarely pure:[85]

> *We are not attracted to a rule that would classify water according to a mineral contained in solution. Water is never absolutely pure unless it is treated in a laboratory. It is the water with which these parties are concerned and not the dissolved salt.* If a mineral in solution or suspension were of such value or character as

[75] 501 S.W.2d 865 (Tex. 1973).
[76] 676 S.W.2d 99 (Tex. 1984).
[77] *Robinson v Robbins Petroleum Corp.,* 501 S.W.2d 865, 866 (Tex. 1973).
[78] *Id.*
[79] *Id.*
[80] *Id.*
[81] *Id.*
[82] *Id.*
[83] 483 S.W.2d 808 (Tex. 1972).
[84] *Robinson v Robbins Petroleum Corp.,* 501 S.W.2d 865, 866-867 (Tex. 1973).
[85] *Id.* at 867 ("Water is never absolutely pure unless it is treated in a laboratory").

> to justify production of the water for the extraction and use of the mineral content, we would have a different case. *The substance extracted might well be the property of the mineral owner, and he might be entitled to use the water for purposes of production of the mineral. See State v. Parker*, 61 Tex. 265 (1884); *Cain v. Neumann*, 316 S.W.2d 915 (Tex. Civ. App. 1958, no writ). *In either case the water itself is an incident of surface ownership in the absence of specific conveyancing language to the contrary. And in our case the saline content has no consequence upon ownership.*[86]

The above quoted language supports the long held common law tenet of the right of the dominant mineral estate to use as much of the surface estate as is reasonably necessary to develop the minerals.[87] The Court's recognition of that usufructry right, however, also makes clear the fact that title was *not* conveyed in absence of express conveyancing language.[88]

Following its conclusion that the lower court's ruling upholding Robbins Petroleum's offsite use of the salt water from Robinson's property to develop the minerals on other leases without an express right to do so in the absence of compensation to Robinson was error, the Court went further with *dicta* that sets up the unanswered question in the *Cactus Water Services, LLC v. COG Operating, LLC* decision - did the Legislature's 2019 amendment to Section 122.002 (House Bill 2767) lawfully, or unconstitutionally, transfer title to water associated with the surface estate? At the end of the paragraph preceding its ruling in favor of Robinson, the Court writes:

> The fact that the Railroad Commission entered orders approving the recovery units may be relevant to the propriety of the use of the water for production from lands of the Wagoner lease, *but no statute or order purports to diminish the title or otherwise extend the burden upon Robinson's surface estate*.[89]

III. Produced Water Litigation – "the Case" - *COG Operating, LLC v. Cactus Water Services, LLC, et al*

a. Background Facts

This case addresses the issue of who owns the "Produced Water" associated with a "hydraulic fracturing operation" ("fracing") conducted by an oil and gas operator, COG Operating LLC ("COG"),[90] from 37,000 acres of leased lands in Reaves County, Texas.[91] Between 2005 and 2014, COG assembled four oil and gas leases from two

[86] *Id.* (emphasis added).
[87] *Sun Oil Co. v. Whitaker,* 483 S.W.2d 808, 811 (Tex. 1972); *Acker v. Quinn*, 464 S.W.2d 348, 352 (Tex. 1971).
[88] *Robinson v Robbins Petroleum Corp.*, 501 S.W.2d 865, 867 (Tex. 1973)("use of water for secondary recovery operations has been upheld as the right of the mineral lessee").
[89] *Id.* at 868 (emphasis added).
[90] *Cactus Water Services, LLC v. COG Operating, LLC,* 2023 Tex. App. LEXIS 5600 *1 (Tex. App. – El Paso July 28, 2023, no pet.).
[91] *Id.* at *1.

landowners covering for approximately 37,000 acres of land (the "COG Leases").[92]

The COG Leases are sometimes referred to as the "2005 and 2010 Collier Leases," "2014 Collier Lease," and the "2010 Balmorhea Lease." [93] COG also entered into separate Surface Use Compensation Agreements ("SUCA") and Right of Way Agreements ("ROW") with the landowners, which were utilized, in part, to facilitate COG's disposal of its oil and gas wastes, including "Produced Water."[94]

The COG Leases purported to grant the "exclusive right to explore for and produce oil and gas on Leased Lands"[95] as follows:

