Denver Law Review

Volume 47
Issue 2 *Symposium - Colorado Water Law*

Article 7

January 1970

A Survey of Colorado Water Law

Denver Law Journal

A Survey of Colorado Water Law

NOTE

A SURVEY OF COLORADO WATER LAW*

CONTENTS

*This study was conducted by the *Denver Law Journal* Association beginning in the Fall, 1969. The *Journal* expresses its sincere appreciation to The Honorable Mortimer Stone, former Chief Justice of the Supreme Court of Colorado, for serving as a Special Editor for this issue; the *Journal* also extends its thanks to Mr. Darryl G. Kaneko for his assistance in the preparation of this work.

INTRODUCTION

COLORADO has attempted to encourage the utilization of its water resources in a manner which is consistent with the climate and geography of the state and in a way which contributes to social and economic growth. To affect this policy, there have been numerous legislative enactments, judicial opinions, and administrative procedures — all of which comprise the total body of Colorado water law. It is the purpose of this study, divided into three major parts, to set forth this law as clearly and concisely as possible.

PART ONE: WATER WHICH IS TRIBUTARY

In Colorado, all water which flows into natural streams is governed by the system of prior appropriation, a system which comprises a number of elements and which constitutes a significant portion of the total body of Colorado water law. PART ONE discusses the component parts of the prior appropriation doctrine against the historical background of the system.

To provide this background, PART ONE begins with a brief sketch of the early developments of prior appropriation in Colorado. Within this context, those elements of water law which have become known as the "Colorado Doctrine" and the "Colorado System" are described. Following this discussion, the first major element of the appropriation doctrine is treated: the requirements which must be satisfied before a right is acquired. The principles of diversion, beneficial use, conditional rights, and rights-of-way are considered within this area.

Once the appropriative right is acquired, the important issues then become the legal extent of the right and how it may be exercised. The legal principles involved in these parts of the appropriation system delineate the rights of junior and senior appropriators as well as the

requirements necessary for changing the point of diversion and place of use of a water right.

Yet legal controls have been placed upon the exercise of a water right which restrict it and which can cause it to be lost. Further, extensive adjudication and administrative procedures have been adopted which can significantly affect the manner in which a water right may be secured and maintained. A discussion of these aspects of the prior appropriation doctrine concludes PART ONE.

I. HISTORICAL BACKGROUND

Although perhaps of little practical value, the history of the development of the prior appropriation doctrine and, more specifically, of the Colorado Doctrine and the Colorado System provides significant insight into the water problems which were confronted by the Western States and the various methods and approaches used to solve those problems. In addition, the statutes and the judicial principles formulated during this early period form the general bases for the appropriation doctrine as it exists today.

A. *The Development of the Doctrine of Prior Appropriation*

Before the development and settlement of the West, the right to use the waters of natural streams was tied inextricably to the incidence of land ownership. Utilized primarily in the eastern half of the United States where water was abundant,[1] this common law riparian doctrine was founded on real property rights.[2] Thereunder, "rights in water arise from, and only from, ownership of land which adjoins or underlies a stream . . . ."[3] Further, riparian rights cannot be lost by mere disuse; the water can be used only on the riparian tract; and, at common law, there were no specific requirements as to beneficial use.[4]

Such rules were not suitable in the Western States. The arid climate, the geographical features, and an economy primarily based on mining and agriculture required more flexibility in water usage. For example, in the mining industry

> water was absolutely indispensable, but as such use often necessarily involved the diversion of the water to points at a distance from the stream, from which it could not well be restored to its natural channel, as well as its substantial diminution in quantity and deterioration in quality, it was found that the common-law doctrine governing the right to the use of natural streams was inapplicable.[5]

Therefore, to restrict the use of water only to land which touched

[1] J. SAX, WATER LAW 8 (1965) [hereinafter cited as J. SAX].

[2] J. LONG, IRRIGATION 126-27 (1916).

[3] J. SAX, *supra* note 1, at 8.

[4] *Id.* at 9.

[5] *See* Irwin v. Phillips, 5 Cal. 140, 63 Am. Dec. 113 (1855).

natural streams was both impractical and inefficient. Indeed, "to limit the use of water to those tracts of land which bordered the streams in the West have made the vast bulk of non-riparian lands simply unusable."

To alleviate the difficulties in applying the riparian doctrine, a new theory of obtaining water rights had to be developed. As more people moved to the West and used the water, a method had to be devised which would protect those who had already used water, allow maximum use of water resources, and, at the same time, conserve as much water as possble. By analogizing to mining law, the law of water rights became one of prior appropriation, *i.e.,* the first user of the water was protected against later takers, just as the first to claim a mine was protected from later "claim jumpers."[6] Although first developed as a custom, this appropriation doctrine gradually became the subject of constitutional and statutory enactments, making it a part of the law of the several Western States, albeit in varying forms: Some states attempted to commingle the doctrines of prior appropriation and riparian rights;[7] others adopted a general appropriation statute which made some provision for certain riparian rights;[8] and still others repudiated the riparian doctrine entirely.[9] Further, in the Mining Act of 1866,[10] the Desert Land Act of 1877,[11] and the Reclamation Act of 1902,[12] there appeared to be tacit approval by the federal government that the appropriation doctrine as adopted by the several states would be applicable to public lands which were located in such states, although presently that issue is the subject of heated debate between the state and federal governments.[13]

B. *The Development of the Prior Appropriation Doctrine in Colorado and the Colorado System*

Unlike some western states,[14] Colorado repudiated riparian rights *in toto*[15] and adopted the doctrine of prior appropriation. Because

---

[6] Trelease, *Law, Water and People: The Role of Water Law in Conserving and Developing Natural Resources in the West,* 18 WYO. L.J. 3, 6 (1963) [hereinafter cited as Trelease].

[7] For a good discussion of the results of such attempts, see California Oregon Power Co., v. Beaver Portland Cement Co., 295 U.S. 142 (1935).

[8] *See* J. SAX, *supra* note 1, at 1.

[9] Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, and Wyoming.

[10] 14 Stat. 262, 43 U.S.C. § 661 (1964).

[11] 19 Stat. 377, 43 U.S.C. § 321 (1964).

[12] 32 Stat. 388, 43 U.S.C. § 383 (1964).

[13] *See generally* Moses, *Federal-State Water Problems,* 47 DENVER L.J. 194 (1970).

[14] See text accompanying notes 8 and 9 *infra.*

[15] COLO. CONST. art. XVI, § 6; COLO. REV. STAT. ANN. § 148-2-2 (1963); *see* Coffin v. Left Hand Ditch Co., 6 Colo. 443, 447 (1882).

Colorado was the first state to adopt this system, the prior appropriation doctrine also became known as the "Colorado Doctrine" and is often contrasted with the earlier "California Doctrine" which attempted to commingle both riparianism and appropriation.[16] The factors which necessitated the adoption of the Colorado Doctrine were succinctly stated by Justice Helm in the well-known case of *Coffin v. Left Hand Ditch Co.*:[17]

> The climate is dry, and the soil, when moistened only by the usual rainfall, is arid and unproductive; except in a few favored sections, artificial irrigation for agriculture is an absolute necessity. Water in the various streams thus acquires a value unknown in moister climates. Instead of being a mere incident to the soil, it rises, when appropriated, to the dignity of a distinct usufructuary estate, or right of property.[18]

It should also be noted that the Colorado Doctrine was the rule in Colorado even before the adoption of the state constitution,[19] a fact of significant importance since many water rights had been established before the state was admitted to the Union. Notwithstanding the Session Laws of 1861, which seemed to infer that there may be riparian rights if the user applied his water to agricultural purposes,[20] the Colorado Supreme Court in the *Left Hand Ditch* case[21] construed the intent of the legislature in enacting such laws to be in accord with the doctrine of prior appropriation so that there was no conflict.[22] By so holding, the Court established the underpinnings of the Colorado Doctrine.

In addition to adopting the appropriation doctrine, Colorado has developed liberal procedures to be followed in establishing a water right, procedures which constitute what is frequently known as the "Colorado System." Historically this system has generally been described as permitting "water to be appropriated without any governmental intervention";[23] and it is often contrasted with permit systems which

---

[16] *See* California Oregon Power Co. v. Beaver Portland Cement Co., 295 U.S. 142 (1935). *See also* W. HUTCHINS, SELECTED PROBLEMS IN THE LAW OF WATER RIGHTS IN THE WEST 21-22 (1942) [hereinafter cited as W. HUTCHINS].

[17] 6 Colo. 443 (1882).

[18] Coffin v. Left Hand Ditch Co., 6 Colo. 443, 446 (1882).

[19] *Id.*

[20] [A]ll persons who claim, own or hold a possessory right or title to any land or parcel of land within the boundary of Colorado Territory, . . . when those claims are on the bank, margin or neighborhood of any stream of water, creek or river, shall be entitled to the use of the water of said stream, creek or river, for the purposes of irrigation, and making said claims available, to the full extent of the soil, for agricultural purposes.

Act of November 5, 1861, § 1, [1861] Colo. Laws 67 (amended 1866).

[21] Coffin v. Left Hand Ditch Co., 6 Colo. 443 (1882).

[22] *Id.* at 451-52.

[23] J. SAX, *supra* note 1, at 38.

have been adopted in other western states[24] (as well as a few eastern states)[25] and which

> require as a prerequisite to taking and using water that an application for a permit to proceed be made with some administrative agency . . . . Such applications frequently require a detailed information filing, publication and notice, hearing and provision for judicial review. . . . The grant or denial of the permit depends on whether the agency believes it would be "detrimental to the public interest."[26]

While the constitutional provision that the right to divert and beneficially use unappropriated water "shall never be denied"[27] would ostensibly seem to preclude Colorado from adopting a permit system, there are significant indications to the contrary. For example in *Fundingsland v. Colorado Ground Water Commission*,[28] plaintiff applied to the Colorado Ground Water Commission[29] for a permit to drill a well. Even though there were no objections to the application filed, the Commission denied the application "on the basis that there was over appropriation in the area where the well was to be drilled."[30] In appealing the decision of the trial court which upheld the Commission, the plaintiff argued, *inter alia,* that the ruling denied him of his constitutional right to appropriate. In rejecting this contention, the Colorado Supreme Court reasoned that even though unappropriated water might exist, it might not be available for appropriation. Indeed, the fact that it would deplete the source of supply and, concomitantly, be detrimental to senior appropriators using the same source of supply would support a finding that there was no available water for appropriation. Specifically, the court held that

> [w]hen, as in this case, water is being mined from the ground water basin [made subject to prior appropriation by COLO. REV. STAT.

---

[24] ARIZ. REV. STAT. ANN. § 45-142 (1956), *as amended* ARIZ. REV. STAT. ANN. § 45-142 (Supp. 1970); CAL. WATER CODE § 1225 (1956), *as amended* CAL. WATER CODE § 1225 (Supp.1970); IDAHO CODE ANN. § 42-202 (1948), *as amended* IDAHO CODE ANN. § 42-202 (Supp. 1969); KANSAS STAT. ANN. § 82a-709 (1964); NEV. REV. STAT. § 46-233 (1968); NEV. REV. STAT. § 533.325 (1963), *as amended* NEV. REV. STAT. § 533.325 (Supp. 1964); N.M. STAT. ANN. § 75-5-1 (1968); N.D. CENT. CODE § 61-04-02 (1960), *as amended* N.D. CENT. CODE § 61-04-02 (Supp. 1969); OKLA. STAT. ANN. tit. 82 § 21 (1970); S.D. COMPILED LAWS § 46-5-11 (1969); TEX. REV. CIV. STAT. ANN. art. 7492 (1954), *as amended* TEX. REV. CIV. STAT. ANN. art 7492 (Supp. 1969); UTAH CODE ANN. § 73-3-1 (1968); WASH. REV. CODE ANN. § 90.03.250 (1962), *as amended* WASH. REV. CODE ANN. § 90.03.250 (Supp. 1969); WYO. STAT. ANN. § 41-201 (1959), *as amended* WYO. STAT. ANN. § 41-201 (Supp. 1969).

[25] FLA. STAT. ANN. § 373.141 (1960), *as amended* FLA. STAT. ANN. § 373.141 (Supp. 1969); IOWA CODE ANN. § 455A.26 (1949), *as amended* IOWA CODE ANN. § 455A.26 (Supp. 1970); MD. ANN. CODE art. 66c, § 720 (1967); MINN. STAT. ANN. § 105.41 (1964), *as amended* MINN. STAT. ANN. § 105.41 (Supp. 1970); MISS. CODE ANN. § 5956-04 (1943), *as amended* MISS. CODE ANN. § 5956-04 (Supp. 1968).

[26] J. SAX, *supra* note 1, at 37 (citations omitted).

[27] COLO. CONST. art. XVI, § 6.

[28] 468 P.2d 835 (Colo. 1970).

[29] COLO. REV. STAT. ANN. § 148-18-3 (Supp. 1965).

[30] Fundingsland v. Colorado Ground Water Comm'n, 468 P.2d 835, 839 (Colo. 1970).

> ANN. § 148-18-1 (Supp. 1965)], and a proposed appropriation would result in unreasonable harm to senior appropriators, then a determination that there is no water available for appropriation is justified.[31]

Hence, the court upheld the permit procedures and dispensed with the constitutional question by deciding that there was no water available for appropriation.

Recent legislation also seems to indicate a trend to the permit system. In addition to the permit required by the Ground Water Management Act[32] discussed in *Fundingsland,* the "Water Right Determination and Administration Act of 1969"[33] provides for extensive application procedures[34] and administrative machinery[35] which is somewhat similar to procedures found in permit states and which indicates that at least a modified permit structure is being established in Colorado.

II. ACQUISITION OF A WATER RIGHT

Since Colorado has adopted the prior appropriation system, it is important to determine what acts are necessary to establish a valid appropriation. The material which follows focuses on the requirements which must be satisfied and also discusses the subjects of conditional rights and right-of-way which are often interrelated with the acquisition of a water right.

A. *Requirements*

Subject to several limitations and modifications which will be discussed in some detail at a later point, the doctrine of prior appropriation imposes two requirements in acquiring a water right: there must be a taking of the water and an application to beneficial use.[36]

1. The Taking

While the taking of water has generally been held to refer to an actual, physical diversion of water from a stream,[37] the courts have

---

[31] *Id.* at 839-40.

[32] COLO. REV. STAT. ANN. § 148-18-6 (Supp. 1965).

[33] *Id.* §§ 148-21-1 *et seq.* (Supp. 1969).

[34] *Id.* § 148-21-18.

[35] *See, e.g.,* COLO. REV. STAT. ANN. §§ 148-21-19 to -21 (Supp. 1969).

[36] Board of County Comm'rs v. Rocky Mtn. Water Co., 102 Colo. 351, 361, 79 P.2d 373, 378 (1938). It should be noted that at one time there might have been three requirements, the third being the filing of maps and plats. *See* COLO. REV. STAT. ANN. § 148-4-1 (1963). While it was not essential that such maps and plats be filed to make a valid appropriation, the entire section was nevertheless repealed by the legislature in 1969. *Id.* § 148-4-1 (Supp. 1969).

[37] Denver v. Northern Colo. Water Conserv. Dist., 130 Colo. 375, 386, 276 P.2d 992, 998 (1954).

stated that "[t]he word 'divert' must be interpreted in connection with the word 'appropriation' "[38] and that "the true test of appropriation of water is the successful application thereof to the beneficial use designed, and the method of distributing or carrying the same or making such application, is immaterial."[39] Thus, in *Thomas v. Guiraud,*[40] wherein it was alleged that a valid appropriation had not been made because ditches had not been constructed, the court stated:

> If a dam or contrivance of any kind will suffice to turn water from the stream and moisten the lands sought to be cultivated, it is sufficient, though no ditch is needed or constructed. Or if land be rendered productive by the natural overflow of the water thereon, without the aid of any appliances whatever, the cultivation of such land by means of the water so naturally moistening the same is a sufficient appropriation of such water, or so much thereof as is reasonably necessary for such use.[41]

The need for extensive, mechanical devices to accomplish a diversion of water was similarly disposed of in *Genoa v. Westfall.*[42] In that case, the plaintiff claimed water which had been used for domestic purposes, including water consumed by his livestock at natural watering places. The court held:

> It is not necessary in every case for an appropriator of water to construct ditches or artificial ways through which the water might be taken from the stream in order that a valid appropriation be made. The only indispensable requirements are that the appropriator intends to use the waters for a beneficial purpose and actually applies them to that use.[43]

Likewise, where a party utilized a natural reservoir in the bed of a stream to store water for future irrigation needs, the court held that a valid appropriation had been made even though an actual diversion from the bed of the stream did not take place till a subsequent date.[44] It should be noted, however, that the court's decision was conditioned upon the appropriator's beneficial purpose being consummated without unnecessary delay.[45]

Hence, whether or not an actual, physical diversion of water is necessary is dependent upon the needs of the appropriator and the location of the water supply. Yet in any event, any taking of water

---

[38] Larimer County Res. Co. v. People *ex rel* Luthe, 8 Colo. 614, 616, 9 P. 794, 795 (1885).

[39] Thomas v. Guiraud, 6 Colo. 530, 533 (1883). *But see* Colorado River Water Conserv. Dist. v. Rocky Mtn. Power Co., 158 Colo. 331, 406 P.2d 798 (1965).

[40] 6 Colo. 530 (1883).

[41] *Id.* at 533.

[42] 141 Colo. 533, 349 P.2d 370 (1960).

[43] *Id.* at 547, 349 P.2d at 378.

[44] Larimer County Res. Co. v. People *ex rel* Luthe, 8 Colo. 614, 617, 9 P. 794, 796 (1885).

[45] *Id.* at 617, 9 P. at 796.

must be accompanied by the second requirement for establishing a valid appropriation: beneficial use.[46]

2. Beneficial Use

While the state constitution requires that all waters be appropriated for a beneficial use,[47] it contains no definition of that term.[48] Lacking a constitutional standard, the courts have held that the determination of beneficial use depends upon the circumstances of each case.[49] Notwithstanding this ad hoc approach, the courts have created general categories of beneficial use which not only include, by implication, the constitutional list of preferences[50] — *i.e.*, domestic, agricultural, or

---

[46] Knapp v. Colorado River Water Conserv. Dist., 131 Colo. 42, 279 P.2d 420 (1955). "[B]eneficial use is the ultimate essential in the establishment of a water right . . . ." *Id.* at 52, 279 P.2d at 425. Denver v. Sheriff, 105 Colo. 193, 96 P.2d 836 (1939). "[T]he application of water to a beneficial use is essential to a completed appropriation." *Id.* at 199, 96 P.2d at 839. Board of County Comm'rs v. Rocky Mtn. Water Co., 102 Colo. 351, 79 P.2d 373 (1938). "[T]he act of diversion and the act of applying the water diverted to a beneficial use, whether performed by the same or different persons, are both necessary to constitute an appropriation, so the continued existence of the appropriation depends on the continuance of both, diversion and beneficial application." *Id.* at 361, 79 P.2d at 378. United States v. Palisade Irr. Dist., 60 Colo. 214, 152 P. 145 (1915). Much of the proceeding for the adjudication of water rights as related to a future appropriation of water depends on whether there will be an application to a beneficial use. *Id.* at 215, 152 P. at 145. Highland Ditch Co. v. Union Res. Co., 53 Colo. 483, 127 P. 1025 (1912). Water diverted and stored must be beneficially applied to constitute a valid appropriation. *Id.* at 485, 127 P. at 1025. Crawford Clipper Ditch Co. v. Needle Rock Ditch Co., 50 Colo. 176, 114 P. 655 (1911). A decree of an amount of water that flowed through a ditch was limited to the amount of water per second of time that had been applied to a beneficial use. *Id.* at 181, 114 P. at 657. Drach v. Isola, 48 Colo. 134, 109 P. 748 (1910). A decree for water for a future use could only become absolute if the water "was applied to a beneficial use within a reasonable time." *Id.* at 144, 109 P. at 751. Fort Morgan Land & Canal Co. v. South Platte Ditch Co., 18 Colo. 1, 30 P. 1032 (1892). The diversion of water into ditches "at times when the same is not needed for a beneficial purpose, to the detriment of other later appropriators" cannot be allowed. *Id.* at 3-4, 30 P. at 1033. Farmers' High Line Canal & Res. Co. v. Southworth, 13 Colo. 111, 21 P. 1928 (1889). A diversion of water "must be applied to some beneficial use, and in the case of irrigation it must be actually applied to the land before the appropriation is complete." *Id.* at 114-15, 21 P. at 1029. Platte Water Co. v. Northern Colo. Irr. Co., 12 Colo. 525, 21 P. 711 (1889). "It has been the settled doctrine of our courts that . . . appropriation, to be valid, must be manifested by the successful application of the water to the beneficial use designed, or accompanied by some open, physical demonstration of intent to take the same for such use." *Id.* at 531, 21 P. at 713. Wheeler v. Northern Colo. Irr. Co., 10 Colo. 582, 17 P. 487 (1888). "[T]o constitute a legal appropriation, the water diverted must be applied within a reasonable time to some beneficial use." *Id.* at 588, 17 P. at 489. Sieber v. Frink, 7 Colo. 148, 2 P. 901 (1884). "One of the essential elements of a valid appropriation of water is the application thereof to some useful industry." *Id.* at 154, 2 P. at 904.

[47] COLO. CONST. art. XVI, § 6. "The right to divert the unappropriated waters of any natural stream to beneficial uses shall never be denied." *Id.* Denver v. Sheriff, 105 Colo. 193, 96 P.2d 836 (1939). "The term 'beneficial use' is not defined in the constitution. What is beneficial use, after all, is a question of fact and depends upon the circumstances in each case." *Id.* at 204, 96 P.2d at 842.

[48] Denver v. Sheriff, 105 Colo. 193, 96 P.2d 836 (1939). "The term 'beneficial use' is not defined in the Constitution." *Id.* at 204, 96 P.2d at 842.

[49] *Id.* at 204, 96 P.2d at 842. *See also* Bell, *Beneficial Use of Water,* 3 WILLAMETTE L.J. 382, 384 (1965).

[50] COLO. CONST. art. XVI, § 6.

industrial purposes — but also other general purposes for which water is used.

a. Domestic Use

In 1888, a district court gave the term "domestic use" a definite description, stating that the term was to include

> housing purposes, including water for drinking, washing, bathing, culinary purposes, and the like; water for such domestic animals as are used and kept about the house, such as work animals and cows kept to supply their owners and their families with dairy products; and such other uses, not being either agricultural or mechanical, as directly tend to secure and promote the healthfulness and comfort of the home.[51]

b. Agricultural Use

Like domestic use, the term "agricultural use" has been broadly defined. It has been held to include "[a]ny activity incident to the cultivation of land for the growing of crops, the harvesting thereof, and the care and feeding of livestock. . . . It includes tillage, seeding, husbandry, and all things incident to farming in the widest sense of that term."[52]

c. Industrial Use

There is very little case law defining what constitutes industrial use for purposes of meeting the beneficial use requirement although it has been held that water is being put to a beneficial use if used for mining,[53] milling,[54] or the production of hydroelectric power.[55] Arguing by analogy from the rather broad definitions of domestic and agricultural use, it would appear that any use of water which involves an industry or which is related to an industry would be classed as a beneficial use.

d. Municipal Use

In addition to those beneficial uses which are based upon the list of preferences in the constitution, an additional category has been created which involves municipal uses. Indeed, "[t]he municipality . . . has the legal right to devote its acquired rights to municipal

---

[51] Armstrong v. Larimer County Ditch Co., 1 Colo. App. 49, 53, 27 P. 235, 236 (1891). The definitive description was set forth in the final decree entered on November 5, 1888, by the District Court of Larimer County and repeated by the Court of Appeals who reversed the district court on other grounds.

[52] Billings Ditch Co. v. Industrial Comm'n, 127 Colo. 69, 72, 253 P.2d 1058, 1059 (1953); *accord,* Smith v. Industrial Comm'n, 134 Colo. 454, 457, 306 P.2d 254, 255 (1957); Great Western Mushroom Co. v. Industrial Comm'n, 103 Colo. 39, 41, 82 P.2d 751, 752 (1938). *See also* McComb v. Farmers Res. & Irr. Co., 167 F.2d 911 (10th Cir. 1948); Zeigler v. People, 109 Colo. 252, 124 P.2d 593 (1942).

[53] *See generally* North Am. Explor. Co. v. Adams, 104 F. 404 (8th Cir. 1900); Sternberger v. Continental Mines, Power & Red. Co., 259 F. 293 (D. Colo. 1919).

[54] *See generally* North Am. Explor. Co. v. Adams, 104 F. 404 (8th Cir. 1900); San Luis Roller Mills, Inc. v. San Luis Power & Water Co., 102 Colo. 119, 77 P.2d 128 (1938); Windsor Res. & Canal Co. v. Hoffman Milling Co., 48 Colo. 82, 109 P. 422 (1910); Colorado Milling & Elev. Co. v. Larimer & Weld Irr. Co., 26 Colo. 47, 56 P. 185 (1899).

[55] *See generally* Sternberger v. Continental Mines, Power & Red. Co., 259 F. 293 (D. Colo. 1919).

uses . . . ."[56] This particular category appears to be a hybrid of other uses since it includes water used for fire fighting and street sprinkling,[57] for flushing sewers,[58] for irrigation of lawns and gardens,[59] for irrigation of trees, shrubs, grasses and other plant life usually grown in city parks,[60] for private and public bathing establishments,[61] and for recreational purposes.[62]

In many cases, the appropriation of water for municipal use is an appropriation of water for the purpose of sale to the ultimate consumer,[63] *i.e.,* to the inhabitants of the community and to industries located within the municipality. The city may also supply water to persons outside its boundaries although it has no duty to do so.[64]

e. Aesthetic Use

Beneficial use has also been held to include aesthetic uses such as watering "trees and grass, flowers and shrubs."[65] While the wasteful use of water for purely aesthetic purposes was denied in *Empire Water & Power Co. v. Cascade Town Co.,*[66] there was dictum to suggest that aesthetic uses "designed to promote health by affording rest and relaxation are assuredly beneficial."[67]

B. *Conditional Rights*

Once the requirements of taking the water and applying it to a beneficial use have been satisfied, an appropriator has the right to the use of water so acquired as against all other users who thereafter establish rights, provided that the appropriator continues to put the water to a beneficial use and that he does not infringe upon the rights of others.[68] Yet with the development of large scale water projects which often take years to complete, it became obvious that valuable

[56] Westminster v. Church, 445 P.2d 52, 58 (Colo. 1968).

[57] COLO. REV. STAT. ANN. § 148-2-6 (1963), *as amended* COLO. REV. STAT. ANN. § 148-2-6 (Supp. 1969).

[58] *Id.;* Pulaski Irr. Ditch Co. v. Trinidad, 70 Colo. 565, 568, 203 P. 681, 682 (1922); Winchester v. Winchester Water Works Co., 149 Ky. 177, 184, 148 S.W. 1, 4 (1912).

[59] Denver v. Sheriff, 105 Colo. 193, 209, 96 P.2d 836, 844 (1939).

[60] Denver v. Brown, 56 Colo. 216, 231, 138 P. 44, 50 (1913).

[61] COLO. REV. STAT. ANN. § 148-2-3 (1963), *as amended* COLO. REV. STAT. ANN. § 148-2-3 (Supp. 1969). The amending statute has, among other changes, deleted the specific wording declaiming private and public bathing establishments as a beneficial use of water.

[62] *Id.* § 148-21-3(7) (Supp. 1969).

[63] *See* Pulaski Irr. Ditch Co. v. Trinidad, 70 Colo. 565, 203 P. 681 (1922), where the city was denied the right to sell the water which it recovered and purified after being used in the sewers.

[64] Colorado Springs v. Kitty Hawk Dev. Co., 154 Colo. 535, 543, 392 P.2d 467, 471 (1964), *appeal dismissed, cert. denied,* 379 U.S. 647 (1965).

[65] Denver v. Sheriff, 105 Colo. 193, 209, 96 P.2d 836, 844 (1939).

[66] 205 F. 123 (8th Cir. 1913).

[67] *Id.* at 128.

[68] For a discussion of the rights of junior and senior appropriators, see PART ONE, § III (A) *infra.*

water rights could be lost due to the necessary delay in applying the water to a beneficial use. In response to this problem, the Colorado courts, by legal fiction, have recognized a conditional right of appropriation, which protects the appropriator's interest by establishing his priority at an earlier date than when beneficial use was first made, provided that the water project is pursued with due diligence.[69]

1. Due Diligence

A conditional right is predicated on the requirement that an appropriator maintains due diligence in completing his right. In making such a determination, the courts have decided the cases on an ad hoc basis, considering such factors as the complexity and size of the project, the extent of the construction season, the availability of materials, labor and equipment, the claimant's economic capabilities, and intervening external factors such as strikes, wars, and litigation.[70] While one need not display "unusual efforts or expenditures" in pursuing due diligence,[71] it has been held that reasonable progress must be shown in the financing, construction, and completion in whole or in part of each water project to prevent cancellation of a conditional decree for lack of due diligence.[72]

It should be noted, however, that in certain instances "reasonable progress" may be construed more liberally than in other situations. For example, in *Metropolitan Suburban Water Users Association v. Colorado River Water Conservation District*[73] the court stated:

> We hold that the statutory requisite of due diligence is met, during the period of the pendency of adjudication proceedings and until a conditional decree is awarded, by diligent action of the claimant in seeking to have his claim allowed and opposing in good faith the allowance of other claims which would, if allowed, be senior in point of time.[74]

Yet an appropriator cannot merely show due diligence in a single instance and thereby totally fulfill the requirement. Indeed, recent

---

[69] *See, e.g.,* Four Counties Water Users Ass'n v. Colorado River Water Conserv. Dist., 159 Colo. 499, 509, 414 P.2d 469, 475 (1966). *See also* COLO. REV. STAT. ANN. § 148-21-3(9) (Supp. 1969).

