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FRESH GROUNDWATER AND TERTIARY OIL RECOVERY: OKLAHOMA WATER RESOURCES BOARD v. TEXAS COUNTY IRRIGATION & WATER RESOURCES ASSOCIATION (MOBIL OIL CORP.)*

I. INTRODUCTION

In an introductory note to a recent publication, the executive director of the Oklahoma Water Resources Board (OWRB) stated that "people's perceptions of [water's] value are still characterized by the truism, 'You don't appreciate the water until the well runs dry.'" This truism has a double meaning when viewed in the context of Oklahoma's two greatest problems: a lack of fresh groundwater and the energy industry's economic slump.

The energy generated by oil and gas supplies the power for electric pumps which are used to withdraw fresh groundwater. At the same time, fresh groundwater is used in enhanced oil and gas recovery projects² in order to recover more than a fraction of the oil and gas reserves. This interdependence between Oklahoma's energy industry and Oklahoma's fresh groundwater has resulted in some unique problems.³

^{*} Ed. note: The word "groundwater" may be spelled as either "groundwater" or "ground water." This Note has adopted the "groundwater" spelling. When quoting from a source that used the "ground water" spelling, this Note will not insert "[sic]."

^{1.} OKLAHOMA WATER RESOURCES BD., OKLAHOMA'S WATER ATLAS ii (Nov. 1984) (statement of James R. Barnett).

^{2.} Generally, when an oil or gas well is produced, the reserves are first produced under primary, then secondary, and finally under tertiary oil and gas recovery methods. Reserves are the "unproduced but recoverable oil and/or gas in place in a formation which has been proven by production." H. WILLIAMS & C. MEYERS, MANUAL OF OIL AND GAS TERMS 746 (6th ed. 1984). Primary recovery is "oil and gas recovered by any method . . [where] . . . the fluid enters the well bore by the action of native reservoir energy or gravity." Id. at 669 (citing American Petroleum Institute, Secondary Recovery of Oil in the United States 255 (1942)). The well bore in which energy sources extrinsic to the reservoir are utilized . . . [and] . . involves an application of fluid injection when a reservoir is approaching or has reached the exhaustion of natural energy . . . " Id. at 798. Tertiary recovery is defined as "[e]nhanced recovery methods . . . requir[ing] a means for displacing oil . . . [by] modifying the properties of the fluids in the reservoir . . . to cause movement of crude oil . . . to force its flow to a production well." Id. at 900.

^{3.} The use of fresh groundwater may be required when the chemical additives to be used in enhanced oil and gas recovery are incompatible with the mineral content of the salt water, or if the salt water is so deep that the costs of obtaining it would make the project economically unfeasible. OWRB, Application No. 79-547 (1979). If the oil and gas industry were the only users of fresh

In 1972, the Oklahoma Legislature significantly revised Oklahoma's fresh groundwater statute.4 In doing so, the legislature declared that "reasonable water utilization" was the foundational legislative policy for fresh groundwater in Oklahoma.⁵ Recently, in Oklahoma Water Resources Board v. Texas County Irrigation & Water Resources Association (Mobil Oil Corp.), 6 the Oklahoma Supreme Court decided a first impression issue with regard to the OWRB's interpretation and application of the fresh groundwater statute in the context of tertiary oil and gas recovery projects.7

TT. STATEMENT OF THE CASE

Mobil Oil Corporation (Mobil) filed an application with the OWRB on February 13, 1979, for a temporary fresh groundwater use permit.8 The total projected amount of fresh groundwater to be withdrawn was 6,375.03 acre-feet annually over the twenty year period of Mobil's oil and gas secondary and tertiary recovery project, with an average estimated use of .744 acre-feet of fresh groundwater per acre of leased land.9 Maximum withdrawal would be 1.852 acre-feet per acre of leased land in 1993, and minimum withdrawal would be .209 acre-feet per acre of leased land in 1998.¹⁰ Mobil had leased water rights to 3,442 acres in Texas County, Oklahoma, overlying the Ogallala Aquifer, and proposed

groundwater, or if the groundwater existed in an abundant supply, no particular problems would arise. Unfortunately, fresh groundwater use in western Oklahoma is "[s]o intense... that pumpage for irrigation, municipal, industrial and other uses consistently exceeds recharge from precipitation." OKLAHOMA WATER RESOURCES BD., OKLAHOMA'S WATER ATLAS 16 (Nov. 1984). In addition to the competition for a limited supply of water faced by the oil and gas industry, other problems may be caused by normal, everyday activities of the competing users. "Abandoned, improperly plugged oil and gas wells; chemical waste and brine disposal wells; poorly designed sanitary landfills, nitrates from irrigation runoff... also offer potential for pollution of the state's ground waters." Id. at 15.

4. See An Act Relating to Ground Water, ch. 248, 1972 Okla. Sess. Laws 529 (codified as amended at OKLA. STAT. tit. 82, §§ 1020.1 to 1020.22 (1981 & Supp. 1985)).

5. It is hereby declared to be the public policy of this state, in the interest of the agricultural stability, domestic, municipal, industrial and other beneficial uses, general economy, health and welfare of the state and its citizens, to utilize the groundwater resources of the state, and for that purpose to provide reasonable regulations for the allocation for reasonable use based on hydrologic surveys of fresh groundwater basins or subbasins to determine a restriction on the production, based upon the acres overlying the groundwater basin or subbasin. The provisions of this act shall not apply to the taking, using or disposal of salt water associated with the exploration, production or recovery of oil and gas or to the taking, using or disposal of water trapped in producing mines.

- OKLA. STAT. tit. 82, § 1020.2 (1981) (emphasis added).
 6. 711 P.2d 38 (Okla. 1984) [hereinafter cited as *Mobil Oil*].
 - 7. Id. at 44. See supra note 2 for definitions of oil and gas enhanced recovery methods.
- 8. OWRB, Application No. 79-547 (1979); see infra note 14; see also OKLA. STAT. tit. 82, § 1020.11 (1981) (temporary permits).
 - 9. Mobil Oil, 711 P.2d at 40.
 - 10. Id.

to use the fresh groundwater over 24,540 acres in Texas County.¹¹ The OWRB held a hearing on August 16, 1979, concerning the temporary permit application.¹²

On January 8, 1980, the OWRB¹³ granted Mobil a temporary groundwater use permit¹⁴ to withdraw fresh groundwater from leased lands overlying the Ogallala Aquifer¹⁵ in Texas County, Oklahoma. The Texas County Irrigation and Water Resources Association (Association)¹⁶ in conjunction with three adjacent surface landowners protested Mobil's application for a fresh groundwater use permit.¹⁷ Subsequent to the approval of the application, the Association sought review in the Texas County District Court¹⁸ of the OWRB final adjudication¹⁹ which granted the fresh groundwater use permit. The Association argued that

15. The Ogallala Aquifer underlies parts of Colorado, Kansas, Nebraska, New Mexico, Oklahoma, South Dakota, Texas, and Wyoming. In Oklahoma the formation covers almost all of Beaver, Texas, and Cimarron counties and parts of Harper, Ellis, Woodward, and Dewey counties. Moreover:

The Ogallala is the major source of water in the Oklahoma Panhandle. About 2,452 irrigation wells have been drilled in this area. Most of the wells yield about 500-1,000 gallons per minute, averaging about 700 gallons per minute. The water is generally of a calcium magnesium bicarbonate type, containing between 200 and 500 [milligrams per liter] of dissolved solids. Although hard [containing calcium and magnesium] the water is suitable for most uses.

OKLAHOMA WATER RESOURCES BD., OKLAHOMA'S WATER ATLAS 18 (Nov. 1984).

- 16. The Association is a non-profit Oklahoma corporation which opposes any use of the Ogallala Aquifer which would "pollut[e] or [take the aquifer] out of the hydrologic cycle." Transcript of Hearing on OWRB, Application No. 79-547, at 9 (1979).
- 17. Norman A. Fischer, Donald L. Fischer, and Allan L. Fischer submitted a written protest to the OWRB, presumably so the Association would have standing in a court of review. OWRB, Application No. 79-547 (1979). The Association probably anticipated seeking judicial review upon a determination by the OWRB to approve Mobil's application. In order to have the necessary standing to seek judicial review a party must show personal damage caused by the agency action. See Note, Mineral Lessee's Right to Fresh Groundwater: Ricks Exploration Co. v. Oklahoma Water Resources Board, 21 Tulsa L.J. 91, 97-98 (1985) (discussion of standing).
- 18. Texas County Irrigation & Water Resources Ass'n v. Mobil Oil Corp., No. C-80-12 (1st Dist. Tex. County 1981).
 - 19. OWRB, Application No. 79-547 (1979) (Order of Jan. 8, 1980, granting temporary permit).

^{11.} Id.

^{12.} OWRB, Application No. 79-547 (1979) (hearing on temporary permit).