> • 2005 and 2010 Collier Leases: "Lessor[s] . . . have GRANTED, DEMISED, LEASED and LET, and by these presents do GRANT, DEMISE, LEASE and LET exclusively unto the said Lessee, its successors and assigns, for the sole and only purpose of investigating, exploring, prospecting, drilling, mining and operating for *oil and gas and other hydrocarbons*, and of laying pipelines and of building tanks, power stations and structures thereon, to produce, save, take care of, store and treat products produced hereunder, and then to transport those products from the land in Reeves County, Texas [covered by the lease][.]"
>
> • 2014 Collier Lease: "Lessor . . . hereby exclusively grants, leases and lets unto Lessee for the purpose of investigating, exploring, prospecting, drilling and *producing oil and gas*, from the [land covered by the lease]."
>
> • 2010 Balmorhea Lease: "Lessor . . . hereby grants, leases and lets exclusively unto Lessee for the purpose of investigating, exploring, prospecting, drilling and mining for and *producing oil, gas, and other hydrocarbons*, conducting exploration, geologic and geophysical surveys by seismographs, core test, gravity and magnetic methods, *injecting gas, water and other fluids, and air into subsurface strata*, laying pipe lines, building roads, tanks, power stations, telephone lines and other structures thereon, to produce, save, take care of, treat, transport and own said products, the [land covered by the lease]."[96]

COG's SUCA granted COG the following rights:

> [C]onstruct, operate and maintain tank battery sites . . . for the gathering, storing, and transporting of oil, gas, other petroleum products, water, and/or any other liquids, gases or substances which can be

[92] *Id.* at *2-3.
[93] *Id.*
[94] *Id.* at *5.
[95] *Id.* at *2.
[96] *Id.* at * 2-3 (emphasis added).

> transported through a pipeline. Said site is to include tanks, pipelines, pipeline connections and other fixtures and appurtenances reasonably necessary or convenient to Operator's use and Operations of the lands as a tank batter[y] site.[97]

Beginning in 2019, Cactus Water Services, LLC ("Cactus") entered into "Produced Water Lease Agreements" with the same surface owners covering the same properties (the "Cactus Agreements"). The Cactus Agreements granted Cactus the ownership and right to sell all water "produced from oil and gas, wells, and formations on or under the [covered properties]."

While the COG Leases do not define "Water,"[98] the Cactus Agreements defined "Water" as follows:

> [A]ny and all water contained in and produced from geologic formations under the subject property through any wellbores drilled for the production of oil, gas, and natural gas liquids (collectively, "hydrocarbons"), whether economically, productive or not, regardless of salinity. "Water" excludes all water, originating from shallow geological intervals that do not, and have never produced oil, or other hydrocarbon liquids, and/or natural gas, anywhere in the Permian basin. "Water" also, excludes water, purposely and directly produced from the Ogallala, Pecos Valley Alluvium, Edwards Trinity, Dockum Aquifers, or any other freshwater aquifers.[99]

While the COG Leases did *not* define "Water," they did contain the following limitations and prohibitions against COG's use of water on and from the 37,000 acres under lease:

> [COG] shall have no right to use water which is on or under the above described land, except it may itself drill a water well and then use the water from that well in its conduct of the drilling operations that actually are conducted on land covered by this lease.[100] No water from any source from said land shall be used for any purpose without written consent of Lessor."[101]

Pursuant to the Cactus Agreements, Cactus claimed "ownership" over all water produced from the leased property, announcing the same to COG in March 2020.[102] COG responded by filing a declaratory judgment action in Reeves County District Court.[103]

In its suit COG claimed "the sole right to the produced water by virtue of its mineral leases, SUCAs and at common law."[104] Cactus counterclaimed asserting ownership

[97] *Id.* at *5-6.
[98] *Id.* at * 7-8.
[99] *Id.* at *7.
[100] *Id.* at *8 (COG's 2005 and 2010 leases).
[101] *Id.* at *8 (COG's 2014 lease).
[102] *Id.* at *6-7.
[103] *Id.* at *7.
[104] *Id.*

to the Produced Water pursuant to the Cactus Agreements.[105]

b. Summary Judgment Issues Presented

The issue presented to the trial court was whether the COG Leases conveyed the "Produced Water" to COG.[106] If *not*, the Cactus Agreements were enforceable, and Cactus owned the produced water.[107] Otherwise, COG owned the Produced Water and the Cactus Agreements were void.[108]

