CASE COMMENT

GROUNDWATER RIGHTS IN VERMONT *DRINKWINE V. STATE*[1]

INTRODUCTION

Vermont's law for the allocation of percolating ground water,[2] the absolute ownership doctrine, is inconsistent with well-established principles of groundwater movement.[3] The doctrine essentially provides a landowner with unrestricted ownership and use of all groundwater accessible beneath the confines of his property.[4] Under this rule, a landowner can intentionally deprive his neighbor of water without fear of liability.[5] This was poignantly illustrated in

---

1. 131 Vt. 127, 300 A.2d 616 (1973). The Drinkwine's sought relief from the Vermont Supreme Court once before in 1970. 129 Vt. 152, 274 A.2d 484 (1970). Both actions sought injunctive relief and the establishment of the reasonable use doctrine for groundwater usage. 131 Vt. at 129, 300 A.2d at 617. For a discussion of the reasonable use rule, see text accompanying notes 40-44 *supra*.

2. Percolating groundwater is defined as that water which infiltrates the surface and oozes beneath the earth. *See* White River Chair Co. v. Connecticut River Power Co., 105 Vt. 24, 39, 162 A.2d 859, 865 (1932). Groundwater is generally presumed to be percolating unless the water is shown to flow in an underground stream. *See* Canada v. City of Shawnee, 179 Okla. 53, 54, 64 P.2d 694, 696 (1936). *See generally* 1 R. CLARK, WATERS AND WATER RIGHTS § 52.2 (1967).

It is important to note that VT. STAT. ANN. tit. 10, §§ 6001-6091 (Cum. Supp. 1978) (more commonly referred to as Act 250) establishes certain criteria to regulate and promote the conservation of groundwater. *Id.* § 6086(a)(3). Nevertheless, the application of Act 250 is generally limited to commercial or industrial development on ten or more acres or the construction of ten or more housing units. *Id.* § 6001(3). Therefore, unless a problem concerning the allocation of groundwater comes within the narrow jurisdictional ambit of Act 250, the common law doctrine of absolute ownership is the governing rule for solving groundwater allocation disputes. *See generally* Drinkwine v. State, 131 Vt. 127, 300 A.2d 616 (1973). Thus, cases such as *Drinkwine* would not be subject to the provisions of Act 250.

3. State v. Michels Pipeline Constr., Inc., 63 Wis. 2d 278, 292, 217 N.W.2d 339, 345 (1974); Higday v. Nickolaus, 469 S.W.2d 859, 869 (Mo. App. 1971). *See also* MEYERS & TARLOCK, WATER RESOURCE MANAGEMENT 553-66 (1971) and B. Baldwin, Ground Water Rights in Vermont (1975) (unpublished essay which proposed that certain new groundwater legislation be adopted in Vermont). Baldwin advocates a correlative rights policy for groundwater in Vermont and highlights the belief that the absolute ownership doctrine is contrary to basic hydrological principles.

4. Huber v. Merkel, 117 Wis. 355, 369, 94 N.W. 354, 359 (1903); Chatfield v. Wilson, 28 Vt. 49, 55 (1855); Acton v. Blundell, 152 Eng. Rep. 1223 (Ex. 1843); 1 R. CLARK, *supra* note 2, § 52.2(B) at 327-28.

5. Hanks & Hanks, *The Law of Water in New Jersey: Groundwater*, 24 RUTGERS L. REV.

the recent Vermont Supreme Court case of *Drinkwine v. State*.[6]

The appellants, Harvey and Helen Drinkwine, owned property near the Salisbury Fish Hatchery, owned and operated by the respondent, State of Vermont. The Drinkwines used their property for farming purposes.[7] The Drinkwine spring, their only source of water, was situated approximately 2,700 feet east of the fish hatchery. The spring had supplied all the water requirements of the Drinkwine's farm for over fifty years.[8] In 1969, the state drilled and developed wells at the fish hatchery which pumped large quantities of water.[9] Shortly after the state increased the frequency of operation of their pumps, the Drinkwine spring ceased flowing.[10]

To prevent the permanent loss of their water supply, the Drinkwines argued for a change in Vermont's groundwater law which would apportion a reasonable share of groundwater for their needs and sought injunctive relief to restrain the operation of the state's pumps and wells.[11] The lower court, basing its decision on the absolute ownership rule, summarily dismissed the complaint for failure to state a cause of action.[12] On appeal, the Vermont Supreme Court

---

621, 632 (1970) [hereinafter cited as *Groundwater Law in New Jersey]:*

> [T]hat the person who owns the surface may dig therein, and apply all that is there found to his own purposes at his free will and pleasure; and that if in the exercise of such right, he intercepts or drains off the water collected from underground springs in his neighbour's well, this inconvenience to his neighbour falls within the description of damnum absque injuria, which cannot become the ground of an action (citing Acton v. Blundell, 12 M & W 324, 354, 152 Eng. Rep. 1223, 1235 (Ex. 1843)).

