State Groundwater Sovereignty After Sporhase: The Case of the Hueco Bolson (with D. Frownfelter)

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STATE GROUNDWATER SOVEREIGNTY
AFTER SPORHASE: THE CASE
OF THE HUECO BOLSON

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I. Introduction: State Water Allocation
and the Dormant Commerce Clause

When, if ever, must one state share an interstate aquifer with users in
another state? Prior to 1982, all states thought the answer to that question
was “never.” Groundwater was presumed a subject of exclusive state
control because it was the property of either the state or of the owner of
the overlying land.1 Furthermore, the United States Supreme Court had
never directly equitably apportioned an aquifer.2 After the Supreme Court’s
1982 decision, Sporhase v. Nebraska,3 the answer to when a state must
share its interstate aquifers with out-of-state users changed from “never”
to presumptively “always.” In Sporhase, the Court held that groundwater
is an article of interstate commerce and that state bans on the export of
groundwater presumptively violate the dormant commerce clause of the
United States Constitution. However, the Supreme Court acknowledged
that water is an essential, unevenly distributed resource and left open the

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Oklahoma Law Library, the editors and staff of the Oklahoma Law Review have relied upon
the author’s expertise in assuring the technical accuracy of these sources—Ed.

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1. The Supreme Court originally held that state resource conservation measures which
prohibited interstate exports were immune from the dormant commerce clause. Hudson County
Water Co. v. McCarter, 209 U.S. 349 (1908). This decision, however, was always wrong.
Conservation is simply the application of the state’s police power to natural resources.
Subsequent cases eroded its holding. See West v. Kansas Natural Gas Co., 221 U.S. 229 (1911);
Hughes v. Oklahoma, 441 U.S. 322 (1979); City of Altus v. Carr, 255 F. Supp. 828 (W.D.
Tex. 1966), summarily aff’d, 385 U.S. 35 (1966). Still, the western states clung to Hudson
County because of federal deference to state water law. See infra notes 29-32.

2. Fisher, Equitable Apportionment of Interstate Groundwaters, 21 Rocky Mt. Min. L.

possibility that a water-short state could constitutionally decide to conserve an aquifer to meet the future needs of its own citizens. In a series of related opinions, the Supreme Court held that the dormant commerce clause does not apply where a state is a resource-market participant as opposed to a resource-market regulator. Thus, western states could entertain the possibility that the demonstrably arid state defense or the water-market participant defense would restore the pre-Sporhase level of exclusive state sovereignty.

Restoration of the pre-Sporhase level of state autonomy is not easy. Sporhase raised more questions than it answered. In its equitable apportionment and compact interpretation decisions, the Supreme Court has recognized that states have a right to a fair share of interstate resources regardless of comparative efficiencies. The concept of equitable apportionment is not fundamentally inconsistent with the idea that states have a duty to share common resources. However, the balance between a state's protected entitlement to resources and a state's duty to share resources was potentially recast by Sporhase. Justice Stevens, writing for the majority, drafted an antiprotectionist, dormant commerce clause opinion which neither established standards for the "demonstrably arid state" defense nor indicated whether such a defense can ever overcome the anti-interstate discrimination policies of the dormant commerce clause. Similarly, the Court failed to establish standards to distinguish between constitutional in-state-user preferences through market participation and regulation that unconstitutionally discriminates against interstate commerce. This distinction is crucial because the application of market participation principles to water allocation often involves only the dubious assertion that a state has a proprietary interest in water because it holds that water in trust for the public.

8. The source of the free trade rationale for the dormant commerce clause is Justice Jackson's opinion in P.F. Hood & Sons v. Du Mond, 336 U.S. 525 (1949), which traced the fear of commercial welfare among the states as the motivating force for "the desire of the Forefathers to federalize regulation of foreign and interstate commerce." Id. at 533. New Energy Co. of Ind. v. Limbach, 486 U.S. 269 (1988), is a recent articulation of the antiprotectionism rationale for the dormant commerce clause. For an exhaustive modern defense of the dormant commerce clause as a federal barrier to state protectionism, see Regan, The Supreme Court and State Protectionism: Making Sense Out of the Dormant Commerce Clause, 84 Mich. L. Rev. 1091 (1986).
10. The assertion that states own water in trust for the public was originally a declaration
Sporhase was an easy case because it fit the paradigm of a state statute intended to grant a competitive preference to in-state citizens. Nebraska's ban on the export of water was a reflexive, parochial statute that did little more than assert "it's mine, not yours." Nebraska could not demonstrate that a single landowner's desire to use Nebraska water on the Colorado portion of his land impaired any but the most abstract state conservation interests. The weakness of Nebraska's position was emphasized by the fact that Nebraska did not have a strong groundwater conservation policy compared to that of Colorado. Nebraska's export ban was similar to other state's conservation measures stricken by the Supreme Court as unconstitutional because they offended dormant commerce clause policies prohibiting discrimination in interstate trade.

A. The Hueco Bolson Controversy

The first concrete test of Sporhase's reach occurred when El Paso, Texas applied to appropriate unappropriated groundwater in the New Mexico portion of the Hueco Bolson aquifer, which overlies both states. Like Sporhase, the Hueco Bolson controversy pitted two states with radically

of the state's police power to regulate water use. See Trelease, Government Ownership and Trusteeship of Water, 45 Calif. L. Rev. 638 (1957). In the nineteenth century, states made this assertion to shore up their then contested claims that they could regulate the acquisition of private property rights. The police power gives the states great power to reallocate water. See Sax, The Limits of Private Rights in Public Waters, 19 Envtl. L. 473 (1989). Simple declarations of trust ownership, however, do not guarantee immunity from the dormant commerce clause. In New England Power Co. v. New Hampshire, 455 U.S. 331 (1982), Chief Justice Burger rejected a state's claim that it could prohibit the export of hydroelectric power because it owned a navigable river in part because he characterized the claim as one of resource regulation. Cf. New Energy Co. of Ind. v. Limbach, 486 U.S. 269, 277 (1988) (subsidization of in-state industry is not market participation).