[70] Colorado River Water Conserv. Dist. v. Twin Lakes Res. & Canal Co., 468 P.2d 853, 856 (Colo. 1970); Denver v. Northern Colo. Water Conserv. Dist., 130 Colo. 375, 398, 276 P.2d 992, 1004 (1954); Taussig v. Moffat Tunnel Water & Dev. Co., 106 Colo. 384, 389-90, 106 P.2d 363, 366 (1940).

[71] Riverside Res. & Land Co. v. Bijou Irr. Dist., 65 Colo. 184, 201, 176 P. 117, 122 (1918) (dissenting opinion); Highland Ditch Co. v. Mumford, 5 Colo. 325, 336 (1880); 2 C. KINNEY, IRRIGATION AND WATER RIGHTS, § 734 (2d ed. 1912) [hereinafter cited as 2 C. KINNEY]; 93 C.J.S. *Waters* § 179 (1956).

[72] Four Counties Water Users Ass'n v. Colorado River Water Conserv. Dist., 159 Colo. 499, 509, 414 P.2d 469, 475 (1966). While a great deal of the discussion in *Four Counties* with respect to conditional decrees and due diligence centered around a statute which has since been repealed (Law of April 9, 1919, ch. 147, § 7, [1919] Colo. Sess. Laws 493 (repealed 1969)), it is arguable that those administering the procedures of the "Water Right Determination and Administration Act of 1969" will consider similar factors in determining whether or not due diligence has been performed.

[73] 148 Colo. 173, 365 P.2d 273 (1961).

[74] *Id.* at 199-200, 365 P.2d at 287.

legislation obligates the holder of a conditional decree to make court appearances in every second calendar year after his application for a conditional decree has been approved in order to present proof of diligence in support of his conditional decree.[75]

Further, filings for an application for a showing of due diligence concerning a conditional water right must be made before June 1, 1970.[76] As the result of 1970 legislative efforts,[77] however, some confusion ensued as to possible exceptions to this suspense date, but the Executive Committee of the Legislative Council Committee on Water has attempted to remove that doubt.

> At an executive committee meeting after the public meeting the committee discussed a point of confussion [*sic*] about the meaning of a change made to Section 148-21-44 by House Bill 1028 [1970 Colo. Session Laws 433] in the 1970 Session. Some water attorneys were of the opinion that since the change in Section 44 was to the effect that water cases being heard in court before Senate Bill 81 (COLO. REV. STAT. ANN. § 148-21-1 *et seq.* (Supp. 1969)) was passed in 1969, [*sic*] are to be heard under the law under which they were initiated, that this provision negates the provision of Section 148-21-18(1) [and Section 148-21-44] which [when read together state] that filings for an application for a showing of due diligence concerning a conditional water right must be made before June 1 of 1970. The consensus of the committee was that this is not the case; the change in Section 44 did not alter Section 18.[78]

---

[75] COLO. REV. STAT. ANN. § 148-21-17(4) (Supp. 1969); *see* Colorado River Water Conserv. Dist. v. Twin Lakes Res. & Canal Co., 468 P.2d 853 (Colo. 1970). In addition, the Attorney General of Colorado has observed:

> that in all cases where the conditional water right is determined under the new Act [COLO. REV. STAT. ANN. §§ 148-21-1 *et seq.* (Supp. 1969)] the application for a biennial finding of reasonable diligence does not have to be filed by any particular date of the year; however, the owner must obtain a finding by the referee sometime during the second year of each successive two-year period. It is also observed there is no requirement that the application be filed in even numbered years.

Letter from Duke W. Dunbar to A. Wayne Denny, May 5, 1970.

[76] COLO. REV. STAT. ANN. §§ 148-21-18(1), -44 (Supp. 1969).

[77] Law of Feb. 3, 1970, ch. 103, § 5, [1970] Colo. Sess. Laws 433.

[78] REPORT OF COLORADO LEGISLATIVE COUNCIL COMMITTEE ON WATER, EXECUTIVE COMMITTEE MEETING 9 (July 6, 1970). The Attorney General of Colorado also seems to lend support to the Council's interpretation. He has stated:

> The . . . section [COLO. REV. STAT. ANN. § 148-21-44 (Supp. 1969)] . . . in so far as it relates to biennial findings of reasonable diligence is only applicable to existing conditional decrees on the effective date of the Act, to wit: June 7, 1969, and to conditional decrees subsequently entered in proceedings pending on the effective date of the Act. As to existing conditional decrees on the effective date of the Act, an application for a biennial finding of reasonable diligence must be filed with the Water Clerk of the Division by June 1, 1970. As to conditional decrees entered subsequently to June 1, 1970 in proceedings pending on the effective date of the Act, an application would be due June 1, 1972.
>
> Showings of reasonable diligence under existing conditional decrees or conditional decrees entered in proceedings pending on the effective date of the Act are to be made in the year 1970 and even numbered years thereafter pursuant to the new Act. Thus, the Act, in effect, transfers all matters in regard to findings of reasonable diligence, with respect to conditional water rights, to the Water Courts effective June 1, 1970.

Letter from Duke W. Dunbar to A. Wayne Denny, May 5, 1970.

2. Relation Back

When a conditional water right has been pursued with due diligence and there has ultimately been an application of the water to a beneficial use, the courts have created the legal fiction of relation back which controls the priority date given to the appropriation.[79] More specifically, relation back has been defined as that operation by which the appropriation of water relates back to the time when the first step to secure that appropriation was taken, if the work from that step on was prosecuted with reasonable diligence.[80]

The purpose of the first step requirement of the relation back principle is to give notice to others,[81] placing them "on inquiry as to the proposed use, the volume to be appropriated, and the consequent demand upon the source of supply."[82] Since this notice should be reasonably likely to "bring knowledge to everyone within the sphere of possible adverse interest,"[83] it has been held that the first step must be "an open and notorious physical demonstration, conclusively indicating a fixed purpose to diligently pursue and, within a reasonable time, ultimately acquire a right to the use of water."[84] While a bare intention to divert water is not sufficient to satisfy the first step requirement,[85] it has been held that relation back will apply to the time when actual construction on a water project was begun[86] or when a survey was commenced.[87]

While historically the principle of relation back has been strictly construed,[88] there appears to be a trend to interpret the doctrine more liberally. Indeed, in *Metropolitan Suburban Water Users Association v. Colorado River Water Conservation District*[89] it was stated that the

---

[79] Rocky Mtn. Power Co. v. White River Elec. Ass'n, 151 Colo. 45, 50, 376 P.2d 158, 161 (1962); Denver v. Northern Colo. Water Conserv. Dist., 130 Colo. 375, 388, 393, 276 P.2d 992, 999, 1001 (1954).

[80] Taussig v. Moffat Tunnel Water & Dev. Co., 106 Colo. 384, 392, 106 P.2d 363, 367 (1940); Sieber v. Frink, 7 Colo. 148, 153, 2 P. 901, 903 (1884). For a decision involving the awarding of a conditional decree, see Four Counties Waters Users Association v. Colorado River Water Conservation District, 159 Colo. 499, 414 P.2d 469 (1966).

[81] Rocky Mtn. Power Co. v. White River Elec. Ass'n, 151 Colo. 45, 50, 376 P.2d 158, 161 (1962), *cited with approval in* Four Counties Water Users Ass'n v. Colorado River Water Conserv. Dist., 161 Colo. 416, 421, 425 P.2d 259, 261 (1967).

[82] Holbrook Irr. Dist. v. Fort Lyon Canal Co., 84 Colo. 174, 190, 269 P. 574, 581 (1928).

[83] San Luis Roller Mills, Inc. v. San Luis Power & Water Co., 102 Colo. 119, 123, 77 P.2d 128, 129 (1938).

[84] Fruitland Irr. Co. v. Kruemling, 62 Colo. 160, 165, 162 P. 161, 163 (1916); *accord,* Holbrook Irr. Dist. v. Fort Lyon Canal Co., 84 Colo. 174, 190, 269 P. 574, 581 (1928).

[85] Holbrook Irr. Dist. v. Fort Lyon Canal Co., 84 Colo. 174, 187-88, 269 P. 574, 580 (1928); New Loveland & Greeley Irr. & Land Co. v. Consolidated Home Supply Ditch & Res. Co., 27 Colo. 525, 529, 62 P. 366, 367 (1900).

[86] Wyoming v. Colorado, 259 U.S. 419, 495 (1922).

[87] Metropolitan Suburb. Water Users Ass'n v. Colorado River Water Conserv. Dist., 148 Colo. 173, 196, 365 P.2d 273, 285 (1961).

[88] Denver v. Northern Colo. Water Conserv. Dist., 130 Colo. 375, 393, 276 P.2d 992, 1001 (1954).

[89] 148 Colo. 173, 365 P.2d 273 (1961).

relation back principle should be construed and applied in a manner which would "aid and encourage, rather than to block development . . . ." of the state's water resources.[90]

C. *Rights-of-Way*

The acquisition of an appropriative water right in tributary waters may also involve taking whatever legal steps are necessary to gain access to the water source. Under a riparian system of water rights, the persons with rights to the water would, by definition, have access to the water source by virtue of their ownership of land adjacent to the stream; but under the appropriation system, an appropriator may or may not own the land necessary for access to a source of supply. If he does not, he must acquire a right-of-way to gain such access.

In Colorado, the acquisition of a right-of-way across the land of another by an individual who owns a water right is provided for both in the state constitution[91] and in the statutes;[92] case law also supports the proposition.[93] Further, a right-of-way may be acquired in various ways, is subject to certain limitations, and may run over the public domain.

1. Modes of Acquisition

A right-of-way may be obtained in many ways. It can be acquired by contract or grant,[94] parole license,[95] prescription,[96] or eminent domain.[97]

a. Contract or Grant

A right-of-way over private lands may, of course, be acquired by grant, although whether an easement or fee simple is conveyed depends upon the intention of the parties.[98] If the grant is not exclusive, the

[90] *Id.* at 194, 365 P.2d at 285; Four Counties Water Users Ass'n v. Colorado River Water Conserv. Dist., 159 Colo. 499, 513, 414 P.2d 469, 477 (1966).

[91] *See* COLO. CONST. art. II, § 14; *id.* art. XVI, § 7.

[92] COLO. REV. STAT. ANN. § 148-3-1 (Supp. 1969).

[93] *See* Larimer & Weld Irr. Co. v. Landers, 23 Colo. App. 84, 141 P. 517 (1914).

[94] DeGraffenried v. Savage, 9 Colo. App. 131, 47 P. 902 (1897): "The right [right-of-way] might be granted by contract between the parties . . . ." *Id.* at 136, 47 P. at 903-04. *See* North Sterling v. Knifton, 137 Colo. 40, 320 P.2d 968 (1958); Farmers' High Line Canal & Res. Co. v. New Hampshire Real Estate Co., 40 Colo. 467, 92 P. 290 (1907).

[95] Webb v. Wild Cat Lateral Ditch Co., 67 Colo. 495, 497, 186 P. 287, 288 (1920); Graybill v. Corlett, 60 Colo. 551, 553, 154 P. 730, 731 (1916); DeGraffenried v. Savage, 9 Colo. App. 131, 133, 47 P. 902, 902-03 (1897).

[96] Pleasant Valley & Lake Canal Co. v. Maxwell, 93 Colo. 73, 78, 23 P.2d 948, 950 (1933); Abrams v. Colwell, 79 Colo. 46, 47, 243 P. 615, 617 (1926); Neville v. Louden Irr. Canal & Res. Co., 78 Colo. 548, 549, 242 P. 1002 (1926).

[97] Lamborn v. Bell, 18 Colo. 346, 349, 32 P. 989, 990 (1893); Tripp v. Overacker, 7 Colo. 72, 73-74, 1 P. 695, 696-97 (1883); Boglino v. Giorgetta, 20 Colo. App. 338, 344, 78 P. 612, 614 (1904); *see* COLO. CONST. art. II, § 14; *id.* art. XVI, § 7; COLO. REV. STAT. ANN. §§ 148-3-1, -3 (Supp. 1969).

[98] North Sterling Irr. Dist. v. Knifton, 137 Colo. 40, 44, 320 P.2d 968, 970 (1958); *cf.* Logan v. Morris, 147 Colo. 1, 362 P.2d 202 (1961); Percifield v. Rosa, 122 Colo. 167, 220 P.2d 546 (1950).

owner of the servient estate may use the ditch but not to an extent that would be inconsistent with or injurious to the dominant use thereof.[99]

A right-of-way may also be acquired by implied grant, such right-of-way receiving the same treatment as an easement passed by deed.[100] Thus, it has been held that when one sells part of his land and that portion of the water right used on such land, a right-of-way for a ditch across the unsold land passes by implication.[101] Similarly, when ditches have been constructed, maintained, and used with the knowledge of the landowner and with his consent or without his interference, the courts have found a right-of-way to have been acquired by implied grant.[102]

b. Parol License

One might also obtain a right-of-way if a parol license is granted permitting the appropriator to construct or maintain a ditch across the land of the licensor. However, if the licensee makes no expenditures for substantial improvements, then the license is apparently revocable at the will of the licensor. On the other hand, if based upon the faith of the license the licensee has entered upon the land and expended money for improvements, then the license becomes irrevocable and operates like a grant.[103]

c. Prescription

A right-of-way acquired by prescription gives an appropriator access to water by means of an existing ditch.[104] Along with the prescriptive right-of-way, the appropriator also obtains all the rights necessary for the use and proper maintenance of the ditch, including the rights of ingress and egress.[105] Yet if the land is registered under the Torrens

---

[99] *See* Sebold v. Rieger, 26 Colo. App. 209, 142 P. 201 (1914).

[100] *See* Kane v. Porter, 77 Colo. 257, 235 P. 561 (1925); Yunker v. Nichols, 1 Colo. 551 (1872).

[101] Cleary v. Skiffitch, 28 Colo. 362, 373-74, 65 P. 59, 62-63 (1901); American Nat'l Bank v. Hoeffer, 18 Colo. App. 53, 55, 70 P. 156, 157 (1902). *Contra,* Child v. Whitman, 7 Colo. App. 117, 42 P. 601 (1895).

[102] Leonard v. Buerger, 130 Colo. 497, 502-03, 276 P.2d 986, 988-89 (1954); Kane v. Porter, 77 Colo. 257, 259, 235 P. 561, 562 (1925); Rogers v. Lower Clear Creek Ditch Co., 63 Colo. 216, 218, 165 P. 248, 249 (1917); *cf.* Graybill v. Corlett, 60 Colo. 551, 154 P. 730 (1916).

[103] Tynon v. Despain, 22 Colo. 240, 247, 43 P. 1039, 1041 (1896); Jones v. Bondurant, 21 Colo. App. 24, 26, 120 P. 1047, 1048 (1912); DeGraffenried v. Savage, 9 Colo. App. 131, 133, 47 P. 902, 903 (1897).

[104] Pleasant Valley & Lake Canal Co. v. Maxwell, 93 Colo. 73, 78, 23 P.2d 948, 950 (1933); Abrams v. Colwell, 79 Colo. 46, 47, 243 P. 615, 617 (1926).

[105] Neville v. Louden Irr. Canal & Res. Co., 78 Colo. 548, 549, 242 P. 1002 (1926). *See also* Pleasant Valley & Lake Canal Co. v. Maxwell, 93 Colo. 73, 23 P.2d 948 (1933); Abrams v. Colwell, 79 Colo. 46, 243 P. 615 (1926).

Title Registration Act [106] prior to the running of the prescriptive period, no right in an existing ditch may be acquired.[107]

d. Eminent Domain

Under the power of eminent domain, rights-of-way may be acquired by federal and state governments as well as by private parties. For example, federal acquisition of a right-of-way is possible under the Reclamation Act[108] which empowers the Secretary of the Interior to decide whether a taking is necessary and which prohibits state imposed limits or controls on the Secretary's authority.[109] In addition, the power of the federal government to take private property for public purposes, which is implicit in the Fifth Amendment to the United States Constitution,[110] has been affirmed in numerous judicial decisions.[111]

The State of Colorado has also been granted the power of eminent domain under its constitution;[112] and when this power is exercised, the constitution further provides that the compensation to be paid must be determined by either a board of commissioners or by a jury when requested.[113] If neither a board nor a jury is present and if the defendant objects, then any determination of damages is considered reversible error.[114] Yet as long as one of the two groups is present, a determination can be made; and the only matters to be decided are the necessity of the taking and the amount of the damages. Other issues, such as the feasibility of the project, may not be considered.[115]

In addition to the State's power of eminent domain, Colorado's constitution also permits the taking of land for a private right-of-way.[116]

---

[106] COLO. REV. STAT. ANN. § 118-10-37 (1963).

[107] *See* Dillenger v. North Sterling Irr. Dist., 129 Colo. 17, 266 P.2d 776 (1954) (holding that registration subject to any subsisting incumbrances on the property involved was sufficient to defeat title by prescription where registration was accomplished before expiration of eighteen years of adverse use by the claimant).

[108] *See* Henkel v. United States, 196 F. 345 (9th Cir. 1912), *aff'd*, 237 U.S. 43 (1915).

[109] United States v. O'Neill, 198 F. 677, 682-83 (D. Colo. 1912).

[110] U.S. CONST. amend. V: ". . . nor shall private property be taken for public use without just compensation." *Id.*

[111] United States v. Carmack, 329 U.S. 230, 237 (1946); Kohl v. United States, 91 U.S. 367, 371 (1875); United States v. Tiffin, 190 F. 279, 280 (N.D. Ohio 1911); United States v. Certain Parcels of Land, 209 F. Supp. 483, 486-87 (S.D. Ill. 1962), *aff'd*, 314 F.2d 825 (7th Cir. 1963); 43 U.S.C. § 421 (1964).

[112] COLO. CONST. art. II, § 15.

[113] *Id.*

[114] Tripp v. Overocker, 7 Colo. 72, 76, 1 P. 695, 698 (1883); *see* Phipps v. Denver, 57 Colo. 205, 140 P. 797 (1914). *See also* COLO. REV. STAT. ANN. § 50-1-1 (1963).

[115] Rothwell v. Coffin, 122 Colo. 140, 145, 220 P.2d 1063, 1065 (1950); Pine Martin Mining Co. v. Empire Zinc Co., 90 Colo. 529, 534, 11 P.2d 221, 223-24 (1932). The issues regarding persons entitled to condemn, the class of property subject to condemnation, the purpose for which property is to be used, and the constitutionality of the law authorizing condemnation were not to be considered. *Id.* at 538, 11 P.2d at 225. Kaschke v. Camfield, 46 Colo. 60, 64, 102 P. 1061, 1062-63 (1909) (while there was no timely showing of an attempt to agree on compensation, this issue was a matter to be determined solely by the court); *cf.* Mortensen v. Mortensen, 135 Colo. 167, 309 P.2d 197 (1957).

[116] COLO. CONST. art. II, § 14; *id.* art. XVI, § 7. For a case holding that such private takings are not in conflict with the 14th Amendment of the United States Constitution, see Pine Martin Mining Co. v. Empire Zinc Co., 90 Colo. 529, 537, 11 P.2d 221, 224-25 (1932).

This private right of condemnation upon payment of just compensation has been justified on the basis of necessity.[117] As stated by the Colorado Supreme Court: "[A]ll lands are held in subordination to the dominant right of others, who must necessarily pass over them to obtain a supply of water to irrigate their own lands, and this servitude arises, not by grant, but by operation of law."[118]

While the acquisition of a private right-of-way for conveying water is limited to reservoirs, drains, flumes or ditches under the Colorado constitution,[119] the legislature in 1969 insured a liberal interpretation of this provision by providing that a right-of-way may be acquired for a ditch, canal, conduit, well, pump, by-pass, reservoir, flume or other structure or device.[120] Thus, it would now appear that a right-of-way may be acquired for any type of diversion work, the only limitations being those common to rights-of-way in general.

2. Limitations on Rights-of-Way

In Colorado, the acquisition of a right-of-way is limited by statute. For example, one statute provides that

> [n]o tract or parcel of improved or occupied land, without the written consent of the owner thereof, shall be subjected to the burden of two or more ditches or other structures constructed for the purpose of conveying water through said land when the same object can feasibly and practicably be attained by uniting and conveying all the water necessary to be conveyed through such property through one ditch or other structure.[121]

Similar state statutes govern the location,[122] extent,[123] and control

---

[117] COLO. CONST. art. II, § 14. Private ways of necessity as construed in this section are not limited to or derived from common law easements so designated (Wagner v. Fairlamb, 151 Colo. 481, 487, 379 P.2d 165, 169 (1963)) but rather refer to ways indispensable to enjoyment of the land considering the purpose for which the ways are claimed. Moreover, the specific exceptions enumerated in this section are not so limited with respect to ways of necessity. Crystal Park Co. v. Morton, 27 Colo. App. 74, 85, 146 P. 566, 571 (1915). However, this section does not apply to private persons taking part of the public domain in possession of a private individual but over which he holds no title. *See* Knoth v. Barclay, 8 Colo. 300, 6 P. 924 (1885).

[118] Yunker v. Nichols, 1 Colo. 551, 555 (1872). See also the concurring opinion of Chief Justice Thatcher in Schilling v. Rominger, 4 Colo. 100, 109 (1878).

[119] COLO. CONST. art. II, § 14.

[120] COLO. REV. STAT. ANN. § 148-21-3(5) (Supp. 1969).

[121] *Id.* § 148-3-4. *See* Sand Creek Lateral Irr. Co. v. Davis, 17 Colo. 326, 29 P. 742 (1892).

[122] COLO. REV. STAT. ANN. § 148-3-5 (Supp. 1969). "Whenever any persons find it necessary to convey water through the lands of others they shall select for the line of such conveyance the shortest and most direct route practicable, upon which said ditch can be constructed with uniform or nearly uniform grade." *Id. See* Mulford v. Farmers Res. & Irr. Co., 62 Colo. 167, 161 P. 301 (1916); Downing v. More, 12 Colo. 316, 20 P. 766 (1889).

[123] COLO. REV. STAT. ANN. § 148-3-2 (Supp. 1969). "Extent of right-of-way. Such right-of-way shall extend only to a ditch, dike, cutting, pipeline or other structure sufficient for the purpose required." *Id.*

over the use of rights-of-way,[124] and federal statutes limit the acquisition of a right-of-way over the public domain.

3. Across the Public Domain

There are several federal statutes governing the laws of rights-of-way over the public domain. One of the statutes provides in part as follows:

> Whenever, by priority of possession, rights to the use of water for mining, agricultural, manufacturing, or other purposes, have vested and accrued, and the same are recognized and acknowledged by the local customs, laws, and the decisions of courts, the possessors and owners of such vested rights shall be maintained and protected in the same; and the right of way for the construction of ditches and canals for the purposes herein specified is acknowledged and confirmed . . . .[125]

This language has been subject to judicial interpretation in two respects. First, the requirement of a vested and accrued water right recognized under local law has prompted the question of whether a conditional water right is sufficient to acquire a right-of-way; and the case of *Jarvis v. State Bank,*[126] though not expressly answering the question, at least implies that a conditional water right is sufficient to satisfy the statute.[127] Second, the language providing for rights-of-way for canals and ditches, while seemingly narrow in scope, has been broadly construed to include rights-of-way for reservoirs.[128]

The statute set forth above was modified by a later enactment which involved irrigation rights over the public domain and which delineated a procedure to be followed by canal ditch companies and irrigation or drainage districts in obtaining rights-of-way.[129] A similar law made this procedure applicable to corporations, individuals, or

---

[124] COLO. REV. STAT. ANN. § 148-3-6 (1963). "No persons having constructed a private ditch for the purposes and in the manner provided in section 148-3-5, shall prohibit or prevent any other person from enlarging or using any ditch by them constructed in common with them, upon payment to them of a reasonable proportion of the cost of construction of said ditch." *Id. See* Junction Creek & N. Durango Dom. & Irr. Ditch Co. v. Durango, 21 Colo. 194, 40 P. 356 (1895) (holding that ditches subject to enlargement pursuant to this section are strictly private ditches).

[125] 43 U.S.C. § 661 (1964).

[126] 22 Colo. 309, 45 P. 505 (1896). The court in *Jarvis* stated that the ditch company involved *would* have required their right of way before completion if they had obtained a conditional water right by complying with the procedures required by Colorado law to obtain such a right. *Id.* at 314-15, 45 P. at 507. For a complete discussion of the current procedures which must be followed under COLO. REV. STAT. ANN. § 148-21-17 (Supp. 1969), see PART ONE, § VI (B)(2)(b) *infra.*

[127] *Id.* at 314-15, 45 P. at 507.

[128] *See* United States v. Big Horn Land & Cattle Co., 17 F.2d 357 (8th Cir. 1927) wherein the court held the words "canal or ditch" to include the acquisition of reservoir land. The words used by the court imply an even broader interpretation: "We think the clear spirit and intent of the act applies to a failure to complete the reservoir as well as the canal or ditch proper; that in the particular clauses mentioned the words canal or ditch were used in an inclusive sense, embracing the whole project." *Id.* at 365.

[129] 43 U.S.C. § 946 (1964).

associations of individuals.[130] Although these statutes provide for rights-of-way solely for irrigation and drainage, Congress has allowed rights-of-way for the additional purposes of water transportation, domestic use, and the development of power when the same are subsidiary to a primary purpose of irrigation or drainage.[131]

All of these irrigation statutes have been held to apply only to public lands which were vacant or unoccupied at the time of their enactment and in no way affect rights which had attached previous to their passage.[132] Nor do they give a mere user of public lands, however long, any rights as against a patentee who has come into possession of the land.[133] Once a right of way is established, however, a subsequent patentee takes subject to the existing easement.[134]

III. LEGAL EXTENT OF THE ACQUIRED RIGHT

Once a valid appropriation has been acquired, there are certain limitations and obligations placed upon the appropriator by the laws of Colorado. Since the use of water is so critically important, the rights and duties so incurred are jealously guarded and strictly enforced by both statutes and case law in an attempt to maintain a balance between the rights of users and to allow for maximum beneficial use of Colorado's water.

A. *Relative Rights of Junior and Senior Appropriators*

Due in part to the peculiar nature of water rights, it is difficult, if not impossible, to view the rights of "senior" or "junior" appropriators in a vacuum. On most streams in Colorado there are a number of users with different priorities that, in effect, "compete" with one another for a limited quantity of water, and any change, either natural or man-made, in the quantity, quality, or condition of the stream may affect other appropriators. For example, if a senior appropriator diverts more water than that allocated by his appropriation, junior appropriators' rights are going to be infringed. Thus, any examination of water rights must be viewed with the knowledge of this interconnecting relationship between senior and junior appropriators,[135] and courts uniformly try to maintain and afford the maximum use of the water supply consistent with vested rights of appropriators.

---

[130] *Id.* § 948.

[131] *Id.* § 951.

[132] *See* Nippel v. Forker, 26 Colo. 74, 56 P. 577 (1899).

[133] Boglino v. Giorgetta, 20 Colo. App. 338, 343, 78 P. 612, 614 (1904); *cf.* Knoth v. Barclay, 8 Colo. 300, 6 P. 924 (1885).

[134] Farmers' High Line Canal & Res. Co. v. Moon, 22 Colo. 560, 564, 45 P. 437, 438 (1896); Tynon v. Despain, 22 Colo. 240, 248, 43 P. 1039, 1041 (1896); Edwards v. Roberts, 26 Colo. App. 538, 544, 144 P. 856, 859 (1914).

[135] It is well to keep in mind that "rights" of senior appropriators are limitations on junior appropriators and vice-versa.

1. Rights of Senior Appropriators

It is a well recognized principle in Colorado that in cases concerning the diversion of water for the same purpose,[136] the first appropriator of the water of a natural stream has a prior right to such water to the extent of his appropriation.[137] A senior appropriator can insist that no junior divert to the senior's detriment water which is tributary to the senior's supply.[138] For example, an upstream junior appropriator diverting water from a tributary of the main stream cannot so reduce the quantity of water reaching the main stream that the downstream senior appropriator is deprived of his full appropriation. The extent of impairment of the senior appropriator's right is the factor to be considered and not the particular location of the junior appropriator's diversion.

There also exists the principle that a senior appropriator is entitled to have the conditions which existed on the stream at the time when he made his appropriation substantially continued and maintained.[139] In general, this principle grew out of the practice of mining companies which deposited large quantities of tailings and slime into their local water supply, making the appropriation of a downstream senior practically useless if it were for domestic or agricultural purposes. With this principle in effect, a senior appropriator, under a claim of right,

---

[136] The phrase "for the same purpose" might raise an inference that the rule "first in time first in right" does not apply in times of shortage when a conflict exists between users of dissimilar uses, *e.g.*, domestic use as opposed to industrial use. This is perhaps an overstatement of current Colorado law. While there does exist some authority (Sterling v. Pawnee Ditch Ext. Co., 42 Colo. 421, 426, 94 P. 339, 340 (1908)) for the proposition that when a conflict exists between dissimilar users a more preferred junior user may be allowed to supercede a less preferred senior user, this rule is generally subject to eminent domain proceedings and thus requires payment of just compensation to the senior user. For a more complete discussion of preferences, see PART ONE, § V(B) *infra*.

[137] Schilling v. Rominger, 4 Colo. 100, 103 (1878). The extent of a senior's appropriation is not limited to that quantity of water which would be immediately used. For example, in People *ex rel.* Park Reservoir Co. v. Hinderlider, 98 Colo. 505, 57 P.2d 894 (1936), a senior user was allowed to fill his reservoir to the full extent of his appropriation, even though a junior appropriator needed a part of that water for direct irrigation. *Id.* at 510, 57 P.2d at 896. For a more complete discussion of storage rights, see PART ONE, § IV(B) *infra*.

