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Rebecca Sugerman

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By *Rebecca Sugerman*◔

I. Introduction

On August 26, 1998, the California Supreme Court granted review in the case of *City of Barstow v. Mojave Water Agency*.[1] The case, an appeal of adjudication of groundwater rights, raises important questions not only about groundwater but surface water rights as well. The California Supreme Court will likely define some important issues, including the flexibility of "reasonable use," the value of the rights of an overlying user vis-a-vis an appropriator, and the extent to which a physical solution may be imposed. This comment argues that the court should provide (1) guidance for water rights holders regarding how much reliance they can place on their "right," and (2) guidance on what "reasonable use" means. Does "reasonable use" mean that use which provides the most water for the greatest number of users? Or, is there a preference for those users who have an historical priority water right?

Part II provides a brief statement of the facts of the *Mojave* case. Part III discusses the history of groundwater law in California. Part IV analyzes the tools that courts have traditionally used to solve conflicts between competing water users, and proposes some new solutions. Part V presents conclusions.

◔ Candidate for J.D., 2001, University of California, Hastings College of the Law; M.S., Environmental Management, 1994, University of San Francisco; B.A., 1990, Oberlin College. The author would like to thank the 1999-2000 West-Northwest Editorial Board for their encouragement, hard work and attention to detail, and Professor Brian Gray for introducing her to water law. The author expresses special thanks to her parents, who taught her to ask questions, to seek solutions and when all else fails, to make up an answer.

1. *See* City of Barstow v. Mojave Water Agency, 961 P.2d 398 (1998).

II. Statement of Facts

Only God gives water. God gave it to me, and I can take it.[2]

The Mojave River system is more than 90 miles long.[3] The groundwater basin associated with the river is approximately 3600 square miles.[4] Most people agree that basin overdraft[5] began in the 1950s.[6] By 1990, agricultural and municipal users were drawing approximately 230,000 acre-feet annually.[7] The parties to the lawsuit dispute whether the total water supply to the basin is 78,600 acre-feet per year or 75,710 acre-feet per year.[8]

The original complaint was filed in 1990 by the City of Barstow and Southern California Water Company, alleging that groundwater production upstream of the City of Barstow was adversely affecting Barstow's water supply.[9] The complaint requested a writ of mandate requiring Mojave Water Agency ("MWA") to perform its duties and provide supplemental water by importing State Water Project ("SWP") water for use within the Mojave Basin.[10]

In 1991, MWA filed an amended cross-complaint that named all water producers who "collectively claim substantially all rights of water use within the Mojave Basin area,"[11] meaning all water producers within the Mojave River watershed, except for a few small producers.[12] The amended cross-complaint requested a declaration that the available water supply to the Mojave Basin area is inadequate to meet the demands of producers within the watershed, and requested a determination of the water rights.[13] The suit involved more than 1000 producers in the Mojave Basin Area and hydrologic subareas which extend over 4000 square miles.[14]

On October 16, 1991, the trial court ordered a litigation standstill while a committee of engineers and attorneys attempted to formulate a physical solution.[15] After two years of engineering studies and negotiations, costing hundreds of thousands of dollars,[16] a draft physical solution was submitted to the trial court.[17] The trial court determined that the physical solution was "necessary to implement the mandate of Article X, Section 2 of the California Constitution,"[18] and ordered that all parties be notified that they had the choice of either stipulating to the physical solution, filing an answer to the cross-complaint, or defaulting.[19] Over seventy-five percent of the

2. Karen Brandon, *Desert Farmers Tap into Water Battle*, CHI. TRIB., April 11, 1999, at C3 (quoting Jo Ann Auerswald, interim general manager of the Mojave Water Agency, who was quoting a farmer).

3. *See* Eric L. Garner & Steven M. Anderson, *The California Supreme Court Reviews the Mojave River Adjudication*, 2 U. COLO. WATER L. REV. 1, 35 (1998).

4. *See id.*

5. Overdraft occurs when more water is extracted from the groundwater basin than is available as surplus. *See* City of Los Angeles v. City of San Fernando, 537 P.2d 1250, 1307 (1975).

6. *See* Garner & Anderson, *supra* note 3, at 35.

7. *See id.* at 36.

8. *See* City of Barstow v. City of Adelanto, No. 208568, Amended Statement of Decision at 7 (Superior Court, County of Riverside, January 2, 1996) [hereinafter Decision].

9. *See* City of Barstow v. City of Adelanto, No. 208568, Judgment After Trial at 1 (Superior Court, County of Riverside, January 10, 1996) [hereinafter Judgment].

10. *See id.*; *see also* City of Barstow v. Mojave Water Agency, 75 Cal. Rptr. 2d 477, 482 (1998). MWA generally has the power to take necessary steps "so that sufficient water may be available for any present or future beneficial use or uses of the lands or inhabitants of the agency . . . ." MWA also has the power to seek a court adjudication of water rights within the Basin. *See Mojave*, 75 Cal. Rptr. 2d at 482 (quoting CAL. WATER CODE APPEN. §§ 97-15, 97-37).

11. Judgment, *supra* note 9, at 1.

12. *See Mojave*, 75 Cal. Rptr. 2d at 482.

13. *See* Judgment, *supra* note 9, at 1; *see also Mojave*, 75 Cal. Rptr 2d at 482.

14. *See* Judgment, *supra* note 9, at 5.

15. *See id.* at 2; *see also Mojave*, 75 Cal. Rptr. 2d at 482. A "physical solution" is usually an engineering control implemented to provide water for more users. Examples of physical solutions include lining a canal to prevent seepage loss, using substitute surface water supplies, or regulating diversion and reservoir release schedules. Even a senior user may be required to bear some of the burden of implementing a physical solution. *See* ARTHUR L. LITTLEWORTH & ERIC L. GARNER, CALIFORNIA WATER 175-76 (1995).

16. *See* Judgment, *supra* note 9, at 5.

17. *See Mojave*, 75 Cal. Rptr. 2d at 482.