COG and Cactus filed cross motions for summary judgment.[109]

The trial court agreed with COG, denied Cactus Second Amended and Traditional and No Evidence Motion for Summary Judgment and granted COG's Motion for Partial Summary Judgment.[110] On November 2, 2021, the Court entered a Final Judgment which in its material parts included the following declarations/holdings:

> • COG owns the oil, gas and other products contained in the commercial oil and gas bearing formations that are produced from the COG wells on the COG Leases; and
>
> • COG has the exclusive right to possession, custody, control and disposition of the product stream produced from the COG wells and COG Leases; and
>
> • Cactus Water has no rights in or to the product stream from the COG wells so long as the COG Leases are in effect.[111]

Cactus filed its notice of appeal on February 8, 2022.[112]

c. Court of Appeals

On appeal to the Eight Court of Appeals sitting in El Paso, Appellant, Cactus Water Services LLC made the following arguments:

1. Contracts grant Cactus Water ownership of produced water

2. Contracts deny COG Operating ownership of produced water

a. Mineral lessee owns only the "oil, gas and other hydrocarbons"

b. Entrainment of underground water with oil and gas does not affect analysis

c. Paragraph 18 of Leases limit water use to drilling operations on the same lease

d. Implied right to use the surface to dispose of produced water does not transfer title

e. Surface-use/pipeline ROW agreements do not grant ownership of produced water

---

[105] *Id.*
[106] *Id.*
[107] *Id.*
[108] *Id.*
[109] *Id.*
[110] Final Judgment *COG Operating, LLC v. Cactus Water Services, LLC,* Cause No. 20-03-23456-CVR (143rd District Court, Reeves County, November 2, 2021); *see generally Cactus Water Services, LLC v. COG Operating, LLC,* 2023 Tex. App. LEXIS 5600 *8-9 (Tex. App. – El Paso July 28, 2023, no pet.).
[111] *Id.*
[112] Case Detail (txcourts.gov) - https://search.txcourts.gov/Case.aspx?cn=08-22-00037-CV&coa=coa08.

3. Contracts, Natural Resources Code and Railroad Commission's authority to regulate "waste" do not grant ownership of produced water:

    a. Natural Resources Code is inapplicable - Parties contracted otherwise

    b. Railroad Commission lacks the power to determine ownership rights.[113]

Cactus final point raises the issue, which is not the focus of this case, but will likely come before the Courts in the near future. Specifically, "the Legislature cannot constitutionally change the ownership of vested property rights."[114]

COG's arguments included the following:

1. The Leases granting COG rights to the oil and gas necessarily includes the oil and gas product stream:

    a. oil and gas leases are construed to effectuate intent to convey oil and gas

    b. oil and gas wells yield a single combined product stream that belongs to the lessee

    c. lessee's development rights include the right to dispose of the waste generated

2. State law says waste is not water, and a contrary construction interferes with the State's regulation of the oil and gas industry:

    a. State law distinguishes oil and gas waste from water, confirms that Cactus claims to own waste not water

    b. Operator/lessee has burden to dispose of waste stream it generates

    c. Cactus's interpretation interferes with the State's regulation of oil and gas waste.

3. No Texas case has held that waste byproduct mechanically separated from an oil or gas product stream belongs to the surface estate

4. Cactus's other arguments contravene Texas law; do not support ownership claims:

    a. Lease "water use" provisions have no bearing on ownership of oil and gas waste

    b. Cactus's "produced water" leases are irrelevant to proper construction of oil and gas leases

5. Cactus's unreasonable interpretation of the Leases would require COG to give Cactus COG's own flowback fluid, which is part of the oil and gas product stream and which Cactus never claims to own

[113] Appellant's Brief at 28-45, *Cactus Water Services, LLC v. COG Operating, LLC*, No. 08-22-00037-CV (Tex. App.—El Paso, June 21, 2022).

[114] *Id.* at 43-45; *cf., Robinson v Robbins Petroleum Corp.*, 501 S.W.2d 865, 868 (Tex. 1973)("no statute or order purports to diminish the title or otherwise extend the burden upon Robinson's surface estate").

