Federal Estate Tax - Fixed Monthly Payments to Surviving Spouse Qualify for the Marital Deduction

Lawrence D. Stuart Jr.
tion of gas pipeline right-of-way easements have also been decided. So far the Internal Revenue Service has lost on the merits in all three cases. In these cases the courts have consistently held that all that is required is a "reasonable approximation" or "rough estimate" of the length of useful life of an asset for the taxpayer to be allowed a depreciation deduction. Nevertheless, the Revenue Service has persisted in maintaining that an estimation or approximation was insufficient to comply with the requirement of "reasonable accuracy." It appears that final settlement of the controversy as to where the line is to be drawn must await either a decision by the Supreme Court or a change in the regulations by the Treasury. In the meantime, the taxpayer has three decisions in his favor. It makes little sense for the Revenue Service to continue to refuse to allow any depreciation and distort the taxpayer's income merely because he cannot compute the useful life of the rights-of-way with mathematical precision.

As suggested above, perhaps the problem could be resolved easily by recognizing that the rights-of-way are not intangibles at all, but tangibles, merging with the construction cost, line pipe and other equipment to become one indivisible and inseverable pipeline system. The Revenue Service has recognized that certain expenditures, intangible when viewed individually, become merged into the cost of the tangible asset to which they are related and are depreciable or depletable. For example, intangible drilling costs incurred in drilling an oil well are expensed or capitalized at the election of the taxpayer. Other examples are attorneys' fees and architect, engineering and contractor's fees incurred in the construction of a tangible asset. If the rights-of-way were characterized as tangibles then proof of the useful life of the related pipeline would be far easier.

The importance of *Shell Pipe Line Corp. v. United States* is that its ultimate decision, after appeal, will have a tremendous impact on the oil pipeline and related industries. In fact, presently, there are some twenty-one cases pending in the court of claims and the United States district courts on this very issue. It remains to be seen whether the holding in *Shell*—that the primary trunk line rights-of-way costs incurred by an oil pipeline common carrier are depreciable because such assets have a limited useful life which can be estimated with reasonable accuracy—will stand on appeal.

*Robert M. Bandy*

---

**Federal Estate Tax — Fixed Monthly Payments to Surviving Spouse Qualify for the Marital Deduction**

Decedent's will set up a trust from which his widow was to be paid a

---


fixed sum of money each month.1 The widow was also given the power to appoint the entire trust corpus. On decedent’s estate tax return, his executor claimed that a portion of the trust was deductible from the gross estate under section 2056(b)(5) of the Internal Revenue Code of 1954.2 That section permits a deduction in respect to a property interest passing from a deceased husband to his widow, if the widow “is entitled for life to all the income from the entire interest, or all the income from a specific portion thereof . . . with power . . . to appoint the entire interest, or such specific portion . . . .” The executor contended that the dollar amount of corpus needed to produce, each month, a sum of money equal to the widow’s stipend could be determined by actuarial computation.3 He argued that this computed dollar amount was a “specific portion” within the purview of section 2056(b)(5). However, the Commissioner refused to allow a deduction because the claimed “specific portion” was a fixed sum rather than a “fractional or percentile share” of the entire trust, as required by the Treasury Regulations.4 The Third Circuit,5 reversing the district court, agreed with the Commissioner. Because this decision conflicted with a Seventh Circuit case,6 the Supreme Court granted certiorari. Held, reversed:


I. DEVELOPMENT OF THE “SPECIFIC PORTION” CONCEPT

The marital deduction was created by the Revenue Act of 1948.7 The object of that legislation was to “equalize the effect of estate taxes in community property and common-law jurisdictions.”8 In a community prop-

---

1 The widow was to receive $300 per month until decedent’s youngest child reached eighteen, and $350 per month thereafter. If the trust income was insufficient to meet the payments, corpus could be invaded to make up the difference. If the income exceeded the amount to be paid, the excess was to be accumulated.


3 The terms “husband” and “widow” are used for sake of convenience. All remarks should be read as applicable to either spouse.