18. Judgment, *supra* note 9, at 6.

19. *See Mojave*, 75 Cal. Rptr. 2d at 482.

parties agreed to the stipulated judgment, with additional parties agreeing after entry of the judgment.[20] These parties represented over eighty percent of the verified water production in the Mojave Basin.[21] By an interlocutory judgment, the trial court then imposed the physical solution upon the stipulating parties.[22] The trial court determined the quantity of water that each party could use without regard for the water rights of riparian and overlying farmers in the basin.[23] The court also imposed the physical solution on alfalfa farmers and dairymen who had never agreed to the plan.[24]

Although the majority of the parties, representing over eighty percent of the verified water production in the Mojave Basin, agreed to the stipulated judgment,[25] the non-stipulating parties went to trial. The non-stipulating parties include the Cardozo Appellants, an association of dairy farmers owning overlying lands in the Mojave Basin, and the Jess Ranch Water Company.[26]

At trial, the court identified the following issues to be determined: "(1) characterization of water rights; (2) priority, if any; (3) what are the uses? (4) are the uses reasonable? (5) the amount of reasonable and beneficial use."[27] Other issues for trial were identification of subareas, whether the physical solution provides an equitable apportionment of water, and whether the physical solution satisfies the requirements of Article X, Section 2 of the California Constitution.[28]

In a 25-page statement of decision, the trial court concluded that "the constitutional mandate of reasonable and beneficial use dictates an equitable apportionment of all rights when a water basin is in overdraft."[29] Deciding it was unnecessary to adjudicate individual water rights, the court found that the proposed physical solution was fair and equitable to non-stipulating parties. The trial court then issued a 153-page judgment, filed on January 10, 1996. Several parties appeal the judgment. The Cardozo Appellants, who claim to hold overlying rights which they use on their property for agricultural purposes, argue that the judgment should be reversed as being contrary to established California law.[30] The Jess Ranch Water Company[31] only argue that its water allocation was improperly calculated.[32]

The court of appeal found that the trial court erred in imposing the physical solution on parties who had not stipulated to the physical solution.[33] The court of appeal objected to, among other things, the trial court's disregard for the farmers' historical priority in water rights.[34]

In the case pending before the California Supreme Court, MWA, the City of Barstow, and Southern California Water Company are the respondents. MWA contends that the physical solution was properly imposed by the trial court, and that the Cardozo Appellants failed to prove that they had water rights that were adversely affected. MWA also argues that the area's Base Annual Production[35] ("BAP") assigned to Jess Ranch was properly calculated in the judgment.[36]

20. *See Mojave Water Agency* (visited March 4, 2000) <http://www.mojavewater.org/mwa>.

21. *See id.*

22. *See Mojave*, 75 Cal. Rptr. 2d at 483.

23. *See id.* at 482.

24. *See* Marc Lifsher, *High Court Set to Hear Case on Water Law*, WALL ST. J., Feb. 3, 1999, California Report, at 1.

25. *See Mojave Water Agency*, *supra* note 20.

26. *See* Garner & Anderson, *supra* note 3, at 38. The court of appeal uses the term "Cardozo Appellants" to refer to the following appellants: Manuel and Maria Cardozo, Niel DeVries, Virgil Gorman, Richard and Geneva Leyerly, Jerry Osterkamp, David and Elizabeth Daily, Richard and Elaine Fitzwater, Cornelis J. Groen, Robert T. and Barbara T. Older and Steve Older. *See Mojave*, 75 Cal. Rptr. 2d at 483 n.3.

27. *Mojave*, 75 Cal. Rptr. 2d at 483.

28. *See id.* Article X, Section 2 established that all water rights are limited by the concept of "reasonable and beneficial" use. The full text of Article X, Section 2 is quoted *infra* at note 55.

29. *Mojave*, 75 Cal. Rptr. 2d at 483.

30. *See id.*

31. The trial court found that Jess Ranch failed to establish that its use of 18,625 acre-feet in 1986 was a reasonable and beneficial use. Specifically, the trial court found that Jess Ranch was in the process of changing the uses of its property from agricultural to residential and commercial, and that the future consumptive use would be only 1300 acre-feet per year. *See id.* at 503.

32. *See id.* at 483.

33. *See id.* at 482.

34. *See id.* at 501.

35. *See* definition of Base Annual Production *infra* Part II.A.

36. *See Mojave*, 75 Cal. Rptr. 2d at 483.

The City of Barstow and Southern California Water Company contend that (1) Article X, Section 2 requires a court to equitably apportion water among users in an overdrafted area, (2) the Mojave River Basin is an overdrafted area, and (3) the trial court properly considered the relevant factors before imposing a physical solution.[37]

A. The Physical Solution

According to the trial court, the physical solution is intended to define the water rights of all producers in a way that will "equitably allocate the natural water supplies and which will provide for equitable sharing of costs for Supplemental Water."[38] The purpose of the physical solution is to "establish a legal and practical means for making the maximum reasonable beneficial use of the waters of the Basin Area."[39]

The judgment divides the Mojave Basin into five hydrologically interrelated "subareas."[40] The Mojave River is identified as the common source of supply for the entire Basin.[41] For each subarea, the judgment identified the BAP. The BAP is the greatest amount of water produced in any year by each party within the subarea during the five year period preceding the filing of the action.[42] The BAP for each subarea will decrease five percent per year for the first five years of operations under the judgment. Thus, in the fifth year, the BAP will be eighty percent of the original amount. Following the fifth year, there is the possibility that the BAP could be adjusted in each subarea separately, depending on the conditions in each subarea.[43]

Within each subarea each party was assigned a Free Production Allowance ("FPA") which is the amount that party is allowed to pump based on a percentage of the subarea's BAP.[44] Any water produced in excess of a party's FPA must be replaced by that party, either by paying sufficient funds to purchase replacement water, or by transfer of unused FPA from another party/producer.[45] The judgment assumes that sufficient water will be available to meet the needs of the Basin in the future from a combination of natural and imported water, water conservation, water reuse and transfers of FPA among producers.[46]

The judgment goes beyond allotting water to the parties; it also includes special provision for environmental protection.[47] It provides for the creation of a Biological Resources Trust Fund to secure a water supply in the event that groundwater levels within specific areas are not supporting existing riparian vegetation.[48] The MWA, in its brief to the California Supreme Court, states, "the judgment in this case goes further than P*asadena*, and provides for allocation of costs and importation of water and recognizes the need to develop the infrastructure to import, store and distribute that water."[49] Rather than simply divide up existing resources among the parties, the judgment creates resources to supply the region with water in the future.

III. California Groundwater Law

[W]estern water is governed by one of the most outmoded collection of rules found anywhere in American public policy.[50]

California groundwater law was initially based on English common law.[51] Like riparian landowners who have the right to use the adjacent surface water, the owner of the land overlying a groundwater basin has primary rights to

37. S*ee id*.

38. Judgment, *supra* note 9, at 6.

39. I*d*. at 25.

40. The basins are interrelated, but divided into subareas by the Helendale and Waterman Faults. S*ee* Decision, *supra* note 8, at 6. (Superior Court, County of Riverside, January 2, 1996).