^{13.} OWRB, Application No. 79-547 (1979) (Order of Jan. 8, 1980, granting temporary permit).

^{14.} The OWRB granted Mobil a temporary permit, automatically renewable for twenty years, to withdraw 6375.03 acre-feet of fresh groundwater annually for use in an oil and gas recovery project in Texas County, Oklahoma. Mobil intended to withdraw the water from 3,442 leased acres of water rights and use the water over 24,540 acres, all in Texas County. Mobil Oil, 711 P.2d at 40. One acre-foot of water is the volume of water which will cover one acre to a depth of one foot and is equivalent to 325,851 U.S. gallons. OKLAHOMA WATER RESOURCES BD., RULES, REGULATIONS AND MODES OF PROCEDURE ii (1979) [hereinafter cited as 1979 OWRB RULES]. The OWRB has been delegated the authority to issue both regular and temporary permits for groundwater use. OKLA. STAT. tit. 82, § 1020.11 (1981). A regular permit may not be issued without a hydrologic survey performed by the OWRB. See infra note 174 for the text of § 1020.11(B) (temporary permits) as it exists today; the underlined portions were added after the decision in Mobil Oil.

the OWRB had violated its own procedural rules and thereby had unduly prejudiced the "beneficial users of the Ogallala Aquifer "20

The Association also argued that Mobil had the burden of proof to justify the use of fresh groundwater and had failed to carry that burden.21 Furthermore, the Association argued that "[t]he Board failed to make adequate findings in regard to Waste [sic], as required "22 The district court of Texas County affirmed the OWRB's grant of the temporary fresh groundwater use permit,23 but reversed the OWRB's decision which allowed Mobil to remove fresh groundwater from the producing premises and use it elsewhere.24

Mobil and the OWRB appealed the district court's final order to the Oklahoma Supreme Court.²⁵ In their petitions in error, Mobil and the OWRB argued that the district court had not applied the "relevant law and applicable Oklahoma Ground Water Law."26 The Association responded to the district court's order by stating that the waste issue was the major defect of the OWRB hearing.²⁷ In addition, the Association also urged that the issue of waste was one of vital public importance.²⁸ and therefore, the issue could be raised on appeal.²⁹

The major issues analyzed by the Oklahoma Supreme Court majority opinion³⁰ were: (1) whether beneficial use equates to non-waste in determining what evidence must be contained in the administrative record to support the OWRB conclusion that waste will not occur:31 and (2) whether the promulgation of an administrative regulation governing annual automatic revalidation of fresh groundwater use permits was

^{20.} Corrected Memorandum Brief of Plaintiff-Appellant at 32, Texas County Irrigation & Water Resources Ass'n v. Mobil Oil Corp., No. C-80-12 (1st Dist. Tex. County 1981).

^{21.} See Corrected Memorandum Brief at 1, Mobil Oil.

^{22.} Corrected Memorandum Brief at 21, Mobil Oil.

^{23.} Texas County Irrigation & Water Resources Ass'n v. Mobil Oil Corp., No. C-80-12 at 6 (1st Dist. Tex. County 1981). The district court affirmed the OWRB order as to Mobil's intended use of the water. The district court also affirmed the order as to secondary and tertiary recovery as a "benefitial [sic] use," and held that such fresh water use is not waste per se. Id.

^{24.} Id. "[T]he order is reversed and vacated in so far as it purports to grant Mobil the use of fresh water mined under 3442 [sic] acres of land to be removed and used for the benefit of 24,540 acres of land for 20 years." Id.

^{25.} Mobil Oil, 711 P.2d at 40.

^{26.} Id. at 43.

^{27.} See Supplemental Brief of Appellee Texas County Irrigation & Water Resources Ass'n at 5, Mobil Oil, 711 P.2d 38.

^{28.} Id.

^{30.} The five-to-four majority opinion was written by Justice Wilson; Hodges, Doolin, Opala, JJ. concurred; Kauger, J., concurred specially, and Barnes, C.J., Lavender, Hargrave, JJ., and Robinson, S.J., concurred in part, dissented in part. Mobil Oil, 711 P.2d at 48.

^{31.} Id. at 44.

within the OWRB's delegated rulemaking power.³² The majority briefly recognized and decided the issue raised by Mobil that the consideration of the waste issue on appeal was improper.³³ The dissenting justices maintained that the only issue properly appealed to the Oklahoma Supreme Court was whether fresh groundwater could be transported away from the land which produced it.34

III. LAW PRIOR TO MOBIL OIL

A. Administrative Law

The OWRB falls into the definition of agency³⁵ included in the Oklahoma Administrative Procedures Act (APA).³⁶ As such, the APA regulates the OWRB in its exercise of administrative powers under the Oklahoma Groundwater Law.³⁷ Therefore, the OWRB is empowered by the legislature to make rules³⁸ and to hold hearings, termed adjudications.39

^{32.} Id. at 46. See infra note 174 for the text of the rule in question as currently amended. Additional issues raised in the case included whether the OWRB can formulate rules of broad retroactive application after conducting a hearing on an application for a fresh groundwater use permit (specially concurring opinion), and whether the issue of water transportation was the only issue properly on appeal before the Oklahoma Supreme Court. See Mobil Oil, 711 P.2d at 48, 56, 72.

^{33.} See Mobil Oil, 711 P.2d at 44. The supreme court noted that it was Mobil who had raised the issue by urging that the district court had failed to apply "relevant and applicable Oklahoma Ground Water Law." Id. The court also stated that the issue of waste could be considered if the issue was a publici juris or "public-law" issue. Id. The supreme court reasoned that it did not, however, have to raise the issue of waste sua sponte, since Mobil had urged the Oklahoma Supreme Court that the district court had failed to apply the correct groundwater law. Id.; see also State ex rel. Poulos v. State Bd. of Equalization, 552 P.2d 1134, 1137 (Okla. 1975) (recognized the doctrine of publici juris).

^{34.} See Mobil Oil, 711 P.2d at 48. However, it should be noted that Justice Robinson, who wrote the dissenting opinion was a substitute justice for V.C.J. Simms, who disqualified. Id.

^{35.} OKLA. STAT. tit. 75, § 301(1) (1981) defines "agency" as "any state board, commission, department, authority, bureau or officer authorized by the constitution or statutes to make rules or to formulate orders" (emphasis added).

^{36.} See OKLA. STAT. tit. 75, §§ 301-326 (1981 & Supp. 1985). Any reference to the APA in this Note shall mean the Oklahoma APA.

^{37.} As noted in the definition of agency, supra note 35, the APA does not confer any power upon an agency. Absent a constitutional or an organic statutory authorization, an agency is powerless. See generally Cox, The Oklahoma Administrative Procedures Act: Fifteen Years of Interpretation, 31 OKLA. L. REV. 886, 887 (1978) (discussion of APA).

^{38.} The OWRB is required to adopt procedural rules pursuant to OKLA. STAT. tit. 75, § 302 (1981) and may adopt substantive rules pursuant to OKLA. STAT. tit. 82, § 1085.2 (1981). The OWRB is required to adjudicate applications for fresh groundwater use permits under OKLA. STAT. tit. 82, §§ 1020.8, 1020.9 (1981). For a discussion of the differences between rulemaking and adjudication, see generally, Cox, supra note 37, at 889-911.

^{39.} See infra note 43 for a discussion of OWRB adjudication.

1. Rulemaking

A rule is defined in the APA as, "any agency statement of general applicability and future effect that implements, interprets or prescribes substantive law or policy, or prescribes the procedure or practice requirements of the agency."40 Thus, the OWRB Rules are an example of rulemaking, since the rules prescribe the necessary procedures to obtain a fresh groundwater use permit.

The APA requires an agency such as the OWRB to promulgate and file its rules with the state prior to applying and interpreting the rules in adjudicative hearings.⁴¹ Any rule or regulation adopted in noncompliance with the APA is not valid.42

2. Adjudication

The OWRB is empowered to hold application hearings for fresh groundwater use permits.⁴³ The Oklahoma APA designates adjudications as "individual proceedings,"44 and requires notice and a right to appear and argue issues.⁴⁵ Additionally, the APA provides that a formal record of the proceeding will be made⁴⁶ and that the administrative agency include specific information therein.⁴⁷ The end result of an adjudication is an order containing findings of fact and conclusions of law.⁴⁸

^{40.} OKLA. STAT. tit. 75, § 301 (2) (1981) (emphasis added). The definition specifically excludes licensing and ratemaking. Id. Therefore, the OWRB's grant of a permit for fresh groundwater use after a hearing would not be rulemaking but adjudication.

^{41.} See OKLA. STAT. tit. 75, §§ 303-308 (1981).