5 The executor contended that, because corpus could be invaded to meet the monthly payments (see supra note 1), the widow’s monthly stipend was, in effect, an annuity. Brief for Petitioner, at 19, Northeastern Pa. Nat’l Bank & Trust Co. v. United States, 387 U.S. 213 (1967). Hence, he proposed that the “specific portion” be computed using the prescribed Treasury formula for annuity-valuation. Treas. Reg. § 20.2056(b)-7 (1958). Though the district court had accepted this approach, the Supreme Court rejected it as “incorrect,” Northeastern Pa. Nat’l Bank & Trust Co. v. United States, supra at 225, presumably because the court felt that, under the language of § 2016(b)(5), a “specific portion” could only be the dollar amount of corpus which would produce an income equal to the widow’s monthly stipend. The number of years the stipend is to be paid is irrelevant.


9 Citizens Nat’l Bank v. United States, 359 F.2d 817 (7th Cir. 1966), discussed infra, text accompanying notes 31 and 32.


erty state the wife is considered the fee simple owner of one-half of the community wealth. Thus, when the husband dies only his portion of the estate is taxed. Taxation of the wife’s one-half is deferred until her death. The marital deduction was an attempt to place the common law testator on a par with his community property counterpart by allowing him to transfer up to one-half of his adjusted gross estate\(^2\) to his widow free from estate taxes.

At the time the marital deduction was enacted, Congress realized that perfect geographic tax equality could not be achieved because of the inherent differences between community and separate property.\(^3\) However, Congress was also aware that an approximation of equality could best be accomplished by limiting property interests which qualified for the marital deduction to those of a fee simple quality.\(^4\) If a property interest of less than fee quality (e.g., a trust) is permitted to qualify for the deduction, common law residents will enjoy a “qualitative advantage” over community property inhabitants. The advantage is in the amount of control the deceased husband can exert over his widow’s interest. A community property widow takes her share of the estate in fee simple. Thus, her deceased husband cannot influence her use and enjoyment of the property through his will or by any other means.\(^5\) The settlor of a trust, on the other hand, can exert a good deal of control over his widow’s interest.

However, Congress did not wish to prejudice the prudent disposition of property by trust in common law states;\(^6\) therefore it provided, in the Revenue Act of 1948, that bequests in trust could, under certain conditions, qualify for the marital deduction. To reduce to a minimum the qualitative advantage generated by the inclusion of trusts, Congress imposed the dual requirements that the widow have the sole right to all the income from the trust, and the sole power to appoint the entire corpus. These requirements insured that a testator who passed an interest to his widow by “marital deduction trust” gave her virtually all the rights of a fee simple owner in respect to that interest.

Unfortunately, the wording of the 1948 provision produced some undesired results. The courts construed the requirements that the widow receive all the income from the trust and have power to appoint the entire corpus to mean that a bequest granting anything less did not qualify for

\(^1\) **INT. REV. CODE of 1954, § 2056(c)(1).** For an enumeration of items included in the adjusted gross estate, see Treas. Reg. § 20.2056(c)-1(b) (1958).


\(^3\) S. Rep. No. 1013, supra note 13, pt. 1, at 28. There it was said: “[T]he interest in property must pass outright to the surviving . . . spouse to qualify for the marital deduction. . . . This will equate the decedent in the common-law State with the decedent in the community property State who cannot by his will effect [sic] in any way the surviving spouse’s interest in the community property.”

\(^4\) A community property husband may control, to some extent, his widow’s use of the property through the “widow’s election.” Under this device, the husband bequeathes the widow a life estate in all the community property, with a remainder to the children. The widow may then elect to take the life estate or to take her one-half community interest in fee simple. Of course, the husband’s ability to control the widow’s interest is contingent on her election. See Comment, *The Widow’s Election—A Study in Three Parts*, 15 Sw. L.J. 85, 134 (1961).

the marital deduction. Thus, a testator who wished to provide for more than one person and still qualify for the marital deduction had to establish multiple trusts. To remove this needless burden, Congress revised the marital deduction provision in 1954 to permit the qualification of a "specific portion" of a trust, if the widow had sole income rights from, and a sole power of appointment over, that portion.