[138] Strickler v. Colorado Springs, 16 Colo. 61, 26 P. 313 (1891). Here, the court stated: "The fundamental principle of this system is that priority in point of time gives superiority of right among appropriators for like beneficial purposes. To now say that an appropriator from the main stream is subject to subsequent appropriation from its tributaries would be the overthrow of the entire doctrine." *Id.* at 67-68, 26 P. at 315. *See also* Peterson v. Reed, 149 Colo. 573, 369 P.2d 981 (1962); Rio Grande Res. & Ditch Co. v. Wagon Wheel Gap Imp. Co., 68 Colo. 437, 191 P. 129 (1920); Trowell Land and Irr. Co. v. Bijou Irr. Dist., 65 Colo. 202, 176 P. 292 (1918); Comstock v. Ramsay, 55 Colo. 244, 133 P. 1107 (1913).

[139] Cushmon v. Highland Ditch Co., 3 Colo. App. 437, 439, 33 P. 344, 345 (1883). Note, however, the qualification stated in Colorado Springs v. Bender, 148 Colo. 458, 366 P.2d 552 (1961):

> Furthermore, under our law there can be no apportionment of available supplies of water in times of short supply, instead, junior appropriators may be shut off if necessary to supply the priorities of senior appropriators, except where juniors who are so situated that shutting them down would not result in improving the water supply of senior appropriators.

Id. at 463, 366 P.2d at 555-56.

may insist that the quality of water that reaches his headgate not be permanently or unreasonably impaired by any action of an upstream junior.[140]

The main thrust of the rights of senior appropriators occurs in time of water scarcity when the senior has the right to his full appropriation, if there is water available, before the junior is allowed to exercise his right.[141] Further, even though it might be possible to supply several users by prorating the existing water, a senior appropriator is under no legal duty to give up any part of his appropriation, and any attempt to make the senior user rotate the use of available water or prorate it with junior users is legally unenforceable.[142] However, it should be noted that recent trends toward making more maximum utilization of the water have resulted in two statutory limitations upon this general rule: first, an appropriator is "not entitled to command the whole flow of the stream merely to facilitate his taking the fraction of the whole flow to which he is entitled";[143] and second, "[n]o reduction of any lawful diversion because of the operation of the priority system shall be permitted unless such reduction would increase the amount of water available to and required by water rights having senior priorities."[144] While the latter of these two statutory limitations raises questions, *e.g.,* to what extent must the senior priority be increased before the reduction of a junior appropriation is allowed, there clearly is an indication by the legislature that even senior rights are subject to the trend toward maximum beneficial use.

2. Rights of Junior Appropriators

While the right of a senior appropriator is superior to that of one who acquired his appropriation at a later date, the senior right is not absolute, and junior appropriators are entitled to exercise certain limited rights. For example, an upstream junior need not close his headgate to supply a downstream senior if this action will not benefit the senior.[145] That is, when stream conditions are such that there

---

[140] Comstock v. Ramsay, 55 Colo. 244, 257, 133 P. 1107, 1111 (1913). See also Rio Grande Reservoir & Ditch Co. v. Wagon Wheel Gap Improvement Co., 68 Colo. 437, 191 P. 129 (1920) for a classical statement of the argument and Peterson v. Reed, 149 Colo. 573, 369 P.2d 981 (1962) for current interpretation.

[141] Colorado Springs v. Bender, 148 Colo. 458, 463, 366 P.2d 552, 555-56 (1961). *See also* People *ex rel.* Park Res. Co. v. Hinderlider, 98 Colo. 505, 57 P.2d 894 (1936); Windsor Res. & Canal Co. v. Hoffman Milling Co., 48 Colo. 89, 109 P. 425 (1910); Coffin v. Left Hand Ditch Co., 6 Colo. 443 (1883).

[142] See Platt Valley Irrigation Co. v. Buckers Irrigation, Milling & Improvement Co., 25 Colo. 77, 53 P. 334 (1898) for a detailed explanation of this point. *See also* Water Supply & Stor. Co. v. Larimer & Weld Res. Co., 25 Colo. 87, 53 P. 386 (1898); Farmers Ind. Ditch Co. v. Agricultural Ditch Co., 22 Colo. 513, 45 P. 444 (1896). *But cf.* discussion in PART ONE, § IV(C)(2) *infra.*

[143] COLO. REV. STAT. ANN. § 148-21-2(2)(c) (Supp. 1969).

[144] *Id.* § 148-21-2(2)(e).

[145] Sterling v. Pawnee Ditch Ext. Co., 42 Colo. 421, 428, 94 P. 339, 341 (1908).

is no reasonable likelihood that useable quantities of water will be received by the senior appropriator as a result of the junior appropriator's shutdown, the junior appropriator cannot be compelled to cease his diversion.[146]

In addition, since no appropriator is entitled to have priority to more water than he has actually appropriated or for more water than he actually needs,[147] junior appropriators may divert any water beyond the needs of the senior and apply it to their own use. If a dispute then arises concerning the priority of the claims to the water, the court will determine whether the junior appropriator took a senior appropriator's surplus or whether the junior took under claim to the senior appropriator's priority. If the court finds that the junior user merely diverted surplus water, the senior user has no standing to complain. If the court finds that the junior appropriator diverted part of the senior appropriator's priority, other issues may have to be determined: The court may find that the senior appropriator abandoned part of his priority or that the junior appropriator's taking was under a claim of adverse possession.[148]

Junior appropriators are also entitled to have the conditions which existed on the stream at the time when they made their appropriations continued and maintained,[149] allowing the junior user to insist that the original quantity and quality of the water which reaches his headgate be maintained.[150] This principle is subject to the limitation that a junior user cannot be heard to complain if the conditions on the stream are changed by any natural or non man-made occurrences.[151]

However, this principle might work to the detriment of a junior appropriator. For example, if the stream carried polluted water before the date of appropriation but the pollution was not discovered by the junior user until after his date of appropriation, it would seem that the junior could not be heard to complain about the quality of the water

---

[146] Alamosa Creek Canal Co. v. Nelson, 42 Colo. 140, 149, 93 P. 1112, 1115 (1908).

[147] Nichols v. McIntosh, 19 Colo. 22, 29, 34 P. 278, 281 (1893).

[148] *See, e.g.*, DeHerrera v. Manassa Land and Irr. Co., 151 Colo. 528, 379 P.2d 405 (1963); Farmers Highline Canal & Res. Co. v. Golden, 129 Colo. 575, 272 P.2d 629 (1954); Enlarged Southside Irr. Ditch Co. v. John's Flood Ditch Co., 120 Colo. 423, 210 P.2d 982 (1949); Faden v. Hubbell, 93 Colo. 358, 28 P.2d 247 (1933); Baker v. Pueblo, 87 Colo. 489, 289 P. 603 (1930); Denver v. Colorado Land & Livestock Co., 86 Colo. 191, 279 P. 46 (1929); Comstock v. Ramsay, 55 Colo. 244, 133 P. 1107 (1913); Baer Bros. Land & Cattle Co. v. Wilson, 38 Colo. 101, 88 P. 265 (1906); Handy Ditch Co. v. Louden Irr. Canal Co., 27 Colo. 515, 62 P. 847 (1900). For a discussion of adverse possession and abandonment, see PART ONE, § V(E) *infra*.

[149] Vogel v. Minnesota Canal & Res. Co., 47 Colo. 534, 541, 107 P. 1108, 1111 (1910); Monte Vista Canal Co. v. Centennial Irr. Ditch Co., 24 Colo. App. 496, 503, 135 P. 981, 984 (1913); Larimer County Canal No. 2 Irr. Co. v. Poudre Valley Res. Co., 23 Colo. App. 249, 259, 129 P. 248, 251 (1913); Farmers' High Line Res. Co. v. Wolf, 23 Colo. App. 570, 578, 131 P. 291, 294 (1913).

[150] Vogel v. Minnesota Canal & Res. Co., 47 Colo. 534, 541, 107 P. 1108, 1111 (1910).

[151] Mendenhall v. Lake Meredith Res. Co., 127 Colo. 444, 447, 257 P. 2d 414, 415 (1953).

which he received. The senior appropriator who was causing the pollution could argue that since the quality of the water had not changed after the appropriation by the junior, the conditions on the stream had not been changed but had been maintained according to the enunciated principle. The Colorado Supreme Court confronted this problem in *Suffolk Gold Mining & Milling Co. v. San Miguel Consolidated Mining & Milling Co.*[152] and held that since the rights of senior appropriators were not absolute but conditional, they "were obligated to so use the water that subsequent locators might . . . receive the balance of the stream unpolluted, and fit for the uses to which they might desire to put it";[153] provided that the senior use involved only part of the water of a stream and that there was a reasonable way in which the remaining water in the stream could be preserved in its original condition.[154]

3. Limitations on Senior and Junior Appropriators

Appropriators of water have the right to change the point of diversion or the place or character of use, provided that the change will not injure vested rights of any other user.[155] However, if an appropriator seeks to secure water in excess of his original amount, the appropriation for such water will be junior to rights which accrued between the time of the original appropriation and the additional appropriation. For example, in *Church v. Stillwell*[156] the court stated:

> The plaintiff might have had, as he claims, the prior right to the amount of water appropriated to and used from the reservoir when it was in its natural state first utilized by him, but he would not have such priority as to any additional water attempted to be secured by an enlargement of the reservoir made after the rights of defendants had accrued by their appropriation through ditches or reservoirs.[157]

B. *Effect of Federal-State Relationships*

In addition to the legal limitations imposed on the appropriative right by Colorado law, the rights of the federal government might also have an effect on the extent of the legal right which is acquired when a valid appropriation is made. However, because of the extensive controversy between the federal government and the states as to the rights in waters which flow through public lands and as to interstate

---

[152] 9 Colo. App. 407, 48 P. 828 (1897).

[153] *Id.* at 417, 48 P. at 832.

[154] *Id.*

[155] Denver v. Colorado Land & Livestock Co., 86 Colo. 191, 192-93, 279 P. 46, 47 (1929); Fort Collins Milling & Elev. Co. v. Larimer & Weld Irr. Co., 61 Colo. 45, 53, 146 P. 140, 143 (1916). For the procedures involved in changing a point of diversion or place of use, see COLO. REV. STAT. ANN. § 148-21-18 (Supp. 1969). For a discussion of changing the exercise of the water right, see PART ONE, § IV(A) *infra.*

[156] Church v. Stillwell, 12 Colo. App. 43, 54 P. 395 (1898).

[157] *Id.* at 48, 54 P. at 397.

waters which flow through Colorado, the exact nature and limits of the effect cannot yet be determined.[158]

IV. Exercise of a Water Right

Once the extent of the acquired right has been determined, an appropriator may need to consider other factors in exercising his right. More specifically, he may want to know how he may change the character or place of use or the point of diversion; whether or not he is allowed to store water; or how his water right may be affected by water distribution organizations.

A. *Change in Exercise*

It is important for an appropriator to be able to change the exercise of his right as circumstances and needs vary. Hence, the Colorado courts have allowed,[159] and the legislature has facilitated,[160] such changes (often referred to as transfer proceedings) since the early beginnings of the prior appropriation system. This is not to imply that the right to change the exercise is conferred by statute; but rather, the right is incident to the ownership of a water right.[161]

When an appropriator desires to change the way in which he is exercising his right, there are several considerations with which he must concern himself. The most important of these are the types of changes which are permitted, the procedures which must be followed to affect a change, and the principles which govern whether or not a change can be made.

1. Types of Changes

Traditionally, a change in exercise has referred to a variety of possibilities such as a change in the place of use,[162] the character of use,[163] and/or the point of diversion.[164] The "Water Right Determi-

---

[158] For a more extensive discussion of federal-state relationships, see Moses, *Federal-State Water Problems,* 47 DENVER L.J. 194 (1970).

[159] *See, e.g.,* Knowles v. Clear Creek, Platte River Mill & Ditch Co., 18 Colo. 209, 210, 32 P. 279, 280 (1893); Strickler v. Colorado Springs, 16 Colo. 61, 68-69, 26 P. 313, 316 (1891); Fuller v. Swan River Placer Mining Co., 12 Colo. 12, 19, 19 P. 836, 839 (1888); Sieber v. Frink, 7 Colo. 148, 154, 2 P. 901, 904 (1883).

[160] *Compare* COLO. REV. STAT. ANN. §§ 148-18-18 to -21 *with* Law of April 6, 1899, ch. 105, § 1, [1889] Colo. Sess. Laws (repealed 1903).

[161] *See* Diez v. Hartbauer, 46 Colo. 599, 105 P. 868 (1909); New Cache La Paudre Irr. Co. v. Water Supply & Stor. Co., 29 Colo. 469, 68 P. 781 (1902).

[162] Brighton Ditch Co. v. Englewood, 124 Colo. 366, 372, 237 P.2d 116, 120 (1951); Enlarged Southside Irr. Ditch Co. v. John's Flood Ditch Co., 116 Colo. 580, 586, 183 P.2d 552, 555 (1947); Knowles v. Clear Creek, Platte River & Mill Ditch Co., 18 Colo. 209, 210, 32 P. 279, 280 (1893); Strickler v. Colorado Springs, 16 Colo. 61, 68, 26 P. 313, 316 (1891).

[163] *See* Brighton Ditch Co. v. Englewood, 124 Colo. 366, 237 P.2d 116 (1951).

[164] Enlarged Southside Irr. Ditch Co. v. John's Flood Ditch Co., 116 Colo. 580, 586, 183 P.2d 552, 555 (1947); Wadsworth Ditch Co. v. Frown, 39 Colo. 57, 62, 88 P. 1060, 1062 (1907); Knowles v. Clear Creek, Platte River & Mill Ditch Co., 18 Colo. 209, 210, 32 P. 279, 280 (1893).

nation and Administration Act of 1969" appears to reflect the continuance of this approach in defining a "[c]hange of water right"[165] as

> [a] change in the type, place, or time of use, a change in the point or points of diversion, a change from a fixed point or points of diversion to alternate or supplemental points of diversion, a change from alternate or supplemental points of diversion to a fixed point or points of diversion, a change in the means of diversion, a change in the place or places of storage, a change from direct application to storage and subsequent application, a change from storage and subsequent application to direct application, a change from a fixed place or places of storage to alternate places of storage, a change from alternate places of storage to a fixed place or places of storage, or any combination of such changes. The term "change of water right" includes changes of conditional water rights as well as changes of water rights.[166]

This broad terminology coupled with the notation of the various combinations of allowable changes seems to indicate a legislative recognition that the most expeditious use of water might necessitate a change in the exercise of the right. Such a supposition would certainly correspond with the legislature's intent "[t]o maximize the beneficial use of all of the waters of this state."[167]

2. Procedure for Instituting Changes

With respect to change in the exercise, the major affect of the "Water Right Determination and Administration Act of 1969" seems to be upon procedures for instituting such changes. Under the new provisions a person desiring a change must initially file an application with the water clerk of the division setting forth facts supporting the ruling sought.[168] Anyone opposing such a change *may* file with the water clerk a "statement of opposition setting forth facts as to why the application should not be granted or why it should be granted only in part or on certain conditions."[169]

3. Principles Governing Changes

Since junior and senior users have vested rights in having stream conditions maintained substantially as they were at the time of their respective appropriations, any proposed change in the exercise of the right must not materially injure their vested rights.[170] In addition,

---

[165] COLO. REV. STAT. ANN. § 148-21-3(11) (Supp. 1969).

[166] *Id.*

[167] *Id.* § 148-21-2(1).

[168] *Id.* § 148-21-18(1).

[169] *Id.* For a more detailed explanation of this procedure see PART ONE, § VI(B)(2)(b).

[170] Green v. Chaffee Ditch Co., 150 Colo. 91, 105-06, 371 P.2d 775, 783 (1962); Reagle v. Square S Land & Cattle Co., 133 Colo. 392, 394, 296 P.2d 235, 236 (1956); Farmers' Highline Canal & Res. Co. v. Golden, 129 Colo. 575, 580, 272 P.2d 629, 632 (1954); Faden v. Hubbell, 93 Colo. 358, 369, 28 P.2d 247, 251 (1933); Denver v. Colorado Land & Live Stock Co., 86 Colo. 191, 193, 279 P. 46, 47 (1919); Handy Ditch Co. v. Louden Irr. Canal Co., 27 Colo. 515, 518, 62 P. 847, 848 (1900); *see* Baer Bros. Land & Cattle Co. v. Wilson, 38 Colo. 101, 88 P. 265 (1906).

"[t]he inherent right to change includes the right to change subject to conditions, if injury to rights of others may thereby be avoided."[171]

An interesting question posed by the above principles involves determining what constitutes "injury". Although there is no absolute answer, case law indicates that the existence of injury depends on the facts[172] of each particular case.[173] These facts cannot include any evidence that benefits from the proposed change exceed the burdens to be suffered; the sole question is whether other users would be substantially injured by the change.[174] Some considerations that have been involved in determining the substantiality of injury are the size and capacity of the various ditches which may be affected by the proposed change, the volume of water applied to beneficial uses, the time of its use, the place where and the acreage upon which it was used, the periods of non-use between successive irrigations, excessive use, and the place and conditions of the use contemplated after the proposed change is effectuated.[175] Once the possibility of injury is raised, the concern shifts to the possible conditions which might be imposed upon the exercise of the right to prevent such injury.

Under the "Water Right Determination and Administration Act of 1969," either the party protesting or the party seeking a change in the exercise may present terms or conditions designed to eliminate possible injury.[176] Such terms or conditions may include:

> (b) A limitation on the use of the water which is subject to the change, taking into consideration the historic use and the flexibility required by annual climatic differences.
>
> (c) The relinquishment of part of the decree for which the change is sought or the relinquishment of other decrees owned by the appli-

---

[171] Colorado Springs v. Yust, 126 Colo. 289, 294, 249 P.2d 151, 154 (1952).

[172] Monte Vista Canal Co. v. Centennial Irr. Ditch Co., 24 Colo. App. 496, 135 P. 981 (1913) wherein the court stated that

> two witnesses gave as their opinions that the change contemplated would not injuriously affect others; but such opinions were not based upon any facts of conditions testified to by them, or otherwise in evidence at the time they were given, from which such inference can by any exercise of the imagination be drawn.

Id. at 500, 135 P. at 983.

[173] Flasche v. Westcolo Co., 112 Colo. 387, 391, 149 P.2d 817, 819 (1944); *In re* Priority Rights to Use of Water in Water Dist. No. 20, 92 Colo. 407, 411, 21 P.2d 177, 179 (1933).

[174] Hallenbeck v. Granby Ditch & Res. Co., 160 Colo. 555, 569, 420 P.2d 419, 427 (1966); Monte Vista Canal Co. v. Centennial Irr. Ditch Co., 24 Colo. App. 496, 502, 135 P. 981, 985 (1913); Farmers' Highline & Res. Co. v. Wolf, 23 Colo. App. 570, 579, 131 P. 291, 295 (1913).

[175] Trinchera Ranch Co. v. Trinchera Irr. Dist., 83 Colo. 451, 460, 266 P. 204, 208 (1928); *see* COLO. REV. STAT. ANN. § 148-21-20(6) (Supp. 1969) which provides:

> Any decision of the water judge as specified in subsection (5) of this section dealing with a change of water right . . . may include the condition that the approval of such change . . . shall be subject to reconsideration by the water judge on the question of injury to the vested rights of others during any hearing commencing in the two calendar years succeeding the year in which the decision is rendered . . . .

Id.

[176] COLO. REV. STAT. ANN. § 148-21-21(3) (Supp. 1969).

> cant which are used by the applicant in conjunction with the decree for which the change has been requested, if necessary to prevent an enlargement upon the historic use or diminution of return flow to the detriment of other appropriators.
>
> (d) A time limitation on the diversion of water for which the change is sought in terms of months per year.
>
> (e) Such other conditions as may be necessary to protect the vested rights of others.[177]

The inclusion of (e) obviously indicates a legislative recognition that the terms or conditions limiting a change in the exercise of water rights must vary according to the facts of each case.

B. *Water Storage Rights*

Colorado law[178] recognizes two types of appropriative right: one for direct use of water from the stream and a second for taking water and storing it for future beneficial use.[179] Since appropriation for one of these two purposes is not an appropriation for the other,[180] an appropriator cannot store water for future use when he has obtained a decree for direct use only.[181]

A decreed appropriation for storage is superior to a subsequent appropriation for direct use,[182] as long as the water is beneficially applied.[183] A reservoir may take its full appropriation of water according to its priority date regardless of whether or not a portion of that water diverted is needed by junior appropriators for direct irrigation;[184] and a junior may not enjoin this storage.[185]

---

[177] *Id.* §§ 148-21-21(4) (a)-(e).

[178] Handy Ditch Co. v. Greeley & Loveland Irr. Co., 86 Colo. 197, 199, 280 P. 481 (1929); Holbrook Irr. Dist. v. Fort Lyon Canal Co., 84 Colo. 174, 191, 269 P. 574, 581 (1928); Greeley & Loveland Irr. Co. v. Huppe, 60 Colo. 535, 538, 155 P. 386, 388 (1916); New Loveland & Greeley Irr. & Land Co. v. Consol. Home Supply Ditch & Res. Co., 27 Colo. 525, 528, 62 P. 366, 366-67 (1900); COLO. CONST. art. XVI, §§ 5, 6; COLO. REV. STAT. ANN. § 148-5-1 (1963); 2 C. KINNEY, *supra* note 71, at 1484, *citing* Church v. Stilwell, 12 Colo. App. 43, 54 P. 395 (1898):

> As in the case with other rights acquired under the Arid Region Doctrine of appropriation, the rule of priority governs, and it is held that the reservoir having the prior right is entitled to fill the same first from the flow of the stream to the full extent of the capacity of the appropriation made therefor.

Id. at 1484. *See generally* COLO. REV. STAT. ANN. §§ 148-5-1*et seq* (1963).

[179] COLO. REV. STAT. ANN. § 148-5-1 (1963).

[180] Holbrook Irr. Dist. v. Fort Lyon Canal Co., 84 Colo. 174, 191, 269 P. 574, 581 (1928).

[181] Handy Ditch Co. v. Greeley & Loveland Irr. Co., 86 Colo. 197, 200, 280 P. 481, 482 (1929). It should be noted however, that one who has acquired a priority for a certain amount of water for *direct* irrigation may store the quantity to which he is entitled during the *direct* irrigation season for use on crops to be irrigated later in that season. Seven Lakes Res. Co. v. New Loveland & Greeley Irr. & Land Co., 40 Colo. 382, 385, 93 P. 485, 486 (1907).

[182] COLO. REV. STAT. ANN. § 148-5-1 (1963).

[183] Cline v. Whitten, 150 Colo. 179, 185, 372 P.2d 145, 148 (1962); Highland Ditch Co. v. Union Res. Co., 53 Colo. 483, 485, 127 P. 1025 (1912).

[184] People v. Hinderlider, 98 Colo. 505, 510, 57 P.2d 894, 896 (1936); COLO. REV. STAT. ANN. § 148-5-1 (1963).

[185] Larimer & Weld Res. Co. v. Cache La Poudre Irr. Co., 8 Colo. App. 237, 45 P. 525 (1896).

Anyone desiring to build and maintain a reservoir to store water has the right to store in such reservoir any unappropriated water of the state.[186] The state engineer must approve the reservoir construction, and the facility is regarded as completed only when the engineer has accepted and certified the work as satisfactory.[187] Even though a priority of right is only awarded for a completed storage appropriation,[188] the priority date of the right may relate back to the time when notice of intent was first given to secure such a right and to apply the water thereunder to a beneficial use.[189]

A priority for storage purposes will not be awarded for a temporary storage of water in temporary receptacles which form part of a continuous conduit for carrying water directly from the stream to irrigated lands.[190] However, one desiring to store water may use the bed of a nonnavigable stream as a reservoir provided that the vested rights of prior appropriators are not thereby injured.[191]

The amount of water which the appropriator can store is measured by the storage capacity of the reservoir.[192] "Capacity" is defined as the amount of water that the reservoir will hold at any one time.[193] The state engineer is charged with annually determining the amount of water capable of being safely stored in reservoirs within the state, and it is unlawful to store water in excess of that amount.[194]

Only one annual filling of any particular reservoir is allowed.[195] "[E]ach reservoir shall be decreed its respective priority, and this priority entitles the owner to fill the same once during any one year, up to its capacity, and restricts the right, upon one appropriation, to

[186] COLO. CONST. art. XVI, § 6; COLO. REV. STAT. ANN. § 148-5-1 (1963). This rule applies only to water not needed for immediate use for domestic or irrigation purposes. *Id.*

[187] COLO. REV. STAT. ANN. § 148-5-5 (1963).

[188] Windsor Res. & Canal Co. v. Lake Supply Ditch Co., 44 Colo. 214, 98 P. 525 (1908). In this case, a corporation constructed the embankment of a reservoir in the bed of a stream, but did not apply the water to beneficial use. It later conveyed the reservoir site to another, reserving any appropriation which it had acquired by reason of the construction. The court held that since the corporation had never applied the water to beneficial use, it had no priority to reserve. *Id.* at 218, 220, 98 P. at 732.

[189] Rocky Mtn. Power Co. v. White River Elec. Ass'n, 151 Colo. 45, 50-51, 376 P.2d 158, 161 (1962). *See* PART ONE, § II(B)(2) for a more detailed discussion of conditional rights.

[190] Windsor Res. & Canal Co. v. Lake Supply Ditch Co., 44 Colo. 214, 233, 98 P. 729, 736 (1908).

[191] COLO. REV. STAT. ANN. § 148-7-17 (1963).

[192] *Id.* § 148-5-7. "The state engineer shall annually determine the amount of water which it is safe to impound in the several reservoirs within this state and it shall be unlawful for the owners of any reservoir to store in said reservoir water in excess of the amount so determined by the state engineer to be safe." *Id.*

[193] Windsor Res. & Canal Co. v. Lake Supply Ditch Co., 44 Colo. 214, 224, 98 P. 729, 733 (1908).

[194] COLO. REV. STAT. ANN. § 148-5-7 (1963).

[195] Orchard City Irr. Dist. v. Whitten, 146 Colo. 127, 141, 361 P.2d 130, 137 (1961); Holbrook Irr. Dist. v. Fort Lyon Canal Co., 84 Colo. 174, 192, 269 P. 574, 582 (1928); Windsor Res. & Canal Co. v. Lake Supply Ditch Co., 44 Colo. 214, 223, 98 P. 729, 733 (1908).

a single filling for one year."[196] Restricting storage appropriators to a single annual filling is based upon the fact that "[a] double filling in effect would give two priorities of the same date and of the same capacity to the same reservoir, on the same single appropriation . . . ."[197] Yet it should be noted that there is no principle which restricts the number of appropriations which can be decreed for the same reservoir.

An appropriator may use the water he has stored in several ways. For example, he may exchange water with the owner of a direct flow right as long as the vested rights of others are not thereby injured. Such a system of exchanges is practiced extensively in eastern Colorado in order to more efficiently use water in accordance with the needs of the season of the year.[198] Such a system will not be allowed, however, when its effect would be to disturb the order of priorities and convert a junior into a senior right.[199]

An appropriator of storage water may also use water appropriated in one season even after that season has ended; he need not withdraw all water within the season during which it was appropriated.[200] In such a situation, the user still retains his priority as long as the water is applied to beneficial use within a reasonable period of time after storage.[201]

However, a reservoir owner does not have the right, under his storage appropriation, to use seepage water from his reservoir which would naturally return to the stream. Since such surface and/or underground seepage water is tributary to the stream,[202] it is not treated as part of the original diversion and appropriation.[203] The owner also cannot use such water for direct irrigation, because water appropriated for storage is not appropriated for direct irrigation.[204]

In addition, reservoir owners are "liable for all damages arising from leakage or overflow of the waters therefrom or by floods caused

---

[196] Windsor Res. & Canal Co. v. Lake Supply Ditch Co., 44 Colo. 214, 224, 98 P. 729, 733 (1908); *accord,* Holbrook Irr. Dist. v. Fort Lyon Canal Co., 84 Colo. 174, 192, 269 P. 574, 582 (1928).

[197] Windsor Res. & Canal Co. v. Lake Supply Ditch Co., 44 Colo. 214, 224, 98 P. 729, 733 (1908).

[198] Hemphill, *Irrigation in Northern Colorado,* U.S. DEPT. OF AGRICULTURE BULL. 1026 (1922).

[199] COLO. CONST. art. XVI, § 6; COLO. REV. STAT. ANN. § 148-5-1 (1963).

[200] North Sterling Irr. Dist. v. Riverside Res. & Land Co., 119 Colo. 50, 55, 200 P.2d 933, 935 (1948).

[201] *Id.*

[202] Nevius v. Smith, 86 Colo. 178, 181-82, 279 P. 44, 45 (1929); Fort Morgan Res. & Irr. Co. v. McCune, 71 Colo. 256, 258-60, 206 P. 393, 394 (1922); Trowel Land & Irr. Co. v. Bijou Irr. Dist., 65 Colo. 202, 214, 176 P. 292, 296 (1918); Comstock v. Ramsay, 55 Colo. 244, 256, 133 P. 1107, 1111 (1913).

[203] Nevius v. Smith, 86 Colo. 178, 181-82, 279 P. 44, 45 (1929); Fort Morgan Res. & Irr. Co. v. McCune, 71 Colo. 256, 258-60, 206 P. 393, 394 (1922); Trowel Land & Irr. Co. v. Bijou Irr. Dist., 65 Colo. 202, 214, 176 P. 292, 296 (1918); Comstock v. Ramsay, 55 Colo. 244, 256, 133 P. 1107, 1111 (1913).