6. Enforcing Leases as written fosters the State's policy of maximizing the efficient production of minerals.[115]

Three amicus briefs were filed in the Case:

a. The Texas Oil and Gas Association filed in support of COG; and

b. The Texas Farm Bureau and the Texas and Southwestern Cattle Raisers Association filed briefs in support of Cactus.

The El Paso Court heard arguments on April 13, 2023, and the Opinion was issued on July 28, 2023.[116]

In its split decision, the majority of the court focused on the "parties' intent" expressed in the oil and gas leases.[117] This was necessitated by the fact, in part, that the leases did not define the term "Water," nor did they specifically address "Produced Water."[118] In addition to the leases, the court also reviewed the Cactus Water Service's produced water agreements in its analysis of the "parties' intent."[119] The court summed up its guiding principle as follows:

> "Ultimately, our goal is to objectively determine what the parties intended by construing the contract 'from a utilitarian standpoint bearing in mind the particular business activity sought to be served.' "[120]

The court went on to identify the issue at hand as follows:

> "The parties' disagreement as to whether produced water is part of the mineral estate essentially depends on whether "produced water" is, as a matter of law, water or if it is waste." [121]

In the absence of a definition of either "Water" or "Produced Water" in the oil and gas leases, the court turns its attention to statutory and regulatory definitions "for relevant context."[122]

After reviewing definitions of oil and gas waste, freshwater, and groundwater in the regulations of the Texas Railroad Commission, the Texas Water Code and the Texas Natural Resources Code, the court concluded that on the basis of this statutory and regulatory framework there was a "clear distinction between produced water and groundwater."[123] The court observed its agreement with COG's petroleum engineering expert that the term "Produced Water" was "essentially a misnomer as it bears little resemblance to water given the 'numerous constituents' it contains other than water."[124] On this basis, the majority concluded that "Produced Water is more

[115] Appellee's Brief at 20-56, *Cactus Water Services, LLC v. COG Operating, LLC*, No. 08-22-00037-CV (Tex. App.—El Paso, August 22, 2022).
[116] *See Cactus Water Services, LLC v. COG Operating, LLC*, 2023 Tex. App. LEXIS 5600 *1 (Tex. App. – El Paso July 28, 2023, no pet.).
[117] *See Cactus Water Services, LLC v. COG Operating, LLC*, 2023 Tex. App. LEXIS 5600 *10 (Tex. App. – El Paso July 28, 2023, no pet.).
[118] *Id.* *10-11.
[119] *Id.*
[120] *Id.* *11 (*citing Reilly v. Rangers Mgmt., Inc.*, 727 S.W.2d 527, 530 (Texas 1987)).
[121] *Id.* at *12.
[122] *Id.*
[123] *Id.* at *14.
[124] *Id.*

accurately classified as a waste byproduct of oil and gas production."[125]

The court also observed that the characterization of Produced Water as oil and gas waste, rather than groundwater conformed to industry practice. The court observed that the landowners had not attempted to claim ownership of the Produced Water until after the Cactus Agreements were entered into. The court also cited the Texas Supreme Court's 1984 decision in *Moser v. U.S. Steel Corp.*[126] and concluded that it was unfair to read the leases as reserving Produced Water separate and apart from oil and gas only after processing and treatment as providing "the benefit of costs and risk [COG] voluntarily undertook."[127] According to the court, collectively these factors all contributed to the conclusion that the obligation of disposal affected the conveyance of title to the Produced Water to COG thereby, as a matter of law, rending the produced water a waste product not groundwater.[128]