The absolute ownership doctrine and the "english rule" are synonymous, with the latter term being a result of the English case, Acton v. Blundell, 152 Eng. Rep. 1223 (Ex. 1843) where the principle of absolute ownership regarding percolating groundwater was first declared.

6. 131 Vt. 127, 300 A.2d 616 (1973).

7. Telephone interview with Mrs. Helen Drinkwine (Oct. 12, 1977).

8. *Id.*

9. Telephone interview with David Butterfield, Director of Vermont Water Resources Department (July 20, 1978). Mr. Butterfield stated that the average household uses five gallons per minute (gpm). At the time the Drinkwine well was exhausted, the state's rate of pumping reached 900 gpm. Drinkwine v. State, 131 Vt. 127, 129, 300 A.2d 616, 617 (1973).

10. Telephone interview with Robert Keer, Supervisor of Vermont Fish Hatcheries (Dec. 19, 1978). Mr. Keer stated that well records indicate that the frequency of pump operation at the Salisbury Fish Hatchery increased from part-time to full-time operation shortly before the Drinkwine well was exhausted.

11. Drinkwine v. State, 129 Vt. 152, 152-53, 274 A.2d 485, 486 (1970).

12. Drinkwine v. State, 131 Vt. at 128, 300 A.2d at 616-17 (1973).

reviewed the dismissal and stated the basic issue to be whether the court "should . . . modify the doctrine of absolute ownership of percolating waters in the light of changed environmental conditions?"[13] Despite acknowledging this issue, the court nevertheless, relying on precedent,[14] refused to recognize the Drinkwine's claim and affirmed the lower court's dismissal. In addition, the court reaffirmed the traditional rule of Vermont which recognizes not only an absolute right in the ownership of percolating groundwater, but also implicitly sanctions its waste and malicious diversion.[15]

VERMONT AND THE ABSOLUTE OWNERSHIP DOCTRINE

The Vermont Supreme Court first adopted the common law concept of absolute ownership in 1855 when it addressed the problem of allocating percolating groundwater in *Chatfield v. Wilson.*[16] In that case, the court held that an overlying landowner's right regarding the use of percolating groundwater was unlimited and absolute.[17] It refused to consider the maliciousness or wastefulness of the defendant's water use, thereby adopting a strict and harsh application of the absolute ownership rule.[18] The court premised its decision on the traditional belief that the owner of land has an

13. *Id.* at 128, 300 A.2d at 618.

14. *Id.* at 130, 300 A.2d at 618. (The court based its opinion on Chatfield v. Wilson, 28 Vt. 49 (1855)).

15. 131 Vt. at 129, 300 A.2d at 618; White River Chair Co. v. Connecticut Power Co., 105 Vt. 24, 162 A. 859 (1932). *See also* City of Winooski v. State Highway Bd., 124 Vt. 496, 207 A.2d 255 (1965). The absolute ownership rule is followed in other states. *See, e.g.*, Logan Gas Co. v. Glasgo, 122 Ohio St. 126, 170 N.E. 874 (1930); Board of Supervisors of Clarke County v. Mississippi Lumber Co., 80 Miss. 535, 31 So. 905 (1902); Roath v. Driscoll, 20 Conn. 532 (1850). *See generally* Weston & Gang, *Law of Ground Water in Pennsylvania]* and 37 Mo. L. REV. 357 (1972). These states do not adhere to the strict application of the absolute ownership rule allowing for waste and malicious diversion. This strict application of the rule is followed solely in Vermont. *See Groundwater in New Jersey, supra* note 5, at 633. (Although this article states that the strict application of the absolute ownership rule is also followed in Wisconsin, research indicates that Wisconsin has since adopted a different rule. State v. Michels Pipeline Constr., Inc., 63 Wis. 2d 278, 217 N.W.2d 339 (1974)).

16. 28 Vt. 49 (1855).

17. *Id.* at 58. *Accord,* Wheelock v. Jacobs, 70 Vt. 162, 40 A. 41 (1897); *Cf.* Fire Dist. No. 1 v. Graniteville Spring Water Co., 103 Vt. 89, 152 A. 42 (1930) (when flowing waters become part of a flowing stream, absolute ownership ceases).

18. 28 Vt. at 57-58.

absolute right to everything beneath the surface of the land.[19] The *Chatfield* opinion also stressed the "mysterious" nature of groundwater and society's inability to understand and regulate its movement.[20] The court noted its lack of scientific understanding of the nature and origin of groundwater, and concluded that it was therefore reluctant to adopt an equitable approach to the problem.[21]

Modern developments in the field of hydrology have significantly undermined the rationales for adherence to the absolute ownership rule because the movement and quantity of groundwater is now ascertainable.[22] Today, every state that follows the absolute ownership rule, *except* Vermont, has modified this rule to exclude waste and malicious diversion.[23] Under the modified absolute ownership rule, a landowner may still appropriate all of the percolating water accessible beneath his land to the exclusion of all other landowners; however, his use must be neither wasteful nor malicious.[24]

---

19. *Id.* at 54-55. *See, e.g.*, Clark v. Estate of Conroe, 38 Vt. 469 (1866); Hardwood v. Benton, 32 Vt. 724 (1860).