41. S*ee id*. at 14.

42. S*ee id*. This method was originally used in C*ity of Pasadena v. City of Alhambra*, 207 P.2d 17, 28 (1949).

43. S*ee* Respondents' Brief at 15, City of Barstow v. Mojave Water Agency, 961 P.2d 398 (1998) (No. S071728) [hereinafter Respondents' Brief].

44. S*ee id*.

45. S*ee* Mojave Water Agency Fact Sheet, S*ummary of the Judgment After Trial*, (visited May 15, 2000) <www.mojavewater.org/mwa/htm>.

46. S*ee id*.

47. S*ee id*.

48. S*ee id*.

49. Respondents' Brief, *supra* note 43, at 22 n.28.

50. Sarah H. Bates et al., Searching Out the Headwaters 4 (1993).

51. S*ee* Littleworth & Garner, *supra* note 15, at 49.

that groundwater.[52] Any water not used by overlying owners is "surplus" water. Surplus water can be appropriated for use on land other than overlying land.[53] The California Supreme Court has defined groundwater rights as follows:

> Rights in water in an underground basin . . . are classified as overlying, appropriative and prescriptive. Generally speaking, an overlying right, analogous to that of a riparian owner in a surface stream, is the right of [the] owner of the land to take water from the ground underneath for use on his land within the basin or watershed; the right is based on ownership of the land and is appurtenant thereto. The right of an appropriator depends upon an actual taking of water.[54]

The rule of priority, as articulated by the court, is modified by the California Constitution. Article X, Section 2 establishes that *all* water rights are limited by the concept of "reasonable and beneficial" use.[55] This "reasonable use" doctrine leaves water rights subject to interpretation by the judiciary. If a court finds an overlying owner's use to be "unreasonable," the court has the authority to grant part of that water right to a junior appropriator whose use is "reasonable."[56]

The judiciary's application of Article X, Section 2 has defined groundwater law in California.[57] According to one California water scholar, the result of these cases has been that "California groundwater law is confusing and generally inadequate to the task of regulating the state's groundwater resources."[58]

A. Katz v. Walkinshaw

In *Katz v. Walkinshaw*, the California Supreme Court rejected the idea that owners of land overlying an aquifer have absolute rights to pump groundwater for use on their land.[59] Instead, the court held that groundwater is governed by the doctrine of "correlative rights and reasonable use."[60] This gives each overlying property owner a common right to the reasonable, beneficial use of the aquifer below the overlying land.[61] Overlying owners have first priority to the groundwater beneath the land they own. Each overlying landowner has correlative rights, with all other overlying owners, to a reasonable share of the safe yield of the aquifer.[62] Courts generally have defined "safe yield" as the long-term recharge of the aquifer.[63]

Katz determined that groundwater use among overlying landowners is governed by a standard of "reasonableness," similar to surface water use. Appropriators (non-overlying users) may take water from the aquifer only if there is a surplus safe yield left over after the reasonable needs of all overlying landowners have been met.[64] Appropriators may pump the surplus water for use on lands removed from

52. *See id.*

53. *See id.* at 50.

54. City of Los Angeles v. City of San Fernando, 207 P.2d 17, 28 (1975).

55. Cal. Const. art. X, § 2 (West Supp. 1993). The full text of the section reads:

> It is hereby declared that because of the conditions prevailing in this State the general welfare requires that the water resources of the State be put to beneficial use to the fullest extent of which they are capable, and that the waste or unreasonable use or unreasonable method of use of water be prevented, and that the conservation of such waters is to be exercised with a view to the reasonable and beneficial use thereof in the interest of the people and for the public welfare. The right to water or to the use or flow of water in or from any natural stream or water course attach to but to no more than so much of the flow thereof as may be required or used consistently with this section, for the purposes for which such lands are, or may be made adaptable, in view of such reasonable and beneficial uses; provided, however, that nothing herein contained shall be construed as depriving any riparian owner of the reasonable use of water of the stream to which the owner's land is riparian under reasonable methods of diversion and use, or as depriving any appropriator of water to which the appropriator is lawfully entitled. This section shall be self-executing, and the Legislature may also enact laws in the furtherance of the policy in this section contained.

Id.

56. For a discussion of cases where the judiciary has interpreted "reasonable use," see *infra* Part IV.A.1.

57. *See* Katz v. Walkinshaw, 74 P. 766 (1903); City of Pasadena v. City of Alhambra, 207 P.2d 17 (1949); City of Los Angeles v. City of San Fernando, 537 P.2d 1250 (1975).

58. Brian E. Gray, *Groundwater Rights* (1999) (unpublished course materials on file with author).

59. 74 P. at 766.

60. LITTLEWORTH & GARNER, *supra* note 15, at 49.

61. *See id.*

62. *See id.*

63. *See id.* at 47.

64. *See id.* at 51.

the aquifer.[65] As with surface water appropriation,[66] groundwater appropriators are governed by a system of priority: "first in time, first in right."[67]

B. City of Pasadena v. City of Alhambra

In *City of Pasadena v. City of Alhambra*, the California Supreme Court addressed the rights of groundwater users when an aquifer is in chronic overdraft. Interestingly, the court did not enforce the hierarchy of rights articulated in *Katz*; instead the court applied a doctrine of "mutual prescription."[68] According to this doctrine, *all* users receive a *pro rata* share of the safe yield of the aquifer. The court ruled that each user's share should be quantified based on "the highest continuous production of water for beneficial use in any five year period prior to the filing of the complaint" and after the overdraft of the aquifer commenced.[69] The court held that all of the overlying and appropriative users had acquired prescriptive rights against each other, thus the term "mutual prescription."[70] The principles of "mutual prescription" look similar to what the trial court applied in *Mojave*.[71] However, the *Mojave* court does not use the phrase "mutual prescription" because, in *City of Los Angeles v. City of San Fernando*, the court limited the doctrine of mutual prescription to the facts of the *Pasadena* case.[72]

C. City of Los Angeles v. City of San Fernando

City of Los Angeles v. City of San Fernando partially overrules the doctrine of mutual prescription, by holding that prescriptive rights cannot be asserted against public utilities and agencies.[73] The court rejects the mechanical application of mutual prescription, because it "does not necessarily result in the most equitable apportionment of water according to need."[74] In discussing equitable apportionment, the court states that "a true equitable apportionment would take into account many . . . factors."[75] In a footnote, the court quotes *Nebraska v. Wyoming*, a United States Supreme Court case, to illustrate how the Court equitably apportions water among states.[76] The *Mojave* court, however, points out that in *Nebraska* the Supreme Court allocated priorities between *states*; the Court did not

65. *See id.* at 53.