In her dissent, however, Justice Palafox, directly challenged the majority's foundation for concluding that the Produced Water ownership was transferred under the terms of the oil and gas lease and the statutory provisions cited in the opinion. Justice Palafox outlined longstanding Texas law which recognized the fact that ownership of groundwater was part of the surface estate absent a severance or prior conveyance of that estate. As part of the surface estate, the oil and gas lessee as the dominant estate was entitled to use as much of the surface as was reasonably necessary to develop the mineral estate conveyed by the oil and gas lease. That right, however, right of use, did not affect a transfer of ownership.[129] After outlining the general principles of contract construction under Texas law for purposes of construing the COG leases, Justice Palafox went through the steps based upon prior Texas Supreme Court precedent for affecting the transfer of a fundamental property right. She included in her analysis recent Supreme Court decisions in the *EAA v. Day* and *Coyote Lake Ranch* cases.[130] Justice Palafox also challenged the majority's reliance upon the Supreme Court's decision in *Moser*, clarifying that the court in *Moser* had confirmed that "only certain substances are impliedly conveyed or reserved by the use of the phrase, "other minerals."[131] The dissent went on to distinguish water from a waste, by highlighting the fact that "water is not 'a thing of like kind to oil and gas.' "[132] On this basis, Justice Palafox concluded that "a grant of "oil, gas and other minerals" does not include a conveyance of water." She went further to observe that "unless water (or subsurface water) is expressly reserved or conveyed, it remains an unsevered part of the surface estate."[133] On this basis, Justice Palafox observed that her conclusion would be that the oil and gas leases "did not expressly convey water in any form."[134] She went on to observe that the conclusion she reached harmonized the granting clause of the leases, particularly the provisions found in paragraph 18 of the Collier leases which limited COG's use of water "on or under" the

[125] *Id. at* *15 & n.3 (*citing* Section 85.001(a)(4), Texas Natural Resources Code).
[126] 676 S.W.2d 99 (Tex. 1984).
[127] *Cactus Water Services, LLC v. COG Operating, LLC,* 2023 Tex. App. LEXIS 5600 *15 & n. 3 (Tex. App. – El Paso July 28, 2023, no pet.)(*citing* Section 85.001(a)(4), Texas Natural Resources Code).
[128] *Id. at* *15-18.
[129] *Id. at* *18-20 (Palafox, J., Dissenting).
[130] *Coyote Lake Ranch LLC v. Lubbock,* 498 S.W.3d 53 (Tex. 2016); *EAA v. Day*, 369 S.W.3d 814 (Tex. 2012)..
[131] *Cactus Water Services, LLC v. COG Operating, LLC,* 2023 Tex. App. LEXIS 5600 *23-24 (Tex. App. – El Paso July 28, 2023, no pet.).
[132] *Id. at* *24.
[133] *Id.*
[134] *Id.*

leased premises to water for drilling a water well for use in its development operations. According to Judge Palafox: "If all of the subsurface water had been granted to COG, there would be no need to include such limiting provision."[135]

Justice Palafox also criticized the majority's characterization of produced water "as mere oil-and-gas waste" as not automatically causing the same to be subject to the granting clause of the oil and gas leases.[136] Relying upon the Supreme Court's decision in *Robinson v. Robbins Petroleum Corp., Inc.,*[137] Justice Palafox quoted the Supreme Court's observation that it was not attracted to a rule that would classify water according to its mineral content in solution.[138]

According to the dissent, the majority should have concluded that the Accommodation Doctrine applied to COG's reasonable use of produced water, not its ownership. *Citing Coyote Lake Ranch, supra,* the dissent explained the balance provided by the accommodation between dominant and servient estates, which include the mineral estate owner's implied right to use as much of the surface as is reasonably necessary with due regard to the landowner's rights.[139]

In response to the majority's reliance upon statutory and regulatory framework, Justice Palafox's dissent outlines her disagreement with any reliance or authoritative application of the provisions of Chapter 122, Texas Natural Resources Code as being "not controlling" in this case as the same was adopted after the signing of the oil and gas leases. The dissent also addressed the traditional duty of a mineral lessee to dispose of waste as being dictated through "three sources – contracts, statutes, and regulations."[140] Based upon the inapplicability of Chapter 122 to the facts before the court, the dissent noted that no statute conveyed ownership of the Produced Water based merely on the duty to properly dispose of the oil and gas waste.[141]

Finally, the dissent dismisses the majority's reliance upon its "industry practices" analysis arguing that the knowledge regarding ownership or utility of recycled water was not relevant because water "as a substance" had not been expressly severed from the surface estate. According to the dissent, COG had not voluntarily undertaken any risk. Instead, COG was obligated both contractually and statutorily to properly dispose of the produced water in a manner that would not harm the surface estate or the environment.[142]

d. Supreme Court

Cactus Water Services LLC has indicated that it will file a petition for review with the Texas Supreme Court. According to the El Paso Court of Appeals website for this appeal, the deadline for filing a Petition is October 11, 2023.[143]