20. The secret, changeable, and uncontrollable character of underground water, in its operations, is so diverse and uncertain that we can not well subject it to the regulations of law, nor build upon it a system of rules, as is done in the case of surface streams. Their nature is defined, and their progress over the surface may be *seen* and *known*, and is *uniform*. They are not in the earth and a part of it, and no secret influences move them, but they assume a distinct character from that of the earth, and become subject to a certain law,—the great law of gravitation.

28 Vt. at 54. Although not specifically stated in *Chatfield*, the fact that there was an abundance of groundwater available in Vermont probably influenced the court's decision. *See generally* 1 R. CLARK, *supra* note 2, § 15.5; F. TRELEASE, WATER LAW 457-61 (2d ed. 1974).

21. We think the practical uncertainties which must ever attend subterranean waters is reason enough why it should not be attempted to subject them to certain and fixed rules of law, and that it is better to leave them to be enjoyed absolutely by the owner of the land, as one of its natural advantages, and in the eye of the law a part of it, and we think we are warranted in this view by well-considered cases.

28 Vt. at 54-55.

22. "Methods for determining the direction and volume of percolating groundwater flow are well developed. Since information about groundwater can now be made available by routine methods, the assumption that it is unknown can no longer justify the absolute ownership and reasonable use rules of groundwater." Davis, *Wells and Streams: Relationship at Law*, 37 Mo. L. REV. 189, 234 (1972) [hereinafter cited as *Wells and Streams*]. *See generally* C. MEYERS and A. TARLOCK, WATER RESOURCE MANAGEMENT 553-66 (1971).

23. See note 13 *supra*.

24. *See* Gamer v. Town of Milton, 346 Mass. 617, 620-21, 195 N.E.2d 65, 67 (1964). *See generally* 1 R. CLARK, *supra* note 2, § 17.1 at 72.

The case of *Drinkwine v. State*[25] provided the Vermont Supreme Court with the opportunity to reconsider the state's groundwater doctrine in light of technological advancements in the field of hydrology.[26] Nevertheless, the *Drinkwine* court declined to acknowledge these advancements and relied exclusively on the *Chatfield* case,[27] decided more than a century before, which premised its decision on a lack of scientific data.[28]

Since *Chatfield,* Vermont's water supply has encountered increasing problems caused by adverse weather conditions and population growth. Periodic droughts have threatened the state's water supply.[29] In addition, human, farm, and industrial pollution have had an impact on the quality of water in the state.[30] The exact dimension of the pollution problem now threatening Vermont's water resources is reflected by the fact that sixty-five percent of the state's drinking water was recently determined to be substandard for human consumption.[31]

In addition to pollution, the steady rise in Vermont's population,[32] fifty percent of whom receive their water supply from groundwater,[33] has had a definite impact on individual groundwater use as evidenced by the large number of wells drilled in the last decade.[34]

---

25. 131 Vt. 127, 300 A.2d 616 (1973).

26. See note 22 *supra.*

27. 131 Vt. at 129-30, 300 A.2d at 617-18.

28. See text accompanying notes 19-21 *supra.*

29. Telephone interview with David Butterfield, Director of Vermont Water Resources Department (Dec. 19, 1977). Mr. Butterfield stated that well records kept by the Department of Water Resources indicate that sections of Vermont periodically experience drought.

30. Evidence of such pollution was encountered by a recent commission which concluded that there was a lack of appropriate regulations for governing sewage disposal. This has resulted in recurring septic tank failures which have a direct impact on the quality and the quantity of groundwater resources. 4 Agency of Environmental Conservation, Vermont's 208 News 3-4, 6 (1977). *See generally* M. MORGAN, COMMISSION ON RURAL WATER, GUIDE TO STATE AND FEDERAL POLICIES AND PRACTICES IN RURAL WATER-SEWER DEVELOPMENT 206 (1977).

31. M. MORGAN, COMMISSION ON RURAL WATER, GUIDE TO STATE AND FEDERAL POLICIES AND PRACTICES IN RURAL WATER-SEWER DEVELOPMENT 206 (1977).

32. Vermont's population has increased over 38% since 1855 to an approximate figure of 465,000. VERMONT DEPARTMENT OF BUDGET AND MANAGEMENT, VERMONT FACTS AND FIGURES 4 (3d ed. 1975); THE NATIONAL SURVEY, VERMONT YEARBOOK (1978).

33. 5 Agency of Environmental Conservation, Vermont's 208 News 1, 4 (1978).

34. A. HODGE, DRILLING FOR WATER IN NEW ENGLAND 4 (1969). Another study, conducted in 1973 by the New England River Basins Commission and the Vermont Department of Water Resources, reported that 1700 new wells are drilled annually in Vermont. 5 Agency of Environmental Conservation, Vermont's 208 News 1 (1978).