66. Surface water law closely parallels groundwater law. A riparian owner, similar to an overlying user, has the right to use water in a natural watercourse that abuts property owned by the riparian. A riparian water right is not quantified; it is a right to use as much water as the riparian can put to reasonable and beneficial use, so long as other riparians are not injured. The riparian right is correlative; one riparian does not have priority over another riparian. An appropriative water right, however, has a priority component, based on who first appropriates the water and uses it for a reasonable, beneficial purpose. This is called "first in time, first in right." Among appropriators, a hierarchy is created of senior and junior appropriative water rights. *See* LITTLEWORTH & GARNER, *supra* note 15, at 29-40.

67. In California, the custom of appropriation was used originally by miners. Most mining camps were on public lands, and no one could own that land. In 1872, the California legislature codified the right to appropriate water. *See id.* at 30. *See also* Irwin v. Phillips, 5 Cal. 140, 145-47 (1855).

68. *See* City of Pasadena v. City of Alhambra, 207 P.2d 17, 28 (1975).

69. *See id.*

70. *See* LITTLEWORTH & GARNER, *supra* note 15, at 54.

71. *See generally* Judgment, *supra* note 9.

72. *See* 537 P.2d 1250 (1975).

73. *See Los Angeles*, 537 P.2d at 1298.

74. *Id.*

75. *Id.*

76. *See id.* n.61. Footnote 61 reads:

> The principles by which the United States Supreme Court equitably apportions water among states are illustrated in *Nebraska v. Wyoming* (1945) 325 U.S. 589, 618. After observing that apportionment between states whose laws base water rights on priority of appropriation should primarily accord with that principle, the court said: 'But if an allocation between appropriation States is to be just and equitable, strict adherence to the priority rule may not be possible. For example, the economy of a region may have been established on the basis of junior appropriations. So far as possible those established uses should be protected though strict application of the priority rule might jeopardize them. Apportionment calls for the exercise of an informed judgment on a consideration of many factors. Priority of appropriation is the guiding principle. But physical and climatic conditions, the consumptive use of water in the several sections of the river, the character and rate of return flows, the extent of established uses, the availability of storage water, the practical effect of wasteful uses on downstream areas, the damage to upstream areas as compared to the benefits to downstream areas if a limitation is imposed on the former—these are all relevant factors. They are merely an illustrative, not an exhaustive catalogue. They indicate the nature of the problem of apportionment and the delicate adjustment of interests which must be made.'

adjudicate the relative rights of appropriators amongst themselves.[77]

4. *Summary of California Groundwater Law*

Unlike surface water appropriative rights, use of groundwater is not regulated under a statewide permit system. In general, property owners with land overlying groundwater can simply drill wells and extract water.[78] Until P*asadena*, the law allowed each overlying owner "the quantity reasonably necessary and available."[79] After P*asadena*, the general rule in cases of water shortage has been that "all overlying owners are entitled to a fair and just proportion of the available waters."[80] Historically, owners of land overlying percolating waters had paramount rights.[81] Appropriative rights attach only to *surplus* water.

IV. Reaction to the Mojave Decision

Groundwater in the Mojave has been overdrawn for more than four decades. Supply is so limited that groundwater could not meet the needs of either agriculture or the cities, let alone both. Groundwater throughout the state is being used much more rapidly than it can be replenished. . . . In some regions, including sections of the Mojave, overdraft has led the land to collapse on the vacuum beneath it.[82]

In granting review to M*ojave*, the California Supreme Court will "address a fundamental question about California groundwater law: Can someone with a historic right to an underground water supply pump as much as he or she wants even when downstream users, such as rapidly developing cities, face potential shortfalls?"[83] In 1995, when the trial court decided the Mojave River adjudication, B*usiness Wire* reported it as:

> [T]he first successful major water rights and system adjudication in California in approximately 20 years. . . . The decision establishes a management system for the surface and groundwater system which supplies the residents and businesses of the Mojave River Basin, an area of more than 4000 square miles north and east of the San Bernardino Mountains.[84]

After the trial court's decision, counsel for one of the largest purveyors of water in the region said: "This judgment is a victory for the whole region. It will bring to an end the overdraft of the Mojave Basin and allow for the sustainable development of the area. It will protect millions of dollars of investments made in the area since the overdraft began."[85]

But, there are farmers and others who do not agree that the decision is a victory. "Any alteration of farmers' historic ownership of water as 'vested property rights,' the [California Farm Bureau Federation] warns . . . , 'will significantly impact farmers and ranchers in all parts of the state.'"[86] Cities like San Francisco with historical "vested" water rights are siding with agriculture in this debate. Any change in the common law priority system for deciding groundwater and surface water disputes could jeopardize parties with longstanding water rights.

77. "The standard of an equitable apportionment requires an adaptation of the formula to the necessities of the particular situation. We may assume that the rights of the appropriators inter se may not be adjudicated in their absence. But any allocation between Wyoming and Nebraska, if it is to be fair and just, must reflect the priorities of appropriators in the two States." M*ojave*, 75 Cal. Rptr. 2d at 490 (quoting Nebraska v. Wyoming, 325 U.S. 589, 627 (1945)).

78. *See* LITTLEWORTH & GARNER, *supra* note 15, at 47.

79. *See id.* at 52.

80. *Id.* (citing City of Pasadena v. City of Alhambra, 207 P.2d 17 (1949)).

81. *See, e.g.*, California Water Service Co. v. Edward Sidebotham & Son, Inc., 37 Cal. Rptr 1, 10 (1964).