II. THE "SPECIFIC PORTION" ENIGMA

A definition of "specific portion" was not included in the 1954 legislation. Moreover, the Senate and House Committee reports on the subject were likewise devoid of any clear-cut explanation. The meaning of the term was thus left open to speculation. It was immediately apparent that a property interest of a nature somewhat different from a fee simple—a fixed dollar amount—could arguably fall within the wording of the new provision, section 2056(b) (5). If a fixed "specific portion" could qualify for the marital deduction, the qualitative advantage of common law residents would be increased: the owner of a fee simple, e.g., a community property widow, faces the possibility that a declining market may dissipate the value of her interest. The holder of a fixed interest faces no such risk. This disparity can be demonstrated by the following example: Assume a trust, at the time of the husband's death, contains $2,000, and the husband's will gives his widow income rights over a fixed $1,000 and appointment power over the entire trust. A depreciation in the trust corpus to $1,500 does not infringe on the widow's right to income from $1,000. Under similar circumstances in a community property state, the widow's community one-half interest would decline to $750. If the value of the property interest appreciates the situation is reversed, but in both cases the widow having a fixed "specific portion" is insulated from one of the chief incidents of a fee simple, the risk of the market.

With the foregoing facts in mind, the Commissioner sought to formulate a definition of "specific portion" which would not alter the nature of property interests which qualified for the marital deduction. He issued a Regulation stating that a "specific portion" had to be expressed as a fractional or percentile share of the entire trust in order to qualify. Under this definition, the interest which the widow received would continue to bear a proportionate share of the market risk. For instance, a widow given income rights over one-third of a trust and appointment power over the entire corpus would get one-third of the total income produced regardless of variations in the value of the corpus. However, whether the Commissioner's definition best effectuates the congressional policy of geographic tax equality is a question on which courts have not agreed.


18 The widow's income rights and appointment power need not be coextensive. Gelb v. Commissioner, 298 F.2d 544, 550 (2d Cir. 1962). However, since both are necessary to qualify a "specific portion" of a trust for the marital deduction, the smaller of the two necessarily controls the size of the "specific portion."

19 Treas. Reg. § 20.2056(b)-1(c) (1958).
III. THE CIRCUIT COURT DECISIONS

The "fractional or percentile" definition has been tested in three leading circuit court cases. Though all three courts rejected the restrictive bounds of the Regulation, they did not agree as to what constitutes a "specific portion." The pathfinder in the realm of "specific portion" was a 1962 case, Gelb v. Commissioner.20 There a widow was granted the right to all the income from a trust, and the power to appoint the entire corpus. However, the trustee was given the power to invade corpus up to $5,000 per year for the benefit of testator's child. Because of the trustee's power,21 the entire trust could not qualify for the marital deduction. The widow nevertheless contended that a "specific portion" of the trust, namely, that amount of corpus which was not subject to the trustee's raiding power, met the marital deduction requirements of section 2056(b)(5). She urged that the court compute by actuarial formula the maximum amount of corpus which the trustee could withdraw,22 subtract this amount from the value of the entire corpus, and treat the remainder as a "specific portion" over which she had sole income rights and appointment power.

In the Commissioner's view, the widow's interest was not a "specific portion" because it was not expressed in fractional terms23 and thus did not bear a proportionate share of the market risk. In fact, the widow's portion was subject to all the market risk, because it fluctuated while the non-qualifying part was a fixed sum. But the Second Circuit was not persuaded by the Commissioner's argument that Congress had intended to limit the interests which could qualify for the marital deduction to those akin to a fee simple.24 Thus, the court disapproved the "fractional or percentile" Regulation and granted the deduction, finding that Congress had "nowhere indicated any policy that the deductibility of a 'specific portion' should be governed by the possibility that the spouse's portion will change in value relatively more or less than the clearly non-qualifying part."25

Since the widow's interest in Gelb was subject to market fluctuation, its qualification as a "specific portion" produced no increase in the qualitative advantage of common law residents. However, a more difficult question was presented by the instant case, Northeastern Pennsylvania National Bank & Trust Co. v. United States,26 and the virtually identical Citizens National Bank v. United States.27 These two cases involved claims for marital deductions on actuarily computed "specific portions" which were fixed dollar amounts. As previously noted, a fixed "specific portion" is an interest not at all similar to a fractional share or a fee simple, and its qualification for the marital deduction would increase the qualitative advantage

---

20 298 F.2d 544 (2d Cir. 1962).
21 The widow did not have the sole power to appoint the entire trust corpus, as required by § 2056(b)(5).
22 Computed as $5,000 times the combined life expectancies of the widow and child.
23 The term "fractional" is hereafter used to signify either a fractional share or a percentile share of a trust.
24 See infra, text accompanying notes 34-37.
25 Gelb v. Commissioner, 298 F.2d 544, 551 (2d Cir. 1962).
26 163 F.2d 476 (1d Cir. 1966).
27 359 F.2d 817 (7th Cir. 1966).
of common law residents. Thus, the issue was squarely presented: Did section 2056(b)(5), when it altered the marital deduction provisions to permit a qualifying "specific portion," expand the class of qualified interests to include those bearing no market risk?