11. The statute prohibited withdrawals for out-of-state groundwater use unless the host state granted reciprocal export privileges. Colorado did not grant reciprocal privileges in part to conserve its share of the Ogallah aquifer. Thompson v. Colorado Ground Water Comm'n, 575 P.2d 372 (Colo. 1978). More generally, Nebraska and Texas have clung to common law capture rules while other states such as Colorado and New Mexico have adapted the law of prior appropriation to manage the decline of the Ogallah. See infra note 14.


13. The Hueco Bolson controversy consists essentially of the following phases:


3) El Paso's constitutional challenge to the so-called 40-year water right development time period limitation was dismissed for want of standing. See Order of Dismissal, City of El Paso v. Reynolds, No. SF-85-1069(C) (First Jud. Dist. Court, County of Santa Fe, filed Jan. 21, 1986).

4) Elephant Butte Irrigation District is seeking to obtain a stream adjudication of the Rio
different water conservation policies. The Hueco Bolson controversy is similar to *Sporhase* to the extent that both involve a state's assertion of exclusive right to control its water without reference to interstate demand. However, there are at least three crucial distinctions between the Hueco Bolson controversy and *Sporhase*. Although the legal significance of these distinctions is not clear, each has been the basis of an argument that *Sporhase* permits a state to prefer in-state users to out-of-state users. Each distinction could be a relevant factor in establishing the standards for review of sophisticated water allocation legislation that may create barriers to interstate water movement.

The first factor distinguishing the Hueco Bolson controversy from *Sporhase* is that New Mexico did not initially assert a strong interest in groundwater conservation. Protection of its interest progressed, however,


6) The processing of El Paso's applications for permits to appropriate groundwater from New Mexico resulted in the denial by the New Mexico State Engineer of the applications. See Findings and Order, In re Applications of the City of El Paso, Texas, Public Service Board Nos. HU-12 through HU-71 and LRG-92 through LRG-357 (State Engineer, State of New Mexico, filed Dec. 23, 1987). The denial is pending appeal of an order granting motions to dismiss the appeal for lack of subject matter jurisdiction for failure to properly serve the appeal. See generally Order Granting Motions to Dismiss and Findings of Fact and Conclusions of Law Elephant Butte Irrigation District's Motion to Dismiss Appeal, In re Applications of the City of El Paso, Texas, Public Service Board Nos. HU-12 through HU-71 and LRG-92 through LRG-357, to Appropriate Ground Water from the Hueco and Lower Rio Grande Underground Water Basins, City of El Paso v. Reynolds, No. CV 88-201 (Third Jud. Dist. Court, County of Dona Ana, filed Mar. 2, 1989).

7) El Paso's attempt to reopen its previous federal constitutional challenge to the "conservation and public welfare" criteria based on "as applied" to the applications of El Paso was recently denied. See Unpublished Opinion, City of El Paso v. Reynolds, No. 89-2053 (10th Cir. filed Apr. 13, 1990).

8) A new phase may be about to commence because recent media accounts indicate that El Paso is attempting to convince the Texas Attorney General to initiate an original jurisdiction action in the United States Supreme Court to equitably apportion interstate groundwater resources of the Mesilla Bolson. Scanlon, *U.S. Court Rejects El Paso Suit for NM Water*, El Paso Times, Apr. 19, 1990 at Al, col. 2; and Brock, *El Paso Set for War Over Mesilla Water*, El Paso Herald-Post, Apr. 19, 1990 at B1, col. 1.

Throughout this article, the City of El Paso will be referred to as "El Paso."

THE HUECO BOLSON CASE

from a reflexive export ban to a more rational conservation strategy as the controversy proceeded. The second distinction is that although El Paso was initially denied access to the New Mexico allocation process, as litigation progressed, El Paso was given access. Some commentators have viewed the dormant commerce clause as a doctrine designed to redress the denial of access to the state political process that can result from reflexive discriminatory statutes.\textsuperscript{15} New Mexico’s export ban began as such a statute, but was amended to cure partially the anti-interstate bias. The third distinction is that the Hueco Bolson was unappropriated groundwater, not water captured and reduced to possession. Thus, the case was not a traditional movement of goods that required federal intervention to eliminate state-created barriers to free trade.\textsuperscript{16}

At the root of the Hueco Bolson controversy is a conflict between economic theory and political sovereignty,\textsuperscript{17} which mirrors debates taking place throughout the West concerning the future of water allocation in the post-Reclamation era. For years, economists have compared the value of alternative uses of water\textsuperscript{18} (especially in New Mexico) and criticized, often unjustly,\textsuperscript{19} western water law for failing to provide the incentives to move water from lower to higher valued uses. Sporhase has been hailed as a prime example of judicial endorsement of the value of economic efficiency.\textsuperscript{20} El Paso’s rationale for its applications to appropriate New Mexico water is that El Paso’s urban uses are more valuable than New Mexico’s agricultural uses.

The equation of beneficial use with efficiency is prevalent today,\textsuperscript{21} and the weakness of New Mexico’s economic rationale for blocking water


\textsuperscript{19} An ongoing research project conducted by the University of Colorado Natural Resources Law Center (Larry MacDonnell, director) on water transfers throughout the West has found that unduly high transaction costs do not exist with respect to water transfers. \textit{See MacDonnell, Changing Uses of Water in Colorado: Law and Policy}, 31 \textit{Ariz. L. Rev.} 783 (1989).


diversions to El Paso placed New Mexico on the defensive. To counter El Paso's beneficial use arguments, New Mexico initially fell back on the traditional western state distrust of the market. Just as El Paso's position is a classic application of welfare economic analysis to the assignment of property rights, New Mexico's initial defense adopted a counter-theory, long rejected by welfare economics, that a resource has intrinsic, not simply comparative, value.22 State regulation often promotes efficiency, but western states have been strong supporters of the theory that the function of modern government is to subordinate efficiency to distributive justice.23

B. The Constitution and State Allocation Primacy

Constitutional law provides no uniform resolution of this tension between state sovereignty and economic efficiency because of the existence of a federal structure. The dormant commerce clause rejects unlimited state sovereignty and collapses state boundaries in the interest of maintaining a union free of excessive protectionist barriers. The dormant commerce clause does not, however, forbid all state actions that deny equal access to resources.24 The coexistence of a market participation doctrine with the dormant commerce clause demonstrates this tension as does the Court's use of a balancing test that allows legitimate local interests to offset burdens on interstate commerce.25 The important point is that Sporhase so tilted the balance toward unlimited interstate access that New Mexico could not simply reassert its ownership in more sophisticated