In the past, wells did not pose a threat to a groundwater supply because the amount of water which could be withdrawn was limited by technology. Today, however, with the development of new pumps and pumping techniques, one can rapidly deplete a groundwater supply, creating a local water shortage. This was precisely the problem in the *Drinkwine* case, where the state's level of pumping at the Salisbury Fish Hatchery exhausted the supply of groundwater beneath the Drinkwine farm.[35]

The situation in the *Drinkwine* case is indicative of the type of problem that will increasingly confront the state as technology advances and the supply of groundwater becomes correspondingly more vulnerable and limited. The question which must be squarely faced is whether the absolute ownership rule should be abandoned in favor of one more appropriate for a fair allocation of groundwater between competing interests in Vermont. The court in *Drinkwine* recognized this as the central question, but, in answering it in the negative, was arguably wrong. Alternative legal doctrines[36] were available to the *Drinkwine* court which would have resulted in a fairer allocation of groundwater between the Drinkwines and the state, and a more sensible solution to the groundwater supply problem in the long run.

An Alternative to the Absolute Ownership Doctrine

The current absolute ownership rule in Vermont does not allocate groundwater in the sense of apportioning a share of groundwater for the reasonable needs of competing landowners. The absolute ownership doctrine instead recognizes and sanctions the right of the landowner under whose property the water lies to appropriate all the groundwater he wants, even though that appropriation deprives his neighbor of a share of that groundwater.[37] This approach encourages the unconstrained consumption of groundwater, an approach which is contrary to Vermont's efforts in other environmental areas to

35. Recall that the pumping equipment used by the state at the Salisbury Fish Hatchery allowed that facility to consume water at the rate of 900 gallons per minute. 131 Vt. at 129, 300 A.2d at 617. See note 9 *supra*.

36. See text accompanying notes 40-52 *infra*. *See also* 1 R. Clark, *supra* note 2, § 17 at 71-74.

37. *See* note 5 *supra*.

promote the conservation of its natural resources.[38] Even the modified absolute ownership doctrine, noted above,[39] prohibits only waste and malicious diversion. Like the present rule in Vermont, it fails to provide a framework for the allocation of groundwater between competing reasonable uses. Since the state's use of ground water was probably neither malicious nor wasteful, the *Drinkwine* decision would have been unaffected by application of the modified absolute ownership doctrine.

One major alternative to the absolute ownership rule is the reasonable use doctrine which entitles a landowner to a limitless use of percolating groundwater provided it is necessary for some beneficial use directly connected with the overlying land.[40] Under this rule a landowner is prohibited from wasting or maliciously diverting groundwater[41] and from using it for purposes not reasonably related to the overlying land.[42] The principal distinction between this doctrine and the modified absolute ownership rule is the requirement that in certain circumstances groundwater must be used on the overlying land.[43]

The reasonable use doctrine, however, fails to establish a system for considering the reasonable needs of competing landowners when an allocation of groundwater is necessary. Similar to the modified doctrine of absolute ownership, the reasonable use doctrine

---

38. VT. STAT. ANN. tit. 10, §§ 6001-6091 (Cum. Supp. 1978) (more popularly known as Act 250) is a good example of the state's genuine concern for the environment. This act provides an innovative approach for regulating the development of land in Vermont. It is significant to note that among the ten criteria which must be met for the issuance of a land use permit, one specific criterion requires that the development "[w]ill not cause an unreasonable burden on an existing water supply, if one is to be utilized." *Id.* § 6086(a)(3). Clearly, the Vermont Supreme Court's reaffirmation of the absolute ownership doctrine in the *Drinkwine* case, a decision which permitted the state to totally exhaust the Drinkwine's existing water supply, is in direct conflict with the environmental concerns of the Vermont legislature, as expressly set forth in Act 250.

39. *See* notes 23-24 *supra* and text accompanying.

40. *See* Finley v. Teeter Stone, Inc., 251 Md. 428, 248 A.2d 106 (1968); Bayer v. Nello L. Teer Co., 256 N.C. 509, 124 S.E.2d 552 (1962); Meeker v. City of East Orange, 77 N.J. 623, 74 A. 379 (1909); Forbell v. City of New York, 164 N.Y. 522, 58 N.E. 644 (1900).

41. *See, e.g.*, Stillwater Water Co. v. Farmer, 89 Minn. 58, 66, 93 N.W. 907, 909 (1903); Buffum v. Harris, 5 R.I. 243, 255 (1858); Greenleaf v. Francis, 18 Pick. 117, 122 (1836).

42. *See* Farmer's Investment Co. v. Bettwy, 113 Ariz. 520, 558 P.2d 14, 19 (1976).

43. *See* State v. Michels Pipeline Constr., Inc., 63 Wis. 2d 278, 299, 217 N.W.2d 339, 349 (1974) (the court said that where there is proof of injury to adjoining landowners the groundwater must be used in connection with the overlying land).

sanctions the unlimited pumping activities of a landowner when the groundwater is used for a reasonable purpose connected with the overlying land. The inequitable result in the *Drinkwine* controversy would probably still occur if Vermont were to adopt the reasonable use rule because the state's use of groundwater at the Salisbury hatchery promotes the legislative goal of fish conservation[44] and, therefore, arguably constitutes a reasonable use.