The Northeastern and Citizens courts disagreed on the answer to this question. The Seventh Circuit, which heard the Citizens case, rejected the "fractional or percentile" Regulation, and ruled that the widow's interest was a "specific portion" within the meaning of section 2056(b)(5). The court cited Gelb as controlling the question of congressional intent underlying the marital deduction. Congress had intended to equalize estate taxes by making the marital deduction readily available to common law residents. Thus, in the absence of any restrictive language in the marital deduction provisions, "specific portion" should be liberally construed to include a fixed dollar amount. The court then approved the calculation of the deductible "specific portion" as the dollar amount of corpus required to produce, at three and one-half per cent, a monthly income equal to the widow's stipend.

In Northeastern the Third Circuit disagreed with the interpretation of legislative history espoused in Gelb and Citizens, and ruled that the widow's interest was not a "specific portion." That court did not, however, hold that an interest in trust had to meet the "fractional or percentile" test to qualify for the deduction. Perhaps with a view toward Gelb-type situations, where there is no fractional share but the interest is nevertheless subject to market fluctuation, the Third Circuit formulated a "virtual owner" test. The court reviewed the legislative history of the Revenue Act of 1948 and concluded that Congress had intended, in the interest of geographic tax equality, to restrict the marital deduction to instances where the widow was granted the equivalent of a fee simple. One of the rights of a fee simple owner, implied the court, was the right to all the income from his interest. Therefore, a marital deduction should not be allowed on an actuarially computed "specific portion" unless the computation used "succeeds in isolating that part of the corpus from which the survivor is entitled to all the income from her lifetime . . . ."

The court then noted that the only computation which could isolate a "specific portion" from which the widow was entitled to all the income was one which took into account the maximum income which could be produced by the corpus in a given month. The "specific portion" could then be computed as the ratio between the maximum income potential of the corpus, for instance, $500, and the amount required to be paid to the widow each month, $300, or three-fifths. However, the court felt that this computation could not be made because the maximum income potential of

---

28 Id. at 820.
30 The court relied on the statement that the marital deduction would be available "where the surviving spouse, by reason of her right to the income and a power of appointment, is the virtual owner of the property." S. Rep. No. 1013, pt. 2, supra note 13, at 16.
the corpus was not known and could not be accurately estimated,\textsuperscript{19} and thus denied the claimed deduction.

IV. The Supreme Court Decision

The conflicting circuit court decisions merely added to the confusion surrounding the definition of "specific portion." The Supreme Court granted certiorari in \textit{Northeastern} in order to clear up this uncertainty. After a close look at the legislative histories of both the 1948 and 1954 marital deduction provisions, the court concluded that the \textit{Gelb} and \textit{Citizens} courts had correctly determined congressional intent in regard to the marital deduction. Congress had intended, said Justice Fortas' majority opinion, to equalize the geographic effect of estate taxes by affording "a liberal 'estate-splitting' possibility to married couples."\textsuperscript{20} Thus "specific portion" should be liberally defined to include an actuarially computed, fixed dollar amount of corpus.

The Court found a liberal intent primarily because there was no expressly restrictive language in the legislative histories of either the 1948 or the 1954 provisions.\textsuperscript{21} Although the Commissioner insisted that a phrase found in a Senate Finance Committee Report\textsuperscript{22} on the 1948 Act indicated that Congress had intended the marital deduction to apply only where the widow was the "virtual owner"\textsuperscript{23} of her interest, the Court dismissed that language as "irrelevant"\textsuperscript{24} when considered in context. Congress' concern, said the Court, was to insure that the widow had all the rights of a fee simple owner, \textit{i.e.}, the sole right to income and the sole power to appoint, and not to require that the \textit{interest itself} be the equivalent of a fee simple. Thus, the Supreme Court repudiated the Third Circuit's "virtual owner" test, stating: "Obviously, Congress did not intend the deduction to be available only with respect to interests equivalent to outright ownership, or trusts would not have been permitted to qualify at all."\textsuperscript{25}