82. Brandon, *supra* note 2, at C3.

83. Lifsher, *supra* note 24, at 1.

84. J*udge Decides in Mojave River Adjudication*, BUS. WIRE, Sept. 14, 1995.

85. *Id.*

86. Lifsher, *supra* note 24, at 1.

IV. Analysis

A. Physical Solutions in California Case Law

Generally, courts account for existing rights and priorities when choosing a physical solution.[87] In 1935, in *Tulare Irrigation District v. Lindsay-Strathmore Irrigation District*, the California Supreme Court encouraged the trial court to use a physical solution, if practicable:

> The equity courts possess broad powers and should exercise them so as to do substantial justice . . . the equity court is not bound or limited by the suggestions or offers made by the parties to this, or any similar, action[. I]f the trial court, on the retrial, comes to the conclusion, based upon proper evidence, that a substantial saving can be effected at a reasonable cost, by repairing or changing some of the ditches . . . it undoubtedly has the power . . . to make its injunctive order subject to conditions which it may suggest and to apportion the cost thereof as justice may require, *keeping in mind the fact that respondents have prior rights and cannot be required lawfully to incur any material expense in order to accommodate appellant*.[88]

The following year, the court repeated the encouragement in a case appealing a decree ordering East Bay Municipal Utility District ("EBMUD") to make large releases of water so that the groundwater table below a downstream city would not be lowered.[89] The court said "before issuing a decree entailing such waste of water, [the trial court must] ascertain whether there exists a physical solution of the problem presented that will avoid the waste."[90] In *Peabody v. City of Vallejo*, the California Supreme Court said that on retrial, if the trial court determined that a physical solution is ascertainable, "the court has the power to make and should make reasonable regulations for the use of water by the respective parties, *provided they be adequate to protect the one having the paramount right in the substantial enjoyment thereof and to prevent its ultimate destruction*."[91]

In *City of Los Angeles*, the court stated on remand that, the trial court should consider the possibility of a physical solution. "The usual purpose of a physical solution is to avoid a waste of water *without unreasonably or adversely affecting the rights of the parties*."[92] The court noted that the trial court had equitable discretion to find a physical solution which was fair and just to all parties.[93]

It is not unprecedented, however, for a court to order the senior user to participate equally in a physical solution. In 1976, a California court of appeal ordered riparians to contribute to a physical solution.[94] Upstream riparians were enjoined from taking water from the Napa River between March 15 and May 15 for frost protection in order to leave enough water in the river for downstream junior appropriators.[95] The court found "the direct diversion of water for frost protection in the crucial period constitute[d] an unreasonable use and an unreasonable method of use of water within the purview of the Constitution."[96] The court rejected the idea that "riparian owners possess a primary right to use the river flow by direct diversion to beneficial use even if as a result no water is left for appropriation."[97] Theoretically, applying the rule of strict priority, a riparian would be able to divert the full flow of a stream, even if it left junior users high and dry. But, in *Forni*, the effect of Article X, Section 2 of the California Constitution "was to modify the

87. *See generally* Reclamation District No. 833 v. Quigley, 64 P.2d 399 (1937); Meridian Ltd. v. San Francisco, 90 P.2d 537 (1939); Montecito Valley Water Co. v. City of Santa Barbara, 77 P. 1113 (1904); *see also* Littleworth & Garner, *supra* note 15, at 177-90.

88. 45 P.2d 972, 1010 (1935) (emphasis added).

89. *See* City of Lodi v. East Bay Mun. Util. Dist., 60 P.2d 439, 450 (1936).

90. *Id*.

91. 40 P.2d 486, 499 (1935) (emphasis added).

92. 537 P.2d 1250, 1316 (1975) (emphasis added).

93. *See id*. at 1317.

94. *See* People *ex rel*. State Water Resources Control Bd. v. Forni, 126 Cal. Rptr. 851 (1976).

95. *See id*.

96. *Id*. at 856.

97. *Id*.

longstanding riparian doctrine and to apply by constitutional mandate the doctrine of reasonable use between riparian owners and others, including appropriators."[98]

F*orni* may be read to indicate that a method of water use that serves more people is preferable to a method which serves only a few, particularly if the former can be accomplished with only moderate inconvenience to the senior water right holder. The trial court's approach in M*ojave* seems to extend from the views expressed in F*orni*. The method that serves fewer people is *unreasonable* when compared with the other option. An unreasonable use is illegal under the California Constitution; therefore, it becomes legal to modify the water rights of the senior users.

B. Physical Solutions and Reasonable Use

> [T]he claim that respondents' use of water is beneficial does not bring it within the constitutional postulate of reasonableness. As emphasized in Joslin, 'beneficial use' cannot be equated with 'reasonable use,' and 'the mere fact that a use may be beneficial to a riparian's lands is not sufficient if the use is not also reasonable within the meaning of section 3 of Article XIV.'[99]

The case law on physical solutions indicates that a senior user may be required to bear some of the burden of implementing a physical solution, or else forfeit his or her water right. This result is often reached when it is determined that there is a more reasonable method of use than the one currently in place. Since, under the California Constitution, a court can severely limit the water right of a senior user if the use of that right is found unreasonable,[100] the physical solution potentially offers the best of all worlds. The senior user can keep the water right, but she must contribute to a solution that allows a junior user to maintain his water right as well. One possible consequence of this progression of case law is that the availability of a physical solution becomes an implicit part of determining whether a right-holder's use is reasonable. Rather than evaluate if the use is reasonable *in vacuo*[101] or compared to other uses, the court looks at whether the use is reasonable *in light of the availability* of a physical solution.

For example, initially, the reasonable use analysis asked whether the overlying user was withdrawing a reasonable amount of water, and applying that water to a reasonable and beneficial use. But, more recently, the question is whether *anyone's* water use is reasonable in light of the fact that if everyone, including the overlying users, cuts back on usage, and paid for extra water used, there could be enough water for all parties. This seemed to be the result in F*orni*, and it is the trial court's result in M*ojave*.

Extending the F*orni* analysis, the M*ojave* trial court's opinion is that a physical solution is a more "equitable" choice than the historical application of reasonable use to the priority system. More users get some water, which seems fair. The senior user bears some burden, but does not lose her water right. If a senior water right holder is putting water to an unreasonable use, and if there is a reasonable physical solution, there is precedent under F*orni* to apply a rule other than strict priority.

But this is not the rule applied by the trial court in M*ojave*. To apply a modified version of the rule stated above, the trial court had to make the following assumptions: (1) use of water from an overdrafted groundwater basin is *per se* unreasonable; (2) the proposed physical solution provides a reasonable use and method of use, because users who have made investments based on an appropriative water right will not lose that investment; and (3) overlying users can continue to get "substantial enjoyment" out of their water right, even once they are forced to participate in the physical solution.