A second alternative is the doctrine of prior appropriation, which has been applied to both surface water and groundwater.[45] This rule is common in the western region of the country[46] and also neglects to evaluate the reasonable needs of the competing parties in the allocation of groundwater. Under this doctrine, a landowner's groundwater rights are determined on the basis of temporal priority and not on the ownership of land.[47] Each appropriator is entitled to a quantity of groundwater for some beneficial purpose, such as mining or irrigation.[48] The quantity for each appropriator is based on the

---

44. *See* VT. STAT. ANN. tit. 10, § 4136 (1973) (authorizing the "construction, maintenance and operation of . . . hatcheries, fishways").

45. *See, e.g.*, State v. Dority, 55 N.M. 12, 225 P.2d 1007 (1950); Pima Farms Co. v. Proctor, 30 Ariz. 96, 245 P. 369 (1926); Katz v. Walkinshaw, 141 Cal. 116, 74 P. 766 (1903). *See also* 1 R. CLARK, *supra* note 2, § 52.2(B) at 327; F. TRELEASE, WATER LAW 467-68 n.7, 475 n.2 (2d ed. 1974).

46. *See, e.g.*, Gilbert v. Smith, 97 Idaho 735, 552 P.2d 1220 (1976); City of Albuquerque v. Reynolds, 71 N.M. 428, 379 P.2d 73 (1963); City of Colorado Springs v. Bender, 148 Colo. 458, 366 P.2d 552 (1961); Tudor v. Jaca, 178 Or. 126, 165 P.2d 770 (1946). For enlightened criticism of the prior appropriation doctrine, see Chief Justice Crockett's dissenting opinion in Current Creek Irrigation Co. v. Andrews, 9 Utah 2d 324, 344 P.2d 528 (1959).

47. *See* City of Pasadena v. City of Alhambra, 33 Cal. 2d 908, 207 P.2d 17 (1949). "As between appropriators, . . ., the one first in time is the first in right. . . ." *Id.* at 926, 207 P.2d at 29. The doctrine of prior appropriation can be illustrated by the following example. If a groundwater basin contains 1000 gallons of water and *A* is the first party to utilize any of the water, then *A* will always be entitled to that amount. If *A* used 800 gallons, then *B*, the second party to use the same groundwater supply, is entitled to the remaining 200 gallons providing it is for some beneficial purpose. In periods of shortage where the basin only contains 600 gallons of water, *A* is entitled to all 600 gallons and *B* is entitled to none. *See also* J.L. SAX, WATER LAW PLANNING AND POLICY 465-68 (1968).

48. Crawford v. Lehi Irrigation Co., 10 Utah 2d 165, 168-69, 350 P.2d 147, 150 (1960); Genoa v. Westfall, 141 Colo. 533, 359 P.2d 370, 378 (1960); Tattersfield v. Putnam, 45 Ariz. 156, 172, 41 P.2d 228, 232 (1935). In addition to the judicial adoption of this doctrine, several states have codified "prior appropriation" through specific legislation. *See, e.g.*, OR. REV. STAT. § 537.120 (1969); WASH. REV. CODE ANN. § 90.03.010 (Supp. 1977). " '[B]eneficial use' means a use of water for the benefit of the appropriator, other persons or the public, that is reasonable and consistent with the public interest, including, but not limited to, domestic,

sequence of his use and on the initial amount of groundwater that such party has appropriated.[49] Subsequent appropriators are entitled to any quantity of groundwater that remains following the more senior appropriations.[50] In periods of shortage, the junior appropriator's right to a specific quantity of water is subordinated to the demands of a senior appropriator.[51]

The inherent infirmity in the doctrine of prior appropriation is that the needs of junior appropriators will be unsatisfied if there is only sufficient groundwater for those appropriators who were first in time.[52] An application of this approach in the *Drinkwine* case would have protected the Drinkwine's share of groundwater by virtue of their prior use. In times of shortage, however, the state's need for groundwater might have gone unsatisfied.

The most attractive alternative in many ways, in view of the underlying policies sought to be achieved, is a third basic doctrine: correlative rights.[53] The correlative rights doctrine requires a balancing of the equities between the competing uses of adjacent land-

---

agricultural, irrigation, industrial, manufacturing, mining, power, public, sanitary, fish and wildlife, and recreation uses . . ." ALASKA STAT. § 46.15.260(3) (1966).

49. Crawford v. Lehi Irrigation Co., 10 Utah 2d 165, 350 A.2d 147 (1960); Jerger v. Pacific Gas & Elec. Co., 207 Cal. 8, 276 P. 1017 (1929); Caviness v. LaGrande Irrigation Co., 60 Or. 410, 119 P. 731 (1911).

50. Hewitt v. Story, 64 F. 510 (9th Cir. 1894); Smith v. O'Hara, 43 Cal. 371 (1872). *See generally* State *ex rel.* Cary v. Cochran, 138 Neb. 163, 292 N.W. 239 (1940).