^{42.} Id. § 303(c). Any rule so adopted can be contested within a two-year period. Id. OKLA. STAT. tit. 75, § 252 (1981) provides that validity is also conditional on proper filing with the secretary of state and state librarian as described at OKLA. STAT. tit. 75, § 251 (1981).

^{43.} Granting permits is actually licensing, handled separately from adjudications in the Oklahoma APA. OKLA. STAT. tit. 75, § 314 (1981). However, when the granting of a license requires notice and a hearing, the adjudication procedures apply. Id. § 314(a); see also infra note 77 and accompanying text (OWRB's authorization to hold hearings).

^{44.} OKLA. STAT. tit. 75, § 309 (1981).

^{45.} Id.

^{46.} Id.

^{47.} Id. Section 309 provides that the record will contain:

⁽¹⁾ all pleadings, motions and intermediate rulings:

⁽²⁾ evidence received or considered;

⁽³⁾ a statement of matters officially noticed;
(4) questions and offers of proof, objections, and rulings thereon;

⁽⁵⁾ proposed findings and exceptions;

⁽⁶⁾ any decision, opinion, or report by the officer presiding at the hearing;

⁽⁷⁾ all staff memoranda or data submitted to the hearing officer or members of the agency in connection with their consideration of the case.

Id. (emphasis added).

^{48.} An order is defined as "all or part of the final or intermediate decision . . . by an agency in any matter other than rulemaking" OKLA. STAT. tit. 75, § 301(6) (1981).

The APA also requires that a final order contain "findings of fact and conclusions of law, separately stated." 49

3. Judicial Review

If any party to an administrative adjudication is "aggrieved or adversely affected by a final order in an individual proceeding," the party has recourse by seeking judicial review if certain technical procedural requirements are satisfied. The party must have standing, the review must be of a final order, and administrative remedies must have been exhausted, among other requirements. 51

It is when a party seeks judicial review that the record of the administrative hearing made by the agency becomes of vital importance. A court only reviews an agency order based on the evidence contained in the record.⁵² The reviewing court may only reverse, remand, or modify the agency order, and then only if it finds that the record does not support the agency decision.⁵³ Therefore, the reviewing court may not decide the administrative issue *de novo* under the Oklahoma APA, but it shall, if requested, hear oral arguments and allow written briefs to be submitted.⁵⁴

B. Statutory Groundwater Law

In the oil and gas industry's adolescence, the courts could not easily fit the use of fresh groundwater, 55 in the context of exploration and pro-

^{49.} OKLA. STAT. tit. 75, § 312 (1981). This section also requires that the findings and conclusions "be in writing or stated in the record." *Id.* The Oklahoma Supreme Court has held that the requirement should not be taken as a mere technicality of the law to be followed but should be taken as a matter of substance. Failure to comply with the requirement shall cause an agency's determination to be overruled. *See, e.g.*, Allied Inv. Co. v. Oklahoma Sec. Comm'n, 451 P.2d 952 (Okla. 1969) (agency must comply with the APA).

^{50.} OKLA. STAT. tit. 75, § 318 (1981); see supra note 44 and accompanying text.

^{51.} For an excellent discussion of mandatory prerequisites for judicial review in an administrative context, see Note, *supra* note 17, at 96-102.

^{52.} OKLA. STAT. tit. 75, § 321 (1981). The reviewing court may reverse, remand, or modify an administrative decision if the decision is unconstitutional, an abuse of agency discretion, or "clearly erroneous in view of the reliable, material, probative and substantial competent evidence . . . upon examination and consideration of the entire record as submitted; but without otherwise substituting its judgment . . . for that of the agency " Id. § 322(1)(e). The court may also reverse or remand if the agency was "arbitrary and capricious" or if no "findings of fact" existed. Id. § 322(1)(f), (g).

^{53.} Id. § 322(1); see also Jackson v. Independent School Dist. No. 16 of Payne County, 648 P.2d 26, 31-32 (Okla. 1982) (findings of agency must contain facts to allow court to review).

^{54.} OKLA. STAT. tit. 75, § 321 (1981); see Cox, supra note 37, at 909.

^{55.} Groundwater is defined as the "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." OKLA. STAT. tit. 82, § 1020.1(A) (1981). The statute specifically excludes salt water from this definition.

[Vol. 21:565

duction, into a niche of common law property rights.⁵⁶ This difficulty probably arose in part as a result of the increased separation of the surface and mineral estates associated with petroleum exploration.⁵⁷ Nonetheless, the Oklahoma judiciary did seem to be moving, albeit sometimes slowly, in the direction of establishing a consistent application of property law principles to the use of water by mineral estate owners and lessees.⁵⁸

The current confusion over the administrative and judicial application of Oklahoma statutory water law to the energy industry began in 1949, when the Oklahoma Legislature passed its first comprehensive⁵⁹ statute dealing with regulation of fresh groundwater.⁶⁰ Further complicating the process, in 1957 the legislature delegated the authority to administer the Oklahoma Groundwater Law by creating the OWRB.⁶¹

In choosing to recognize prior appropriation, Oklahoma followed most western states in discarding or modifying the English Rule of absolute ownership. This rule gave the landowner an absolute right to groundwater beneath his land. See Canada, 179 Okla. at 53, 64 P.2d at 694; see also City of Stillwater v. Cundiff, 184 Okla. 375, 87 P.2d 947 (1939) (citing and approving Canada on similar facts).

- 57. For a discussion of the evolution of relevant case law, see Note, Oil and Gas: Water and Water Courses: The Right to Use Ground Water in Oil and Gas Production in Oklahoma, 22 OKLA. L. REV. 99 (1969). For a complete historical recitation of prior appropriation and reasonable use doctrines in Oklahoma, see Rarick, Oklahoma Water Law, Ground or Percolating in the Pre-1971 Period, 24 OKLA. L. REV. 403, 403-16 (1971).
- 58. See generally Acidoil Co. v. Mitchell, 191 Okla. 532, 533, 130 P.2d 993, 995 (1942) (oil and gas lessee has right to use surface); Melton v. Sneed, 188 Okla. 388, 390, 109 P.2d 509, 512 (1940) (everything essential to full use of property is conveyed by grant); McKernon v. Josey Oil Co., 106 Okla. 100, 102, 233 P. 451, 452 (1925) (grant of mineral estate includes rights necessary for full enjoyment); Pulaski Oil Co. v. Conner, 62 Okla. 211, 214, 162 P. 464, 466 (1916) (oil and gas lease includes rights necessary for full enjoyment).
- 59. For an extended discussion on the statute and its history in English law, see Jensen, *The Allocation of Percolating Water Under the Oklahoma Ground Water Law of 1972*, 14 TULSA L.J. 437 (1979).
- 60. Act of June 6, 1949, ch. 11, §§ 1-19, 1949 Okla. Sess. Laws 641 (codified as amended at OKLA. STAT. tit. 82, §§ 1001-1019 (1971) (repealed 1972)).
- 61. Act of May 2, 1957, ch. 23, §§ 1-13, 1957 Okla. Sess. Laws 544. Although the OWRB was created in 1957, the Oklahoma Planning and Resources Board administered the law until the 1961 amendment. OKLA. STAT. tit. 82, § 1002 (1961) (repealed 1972); see also Rarick, supra note 57, at 421-22 (discussion of the 1961 amendment).

Id. § 1020.1(G). Unless context requires otherwise, any reference to water in this Note means fresh groundwater.

^{56.} Prior to 1949, Oklahoma common law regarding groundwater followed the prior appropriation doctrine, known as the American Rule, and stressed the reasonable use aspect found within that doctrine. See Canada v. City of Shawnee, 179 Okla. 53, 64 P.2d 694 (1936). If a property owner was the first to use groundwater for a reasonable use, her use would be protected even though the use infringed on the rights of adjacent property owners to appropriate water for other purposes. Id. at 54-55, 64 P.2d at 696-97. So long as the water was not forcibly pumped out of the ground and used off the premises unreasonably, the use was protected. Id. at 57, 64 P.2d at 699. A variation of the reasonable use rule is the correlative rights doctrine, which holds that one owner's rights end where another owner's rights begin. Id. at 54, 64 P.2d at 696.

Thereafter the legislature amended the 1949 Act regularly.⁶²

The 1949 Act, as amended, emphasized conservation of fresh groundwater,⁶³ due almost certainly to a legislative desire and intent to avoid a recurrence of the "dust-bowl" days of the mid-1930's. The conservation technique embodied in the statute limited permissible fresh groundwater use to the average annual recharge rate of any given basin or subbasin.⁶⁴ Accordingly, when a non-domestic⁶⁵ use would deplete a fresh groundwater basin faster than the average annual recharge rate, termed overdraft, the OWRB could not grant a permit under the Act authorizing the requested use.⁶⁶

On the other hand, utilization⁶⁷ as envisioned under the current Oklahoma Groundwater Law,⁶⁸ apportions the available water in relation to the surface acreage overlying the basin being apportioned, regardless of the use or non-use of each permit holder.⁶⁹

A remnant of prior common law, the reasonable use doctrine,⁷⁰ was contained in both the 1949⁷¹ amended version and the 1972⁷² amended version of the Oklahoma Groundwater Law. Each amended version of the statute also retained the beneficial use requirement of the reasonable use doctrine, and by implication, the requirement that the groundwater be used on the land overlying the basin or subbasin from which it was withdrawn. Waste of water is defined in each amended statutory version in the context of loss to beneficial use and by specific listed description.⁷³

1986]

^{62.} For an excellent discussion of the amendments, see Rarick, supra note 57, at 421-24 (discussion of 1961, 1965, and 1967 amendments).