22. The theory that water has an independent community value has support among water policy analysts. See A. MAASS & R. ANDERSON, . . . AND THE DESERT SHALL REJOICE: CONFLICT, GROWTH, AND JUSTICE IN ARID ENVIRONMENTS (1978); Measuring the Community Value of Water, Water and Public Welfare Project, The Udall Center for Studies in Public Policy, University of Arizona and Natural Resources Center, University of New Mexico School of Law (1989). This theory was recently recognized in a major Superfund decision. Ohio v. Department of the Interior, 880 F.2d 432 (D.C. Cir. 1989). The court in this decision invalidated the Department's natural resources damage rules because they adopted a lost value rather than restoration measure. The Department defended its rule as consistent with the welfare economics definition of efficiency. The court conceded the Department's understanding of welfare economics, but refused to accept its relevance. The court stated that, "The fatal flaw of Interior's approach . . . is that it assumes that natural resources are fungible goods, just like any other, and that the value to society generated by a particular resource can be accurately measured in every case . . . ." Id. at 456. The intellectual origins of this idea can be found in the medieval theories of objective value that were thought to be expressed in the idea of a just price. The idea of an objective as opposed to market determined just price was a minor theological position in the 13th century but exerted a major influence on 19th century theories of social justice. See R. deROOVER, LA PENSEE ECONOMIQUE DES SOCIALES: DOCTRINES ET METHODES 62-66 (1971).


The Hueco Bolson controversy is a modern twist on the classic interstate allocation problem: a faster growing downstream state claims a disproportionate share of the interstate “stream” against the slower growing upstream state. The twist is that El Paso seeks to perfect a water right under New Mexico law, not under federal common law. Further, El Paso relied neither on the grace of New Mexico nor the reciprocal enforcement of interstate priorities. Instead, El Paso followed the long standing Lone Star state practice of treating New Mexico as its western colony and asserted that its neighbor had a duty under the United States Constitution to approve the city’s applications for out-of-state groundwater appropriations.

Sporhase and its possible implications for western water allocation have been widely criticized by the western water law fraternity for striking the balance too much in favor of unlimited interstate access. The gist of the argument is that Sporhase, broadly read, is an intolerable intrusion on state allocation primacy. The late Dean Frank Trelease summarized these concerns when he criticized the invalidation of New Mexico’s moratorium on new appropriations in the Hueco Bolson:

Sporhase is right and El Paso is wrong. States can live with Sporhase’s ruling that a state cannot tell its citizens that they cannot sell out of state when it permits them to sell within the state. This applies to both sales of water and sales of water rights. A state cannot expect to prevent the interstate sale of water rights to “preserve the neighborhood” any more than it could prevent a steel mill from closing in a factory town or dictate the way of life to its rural inhabitants. On the other hand, the states cannot live with El Paso. El Paso would require a state to sit by and see other states deprive its people of future opportunities for growth and development, while preserving only “noneconomic” water for the public health and safety of stagnating communities. Without overruling Sporhase, but with some clarifications with regard to shortages and explanations of legitimate local interests, much water might be saved within states on a territorial-opportunity cost theory, discussed later, without freezing out neighboring cities. Neighboring cities might be put


to more expense either because they have to pay the opportunity costs or because they must use available, though more expensive, sources in their own state.28

Western states have always been unjustifiably surprised at assertions of the supremacy clause. The legal consequences of the conservation era, which established the legitimacy of state regulation of property and the need for greater federal involvement in resource allocation, were delayed until 1963. Deference to state law was enshrined as fundamental by Supreme Court decisions and political practice. In *California-Oregon Power Co. v. Beaver Portland Cement Co.*,29 Justice Sutherland concluded that the three post-Civil War acts, culminating in the Desert Land Act of 1877,30 constituted an eternally binding compact between the federal government and the states that the federal government would not assert its authority to allocate waters arising on the public domain. Given the ample water allocation powers vested in Congress under the commerce clause and the property clause of the constitution, federal deference is a presumption not a compact.31

The inevitable erosion of state supremacy began in *Arizona v. California*,32 and continues today. *Arizona v. California* dealt two major doctrinal shocks to the western states. The first shock was the Supreme Court’s recognition that the federal government reserved rights for federal lands as well as for Indian tribes. The second shock was the Court’s recognition that Congress has unlimited power to allocate interstate waters. *Sporhase* dealt a third shock, which is perhaps the most severe, because it created a self-enforcing constitutional doctrine, which is less amenable to political reversal. All three doctrines are subject to congressional modification. Congress need not claim reserved rights; it seldom does. Congress need not preempt Supreme Court apportionments or apportion interstate streams. In fact, Congress has done so only in the unique circumstances that led to the Colorado River legislation, which the Court found to be an apportionment. Congress’s power to immunize state activity from the dormant commerce clause seems to be without limitation as long as fundamental liberties are not impaired by the exercise of that power. The rub is that *Sporhase* applies to a whole range of conflicts such as the Hueco Bolson controversy that may not trigger congressional involvement.

The parties in the Hueco Bolson controversy both tried to avoid *Sporhase* and to use *Sporhase* affirmatively. The parties adopted institutional changes

29. 295 U.S. 142 (1935).
32. 373 U.S. 546 (1963). Similar claims have been made on the Missouri, but the Court has dismissed a petition by South Dakota to quiet its title to blocks of water stored behind reservoirs authorized by the Pick-Sloan plan. *Cf. ETSI Pipeline Project v. Missouri*, 484 U.S. 495 (1988).
in the process. Our conclusions about the impact of Sporhase run somewhat counter to the conventional wisdom that Sporhase is an intolerable inroad on state allocation primacy. As a result of Sporhase, both New Mexico and El Paso have been forced to take positive institutional steps to allocate water in the future. To avoid judicial invalidation of its reflexive anti-export statute, New Mexico was forced to adopt a more flexible out-of-state appropriation statute and to begin the slow process of devising a comprehensive, rational state allocation policy. Ironically, New Mexico's decade-long protectionist position appears to be leading El Paso to the most economically rational allocation solution: the intraregional reallocation of surface water supplies and use of its own groundwater supplies.