51. *See* McNaughton v. Eaton, 4 Utah 2d 223, 291 P.2d 886 (1955); Pasadena v. Alhambra, 33 Cal. 2d 908, 207 P.2d 17 (1949); Mettler v. Ames Realty Co., 61 Mont. 152, 201 P. 702 (1921); Day v. Hicks, 33 Okla. 675, 124 P. 1077 (1912). *See also* Heine v. Reynolds, 69 N.M. 398, 367 P.2d 708 (1962); *In re* Hobson, 64 N.M. 462, 330 P.2d 547 (1958); Spencer v. Bliss, 60. N.M. 16, 287 P.2d 221 (1955). *See* 1 W. HUTCHINS, WATER RIGHTS LAWS IN THE NINETEEN WESTERN STATES 569-82 (1971).

52. See note 47 *supra.*

53. *See, e.g.*, Bristor v. Cheatham, 75 Ariz. 227, 255 P.2d 173 (1953).

> A great majority of the states which in recent years have been presented with this problem adhere to the principle that the owner of lands overlying ground waters may freely, without liability to an adjoining user, use the same without limitation and without liability to another owner, providing his use thereof is for the purpose of reasonably putting the land from which the water is taken to a beneficial use.
>
> Some courts have extended the doctrine by limiting the taking of water, when there is a scarcity thereof, to only the land owner's proportionate share thereof. The former is the doctrine of reasonable use and the latter is the doctrine of correlative rights. The terms are often used interchangeably, but they are distinct doctrines.

owners.[54] Several jurisdictions have adopted this rule[55] which, unlike the reasonable use doctrine, provides for the apportionment of groundwater between competing reasonable uses whenever there is an insufficient supply to satisfy all current uses.[56] Some factors which aid in determining the relative equities of the parties are: the purpose of a groundwater use,[57] the economic and social value of a use,[58] the extent of the harm suffered because of a use,[59] and alternative methods available for satisfying a landowner's need.[60]

When these factors are applied to the *Drinkwine* case, the balance weighs heavily in favor of the Drinkwines. Of primary import-

---

54. *See* MacArtor v. Graylyn Crest III Swim Club, Inc., 41 Del. Ch. 26, 187 A.2d 417 (1963). "This rule permits the court to consider and evaluate the various factors on both sides and arrive at an 'accommodation' of the conflicting rights, if that is feasible." *Id.* at 29, 187 A.2d at 419. *See also* Katz v. Walkinshaw, 141 Cal. 116, 74 P. 766 (1903); Bassett v. Salisbury Mfg. Co., 43 N.H. 569, 577 (1862).

Factors used in balancing the "equities" of a ground water allocation dispute include the following:

(a) The purpose of the respective uses,
(b) The suitability of the uses to the water course or lake,
(c) The economic value of the uses,
(d) The social value of the uses,
(e) The extent and amount of the harm caused,
(f) The practicality of avoiding the harm by adjusting the use or method of use of one proprietor or the other,
(g) The practicality of adjusting the quantity of water used by each proprietor,
(h) The protection of existing values of land, investments and enterprises, and
(i) The burden of requiring the user causing the harm to bear the loss.

RESTATEMENT (SECOND) OF TORTS § 850B (Tent. Draft No. 17, 1971), *as cited in* Clark, *Arizona Groundwater Law: The Need for Legislation*, 16 ARIZ. L. REV. 799, 807-16 (1974).

55. *See, e.g.*, Higday v. Nickolaus, 469 S.W.2d 859 (Mo. App. 1971); Koch v. Wick, 87 So. 2d 47 (Fla. 1956); City of Pasadena v. City of Alhambra, 33 Cal. 2d 908, 207 P.2d 17 (1949).

56. *See* State v. Michels Pipeline Constr., Inc., 63 Wis. 2d 278, 300, 217 N.W.2d 339, 349 (1974). *See also Groundwater Law in New Jersey*, *supra* note 5, at 638; *Groundwater in Pennsylvania*, *supra* note 13, at 15.

57. *See* Higday v. Nickolaus, 469 S.W.2d 859, 866 (Mo. App. 1971); MacArtor v. Graylyn Crest III Swim Club, Inc., 41 Del. Ch. 26, 30, 187 A.2d 417, 420 (1963); Evans v. City of Seattle, 182 Wash. 450, 47 P.2d 984 (1935); Bassett v. Salisbury Mfg. Co., 43 N.H. 569, 82 Am. Dec. 179 (1862). *See generally* Jones v. Oz-Ark-Val Poultry Co., 228 Ark. 76, 306 S.W.2d 111 (1957).

58. *See* MacArtor v. Graylyn Crest III Swim Club, Inc., 41 Del. Ch. 26, 30, 187 A.2d 417, 420 (1963).