^{63.} OKLA. STAT. tit. 82, § 1002 (1971) (repealed 1972).

^{64.} Id

^{65. &}quot;Any landowner has a right to take groundwater from land owned by him for domestic use without a permit. Wells for domestic use . . . are subject to sanctions against waste." OKLA. STAT. tit. 82, § 1020.3 (1981); see also Jensen, supra note 59, at 460 (discussion of domestic exemption).

^{66.} See Rarick, supra note 57, at 419.

^{67.} See supra note 5, emphasized portions, for statement of utilization policy.

^{68.} OKLA. STAT. tit. 82, §§ 1020.1 to 1020.22 (1981 & Supp. 1985); see also 1979 OWRB RULES, supra note 14 (regulations to implement groundwater law).

^{69.} See generally OKLA. STAT. tit. 82, § 1020.9 (1981) (approval of application). The section, in pertinent part, provides:

A regular permit shall allocate to the applicant his proportionate part of the maximum annual yield of the basin or subbasin. His 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 5, which is equal to the percentage of the land overlying the fresh groundwater basin or subbasin which he owns or leases.

Id. (footnote omitted).

^{70.} See Rarick, supra note 57, at 408.

^{71.} See, e.g., OKLA. STAT. tit. 82, § 1002 (1971) (repealed 1972).

^{72.} See, e.g., OKLA. STAT. tit. 82, § 1020.2 (1981).

^{73.} The 1949 statute defined waste as taking or using groundwater in such a manner that it was lost for beneficial use, transporting the water in such a manner that there was an excessive loss

The most relevant, specific reference to waste of fresh groundwater is found in the OWRB Rules, which uses and then defines the term "pollution."⁷⁴

Under the 1972 version of the Oklahoma Groundwater Law, as amended, a potential user must make a proper application for a use permit.⁷⁵ After the applicant has published notice,⁷⁶ as required, the OWRB holds an administrative hearing⁷⁷ to determine if the applicant meets the OWRB qualifications.⁷⁸ Two of the requirements particularly affect the enhanced oil and gas recovery applicant. The OWRB must determine that waste will not occur,⁷⁹ and the applicant must submit a set of justification reports, including, among other things, an economic cost-benefit analysis of the proposed use.⁸⁰

The applicant, however, is not the only one required to comply with

during transit, polluting the groundwater basin, using more water than was annually recharged, and using water that reduced the yield of earlier appropriations. OKLA. STAT. tit. 82, § 1002 (1971) (repealed 1972). The 1972 statute contains the same definitions except for those prohibiting using more groundwater than the annual recharge rate and reducing prior-appropriated yields. OKLA. STAT. tit. 82, § 1020.15 (1981). It should be noted that the title of the section is "Waste - Prosecutions," and therefore these definitions should only apply to waste after a permit is issued. This dilemma is solved by the OWRB's promulgation of rules. See supra note 38 and accompanying text.

74. "WASTE OR WASTE OF WATER means any act permitting or causing the pollution of fresh water or the use of such water in an inefficient manner or any manner that is not beneficial and is further defined in 82 O.S. 1981, § 1020.25 [sic] [should be § 1020.15]." 1979 OWRB RULES, supra note 14, § 125.1. Pollution is defined as:

POLLUTION means contamination or other alteration of the physical, chemical or biological properties of any natural waters of the State or such discharge of any liquid, gaseous, or solid substance into any waters of the State as will or is likely to create a nuisance or render such waters harmful or detrimental or injurious to public health, safety, or welfare, or to domestic, commercial, industrial, agricultural, recreational, or other legitimate beneficial uses, or to livestock, wild animals, birds, fish, or other aquatic life, or acts or conduct in violation of the Oklahoma Water Quality Standards.

Id.

75. OKLA. STAT. tit. 82, § 1020.7 (1981).

76. Id. § 1020.8.

77. Id.

78. Id. § 1020.9. The relevant portion of the statutory section provides:

At the hearing, the Board shall determine from the evidence presented by the parties interested, from the hydrologic surveys and from other relevant data available to the Board and applicant, whether the lands owned or leased by the applicant overlie the fresh groundwater basin or subbasin and whether the use to which the applicant intends to put the water is a beneficial use. If so, and if the Board finds that waste will not occur, the Board shall approve the application by issuing a regular permit.

Id.

Prior to 1979, the title of the OWRB requirement and the internal reference were to "secondary oil recovery." See infra note 98. Currently, the OWRB Rules contain an additional requirement for potential enhanced oil and gas recovery fresh groundwater users. See Oklahoma Water Resources Bd., Rules, Regulations and Modes of Procedure § 820.1 (1985) [hereinafter cited as 1985 OWRB Rules].

79. OKLA. STAT. tit. 82, § 1020.9 (1981).

80. 1979 OWRB RULES, supra note 14, § 820.1.

575

the statute. The OWRB has a legislative mandate to conduct hydrologic surveys of Oklahoma's groundwater basins in order to establish the average annual yield of each basin.⁸¹ The surveys are required to be performed prior to the approval of an application for a regular fresh groundwater use permit,⁸² but the OWRB is authorized to issue temporary permits if a survey has not been performed.⁸³ In addition, the OWRB has promulgated a rule allowing automatic renewal of a temporary fresh groundwater use permit on an annual basis, subject to the user's reporting water usage to the OWRB on the proper form.⁸⁴

Since the prerogative of establishing the Oklahoma Groundwater Law ad hoc was wrested away from the judiciary by the state legislature, the courts were relegated the task of reviewing the OWRB's interpretation and application of the new "permit system" statute. Although there is a scarcity⁸⁵ of case law dealing with the Oklahoma Supreme Court's consideration of the Oklahoma Groundwater Law in enhanced oil and gas recovery contexts, several opinions with pertinent holdings merit discussion, especially as the cases analyze and discuss the issue of waste.

C. Relevant Case Law

In Lowrey v. Hodges, ⁸⁶ the supreme court reversed the district court of Oklahoma County's decision to set aside an OWRB order granting a temporary permit to use fresh groundwater for irrigation. In a unanimous decision, the Oklahoma Supreme Court decided that if an application does not evidence waste and "the [p]rotestants fail to introduce evidence to substantiate that waste will occur, . . . the statute has been satisfied."⁸⁷ Furthermore, the supreme court held that the statutory definition of waste contemplates an after-the-fact determination by the OWRB.⁸⁸

^{81.} OKLA. STAT. tit. 82, §§ 1020.4 to 1020.6 (1981).

^{82.} Id. § 1020.11.

^{83.} Id. To date, the OWRB has initiated or completed hydrologic surveys on all 22 of Oklahoma's major groundwater basins. Although nine surveys have been completed, of the nine, only five have had maximum annual yields established: (1) Elk City; (2) Enid; (3) North Fork of the Red River; (4) Texas County (Ogallala Aquifer); and (5) Tillman. Telephone interview with Art Cotton, OWRB Administrative Officer, Tulsa, Okla. (Jan. 17, 1986).

^{84. 1979} OWRB RULES, supra note 14, § 840.4.

^{85.} One reason for the dearth of cases may be the district court's reluctance to get involved in what is felt to be an administrative area of responsibility. See generally Note, supra note 57, at 102 (citations to discussions of judicial decisions).

^{86. 555} P.2d 1016 (Okla. 1976).

^{87.} Id. at 1023; see also OKLA. STAT. tit. 82, § 1020.15 (Supp. 1975) (where ten specific definitions of waste were described).

^{88.} Lowery, 555 P.2d at 1016.

Two years later, the Oklahoma Supreme Court decided *Hodges v. Oklahoma Water Resources Board*⁸⁹ and reaffirmed its reasoning in *Lowrey*, stating that the facts in *Hodges* were substantially the same as in *Lowrey*. The supreme court held that the plaintiffs had not presented enough evidence to permit the court to decide that waste would occur, and stated that "one indication of water quality, was not conclusive." The Oklahoma Supreme Court also approved the language in *Lowrey* which indicated that if a use was beneficial, the issue of waste was thereby answered in the negative.