98. I*d*.

99. I*d*. (quoting Joslin v. Marin Mun. Water Dist., 429 P.2d 889 (1967)).

100. S*ee generally Forni*, 126 Cal. Rptr. 851 (1976); Joslin v. Marin Mun. Water Dist., 429 P.2d 889 (1967).

101. S*ee Joslin*, 429 P.2d at 894.

The MWA argues this third point convincingly. It argues that the physical solution imposed by the trial court in fact provides appellants with the ability to produce *more* water under the judgment than would have been the case under an absolute priority scheme.[102] According to MWA, as of 1990 "the amount of water produced by overlying users alone exceeded the safe yield [of the aquifer] by approximately 39%."[103] The judgment, on the other hand, provides that at the end of the first five year period, each party could still pump up to eighty percent of its pre-1990 highest production amount, without having to pay replacement assessments.[104]

The Cardozo Appellants, however, argue that MWA's numbers do not reflect reality.[105] Appellants' brief to the Supreme Court summarizes how the numbers used by MWA do not accurately reflect annual water use by agriculture.[106] They conclude that all agricultural users could correlatively share the annual supply of water in the basin without reduction, and there would still be a surplus of 2600 acre-feet.[107]

There are obvious environmental benefits to the proposed physical solution. If the parties had agreed to the physical solution during settlement negotiations, and most or all had volunteered to participate, the solution genuinely would have been a huge success in California groundwater law. But, that was not how it happened. Instead, an independent group of engineers devised the solution. The group's goal was to allocate as much water as possible to as many parties as possible, and to create a scheme for keeping the basin free from overdraft.[108] They clearly stated that priority played no part in the construction of the physical solution.[109]

C. Proposal

The physical solution is a good idea, but it does not seem to be based in good law. In deciding the M*ojave* case, the California Supreme Court should take this opportunity to provide guidelines for how and when physical solutions are to be implemented. This comment proposes a three-step analysis in determining the applicability of physical solutions.

First, a physical solution must take into account reasonable use. If the overlying owner's use and method of use are reasonable, the analysis should go no further. Of course what is "reasonable" is within the discretion of the court. A junior user may still offer to implement a physical solution, but there is no *requirement* that the senior user contribute. As shown in this case, some alfalfa farmers are making as much money selling their water allotments as they could make farming. Junior users have every reason to provide the seniors with an economic incentive to sell their water, or participate in a physical solution.

Second, the court should take into consideration the length of senior users' use of groundwater. The court should be skeptical of the assumption that an overdrafted groundwater basin automatically makes all uses unreasonable. Though this assumption makes it easier for courts to adjudicate groundwater conflicts, it does not take into account the obvious harm to senior users, nor does it take into account California water law. In the M*ojave* situation, many users have been drawing from an overdrafted basin for more than thirty years. But, if the law of priority had been applied earlier, this would not have been the case. It is not necessarily the fault of the senior user that the basin is in overdraft, and the senior users should not be penalized because others have been ignoring the law.

The M*ojave* trial court's approach provides incentives for new users to plunder an overdrafted groundwater basin. After all, the result in M*ojave* provides even the most junior user on the system an adjudicated right to groundwater. There is also incentive for overlying users to pump as much as they can, as often as they

102. S*ee* Respondents' Brief, *supra* note 43, at 28.

103. I*d*. at 29.

104. S*ee id*. at 30.

105. S*ee* Cardozo Appellants' Brief on the Merits at 42, M*ojave* (No. S071728).

106. S*ee id*. at 42-44.

107. S*ee id*. at 44.

108. S*ee* M*ojave*, 75 Cal. Rptr. 2d at 484-85.

109. S*ee id*.

can. Overlying users were allotted a percentage of their maximum previous use. Absent the assumption that an overdrafted groundwater basin creates *per se* unreasonable use, a senior user's application may still be found unreasonable, based on a reasonable use balancing of quantity of water used and beneficial use.

Third, if the overlying or priority owner's use *is* unreasonable, then a physical solution should be proposed. At this point, a senior user may have to forfeit some of his right, as in F*orni*, but only if it is found the use was deemed unreasonable under Article X, Section 2. The result of a finding of unreasonable use means that all water users are at square one in terms of water rights. Thus, in this scenario, a senior user's right may be diminished to allow for a junior user to receive water.

D. The Role of Priority

> P*roper overlying use . . . is paramount, and the right of an appropriator, being limited to the amount of the surplus, must yield to that of the overlying owner in the event of shortage, unless the appropriator has gained prescriptive rights through the taking of nonsurplus waters*.[110]

In M*ojave*, the trial court and the court of appeal adopted opposing views on the role of priority. As detailed above, California's groundwater and surface water have been historically governed by a rule of priority. Owners of land overlying the groundwater basin ("overlying users") have first priority to use a reasonable amount of groundwater on their land; any surplus water after that may be appropriated to non-overlying users.[111] All overlying users have an equal right to the water ("correlative rights").[112] Appropriators have junior rights to overlying users. Among appropriators, the rule is "first in time, first in right."[113] Under a strict priority rule, all junior users may be required to forgo their entire share to ensure that senior appropriators receive their full allotment.

Applying a strict priority rule to M*ojave*, the analysis might be as follows: the overlying users are withdrawing a reasonable amount of water, and applying it to a reasonable and beneficial use. Therefore, the overlying users maintain their water right by priority, and the most junior users must stop pumping until the basin is no longer in overdraft. As many junior users as necessary must be enjoined from withdrawing water to preserve the senior user's water right. In M*ojave*, the junior users are generally municipalities. Municipalities are in a position to purchase water and spread the cost to the parties receiving the water. Some farmers, on the other hand, more often operate on a marginal basis, and could be forced out of business if they must purchase water.[114]

Enjoining junior users may sound inequitable. It is fair, however, because the priority system is a fundamental part of California water law. Junior users are always on notice that their water rights are somewhat uncertain and may have to be reduced. The law of appropriation is based on "*surplus*" water. If there is no surplus water, there can be no appropriation.

Much of the economy of the Mojave region developed *after* overdraft had begun.[115] If courts applied the law of priority more strictly, junior users might think twice before relying on an illusory water source. Article X, Section 2 makes clear that the law of reasonable use applies to both overlying and appropriative water rights. Now it seems that courts may turn away from the idea that a senior user has a right to the *reasonable use* of that water right. "Equitable apportionment," where everyone deserves a piece of the pie, is threatening the role of priority in California water law.

The trial court justified "equitable apportionment" by saying that applying the rule of strict priority might be impossible in this situation. "None of the priorities asserted by any of the Producers is without dispute; . . . the

110. City of Pasadena v. City of Alhambra, 207 P.2d at 28-29.

111. S*ee* LITTLEWORTH & GARNER, *supra* note 15, at 50.

112. S*ee id.* at 49.

113. S*ee id.* at 39.

114. The trial court stated as much: "[A] significant number of alfalfa farmers currently operate on a marginal basis and will be forced out of business in the next 10 years by economic factors." Decision, *supra* note 8, at 13.