59. Erickson v. Crookston Waterworks Power & Light Co., 105 Minn. 182, 196, 117 N.W. 435, 440-41 (1908).

60. *See generally* cases cited note 57 *supra*.

ance is the fact that the purpose of their use was domestic. Domestic uses are universally recognized as entitled to preference in time of shortage.[61] The reason for this domestic priority is clear—the very survival of an individual, his family and domestic animals would be severely threatened if the right to water for domestic use were defeasible by stronger, higher-volume users. It is not known whether alternative sources existed that might have satisfied the needs of either the State of Vermont or the Drinkwines. Nevertheless, the volume of water needed by the Drinkwines was miniscule compared to the volume needed by the State,[62] and there was no showing that the method of withdrawal used by the Drinkwines was inefficient or wasteful. Depriving the Drinkwines of an absolutely essential domestic water supply seems unconscionable in these circumstances. If the correlative rights doctrine had been applied to this case, the court would have been able to fashion a more equitable scheme for the allocation of groundwater, allowing both parties to continue to use the water from their mutual underground basin.

A Need for Legislation

Although judicial adoption of the doctrine of correlative rights would provide an immediate means for resolving local conflicts over insufficient water supplies, it does not provide a plan for the long term rational use of groundwater.[63] The citizens of Vermont need and deserve security for their groundwater usage without having to

61. In Prather v. Hoberg, 24 Cal. 2d 549, 150 P.2d 405 (1944), the California Supreme Court stated: "Without question the authorities approve the use of water for domestic purposes as first entitled to preference." *Id.* at 562, 150 P.2d at 412. *See also* Town of Sterling v. Pawnee Ditch Extension Co., 42 Colo. 421, 426-28, 94 P. 339, 340 (1908). *But see* Phillips v. Gardner, 2 Or. App. 423, 469 P.2d 42 (1970). Other clear examples of domestic priority may be found in the statutory provisions and constitutions of several western states. Although these jurisdictions adhere to the prior appropriation doctrine, the analogy between this doctrine and the Drinkwine situation is strong when water is in short supply, since this is the very type of condition that spawned the prior appropriation doctrine in the first place. *E.g.*, N.D. Cent. Code § 61-04-06.1 (Supp. 1977); Or. Rev. Stat. § 540.140 (1977); Utah Code Ann. § 73-3-21 (1953); Wyo. Stat. §§ 41-3-102, 41-3-906 (Michie 1977). Colo. Const. art. 16, § 6; Idaho Const. art. 15, § 3; Neb. Const. art. 15, §§ 4, 6.

62. *See* note 9 *supra*. It appears that the volume of water used by the state may have exceeded that of the Drinkwines by a factor of nearly 200 to one.

63. *See generally* Clark, *Arizona Ground Water Law: The Need for Legislation*, 16 Ariz. L. Rev. 799, 807-16 (1974); *Ground Water in Pennsylvania*, *supra* note 15.

resort to costly litigation. Courts do not have access to the hydrological expertise or staff necessary to fully understand and fairly litigate statewide groundwater issues.[64] In addition, the courts would have to retain permanent jurisdiction over a specific case in order to supervise and insure full compliance with a judicial decision allocating groundwater. Furthermore, groundwater is a valuable state resource which requires state regulation and protection to insure its optimum use in society. Only a comprehensive statutory scheme can provide for the regulation, security, and future rational use of groundwater. Although the specifics of such a scheme are beyond the scope of this case comment, it is possible to identify the basic objectives that should be reflected in such legislation.[65]

Comprehensive water legislation should recognize and provide for the interrelationship between surface and groundwater.[66] The legislation should unambiguously declare the state's authority to control and use its resources for the benefit of the public.[67] Section 1278 of Vermont's Water Pollution Control Act,[68] enacted after the *Drinkwine* decision, represents a step in this direction as it mandates the state's use and regulation of groundwater for the prevention of pollution and the benefit of the public.[69] The legislative policies evidenced in section 1278 are in direct conflict with the court's ruling in *Drinkwine* that individuals possess an absolute

64. *See* L. MACK, GROUND WATER MANAGEMENT IN DEVELOPMENT OF A NATIONAL POLICY ON WATER 95-96, 101 (NATIONAL WATER COMMISSION P.B. 201 536, 1971).

65. A helpful discussion of the conceptual policies and goals that any groundwater legislation should incorporate can be found in two authoritative sources. MACDONALD & BEUSCHER, WATER RIGHTS 70-71 (1973); Clark, *Institutional Alternatives for Managing Groundwater Resources: Notes for a Proposal*, 18 NAT. RES. J. 153, 158-60 (1978).

66. *See generally* MACDONALD & BEUSCHER, WATER RIGHTS 70-71 (1973); Clark, *Institutional Alternatives for Managing Groundwater Resources: Notes for a Proposal*, 18 NAT. RES. J. 153, 158-59 (1978).

67. At present, there is some ambiguity whether Vermont has complete authority and control over its water resources. A reading of the state's water policy as set forth in VT. STAT. ANN. tit. 10, § 901 (Cum. Supp. 1978) appears to give the state control over water resources "in the public interest and to promote the general welfare." VT. STAT. ANN. tit. 10, § 905 (1973), however, authorizes the Water Resources Department to purchase or accept the donation of property rights in the water of the state. This would seem to indicate that Vermont still recognizes individual proprietary rights in its waters.