The most relevant decision that pertains to the question of using fresh groundwater for enhanced oil recovery projects is *Texas County Irrigation & Water Resources Association v. Cities Service Oil Co.* ⁹³ The OWRB granted Cities Services Oil Company a permit to use fresh groundwater in a secondary oil recovery waterflood project. The Association in *Cities Service Oil Co.* sought review of the OWRB order in the district court of Texas County. ⁹⁴ The district court reversed the OWRB's order and held that the use of fresh groundwater for secondary oil recovery waterflood projects constituted waste *per se.* ⁹⁵

On appeal, the Oklahoma Supreme Court reversed the district court, strictly addressing two narrow issues, 96 and instructed the district court to reinstate the OWRB order. 97 The reasoning used to urge that the use of fresh groundwater was not waste per se depended heavily upon the supreme court's interpretation of legislative intent by omission. 98 To reiterate that its opinion was limited to the current issues, the supreme court stated: "These views do not mean fresh ground water use in a

^{89. 580} P.2d 980 (Okla. 1978).

^{90.} Id. at 982.

^{91.} Id. (emphasis added).

^{92.} Id. In light of the dissent's reasoning, see infra text accompanying note 179, it is interesting to note that in both cases John C. Hodges was the protestant and Chief Justice Barnes wrote the majority opinions.

^{93. 570} P.2d 49 (Okla. 1977).

^{94.} Id.

^{95.} *Id*.

^{96.} The second issue before the supreme court was whether the old 1949 groundwater law or the new 1972 groundwater law applied. The Oklahoma Supreme Court reasoned that the question was moot in light of the decision on the question regarding waste, since "[b]oth laws contain[ed] the same basic language" *Id.* at 51.

^{97.} Id.

^{98.} Id. The supreme court referred to a 1967 opinion of the Attorney General, requested by the OWRB, which concluded that use of fresh groundwater for secondary oil recovery was not waste per se. See Okla. Op. Att'y Gen. No. 67-159 (1967). Because the legislature did not act when the OWRB subsequently promulgated rules permitting such use, the court inferred that the legislature intended to allow "any and all use of fresh ground water for secondary oil recovery" Cities Service Oil Co., 570 P.2d at 51.

1986]

water flood secondary oil recovery program under any circumstance may not constitute waste. That is an administrative decision for the Board after individual proceedings before the agency where probative evidence may be admitted and given effect."99 The court also stressed that the legislature had passed a resolution enumerating what the legislature considered to be beneficial uses. 100

THE DECISION IN MOBIL OIL

The Majority Opinion

In response to briefs amicus curiae, 101 the Oklahoma Supreme Court in Mobil Oil initially addressed the question of "conflicting beneficial uses in a critical ground water area"102 by drawing attention to the declaration of policy in the 1972 Oklahoma Groundwater Law. 103 The court concluded that the conservationist concept of critical groundwater areas was not recognized under current Oklahoma Groundwater Laws. Moreover, the supreme court held, no preferences exist among the beneficial uses recognized by the statute. 104

The Oklahoma Supreme Court then focused on the issue of fresh groundwater transportation away from the land from which it was withdrawn. The supreme court reasoned that the statute, by the language contained therein, gave rise to an inference that use of fresh groundwater anywhere is subject only to the requirement that the use be reasonable. 105 Provided that all the applicable Oklahoma Groundwater Law statutes

^{99.} Id.; see also Mobil Oil, 711 P.2d at 44 (citing Cities Service Oil Co., 570 P.2d at 49).

^{100.} H.R.J. 502, 26th Leg., 1957 Okla. Sess. Law 670; see Note, Oil and Gas: Water and Watercourses: The Right to Use Fresh Groundwater in Waterflood Operations, 35 OKLA. L. REV. 158, 160-61 (1982) (the Attorney General's opinion and the House Joint Resolution are both discussed). Among the beneficial uses enumerated were irrigation, industry, and domestic use. However, enhanced oil recovery was not specifically mentioned. See supra Note, at 160-61.

^{101.} Mobil Oil, 711 P.2d at 41. The Oklahoma Municipal League and Oklahoma Gas and Electric Company were granted leave to file briefs amicus curiae by the supreme court, and therein presented two substantive issues to be resolved: (1) whether under the current Oklahoma groundwater law, a concept of conflicting beneficial uses in a critical groundwater area was recognized; and (2) whether percolating water may be used away from the premises from which it is produced under the current Oklahoma groundwater law. Id.

^{102.} Id.

^{103.} Id. See supra note 5 for the declaration of policy.

^{104.} Mobil Oil, 711 P.2d at 41. The OWRB has also defined beneficial use in a manner which precludes consideration of conflicting uses:

BENEFICIAL USE is the use of such quantity of stream or ground water when reasonable intelligence and reasonable diligence are exercised in its application for a lawful purpose and as is economically necessary for that purpose. Beneficial uses include but are not limited to municipal, industrial, agricultural, irrigation, recreation, fish and wildlife, etc.

¹⁹⁷⁹ OWRB RULES, supra note 14, at § 125.1 (emphasis added).

^{105.} Mobil Oil, 711 P.2d at 42.

have been properly followed by the applicant and properly adjudicated by the OWRB, the use of fresh water, including groundwater, off the producing premises is recognized as a reasonable use. 106

The supreme court then applied the rule of reasonable use to Mobil's proposed use and tested the evidence contained in the administrative record against the provisions of the 1972 Oklahoma Groundwater Law. 107 The court held that the OWRB decision regarding waste 108 was not based on the evidentiary matters present in the record, and therefore, no basis existed for the findings of fact with respect to the presence or absence of waste. 109 The Oklahoma Supreme Court quoted from the OWRB order and found insufficient a mere statement that the OWRB had not, as a matter of law, found waste to exist. 110

The supreme court quoted the decision in Cities Service Oil Co. with approval. The court also noted that the issue of whether use of fresh groundwater for tertiary oil and gas recovery constitutes waste per se was one of first impression to the Oklahoma Supreme Court. The court listed two types of waste: (1) waste by depletion and (2) waste by pollution, indicating that it is the duty of the OWRB to protect the waters of the State of Oklahoma against both forms of waste. Waste by depletion would result if the water of the Ogallala Aquifer was removed at a rate faster than the water was being naturally replenished, or was overdrafted. Moreover, the supreme court was equally concerned with the waste by pollution issue in Mobil Oil. 116

In order for the supreme court to determine on review if a particular applicant will commit waste by pollution, the OWRB's administrative record must necessarily contain specific information concerning the effects and potential effects of the chemical additives to be used in the tertiary oil and gas recovery operations.¹¹⁷ The Oklahoma Supreme Court

^{106.} Id. at 42-43

^{107.} See supra notes 75-80 and accompanying text. The Oklahoma Supreme Court specifically tested the evidence for compliance with OKLA. STAT. tit. 82, §§ 1020.2, 1020.15 (1981).

^{108.} Mobil Oil, 711 P.2d at 44; see supra note 74 and accompanying text.

^{109.} Mobil Oil, 711 P.2d at 45.

^{110.} Id. The supreme court quoted from the findings of the OWRB and stated that the specific evidence for the OWRB conclusion "is not included in the order." Id.; see supra notes 47-49 for the APA requirements pertaining to administrative findings.

^{111.} Mobil Oil, 711 P.2d at 44; see supra note 99 and accompanying text.

^{112.} Mobil Oil, 711 P.2d at 44.

^{113.} Id. at 45.

^{114.} Id. at 46.

^{115.} See supra note 73.

^{116.} Mobil Oil, 711 P.2d at 44.

^{117.} Id. at 45. The supreme court was concerned that the only evidence in the record regarding

then indicated that the burden of proof might also be on the applicant. 118 To determine if waste by depletion would occur, the supreme court indicated that Mobil should have presented "[a] program to monitor on a regular basis the drop in the Ogallala water level, resulting from Mobil's mining activities"119 at the OWRB administrative hearing.

A further indication that Mobil had not complied with the applicable regulations and that as a result the OWRB had insufficient evidence before it to make its decision, was a review by the supreme court of Mobil's submission of economic justification. 120 The court noted that the rule, as promulgated by the OWRB, 121 required a detailed economic cost-benefit analysis. 122 Justice Wilson then determined that Mobil did not comply with the OWRB rule since only one comparative estimate, that of oil recovery measured against irrigation, was provided. 123 The supreme court noted that no economic evidence on alternatives such as using reclaimed salt water instead of fresh water, using water from a

the chemical additives used in the tertiary oil and gas recovery process was that both detergent and polymer additives would be used. Id. The 1985 OWRB RULES, § 820.1(d) (second reference), may require an applicant to provide, if requested, "[t]he name and chemical composition of any material or substance proposed to be injected underground in connection with the proposed enhanced recovery operation (other than fresh water)." The Oklahoma Supreme Court majority opinion stated that Mobil had "presented absolutely no evidence identifying these specific chemical additives; or whether these unidentified chemical additives were harmful or harmless; or whether the water contaminated by these unidentified chemical additives could possibly later be reclaimed through treatment." Mobil Oil. 711 P.2d at 45 (emphasis added).