[204] Rio Grande Res. & Ditch Co. v. Wagon Wheel Gap Imp. Co., 68 Colo. 437, 443, 191 P. 129, 131 (1920).

by breaking of the embankments of such reservoirs."[205] A lessee of a reservoir is within the meaning of the statute, and a person may be considered an owner even though his interest is less than an absolute fee.[206] The plaintiff in an action for damages under this statute need not allege nor prove negligence since the liability of the owner of the reservoir is absolute.[207]

C. *Water Distribution Organizations*

To facilitate the delivery of water to users, several types of water distribution organizations have been developed. In general, these organizations have taken the form of mutual or carrier ditch companies, irrigation or conservancy districts or reclamation projects involving the federal government.

1. Mutual Ditch Companies

a. Definition and Organization

Mutual ditch companies have been described as "[p]rivate corpotions organized for the express purpose of furnishing water only to the shareholders thereof and not for profit or hire."[208] The basic relationship between the mutual corporation and the stockholders is that of contract.[209] This contract, however, is one implied in law;[210] "[t]he members commit their property interests to the corporate body for certain express purposes which are defined in the charter or certificate, and the corporation undertakes to faithfully carry out these purposes."[211]

From this contract a trust arises charging the corporation with the duty of managing the corporation in the best interests of the stock-

---

[205] COLO. REV. STAT. ANN. § 148-5-4 (1963).

[206] Larimer County Ditch Co. v. Zimmerman, 4 Colo. App. 78, 34 P. 1111 (1893).

[207] Ireland v. Henrylyn Irr. Dist., 113 Colo. 555, 557, 160 P.2d 364, 365 (1945); Ryan Gulch Res. Co. v. Swartz, 83 Colo. 225, 228-29, 263 P. 728, 730 (1928); Garnett Ditch & Res. Co. v. Sampson, 48 Colo. 285, 288-89, 110 P. 79, 80 (1910).

[208] Farmers Water Dev. Co. v. Barrett, 151 Colo. 140, 148, 376 P.2d 693, 698 (1962); *accord,* Billings Ditch Co. v. Industrial Comm'n, 127 Colo. 69, 74, 253 P.2d 1058, 1060 (1953); McComb v. Farmers Res. & Irr. Co., 337 U.S. 755, 757 (1949); Beaty v. Board of County Comm'rs, 101 Colo. 346, 352, 73 P.2d 982, 985 (1937); Comstock v. Olney Springs Drainage Dist., 97 Colo. 416, 419, 50 P.2d 531, 532 (1935); Kendrick v. Twin Lakes Res. Co., 58 Colo. 281, 282, 144 P. 884 (1914). *See also* COLO. CONST. art. X, § 3; J. SAX, *supra* note 1, at 269.

[209] Supply Ditch Co. v. Elliot, 10 Colo. 327, 332, 15 P. 691, 694 (1887); Stuart v. County Comm'rs, 25 Colo. App. 568, 576, 139 P. 577, 579 (1914); Rocky Ford Canal & Trust Co. v. Simpson, 5 Colo. App. 30, 32, 36 P. 638, 639 (1894); J. LONG, *supra* note 2, at 486.

[210] Stuart v. County Comm'rs, 25 Colo. App. 568, 576, 139 P. 577, 579 (1914); Rocky Ford Canal & Trust Co. v. Simpson, 5 Colo. App. 30, 32-33, 36 P. 638, 639 (1894); Supply Ditch Co. v. Elliot, 10 Colo. App. 327, 332, 15 P. 691, 694 (1887).

[211] Rocky Ford Canal & Trust Co. v. Simpson, 5 Colo. App. 30, 32-33, 36 P. 638, 639 (1894); *see* Stuart v. County Comm'rs, 25 Colo. App. 568, 139 P. 577 (1914).

holders.[212] More specifically, the mutual company must "exercise reasonable care and diligence in procuring and storing . . . water and keeping its reservoirs in repair and supplied with water and in distributing [pro-rata] water to its stockholders . . . ."[213] The corporation's failure to observe any of these duties may result in liability to injured stockholders.[214]

Separate and distinct from the duties created under the trust, the corporation has the right to assess stockholders for the care and maintenance of the ditch and/or reservoir system.[215] Failure to pay such an assessment permits the corporation to sell the stock of the non-complying owner.[216]

b. Ownership of Water Rights and Change in Place of Diversion and Use

A mutual ditch company may own the "naked legal title"[217] to the ditches, related facilities, and water rights;[218] however, the stockholders are the "equitable and actual owners"[219] of these property rights.[220]

---

[212] Stuart v. County Comm'rs, 25 Colo. App. 568, 576, 139 P. 577, 579 (1914); Supply Ditch Co. v. Elliot, 10 Colo. App. 327, 332-33, 15 P. 691, 694 (1887); Rocky Ford Canal & Trust Co. v. Simpson, 5 Colo. App. 30, 32-33, 36 P. 638, 639 (1894); J. LONG, *supra* note 2, at 486.

[213] J. LONG, *supra* note 2, at 487; *accord,* Mountain Supply Ditch Co. v. Lindekugel, 24 Colo. App. 100, 102-03, 131 P. 789, 790 (1913); *see* Billings Ditch Co. v. Industrial Comm'n, 127 Colo. 69, 253 P.2d 1058 (1953), stating that mutual ditch companies are organized, in part, for "[t]he distribution of the proper apportionment of water to [their] owners . . . ." *Id.* at 74, 253 P.2d at 1060; Comstock v. Olney Springs Drainage Dist., 97 Colo. 416, 50 P.2d 531 (1935) (concurring opinion of Butler, C.J.), stating that mutual ditch companies are organized, in part, for the convenience of their members "[i]n the distribution to them of water upon their lands in proportion to their respective interests . . . ." *Id.* at 419, 50 P.2d at 532.

[214] Stuart v. County Comm'rs, 25 Colo. App. 568, 576, 139 P. 577, 579 (1914), stating that "[i]t is not necessary to the enforcement of [the implied contractual] right that the officers of the corporation intentionally commit a wrong or an actual fraud, for, if it is shown that the officers are diverting the assets or countenancing any unauthorized surrender of the rights of the corporation, any stockholder has the right to complain and be relieved in equity." *Id.* at 576, 139 P. at 579. Mountain Supply Ditch Co. v. Lindekugel, 24 Colo. App. 100, 103, 131 P. 789, 790 (1913); J. LONG, *supra* note 2, stating that "for failure to perform [the corporation's duties] it is liable to a stockholder injured thereby." *Id.* at 487. *See* Rocky Ford Canal & Trust Co. v. Simpson, 5 Colo. App. 30, 36 P. 638 (1894).

[215] J. LONG, *supra* note 2, at 486; *see* McComb v. Farmers Res. & Irr. Co., 337 U.S. 755 (1949); Wadsworth Ditch Co. v. Brown, 39 Colo. 57, 88 P. 1060 (1907); *cf.* Supply Ditch Co. v. Elliot, 10 Colo. 327, 15 P. 691 (1887). *See also* COLO. CONST. art. XVI, § 8.

[216] J. LONG, *supra* note 2, at 486-87.

[217] United States v. Akin, 248 F.2d 742, 744 (1957).

[218] *Id.; see* Stuart v. County Comm'rs, 25 Colo. App. 568, 139 P. 577 (1914).

[219] United States v. Akin, 248 F.2d 742, 744 (1957); *see* Billings Ditch Co. v. Industrial Comm'n, 127 Colo. 69, 253 P.2d 1058 (1953); Stuart v. County Comm'rs, 25 Colo. App. 568, 139 P. 577 (1914) stating that "[t]he stockholders [of a mutual ditch company] are the real parties in interest in the affairs and property of the corporation. . . ." *Id.* at 576, 139 P. at 579.

[220] *See* Brighton Ditch Co. v. Englewood, 124 Colo. 366, 237 P.2d 116 (1951); Beaty v. County Comm'rs, 101 Colo. 346, 73 P.2d 982 (1937), *quoting* Comstock v. Olney Springs Drainage Dist., 97 Colo. 416, 419, 50 P.2d 531, 532 (1935) (concurring opinion of Butler, C.J.); Kendrick v. Twin Lakes Res. Co., 58 Colo. 281, 282, 144 P. 884 (1914); Stuart v. County Comm'rs, 25 Colo. App. 568, 576, 139 P. 577, 579 (1914); Cache La Poudre Irr. Co. v. Larimer & Weld Res. Co., 25 Colo. 144, 53 P. 318 (1898).

"[T]he stock certificates issued by the compan[y] to [its] members are merely muniments of title to their water rights and the value of the stock is in the water rights which it represents."[221] A stockholder, consequently, may sell his water rights[222] or change his place of diversion or use.[223] He has the same rights as a direct appropriator[224] and may make such changes subject to the limitation that the vested rights of others are not injuriously affected.[225] A second limitation imposed upon the exercise of these rights may emanate from the corporation itself.[226] More specifically, the by-laws may prevent a stockholder from selling his stock [water rights] or from changing his place of diversion or use.[227]

c. Operation

Mutual ditch companies were originally incorporated as a means of aggregating capital to build and maintain large ditch and reservoir systems for the use and benefit of their stockholders.[228] However, the success of these companies was limited since stock assessment proved

---

[221] United States v. Akin, 248 F.2d 742, 744 (1957); Billings Ditch Co. v. Industrial Comm'rs, 127 Colo. 69, 74, 253 P.2d 1058, 1060 (1953); Beaty v. County Comm'rs, 101 Colo. 346, 352, 73 P.2d 982, 985 (1937), *quoting* Comstock v. Olney Springs Drainage Dist., 97 Colo. 416, 419, 50 P.2d 531, 532 (1935) (concurring opinion of Butler, C.J.); Kendrick v. Twin Lakes Res. Co., 58 Colo. 281, 282, 144 P. 844 (1914).

[222] Ironstone Ditch Co. v. Ashenfelter, 57 Colo. 31, 39, 140 P. 177, 181 (1914); Cache La Poudre Irr. Co. v. Larimer & Weld Res. Co., 25 Colo. 144, 147-48, 53 P. 318, 319 (1898); J. SAX, *supra* note 1, at 273; *see* Strickler v. Colorado Springs, 16 Colo. 61, 26 P. 313 (1891). *But see* Billings Ditch Co. v. Industrial Comm'rs, 127 Colo. 69, 253 P.2d 1058 (1953).

[223] Cline v. McDowell, 132 Colo. 37, 44, 284 P.2d 1056, 1059 (1955); Colorado Springs v. Yust, 126 Colo. 289, 294, 249 P.2d 151, 153 (1952); Brighton Co. v. Englewood, 124 Colo. 366, 372-73, 237 P.2d 116, 120 (1951); Nielson v. Newmyer, 123 Colo. 189, 193, 228 P.2d 456, 458-59 (1951); Ironstone Ditch Co. v. Ashenfelter, 57 Colo. 31, 39, 140 P. 177, 180 (1914); Wadsworth Ditch Co. v. Brown, 39 Colo. 57, 61-62, 88 P. 1060, 1061 (1907); Cache La Poudre Irr. Co. v. Larimer & Weld Res. Co., 25 Colo. 144, 147-48, 53 P. 318, 320 (1898); Monte Vista Canal Co. v. Centennial Irr. Ditch Co., 24 Colo. App. 496, 498, 135 P. 981, 982 (1913); J. SAX, *supra* note 1, at 273.

[224] J. SAX, *supra* note 1, at 273.

[225] Wadsworth Ditch Co. v. Brown, 39 Colo. 57, 61-62, 88 P. 1060, 1061 (1907); *see* Hallenbeck v. Grandby Ditch & Res. Co., 160 Colo. 555, 420 P.2d 419 (1966); Cline v. McDowell, 132 Colo. 37, 284 P.2d 1056 (1955); Brighton Ditch Co. v. Englewood, 124 Colo. 366, 237 P.2d 116 (1951); Consolidated Home Supply Ditch & Res. Co. v. Evans, 59 Colo. 482, 149 P. 834 (1915); Cache La Poudre Irr. Co. v. Larimer & Weld Res. Co., 25 Colo. 144, 53 P. 318 (1898); Knowles v. Clear Creek Co., 18 Colo. 209, 32 P. 279 (1893); Monte Vista Canal Co. v. Centennial Irr. Ditch Co., 24 Colo. App. 496, 135 P. 981 (1913).

[226] J. SAX, *supra* note 1, at 273.

[227] *Id.*; Moses, *Irrigation Corporations*, 32 ROCKY MT. L. REV. 527 (1960) noting that "[c]are should be taken to give the board of directors control over the place of use, so that stock cannot be sold to land owners so situated as to require uneconomical deliveries." *Id.* at 528. *See* Costilla Ditch Co. v. Excelsior Ditch Co., 100 Colo. 433, 68 P.2d 448 (1937), noting that a by-law restricting the location of the place of use and diversion may not be unreasonably or arbitrarily employed or enforced. *Id.* at 435, 68 P.2d at 449.

[228] J. SAX, *supra* note 1, at 269.

to be an inadequate method of financing when very extensive water diversion projects were involved.[229]

2. Carrier Ditch Companies

Carrier ditch companies are a second type of privately owned irrigation organization.[230] They differ from mutual ditch companies in that they are for-profit enterprises, selling water to users on a contractual basis.[231] As such, these companies have been regarded as public utilities,[232] charged with a public duty or trust,[233] and consequently subject to the rate-making powers of the county commissioners.[234] These factors, however, generally do not become relevant until the organization begins to function, and at least not until an appropriation is initiated.

A carrier ditch company receives a priority as against subsequent users once a valid appropriation has been made.[235] Although the company is considered to be merely an agent of the user,[236] both parties must perform to establish the appropriation as valid.[237] To illustrate, in *Farmer's High Line Canal Co. v. Southworth*[238] the court noted that

> [t]he constitution recognizes priorities only among those taking water from natural streams. Therefore, to constitute an appropriation such as is recognized and protected by that instrument, the essential act of diversion, with which is coupled the essential act of use, must have reference to the natural stream. But the consumer himself makes no diversion from the natural stream. The act of turning water from the carrier's canal into his lateral cannot be regarded as a diversion, within the meaning of the constitution, nor can this act, of itself, when combined with the use, create a valid constitutional appropriation. There is therefore no escape from the conclusion, hitherto announced by this court, that in cases like the present the carrier's diversion from the stream must unite with the consumer's use in order

[229] Moses, *supra* note 227, at 529.

[230] See text accompanying notes 208 to 216 *supra*. "Carrier ditch companies" have been erroneously confused with "public ditch companies." J. SAX, *supra* note 1, at 269.

[231] J. SAX, *supra* note 1, at 269.

[232] Putnam Ditch Co. v. Bijou Irr. Co., 108 Colo. 124, 131, 114 P.2d 284, 288 (1941).

[233] Wanamaker Ditch Co. v. Crane, 132 Colo. 366, 369, 288 P.2d 339 (1955); Junction Creek Ditch Co. v. Durango, 21 Colo. 194, 196, 40 P. 356, 357 (1895); Wheeler v. Northern Colo. Irr. Co., 10 Colo. 582, 589-90, 17 P. 487, 490 (1887); *see* Denver v. Brown, 56 Colo. 216, 138 P. 44 (1914).

[234] COLO. CONST., art. XVI, § 8; *cf.* County Comm'rs v. Rocky Mt. Water Co., 102 Colo. 351, 79 P.2d 373 (1938) wherein the court held that neither "[t]he whole [n]or any part of the value of the water rights involved shall be included in the rate base." *Id.* at 355, 79 P.2d at 375.

[235] *See* Denver v. Miller, 149 Colo. 96, 368 P.2d 982 (1962); County Comm'rs v. Rocky Mt. Water Co., 102 Colo. 351, 79 P.2d 373 (1938); Denver v. Brown, 56 Colo. 216, 138 P. 44 (1914).

[236] County Comm'rs v. Rocky Mt. Water Co., 102 Colo. 351, 363, 79 P.2d 373, 378 (1938); Denver v. Brown, 56 Colo. 216, 222-23, 138 P. 44, 46-47 (1914).

[237] *See* County Comm'rs v. Rocky Mt. Water Co., 102 Colo. 351, 79 P.2d 373 (1938).

[238] 13 Colo. 111, 21 P. 1028 (1889).

> that there may be a complete appropriation, within the meaning of our fundamental law.
>
> The carrier makes a diversion both in fact and in law. This diversion is accomplished through an agency (the carrier) recognized by the constitution and statutes, and for purposes expressly named in both, hence it cannot be challenged as illegal. It would undoubtedly become unlawful were the water diverted not applied to beneficial uses within a reasonable time; but when thus applied, the diversion unquestionably ripens into a perfect appropriation.[239]

To maintain this priority, both the diversion of the ditch company and the beneficial application by the user must continue.[240] This fact leads to a consideration of the rights and duties of each party. In *Denver v. Brown*,[241] the court noted that

> [a] consumer supplied with water by contract from a ditch owned and operated by a carrier company in a sense is an appropriator from the stream supplying the ditch, but does not occupy the exact status of an independent appropriator directly from the stream, as his rights are limited by the terms of his contract, so far as valid, with the ditch company, as well as other limitations which the law, from the nature of the relation between the carrier company and a contract consumer from its ditch, imposes.[242]

One right of the consumer is to continue to *purchase* the amount of water *for which he contracted* the previous year, albeit at any new rate set by the county commissioners. If no new rate has been set, then the user may buy at the previous year's rate.[243] This right, however, will

---

[239] *Id.* at 120, 21 P. at 1033-34 (citations omitted); *accord,* County Comm'rs v. Rocky Mt. Water Co., 102 Colo. 351, 360-61, 79 P.2d 373, 377 (1938). In times of water shortage this doctrine produces an interesting result among carrier ditch company users. In Denver v. Brown, 56 Colo. 216, 233-34, 138 P. 44, 50 (1914) the court notes that all carrier ditch company consumers who take their water under a given priority are considered as having taken such rights as of the same date. Since no user is more senior than another, all share on a prorata basis. This seems to be a logical application of the prior appropriation system. Later in the opinion, however, the court indicates that, in times of shortage, if more than one priority has been awarded to a ditch, and the priorities are for the same use (*e.g.,* all agricultural), "all consumers, generally speaking, have the right to be supplied from all the priorities decreed the ditch through which they are supplied, whose rights by virtue of prior use aggregate. The volume of such priorities and in such circumstances stand on an equal plane." *Id.* at 234, 138 P. at 50. This raises the interesting question of whether the courts will recognize priorities within the same preference as far as carrier ditch companies are concerned.

[240] Colorado River Dist. v. Power Co., 158 Colo. 331, 335, 406 P.2d 798, 800 (1965); County Comm'rs v. Rocky Mt. Water Co., 102 Colo. 351, 361, 79 P.2d 373, 377-78 (1938).

[241] 56 Colo. 216, 138 P. 44 (1914).

[242] *Id.* at 222-23, 138 P. at 47; *see* County Comm'rs v. Rocky Mt. Water Co., 102 Colo. 351, 79 P.2d 373 (1938) wherein the court, in citing Pioneer Irr. Co. v. Board of Comm'rs, 236 F. 790, 792 (D. Colo. 1916), notes that

> (1) the owner of the carrying ditch in making the diversion from the natural stream acts solely as the agent or trustee for him [sic] who applies the water to a beneficial use, (2) gets no title in a right to the use of the water and has no property in it subject to disposal, and (3) he who applies the water thus diverted to beneficial use acquires a property right in the use of the water thus applied which he, and he only, can sell, dispose of and convey by deed separate and apart from the land to which it has been applied or with the land to which it has been applied.

Id. at 361, 79 P.2d at 377-78.

[243] COLO. REV. STAT. ANN. § 148-8-1 (1963); County Comm'rs v. Rocky Mt. Water Co., 102 Colo. 351, 362, 79 P.2d 373, 378 (1938); Denver v. Brown, 56 Colo. 216, 223, 138 P. 44, 47 (1914).

be lost if the consumer ceases to purchase water "for the *purpose* or with the intent to procure water from some other source of supply. . . ."[244] It also might be lost if the consumer does not comply with reasonable regulations of the company.[245] In either event, the ditch company may sell the forfeiting consumer's water allotment to another customer to insure the continued validity of its appropriation.[246]

Traditionally, carrier ditch companies were plagued by their inability to finance extensive diversion systems.[247] Revenues from consumers and private capital simply did not come forth in sufficient amounts to support such projects.[248] Irrigation and conservancy districts were formed primarily as a solution to these financial problems.[249]

3. Irrigation and Conservancy Districts

a. Irrigation Districts

The need for an organization with a sounder economic foundation capable of providing larger and more complex diversion works provoked the creation of irrigation districts.[250] Such organizations have the advantage of being able to rely upon a broad tax base.[251] To illustrate: a majority of landowners in a proposed district may file a petition with the respective county commissioners,[252] force a vote,[253] and, if the plan is approved by a majority of the landowners therein, form the district.[254] This "public corporation"[255] then may contract with the federal government,[256] exercise the power of eminent domain,[257] *issue bonds,*[258] and *tax landowners with irrigable land.*[259] These latter two

---

[244] COLO. REV. STAT. ANN. § 148-8-1 (1963); *cf.* County Comm'rs v. Rocky Mt. Water Co., 102 Colo. 351, 79 P.2d 373 (1938); Denver v. Brown, 56 Colo. 216, 138 P. 44 (1914).

[245] Denver v. Brown, 56 Colo. 216, 223, 138 P. 44, 47 (1914); Golden Canal Co. v. Bright, 8 Colo. 144, 149, 6 P. 142, 149 (1885).

[246] Denver v. Miller, 149 Colo. 96, 99, 368 P.2d 982, 984 (1962); County Comm'rs v. Rocky Mt. Water Co., 102 Colo. 351, 361, 79 P.2d 373, 377-78 (1938).

[247] *See also* text accompanying notes 228 & 229 *supra.*

[248] J. SAX, *supra* note 1, at 269-70.

[249] *Id.* at 270.

[250] J. SAX, *supra* note 1, at 270; Moses, *Irrigation Corporations,* 32 ROCKY MT. L. REV. 527, 529 (1960).

[251] J. SAX, *supra* note 1, at 270.

[252] COLO. REV. STAT. ANN. § 150-1-2 (1963).

[253] *Id.* § 150-1-3(3).

[254] *Id.* § 150-1-5.

[255] Logan Irr. Dist. v. Holt, 110 Colo. 253, 258-59, 133 P.2d 530, 532 (1943).

[256] *See, e.g.,* COLO. REV. STAT. ANN. § 150-1-11(2) (1963).

[257] *See, e.g.,* COLO. REV. STAT. ANN. § 150-1-12 (1963).

[258] *See, e.g.,* COLO. REV. STAT. ANN. §§ 150-1-15, -16 (1963).

[259] *See, e.g.,* COLO. REV. STAT. ANN. §§ 150-1-1(3), -19(1) (1963). The statute states that

> [i]n no case shall any land be taxed . . . which . . . is unsuitable for irrigation and cultivation, . . . nor shall tracts of land of *one acre or less* be taxed . . . . (emphasis added).

Id. § 150-1-19(1).

powers enable districts to secure financing for the construction and maintenance of major irrigation systems.[260]

Even with this large financial base

> [t]here was one great weakness in the irrigation district law . . . . As the easier projects were completed, . . . the sources of water were farther away and the cost of storing and delivering the water multiplied. In most instances, the largest taxpayers in the area were contributing nothing to the cost of the works . . . .[261]

"The districts had not provided a broad *enough* tax base, since the entire burden was carried by the land irrigated, while reclamation plainly benefitted the entire community."[262] The out-growth of this inequity was the Conservation District Law.[263]

b. Conservancy Districts

Water conservancy districts are organized somewhat similarly to irrigation districts;[264] however, the former are "quasi-municipal corporations",[265] possessing the power to make special assessments and to tax *all* property within the district,[266] while the latter are "public corporations",[267] possessing the power to make only special assessments.[268] This distinction is of some importance,[269] for conservancy districts may charge not only those who receive special benefits, but also those who indirectly or generally profit from the operations of the organization.[270] Due to this extensive tax base, such districts can

---

[260] Moses, *Irrigation Corporations,* 32 ROCKY MT. L. REV. 527, 530 (1960).

[261] *Id.* at 531.

[262] J. SAX, *supra* note 1, at 270 (emphasis added); *see* Logan Irr. Dist. v. Holt, 110 Colo. 253, 133 P.2d 530 (1943) wherein the court noted that "taxes levied by [irrigation districts] are, in reality, local or special improvement taxes, and not general taxes." *Id.* at 259, 133 P.2d at 532.

[263] Moses, *supra* note 260, at 531; *see* COLO. REV. STAT. ANN. §§ 150-5-1 to -50 (1963).

[264] Moses, *supra* note 260, at 532. *Compare* COLO. REV. STAT. ANN. §§ 150-1-1 to -60 (1963) *with* COLO. REV. STAT. ANN. §§ 150-5-1 to -50 (1963).

[265] People v. Letford, 102 Colo. 284, 79 P.2d 274 (1938) wherein the court stated that such corporations (water conservancy districts) are "[d]esignated for state purposes as distinguished from private or local municipal purposes in the proprietary sense." *Id.* at 299, 79 P.2d at 282.

[266] *Id.* at 300-01, 79 P.2d at 283; COLO. REV. STAT. ANN. § 150-5-16 (1963).

[267] Logan Irr. Dist. v. Holt, 110 Colo. 253, 133 P.2d 530 (1943) stating that "[w]hile an irrigation district is a public corporation, we do not think that it is in any true sense a branch or subdivision of the sovereignty. Its purposes are chiefly private, and for the benefit of private landowners." *Id.* at 259, 133 P.2d at 532. In People v. Letford, 102 Colo. 284, 79 P.2d 274 (1938), the court in distinguishing "public" and "municipal" corporations noted that "[w]hile all municipal corporations are public corporations, all public corporations are not municipal corporations." *Id.* at 297, 79 P.2d at 281. The logic of this statement would appear to extend to the distinction between "public" and "quasi-municipal" corporations. *Id.* at 298, 79 P.2d at 282.

[268] Logan Irr. Dist. v. Holt, 110 Colo. 253, 259, 133 P.2d 530, 532 (1943); COLO. REV. STAT. ANN. §§ 150-1-1(3) to -19(1) (1963).

[269] People v. Letford, 102 Colo. 284, 301, 79 P.2d 274, 283 (1938).

[270] *Id.* at 300-01, 79 P.2d at 283; COLO. REV. STAT. ANN. § 150-5-16 (1963); Moses, *supra* note 260, at 532.

finance diversion projects even more complex than those constructed by irrigation districts.[271]

The predominant role of the conservancy district today, however, is that of a "middleman"[272] between the federal government and the water user.[273] Even though these districts did have broad financial backing, the tremendous expenses associated with large scale diversions, and the inability of such organizations to attract vast amounts of private investment capital required the assistance of the federal government.[274] This assistance came in the form of the Reclamation Act.[275]

4. Reclamation

a. Federal Involvement

The first Reclamation Act was passed by Congress in 1902.[276] At the time it was passed, the purpose of the Act was to reclaim public domain which was ultimately to pass into the possession of individual citizens and to provide irrigation water for privately owned lands.[277] Initially, users contracted with the United States for the use of project water under the terms which provided for payment of full costs of the construction of the reclamation facilities.[278] It soon became apparent, however, that irrigation users would simply be unable to finance the repayment of the construction costs.[279] As a result, the Reclamation Act was amended in 1939.[280]

b. The 1939 Change

Basically, the 1939 amendment provided that the government would contract with users' associations rather than with individual

---

[271] J. SAX, *supra* note 1, at 270; Moses, *supra* note 260, at 532.

[272] J. SAX, *supra* note 1, at 270.

[273] *Id.*

[274] *Id.* at 270-71.

[275] Act of June 17, 1902, Ch. 1093, §§ 1-10, 32 Stat. 388 *et seq.* (1902), *as amended* 43 U.S.C. §§ 371 *et seq.* (1964).

[276] *Id.*

[277] J. SAX, *supra* note 1, at 283. The Act provides that "[t]he rights to the use of water acquired under [this Act] . . . shall be appurtenant to the land irrigated, and beneficial use shall be the basis, the measure, and the limit of the right." 43 U.S.C. § 372 (1964). This provision would seemingly be a combination of riparian and appropriative water doctrines working within one entity, *i.e.*, the reclamation project. The Act also provides that

> [n]o right to the use of water for land in private ownership shall be sold for a tract exceeding one hundred and sixty acres to any one landowner, and no such sale shall be made to any landowner unless he be an actual bona fide resident on such land, or occupant thereof residing in the neighborhood of said land, and no such right shall permanently attach until all payments therefore are made.

Id. § 431.

[278] 43 U.S.C. § 485 (1964).

[279] J. SAX, *supra* note 1, at 283.