II. The Parties and Their Positions

A. El Paso

El Paso\(^{33}\) approaches the problem of future water supply as a classic non-renewable mineral resource issue. Demand is up and the supply is being exhausted. The classic oil and gas solution to such a problem is to increase reserves. El Paso claims that it will have a population of 2,100,000 by 2080 and that it will require 300,000 acre feet of water per year to serve that population. El Paso has eighty percent of the population in the region, which it defines as the reach of the Rio Grande from the Caballo Reservoir in New Mexico to Fort Quitman on the Texas-Mexico border. Although the Rio Grande River runs through El Paso, the city draws most of its water from the Texas side of the Hueco Bolson aquifer, ninety percent of which is owned by the United States. The city estimates that it has 10,000,000 acre-feet in its water account, which will be depleted in thirty to fifty years. Texas' proposed solution fails to recognize that water is different from oil in that water is free whereas oil is not.\(^{34}\) New Mexico quite rationally refused to cooperate


\(^{34}\) After the decade-long litigation, the mayor of El Paso told a New Mexico audience, “We would like to buy New Mexico water at market value when and if it is ever needed.” Brock, Mayor Sees Peace on Horizon in New Mexico Water War, El Paso Herald-Post, Nov. 2, 1989, at A-1, col. 3.
in El Paso’s solution because there was no direct economic benefit to New Mexico.

Groundwater is El Paso’s primary municipal water supply source because the 1906 Water Convention only apportioned Rio Grande water for agricultural use and El Paso initially did not contract with the Bureau of Reclamation (the Bureau) for a share of the stream flow appropriated to the Bureau to construct the Rio Grande Project (Project). In 1949, El Paso contracted for so-called “wild” irrigation water. Moreover, in 1962, the city contracted with the Bureau and the El Paso County Water Improvement District No. 1 to establish the legal framework authorizing El Paso to obtain assignments of Project water from owners of Project lands within the city limits. Thus, historically El Paso’s water use strategy was premised on the use of groundwater not surface water supplies.

The interesting question is why El Paso decided to look across the fence instead of to its own backyard for water supply sources. In retrospect, the decision was costly. The costs to El Paso’s Public Service Board (the PSB) are approaching eight million dollars. To date, no groundwater from New Mexico has been diverted to El Paso and the city has begun to draft settlement proposals. El Paso’s strategy seems to be the product of its water service policies. Historically, El Paso has minimized the use of Rio Grande surface water because of its expense and has limited extraterritorial service in El Paso County. The expense of surface water made reliance on groundwater a


39. The historic generally PSB rule was that only property within the city limits of El Paso was eligible for water service. If the property was not so situated, it had to be annexed in order to be served. Notwithstanding this, however, the PSB has had for almost twenty-five years an official extraterritorial water service policy. With one exception, though, the policy has always been quite restrictive.

PSB’s extraterritorial water service policy can be divided into four eras:

1) The pre-January 11, 1972 policy was very restrictive. Property outside the El Paso city limits could only receive water service if, among other things, the property abutted certain water lines and the building to be served was in existence at the time 1965 aerial photographs
logical policy, and once litigation began, it would have been a strategic error for El Paso to begin exploiting its surface water sources. Moreover, El Paso's water service policies are largely shaped by the location of the city limits of

were made for El Paso's photographic atlas. No line extensions from existing lines were permitted. See PUBLIC SERVICE BOARD, RULES AND REGULATIONS NO. 1 §§ I-1, II-14 (1970); Minutes of the Public Service Board, City of El Paso, Texas, Regular Meeting 3-4 (July 5, 1966).

2) The "Johnson" Policy was in effect from January 11, 1972 to October 25, 1977. The Johnson Policy proved to be the most liberal of the extraterritorial water service policies of the PSB. The Johnson Policy authorized extraterritorial water service to property within the State of Texas and within the extraterritorial jurisdiction (ETJ) (i.e., five miles from the city limits) of El Paso under certain conditions. The conditions consisted of: 1) the payment of specific service charges and frontage fees; 2) the acceptance of standard utility conditions of service; 3) suitable plumbing as inspected by El Paso; and 4) "certification" of appropriateness of post-January 1, 1972 buildings. Line extensions were permitted if certain frontage fees and/or cost deposits were made by the applicant for water service. See PUBLIC SERVICE BOARD, RULES AND REGULATIONS NO. 1 § II-14 (1972); Minutes of the Public Service Board, City of El Paso, Texas, Regular Meeting 3-4 (Jan. 11, 1972).

3) The Johnson Policy was replaced by the "Pearson" Policy. The first seeds of the Pearson Policy were sown on October 25, 1977, when the requirement of a water service line abutting the out-of-city property within the five mile ETJ of El Paso to be served was reinstated. See PUBLIC SERVICE BOARD, RULES AND REGULATIONS NO. 1 § II-14 (1977); Minutes of the Public Service Board, City of El Paso, Texas, Regular Meeting 2-3 (Oct. 25, 1977). The right to make line extensions was also limited to those properties lying within only two miles of the El Paso city limit. Id. The right to make extensions survived for only two more years. In 1979, the Pearson Policy eliminated line extensions except for applicants with pre-September 5, 1979 filing dates who had paid certain costs of extension by December 5, 1979 (later extended to December 31, 1979). See PUBLIC SERVICE BOARD, RULES AND REGULATIONS NO. 1 § II-15 (1979); Minutes of the Public Service Board, City of El Paso, Texas, Regular Meeting 4 (Sept. 5, 1979). This, in effect, prohibited all extraterritorial line extensions for water service. Interestingly, this action coincided with the retention of counsel to initiate the New Mexico litigation. Minutes of the Public Service Board, City of El Paso, Texas, Executive Meeting 3 (Sept. 5, 1979).