68. VT. STAT. ANN. tit. 10, § 1278 (Cum. Supp. 1978).

69. "It is the policy of the state that groundwater resources shall be protected, regulated and, where necessary, controlled in order to protect and promote the general welfare of the public." *Id.*

proprietary right in groundwater.[70] A detailed legislative scheme is required concerning the allocation of groundwater and the effect of pollution on groundwater resources. Such legislation should reaffirm the implicit policy of section 1278 by recognizing that individuals have only a usufructuary privilege to groundwater.[71]

In addition, the state legislative scheme should provide for the creation of a central administrative agency, or for the assumption of administrative responsibilities by an existing agency. The Vermont Water Resources Board, with modifications of its present status, would be the most appropriate body to fulfill the role of a central administrative agency. This agency should have complete authority to formulate and then enforce a statewide water policy.[73] It should be given responsibility for compiling information,[74] creating a flexible permit system, providing expert hydrological advice, and adjudicating all water claims.[75] Decisions of this agency should

---

70. *Compare* notes 21 *and* 68 *supra.*

71. *See, e.g.*, WYO. STAT. §§ 41-3-901-38 (1977) for a good example of a legislative scheme which authorizes the Wyoming Water Board to regulate the allocation and pollution of its groundwater resources. Section 41-3-909 extensively defines the enforcement duties and powers of the state engineer, including investigations and legal interventions in any situation that threatens Wyoming's policy of conserving its groundwater resources. The state engineer is explicitly granted the authority to order any appropriator interfering with a domestic use to cease or reduce such interference to an acceptable level. *Id.* § 41-3-911. *See also id.* § 41-3-915. In addition to establishing a priority system in which domestic uses are preferred, *id.* § 41-3-907, Wyoming requires that all wells be licensed and that subsequent to a hearing, *id.* § 41-3-932, the engineer may suspend or cancel any permit for a well which violates the state's policy of groundwater conservation. *Id.* § 41-3-937. In essence, Wyoming's groundwater statutes allow for and promote the effective management of its groundwater resources by granting powers of allocation, with statutory guide lines, to the state engineer.

72. The importance of an administrative agency is discussed in MACDONALD & BEUSCHER, WATER RIGHTS 70 (1973). *See, e.g.*, OR. REV. STAT. § 536.220(2) (1977) (integrated state water resources policy to be formulated and enforced by single state agency).

73. The Vermont Water Resources Department has such authority pursuant to the 1973 enactment of VT. STAT. ANN. tit. 10, § 1279 (Cum. Supp. 1978). Despite this authority, the department has yet to formulate a long range comprehensive groundwater policy. *Cf.* OR. REV. STAT. § 536.220(2) (1977) (This statute provides that an integrated statewide water resources policy should be formulated).

74. The Vermont Water Resources Department is authorized to compile information on groundwater. VT. STAT. ANN. tit. 10, § 907 (1973). It presently requires all well drillers to be licensed and to submit information on the wells drilled. It is important to note that nowhere is the Water Resources Department granted authority to prevent the drilling of a well. *Cf.* OR. REV. STAT. § 536.300 (1977) (authorizes Water Resource Board to proceed as rapidly as possible in gathering pertinent water data to formulate state water policy).

75. The Vermont Water Resources Board is presently authorized to compile water data

be appealable to the courts only on issues of law,[76] thereby ensuring that questions of water policy would be decided by trained engineers in the field of hydrology and not by a judicial system ill suited for determining complex technological issues.[77] Finally, any legislative effort toward the management of groundwater obviously should not be divorced from regulation of other water quality matters; and the scheme should provide a comprehensive approach toward conservation, waste reduction, and pollution abatement in water management.

CONCLUSION

The *Drinkwine* case represents the last vestige of a strict technical application of the absolute ownership rule. Today, Vermont's development and environment require a more rational approach to the management of its groundwater resources. The doctrine of correlative rights would be an important interim step in achieving such management and for this reason should be adopted as judicial policy in Vermont until comprehensive water legislation is promulgated.

John P. Sahl

---

and provide hydrological advice, but as yet lacks the crucial authority to adjudicate groundwater allocation controversies. VT. STAT. ANN. tit. 10, § 907 (1973). The nature of such an adjudicatory proceeding should, upon sufficient notice of a hearing, require all interested parties to present evidence regarding their groundwater claims. The result in an allocation decision would then be based on a system of legislative priorities. *Compare* note 69 *supra*.

A general discussion of suggested agency responsibilities can be reviewed in the authorities cited at note 72 *supra*. *Cf.* OR. REV. STAT. § 537.670 (1977) (provides the Water Resources Director with final authority to cancel any water permit issued from that office after a hearing is held).

76. *See* MACDONALD & BUESCHER, WATER RIGHTS 71 (1973). *See, e.g.*, OR. REV. STAT. § 537.790 (1977) (no order from the Water Resources Director should be disturbed when supported by substantial evidence).

77. *See generally* Note, *Groundwater Management in Nebraska Without a Legislative Solution: Is There an Alternative?*, 57 NEB. L. REV. 78, 79, 88 (1978).