IV. Litigation Avoidance

[135] *Id. at* *24-25.
[136] *Id. at* *27.
[137] 501 S.W.2d, 865, 867 (Tex. 1973).
[138] *Cactus Water Services, LLC v. COG Operating, LLC,* 2023 Tex. App. LEXIS 5600 *27-28 (Tex. App. – El Paso July 28, 2023, no pet.) (*citing Robinson v. Robbins Petroleum Corp, Inc.*, 501 S.W.2d, 865, 867 (Tex. 1973)).
[139] *Cactus Water Services, LLC v. COG Operating, LLC,* 2023 Tex. App. LEXIS 5600 *29 (Tex. App. – El Paso July 28, 2023, no pet.).
[140] *Id.* at 31.
[141] *Id.* at 31-32.
[142] Id. at *33-34 (*citing Bowden v. Phillips Petro. Co.*, 247 S.W.3d 690, 706 (Tex. 2008)).
[143] Case Detail (txcourts.gov) - https://search.txcourts.gov/Case.aspx?cn=08-22-00037-CV&coa=coa08.

The issue confronting the industry, the courts and practitioners alike is the confusion created by the asserted argument that whether it is the language of Chapter 122, Texas Natural Resources Code or the traditional conveyancing language found in oil and gas leases effects a transformation of the operator's duty of disposal of the waste stream, including the Produced Water, into a transfer a title to the Produced Water that is part of, but can be extracted from the waste stream and converted into a marketable commodity. The obligation to dispose of fluid oil and gas waste should *not* be converted to a conveyance of title because of the opportunity to make money on a one-sided basis.

The advent of technology that facilitates the economical recycling of the waste stream into a marketable product capable of beneficial reuse needs to be embraced. Water is an essential resource that continues to shrink in supply. Any opportunity to reuse water for non-potable purposes in lieu of water capable of treatment potable uses should be explored. The Legislature's creation of the Texas Produced Water Consortium at Texas Tech University is it example of such an initiative. Long term, the Consortium should produce new technologies and opportunities to maximize reusable products, including water, maximize waste disposal and the attendant issues, and optimize opportunities for economic benefits.

In the meantime, landowners and operators need to come together to find a mutual benefit in the fact that what was once "waste," and a nuisance or burden, can now be a "treasure." The economic benefits available from the avoidance of significant costs of litigation alone that could be invested in advancement of the reuse opportunities should be an incentive.

Again the duty to dispose was never contemplated to become an economic boon to the operator. Such an outcome could be analogized to converting the duty to reclaim disturbed surface acreage covered by a lease into a conveyance of the surface upon completion of the reclamation. Such an absurd result would never be argued in such circumstances. A similarly absurd argument should not be made in the context of the Produced Water component of the fluid oil and gas waste stream.

The concept of the parties' power to contract has been embraced fully by Texas Courts. As Chief Justice Hecht wrote in *Coyote Lake Ranch LLC v Lubbock*:[144]

> 'As a rule, parties have the right to contract as they see fit as long as their agreement does not violate the law or public policy.' The rule applies to a mineral owner's use of land, … .[145]

Accordingly, preplanning, specifically, negotiating terms and conditions as part of the oil and gas lease to address recycling of the produced water, and other fluid oil and gas waste is in the best interest of all affected parties. At a minimum, leases should provide for some kind of economic remuneration to the landowner when an operator explores opportunities to convert a waste stream to an economic product, as well as clarify the right to transfer responsibility and liability for the disposal of the fluid oil and gas wastes

[144] 498 S.W.3d 53 (Tex. 2016).

[145] *Id.* at 59 & n. 13-14 (citing *In re Prudential Ins. Co. of Am., 148 S.W.3d 124, 129 (Tex. 2004)*; *Sun Oil Co. v. Whitaker, 483 S.W.2d 808, 810-811 (Tex. 1972)*; *see also DeWitt Cty. Elec. Coop., Inc. v. Parks, 1 S.W.3d 96, 105 (Tex. 1999)* (explaining that parties can displace common law rules by contract)).

pursuant to the provisions of Chapter 122, Texas Natural Resources Code.