4) The Post-Pearson (Present) Policy has been evidenced by further cutbacks in extraterritorial water service. The line extension prohibition remains in effect. PUBLIC SERVICE BOARD, RULES AND REGULATIONS NO. 1 § II-15 (1989) (introductory paragraph). The properties which qualified as "abutting" an existing water line were limited to those with a minimum of 10% of the perimeter of the property to be served abutting on the right-of-way of the street in which there was an existing line. Id. § II-15(7) (1989). Moreover, properties located in municipal corporations or water districts were disqualified from receiving water service notwithstanding the fact they may abut an existing line. Id. § II-15 (1989). The only relaxation of the extraterritorial water service prohibition relates to public schools. The PSB may, by special contract under certain conditions, provide water service to schools located outside the city limits of El Paso. PUBLIC SERVICE BOARD, RULES AND REGULATIONS NO. 1 § II-15(8) (1989); Minutes of the Public Service Board, City of El Paso, Texas, Regular Meeting 2-5 (Nov. 4, 1987).

The rationale historically advanced by the PSB to justify the prohibition of extraterritorial water service is 1) protection of land values and tax base inside El Paso (Minutes of the Public Service Board, City of El Paso, Texas, Regular Meeting 3 (Sept. 5, 1979)); 2) conservation of scarce water resources; 3) promotion of more orderly development; 4) encouragement of in-city development, and 5) elimination of incorporation of communities on the outskirts of El Paso (Id. at 3 (Oct. 25, 1977)).
El Paso. The problem is complicated by the way in which the county has developed.

El Paso's prohibition of extraterritorial water service has induced a set of political subdivisions in El Paso County with jurisdiction over water service outside the city limits of El Paso which are totally separate and distinct from the PSB. Thus, for a full understanding of the municipal water supply acquisition policies of El Paso, one must consider water service institutions in both the city and county, especially the El Paso County Lower Valley Water District Authority (the Authority). The Authority is the second largest water utility in El Paso County. It is second only to the PSB. The service area of the Authority covers approximately 200 square miles. The Authority generally shares the southeast city limit with El Paso and continues approximately twenty-eight miles down drainage along the Rio Grande, almost to the Hudspeth County line. The principal reason for the existence of the Authority and the other special water districts in El Paso County is El Paso's historical reluctance to provide extraterritorial water service. Notwithstanding this policy, population concentrations continue to form within the unincorporated parts of El Paso County. These unorganized population centers are generally known locally as colonias.

Colonias have proliferated in El Paso County. Although colonias have existed for over three decades, they were not systematically studied until January 1987. A precedential study of colonias funded by the Texas Water Development Board found that colonias on the border are characterized by unincorporated areas populated primarily as rural, residential subdivision developments of substandard housing. A rural location is not, however, necessarily a sine qua non of a colonia. Colonias may also be relatively large and urban. On-site, private sewage disposal methods predominate. The inhabitants of colonias are typically of poverty level means. Culturally,
colonias are geographically and socially isolated. Water is obtained from often contaminated shallow groundwater supplies, irrigation canals, garden hoses and other unorganized forms of water hauling.

The colonias of El Paso County, which ring the southern and eastern limits of El Paso in the lower valley of El Paso County, are typical. In El Paso County, colonias are considered to be "residential areas with substandard housing and inadequate water or wastewater services." The Department of Planning, Research and Development for the City of El Paso offers particularly insightful description of colonias in El Paso County as "emerging communities located adjacent to and outside the city limits of El Paso lacking adequate infrastructure." Indeed, ninety to ninety-five percent of the residential developments in the Lower Valley are colonias. In these colonias, urban growth has historically been uncontrolled. Public health problems abound as domestic water supplies are drawn from a variety of unsafe sources such as barrels with toxic residues and contaminated shallow groundwater. The colonias of the Lower Valley are populated mainly by low income residents predominantly of Hispanic descent. They are often recent immigrants or families emerging from public housing projects. The residents of colonias live in these areas, despite the lack of water systems, because they strongly desire to fulfill the American dream of home ownership. This area is the only source of affordable land for the construction of single-family residences. Dwellings in colonias range from otherwise normal housing to conglomerations of mortar, brick, concrete and plywood and other makeshift structures.

The Authority was created in 1985 to solve the colonia phenomena. El Paso's reluctance to provide city services to the colonias left no other policy alternative. Originally, the Authority was a statutory shell. It had no water sources, no equipment, no system, no funds and no staff. Consequently, the initial approach of the Authority was to work constructively and cooperatively with the PSB to explore a plan in which the PSB would provide Lower Valley water service on behalf of the Authority. These overtures were


51. PARKHILL, SMITH & COOPER, WATER AND WASTEWATER MANAGEMENT PLAN FOR EL PASO COUNTY, TEXAS II-38 (1988) [hereinafter COUNTY WATER PLAN].
53. COUNTY WATER PLAN at II-38 to II-41.
soundly rebuked. The Authority was left with no alternative but to secure its own raw water supply and construct and operate its own system. Unfortunately, there is a dearth of potable groundwater in the Lower Valley and all surface water has been appropriated by the United States for the Rio Grande Project.\(^{55}\)

In the spring of 1987, the PSB was in the process of designing and obtaining financing for its new Southeast Sewage Treatment Plant. This new facility was to have a planned discharge of thirty-nine million gallons of water per day into the Riverside Interceptor Drain or the Riverside Canal. Both of these discharge routes flowed through the heart of the service area of the Authority. The Authority considered reuse of this sewage effluent as a potential raw-water supply because no other economically feasible supply sources were available.

Other than El Paso, the only reasonable source of supply for the Authority in 1987 was irrigation water from the Rio Grande Project. Project water was already appropriated for irrigation use, but the general urbanization of agricultural lands within the Authority and the El Paso County Water Improvement District No. 1 was reducing the demand for irrigation water. However, a transfer of Project water from irrigation use to municipal and industrial use would require successful negotiation with the Bureau and the District of a contract similar to the PSB's 1962 contract.

Both the reuse of water from the Southeast Plant and the use of water from the Rio Grande would have been affected by the PSB's plans to discharge sewage effluent from the Southeast Plant into the District's drains and canals. First, in order to assert a credit for the sewage effluent discharge in the New Mexico litigation, the PSB proposed a discharge point above the Riverside Diversion Dam. For Texas users of Project water supply, all water, regardless of sources, in the channel of the Rio Grande above Riverside Diversion Dam is deemed to be Project water supply.\(^{56}\) For Texas users of Project water, this policy amounts to a trade out on an acre-foot per acre-foot basis of high quality irrigation water stored in Elephant Butte, for low-quality sewage effluent discharged by the PSB. Texas users of Project water have long asserted the right of first use. Second, the PSB proposed a 30-30 discharge water quality parameter, as opposed to a 10-15 or other higher quality discharge. This proposal, in effect, transferred the treatment costs to the Authority, if in fact, the Authority pursued the reuse option.