[280] Act of Aug. 4, 1939, Ch. 418, §§ 1-19, 53 Stat. 1187 *et seq.* (1939).

users,[281] since the organizations had a broader financial basis with which to repay construction costs. By statute, contracts scheduled repayment for no more than forty years or at such time as the Secretary of the Interior within his discretion should determine.[282]

Given this basic change, the relationship among the United States, the users' association, and the user is somewhat vague. To the extent that repayment occurs, it is made by the association contracting with the government rather than by the individual user, and various sources are tapped to provide funds for repayment. In addition to the individual irrigation user, power companies that are served by the contracting party pay much of the bill.[283] Also, the cost of certain uses such as recreation, flood control, and navigation are absorbed by the federal government and, consequently, no repayment is required.[284] In addition, the Act provides that associations (contracting parties) shall apply "profits . . . derived from the operation of project power plants, [the] leasing of project grazing and farm lands, and the sale or use of town sites [as credits] . . . to the construction charge of the project . . . ."[285] Thus, the proportion of the cost that users repay is very small when compared with the value of the use of the water to them. Indeed, the important question of repayment in proportion to value received has never reached the courts for determination, and no indication of its solution is provided in the Act.

c. Ownership of Water Rights

A difficult and perplexing question that has faced the courts is ownership of the rights to the water subject to a reclamation project. The Act provides that users' associations are to take over the management of projects, but it is silent with respect to ownership of title to water rights.[286] The government has claimed ownership; but in two landmark cases the Supreme Court found title to lie in the individual user or water company contracting with the government. In one case the Supreme Court reasoned that "[a]lthough the government diverted, stored, and distributed the water, . . . [a]ppropriation was made not for the use of the government, but, under the Reclamation Act, for the use of the land owners . . . . [T]he water-rights became the property of the land owners, wholly distinct from the property right of the government in the irrigation works."[287]

---

[281] 43 U.S.C. §§ 485(a)-(g) (1964).

[282] *Id.* § 485(6)(1).

[283] J. SAX, *supra* note 1, at 283.

[284] *Id.*

[285] 43 U.S.C. § 501 (1964).

[286] *Id.*

[287] Ickes v. Fox, 300 U.S. 82, 94-95 (1937).

Another case gives a similar rationale for declaring the users and not the government the owners of the water rights. In *Nebraska v. Wyoming*,[288] the Court declared that the government's diversion, storage, and distribution of water involved in a reclamation project under contracts with users' associations did not vest the ownership of the water rights in the United States.[289] Rather, the water rights remained vested in the owners of the land appurtenant to the water involved in the project.[290] The government remained the carrier and distributor of the water with the right to receive the sums previously agreed upon for the construction of the project and the right to make annual charges for the operation and maintenance of the project's physical facilities.[291]

It should also be noted that the Reclamation Act provides that the federal government's reclamation projects must leave vested water rights unaffected and must not alter a given state's methods of allocating water resources.[292] Thus, to gain ownership under the Act the United States would have to institute condemnation or eminent domain proceedings.[293]

V. LEGAL CONTROLS OF A WATER RIGHT

Once an appropriation of water is made, the right thereby obtained and the exercise of that right are not without limitations. Both statutory enactments and judicial pronouncements have created a set of legal controls which govern the right and its use.

A. *Beneficial Use*

The concept of beneficial use, integral to acquiring a water right,[294] also acts as a legal control upon that right. For example, if a valid appropriation is made and subsequently the court decides that the water right is not being beneficially used, either totally or partially, then the right is either abrogated or limited to the extent that the use is beneficial. In order to make such determinations, courts consider a number of

[288] 325 U.S. 589 (1945).

[289] *Id.* at 614.

[290] *Id.*

[291] *Id.*

[292] 43 U.S.C. § 383 (1964).

[293] *See* Fresno v. California, 372 U.S. 627 (1963). The Supreme Court has held that where there are no condemnation proceedings instituted by the federal government, the acts of impounding and diverting water under the authority of the Reclamation Act do not vest rights to its use or rights to its ownership in the United States. Rank v. Krug, 142 F. Supp. 1 (D. Cal. 1956), *aff'd in part, rev'd in part on other grounds*, 293 F.2d 340, *modified on other grounds*, 307 F.2d 96, *aff'd in part*, 372 U.S. 627, *aff'd in part, rev'd in part on other grounds*, 372 U.S. 609 (1963).

[294] *See* PART ONE, § II(A)(2) *supra.*

factors, including the nature of the use, the place of use, and the efficiency of the use.

1. Nature of Use

As discussed elsewhere,[295] water rights for domestic, agricultural, industrial, municipal, or aesthetic use are usually determined to be beneficial. It is only to the extent that the use is nonbeneficial that the nature of the use limits the appropriative right.

2. Place of Use

The doctrine of prior appropriation permits great flexibility with regard to the place where water may be used. Indeed, "[t]he right to appropriate water and put the same to beneficial use at any place in the state is no longer open to question."[296] Further, since the right to use water is a property right which may be sold separately from the land,[297] courts have held that the place of use may be changed, *i.e.*, "the right to the use of the water is not limited to the land where the water was first applied."[298]

However, there are legal controls which have been developed that limit the right to change the place of use. For example, a change in the place of use must not "interfere with the vested rights of junior appropriators in the continuance of conditions existing at the time of their appropriations . . . ."[299] Further, change in the place of use is

---

[295] For a more complete discussion of the nature of beneficial uses, see PART ONE, §§ II (A)(2)(a)-(e) *supra.*

[296] Metropolitan Suburban Water Users Ass'n v. Colorado River Water Conserv. Dist., 148 Colo. 173, 202, 365 P.2d 273, 289 (1961); *accord,* Coffin v. Left Hand Ditch Co., 6 Colo. 443, 449 (1882); *see* Wyoming v. Colorado 259 U.S. 419 (1922); Pioneer Irr. Co. v. Board of Comm'rs, 236 F. 790 (D. Colo. 1916). See also COLO. REV. STAT. ANN. § 150-5-13(2)(d) (1963) which places restrictions on appropriators diverting water across the trans-continental divide; that is,

> facilities planned and designed for the exportation . . . shall be designed, constructed and operated in such manner that the present appropriations of water, and in addition thereto prospective uses of water for irrigation and other beneficial consumptive use purposes . . . will not be impaired nor increased in cost at the expense of the water users within the natural basin.

Id.

[297] For a more complete discussion of a water right as a property right, see PART FOUR, § I *infra.*

[298] Hassler v. Fountain Mutual Irr. Co., 93 Colo. 246, 249, 26 P.2d 102, 103 (1933); *accord,* Colorado Springs v. Yust, 126 Colo. 289, 294, 249 P.2d 151, 153 (1952); Enlarged Southside Irr. Ditch Co. v. John's Flood Ditch Co., 120 Colo. 423, 429, 210 P.2d 982, 985 (1949); Ironstone Ditch Co. v. Ashenfelter, 57 Colo. 31, 39-40, 140 P. 177, 180 (1914); *see* Denver v. Sheriff, 105 Colo. 193, 96 P.2d 836 (1939).

[299] Enlarged Southside Irr. Ditch Co. v. John's Flood Ditch Co., 120 Colo. 423, 429, 210 P.2d 982, 985 (1949); *accord,* Enlarged Southside Irr. Ditch Co. v. John's Flood Ditch Co., 116 Colo. 580, 586, 183 P.2d 552, 555 (1947); Hassler v. Fountain Mutual Irr. Co., 93 Colo. 246, 249, 26 P.2d 102, 103 (1933); Ironstone Ditch Co. v. Ashenfelter, 57 Colo. 31, 40, 140 P. 177, 180 (1914); Colorado Springs v. Yust, 126 Colo. 289, 294, 249 P.2d 151, 153 (1952). *See generally* DeHerrera v. Manassa Land & Irr. Co., 151 Colo. 528, 379 P.2d 405 (1963); Shawcroft v. Terrace Irr. Co., 138 Colo. 343, 333 P.2d 1043 (1958); PART ONE, § III(A)(2) *supra.*

"[l]imited not only by the volume use stated in the decree but also by the time use measured by the needs of the land . . . ."[300]

It should also be noted that Colorado has enacted a watershed protection law[301] which requires that works and facilities constructed for appropriations, which export water from the basin of the Colorado River under the authority of a water conservation district,

> shall be designed, constructed and operated in such a manner that the present appropriations of water, and in addition thereto prospective uses of water for irrigation and other beneficial consumptive use purposes . . . within the natural basin of the Colorado river [*sic*] in the state of Colorado . . . will not be impaired nor increased in cost at the expense of the water users within the natural basin.[302]

The practical implication of this enactment, exemplified by the Grand Lake diversion, is to require a compensating reservoir to be built for the benefit of western slope appropriators when water is to be transported across the Continental Divide to the Eastern Slope.[303]

3. Efficiency of Use

Efficiency of use deals principally with waste, *i.e.*, "practices, such as the use of excessive amounts of water and losses in the physical application or transportation of water, through seepage, evaporation and the like,"[304] which do not make reasonable utilization of appropriated water.

a. Wasteful Use

Although decreed water rights are vested rights, there are certain limitations which attach to them, including the limitation to not waste the appropriated water.[305] If an appropriator diverts more water than he can apply to a beneficial use, he then owes a duty to return the surplus to the stream where it becomes subject to appropriation as if it had never been diverted.[306] Similarly, if an appropriator has no

---

[300] Enlarged Southside Irr. Ditch Co. v. John's Flood Ditch Co., 120 Colo. 423, 429, 210 P.2d 982, 985 (1949). *See* Farmers Highline Canal & Res. Co. v. Golden, 129 Colo. 575, 272 P.2d 629 (1954); Enlarged Southside Irr. Ditch Co. v. John's Flood Ditch Co., 116 Colo. 580, 183 P.2d 552 (1947); Baker v. Pueblo, 87 Colo. 489, 289 P. 603 (1930); *cf.* Fort Lyon Canal Co. v. Rocky Ford Canal Co., 79 Colo. 511, 246 P. 781 (1926). *See generally* Hassler v. Fountain Mutual Irr. Ditch Co., 93 Colo. 246, 26 P.2d 102 (1933).

[301] COLO. REV. STAT. ANN. § 150-5-13(2)(d) (1963).

[302] *Id.*

[303] J. SAX, *supra* note 1, at 122.

[304] *Id.* at 124.

[305] *See generally* Fellhauer v. People, 447 P.2d 986 (Colo. 1968); Colorado Springs v. Bender, 148 Colo. 458, 366 P.2d 552 (1961).

[306] Pulaski Irr. Ditch Co. v. Trinidad, 70 Colo. 565, 568, 203 P. 681, 682 (1922); Durkee Ditch Co. v. Means, 63 Colo. 6, 8-9, 164 P. 503, 504 (1917); La Jara Creamery & Live Stock Ass'n v. Hansen, 35 Colo. 105, 109, 83 P. 644, 645 (1905); Water Supply and Storage Co. v. Larimer & Weld Res. Co., 25 Colo. 87, 94, 53 P. 386, 388 (1898).

present use for his full appropriation, he owes a duty to allow that which is not needed to remain in the stream.[307]

The problem with excessive usage of water is particularly acute during the summer season when shortage of available water is most likely to occur. Hence, a Colorado statute provides that "[d]uring the summer season it shall not be lawful for any person to run through his irrigating ditch any greater quantity of water than is *absolutely* necessary for irrigating his land, and for domestic and stock purposes; it being the intent and meaning of this section to prevent the wasting and useless discharge and running away of water."[308]

b. Wasteful Loss from Conveyance or Diversion

An appropriator is required to "exercise a reasonable degree of care to prevent loss in carrying [water] to the place of use."[309] Attempting to convey a volume of water in excess of the capacity of a ditch[310] or conveying water in a ditch or canal which loses an unreasonable amount of water due to seepage or evaporation constitutes waste.[311]

While the statutes do not provide a test for determining waste, there are specifications in a recent statute for the construction of headgates and waste gates which allow the volume of water and the possibility of waste to be more effectively measured and controlled.[312] Further, the state engineer or the division engineer is authorized by law to enter upon private property to inspect the means or proposed means of diversion and transportation of water;[313] and division engineers are required to order the total or partial discontinuance of any diversion in their division when the water is not being applied to a beneficial use.[314] In addition to risking a total or partial discontinuance by order of the state or division engineer, the appropriator who permits an unreasonable diversion of water also subjects himself both to the

---

[307] Denver v. Sheriff, 105 Colo. 193, 203, 96 P.2d 836, 841 (1939); Fort Lyon Canal Co. v. Chew, 33 Colo. 392, 405, 81 P. 37, 41 (1905).

[308] COLO. REV. STAT. ANN. § 148-7-8 (1963) (emphasis added).

[309] Sterling v. Pawnee Ditch Ext. Co., 42 Colo. 421, 431, 94 P. 339, 341 (1908). *See generally* COLO. REV. STAT. ANN. §§ 148-7-7, -8 (1963); *Id.* § 148-21-35(6) (Supp. 1969).

[310] Greeley Irr. Co. v. House, 14 Colo. 549, 553, 24 P. 329, 330 (1890).

[311] Comstock v. Larimer & Weld Res. Co., 58 Colo. 186, 205-06, 145 P. 700, 706 (1914); *accord* Sterling v. Pawnee Ditch Ext. Co., 42 Colo. 421, 430, 94 P. 339, 341 (1908); Montrose Canal Co. v. Loutsenhizer, 23 Colo. 233, 237-38, 48 P. 532, 534 (1896). These cases specifically emphasize that waste can be occasioned by the use of ditches or appliances conveying water which permit a loss of a volume of water many times greater than that actually consumed at the point of utilization. In other words, these cases obligate appropriators to use care in the construction and maintenance of ditches in order to prevent waste from evaporation or seepage. Finally, there is also a statutory obligation for ditch owners to prevent waste. COLO. REV. STAT. ANN. §§ 148-7-7, -8 (1963).

[312] COLO. REV. STAT. ANN. § 148-7-12(1) (Supp. 1969).

[313] *See generally* COLO. REV. STAT. ANN. § 148-21-35(6) (Supp. 1969).

[314] *Id.* §§ 148-21-35(1), (2).

possibility of a fine[315] and to allegations by a junior appropriator that the water is not being beneficially used and that the senior right should, therefore, be cut back.[316]

A reasonable means of diversion is also required when tributary ground water is appropriated. In *Colorado Springs v. Bender,*[317] which involved the appropriation of water from an aquifer by wells, it was stated that "the diversion by the senior appropriator must be examined as to whether he has created a means of diversion from the aquifer which is reasonably adequate . . . ."[318] The court remanded the case for further findings, providing that

> [t]he court must determine what, if anything, the plaintiffs should be required to do to make more efficient the facilities at their point of diversion, due regard being given to the purposes for which the appropriation had been made, and the "economic reach" of plaintiffs. The plaintiffs cannot reasonably "command the whole" source of supply merely to facilitate the taking by them of the fraction of the entire flow to which their senior appropriation entitles them. On the other hand, plaintiffs cannot be required to improve their extraction facilities beyond their economic reach, upon a consideration of all the factors involved.[319]

While there are many problems that remain to be solved, it does appear that the trend of water law is to attempt to minimize waste and to obtain the maximum efficiency of use. Given the language in *Fellhauer,*[320] the provisions of recent legislation,[321] and the emphasis on economic use,[322] it is apparent that efficiency of use may provide a viable way in which additional water may be made available to users in Colorado.

---

[315] *Id.* § 148-7-9 (1963).

[316] *See* Albion-Idaho Land Co. v. Naf Irr. Co., 97 F.2d 439 (10th Cir. 1938).

[317] 148 Colo. 458, 366 P.2d 552 (1961).

[318] *Id.* at 464, 366 P.2d at 556.

[319] *Id.* at 465, 366 P.2d at 556.

[320] 447 P.2d 986 (Colo. 1968).

> It is implicit . . . that, along with *vested rights,* there shall be *maximum utilization* of the water of this state. As administration of water approaches its second century the curtain is opening upon the new drama of *maximum utilization* and how constitutionally that doctrine can be integrated into the law of *vested rights.* We have known for a long time that the doctrine was lurking in the backstage shadows as a result of the accepted, though oft violated, principle that the right to water does not give the right to waste it. (emphasis by the court).

Id. at 994.

[321] The "Water Right Determination Act of 1969" (COLO. REV. STAT. ANN. §§ 148-21-1 *et seq.* (Supp. 1969)) makes several references to the policy of maximizing use. For example, the stated policy of the act is to "maximize the beneficial use of all the waters of this state." *Id.* § 148-21-2(1). Further, the definition of beneficial use uses the phrase "reasonably efficient practices to accomplish without waste the purpose for which the diversion is lawfully made. . . ." *Id.* § 148-21-3(7).

[322] See, for example, the language in COLO. REV. STAT. ANN. § 148-21-35(4) (Supp. 1969).

B. *Preferences in Use of Appropriated Water*

Although the dominant factor of the prior appropriation system is time,[323] this factor is not determinative of all water rights under this system. Indeed, statutory preferences can give a junior user a priority over a senior user provided that certain requirements are satisfied.[324]

The most common types of preferences are those which correspond to the ultimate purpose for which the water was appropriated. The Colorado constitution states:

> [w]hen the waters of any natural stream are not sufficient . . . those using the water for domestic purposes shall have the preference over those claiming [water] for any other purpose, and those using the water for agricultural purposes shall have preference over those using the same for manufacturing purposes.[325]

It would seem that the drafters of the Colorado constitution intended to create a true preference for appropriators using water for domestic purposes and likewise for those using water for agricultural purposes.[326] From the wording of art. XVI, § 6, it appears that a person using water for a preferred purpose could divert and use the quantity of water he has properly appropriated as against a non-preferential senior right and that the preference provision would be self-executing. However, Colorado courts have refused to give the preference clause in the constitution a self-executing effect; instead they have held that "[r]ights to the use of water" and the priority one appropriator may have over another are property rights "in the full sense of that term"[327] and, as such, are subject to the condemnation requirements of art. II, § 15 of the constitution. This provision gives a junior preferred appropriator a right to condemn, provided he offers just compensation to the holder of the nonpreferential senior right if the latter's consent is not obtained.[328]

One of the earliest cases to set forth this interpretation of the preference clause was *Montrose Canal Co. v. Loutsenhizer Ditch Co.*, in which it was stated:

> The use [domestic] protected by the constitution is such as the riparian owner has at common law to take water for himself, his family or his stock, and the like. And if the term "domestic use" is to be given a different or greater meaning than this, then as between such enlarged use and those having prior rights for agricultural and manufacturing purposes, it is subject to that other constitutional provision requiring just compensation to those whose rights are affected thereby.[329]

---

[323] Coffin v. Left Hand Ditch Co., 6 Colo. 443, 447 (1882); Schilling v. Rominger, 4 Colo. 100, 103 (1878); COLO. CONST. art. XVI, § 6; *see* Thomas, *Appropriations of Water for a Preferred Purpose,* 22 ROCKY MT. L. REV. 422 (1950).

[324] *See* Trelease, *Preferences to the Use of Water,* 27 ROCKY MT. L. REV. 133 (1955).

[325] COLO. CONST. art. XVI, § 6.

[326] Trelease, *supra* note 324, at 134.

[327] Sterling v. Pawnee Ditch Ext. Co., 42 Colo. 421, 426, 94 P. 339, 340 (1908).

[328] Thomas, *supra* note 323, at 423.

[329] 23 Colo. 233, 237, 48 P. 532, 534 (1896).

The court seemed to say that a true preference would only extend to that quantity of water a riparian landowner could take under common law,[330] and all other preferences would merely constitute rights to condemn or to take by consent. With this interpretation the court was able to give effect to the literal meaning of the preference clause by creating a true preference and provide a workable, as well as reasonable, application of the preference clause. However, it should be noted that cases following *Montrose* have never referred to that portion of the opinion which provided for a true preference since there were few claims for a quantity of water as small as that to which a riparian landowner was entitled under common law[331] and since the standard of a riparian landowner's right under common law was not applicable in Colorado.[332]

One of the underlying considerations in the *Montrose* decision was the possibility that towns might use their preferred right for domestic purposes to claim large quantities of water without paying compensation, thereby unreasonably interfering with the efficient allocation of water resources.[333] The courts felt that claims so large were inconsistent with sound economic policy in view of the public welfare. It was believed that the benefit to the domestic user was far overshadowed by the possible detriment to the farmers and manufacturers who rights were affected[334] and, further, that the general public ultimately stood to lose by allowing domestic users to freely divert large quantities of water, thus reducing food production and manufacturing output.[335] In response to these fears, the Colorado Supreme Court made it explicitly clear in *Sterling v. Pawnee Ditch Extension Co.*[336] that municipalities could not take water already appropriated without paying compensation:

> Section 6, art. XVI, of the constitution states that those using water for domestic purposes shall have the preference over those claiming for any other purpose, but this provision does not entitle one desiring to use water for domestic purposes, as intended by the defendant town of Sterling, to take it from another who has previously appropriated it for some other purpose, without just compensation.[337]

---

[330] Under the riparian system, all riparian owners on a stream had equal and correlative rights to the use of the water in the stream. The amount of water each user could take directly depended on the amount of water available in the stream. A "reasonable amount" was the proper, although often times confusing, standard. When water is scarce the riparian rights are very small. *See* Trelease, *Coordination of Riparian and Appropriative Rights to the Use of Water,* 33 TEXAS L. REV. 24, 26 (1954).

[331] Many early decisions like Sterling v. Pawnee Ditch Extension Co., 42 Colo. 421, 94 P. 339 (1908), involved municipalities or large ditch companies who were appropriating large amounts of water.

[332] Coffin v. Left Hand Ditch Co., 6 Colo. 443, 447 (1882).

[333] Montrose Canal Co. v. Loutsenhizer Ditch Co., 23 Colo. 233, 237, 48 P. 532, 534 (1896).

[334] *Id.*

[335] *Id.*

[336] 42 Colo. 421, 94 P. 339 (1908).

[337] *Id.* at 426, 94 P. at 340.

A later case, *Black v. Taylor,*[338] recognized, in effect, the right of an *individual* user to condemn a less preferred senior right;[339] yet the court in *Black,* citing *Sterling,* stated that full compensation must be paid in such cases to the holder of the displaced senior right.[340] Hence, the case law development from *Montrose* to *Black* leads to the conclusion that the purpose of use preferences for domestic, agricultural, and manufacturing uses in Colorado amount to no more than a right to condemn inferior uses, provided that just compensation is paid.

There also exists a favored user preference which gives one appropriator of water a better right than a prior appropriator who is using the water for the same purpose.[341] In Colorado, the authority for the favored user preference does not come from the preference provision of the constitution but is based primarily on the eminent domain power of the state. The favored user preference is, therefore, no more than a right to condemn and is similar to the purpose of use preferences in that regard.

C. *Vested Rights*

A principal element of the law of prior appropriation is the fact that a water right is, as against all claims more junior in time, a vested property interest.[342] As a consequence thereof, it has been held that prorating available water in times of short supply cannot be required and that junior appropriators may be shut off, if necessary, to supply priorities of senior appropriators.[343]

Although a right to the use of water is a vested property right, it may still be limited or lost. For example, "[s]ince the priority rule protects only the priority of those making 'beneficial' uses of the water, it is always open to a junior claimant to urge that a senior's use is not beneficial"[344] because of excessive waste in use or transportation[345] or because of abandonment.[346] Further, even though an appropriator

---

[338] 128 Colo. 449, 264 P.2d 502 (1953).

[339] *Id. See generally* Thomas, *supra* note 323, at 427.

[340] Black v. Taylor, 128 Colo. 449, 457, 264 P.2d 502, 506 (1953).

[341] Trelease, *supra* note 324, at 133.

[342] *See* J. SAX, *supra* note 1, at 136. Well rights to tributary ground waters are vested even though they may not be adjudicated. *See* Black v. Taylor, 128 Colo. 449, 264 P.2d 502 (1953). *See also* PART FOUR, § I *infra.*

[343] Colorado Springs v. Bender, 148 Colo. 458, 463, 366 P.2d 552, 555-56 (1961).

[344] J. SAX, *supra* note 1, at 136. *See* PART ONE, § V(A)(1) *supra.*

[345] Albion-Idaho Land Co. v. Naf Irr. Co., 97 F.2d 439, 444-45 (10th Cir. 1938). *See* PART ONE, §§ V(A)(2)(a) & (b) *supra.*

[346] Kaess v. Wilson, 132 Colo. 443, 447-48, 289 P.2d 636, 638 (1955); Knapp v. Colorado River Water Conserv. Dist., 131 Colo. 42, 53-54, 279 P.2d 420, 425-26 (1955); Peterson v. Colorado River Dist., 127 Colo. 16, 23, 254 P.2d 422, 425 (1952). Although both nonuse and intent are normally required for abandonment, the intent may under certain circumstances be inferred. Farmers Res. & Irr. Co. v. Fulton Irr. Ditch Co., 108 Colo. 482, 487, 120 P.2d 196, 199 (1941); Commonwealth Irr. Co. v. Rio Grande Canal Water Users Ass'n, 96 Colo. 478, 480, 45 P.2d 622, 623 (1935). *See* PART ONE, § V(E)(1) *infra.*

has a vested property right, he still cannot "command the whole flow of the stream merely to facilitate his taking the fraction of the whole flow to which he is entitled."[347] Hence, these and other restrictions[348] limit the vested right acquired by a valid appropriation.

Vested water rights may also not be as stable as other kinds of vested rights. Federal reclamation projects, authorizing the distribution of project water to users in time of shortage in accordance with a proportional reduction scheme, may make an exception to the rule of priority since federal law will be held to apply.[349] There is also the whole question of federal control over and claims to water rights in the Western States which may threaten the security afforded by a state-granted water right.[350]

The concept of vested rights with respect to nontributary ground waters poses an especially difficult problem. A discussion of the law in this area and the conclusion that the property owner has a vested right to such underlying waters, subject only to the reasonable use doctrine, is included in a later portion of this study.[351]

D. *Restrictions on the Right*

A right to the use of water is limited by the volume of water that may be diverted and the time during which the water may be used.

1. Measure of Volume

It has been held that "[t]he rate or volume which may rightfully be diverted under a decreed priority is measured by the decree."[352] In Colorado, decrees measure the right in terms of rate of flow, *i.e.*, 5 cubic feet per second (cfs). In determining the rate or volume which may rightfully be diverted, the courts generally follow the "original enterprise" concept whereby the appropriator is entitled to take all the water that is reasonably needed to pursue the use intended at the time of his original appropriation.[353]

2. Period of Use

It is the uniformly stated principle that

> a prior appropriator of water acquires an absolute right thereto only to the extent to which such water is applied to beneficial use. . . . If,

---

[347] COLO. REV. STAT. ANN. § 148-21-2(2)(c) (Supp. 1969).

[348] For a more complete discussion of the legal controls placed on water rights, see PART ONE, §§ V(A), (B) *supra* and PART ONE, §§ V(D), (E) *infra*.

[349] J. SAX, *supra* note 1, at 141. *See* Ivanhoe Irr. Dist. v. McCracken, 357 U.S. 275 (1958).

[350] *See* Moses, *Federal-State Water Problems*, 47 DENVER L.J. 194 (1970).

[351] PART TWO, § I (B)(2)(b)(3) *infra*.

[352] Enlarged Southside Irr. Ditch Co. v. John's Flood Ditch Co., 120 Colo. 423, 428, 210 P.2d 982, 984 (1949).

[353] J. SAX, WATER LAW, PLANNING & POLICY 263 (1968).

> therefore, the prior appropriator makes use of the water only at certain times, as during certain seasons, or on certain days in the week, or during a certain number of days in a month, other persons may acquire a right to the use of the water at other times, or on other days.[354]

E. *Loss of the Right*

In addition to the foregoing restrictions, there are two other ways in which a water right may be totally or partially lost. It may be determined that the right has been abandoned or that another user has obtained the water right by adverse possession.

1. Abandonment

In Colorado, all water rights (including direct flow rights,[355] storage rights,[356] adjudicated rights,[357] conditional rights,[358] and ground water rights[359]) are subject to abandonment even though they

---

[354] J. LONG, *supra* note 2, at 240. *See also* Cache La Poudre Res. Co. v. Water Supply & Stor. Co., 25 Colo. 161, 53 P. 331 (1898).

[355] *See* Mountain Meadows Ditch & Irr. Co. v. Park Ditch & Res. Co., 130 Colo. 537, 277 P.2d 527 (1954); Commonwealth Irr. Co. v. Rio Grande Canal Water Users Ass'n, 96 Colo. 478, 45 P.2d 622 (1935); Farmers Res. & Irr. Co. v. Fulton Irr. Ditch Co., 108 Colo. 482, 120 P.2d 196 (1941); Parsons v. Fort Morgan Res. & Irr. Co., 56 Colo. 146, 136 P. 1024 (1913).

[356] Hallenbeck v. Granby Ditch & Res. Co., 160 Colo. 555, 566, 420 P.2d 419, 426 (1966); *see* Del Norte Irr. Dist. v. Santa Maria Res. Co., 108 Colo. 1, 113 P.2d 676 (1941).

[357] Alamosa Creek Canal Co. v. Nelson, 42 Colo. 140, 93 P. 1112 (1908) is the leading case on this area. The court said that a statutory decree confers no new rights on the water right owner. A decree is not a guaranty to the owner of the right that the right cannot be abandoned; it is merely evidence of a pre-existing right which may be lost by abandonment. *Id.* at 147, 93 P. at 1114. *Accord,* San Luis Valley Land & Cattle Co. v. Hazard, 114 Colo. 233, 236, 157 P.2d 144, 145 (1945); Bijou Irr. Dist. v. Weldon Valley Ditch Co., 67 Colo. 336, 338, 184 P. 382, 384 (1919); Parsons v. Fort Morgan Res. & Irr. Co., 56 Colo. 146, 151, 136 P. 1024, 1026 (1913).

[358] COLO. REV. STAT. ANN. § 148-21-3(14) (Supp. 1969) states: " 'Abandonment of a conditional water right' means the termination of a conditional water right as a result of the failure to develop with reasonable diligence the proposed appropriation upon which such water right is to be based." *Id.* This is the first time that conditional water rights have been subject to abandonment. The old rule was that abandonment applied only to *completed* appropriations of water. In Conley v. Dyer, 43 Colo. 22, 95 P. 304 (1908) the court reasoned that if the appropriator did not follow the doctrine of due diligence to perfect his right (*i.e.,* applying the appropriated water to a beneficial use within a reasonable time), no appropriation of water would exist. *Id.* at 28, 95 P. at 306. *Accord,* Bieser v. Stoddard, 73 Colo. 554, 560, 216 P. 707, 709 (1923); Drach v. Isola, 48 Colo. 134, 145, 109 P. 748, 751 (1910).