Issues to be considered in such a lease negotiation should include questions regarding liability and responsibility, costs to recycle and potential resale opportunities. To the extent that a landowner should be entitled to benefit from the conversion of the waste stream into a marketable product should reflect the efforts of such conversion. Any "royalty," or other economic remuneration to be paid to the landowner should be net of the actual cost of treatment, marketing and transport, and other direct costs. In other words, realistic expectations must be in place.

By analogy, Texas law of cotenancy may provide a workable model or blueprint for handling a proper compensation between the operator, or the subcontractor to the operator, who assumes the liability for the waste stream by undertaking to recycle and market the same, and the landowner who benefits from the end-product. Under Texas laws of cotenancy, either party, *i.e.*, cotenant, has the right to develop the resources of the property. The party that undertakes such development, however, has a duty "to account" to the other account cotenants.

Obviously, every deal will be negotiated specific to the underlying circumstances. For "planning purposes," however, the following overview of cotenancy law in Texas may be a helpful beginning:

> The general rule in Texas is that each cotenant is treated legally as the owner of "all" the property. In the context of "fluid oil and gas wastes" Each Cotenant has a right to enter upon the common estate and a corollary right to possession. *Byrom v. Pendley*, 717 S.W.2d 602, 605 (Tex. 1986). With respect to minerals in Texas, the long-standing rule is that each Cotenant has a right to produce the minerals from 100% of the common property, even without its cotenants' consent, but must account to the Cotenants on the basis of the value of the minerals produced, after deducting the necessary and reasonable costs to produce and market them. *Burnham v. Hardy Oil Co.*, 147 S.W. 330 (Tex. Civ. App. San Antonio 1912), aff'd, 195 S.W. 1139 (Tex. 1917); *e.g., Byrom v. Pendley*, 717 S.W.2d 602, 605 (Tex. 1986); *Cox v. Davison*, 397 S.W.2d 200, 201 (Tex. 1965); *Texas & Pacific Coal & Oil Co. v. Kirtley*, 288 S.W. 619, 622 (Tex. Civ. App.-Eastland 1926, writ ref'd). While these cases focus on the development of oil and gas, based upon the recent groundwater-focused decisions of the Texas Supreme Court in *EAA v Day*, and *Coyote Lake Ranch LLC v. Lubbock*, it appears that the same legal analysis applies to a groundwater estate, or portion thereof, held in cotenancy in the form of the Produced Water originating as privately owned groundwater. *See Coyote Lake Ranch LLC v. Lubbock*, 498 S.W.3d 53, 58-59 & n.10 (Tex. 2016); *EAA v Day*, 369 S.W.3d 814, 823, 829-832 (Tex. 2012).

V. Conclusion

Until July 28, 2023, there were no reported Texas appellate court decisions related to the issue of ownership of "Produced Water."[146] The El Paso Court's decision in *Cactus Water Services, LLC v. COG Operating, LLC,*[147] changed that; however, we still have no reported decisions addressing the application of the transfer of ownership pursuant to the provisions of Chapter 122, including specifically Section 122.002.[148] Efforts are underway to evaluate and draft template agreements for use by practitioners whose clients seek to negotiate and enter into agreements addressing the ownership of these fluid oil and gas waste streams. In the meantime, lessors and lessees of oil and gas interests are encouraged to consider the potential for treatment and beneficial recycling of these fluid oil and gas waste streams in their negotiation of new and amended oil and gas leases. One way to address the interests of both parties is to expressly recognize the transfer of the fluid oil and gas waste streams to the lessee/operator with the provision of a royalty payable to the lessor/landowner in the event that that the lessee/operator elects to treat the fluid oil and gas waste streams for sale for recycled beneficial uses within the oil field. Any such royalty should be negotiated keeping in mind such factors as risk, cost of treatment, marketing, and delivery, and avoided need for onsite disposal using injection wells, and the market value of the treated Produced Water.

[146] *See Cactus Water Services, LLC v. COG Operating, LLC,* 2023 Tex. App. LEXIS 5600 *5 (Tex. App. – El Paso July 28, 2023, no pet.).
[147] *Id.*
[148] *See Id.* *1-2. 17-18; *Id.* *31-32 (Palafox, J., Dissenting); *see generally* Tex. Nat. Res. Code §122.002.