Both of these discharge proposals were unfavorable to the Authority and to other Texas water users. In the summer of 1987, the Authority, in

\(^{55}\) It should be noted that the reach of the Rio Grande from the Texas-New Mexico line to Fort Quitman, Texas is the last remaining stream segment in Texas which has not been adjudicated. Therefore, the water rights associated with the Rio Grande Project are unadjudicated at this time.

\(^{56}\) Rio Grande Project Texas-New Mexico Contract between the United States of America Department of Interior Water and Power Resources Service and the El Paso County Water Improvement District No. 1 for the Transfer of the Operation and Maintenance of Project Works art. 1(g) at 4 (Mar. 14, 1980) (contract no. 0-07-54-X0904).
conjunction with other local political subdivisions, protested the PSB application for a wastewater discharge permit for the Southeast Plant. At the same time local political pressure was building to effectuate a change in PSB water service policy. Because of the growing problems of colonias and the PSB's failure to provide extraterritorial service, the county judge called for the resignation of the board of trustees of the PSB.57 In July of 1987, the county judge called a press briefing and invited all relevant local water entities to provide an informal seminar for the purpose of educating the local news media to the serious water problems facing El Paso County.58 One of the purposes of the July 9, 1987, press briefing was to lay the groundwork, if necessary, for a political attack on the competency of the PSB's water supply strategy, and, in particular, the prudency of the effort to secure New Mexico water.59

The public scrutiny placed on the PSB initially caused the PSB to attack the Authority. For example, in order to shore up its local monopoly, the PSB had asked its counsel in the New Mexico litigation to determine whether the Authority was validly created, presumably in contemplation of litigation against the Authority.60 However, within six days of the county judge's water press briefing, the Authority received an offer from the PSB to settle the protest. This settlement averted not only further intracounty water litigation, but also diluted the media's criticism of the PSB. The basic term of the settlement was an agreement to negotiate in good faith for a cooperative water and sewage infrastructure solution for the Lower Valley.61 The implementation of this settlement resulted in the conclusion of two agreements which have fundamentally altered water service policy in El Paso County.

In November 1988, the Authority contracted with the Bureau and the District for access to Project water supplies.62 The contract is similar to the PSB's 1962 contract and authorizes the conversion of Project water from irrigation use to municipal uses. The 1988 contract paved the way for the Authority to acquire assignments of Project water during the irrigation season. In January 1989, the PSB and the Authority concluded a cooperative


59. Interview with Luther Jones, County Judge for El Paso County, in El Paso, Texas (Jan. 10, 1989).

60. See Letter from Jody Richardson to John T. Hickerson, general manager of the El Paso Water Utilities (July 21, 1987) (concluding that the Authority was not validly created because certain municipal corporations did not consent to its creation). *But see* Beckendorff v. Harris-Galveston Coastal Subsidence Dist., 563 S.W.2d 239 (Tex. 1978) (discussing the significance of the enrolled bill rule and declarations of legislative findings as they relate to the creation of conservation and reclamation districts pursuant to article 16, section 59, of the Texas Constitution).

61. Letter from the parties to Kevin McCalla, hearings examiner for the Texas Water Commission (July 20, 1987).

62. See Contract Regarding Delivery of Water to the El Paso County Lower Valley Water District Authority No. 9-07-40R0680 (Nov. 29, 1988).
water and wastewater system contract. This contract sets out the nature and basis of the relationship between the Authority and the PSB and provides for water service outside of the city limits of El Paso in the Lower Valley.63 The 1989 contract has four basic components. First, the PSB agreed to sell to the Authority its existing water distribution system in the Lower Valley outside the city limits of El Paso. Second, the PSB agreed to finance, construct, operate and maintain a new water treatment plant to serve the requirements of the Authority. The Authority agreed to provide the raw water supply for the new plant from Project water supply under the 1988 contract. Third, in exchange for Project surface water during the irrigation season provided by the Authority, the PSB agreed to supply the Authority with drinking water during the nonirrigation season from groundwater supplies of the PSB. In effect, the Authority makes excess deliveries of Project water during the irrigation season and thereby develops a summer surface water credit against which it may draw on El Paso groundwater during the winter. Fourth, the PSB agreed to sell drinking water to the Authority during the four years that the new water treatment plant was being constructed.

The net result of El Paso’s belated regionalism is that the city was able, through the Authority, to acquire access to Project surface water which was otherwise unavailable. This symbiotic relationship between the Authority and El Paso benefits both parties by increasing overall surface water supplies to both parties and providing the institutional mechanism to expand and provide water service to areas of El Paso County which would otherwise be without service. More generally, the agreement brings El Paso and the surrounding area into the post-Reclamation era. Future municipal and irrigation supplies are likely to come from the transfer of irrigation water rights to municipal and irrigation uses rather than from the initiation of new large-scale appropriations. The past is not necessarily a prologue in El Paso County. A wide variety of more flexible allocation patterns are emerging in the reallocation era.64 As a result of the failure of New Mexico strategy, El Paso is pursuing three alternate sources of water: newly discovered sources of groundwater;65 conserved water;66 and the acquisition of agricultural water rights.

B. New Mexico

1. The Compact Defense

New Mexico’s position, that the water of the Hueco Bolson aquifer was under New Mexico’s exclusive control was based on the Rio Grande Compact

(the Compact). A compact is an equitable apportionment of a common source, and this enabled New Mexico to argue that sharing rather than market allocation should be the allocation principle. New Mexico argued that the Compact allocated the Rio Grande and its subsurface flows and that El Paso's withdrawals would cause Texas to exceed its allocated share. Because surface and groundwater rights are integrated, increased groundwater use would require the retirement of equal amounts of surface rights. The compact theory was rejected by the district court's first opinion. The judge read the history of the negotiations and the Compact for the proposition that the Compact does not apportion either the surface flows of the Rio Grande or the related groundwater below Elephant Butte Dam between New Mexico and Texas. The Compact specifies only New Mexico's delivery obligations into Elephant Butte Reservoir.