The Court next discussed the feasibility of a computed "specific portion." The Third Circuit had objected to computation because the lack of real

---

\textsuperscript{19} The Court's objection to the use of assumed, "reasonable" income factors to compute an estimated maximum income potential seemed to be that this computation would not result in a "specific portion" from which the widow was certain to receive \textit{all} the income, as required by section 2016(b)(f). The Court noted that, if a "specific portion" was computed using an assumed investment constant, say 3 and ½ percent, excess income would be produced from this portion whenever the real market rate of return exceeded the assumed rate. The widow would not be entitled to this excess, because under the terms of the will it would have to be accumulated. This objection overlooks the fact that qualification for the marital deduction is determined only at the time of decedent's death, with no inquiry into possible subsequent changes in circumstances. \textit{Jackson v. United States}, 376 U.S. 103 (1964).


\textsuperscript{21} H.R. REP. No. 1337, 83d Cong., 2d Sess. (1954), and S. REP. No. 1662, 83d Cong., 2d Sess. (1954), contain no mention of a "fractional or percentile" requirement. The Court was further impressed by the fact that the Technical Amendments Act of 1958, § 93, 72 Stat. 1668 (1958) makes "The more realistic rules of the 1954 Code" apply retroactively to the 1948 marital deduction.

\textsuperscript{22} The phrase was that which the circuit court had earlier relied on in denying the deduction. See \textit{supra} note 29.

\textsuperscript{23} S. REP. No. 1013, \textit{supra} note 13, at 28.

\textsuperscript{24} Id. at 16.

investment constants made accurate estimation of the maximum income potential of the corpus impossible. The Supreme Court disagreed. Though admitting that perfect projection of future rates of return was not possible, the court concluded that an acceptable specific portion could be estimated by using reasonable market conditions to compute the maximum income potential of the corpus. However, the court did not specify a formula for computation, but remanded for such a determination.

Justice Stewart, in his dissent, disagreed with the majority’s determination of congressional intent. He felt that the “liberalism” which the majority had injected into the marital deduction would not only prove troublesome to estate planners, whose profession demands predictability, but also would lead to a “tax avoidance scheme” for common law residents. The latter conclusion was based on the language of section 2056(b) (5). Justice Stewart noted that the provision reads: “[The widow must receive] all the income from a specific portion . . . with power . . . to appoint . . . such portion.” From this, he deduced that if the widow’s rights to income could be expressed in fixed terms, it followed that her power of appointment could be likewise stated. In such a case, since it is the widow’s power of appointment which controls the amount taxable to her estate, an increase in the value of the corpus could result in tax avoidance by common law residents.

To illustrate his point, Justice Stewart gave the example of a $200,000 trust, with the widow having income rights and a power of appointment over a fixed $100,000, and the testator’s children having income rights from the residue, their remainders to vest when the widow dies. If at the time of the widow’s death the corpus has increased to $400,000, only the amount which the widow can appoint, $100,000, is taxable to her estate. The remaining $300,000 passes tax free to the children. Under the same circumstances in a community property state, the widow’s 50 percent community interest would make $200,000 of the expanded corpus taxable to her estate, and only $200,000 would pass tax free to the children. This “quantitative advantage” could be avoided, Justice Stewart felt, only by restricting “specific portion” to a fractional or percentile share of the trust.

V. Conclusion

The Supreme Court’s conclusion that Congress intended to create a liberal, readily available, marital deduction represents a contrast to the well accepted principle that tax deductions are to be strictly construed. Moreover, the Northeastern decision overlooks the fact that the overriding purpose of the marital deduction provision, regardless of whether Congress intended that it be liberally construed, was to equalize the tax discrepancies in the two jurisdictions. Northeastern does not equalize. The case grants

---

40 Id. at 229.
41 Id. at 227.
42 INT. REV. CODE of 1954, § 2016(b) (5).
43 Id. § 2041.
45 See supra note 11.
a "qualitative advantage" to common law residents, for it allows a common law decedent greater control over his surviving spouse's interest (by fixing the amount which she can receive each month), as well as insulating the spouse from market risk.