118. Mobil Oil, 711 P.2d at 45.

120. Id. It should be noted that the Oklahoma Supreme Court quoted from the 1982 OWRB RULES instead of the 1979 OWRB RULES. Mobil filed its application on February 13, 1979. This use by the supreme court is questionable, since the requirements under the 1982 OWRB RULES were much broader and would have required more evidence from Mobil. Section 820.1(c) requires:

(c) An economic study containing the following information:

(1) A detailed analysis of the relative cost of obtaining salt water and any other feasible alternative versus the relative cost of obtaining fresh water,

(2) Total project costs and the amount of oil and gas expected to be recovered and the value expected to be realized,

- (3) The estimated value of fresh water for other purposes (purposes or uses common to the area or vicinity subject of the application) as measured against the overall estimated value of the oil or gas to be recovered,

 (4) The additional expense per barrel recovered if the applicant is required to use or treat
- salt water instead of fresh water in the recovery process, and

(5) An evaluation of other recovery methods or alternatives considered and why recovery requiring the use of fresh water was deemed to be necessary or the most feasible.

OKLAHOMA WATER RESOURCES BD., RULES, REGULATIONS AND MODES OF PROCEDURE § 820.1(c) (1982) [hereinafter cited as 1982 OWRB RULES]. The Oklahoma Supreme Court determined that Mobil had not provided comparative estimates of alternative uses other than agricultural irrigation and had also not provided accounting data regarding costs of using treated salt water rather than fresh water. Mobil Oil, 711 P.2d at 46.

- 121. 1982 OWRB RULES, supra note 120, § 820.1.
- 122. See Mobil Oil, 711 P.2d at 46.
- 123. Id. at 45.

different formation, or using a different method of tertiary recovery was presented to the OWRB by Mobil. The court stated that the evidence did indicate that, once used, the fresh groundwater used for tertiary recovery as proposed by Mobil, would never be available for re-use.¹²⁴

Lastly, the Oklahoma Supreme Court examined the question of the validity of the OWRB rule regarding automatic annual revalidation of temporary permits issued by the OWRB in lieu of a regular permit. 125 The supreme court noted that a temporary permit holder need only return an annual water usage report form to the OWRB to receive automatic revalidation, unless the revalidation was protested. 126 In addressing this issue, Justice Wilson reasoned that the legislative intent behind the distinction between regular and temporary permits 127 was violated when the permit holder was not required to annually re-substantiate eligibility under the OWRB Rules. 128 Additionally, Justice Wilson stated, "the routine granting of temporary permits becomes tantamount to the *ex parte* issuance of a regular permit and the requirements of hydrologic surveys and the determination of annual yields become meaningless." 129

The Oklahoma Supreme Court also cited Lowrey which stated, "[a] temporary permit is not tantamount to a regular permit in that the statute provides it must be revalidated annually"¹³⁰ and noted that automatic revalidation was apposite to the statement in Lowrey that "[a temporary permit] is thus subject to review on a yearly basis and possible nonrenewal."¹³¹ The supreme court assessed possible nonrenewal as requiring a re-substantiation and held that the OWRB rule did not "conform with the authorizing statute and is therefore without force."¹³² The Oklahoma Supreme Court also stated that it recognized the problems faced by the OWRB, but that the issuance of a permit would nonetheless

^{124.} Id. at 46.

^{125.} Id.

^{126.} Id.; see also id. Appendix A, at 68-69 (form for water use report).

^{127.} See supra notes 81-84 and accompanying text.

^{128.} Mobil Oil, 711 P.2d at 47.

^{129.} *Id.* (emphasis added). The supreme court was referring to the statutory mandate to the OWRB to make hydrologic surveys and determine annual yields; *see supra* notes 81-84 and accompanying text.

^{130.} Mobil Oil, 711 P.2d at 47 (citing Lowery, 555 P.2d at 1024) (emphasis in original); see supra text accompanying note 87.

^{131.} Mobil Oil, 711 P.2d at 47 (citing Lowery, 555 P.2d at 1024) (emphasis added by Mobil Oil court); see also Adams v. Professional Practices Comm'n, 524 P.2d 932 (Okla. 1974) (supreme court held that an administrative agency cannot act contrary to its statutory authorization). But see infra note 174 (legislature amends statute to conform to OWRB Rule).

^{132.} Mobil Oil, 711 P.2d at 47.

require the OWRB to "meet all statutory requirements, including, 'allocation for reasonable use' [and] 'restriction of the production' based upon information provided by hydrologic survey." Subsequently, the supreme court also directed the OWRB to make rules and regulations which were "tailored to focus inquiry upon the pertinent issues peculiar

to the tertiary process" before the OWRB issued a permit allowing such use of fresh groundwater. ¹³⁴

The Oklahoma Supreme Court reversed both the district court of

Texas County and the OWRB, and remanded the case to the OWRB, with additional instructions to determine if waste would occur and to hold "further hearings" on the hydrological survey "135"

B. Specially Concurring Opinion

Justice Kauger, in her specially concurring opinion agreed with the majority's holding that "severed ground water may be transported from leased lands," and "[a]utomatic renewal of a temporary permit, based only upon a statement of rate of consumption, circumvents the need for a regular permit based upon hydrologic surveys, and the determination of the annual yield of a basin or subbasin to establish a minimum twenty-year life of a reservoir." Justice Kauger went into more detail than the majority in describing waste by depletion and by pollution, and the economic cost-benefit analysis requirement of the OWRB Rules. Justice Kauger disagreed with what she perceived was an attempt by Mobil to extend the Cities Service Oil Co. doctrine, that secondary recovery project use of fresh groundwater was not waste per se, to tertiary oil and gas recovery. In the secondary recovery and gas recovery.

Justice Kauger stated that the OWRB had not complied with the Oklahoma APA and, therefore, the temporary permit issued Mobil was invalid. The specially concurring opinion by Justice Kauger also indicated agreement with the majority's direction to the OWRB to establish rules for fresh groundwater use in tertiary oil and gas recovery operations, since she believed that without such rules any order by the OWRB

^{133.} Id. at 47-48. The Oklahoma Supreme Court was referring to the public policy statement. See supra note 5.

^{134.} Mobil Oil, 711 P.2d at 47.

^{135.} Id.

^{136.} Mobil Oil, 711 P.2d at 56 (Kauger, J., specially concurring).

^{137.} Id. (footnote omitted).

^{138.} Id. at 61-62.

^{139.} Id. at 65-66.

^{140.} Id. at 66; see supra notes 93-99 and accompanying text.

granting a permit would be "void, invalid, and of no effect." 141

C. Dissenting Opinions

Justice Robinson, who concurred with the majority and concurring opinions in all respects *except* for the decision on the issue of waste, ¹⁴² contended that the evidence in the administrative record supported the OWRB decision and stated that Mobil had sufficiently proved no waste would occur. ¹⁴³

The dissent went into considerable detail describing the facts in evidence and noted that Mobil had shown that their use of fresh groundwater for tertiary oil recovery had an economic benefit four times greater than that of irrigation by using only five percent of the amount of fresh groundwater irrigation would require. ¹⁴⁴ Justice Robinson also indicated that the State of Oklahoma would benefit from Mobil's proposed use in the form of increased production tax revenues and pointed out that the irrigation wells were using natural gas as an energy source. ¹⁴⁵ The dissent argued that the beneficial use of fresh groundwater had been proved by Mobil in its application and therefore, the OWRB grant of a temporary permit should be sustained on appeal. ¹⁴⁶

In addition, Justice Robinson took exception to the majority's interpretation and application of the OWRB rule of law to the facts. The thrust of the dissent's disagreement with the majority was that the intended use by Mobil was obviously beneficial and since the Association had presented no conclusive evidence of waste, the OWRB had adequate evidence to find that waste by pollution would not occur.

The dissent, however, only briefly addressed the issue of waste by depletion, arguing that there was "substantial evidence in the record to

^{141.} Mobil Oil, 711 P.2d at 59.

^{142.} Id. at 48 (Robinson, S.J., dissenting). Justice Hargrave also concurred with the majority but only as the decision related to transportation of water off the producing premises. He maintained that the issue of water transportation was the only issue properly appealed and, therefore, reviewable by the supreme court. Id. at 72 (Hargrave, J., concurring in part and dissenting in part).

^{143.} *Id.* at 48. Justice Robinson also agreed with Justice Hargrave that the issue of waste was not before the supreme court. *See supra* note 142.

^{144.} See Mobil Oil, 711 P.2d at 48.

^{145.} Id. at 49.

^{146.} Id. at 48.