115. S*ee* Garner & Anderson, *supra* note 3, at 36.

allocation of water and rights mechanistically based upon the asserted priorities would be extremely difficult, if not impossible, and would *not result in the most equitable apportionment* of water."[116] As an example of the difficulty of determining priority, the MWA states the following:

> Overlying users claimed that overlying rights had priority over appropriative uses. However, overlying rights may be lost due to prescriptive rights acquired by others. [citation] Many non-overlying uses had been exercised for many years during the period of overdraft. Some of these uses began before the mid-1950s and some began after commencement of overdraft. Long continued uses which were dedicated to municipal, domestic or other public uses, competed with on-going overlying uses for the overdrafted supply. Municipal users claimed that dedication of water to a public use took precedence over other uses. Respondent Southern California Water Company, for example, had been producing water for domestic use by its customers since before the overdraft commenced.[117]

MWA points out that if a user's right is not overlying, it is either appropriative or prescriptive.[118] However, C*ity of* L*os* A*ngeles* limited the doctrine of mutual prescription to the facts of the P*asadena* case.[119] The parties in M*ojave* did not introduce the claim of mutual prescription at trial. MWA assumes that an appropriative use that began in 1950 would take precedence over an overlying use, begun more recently. The parties disagree about whether any appropriator's use meets the criteria for prescription, which requires actual, open and notorious, hostile and adverse and uninterrupted use for five years, under a claim of right.[120]

Instead of attempting to determine priorities, the trial court asked whether any uses of water were reasonable in the Mojave Basin, in light of the fact that if all parties cut back on their water use, and paid for any extra water they use, there could be enough water for all parties. And, the drafters of the physical solution were very clear in stating that they did not accept any theory of priority of water rights.[121]

One of the drafters of the physical solution testified that its purpose was not to balance water consumption with natural supply because:

> then the only way to achieve that would be drastic reductions in the amount of water being produced by a lot of people. . . . The idea was to create a solution that generates the money necessary to acquire water . . . and to cause through economic forces water conservation to take place so that in the long term the amount of water supply needed for the area will be made available.

[The drafters] *did not accept any theory of priority of water rights* in drafting the physical solution *because* the drafting committee thought that *the results achieved were inequitable*.[122]

In rejecting this analysis, the appeals court noted that "neither [footnote 61 of C*ity of* L*os* A*ngeles*[123] nor Article X, Section 2, of the

116. Judgment, *supra* note 9, at 20 (emphasis added).

117. Respondents' Brief, *supra* note 43, at 31.

118. S*ee* Respondents' Reply to Cardozo Brief on the Merits at 13, M*ojave* (No. S071728) [hereinafter Respondents' Reply].

119. S*ee* discussion *supra* Part III.A.3.

120. S*ee* Respondents' Reply, *supra* note 118, at 13.

121. S*ee* M*ojave*, 75 Cal. Rptr. 2d at 484.

122. I*d*. at 484-85 (emphasis added).

123. In footnote 61 of L*os* A*ngeles*, the court quotes a United States Supreme Court case, N*ebraska v.* W*yoming*. S*ee* City of Los Angeles v. City of San Fernando, 537 P.2d 1250, 1298 n.61 (1975) (quoting Nebraska v. Wyoming, 325 U.S. 589 (1945)). N*ebraska v.* W*yoming* was decided using "equitable apportionment." The N*ebraska* Court recommends a list of factors to use when examining whether a physical solution is equitable. The factors include climate, consumptive use in different areas, and the extent of established uses. S*ee* L*os* A*ngeles*, 537 P.2d at 1298. Critics of the M*ojave* trial court's use of equitable apportionment point out that equitable apportionment is a federal common law doctrine, created in the context of *interstate* adjudications. This federal doctrine would not necessarily apply to an *intrastate* water dispute, as is the case in M*ojave*. S*ee*, *e.g.*, City and County of San Francisco et al., Amici Curiae Brief, City of Barstow v. Mojave Water Agency, No. S071728 (filed March 25, 1999) [hereinafter San Francisco Brief].

California Constitution has been interpreted to allow the trial court to disregard existing water rights in order to fashion an allegedly equitable solution based on prior usage rather than current beneficial use."[124]

In California, the lines of priority are not clearly drawn between the urban and agricultural users, though some in M*ojave* make that claim.[125] There are California cities that hold very senior water rights, and are on the same side as the farmers in this case. The city of San Francisco, for example, filed an *amicus* brief supporting the Cardozo Appellants and the rule of priority.[126] We are not at a point where California can draw the line of reasonable use somewhere between farms and cities. The priority system, which has until now been the law of groundwater in California, draws a line that all users acknowledge between senior and junior users.

E. The Role of Certainty

Both sides of the controversy use the concept of "certainty" to bolster their arguments. The California Supreme Court has said that uncertainty "inhibits long range planning and investment for the development and use of waters."[127] The Appellants echo the court of appeal, which said: "[U]ncertainty is promoted by a judgment which disregards all existing and future riparian, overlying, and prescriptive rights, and allocates water on the basis of the amount of actual production (regardless of . . . right to produce) in one of the five years prior to the filing of the suit."[128] Appellants stress that "water producers . . . must have some objective basis, some dependable measure of the extent of their rights, *prior* to filing suit."[129]

The respondents, on the other hand, argue that limiting unexercised riparian or overlying rights and quantifying water rights as part of a stream or basin adjudication creates certainty. Under strict priority law, these users are allowed to take as much water as they can reasonably use. Since this is not necessarily a set amount from year to year, it leaves a lot of uncertainty for the appropriative users, who are only allowed to take "surplus."

The implementation of the physical solution in the M*ojave* case adds nothing to the law of certainty. In fact, the physical solution creates uncertainty. Every water right holder in California has a reason to worry that someday a court could wave an adjudicatory wand and, under the guise of equity, limit a longstanding water right.

F. Proposal

To create certainty in groundwater law the state needs to implement a system for monitoring consumptive use. There is currently no statewide system for regulating and permitting groundwater. The state, however, if loath to permit groundwater use, could implement a "water use registry." All water users on a system would have to register the quantity of water used annually. The state would need to implement incentives to encourage users to register. If the M*ojave* physical solution stands, there will be no incentive for holders of water rights to register their use; the registration would only be used against them, to limit their consumption. But, if the law of priority stands, the state could offer assurances that no registered water right being put to reasonable use would be unreasonably limited. This assurance would not be a stretch of the state's authority, since "reasonable use" is the current rule of groundwater in California. Registration would also help build a case for prescription. It will be easier for a user to prove the use of another's water right over five years if the prescriptive user has registered the quantity used.