2. Aridity of Necessity

New Mexico's fallback position was the application of its anti-export statute because it needed the water for a long-term statewide water shortage for the full spectrum of beneficial uses. Specifically, the state argued that it made out a prima facie case for the demonstrably arid state defense by showing that there would be a 626,000 acre-feet statewide consumptive use storage by the year 2020. This demonstrably arid state defense dried up in the first district court decision. El Paso I decisively rejected the demonstrably arid state defense because the state recognized "no limits on the future uses for which New Mexico should be able to preserve ground water." The antidiscrimination policies of the dormant commerce clause required the conclusion that water was merely another commodity: "Outside of fulfilling human survival needs, water is an economic resource."

New Mexico was in a very weak position. The state engineer testified that the state "is far from the time when water will be a limiting factor on the state's growth." The district court mocked New Mexico's "specter of the wholesale 'drying up' of southern New Mexico if El Paso is permitted to export the water it seeks" because the state itself "already contemplates that its irrigated agriculture will gradually be cannibalized as market forces transfer water to municipal and industrial use." New Mexico tried to

69. Id. at 384-85.
70. Id. at 390.
71. Id. at 389.
72. Id. at 390.
73. Id.
counter this logic by arguing that it had the exclusive power to decide how the transition would be managed. Here, New Mexico confronted the fact that it, like most other western states, had no real plans to manage the transition or to transport the water intrastate. Motive review is never far from the surface in dormant commerce clause balancing and, seen in this harsh New Mexico light, the court concluded “the purpose of the embargo is to promote New Mexico’s economic advantage.”


_El Paso I_ effectively eliminated the demonstrably arid state defense. New Mexico’s response was to immediately enact a statute which allowed out-of-state appropriation subject to public interest review:

In order to approve an application under this act, the state engineer must find that the applicant’s withdrawal and transportation of water for use outside the state would not impair existing water rights, is not contrary to the conservation of water within the state and is not otherwise detrimental to the public welfare of the citizens of New Mexico.

In acting upon an application under this act, the state engineer shall consider, but not be limited to, the following factors:

(1) the supply of water available to the state of New Mexico;
(2) water demands of the state of New Mexico;
(3) whether there are water shortages within the state of New Mexico;
(4) whether the water that is the subject of the application could feasibly be transported to alleviate water shortages in the state of New Mexico;
(5) the supply and sources of water available to the applicant in the state where the applicant intends to use the water, and;
(6) the demands placed on the applicant’s supply in the state where the applicant intends to use the water.

The statute also limits municipalities and other public water suppliers to a forty-year planning horizon.

The statute is ironic because it attempts to pump up public interest review, a concept that has a limited historical meaning and has always been downplayed by the western states because its vagueness interferes with the acquisition of property rights through the permit process. Most states have long had the power, even when water was available, to deny appropriations

74. _Id._ at 391.
76. _Id._ § 72-1-9.
because the proposed use would be contrary to the public interest. However, the power was more discussed than used, although there are cases upholding the discretion of the state engineer to deny inefficient projects to protect larger, more efficient ones.\textsuperscript{77} Public interest review is ultimately water allocation planning.\textsuperscript{78} To the extent states did planning, it was to justify new project development.\textsuperscript{79} Thus, states such as New Mexico had little or no basis on which to claim that an intrastate allocation was necessary to protect the state's long-range water interests. Now, however, courts are beginning to apply the public interest review concept to environmental and related conflicts.\textsuperscript{80}

Despite the weak tradition of public interest review in New Mexico, public interest review provided the basis for a much more favorable judicial reaction in the second round of the litigation. New Mexico was no longer burdened with an explicit barrier to interstate commerce so the court was freer to tilt the \textit{Pike} balance toward New Mexico. El Paso, of course, argued that the new statute was a sham and thus just as much a barrier to exports as the previous ban.

The court rejected three challenges to the statute, but it upheld a fourth challenge.\textsuperscript{81} El Paso first argued that the conservation of water within the state criterion effectively prohibited all interstate transfers. The court, however, held that the language was not a per se prohibition against out-of-state exports. "Water within the state" was defined as the water subject to New Mexico jurisdiction, not a directive to retain these waters in all cases. Conservation and public welfare were attacked as meaningful standards for in-state users and thus the purported even-handedness was a sham. The court acknowledged the lack of clarity in applying public interest review, but refused to find that review meaningless in light of the tradition, weak as it is, of public interest review, and accepted the 1984 legislation as a declaration that public welfare required an embargo.

El Paso characterized concern for the welfare of the citizens of New Mexico and concern for water conservation goals as intrinsically discriminatory, but the court disagreed. The court reasoned that "[a] state may favor its own citizens in times and places of shortage."\textsuperscript{82} The court then

\textsuperscript{77} The leading and sole New Mexico case is Young \& Norton v. Hinderlider, 15 N.M. 666, 110 P. 1045 (1910). \textit{See generally} A. TARLOCK, \textit{LAW OF WATER RIGHTS AND RESOURCES} \textsection{} 5.13 (1988).

\textsuperscript{78} \textit{See} Grant, \textit{Public Interest Review of Water Allocation and Transfer in the West: Recognition of Public Values}, 1987 \textit{ARIZ. ST. L.J.} 681, 704 ("[p]ublic interest review . . . has long functioned to maximize water resource benefits though regulation of externalities . . . ").


\textsuperscript{80} \textit{See} Grant, \textit{supra} note 78.


\textsuperscript{82} 597 F. Supp. at 701.
applied the *Pike* balancing test to place the burden on El Paso to justify its need for the resource:

"Public welfare" is a broad term including health and safety, recreational, aesthetic, environmental and economic interests . . . . The Supreme Court in *Sporhase* did not equate "public welfare" with human survival. However, when a state exercises a preference for its own citizens under the rubric of protecting their public welfare and economic interests are implicated, the resulting burden on interstate commerce must be weighted against the putative local benefits . . . . The preference envisioned by the Supreme Court must be limited to times and places where its exercise would not place an unreasonable burden on interstate commerce . . . . New Mexico need not wait until the appropriate time and place to enact a statute limiting exports."  