^{147.} Id. at 50. Justice Robinson felt that OKLA. STAT. tit. 82, § 1020.15 (1981), as it defined waste, only applied to situations occurring after the issuance of a permit. He also believed that the definition of pollution used by the majority was inapplicable since the definition was contained in an entirely different act. Mobil Oil, 711 P.2d at 50. The scope of OKLA. STAT. tit. 82, § 926.1(6) (1981) specifically applies, by definition, to fresh groundwater.

support the conclusion that no waste by 'depletion' [would] occur." ¹⁴⁸ Justice Robinson argued that waste by depletion would not occur, because the evidence demonstrated that the tertiary oil and gas recovery process would be a closed system, using only "make-up" water. ¹⁴⁹

Justice Robinson also cited *Hodges* as supporting his contention that a use of fresh groundwater which changes the chemical composition of the water is not waste by pollution as defined in the Oklahoma Groundwater Law. The dissent described *Hodges* as citing *Lowrey* for the holding that *some* evidence of change in chemical characteristics is inconclusive. The dissent stated that the majority's holding, that Mobil's intended use of polymer and detergent additions to fresh groundwater was waste, contravened the holding in *Hodges*. Justice Robinson stated:

While it is true that the groundwater would undergo changes as it is being utilized in the secondary and tertiary operations, it is also true that water used in irrigation changes its chemical characteristics as it percolates through fertilizer and other chemicals sprayed on crops and through the surface of the earth. Changes in water also occur during domestic and other industrial uses when fresh water absorbs dirt, sewage, detergents and other chemicals. After use, all groundwater changes its chemical characteristics and composition. Nowhere in the Groundwater Law does it say that the changing of fresh water chemical characteristics is pollution. ¹⁵²

The dissent concluded by stating that the majority rule would have the effect of denying permits for any uses which change the characteristics of fresh groundwater, thereby changing the legal policy to one of conservation as opposed to the existing legislative declaration of reasonable utilization.¹⁵³

^{148.} Mobil Oil, 711 P.2d at 52.

^{149.} Id. The dissent did not discuss the specially concurring opinion's contention that Mobil could:

[[]F]ill a family-size swimming pool every minute; it can fill an Olympic-size swimming pool every twenty-three minutes; it can drain Lake Heyburn within a year; it can drain Lake Fort Supply within 2½ years; it can drain Lake Wister within seven years; or, it can exhaust Lake Canton within eighteen years.

Id. at 62 (footnote omitted).

^{150.} Id. at 52.

^{151.} Justice Robinson interpreted the holding to require in the present case that the Association must present evidence that waste by pollution would occur. *Id*.

^{152.} Id. at 51 (footnote omitted).

^{153.} Id. at 52; see also id. at 51 n.4 (the dissent stated that the holding in Mobil Oil is in contravention of Cities Service Oil Co.).

D. Application of the Oklahoma Groundwater Law

In answering the issues raised by the amicus curiae briefs,¹⁵⁴ the majority applied both precedent and a logical interpretation of legislative intent. The concept of "critical ground water areas" may have economic and environmental import, but the legislature had specifically repealed the statutes pertaining to these concepts, and had enacted laws with an expressly stated policy.¹⁵⁵ Thus, the Oklahoma Supreme Court has recognized and applied the stated intent of the Oklahoma Legislature.

1. Reasonable Use

In applying the Groundwater Law statute to the issue of transportation of water away from the producing lands, the supreme court's reasoning was not as clear. The basis in precedent for Oklahoma water law in general is the concept of "reasonable use" established in *Canada v. City of Shawnee*. The reasonable use doctrine was only partially incorporated by the legislature into the 1972 Groundwater Law, because the statute requires a permit system which restricts the production of fresh groundwater (regardless of whether the use is reasonable). 157

A statute may or may not incorporate the existing common law. The English rule did not prohibit use of fresh groundwater away from the surface soil. On the other hand, applying the reasonable use doctrine, a use would only be privileged if adjacent landowners were not harmed. By enacting a comprehensive fresh groundwater statute, the legislature would apparently be expressing displeasure with the supreme court's application of common law to Oklahoma fresh groundwater. 159

The supreme court, in construing the statute, had to resolve the absence of a statutory prohibition against transportation away from the producing lands with the common law doctrine of reasonable use. The

^{154.} See supra note 101 for the major issues raised by the amicus curiae briefs.

^{155.} See supra note 5 and accompanying text.

^{156. 179} Okla. 53, 64 P.2d 694 (1936); see also supra note 56 and accompanying text.

^{157.} See supra note 5 where restriction on production is required.

^{158.} The English rule of absolute ownership allows the landowner to remove from the underlying basin all of the water he can capture for use on or off the overlying surface just as he can other property, as long as the landowner does not act with malice. See supra note 56 for discussion of common law; see also Canada v. City of Shawnee, 179 Okla. 53, 54, 64 P.2d 694, 697 (1936) (rejecting English absolute ownership rule and adopting reasonable use doctrine); cf. Nilsen v. Tenneco Oil Co., 614 P.2d 36, 43 (Okla. 1980).

^{159.} Another possibility is the legislature's concern with the rapidly diminishing fresh ground-water supply in Oklahoma, or a desire to minimize conflicts between competing uses for the same finite supply of fresh groundwater. The second possible rationale, one of minimizing conflicts, would seem plausible in light of the legislature's failure to statutorily prioritize beneficial uses. But see supra note 100 and accompanying text.

Oklahoma Supreme Court held that the concepts were not mutually exclusive; the court also inferred that if a prohibition against waste refers to transportation of water "from a well to the place of use," the implication arises that such transportation is statutorily authorized, provided the intended off-site use is reasonable. The court's finding is both logical and based on ample precedent. In a fresh groundwater poor state such as Oklahoma, the ability to transport fresh groundwater for use in water deficient areas is an important legal right.

2. Waste

Under the current 1972 Oklahoma Groundwater Law, the critical issue before the Oklahoma Supreme Court was the definition of what constituted waste. The majority in *Mobil Oil* had little difficulty establishing that Mobil had complied with the first two requirements for a permit and that the OWRB had correctly assessed the facts pertaining to the first two requirements. ¹⁶² Justice Wilson drew a sharp distinction, however, between the concepts of beneficial use and waste, or more correctly, beneficial use and non-waste. And, she expressly rejected the OWRB's contention that the concepts were complementary. ¹⁶³

Justice Wilson defined waste as pollution and pollution as the contamination or alteration of fresh groundwater. Based on Lowrey, the Oklahoma Supreme Court could have rejected the Association's allegation of waste for lack of conclusiveness, since the Association did not allege specific instances where waste or pollution would in fact occur. The supreme court held that the issue of waste had been introduced by Mobil on appeal, therefore, the court did not have to find the issue one of public concern. As a consequence, the court, by distinguishing beneficial use and non-waste, effectively overruled its conclusion in Hodges; that if no evidence of waste were introduced and the proposed use were beneficial, the OWRB could grant a permit. Moreover, this argument effec-

^{160.} OKLA. STAT. tit. 82, § 1020.15 (1981).

^{161.} Mobil Oil, 711 P.2d at 42. A logical inference can be drawn from the Oklahoma Groundwater Law statute.

^{162.} Id. at 44; see supra note 78; see also OWRB, Application No. 79-547 (1979) (copies of water rights leases and the economic benefit of recovering oil discussed in summary of evidence).

^{163.} Mobil Oil, 711 P.2d at 44; see also Jensen, supra note 59, at 456 (Professor Jensen defines beneficial use as the complement of waste).

^{164.} Mobil Oil, 711 P.2d at 44.

^{165.} OWRB, Application No. 79-547 (1979).

^{166.} See supra notes 89-92 and accompanying text.

tively countered the dissenting opinion's objection with respect to insufficient evidence of waste in the administrative record.

The majority cited *Cities Service Oil Co.* ¹⁶⁷ and by analogy to secondary oil recovery, indicated that tertiary oil recovery may or may not constitute waste *per se*, and that the matter should be determined by an administrative decision of the OWRB.

Justice Kauger, in the specially concurring opinion, also cited *Cities Service Oil Co.* and indicated that she disagreed with the attempt by Mobil to *extend* the holding. The holding in *Cities Service Oil Co.* was a very narrow one, 169 and it appears that the specially concurring opinion missed the point. The Oklahoma Supreme Court in *Cities Service Oil Co.* held that the use of fresh groundwater was a use recognized under the statute. The holding was not that secondary recovery did not constitute waste *per se*, but that the OWRB could proceed from step two (determination of a proposed beneficial use) to step three (inquiry into waste).

The Oklahoma Supreme Court majority interpretation is the correct view. All that was missing from the *Cities Service Oil Co.* dispute was an appeal from the subsequent grant of a permit after the supreme court's decision. The court would then have been presented with one of the current issues, specifically what evidence must the OWRB consider in order to determine that "no" waste will occur.