[359] " 'Abandonment of a water right' means the termination of a *water right* . . . ." (Emphasis added) COLO. REV. STAT. ANN. § 148-21-3(13) (Supp. 1969), provides: " 'Water right' means a right to use in accordance with its priority a certain portion of the *waters of the state* by reason of the appropriation of the same." (Emphasis added) *Id.* 148-21-3(8). " 'Waters of the state' means all surface and *underground water* in or tributary to all natural streams within the state of Colorado . . . ." (emphasis added) *Id.* § 148-21-3(3). Since "water rights" includes the right to use "water of the state" and "waters of the state" is defined to include "underground waters," the provision of the statute allowing abandonment of "water rights" includes the abandonment of underground water rights.

are not subject to forfeiture.[360] If the essential elements are proved, then water rights may be lost or limited by abandonment proceedings. In addition, the "Water Right Determination and Administration Act of 1969" provides for administrative determination of abandonment.

a. Essential Elements

According to the case law, abandonment consists of two elements: nonuse of appropriated water coupled with the owner's intent not to repossess himself of such use.[361] In 1969, the Colorado legislature defined abandonment as "the termination of a water right in whole or in part as a result of the intent of the owner thereof to discontinue permanently the use of all or part of the water available thereunder."[362] While on its face the statute seems to have eliminated the element of nonuse in this definition, the provision "intent . . . to discontinue permanently use" could be interpreted in such a manner that nonuse depends solely upon intent; and therefore if intent is shown, nonuse can be assumed.

The controlling element in the definition of abandonment becomes intent which may be shown either expressly or impliedly.[363] Without

---

[360] According to Dr. Kinney, the distinction between abandonment and forfeiture may be summarized as follows:

> While upon the one hand abandonment is the relinquishment of the right by the owner with the intention to forsake and desert it, forfeiture, upon the other hand, is the involuntary or forced loss of the right, caused by the failure of the appropriator or owner to do or perform some act required by statute. . . . The element of intent, therefore, so necessary in the case of abandonment, is not a necessary element in the case of forfeiture. In fact a forfeiture may be worked directly against the intent of the owner of the right to continue in the possession and the use of the right. Therefore forfeiture as applied to water rights in this connection is the penalty fixed by statute for the failure . . . to use the same for the period specified in the statute.

2 C. KINNEY, *supra* note 71, at 2020. Colorado has no forfeiture statute, and therefore no water rights in Colorado may be forfeited. The old case of Beaver Brook Res. & Canal Co. v. Saint Vrain Res. & Fish Co., 6 Colo. App. 130, 40 P. 1066 (1895) mentions forfeiture but in the context of conditional water rights. The court said:

> If, by neglect to apply the water within a proper time, the right to apply was forfeited, the water reverted, and anyone could proceed to appropriate and apply it; but such right could only attach while the right of the former claimant was in abeyance by reason of his negligence, and the second party must have availed himself of the right before the re-entry and prosecution of the enterprise by the first party.

Id. at 135, 40 P. at 1068; *cf.* COLO. REV. STAT. ANN. § 148-21-3(11) (Supp. 1969).

[361] Farmers Res. & Irr. Co. v. Fulton Irr. Ditch Co., 108 Colo. 482, 487, 120 P.2d 196, 199 (1941); Del Norte Irr. Dist. v. Santa Maria Res. Co., 108 Colo. 1, 6, 113 P.2d 676, 678 (1941); Commonwealth Irr. Co. v. Rio Grande Canal Water Users Ass'n, 96 Colo. 478, 480, 45 P.2d 622, 623 (1935); Arnold v. Roup, 61 Colo. 316, 324, 157 P. 206, 209 (1916).

[362] COLO. REV. STAT. ANN. § 148-21-3(13) (Supp. 1969).

[363] Scott v. Temple, 108 Colo. 463, 465, 119 P.2d 607, 608, (1941); Fruit Growers Ditch & Res. Co. v. Donald, 96 Colo. 264, 268, 41 P.2d 516, 518 (1935); South Boulder Canon Ditch Co. v. Davidson Ditch & Res. Co., 87 Colo. 391, 392, 288 P. 177, 178 (1930).

proving such intent to abandon a water right, proof of mere nonuse of the appropriated water will not suffice to establish abandonment.[364]

b. Proof of Intent to Abandon

Abandonment is a question of fact which must be proved by clear and convincing evidence[365] of both an intent to abandon and, concomitantly, nonuse.[366] Further, when attempting to prove abandonment of an *adjudicated* water right, the evidence generally must be of facts occurring after the adjudication and awarding of priorities,[367] although conditions prior to the adjudication may be competent to show intent subsequent to the decree.[368] In any case, the party who asserts abandonment has the burden of proving abandonment.[369]

The evidence necessary to establish the requisite intent may vary. Abandonment of a water right may be effected by a plain declaration of an intention to abandon the right.[370] However, a more complicated situation results when the intent to abandon is presumed or inferred,

---

[364] New Mercer Ditch Co. v. Armstrong, 21 Colo. 357, 364, 40 P. 989, 991 (1895); *accord,* Scott v. Temple, 108 Colo. 463, 465, 119 P.2d 607, 608 (1941); Fruit Growers Ditch & Res. Co. v. Donald, 96 Colo. 264, 269, 41 P.2d 516, 517 (1935); White v. Nuckolls, 49 Colo. 170, 175, 112 P. 329, 332 (1910).

[365] Commonwealth Irr. Co. v. Rio Grande Canal Water Users Ass'n, 96 Colo. 478, 480, 45 P.2d 622, 623 (1935); South Boulder Canon Ditch Co. v. Davidson Ditch & Res. Co., 87 Colo. 391, 392, 288 P. 177, 178 (1930); Arnold v. Roup, 61 Colo. 316, 324, 157 P. 206, 209 (1916); Beaver Brook Res. & Canal Co. v. Saint Vrain Res. & Fish Co., 6 Colo. App. 130, 136, 40 P. 1066, 1068 (1895).

[366] Hallenbeck v. Granby Ditch & Res. Co., 160 Colo. 555, 567, 420 P.2d 419, 426 (1966); Lengel v. Davis, 141 Colo. 94, 100, 347 P.2d 142, 146 (1959); Pouchoulou v. Heath, 137 Colo. 462, 463, 326 P.2d 656 (1958); Means v. Pratt, 138 Colo. 214, 219, 331 P.2d 805, 807 (1958); Cline v. McDowell, 132 Colo. 37, 42, 284 P.2d 1056, 1059 (1955).

[367] Bieser v. Stoddard, 73 Colo. 554, 560, 216 P. 707, 709 (1923); Arnold v. Roup, 61 Colo. 316, 324, 157 P. 206, 209 (1916); O'Brien v. King, 41 Colo. 487, 491, 92 P. 945, 946 (1907); *accord,* Hallenbeck v. Granby Ditch & Res. Co., 160 Colo. 555, 565, 420 P.2d 419, 425 (1966) (where the court states the rule but does not apply it to the facts of the case); Farmers Res. & Irr. Co. v. Fulton Irr. Ditch Co., 108 Colo. 482, 120 P.2d 196 (1941) (holding that the fact that decreed water had not been used was evidence of abandonment of the decreed right) *Id.* at 496, 120 P.2d at 204. *See* Klug v. Henrylyn Irr. Dist., 88 Colo. 8, 291 P. 820 (1930) (where the court found abandonment where a water user constructed his reservoir in such a way that he could not use the water decreed to him).

[368] New Mercer Ditch Co. v. New Cache La Poudre Irr. Ditch Co., 70 Colo. 351, 201 P. 557 (1921). "Evidence of abandonment must, of course, be of facts which occur after the decree which awards the priorities, but previous conditions, declarations of the parties and the proceedings in the suit of which that decree is the result are competent to show conditions and intent subsequent to the decree." *Id.* at 353-54, 201 P. at 558. *Accord,* Colorado Springs v. Yust, 126 Colo. 289, 293, 249 P.2d 151, 153 (1952) (cites this proposition but applies the principle to a case involving a petition for a change of point of diversion rather than a petition for a decree of abandonment); *see* Alamosa Creek Canal Co. v. Nelson, 42 Colo. 140, 93 P. 1112 (1908).

[369] Mason v. Hills Land & Cattle Co., 119 Colo. 404, 408, 204 P.2d 153, 155 (1949); Arnold v. Roup, 61 Colo. 316, 324-25, 157 P. 206, 209 (1916); Parsons v. Fort Morgan Res. & Irr. Co., 56 Colo. 146, 150, 136 P. 1024, 1025 (1913); White v. Nuckolls, 49 Colo. 170, 176, 112 P. 329, 332 (1910); Platte Valley Irr. Co. v. Central Trust Co., 32 Colo. 102, 106, 75 P. 391, 393 (1904); Hall v. Lincoln, 10 Colo. App. 360, 364, 50 P. 1047, 1048 (1897); *see* Bieser v. Stoddard, 73 Colo. 554, 216 P. 707 (1923).

[370] Green Valley Ditch Co. v. Frantz, 54 Colo. 226, 232, 129 P. 1006, 1008 (1913), *citing* North Am. Explor. Co. v. Adams, 104 F. 404 (10th Cir. 1900).

for it then becomes necessary to establish the connection between the facts asserted and the inference presumed.

In order to adjudicate the issue of implied intent the Colorado Supreme Court has formulated several general rules for determining what constitutes a proper inference of intent to abandon. For example, the court has stated that intent to abandon "may be inferred from acts or failures to act so inconsistent with an intention to retain it [the water right] that the unprejudiced mind is convinced of the renunciation."[371] Further, the court has held that abandonment of a water right will not be inferred because the user has changed either his point of diversion[372] or his method of conveying appropriated water from the source of supply to the point of beneficial use, without a showing of intent to abandon and nonuse of the appropriated water.[373]

A third principle adopted by the court states that when it is shown by clear and convincing evidence that available water has been unused for an unreasonable amount of time, an implication or presumption of an intent to abandon may arise in the absence of satisfactory proof of some fact or condition excusing such nonuse.[374] The Colorado

---

[371] *Id.* at 232, 129 P. at 1008. *See also* Northern Colo. Irr. Co. v. Burlington Ditch, Res. & Land Co., 74 Colo. 159, 219 P. 1071 (1923); Nichols v. Lantz, 9 Colo. App. 1, 47 P. 70 (1896).

[372] Corey v. Long, 111 Colo. 146, 138 P.2d 930 (1943). The court said:

> Defendants have a decreed priority. . . though the water is now taken at a different point of diversion from that described as the diversion point in the decree. The defendants, by changing the point of diversion, or by procuring a priority decree in which the point of diversion was erroneously described, did not thereby lose the right to the water which they had theretofore appropriated and which they have continued to use.

Id. at 150, 138 P.2d at 932. *Accord,* Lengel v. Davis, 141 Colo. 94, 101, 347 P.2d 142, 146 (1959); Pouchoulou v. Heath, 137 Colo. 462, 464, 326 P.2d 656 (1958); Graeser v. Haigler, 117 Colo. 197, 199, 185 P.2d 781, 782 (1947). The Colorado court has applied this doctrine to storage rights as well as in the case Del Norte Irrigation District v. Santa Maria Reservoir Co. 108 Colo. 1, 113 P.2d 676 (1941): "[s]o long as an off-channel reservoir actually continues to store available water to an extent reasonably consistent with its decrees, it abandons none of its rights, and it matters not whether its mean of inflow diversion is by ditch or pipeline, large or small, in good condition or bad." *Id.* at 6, 133 P.2d at 678.

[373] Nichols v. McIntosh, 19 Colo. 22, 34 P. 278 (1893), wherein the court said:

> A distinction must be observed between the abandonment of *an irrigating ditch* and the abandonment of *the right to the use of water for irrigation.* Water rights may be abandoned by a nonuser; but so long as the appropriator continues the use of such rights without any unreasonable voluntary cessation, an abandonment of his water rights will not be presumed against him. (Emphasis by the court)

Id. at 28, 34 P. at 281. *See also* New Mercer Ditch Co. v. Armstrong, 21 Colo. 357, 40 P. 989 (1895) wherein the court stated the rule but held it inapplicable to the facts in the case.

[374] *See, e.g.,* Knapp v. Colorado River Water Conserv. Dist., 131 Colo. 42, 279 P.2d 420 (1955); Mountain Meadow Ditch & Irr. Co. v. Park Ditch & Res. Co., 130 Colo. 537, 277 P.2d 527 (1954); Mason v. Hills Land & Cattle Co., 119 Colo. 404, 204 P.2d 153 (1949); Commonwealth Irr. Co. v. Rio Grande Canal Water Users Ass'n, 96 Colo. 478, 45 P.2d 622 (1935); Parsons v. Fort Morgan Res. & Irr. Co., 56 Colo. 146, 136 P. 1024 (1913); Alamosa Creek Canal Co. v. Nelson, 42 Colo. 140, 93 P. 1112 (1908); Sieber v. Frink, 7 Colo. 148, 2 P. 901 (1883). The court does not generally make the evidentiary distinction between an inference and a presumption. In cases which speak of a presumption, reference is made to rebutting the presumption by satisfactory proof of some fact or condition excusing nonuse.

case law on this subject is quite extensive and the following illustrations show some of the conditions that will or will not excuse long periods of nonuse.

The Colorado Supreme Court has held that conditions which constitute excusable nonuse arise when natural calamities or economic, financial or legal difficulties have prevented the use of water rights. Under such circumstances, a claim of abandonment will be defeated.[375] The court has also held that when an upstream user was cutting off the supply of water to a downstream user, there could be no finding of abandonment of the water right due to nonuse by the downstream user.[376]

On the other hand, there are several illustrations of situations in which the court has refused to recognize conditions of excusable nonuse. For example, an oral statement of intent not to abandon a water right followed by nonuse for a sufficient period of time will not rebut a presumption of abandonment.[377] Further, when acts upon which a claim of nonabandonment is based are not performed in good faith[378] but are mere pretenses to evince an intention to use the water right,[379] the court will grant a decree of abandonment.[380] Likewise, mere expressions of desire or hope to use the water right will not be sufficient

---

[375] Hallenbeck v. Granby Ditch & Res. Co., 160 Colo. 555, 420 P.2d 419 (1966) wherein the court applied the rule of excusable nonuse to shortage rights when the following conditions existed: Financial difficulties during the Depression curtailed the ability of the owner to keep the reservoirs in peak operating conditions; a shortage of materials and engineering help during World War II years hampered operations; and repairs after World War II proved to be too expensive due to stringent requirement placed thereon by the United States Forestry Service officials. *Id.* at 568, 420 P.2d at 426; Flasche v. Westcolo Co., 112 Colo. 387, 149 P.2d 817 (1944) where the court said:

> The evidence discloses that up to 1925, with intermittant interruptions due to physical conditions and storms and washouts beyond petitioner's control, it [the water right] was continuously so used. It was during this period of use that protesting juniors acquired their rights. These interruptions were misfortunes to petitioners that of course inured to the juniors' benefit. It would be strange construction of the rule of law that gives them a vested right to a continuance of conditions on the stream to hold that it is broad enough to vest them with the right to a continuance of the senior petitioners' misfortunes with their ditch. . . . To deny petitioners, in the absence of abandonment, the right to repair and improve their old diversion system and take all the water that has been decreed to them would be a denial of their property rights.

Id. at 393, 149 P.2d at 820.

[376] *See* Reagle v. Square S Land & Cattle Co., 133 Colo. 392, 296 P.2d 235 (1956).

[377] *See* Green Valley Ditch Co. v. Frantz, 54 Colo. 226, 129 P. 1006 (1913).

[378] Parsons v. Fort Morgan Res. & Irr. Co., 56 Colo. 146, 152, 136 P. 1024, 1026 (1913).

[379] *Id.*

[380] *Id.* The defendant diverted some of his priority water through certain ditches but under circumstances from which it was apparent that the diversions were a mere pretense to establish a use of water which he did not need since he was taking water from another source. A use of water must be in good faith in order to prevent an abandonment.

> [B]esides from the testimony it appears that before he [the defendant] commenced this use the water had not been used for at least seven years, and possibly not for ten. The Parson ditch had been abandoned during all this period . . . . From these circumstances it could be inferred that an abandonment had taken place before the attempt to use the water in 1905. If this were true then the use in 1905 would not revive rights which had been lost by abandonment.

Id. at 152, 136 P. at 1026.

to overcome a claim of abandonment when a long period of nonuse is established;[381] nor will nonuse of a water right because the owner of the water right intended to sell his right[382] or because the owner was in receivership[383] constitute sufficient evidence to rebut the presumption of abandonment. Finally, when a water right is held by tenants in common and one or more of the consumers do not use the water to which they are entitled, such individuals will not be excused from nonuse, and an inference of abandonment will arise as to their water rights; if the right is exercised by other tenants in common for a beneficial and necessary purpose, there is no abandonment of the water right as to those users.[384]

Because the case law fails to precisely define what is meant by "unreasonable nonuse," "nonuse for a sufficient period," "a long period of nonuse," and similar expressions, recent legislation has attempted to be more precise:

> For the purpose of procedures under this section, [*Colo. Rev. Stat. Ann.* § 148-21-28 (Supp. 1969)] failure for a period of ten years or more to apply to a beneficial use the water available under a water right when needed by the person entitled to use the same, shall create a rebuttable presumption of abandonment of a water right with respect to the amount of such available water which has not been so used.[385]

c. Abandoned Water

"When an abandonment occurs, the abandoned water augments the stream from which the diversion is made and re-establishes conditions as they would have existed had the abandoned right never come into existence and had it never been exercised."[386] Such water is to be taken by other appropriators according to their priorities,[387] and a

---

[381] Mason v. Hills Land & Cattle Co., 119 Colo. 404, 408, 204 P.2d 153, 156 (1949).

[382] Knapp v. Colorado River Water Conservation Dist., 131 Colo. 42, 279 P.2d 420 (1955) wherein the court said: "Speculation on the market, or sale expectancy, is wholly foreign to the principle of keeping life in a proprietary right and is no excuse for failure to perform that which the law requires." *Id.* at 56, 279 P.2d at 427.

[383] Farmers Res. & Irr. Co. v. Fulton Irr. Ditch Co., 108 Colo. 482, 120 P.2d 196 (1941). The court said:

> It is hardly probable that a receiver finding himself in possession of the entire stock of a water company, and thus able to control it, would not make some inquiry concerning its assets and their value. Neither is it probable that for ten years nothing was done by the receiver toward using a water right potentially capable of irrigating seventeen square miles of land. . . . The evidence was competent as tending to show a recognition of an abandonment of the rights . . . .

Id. at 497, 120 P.2d at 203-04.

[384] *See* Brighton Ditch Co. v. Englewood, 124 Colo. 366, 237 P.2d 116 (1951); Cache La Poudre Irr. Co. v. Larimer & Weld Res. Co., 25 Colo. 144, 53 P. 318 (1898).

[385] COLO. REV. STAT. ANN. § 148-21-28(2)(k) (Supp. 1969).

[386] Farmers Res. & Irr. Co. v. Fulton Irr. Ditch Co., 108 Colo. 482, 486, 120 P.2d 196, 199 (1941).

[387] Kaess v. Wilson, 132 Colo. 443, 447, 289 P.2d 636, 638 (1955); Granby Ditch & Res. Co. v. Hallenbeck, 127 Colo. 236, 242, 255 P.2d 965, 968 (1953); North Boulder Farmer's Ditch Co. v. Leggett Ditch & Res. Co., 63 Colo. 522, 557, 168 P. 742, 749 (1917).

subsequent attempt to use the abandoned water by the owner of the abandoned right will not revive the lost right.[388]

d. Recent Legislative Developments

While not precluding private actions, the Colorado legislature has provided a means for the administrative determination of abandoned water rights. Specifically, the "Water Right Determination and Administration Act of 1969"[389] provides that each tabulation, beginning in 1974, "shall modify any water rights or conditional water rights which the division engineer determines to have been abandoned in part, and shall omit any water rights or conditional water rights which the division engineer determines have been totally abandoned."[390] In making such determinations, each division engineer will "investigate the circumstances relating to each water right, the water available under which has not been fully applied to a beneficial use."[391] Further, the statute provides that an owner, last known owner, or last known claimant of a water right be notified if his claim has been included within the tabulation of abandoned water rights.[392] Still other provisions of the legislation set forth procedures for filing objections to tabulations made by the state engineer,[393] for revising the tabulations if water officials deem revision necessary,[394] and for filing objections to the revised tabulations.[395]

---

[388] Parsons v. Fort Morgan Res. & Irr. Co., 56 Colo. 146, 152, 136 P. 1024, 1026 (1913).

[389] COLO. REV. STAT. ANN. §§ 148-21-1 *et seq.* (Supp. 1969).

[390] *Id.* § 148-21-28(1).

[391] *Id.*

[392] *Id.* § 148-21-28(2):

> (a) The following deadlines shall then be effective each even numbered year beginning in 1974:
>
> (b) No later than July 10, the division engineer shall cause such publication of the tabulation to be made as is necessary to obtain general circulation once in each county or portion thereof in the division . . . and shall mail a copy of such tabulation by registered mail to the owner, or last known owner or claimant, of every water right or conditional water right which the division engineer has found to have been abandoned in whole or in part . . . .

[393] *Id.* § 148-21-28(2)(c):

> Not later than September 10, any person who wishes to object to the manner in which a water right or conditional water right is listed in the tabulation or to the omission of a water right or conditional right from such tabulation shall file a statement of objection in writing with such division engineer.

[394] *Id.* § 148-21-28(2)(d):

> On or before October 10, the division engineer shall make such revisions, if any, as he deems proper in the aforesaid tabulation. In considering the matter raised by statements of objections, the division engineer may consult with interested persons. The division engineer shall consult with the state engineer and shall make any revisions in the tabulation determined by the state engineer to be necessary or advisable . . . . The revised tabulation . . . shall be filed . . . with the water clerk.

[395] *Id.* § 148-21-28(2)(e):

> Any person who wishes to protest the manner in which a water right or conditional water right is listed in the tabulation, including any revisions, or the omission of a water right or conditional water right from such tabulation shall file a written protest with the water clerk and with the division engineer not later than November 30. Such protest shall set forth in detail the facts and legal basis therefor.

If protests to the administrative determinations are filed, the entire matter is subject to judicial review, and procedures are set forth for hearings to be conducted according to accepted methods of trial practice and according to accepted rules of procedure, the trial judge promptly entering judgment upon conclusion of the hearing.[396] On the other hand, if no protests are filed, those water rights determined to be abandoned and included in the administrative tabulation are declared abandoned by a decree and judgment;[397] and after the decree is entered, the records are corrected to conform to the decree.[398] It is important to note that appellate review is permitted only on those points to which a protest was filed.[399]

These new procedures have resulted in some confusion. For example, one member of the Legislative Council Water Committee has stated: "What will be done about abandonment suits? There could be thousands trying to make abandoned water rights good even though these rights have never been used or are water rights for ditches that cannot carry the amount of the decree. Perhaps one good case will set precedent and solve the problem."[400]

---

[396] *Id.* § 148-21-28(2)(f):

> Commencing the second week in December and continuing for as long as may be necessary, the water judge in each division shall conduct hearings on the tabulation filed by the division engineer and any protests that have been filed with respect thereto. The hearings shall be conducted in accordance with trial practice and procedure except that no pleadings other than the protest shall be required. The protestant shall appear either in person or by counsel in support of the protest . . . . All persons interested in the portions of the tabulation which are being protested shall be permitted to participate in the hearing . . . if they enter their appearance in writing . . . . Such entry of appearance shall identify the portion of the tabulation with respect to which the appearance is being made . . . . Promptly after hearing all protests the water judge shall enter a judgment and decree which shall either incorporate the tabulation of the division engineer as filed or shall incorporate same with such modifications as the water judge may determine proper after the hearings.

[397] *Id.* § 148-21-28(2)(g):

> If no protests have been filed, then promptly after November 30 the water judge shall enter a judgment and decree incorporating and confirming the tabulation of the division engineer without modification.

[398] *Id.* § 148-21-28(2)(h):

> A copy of such judgment and decree shall be filed with the state engineer and the division engineer and shall be provided by the water clerk to any other person requesting same. . . . Promptly after receiving a judgment and decree the division engineer and the state engineer shall enter in their records the determinations therein made as to priority, location, and use of the water rights and conditional water rights and shall regulate the distribution of water accordingly.

[399] *Id.* § 148-21-28(2)(i):

> Appellate review shall be allowed to the judgment and decree or any part thereof as in other civil actions, but no appellate review shall be allowed with respect to that part of the judgment or decree which confirms a portion of the tabulation with respect to which no protest was filed.

[400] Remarks of Representative Jackson, Minutes of the Executive Committee, LEGISLATIVE COUNCIL WATER COMMITTEE, Sept. 15, 1970.

2. Adverse Possession and Use

Water rights are considered property rights in Colorado[401] and are subject, like other real property rights, to adverse possession and use.[402] As was stated in *Lomas v. Webster,*[403] "It is well established that individuals in whom a prior right to the use of water is vested may lose such right by acquiescence in an adverse use thereof by another . . . ."[404] Though the court in the *Lomas* case speaks only of individuals losing their water rights, water rights of corporations are likewise subject to being lost through adverse use.[405] Yet adverse possession as a means to acquire a water right is not without limitation. Water rights of the United States[406] and the unappropriated water of the State of Colorado[407] are not subject to acquisition in this manner.

a. Elements of Adverse Use

In the case of *Surface Creek Ditch and Reservoir Co. v. Grand Mesa Resort Co.,*[408] the requirements for proving adverse use were concisely set forth: "In order to establish a [water] right by adverse possession it [is] incumbent upon [claimant] to prove . . . actual, open, notorious . . . continuous, hostile and exclusive possession . . . under claim of right for the statutory period."[409] As will be described later, these elements are intertwined in various ways so that proving one element might help to prove the other. To better understand both the

---

[401] Denver v. Sheriff, 105 Colo. 193, 199, 96 P.2d 836, 840 (1939); La Plata River & Cherry Creek Ditch Co. v. Hinderlider, 93 Colo. 128, 132, 25 P.2d 187, 188 (1933); Fort Lyon Canal Co. v. Rocky Ford Canal, Res., Land, Loan & Trust Co., 79 Colo. 511, 515, 246 P. 781, 782 (1926); Sterling v. Pawnee Ditch Ext. Co., 42 Colo. 421, 426, 94 P. 339, 340 (1908); Strickler v. Colorado Springs, 16 Colo. 61, 70, 26 P. 313, 316 (1891).

For a comprehensive but brief review of water rights as property rights and legal incidents thereto, see Brighton Ditch Co. v. Englewood, 124 Colo. 366, 372-73, 237 P.2d 116, 120 (1951).

[402] The rule was early established in Clark v. Ashley, 34 Colo. 285, 82 P. 588 (1905): "The right to use water . . . may be acquired . . . by adverse possession and use." *Id.* at 288, 82 P. at 589.

More recent cases include Surface Creek Ditch & Reservoir Co. v. Grand Mesa Resort Co., 114 Colo. 543, 558, 168 P.2d 906, 913 (1946); Lomas v. Webster, 109 Colo. 107, 111, 122 P.2d 248, 250-51 (1942); Maes v. Willburn, 85 Colo. 70, 71, 273 P. 886 (1928). *See* Greeley & Loveland Irr. Co. v. McCloughan, 140 Colo. 173, 342 P.2d 1045 (1959); Pleasant Valley & Lake Canal Co. v. Maxwell, 93 Colo. 73, 23 P.2d 948 (1933); Hitchens v. Milner Land, Coal & Townsite Co., 65 Colo. 597, 178 P. 575 (1919).

[403] 109 Colo. 107, 122 P.2d 248 (1942).

[404] *Id.* at 111, 122 P.2d at 250-51.

[405] Surface Creek Ditch & Res. Co. v. Grand Mesa Resort Co., 114 Colo. 543, 558, 168 P.2d 906, 913 (1946); Pleasant Valley & Lake Canal Co. v. Maxwell, 93 Colo. 73, 78-79, 23 P.2d 948, 950 (1933).

[406] *See* Morris v. United States, 174 U.S. 196 (1899).

[407] Mountain Meadow Ditch & Irr. Co. v. Park Ditch & Res. Co., 130 Colo. 537, 539, 277 P.2d 527, 528 (1954).

[408] 114 Colo. 543, 168 P.2d 906 (1946).

[409] *Id.* at 558, 168 P.2d at 913. *See also* Loshbaugh v. Benzel, 133 Colo. 49, 291 P.2d 1064 (1956); Haymaker v. Windsor Res. & Canal Co., 81 Colo. 168, 254 P. 768 (1927); Webber v. Wannemaker, 39 Colo. 425, 89 P. 780 (1907).

particular elements and the ways in which they are interrelated, each of the requirements are explained in light of judicial interpretation.