The Court's position that the enactment of the marital deduction with certain inequality "built-into the statute" shows that Congress did not intend to restrict qualified interests to those akin to a fee simple seems untenable. The marital deduction trust was conceived as a delicate compromise between the purpose of geographic tax equality and a recognized need for the continued availability of the trust as a means of disposing of property. Congress balanced these two interests in setting out the requirements for the marital deduction trust in 1948. Implicit in the requirements was that the widow's interest be subject to the risk of the market. The legislative history of the 1954 revisions of the marital deduction reveals only an intent to remove an unforeseen complication resulting from the requirements that the widow receive all the income from the trust and be empowered to appoint the entire corpus. There is no indication of a congressional desire to change the nature of interests qualified for the marital deduction. In the absence of a specific command from the 1954 Congress, the Supreme Court should not have abandoned the implied requirement of market risk.

Justice Stewart's dissent levels a more serious charge at Northeastern, the charge that it will lead to a quantitative advantage for common law residents. Under the facts set out in his example, this is certainly true. However, if, in the example, the corpus of the trust had decreased rather than increased, the community property residents would have paid the lesser tax. This suggests that the real advantage offered common law residents by Northeastern (if Justice Stewart is correct that it will allow the widow's power of appointment to be fixed) is not the certain escape of taxes but the choice of whether to fix the widow's appointment power. A common law resident can speculate as to whether the market will rise or fall, and give his widow either a fixed specific portion or a fractional share according to his speculation. If he thinks the value of the corpus is likely to increase, he can fix his widow's "specific portion" and the estate will reap the benefits noted in Justice Stewart's example. If, on the other hand, the corpus is likely to decrease in size, the common law testator can give his widow the power to appoint a fractional share and receive the same tax treatment afforded community property residents.

Whether Justice Stewart is correct in that Northeastern will allow the widow's power of appointment to be expressed in fixed terms remains to be seen. The majority hinted that it might not, stating that the "specific portion" determined by the power of appointment involved a "quite diff-
ferent question than the "specific portion" determined by income rights. This statement hardly removes the uncertainty as to what constitutes a "specific portion." This question should be settled quickly, and preferably settled by a ruling that the widow's appointment power cannot be stated in fixed terms.

Lawrence D. Stuart, Jr.

Oil and Gas Lessee's Right To Use Surface Owner's Fresh Water Supply for Waterflooding

Waterflooding, as a device for secondary recovery and pressure maintenance operations on oil leases, has become a fairly widespread and significant technique in recent years. Not only is the increased production obtained by the process of value to the lessee and the royalty owner, but the public in general also benefits because less oil is left unrecoverable in the ground. However, these benefits do not always flow without their price. Although most waterflooding operations now conducted in Texas utilize salt water to increase pressure in the producing reservoir, technical problems in some areas require or encourage oil companies to inject fresh water rather than salt water in their waterflood projects. Where fresh water is abundant, its use for waterflooding creates few problems; but in many areas, such as West Texas, fresh water is a scarce, depleting asset, and waterflooding operations only add another burden to a water supply already overburdened by irrigation, municipal, and other demands.

I. Sun Oil Co. v. Whitaker

In 1967 the first Texas case dealing with an oil company's right to use fresh water for waterflooding reached the appellate courts. The dispute arose on a tract of land in Hockley County which Sun Oil Company had leased from L. D. Gann in 1947. The defendant, Earnest Whitaker, owned title to the surface of this tract through a 1948 conveyance to him of Gann's retained title to the surface. Since the late 1940's the tract has been producing oil, but in 1965 Sun decided to begin waterflooding operations. The Texas Railroad Commission granted a permit for this purpose, specifically authorizing Sun to inject fresh water from the Ogallala formation. The Ogallala, the only source of fresh water on the land, also con-


1 Oil in its normal state under the ground is under pressure from some source, usually gas or salt water. When the oil reservoir is tapped by a well, this pressure pushes the oil toward the hole. Invariably, some of this pressure is lost as oil is produced, and after a period of time the pressure in the reservoir becomes so low that the oil is no longer pushed to the well. In order to prevent this decline in pressure, oil producers pump some substance into the reservoir from other wells. If this operation is conducted carefully, the remaining oil in the reservoir will be pushed ahead of the injected substance toward the producing well. "Waterflooding" refers to the injection of fresh or salt water for these operations, although gas is also suitable. For a layman's discussion of the engineering aspects of oil production, see Interstate Oil Compact Comm'n, Oil and Gas Production (1951).


5 Water in the Ogallala formation is subject to depletion just like oil and gas. See United States v. Shurbet, 147 F.2d 103 (5th Cir. 1945).