3. OWRB Rules and Regulations

The majority outlined the evidence it expected to find in the OWRB record to substantiate the OWRB's decision that waste will not occur. ¹⁷¹ Since the outline was merely an enunciation of the OWRB's Rules, the nature of the evidence required by the supreme court was not surprising. However, in applying the rules to the facts, the court indicated that more than a cursory compliance was necessary. ¹⁷² In holding that the OWRB had acted outside its administrative scope by adopting a rule to annually revalidate temporary permits on the basis of water use reports, the

^{167.} See supra note 93.

^{168.} See supra text accompanying note 140.

^{169.} See supra notes 89-92 and accompanying text.

^{170.} See supra text accompanying note 99.

^{171.} See Mobil Oil, 711 P.2d at 45-46.

^{172.} Id. For instance, the supreme court indicated that Mobil had not provided specific accounting figures with regard to the cost and feasibility of using treated salt water, rather than fresh water. Id.

supreme court did interpret the authorizing statute correctly.¹⁷³ This fact is supported by subsequent legislative action, when the OWRB rule was incorporated into the definition of temporary permit.¹⁷⁴

The implication that Mobil would have to establish a program to monitor the effects of its enhanced oil and gas recovery project on the Ogallala Aquifer may have arguably exceeded the supreme court's authority. The Oklahoma Supreme Court, in effect, mandated to the OWRB that it must establish a regulation to require a permit holder intending enhanced oil and gas recovery to establish such a program. It is the OWRB's responsibility to establish such regulations as it deems proper in order to govern taking and use of fresh groundwater. The 1972 Oklahoma Groundwater Law provides for an after-the-fact waste determination to be made by the OWRB.

19867

^{173.} Id. at 47.

^{174.} OKLA. STAT. tit. 82, § 1020.11(B) (1981) which was amended (amendment indicated with underlined language) by 1985 Okla. Sess. Law Serv. 104 (West) to read:

B. Temporary Permit. A temporary permit is an authorization for the same purposes as a regular permit but granted by the Oklahoma Water Resources Board prior to completion of the hydrologic survey and the determination of the maximum annual yield of the basin or subbasin. Unless requested by a majority of the surface owners of the land, 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 in the basin or subbasin; provided, however, if the applicant presents clear and convincing evidence that allocations in excess of two (2) acre-feet annually for each acre of land overlying the basin or subbasin will not exhaust the water thereunder in less than twenty (20) years, then the Board may issue temporary permits in such basin or subbasin in such amounts in excess of said limitation as will assure a minimum twenty-year life for such basin or subbasin. A temporary permit must be revalidated annually during its term. The permit shall lapse at expiration of its term or upon the issuance of a regular permit, whichever shall occur first. It is subject to revocation or cancellation as provided in Sections 1020.12 and 1020.15 of this title. For temporary permit revalidation purposes, water use report forms shall be mailed by the Board to each temporary permit holder. Timely return of the completed, signed, and dated water use report form to the Board shall automatically revalidate a temporary groundwater permit if the revalidation is not protested and if the water use report form does not show or reflect any permit-water use violations. If the revalidation of a permit is protested, the Board shall immediately set a date for hearing and notify the applicant and each protestant of the time and place of the hearing. At the hearing, any interested person may appear and present evidence and argument in support of or in opposition to the protest and revalidation. At the hearing on the revalidation protest, matters previously presented or considered and adjudicated shall not be subject to reconsideration or readjudication. The protest issues which may be entertained shall be limited to matters not previously determined, including but not limited to: a material or substantial change in conditions since issuance of the permit; evidence of the applicant's noncompliance with any of the terms, provisions, or conditions of the permit; or subsequent violations of the Oklahoma Groundwater Law, Section 1020.1 et seq. of this title, or Board rules and regulations. Subject to compliance with all other and applicable provisions of this chapter and rules and regulations of the Board, all temporary permits "revalidated" by the Board prior to the effective date of this act are hereby validated.

^{175.} See Mobil Oil, 711 P.2d at 45.

^{176.} See supra notes 38-40 and accompanying text.

^{177.} OKLA. STAT. tit. 82, § 1020.15 (1981); see supra note 73.

this illustration of non-waste by the supreme court will have any substantive effect. What *is* apparent, however, is that the supreme court intends to perform its function in reviewing the OWRB's interpretation and application of the fresh groundwater statutes. The Oklahoma Supreme Court recognized that there is more involved in the groundwater statute than a simple dichotomy between reasonable use and absolute ownership doctrines.¹⁷⁸

Justice Robinson, in the dissent, appears to have quietly sidestepped the majority's interest to apply the statute as written, and returned to the mistaken belief that beneficial use equates with nonwaste.¹⁷⁹ The distinction between beneficial use and non-waste arose from the Oklahoma Legislature's express requirement that the OWRB conclusively determine both issues as a matter of law.¹⁸⁰ Moreover, the dissent merely reiterated the evidence contained in the OWRB order¹⁸¹ and in Mobil's application. Nowhere in the lengthy summary did Justice Robinson state that the recovery project would not contaminate or pollute the fresh groundwater used.¹⁸²

4. Pollution Statutes

The majority's use of a definition of pollution located in a different section of the Oklahoma statutes¹⁸³ was objected to because the two acts dealt with different subject matter.¹⁸⁴ The dissent fails to appreciate that the OWRB, just as the supreme court, cannot apply Oklahoma law with "tunnel-vision."¹⁸⁵ The overall intent of the legislature in enacting the statutes must be taken into account, and conflicting or alternative responses must be resolved. The majority correctly determined that the legislature intended to regulate both stream and groundwater pollution in Oklahoma, and subsequently entrusted this intent to the OWRB.

In addition, Justice Robinson incorrectly applies the holding of *Hodges*. ¹⁸⁶ *Hodges* did not hold that "use by man whereby fresh water's chemical characteristics are changed is not waste by pollution in the con-

^{178.} See supra notes 158-61 and accompanying text.

^{179.} See supra note 163.

^{180.} See supra notes 78-80 and accompanying text.

^{181.} OWRB, Application No. 79-547 (1979).

^{182.} See Mobil Oil, 711 P.2d at 48 (Robinson, S.J., dissenting).

^{183.} Id. at 50 (citing OKLA. STAT. tit. 82, § 926.1 (1981)).

^{184.} Id. See supra note 74 for the definitions of waste and pollution.

^{185.} Mobil Oil, 711 P.2d at 51 (Robinson, S.J., dissenting). The dissent stated, "[w]e therefore must determine the meaning of the word 'waste' under this particular section only" Id. 186. Id. at 52.

589

1986]

text of the Oklahoma Groundwater Law."187

Although not directly stated by the majority opinion, there is implicit in the decision a conclusion that the protestants to an application for a fresh groundwater use permit need not identify the specific waste that would occur. The Oklahoma Supreme Court has left the responsibility to assess and resolve the issue of waste with the OWRB, as the legislature intended.

V. CONCLUSION

The decision in *Mobil Oil* can be looked at as both a beginning of the supreme court's recognition of legislative intent and an end to unrestrained judicial intervention in administrative procedures. Although the five-to-four decision¹⁸⁸ was close, a major turning point in Oklahoma Groundwater Law has now been reached.

The Oklahoma Supreme Court decided unanimously that fresh groundwater could be transported away from the premises where it was produced for use on other lands. This conclusion stands for the court's recognition that their application of the reasonable use doctrine was usurped when the legislature enacted the revised version of the 1972 Oklahoma Groundwater Law.

The legislature purposefully took the determination of which form of water law, English or American, Oklahoma should follow away from the state courts. By enacting a permit system with specific requirements and by establishing an administrative agency, the OWRB, to oversee the application of the statute, the legislature indicated that the courts' function would be relegated to judicial review. After thirty-six years, the Oklahoma Supreme Court has finally accepted that decision.

The supreme court did not define waste per se in Mobil Oil as it applies to tertiary oil and gas recovery in conjunction with the use of Oklahoma fresh groundwater. Moreover, the majority stated that the decision as to what does or does not constitute waste is an administrative decision for the OWRB. 190

Mobil Oil established for the OWRB just what kind of evidence, and the specific detail the supreme court will require when reviewing an OWRB finding that waste will not occur. Armed with legislative author-

^{187.} Id.; see supra notes 89-92 and accompanying text.

^{188.} Mobil Oil, 711 P.2d at 48.

^{189.} Id. at 41.

^{190.} Id. at 44.

ization to permit utilization with a minimum life of twenty years for fresh groundwater basins and the court's evaluation of standards regarding waste, the OWRB task, if not easier, is at least clearer; and potential applicants have a better understanding of the nature of the evidence they must include in order to convince the OWRB that waste by depletion or by pollution will not occur.

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