(1) Actual Use

A mere claim of right to the use of water will not be sufficient to sustain allegations of adverse use;[410] the claimant must be in actual possession, *i.e.,* using the water himself. As was stated in *Bowers v. McFadzean*:[411] "Proof as to this cause of action [adverse use] did not show actual possession . . . . ,"[412] and the court held that since there was no actual possession and since the claimant had not presented evidence that a third party was using the water right under claimant's claim of title, there could be no adverse title granted.[413]

(2) Open and Notorious Use

Open and notorious use requires that notice or a means of knowledge of an adverse use be brought home to the owner of the right:[414] "No adverse user can be initiated until the owners of the water right are deprived of the benefit of its use in such a substantial manner as to notify them that their water rights are being invaded."[415] For example, in *Lomas v. Webster*[416] the building of a ditch on the lands of the defendant, the diversion and beneficial use of nontributary seepage water arising on the land, and the filing of a statement of claim for the water were held to constitute both actual and constructive notice to the owner that his rights were being invaded.[417]

(3) Hostile Use

Concomitant with the notice requirement is the fact that the adverse use must be hostile to the owner of the water right.[418] Quoting *Long on Irrigation,* the Colorado Supreme Court has held that " '[t]he acts by which it is sought to establish the prescriptive right must be such as to operate as an invasion of the right of the person against whom the prescriptive right is asserted, and will give a cause of action in his favor.' "[419] For such hostile use to exist, it must be shown that the owner neither accepted nor consented to the use. Likewise, the

---

[410] J. LONG, *supra* note 2, at 343.

[411] 82 Colo. 138, 257 P. 361 (1927).

[412] *Id.* at 144, 257 P. at 363.

[413] *Id.*

[414] Clark v. Ashley, 34 Colo. 285, 288, 82 P. 588, 589 (1905).

[415] *Id.* For further discussion of open and notorious possession and use, see McLure v. Koen, 25 Colo. 282, 288, 53 P. 1058, 1059 (1898).

[416] 109 Colo. 107, 122 P.2d 248 (1942).

[417] *Id.* at 112, 122 P.2d at 251.

[418] Loshbaugh v. Benzel, 133 Colo. 49, 61, 291 P.2d 1064, 1070 (1956).

[419] Clark v. Ashley, 34 Colo. 285, 288, 82 P. 588, 589 (1905).

use cannot be in harmony with the use of the true owner.[420] For example, in *Schluter v. Burlington Ditch, Reservoir and Land Co.*[421] plaintiffs objected, *inter alia,* to the lower court's ruling that adverse use had not been proved. In upholding the decision of the trial court with respect to this issue, the Colorado Supreme Court stated: "Plaintiff . . . testified to use of this seep water since 1919 but this use was, until his filing in 1928, permissive and under no claim of right. He testified that the ditch superintendent said he would *give him some water* to irrigate his garden and he had had that water ever since."[422]

In addition to denying adverse use when the element of hostility has not been satisfied because of permissive use, the Colorado Supreme Court has suggested that hostility may not exist when sufficient water exists to satisfy both the rightful owner and the adverse claimant. In *Church v. Stillwell*[423] the court said:

> For aught we know from the complaint, there may have been sufficient water in Coal Creek during those years to have supplied all of the reservoirs belonging both to plaintiff and defendants. If this were the case, neither party could have initiated or acquired a prescriptive right by having his reservoir first filled. Such action under such circumstances would not have been the assertion of a claim of right adverse to the others. It would not have been an invasion of the rights of the others for which they might have maintained an action, even had their rights been prior and superior to that of the party whose reservoir was first supplied.[424]

(4) Continuous Use

Even if the use is proved to be hostile, an adverse user must make use of the right continuously and uninterruptedly for the statutory period. Indeed, "[i]t is well established that individuals in whom a prior right to the use of water is vested may lose such right by acquiescence in an adverse use thereof by another *continued uninterruptedly* for the statutory period . . . ."[425] It also follows that if the years of adverse use are not consecutive, then a claim based thereon cannot be granted.

(5) Exclusive Use

Still another requirement which must be satisfied before a claim of adverse use may be sustained is that of exclusive use. Perhaps the best definition of this element was stated in *Dzuris v. Kucharik*:[426]

> [F]or adverse possession to be effective as a means of acquiring title, the possession of the adverse claimant must be such that the true

[420] Surface Creek Ditch & Res. Co. v. Grand Mesa Resort Co., 114 Colo. 543, 558-59, 168 P.2d 906, 914 (1946) (in this case the plaintiff was using a lake for recreational sports while the defendant was using the lake for irrigation).

[421] 117 Colo. 284, 188 P.2d 253 (1947).

[422] *Id.* at 290, 188 P.2d at 256 (emphasis added).

[423] 12 Colo. App. 43, 54 P. 395 (1898).

[424] *Id.* at 50, 54 P. at 398.

[425] Lomas v. Webster, 109 Colo. 107, 111, 122 P.2d 248, 250-51 (1942) (emphasis added).

[426] 164 Colo. 278, 434 P.2d 414 (1967).

> owner is wholly excluded therefrom. Any sort of joint or common possession by the adverse claimant and the record owner prevents the possession of the one claiming adversely from the requisite quality of exclusiveness.[427]

(6) Claim of Right

In addition to all of the foregoing elements, a claimant of a water right by means of adverse use must also establish a claim of right. As the Colorado Supreme Court said in *Surface Creek Ditch and Reservoir Co. v. Grand Mesa Resort Co.*:[428]

> By the execution and delivery of the deed of July 31, 1896, defendant's legal title to the interest conveyed thereunder passed to plaintiff's predecessors, and thereafter defendant's possession, if such existed, is to be regarded as subservient to the plaintiff's predecessors as its tenant or trustee, and nothing short of an explicit disclaimer of such relationship and a notorious *assertion of right in defendant* would render its holding hostile and adverse to plaintiff or its predecessors in interest. (emphasis added).[429]

As indicated in the quotation from the *Surface Creek* case, claim of right may help to establish hostility of use rather than mere permissive use.

b. Statutory Provisions

In addition to proving all of the elements described above, a claim of adverse possession must satisfy one of two statutory provisions.[430] The provisions and the differences between them are set forth below.

(1) Requirement of Eighteen Years

Under one of the statutory provisions,[431] "[e]ighteen years adverse possession . . . shall be conclusive evidence of absolute ownership."[432] A problem arises under this provision, however, when a trespasser has used another's water right for the statutory period and the owner fails to commence or maintain an action for the recovery of possession of his right during that time. In such a situation, the owner could not recover possession under the statute, and the trespasser, while in possession, could not claim title since he does not qualify as an adverse possessor. Perhaps a solution to this problem is suggested by the

---

[427] *Id.* at 282, 434 P.2d at 416; *accord,* Surface Creek Ditch & Res. Co. v. Grand Mesa Resort Co., 114 Colo. 543, 559, 168 P.2d 906, 914 (1946); Kountz v. Olson, 94 Colo. 186, 191, 29 P.2d 627, 629 (1934) (in which tenants in common were considered capable of exercising exclusive possession); *cf.* McKelvy v. Cooper, 165 Colo. 102, 437 P.2d 346 (1968) (in which the court held that a casual intrusion by a fisherman does not deny an adverse possessor's claim to exclusive use).

[428] 114 Colo. 543, 168 P.2d 906 (1946).

[429] *Id.* at 559, 168 P.2d at 914.

[430] While both provisions refer to *land* and *tenements,* they also apply to water rights. *See* Hayden v. Morrison, 152 Colo. 435, 382 P.2d 1003 (1963); Kountz v. Olson, 94 Colo. 186, 29 P.2d 627 (1934).

[431] COLO. REV. STAT. ANN. § 118-7-1(1) (Supp. 1967).

[432] *Id.*

discussion of presumptions and adverse use which follows later in this study.[433]

(2) Requirement of Seven Years

The major distinction between the statute which requires 18 years of adverse use and the statute which requires only seven[434] is that a claim under the latter must be based on claim and color of title, and the claimant must have paid all the taxes legally assessed. For example, in *Kountz v. Olson*[435] it was stated that if a water right is held adversely for seven successive years under color of title and if all legally assessed taxes are paid by those in possession, then "the title becomes fixed . . . ."[436]

To fulfill the requirement of claim and color of title, one must have a "good faith" reason for believing himself to be the owner of the disputed property, and the claim of ownership must be based upon paper title.[437] With respect to the payment of taxes, the courts have held that it is sufficient to have paid taxes on either the land adjacent to the water course or on the lands irrigated thereby.[438] In *Frey v. Paul,*[439] however, the court held that "if no taxes were assessed, no payment was required."[440] Indeed, in that case the claimants were not even required to plead or prove non-assessment of taxes.[441]

c. Burden of Proof

The burden of proving adverse use is always upon the claimant and must be shown by clear and convincing evidence.[442] Further, one

---

[433] *See* PART ONE, § V(E)(2)(c) *infra.*

[434] COLO. REV. STAT. ANN. § 118-7-8 (1963):

> Every person in the actual possession of lands or tenements, under claim and color of title, made in good faith, and who shall, for seven successive years, continue in such possession, and shall also, during said time, pay all taxes legally assessed on such lands or tenements, shall be held and adjudged to be the legal owner of said lands or tenements, to the extent and according to the purport of his or her paper title. All persons holding under such possession by purchase, devise or descent, before said seven years shall have expired, and who shall continue such possession and continue to pay the taxes as aforesaid, so as to complete the possession and payment of taxes for the term aforesaid shall be entitled to the benefit of this section.

[435] 94 Colo. 186, 29 P.2d 627 (1934).

[436] *Id.* at 192, 29 P.2d at 629.

[437] De Foresta v. Gast, 20 Colo. 307, 310-11, 38 P. 244, 246 (1894) (in which a voidable tax deed was held sufficient to satisfy "color of title"); Knight v. Lawrence, 19 Colo. 425, 36 P. 242 (1894): "Color of title . . . is shown by any deed or instrument which purports on its face to convey title . . . ." *Id.* at 433, 36 P. at 245. Gibson v. Huff, 26 Colo. App. 144, 146, 141 P. 510, 511 (1914). *See generally* Bowers v. McFadzean, 82 Colo. 138, 257 P. 361 (1927).

[438] *See* Kountz v. Olson, 94 Colo. 186, 29 P.2d 627 (1934) (where taxes were assessed on adjacent lands irrigated thereby).

[439] 69 Colo. 244, 193 P. 560 (1920).

[440] *Id.* at 245, 193 P. at 560.

[441] *Id.* at 246, 193 P. at 560.

[442] Howey v. Eshe, 452 P.2d 393, 396 (Colo. 1969); Commissioners v. Masden, 153 Colo. 247, 251, 385 P.2d 601, 603 (1963).

who relies upon a statute as a basis for a claim of adverse use must plead and prove all of the facts with exactness.[443] Hence, the burden upon the adverse claimant is significant. Indeed, in *Evans v. Welch*[444] a presumption against the adverse user was established: "[t]he presumption of law is that possession of property is in consonance, or harmony, with the rights of the true owner . . . ."[445]

However, *Evans* has been overruled by *Trueblood v. Pierce*,[446] and now if a claimant establishes that he has been in possession of a property right for 18 years, a presumption arises that the holding was adverse. As the court stated in that case:

> Plaintiffs and their predecessors in title have been in possession of the easement for more than eighteen years; there is, as a result thereof, a presumption that their holding was adverse. [citations omitted] [C]onsequently, it was incumbent upon defendants to overcome this presumption, and this they did not attempt to do. The presumption being that plaintiffs' possession was adverse, the uncontradicted evidence is that plaintiffs and their predecessors in title were in open, notorious and visible use and occupation of the easement under a claimed right thereto for more than eighteen years, and as a result thereof fully established their right to the easement by prescription.[447]

The rule of *Trueblood* was quoted with approval in *Lively v. Wick*,[448] and in reaffirming the rule, the Colorado Supreme Court in *Nesbitt v. Jones*[449] said:

> In *Lively v. Wick* [citation omitted] it was contended that the burden is on the person asserting the adverse claim to prove that it was adverse. The Court speaking through Mr. Justice Jackson held, however, that the burden of proof was on the owner (where there was more than 18 years of exclusive possession in the adverse claimant).[450]

d. Estoppel

In a limited number of cases, the doctrine of estoppel has been invoked in an attempt to deny owners from asserting their rights to water. When it has been argued that such owners should be estopped because of their acquiescence in another's use and there has been merely passive acquiescence[451] or the use has not been clearly hostile,[452] requests for estoppel have generally been disallowed.

---

[443] Gibson v. Huff, 26 Colo. App. 144, 146, 141 P. 510, 511 (1914).

[444] 29 Colo. 355, 68 P. 776 (1902).

[445] *Id.* at 362, 68 P. at 778.

[446] 116 Colo. 221, 179 P.2d 671 (1947).

[447] *Id.* at 233, 179 P.2d at 677.

[448] 122 Colo. 156, 162, 221 P.2d 374, 377 (1950).

[449] 140 Colo. 412, 344 P.2d 949 (1959).

[450] *Id.* at 425, 344 P.2d at 956.

[451] Holbrook Irr. Dist. v. Arkansas Valley Sugar Beet & Irr. Land Co., 42 F.2d 541, 546 (D. Colo. 1929); *see* Schluter v. Burlington Ditch, Res. & Land Co., 117 Colo. 284, 188 P.2d 253 (1947).

[452] *See* Church v. Stillwell, 12 Colo. App. 43, 54 P. 395 (1898).

On the other hand, estoppel has been successfully invoked by an owner of a water right when an alleged adverse use is determined to be merely permissive use. For example, in *Surface Creek Ditch and Reservoir Co. v. Grand Mesa Resort Co.*[453] it was stated that

> [u]nder [the circumstances of the case] it is presumed that [the adverse claimant's] use of the impounded waters is permissive, and under and subordinate to the title held by its grantee; defendant is thereby estopped by its deed from claiming that its use of the water is adverse.[454]

e. Applicability to the Appropriative Right

It is well established in Colorado that rights to the use of water acquired under the appropriation system are subject to loss through adverse use.[455] At the same time, it is also clear that successful claims to water rights based on adverse use are significantly curtailed both by the requirements of the prior appropriation system and by fact that abandonment might be found in many of the cases in which adverse use might be argued.[456] These facts, coupled with the additional fact that adverse use against all the other users from a stream is not possible,[457] renders adverse use of limited value as a means of acquiring title to water rights in Colorado.

f. Quality of Title

While adverse use is of limited value in acquiring title to water rights, any rights so acquired are accorded the same status as water rights based on appropriation. Further, since a right obtained by adverse use is regarded as real property, it may thereafter be passed by deed.[458]

VI. Protection, Administration and Adjudication of a Water Right

As guardian of the public waters, the state is called upon to protect and administer water and water rights in order to insure the efficient use of water resources. In fulfilling this obligation, a number of protective principles have been set forth. By the increasing need for

---

[453] 114 Colo. 543, 168 P.2d 906 (1946).

[454] *Id.* at 559, 168 P.2d at 914.

[455] *See, e.g.,* Greeley & Loveland Irr. Co. v. McCloughan, 140 Colo. 173, 342 P.2d 1045 (1959); Surface Creek Ditch & Res. Co. v. Grand Mesa Resort Co., 114 Colo. 543, 168 P.2d 906 (1946); Lomas v. Webster, 109 Colo. 107, 122 P.2d 248 (1942); Pleasant Valley & Lake Canal Co. v. Maxwell, 93 Colo. 73, 23 P.2d 948 (1933); Maes v. Willburn, 85 Colo. 70, 273 P.2d 886 (1928); Hitchens v. Milner Land, Coal & Townsite Co., 65 Colo. 597, 178 P. 575 (1919).

[456] *See* Part One, § V(E)(1) *supra.*

[457] Granby Ditch & Res. Co. v. Hollenbeck, 127 Colo. 236, 242, 255 P.2d 965, 968 (1953).

[458] Surface Creek Ditch & Res. Co. v. Grand Mesa Resort Co., 114 Colo. 543, 555, 168 P.2d 906, 912 (1946); *see* Lomas v. Webster, 109 Colo. 107, 122 P.2d 248 (1942); Kountz v. Olson, 94 Colo. 186, 29 P.2d 627 (1934); Colo. Rev. Stat. Ann. § 118-7-8 (1963).

more effective administrative procedures, the legislature has enacted the extensive "Water Right Determination and Administration Act of 1969."

A. *Protection of the Appropriative Right*

It is well established that the State of Colorado has an obligation to protect the rights of those who have made valid appropriations of its waters.[459] This protection applies not only to those having vested rights but extends to those having conditional water rights[460] as well, provided that as holders of a conditional decree, they satisfy the requirement of due diligence.[461] In addition, more specific principles have been developed in a number of related areas.

1. On the Main Stream

An appropriator on the main stream is protected from subsequent appropriations made on tributaries of the stream which would injure him.[462] This doctrine may be applicable even when the tributary enters the main stream below the diversion point of the prior appropriator.[463] Further, since "tributary" is to be construed broadly to include all sources of supply which may constitute the volume of a stream,[464] the water right of an appropriator on a main channel is protected from any interference with such tributary sources as percolating waters,

---

[459] Coffin v. Left Hand Ditch Co., 6 Colo. 443 (1882): "The right to water in this country, by priority of appropriation thereof, we think it is, and has always been, the duty of the national and state governments to protect." *Id.* at 446; *see* Armstrong v. Larimer County Ditch Co., 1 Colo. App. 49, 27 P. 235 (1891); Farmers' High Line Canal & Res. Co. v. Southworth, 13 Colo. 111, 21 P. 1028 (1889); Thomas v. Guiraud, 6 Colo. 530 (1883).

[460] *See* COLO. REV. STAT. ANN. § 148-21-17(4) (Supp. 1969).

[461] For a discussion of due diligence, see PART ONE, § II(B)(1) *supra.*

[462] Strickler v. Colorado Springs, 16 Colo. 61, 26 P. 313 (1891):

> To now say than an appropriator from the main stream is subject to subsequent appropriation from its tributaries would be the overthrow of the entire doctrine . . . . To cut off the water from such tributaries would be to destroy the capacity of the stream to the injury of those below.

Id. at 67, 26 P. at 315; *see* Farmers Ind. Ditch Co. v. Agricultural Ditch Co., 22 Colo. 513, 45 P. 444 (1896).

[463] Platte Valley Irr. Co. v. Buckers Irr., Milling & Imp. Co., 25 Colo. 77, 53 P. 334 (1898):

> [A]nd this doctrine is applicable to the subsequent appropriation of water from a tributary which enters the main stream below the point where the prior appropriator makes his diversion, when the result of such appropriation from the tributary is to require the prior appropriator to surrender the right to additional water for the purpose of supplying appropriations senior to his below the point where such tributary joins the main stream . . . .

Id. at 83, 53 P. at 336; *see* Water Supply & Stor. Co. v. Larimer & Weld Res. Co., 25 Colo. 87, 53 P. 386 (1898).

[464] *In re* German Ditch & Res. Co., 56 Colo. 252, 139 P. 2 (1914):

> [T]he legislature, in using the word "tributary to a natural stream", did not intend their use in a restricted sense, that is, that the tributaries themselves should be natural, continuous running streams; but as therein used it indicates that the word "tributaries" is used to include all sources of supply which go to make up the natural stream, and which properly belong thereto.

Id. at 270, 139 P. at 9. *See also* Safranek v. Limon, 123 Colo. 330, 228 P.2d 975 (1951); Ogilvy Irr. & Land Co. v. Insinger, 19 Colo. App. 380, 75 P. 598 (1904).

springs, subterranean channels, seepage water,[465] and any other source determined to be tributary.[466] This is true notwithstanding the fact that it is the owner of the land on which the water arises that has caused the interference.[467]

Similarly, it has been held not to be a valid defense to show that the slowly flowing water would reach the senior user only after significant losses in volume.[468] Nor may interference with a senior's right be justified on the ground that the junior is wholly dependent on such source of supply.[469] However, these provisions are subject to the statutory limitation that "[n]o reduction of any lawful diversion because of the operation of the priority system shall be permitted unless such reduction would increase the amount of water available to and required by water rights having senior priorities."[470]

2. Against Taking Without Compensation

Although the Colorado constitution provides that certain uses shall be preferred over other uses,[471] this provision is not construed

---

[465] McClellan v. Hurdle, 3 Colo. App. 430, 33 P. 280 (1893):

> It is probably safe to say that it is a matter of no moment whether water reaches a certain point [in a natural stream] by percolation through the soil, by a subterranean channel, or by an obvious surface channel. If by any of these natural methods it reaches the point, and is there appropriated in accordance with the law, the appropriator has a property in it which cannot be divested by the wrongful diversion by another, nor can there be any substantial diminuition.

Id. at 434, 33 P. at 282; *see In re* German Ditch & Res. Co., 56 Colo. 252, 139 P. 2 (1914); Comstock v. Ramsay, 55 Colo. 244, 133 P. 1107 (1913); Buckers Irr., Milling & Imp. Co. v. Farmers' Indep. Ditch Co., 31 Colo. 62, 72 P. 49 (1902); Medano Ditch Co. v. Adams, 29 Colo. 317, 68 P. 431 (1902).

[466] Safranek v. Limon, 123 Colo. 330, 228 P.2d 975 (1951): "Under our Colorado law, it is the presumption that all ground water so situated finds its way to the stream in the watershed of which it lies, is tributary thereto, and subject to appropriation as part of the waters of the stream." *Id.* at 334, 228 P.2d at 977; *accord,* DeHaas v. Benesch, 116 Colo. 344, 350, 181 P.2d 453, 456 (1947); *see* Ranson v. Boulder, 161 Colo. 478, 424 P.2d 122 (1967); Cline v. Whitten, 150 Colo. 179, 372 P.2d 145 (1962); Colorado Springs v. Bender, 148 Colo. 458, 366 P.2d 552 (1961); Cresson Consol. Gold Mining & Milling Co. v. Whitten, 139 Colo. 273, 338 P.2d 278 (1959); Prinster v. District Court, 137 Colo. 393, 325 P.2d 938 (1958).

[467] McClellan v. Hurdle, 3 Colo. App. 430, 434, 33 P. 280, 282 (1893); *see* Austin v. Koch, 146 Colo. 503, 362 P.2d 167 (1961); Faden v. Hubbell, 93 Colo. 358, 28 P.2d 247 (1933); Nevius v. Smith, 86 Colo. 178, 279 P. 44 (1929); La Jara Creamery & Live Stock Ass'n v. Hansen, 35 Colo. 105, 83 P. 644 (1905); Bruening v. Dorr, 23 Colo. 195, 47 P. 290 (1896).

[468] Lower Latham Ditch Co. v. Louden Irr. Canal Co., 27 Colo. 267, 60 P. 629 (1900):

> There is no evidence that the water would not reach the river, and although it may flow down the . . . [river] slowly, and a considerable volume be lost, inasmuch as it would eventually reach the river, and could there be utilized by plaintiff, we do not think that this defense has been established.

Id. at 277, 60 P. at 632.

[469] Roberts v. Arthur, 15 Colo. 456, 24 P. 922 (1890):

> It is true, when one party has acquired a priority of right to the water of a natural stream by a valid appropriation thereof to a beneficial use, another party cannot justify an interference with such right by merely showing that he is wholly dependent upon the same supply of water . . . .

Id. at 458, 24 P. at 923.

[470] COLO. REV. STAT. ANN. § 148-21-2(e) (Supp. 1969).

[471] COLO. CONST. art. XVI, § 6.

to mean that those taking for preferred purposes — including cities or towns[472] — may acquire the water of a prior appropriator without just compensation. On the other hand, even though the Fifth Amendment to the United States Constitution denies the taking of a property right for public use without compensation,[473] there are ways in which the federal government can avoid paying compensation, *e.g.*, the navigation servitude.[474]

3. With Respect to Quality and Quantity

It is generally held that the law protects an appropriator's right to have water flow down its natural channels undiminished both in quantity and quality.[475] In maintaining control over the quality of water, courts have traditionally resorted to several devices. For example, courts have found that an appropriator who has polluted water has caused waste, thereby enjoining him on that basis;[476] or courts have determined that a polluter has damaged a water right and have granted an injunction and compensation based on the constitutional provision[477] that "private property shall not be taken or damaged, for public or private use, without just compensation."[478]

With the enactment of the "Colorado Water Pollution Control Act of 1966,"[479] however, determinations with respect to pollution and standards of stream quality are made by the State Water Control Commission.[480] In addition, the Commission "shall have the final authority in the administration of water pollution prevention, abatement, and control"[481] and, when necessary, "shall make application, through the attorney general, to the district court for the district in which the violation occurs or is threatened for an order enjoining such

---

[472] Sterling v. Pawnee Ditch Ext. Co., 42 Colo. 421, 94 P. 339 (1908): "That a city or town cannot take water for domestic purposes which has been previously appropriated for some other beneficial purpose, without fully compensating the owner, is so clear that further discussion seems almost unnecessary." *Id.* at 427, 94 P. at 341; *accord*, Genoa v. Westfall, 141 Colo. 533, 549, 349 P.2d 370, 379 (1960); Strickler v. Colorado Springs, 16 Colo. 61, 74, 26 P. 313, 317 (1891).

[473] U.S. CONST. amend V.

[474] For a more extensive discussion of the navigation servitude, see Moses, *Federal-State Water Problems*, 47 DENVER L.J. 194 (1970).

[475] Humphreys Tunnel & Mining Co. v. Frank, 46 Colo. 524, 105 P. 1093 (1909):

> Plaintiff's rights were subject only to the rights acquired by prior appropriators of the water for some useful purpose, and his right, as well as theirs, as against defendant, is to have the natural waters and all accretions come down the natural channel undiminished in quality as well as quantity.

Id. at 532, 105 P. at 1096; *see* People v. Hupp, 53 Colo. 80, 123 P. 651 (1912) (criminal action); Cushman v. Highland Ditch Co., 3 Colo. App. 437, 33 P. 344 (1893) (stream should be unpolluted in any permanent way).

[476] Suffolk Gold Mining & Milling Co. v. San Miguel Consol. Mining & Milling Co., 9 Colo. App. 407, 415-16, 48 P. 828, 831-32 (1897).

[477] COLO. CONST. art. II, § 15. *See also* U.S. CONST. amend. V.

[478] Game & Fish Comm'n v. Farmers Irr. Co., 162 Colo. 301, 426 P.2d 562 (1967).

[479] COLO. REV. STAT. ANN. §§ 66-28-1 *et seq.* (Supp. 1967).

[480] *Id.* § 66-28-8.

[481] *Id.* § 66-28-11.

act or practice."[482] Hence, stream quality control is administratively placed with the Commission whose findings are prima facie evidence of the facts contained therein if the matter goes before the courts.[483]

The protection of the state is extended to the quantity as well as to the quality of water which a user has appropriated,[484] provided that the appropriator continues to use that quantity beneficially.[485] Yet the right to a specific quantity is always dependent upon the amount of water in the stream and the priority date of the user.[486]

4. Remedies

Injunction lies to prevent wrongful diversion of water or interference with vested water rights,[487] especially since an action at law would often be inadequate.[488] This relief is available even when the interference comes from one upon whose land the water flows[489] and may be brought jointly against all parties junior in right when they, by their several acts, have caused the injury.[490] However, the parties

[482] *Id.* § 66-28-10(5).

[483] *Id.*

[484] DeHerrera v. Manassa Land & Irr. Co., 151 Colo. 528, 379 P.2d 405 (1963); Enlarged Southside Irr. Ditch Co. v. John's Flood Ditch Co., 120 Colo. 423, 429, 210 P.2d 982, 985 (1949); Farmers' High Line and Res. Co. v. Wolf, 23 Colo. App. 570, 580, 131 P. 291, 294 (1913).

[485] Weldon Valley Ditch Co. v. Farmers' Pawnee Canal Co., 51 Colo. 545, 119 P. 1056 (1911): "Anyone familiar with irrigation knows that 47 cubic feet of water per second [the amount of the appropriation] is not necessary for the irrigation of 640 acres of land. That amount, therefore, was not beneficially applied thereto." *Id.* at 550, 119 P. 1057. *See also* Fort Collins Milling & Elev. Co. v. Larimer & Weld Irr. Co., 61 Colo. 45, 156 P. 140 (1916); Comstock v. Larimer & Weld Res. Co., 58 Colo. 186, 145 P. 700 (1914); Thomas v. Guiraud, 6 Colo. 532 (1883); Church v. Stillwell, 12 Colo. App. 43, 54 P. 395 (1898); COLO. REV. STAT. ANN. §§ 148-21-3(7), -35(2) (Supp. 1969). For detailed discussion of beneficial use, see PART ONE, §§ II(A)(2) & V(A) *supra.*

[486] *See* PART ONE, § III(A) *supra.*

[487] Faden v. Hubbell, 93 Colo. 358, 28 P.2d 247 (1933): "Injunction lies to restrain the wrongful diversion of water away from those who are lawfully entitled thereto." *Id.* at 369, 28 P.2d at 251; *accord,* Cline v. Whitten, 144 Colo. 126, 129, 355 P.2d 306, 308 (1960); Olney Springs Drainage Dist. v. Auckland, 83 Colo. 510, 516, 267 P. 605, 608 (1928); Kane v. Porter, 77 Colo. 257, 258, 235 P. 561 (1925); Rogers v. Nevada Canal Co., 60 Colo. 59, 64, 151 P. 923, 926 (1915); Comstock v. Fort Morgan Res. & Irr. Co., 60 Colo. 101, 109, 151 P. 929, 932 (1915).

[488] Medano Ditch Co. v. Adams, 29 Colo. 317, 68 P. 431 (1902):

> An action at law against them [defendants] by plaintiff would be wholly inadequate, because it would require a multiplicity of suits to recover the damages which he [plaintiff] might sustain from year to year on account of the shortage of waters . . . .

Id. at 328, 68 P. at 435. *But see* Comstock v. Fort Morgan Res. & Irr. Co., 60 Colo. 101, 151 P. 929 (1915).

[489] Austin v. Koch, 146 Colo. 503, 362 P.2d 167 (1961): "[W]e note first that any interference with the right of a prior appropriator to divert water, even though the person interfering owns the land through which the water flows, is subject to injunctive relief." *Id.* at 508, 362 P.2d at 170.