Despite its incoherence and qualifications, this language is a 180 degree turn from *El Paso I*. To justify the change, the court adopted the distinction between state statutes with a legitimate local purpose which only incidentally burden interstate commerce and those that affirmatively discriminate against interstate commerce. Slippery as the test is, the United States Supreme Court has crystallized it and applied it in *Maine v. Taylor* to uphold a state statute prohibiting the import of live bait to preserve the state's unique and fragile fisheries and aquatic ecology.

The discretion granted states in the first part of the opinion was narrowed when the court found that New Mexico's public interest review was not even-handed because the burden on out-of-state applications to show that the appropriation is in the public interest is higher than that on in-state interests. The consideration of conservation and public welfare criteria for only out-of-state transfers is facially discriminatory because it requires interstate commerce to shoulder the entire burden of conservation. An administrative process that is tilted toward in-state residents is not even-handed. Finally, in an excess of commerce clause zeal, the court also struck down a two year moratorium in the basin.

**III. A Dual Strategy: S.E. Reynolds and Planning**

**A. Application Denied**

After *El Paso II*, the state pursued a dual strategy. State Engineer S.E.

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83. Id. at 700-01. Likewise, the court applied the same analysis to the conservation standards because the scarce water exemption of *Sporhase* "can only be implemented by keeping or 'conserving' within the state water that would otherwise go out." *Id.* at 702.
85. 477 U.S. 131 (1986).
86. N.M. STAT. ANN. § 72-12B-1(D) (1978).
88. 597 F. Supp. at 704-05.
Reynolds\textsuperscript{89} held hearings on El Paso’s applications and the state legislature appropriated money to develop a larger range groundwater use strategy. In December of 1987, Reynolds denied all of El Paso’s applications on the ironic ground that El Paso had not demonstrated a need for the water.\textsuperscript{90} He found that “no water rights in New Mexico are needed by El Paso for a water development plan or to protect its water supply for reasonably projected needs within 40 years . . .”, the planning horizon allowed under state law.\textsuperscript{91} Among the state engineer’s findings were that (1) El Paso will require 163, 000 acre-feet by 2020 and has 167,420 acre-feet available from the Hueco Bolson and Canutillo well fields and Rio Grande surface diversions, (2) Rio Grande water is the most practical alternative source, and (3) if the numbers are wrong, El Paso can condemn the necessary appropriative rights.

\textbf{B. Planning}

Parallel to the application proceeding, New Mexico pursued a longer range planning strategy. In 1984, the New Mexico legislature funded a study of water needs and water marketing. The working assumption was that, in the long run, state water marketing is the best means of preserving the state’s control over its water resources in a post-\textit{Sporhase} world. After a survey of water availability and the claims of different interest groups, the study identified several potential interstate groundwater markets and recommended that New Mexico become an active market participant.\textsuperscript{92} The study proposed that the state begin to appropriate unappropriated groundwater for a variety of reasons which included possible benefits ranging from the promotion of new economic development to the preservation of the unique multi-cultural heritage of northern New Mexico. Apparently happy with the results, the New Mexico legislature funded a second study in 1986. The second planning study examined the costs and financing of an ambitious water-marketing strategy as well as its administrative and legal structure.\textsuperscript{93}

\textsuperscript{89} The late Stephen E. Reynolds, New Mexico’s legendary state engineer, is captured as Nelson Bookman in John Nichols’ 1974 novel, \textit{The Milagro Beanfield War}. Nichols comments that the engineer and his lawyer “literally decided how the rivers would run and which people would benefit the most from those rivers.” \textsc{J. Nichols, The Milagro Beanfield War} 57 (1974).

\textsuperscript{90} In the Matter of the Applications of the City of El Paso, Texas Nos. LRG-92 through LRG-357,HU-12 through HU-71.

\textsuperscript{91} See Note, \textit{Recent Developments in the El Paso/New Mexico Interstate Groundwater Controversy—The Constitutionality of New Mexico’s New Municipality Water Planning Statute}, 29 \textsc{Nat. Resources J.} 223 (1989).


The following summarizes the thrust of the study’s vision of the future of water allocation not only in New Mexico but throughout the West:

The state may elect to appropriate a substantial amount of groundwater where available supplies exist, using a time horizon for development of 80-100 years. It would need to, concomitant with its application to appropriate water, develop a long-term plan for the use and development of the water resource and ultimately make the water available to actual water users for beneficial use. The most significant result of this strategy would be securing water supplies for future needs. In some areas of the state, the same result could be achieved through purchase by the state of existing rights with a lease-back arrangement to the owner until the owner no longer needs the rights. For example, in many areas of the state, the maximum depth to which a farmer can pump and still remain profitable is 230 to 250 feet. There may, however, be substantial amounts of water below that depth that could be put to other commercial uses in the future. Therefore, as noted above, in those areas of the state, the state may wish to act now to begin to purchase rights and give the farmer a lease-back (in a sense, purchase “water futures”) so that the balance of the aquifer is available over the long term if and when the financial base of these agricultural communities changes to other types of industries.94

VI. Conclusion

There are many potential lessons to be learned from the Hueco Bolson controversy. The most important is that the dormant commerce clause can have positive spillover effects that are obscured by the debate over whether the dormant commerce clause serves any function in a fully integrated national economy. Many westerners see Sporhase as the indiscriminate substitution of unbridled state parochialism for unlimited market access to water. Sporhase has this potential, however, El Paso II suggests that the inroads into state allocation primacy are less than many once feared. Ideally, the United States Supreme Court and lower federal courts should clarify Sporhase and integrate it with pre-existing interstate water allocation law. However, the likely resolution of the Hueco Bolson controversy suggests the case as it stands will not undo the fabric of interstate allocation and may even have positive long-run effects. The “creative tension” between efficiency and political sovereignty established by Justice Stevens’ majority opinion in Sporhase prevented both parties from achieving their initial objectives and forced each to adopt more creative and rational solutions to

94. State Appropriation of Unappropriated Groundwater: A Strategy for Insuring New Mexico’s Water Future, New Mexico Resources Research Institute and University of New Mexico (1986).
their particular water allocation needs. Perhaps this is a reasonable price to pay for the decade-long litigation that reallocated no water across state lines.