124. M*ojave*, 75 Cal. Rptr. 2d at 496.

125. The Chicago Tribune labeled the controversy "farm versus city." S*ee* Brandon *supra* note 2, at C3.

126. S*ee* San Francisco Brief, *supra* note 123.

127. I*n re* Rights to Waters of Long Valley Creek Stream System, 599 P.2d 656, 666 (1988).

128. Cardozo Brief, *supra* note 105, at 40.

129. I*d*.

G. The Role of Reasonable Use

> [A]*s epitomized in* P*eabody*, [A*rticle* X, S*ection* 2 *says*]: 1. T*he right to the use of water is limited to such water as shall be reasonably required for the beneficial use to be served*. 2. S*uch right does not extend to the waste of water*. 3. S*uch right does not extend to unreasonable use or unreasonable method of use or unreasonable method of diversion of water.*[130]

If the California Supreme Court chooses to enforce the physical solution, it could determine that the overlying owners' uses are unreasonable. As noted above, the M*ojave* trial court said that drawing water from an overdrafted groundwater basin is *per se* unreasonable.[131] But in the case of growing alfalfa,[132] there may be another unreasonable use. There are organizations that argue that growing alfalfa in the desert should be deemed an unreasonable use of water. Some of the elements that may be considered when determining reasonableness include: (1) efficiency of use and diversion; (2) purpose of the use; (3) economic wealth and benefit generated and alternative competing uses; and (4) environmental value.[133]

According to an article written by the Natural Resources Defense Council ("NRDC"), alfalfa uses twenty-five percent of the state's irrigation water, but accounts for only four percent of the state's agricultural revenue.[134] Growing alfalfa requires flood irrigation. Flood "irrigation methods may direct as little as half of the irrigation water to the crop."[135] If alfalfa farmers could reduce the amount of water they are using without affecting their output, this could be used as a factor in finding an unreasonable use of water. The NRDC report states that with alternative technologies, farmers can save fifteen to twenty percent of irrigation water.[136] The physical solution imposed by the M*ojave* trial court requires a twenty percent reduction over five years. Without forcing issues of priority, the supreme court could enforce the physical solution on alfalfa farmers. If the NRDC's numbers are correct, the farmers retain the substantial enjoyment of their water right, and adhere to the trial court's physical solution.

It is not unprecedented for a California court to evaluate an established commercial venture and determine that use is no longer reasonable.[137] In 1967, in *Joslin v. Marin Municipal Water District*, the California Supreme Court was asked to determine if an upstream appropriator of water (Marin Municipal Water District ("MMWD")), was liable in damages to plaintiffs, downstream riparian owners. MMWD appropriated water previously used by Joslin in a sand and gravel business. The court determined that Joslin's $250,000 a year sand and gravel business served "no public policy," and thus under Article X, Section 2, Joslin's water use had become unreasonable.[138] As noted earlier, an unreasonable use can lead to the loss of one's water right. The court balanced the "public policy" value of Joslin's sand and gravel business with the Marin Water District's permit to appropriate water for municipal water supply purposes.[139] A beneficial use, once reasonable, was found unreasonable when compared to a "better" beneficial use. For Joslin to make his $250,000 a year, however, he required the normal flow of the creek to deposit the sand and gravel on his land.

Rather than standing for the proposition that municipal uses are superior to a sand and gravel business, *Joslin* may indicate that any use requiring the full flow of the creek is unreasonable, as it unduly limits any uses upstream. The logic is similar to F*orni*,[140] where the riparians' use was found unreasonable because it

130. *Joslin* at 893.

131. S*ee* Decision, *supra* note 8, at 7.

132. Alfalfa farming constitutes a significant portion of the agricultural operations of the Mojave Basin. S*ee id*. at 13.

133. S*ee Joslin* 429 P.2d at 893.

134. S*ee* Ronnie Cohen, H*aywire, Alfalfa Irrigation—Subsidies and the Competition for California Water*, NRDC PUBLICATION (Aug. 1999).

135. I*d*.

136. S*ee id*.

137. S*ee generally Joslin*, 429 P.2d 889.

138. S*ee id*. at 895.

139. S*ee id*.

140. 126 Cal. Rptr. 851 (1976).

left other users with little or no water. In both cases, users were actively applying a water right to a constructive use. That use was not relevant to the reasonable use analysis, however, since the method of use was deemed unreasonable. Applying this logic to M*ojave*, an overlying user's method of use could be unreasonable if the result is the extinguishment of another's right to use the water. This result is contrary to the strict law of priority, but it may be the result of the rule of priority when tempered by reasonable use.

As F*orni* and J*oslin* suggest, even if an overlying user's application of groundwater is beneficial, it is not automatically "reasonable" within the meaning of the California Constitution. According to F*orni* and P*asadena*, what is reasonable is the use that allows the most users a reasonable share. In F*orni*, riparians cannot use all the water, simply because it is their right; in P*asadena*, the overlying users must share with appropriators if they have been sharing all along. In M*ojave*, the trial court came to a similar conclusion: spread the limited quantity available to many, rather than limit it to the few who, by common law, have a right to that use.

The overriding constitutional consideration is to put the water resources of the state to a reasonable use and make them available for the constantly increasing needs of all the people. In order to attain this objective, the riparian owners may properly be required to endure some inconvenience or to incur reasonable expenses.[141]

VI. Conclusion

There are obvious advantages to the physical solution, including conserving local water, mending the overdraft in the Mojave Basin, and raising money to purchase supplemental water. The trial court's decision, however, disregards many years of California water law. If the California Supreme Court allows the physical solution to be imposed on all parties, it will set a precedent that a reasonable use of water by a senior water right holder is not safe from restriction or even elimination.

The reasonable use doctrine has placed limits on the law of priority. A court can apply "reasonable use" to severely limit senior water rights when the court determines a previously accepted and beneficial use is no longer reasonable. Perhaps in this case it is unreasonable that so many parties were drawing from an overdrafted groundwater basin for so long. But, as long as the reasonable use analysis remains entirely at the discretion of the court, with no set guidelines for that determination, no user can have confidence in the validity of his or her priority-based water right.

Upholding the priority system would discourage newer users from relying on water from an overdrafted groundwater basin. If courts continue to simply divide up the existing amount of water among an ever-growing number of users, soon no single user will receive enough water to maintain a farm, a business or a city.

California water law does need more certainty. To achieve this, the supreme court or the legislature should establish guidelines for applying the reasonable use doctrine to priority law. To allow the M*ojave* physical solution to stand would be to effectively abolish the law of priority in California.

141. *Id.* at 856.