[490] Saint v. Guerrerio, 17 Colo. 448, 30 P. 335 (1892):

> [I]t follows that, if plaintiff had, by 'priority of appropriation,' actually acquired 'the better right' to the use of the water of the natural stream than either or all of the several defendants, he was entitled to have such priority protected against their acts, whether joint or several, and for that purpose was entitled, if necessary, to join them all as defendants in one action.

Id. at 454, 30 P. at 337; *see* Rogers v. Nevada Canal Co., 60 Colo. 59, 151 P. 923 (1915); Lower Lathan Ditch Co. v. Louden Irr. Canal Co., 27 Colo. 267, 60 P. 629 (1900).

bringing the action must demonstrate that the injury is material[491] and not merely a temporary interference in flow,[492] a determination which is usually based upon the circumstances of the case.[493] Further, injunctive relief is available even though the injuring party has promised no future transgressions against the quality or quantity of flow, if there is no adequate assurance that the promise will be upheld;[494] however, the order will not lie to restrain an offending party when the injured party is not using the water.[495]

If injunctive relief is not an appropriate remedy, then an action at law may be instituted in the nature of a nuisance suit.[496] Further, if injury should be incurred after an injunction has been awarded pursuant to the statutes,[497] then a suit may be instituted at law praying for treble damages.[498]

B. *Water Right Determination and Administration Act of 1969*[499]

This Act, commonly referred to as S. 81, significantly changed Colorado water law. Its provisions established a new jurisdictional arrangement, created new procedures for the administration and distribution of the state's water, and authorized a state-wide tabulation of water rights.

1. Jurisdictional Arrangement of the Act

The 1969 Act[500] repealed a prior article[501] which provided for water right determination within water districts. In place thereof, it created seven water divisions based on the territorial boundaries of the major watersheds. The divisions are numbered one through seven respectively, and include the following watersheds: the South Platte River watershed,[502] the Arkansas River,[503] the Rio Grande River,[504]

---

[491] COLO. REV. STAT. ANN. § 148-21-35(2) (Supp. 1969). *See* Hutchins, *Selected Problems in the Law of Water Rights in the West* 335 (U.S. Dep't of Agriculture Misc. Pub. No. 418, 1942).

[492] Hutchins, *supra* note 491, at 335.

[493] Atchison v. Peterson, 87 U.S. 507, 514-15 (1874).

[494] Slide Mines Inc. v. Left Hand Ditch Co., 102 Colo. 69, 74, 77 P.2d 125, 127 (1938); *see* Atchison v. Peterson, 87 U.S. 507 (1874).

[495] T. WIEL, WATER RIGHTS IN THE WESTERN STATES 704 (3d ed. 1911): "The modern rule is to regard injunctions as based strictly on beneficial use and not as restraining a defendant while the plaintiff is not himself using the water . . . ." *Id. See also* COLO. REV. STAT. ANN. § 148-21-35(2) (Supp. 1969).

[496] T. WIEL, WATER RIGHTS IN THE WESTERN STATES 325 (2d ed. 1908).

[497] COLO. REV. STAT. ANN. § 148-21-36(1) (Supp. 1969).

[498] *Id.* § 148-21-37.

[499] COLO. REV. STAT. ANN. §§ 148-21-1 *et seq.* (Supp. 1969).

[500] Ch. 373, § 20, [1969] Colo. Sess. Laws 1200. For recent developments under the Act see LEGISLATIVE COUNCIL WATER COMMITTEE, *Minutes of Executive Committee Meeting*, Sept. 15, 1970.

[501] COLO. REV. STAT. ANN. §§ 148-13-1 *et seq.* (1963).

[502] *Id.* § 148-21-8(2) (Supp. 1969).

[503] *Id.* § 148-21-8(3).

[504] *Id.* § 148-21-8(4).

the Gunnison River,[505] the Colorado River,[506] the Yampa River,[507] and the San Juan River.[508] It is anticipated that the establishment of watersheds as the basis for jurisdiction in administering and adjudicating water rights will eliminate conflicting decisions which have resulted with respect to such waters in the past.

2. Administration and Distribution Under the Act

As previously noted, the Act makes significant changes in the way in which water in Colorado is administered and distributed. Excluding tabulation procedures which will be discussed in some detail later in the study,[509] the general provisions of the Act deal with the administrators, the procedures of administration, and the regulation and distribution of the state's water resources.

a. The Administrators

The general administrative responsibilities are primarily handled by state and division engineers and by water judges. The state[510] and division[511] engineers are charged with the duty of administering, distributing, and regulating

> the waters of the state in accordance with the constitution of the state . . . and other applicable laws and written instructions and orders of the state engineer, and no other official, board, commission, department, or agency, except as provided in this article and article 28 of chapter 66, C.R.S. 1963, as amended shall have jurisdiction . . . .[512]

Authorized to work in conjunction with the engineers, water judges — designated district court judges whose positions were created pursuant to the Act[513] — hear all matters.[514] They act for the district courts which are within their respective water division and which have exclusive jurisdiction over water matter. To assist the water judge in

---

[505] *Id.* § 148-21-8(5).

[506] *Id.* § 148-21-8(6).

[507] *Id.* § 148-21-8(7).

[508] *Id.* § 148-21-8(8).

[509] PART ONE, § VI(B)(3) *infra.*

[510] The position of state engineer is created by COLO. REV. STAT. ANN. § 148-11-1 (1963). The statute provides that the state engineer has "general supervising control over the public waters of the state." *Id.* § 148-11-3.

In fulfilling his responsibilities, the state engineer is authorized to appoint the division engineers, to issue orders to the division engineers, to give his approval for the division engineers to establish field offices and to appoint a staff member as water commissioner for each field office so established. *Id.* § 148-21-9 (Supp. 1969).

[511] In place of "division engineers" for irrigation divisions, the new act establishes the position of division engineer as part of the Division of Water Resources of the Department of Natural Resources. COLO. REV. STAT. ANN. § 148-21-9(1)(a) (Supp. 1969). The division engineer is charged with performing functions specified by law and such functions as may be specified by the state engineer. *Id.* § 148-21-9(2).

[512] COLO. REV. STAT. ANN. § 148-21-34 (Supp. 1969).

[513] *Id.* § 148-21-10(1).

[514] *Id.* § 148-21-10(2). The Supreme Court may appoint additional water judges if necessary for the proper handling of water matters. *Id.*

their administrative and judicial functions are water clerks.[515] The judges are also to appoint referees,[516] "provided that in any water division the water judge may elect to perform the functions which by this article would otherwise be vested in the water referee."[517]

b. The Procedures

A water user who desires a determination of water rights must file an application with the water clerk in the appropriate water division.[518] An application for determination may be filed for any of the following:

1) a water right[519] or a conditional water right[520]
2) a conditional water right [that] has become a water right by reason of completion of appropriation[521]
3) a change in a water right
4) a plan for augmentation or a biennial finding of reasonable diligence.[522]

The application for a determination of a water right must include:

1) "a legal description of the diversion or proposed diversion . . . ;"
2) "a description of the source of the water . . . ;"
3) "the date of the initiation of the appropriation or proposed appropriation . . . ;"
4) "the amount of the water claimed and . . ."
5) "the use or proposed use of the water."[523]

---

[515] *Id.* § 148-21-11.

[516] *Id.* § 148-21-10(4). For a discussion of the referee's function see PART ONE § VI (B) (2) (b) *infra.*

[517] COLO. REV. STAT. ANN. § 148-21-10(5) (Supp. 1969). One of the functions of a referee is to investigate (*Id.* § 148-21-18(4)) and rule (*Id.* § 148-21-19(1)) upon an application for a water right determination. If the judge elects to function as a referee for the investigation and ruling, there is a question of the value of a subsequent hearing. Since a statement of opposition has been filed (*Id.* § 148-21-18(1)), the judge acting as referee has been able to consider the merits of such objection. Suppose the judge acting as referee granted the application. The overruled objector could then file a written protest to the referee's ruling (*Id.* § 148-21-20(2)). His written protest along with the application, statement of opposition, and the referee's ruling would form the basis of a subsequent hearing presided over by the water judge (*Id.* § 148-21-20(3)), *i.e.,* the same person who had ruled against the objector as referee. One may doubt the ability of a person who has investigated and ruled upon the facts to impartially hear the merits of, and possibly overrule, his previous decision. The appeal from the referee's ruling to the judge's hearing would seem highly illusory when the referee and the judge are the same person.

[518] *Id.* § 148-21-18.

[519] *Id.* § 148-21-3(8). " 'Water right' means a right to use in accordance with its priority a certain portion of the waters of the state by reason of the appropriation of the same." *Id.*

[520] *Id.* § 148-21-3(9). " 'Conditional water right' means a right to perfect a water right with a certain priority upon the completion with reasonable diligence of the appropriation upon which such water right is to be based." *Id.*

[521] *Id.* § 148-21-18(1).

[522] *Id.*

[523] *Id.* § 148-21-18(2).

Further, if one applies for a change in a water right, the application must include:

1) "a description of the water right or conditional water right . . . ;"
2) "the amount and priority of [such a right] . . . and . . . ;"
3) "a description of the proposed change . . . ."[524]

And if one seeks approval of a plan for augmentation, the application must contain a complete statement of such a plan.[525] All applications for determinations are jointly prepared by the water judges and may be modified by the judges to require additional information.[526]

The application must be filed with the water clerk of the proper district court.[527] By the fifth day of each month, the water clerk must "prepare a resume of all applications filed . . . during the preceding month."[528] This resume must be published in a newspaper of general circulation in each county of the division by the tenth day of the month.[529] Notification must also be sent to persons "who the referee has reason to believe would be affected or who have requested . . ." a resume by submitting their names and addresses to the water clerk, and who have paid a twelve dollar fee.[530] Statements of opposition to an application may be filed with the water clerk by "the last day of the second month following the month in which the application [was] . . . filed."[531]

After the filing of an application, the referee[532] is required to

---

[524] *Id.*

[525] *Id.*

[526] *Id.*

[527] *Id.* § 148-21-18(1). The position of water clerk, as an associate clerk of the district court, is provided for in COLO. REV. STAT. ANN. § 148-21-11 (Supp. 1969).

[528] *Id.* § 148-21-18(3). The information that must be contained in the resume is as follows: (1) the name and address of the applicant; (2) a description of the water right or conditional water right involved; and (3) a description of the ruling sought. This description is apparently quite vague, and one might not be able to determine whether he could or should file a statement of opposition. Even the required information on the application might not contain information precise enough to form the basis of an objection since these forms may not be completed by an attorney but by one seeking changes. To illustrate, important and unanswered questions may be:

(1) Is the change to be seasonal or for year-round use?
(2) Will the water be used at the same location or at a different location?
(3) If a new location, will that new location be outside the division?
(4) Will the water be used for the same purposes?

[529] COLO. REV. STAT. ANN. § 148-21-18(3) (Supp. 1969).

[530] *Id.*

[531] *Id.* § 148-21-18(1).

[532] *Id.* §§ 148-21-10(4) to -10(6). This position of referee is not the "referee" position described in COLO. REV. STAT. ANN. §§ 148-9-4,-12,-19 (1963) which was repealed by Ch. 373, § 20, [1969] Colo. Sess. Laws 1200.

According to COLO. REV. STAT. ANN. § 148-21-10(5) (Supp. 1969), the water judge's selection is limited to a list of not less than three persons submitted by the executive director of natural resources provided that "in any water division the water judge may elect to perform the functions which . . . would otherwise vest in the water referee."

Subsection six describes the training and experience required before one may be considered for the job of referee. "[R]eferees shall possess such training and experience as to qualify them to render expert opinions and decisions on the complex matters of water and water rights and administration. The persons may, . . . be either full time, part time or contractual court employees . . . ." *Id.* § 148-21-10(6).

make an investigation into the facts of the application,[533] and "shall in the first instance have the authority and duty to rule upon [the] determinations of water rights and conditional water rights . . . ."[534] The ruling of the referee is governed by standards which are specified in the new Act. For example, a particular point or means of diversion may serve more than one water right.[535] Further, if the appropriation is completed with reasonable diligence, the priority date awarded is the date the appropriation was initiated;[536] however, if the appropriation was not completed with reasonable diligence, the priority date is the date from "which the appropriation was completed with reasonable diligence."[537]

Another standard requires that a change of a water right, plan of augmentation or water exchange project must not injure persons entitled to use water rights or decreed conditional water rights.[538] If the proposed plan or change will cause injury, the applicants must be allowed to propose adjustments that would avoid the injury. Those adjustments include:

1) a limitation on the use of the water involved in the change, considering the historical use and annual climatic differences;[539]

2) a relinquishment of part of the requested change or relinquishment of another decree held by the applicant and used in conjunction with the requested change;[540]

3) the invocation of a time limitation in terms of months per year on the diversion for which the change is sought;[541]

4) "[s]uch other conditions as may be necessary to protect the vested rights of others."[542]

Finally, in a plan for augmentation, the referee must note the principle that

> the supplier may take an equivalent amount of water at his point or points of diversion or storage if such water is available without impairing the rights of others. Any substituted water shall be of a quality

---

[533] COLO. REV. STAT. ANN. § 148-21-18(4) (Supp. 1969).
> The referee without conducting a formal hearing shall make such investigations as are necessary to determine whether or not the statements in the application and statements of opposition are true and to become fully advised with respect to the subject matter of the applications and statements of opposition. The referee shall consult with the appropriate division engineer and may consult with the state engineer, the Colorado water conservation board, and other state agencies.

[534] *Id.* § 148-21-17(2).

[535] *Id.* § 148-21-21(2).

[536] *Id.* § 148-21-21(1).

[537] *Id.*

[538] *Id.* § 148-21-21(3).

[539] *Id.* § 148-21-21(4)(b).

[540] *Id.* § 148-21-21(4)(c).

[541] *Id.* § 148-21-21(4)(d).

[542] *Id.* § 148-21-21(4)(e).

> and quantity so as to meet the requirements for which the water of the senior appropriator has normally been used, and such substituted water shall be accepted by the senior appropriator in substitution for water derived by the exercise of his decreed rights.[543]

Based upon these standards, the referee may issue a ruling which must come "within the month following the last month in which the statement of opposition [was] filed . . . ."[544] The referee may approve or disapprove in part or in total the application even if no objection has been made,[545] and the ruling becomes effective upon entry in his records and thereafter is filed with the division engineer.[546] Within twenty days after the entry of the referee's ruling, a protest may be filed stating the factual and legal grounds for such protest.[547] If, however, there have been statements of opposition filed, the referee may choose not to rule and refer the matter to the water judge.[548]

Once every six months, hearings are commenced by water judges[549] on matters referred by referees and rulings that have been protested.[550] The "hearings shall be . . . conducted in accordance with trial practice and procedure, except that no pleadings shall be required."[551] While a judge is bound by the same standards as the referee,[552] his decision may either "confirm, modify, reverse, or reverse and remand"[553]

---

[543] *Id.* § 148-21-21(5).

[544] *Id.* § 148-21-19(1). However, it should be noted that plans for augmentation filed before July 1, 1971, will not be referred to the referee. *Id.* § 148-21-23(2). Instead, in September or October of 1971, the judge will hold hearings and make decisions without the assistance of the referee. *Id.* Until the judge has made his determinations on plans filed before July 1, 1971, and

> the basis for the administration of ground water has been established the state engineer and division engineers shall exercise the broadest latitude possible in the administration of waters . . . to encourage and develop temporary . . . plans and voluntary exchanges of water and to make such rules and regulations and take such other reasonable action as may be necessary in order to allow continuance of existing uses and to assure maximum beneficial utilization. . . .

Id. § 148-21-23(4).

After July 1, 1973, such plans for augmentation will be handled as applications for water right determinations. *Id.* § 148-21-23(2). This process includes referral of the applications or plans to the referee. *Id.* § 148-21-10(7).

[545] *Id.* § 148-21-19(1).

[546] *Id.*

[547] *Id.* § 148-21-20(2).

[548] *Id.* § 148-21-19(2).

[549] There have been a few problems with respect to this aspect of the procedures. For example, the judges are occasionally taking references from referees and passing on those decisions without regard for the time required by the law — that the water judge consider cases every six months which have been referred to him by the referee. Many of these matters are being taken care of administratively by conversations with the court and with referees. LEGISLATIVE COUNCIL WATER COMMITTEE, *Minutes of Executive Committee Meeting* 10-11, Sept. 15, 1970.

[550] COLO. REV. STAT. ANN. § 148-21-20(1) (Supp. 1969).

[551] *Id.* § 148-21-20(3). However, it is not clear whether the language "trial practice and procedure" indicates that the Colorado Rules of Civil Procedure are to be employed in the "hearing". One might argue that the legislature intended that only those practices and procedures employed at trial be available in these hearings, disallowing the use of such pre-trial procedures as discovery.

[552] See text accompanying notes 219-26 *supra.*

[553] COLO. REV. STAT. ANN. § 148-21-20(5) (Supp. 1969).

the referee's ruling. Hence, a decision on an application referred by the referee may be fully disposed of by the judge.[554] In any event, the judge may reconsider a decision concerning a change in a water right or a plan for augmentation when there may have been injury to vested rights within two years of the decision.[555] The judge may also correct clerical mistakes in the judgment and decree;[556] order notice of proceedings to correct substantive errors;[557] and order a show cause hearing for the benefit of those claimed to be injured by the ruling of the referee.[558] Lastly, while "[a]ppellate review shall be allowed to the judgment and decree, or any part thereof, as in other civil actions, . . . no appellate review shall be allowed with respect to that part of the judgment or decree which confirms a ruling with respect to which no protest was filed."[559]

c. The Regulation

The water judges, along with the state and division engineers, distribute the water resources of the state. In making this distribution,

---

554 *Id.*

555 *Id.* § 148-21-20(6).

556 *Id.* § 148-21-20(10).

557 *Id.*

558 *Id.* § 148-21-20(11).

559 *Id.* § 148-21-20(9). There is some question as to the role that the state engineer plays in water litigation. The minutes of the Legislative Council Water Committee reflect this uncertainty.

> Mr. Beise: In a case brought by the Prowers County Grazing Association (W-16), the Association sought a permit from the state engineer to drill a well. The applications had been denied by the state engineer so the Association made an application to the court for a water right. The Association sought to get an alternate point of diversion for several water rights which have been largely useless in the past. They sought to use wells to fill this water right.
>
> The state engineer decided in this case that the state should not be a party to the case. The division engineer was willing to become a party to the case, but the state engineer refused. The referee did not call on the division engineer for his advice, as is required by law. The Southeastern Colorado Water Conservancy District called on the state engineer to enter the case on behalf of the state and, again, the state engineer refused. The letters between Mr. Beise and the state engineer are appended to these minutes.
>
> There is a definite problem of the state engineer not making the protest. If no other water user files a protest to an application for water right, one of the major purposes of S.B. 81 will be defeated because water users will be allowed to file unopposed and will get adjudicated water rights when the river is already over-appropriated. The Association's application was for a water right outside the boundaries of the district. It is conceivable that a protest by the district could be disregarded for that reason. The district did insist that, by stipulation, the Association would agree to a certain number of acre feet of water to be used per year; that the wells would be used to irrigate certain lands; and that the wells would all have meters.
>
> One of the major points I wish to make is that the Association is now drilling wells for which the state engineer has denied a permit. There is a problem of the court circumventing the law by allowing a well to be drilled after the state engineer has refused a permit. We feel that the state engineer should have protested the application on the grounds that the Association had not gained a permit to drill the well for which it was making an application. The state engineer should represent the people of the state of Colroado to protect the water rights of all the people.
>
> . . . .
>
> Representative McCormick: It appears to me that the taxpayers of the Southeastern Colorado Water Conservancy District who pay 4/10ths of a mill

on their property for the district are serving a function which the state engineer should perform; i.e., that of protecting the water rights of the people of the state. We had hoped that in S.B. 81 we would be able to eliminate from the record many of these worthless decrees. It seems that the taxpayers of the district are supplementing the state engineer's function of protecting the water rights of the people in the Arkansas Valley.

Mr. Beise: There are other examples in the state where the water court is being used to revitalize decrees which have never been valuable, have never produced water, and in essence have been abandoned — these are actual cases — this is not legal theory — this is an existing problem. We think that the state engineer should represent the people of Colorado and protect the people's water rights. This should not be left up to chance or to interference by the Southeastern Colorado Water Conservancy District.

. . . .

Mr. Geissinger: In most cases the state will not find it necessary to become a party in interest in opposing an application for a water right because other parties will protest an application for a new water right if it is not justified. The groundwater administration law provides that no wells will be drilled unless a permit is first obtained from the state engineer. This is a condition precedent to a water right and the court should not circumvent this portion of the law.

The real parties at interest are the water users and they should be the ones who protest in most cases. The state has a definite obligation in this case. It is clear that it is not the function of the Southeastern Colorado Water Conservancy District to determine this point of law.

Mr. Kuiper: The division engineer is ordinarily present and willing to testify. However, that is not the same thing as the state engineer being a party litigant, and the statute does not provide, as far as I know, for the state engineer to become the party litigant concerning water cases.

Mr. Geissinger: I think it is an administrative problem in that the water users have not been made aware of the fact that the law requires that a permit be obtained before a well can be drilled. The judge should require that, as part of an application for a groundwater right, the applicant provide a permit to drill his well. If the case is one which involves the state as a whole the state should enter the case.

Representative McCormick: What if there is a void and there is no protest? Are we leaving the door open for the possibility of people filing on water that actually belongs to someone else and subverting other people's water rights.

. . . .

Mr. Kuiper: There are some cases in which the state engineer should enter even if there is no protest. As to whether or not the state engineer should enter the case, this should be permissive. Certain guidelines should be established under which the state engineer should be allowed to enter the case on the part of the state.

Mr. Hamburg: There would need to be some legislation before the state engineer could become a party to these cases.

Representative Jackson: Should the state engineer become a party in every case?

Mr. Beise: There are some cases, but not every case, in which the state engineer should have an interest. The state engineer should have a prerogative to become a party.

Mr. Hamburg: It should be pointed out that the state has never been a party to water litigation. S.B. 81 does not change this situation. The bill does not give the state engineer authority to enter water litigation. There should be a standard established for the state engineer to become a party. The standard should determine under what circumstances and to what extent the state engineer should become a party.

. . . .

Mr. Pasco: In the debate over S.B. 81 in 1969 the point was made that water users do not want to have to fight the state when they get their water rights. This would certainly not make it easier and cheaper to litigate water questions.

Representative Fentress: The state engineer should not be required to be a party to all cases. This would be extremely expensive as was pointed out earlier by the state engineer.

Representative Jackson: It might be that the state engineer should be a party to all water cases for a time.

LEGISLATIVE COUNCIL WATER COMMITTEE, *Minutes of Executive Committee Meeting* 1-5, Sept. 15, 1970.

the judges and the engineers are governed by the following provisions of the act:

1) Water from a well may be charged against an appropriative right.[560]
2) An owner of an appropriative right to surface water may secure the right to have a well as an alternate point of diversion.[561]
3) "Until July 1, 1971, all diversions by well to supply . . . water [for a decreed right to surface water] . . . may be charged against [such a right] . . . even if the owner has not secured the right to an alternate point of diversion at the well . . . ."[562]
4) "In authorizing alternate points of diversion for wells, the widest possible discretion to permit the use of wells shall prevail." However, withdrawals of well water will not be permitted to injure senior appropriators.[563]

These provisions are designed to permit maximum beneficial use from an integration of ground and surface water.[564]

To further develop maximum beneficial use, the division engineers are given the power to issue orders[565] necessary to implement the provisions of the act. These orders include:

1) total or partial discontinuance of a diversion where water is not being beneficially applied;[566]
2) a total or partial discontinuance of a diversion of water needed to fulfill the rights of senior appropriators;[567]

---

[560] COLO. REV. STAT. ANN. § 148-21-17(3)(a).

[561] *Id.* § 148-21-17(3)(b).

[562] *Id.* § 148-21-17(3)(c).

[563] *Id.* § 148-21-17(3)(d).

[564] For a more extensive discussion of the Act's integration of ground and surface water, see PART TWO, § I(C)(3) *infra.*

[565] COLO. REV. STAT. ANN. § 148-21-35(1) (Supp. 1969).

[566] *Id.* § 148-21-35(2).

[567] *Id.* If the discontinuance is for the purpose of satisfying a senior right,

> the division engineer shall be governed by the following: The materiality of the injury depends on all factors which will determine in each case the amount of water such discontinuance will make available to such senior priorities . . . . Such factors include current and prospective volumes of water . . . ; distance and type of stream bed between diversion points; . . . velocities of this water . . . ; . . . duration of available flow; and the predictable return flow . . . . In the event a discontinuance has been ordered pursuant to the foregoing, and nevertheless such does not cause water to become available to such senior priorities at the time and place of their need, then such discontinuance order shall be rescinded. If a well has been approved as an alternate means of diversion for a water right for which a surface means of diversion is decreed, such well and such surface means must be utilized to the extent feasible and permissible under this article to satisfy said water right before diversions under junior water rights are ordered discontinued.

Id.

3) releasing "from storage . . . any water [the divison engineer] finds to have been illegally or improperly stored . . .";[568]
4) administering any plan for augmentation involving the movement of water within the division or from one division to another;[569]
5) the installation and maintenance, at the owners expense of necessary meters, gauges and devices, as well as the reporting of meter readings;[570]
6) the inspection of the means of diversion, transportation, storage and uses of water.[571]

If an order of a division engineer "is not complied with, the [division or state engineer] . . . shall apply to the water judge . . . for an injunction enjoining the person . . . from continuing to violate [the order] . . . ."[572] If the division engineer's order involves a diversion of water or a release of water from a reservoir, the judge must consider whether the water is being beneficially used; whether the diversion will cause injury to those with senior rights; and whether other users would benefit from the release of improperly stored water.[573]

3. The Tabulation of Water Rights

Perhaps the single most important duty of the division engineer is the tabulation of water rights authorized by the act.[574] As one commentator has noted: "The tabulation of water rights has been neglected for a hundred years and the current tabulation is the first one on a state-wide basis that has ever been attempted. There are approximately 37,000 decrees which have to be tabulated."[575] The task is also important because the tabulation sets forth "the priority and amount [of each water right and conditional water right] . . . as established by court decrees."[576]

While the act enumerates the rules to be followed if there is a conflict of dates regarding the priority position listed in the tabula-

[568] *Id.* § 148-21-35(3).

[569] *Id.* § 148-21-35(4).

[570] *Id.* § 148-21-35(5).

[571] *Id.* § 148-21-35(6).

[572] *Id.* § 148-21-36(1). If a person claims to be injured by a violation of the division engineer's order or by a violation of a judge's injunction, he may bring an action against the violator "in any district court of competent jurisdiction and recover threefold the damages sustained and the cost of the suit, including reasonable attorney's fees." *Id.* § 148-21-37.

[573] *Id.* § 148-21-36(2).

[574] *Id.* § 148-21-27.

[575] LEGISLATIVE COUNCIL WATER COMMITTEE, *Minutes of Executive Committee Meeting* 8, July 6, 1970.

[576] COLO. REV. STAT. ANN. § 148-21-27(1)(a) (Supp. 1969).

tion,[577] the initial problem seems to be determining whether the listed priority is accurate. The following remarks point out some of the problems:

> Mr. Jerry Goldsmith: The tabulation has put an impossible burden on the small water user in Division 4. The list is too long. It is incomprehensible. The idea that the tabulation will be readjudicated every two years is a burden which no water user should have to assume.
>
> . . . .
>
> Mr. Sayre: The tabulation is so confusing that it is difficult for even the large water users who can afford an attorney to be adequately protected. The large water users will have to oversee the administration of this tabulation for the first few years. It will take at least four years even for large water users to figure out what the tabulation is all about.
>
> Mr. Goldsmith: This is a definite problem with the people on the Western Slope. If the tabulation is to be taken seriously, as it is to be used to administer and deliver water, it should be correct and understandable.
>
> . . . .
>
> Mr. Roland Fischer: The ordinary water user has no way of understanding this tabulation. The Colorado Water Conservation District has filed a general protest to the tabulation so it can come in later with more specific protests as errors are discovered.
>
> . . . .
>
> Mr. Barkley: Another problem with this tabulation is that every water right owner has to check every owner ahead of him to make sure the tabulation has not inadvertently switched his right with another.[578]

To alleviate some of the difficulties presented by the tabulation, it has been indicated that the state engineer will correct any errors in the initial tabulation until 1974 when it is adjudicated.[579]

In addition to pointing out an error, a water user may file a written protest[580] once the revised 1970 tabulation has been completed.[581] Once a protest has been filed, "the water judge shall order such notice, conduct such proceedings and enter such orders as he

---

[577] 1) The principle of "first in time, first in right" applies as among rights decreed in the same suit in the same water district. *Id.* § 148-21-27(1)(b)(iii).
2) Rights decreed in a prior appropriation suit are senior to those obtained in a later but different suit brought in the same district. *Id.* § 148-21-27(1)(b)(iv).
3) The principle of "first in time, first in right" also applies as among "rights decreed in the various original adjudication suits in the various water districts of the same division . . . ." *Id.* § 148-21-27(1)(b)(v).
4) Rights decreed in supplemental proceedings in the various water districts of the same division will "not extend back further than the day following the entry of the final decree in the preceding adjudication suit in such district." *Id.* § 148-21-27(1)(b)(vi).
5) "If the preceding principles would cause in any particular case a substantial change in the priority of a particular water right to the extent theretofore lawfully enjoyed for a period of not less than eighteen years, then the division engineer shall designate the priority for that water right in accordance with historic practice." *Id.* § 148-21-27(1)(b)(vii).

[578] LEGISLATIVE COUNCIL WATER COMMITTEE, *Minutes of Executive Committee Meeting* 5-6, Sept. 15, 1970. *See* White, *A Guide to the Examination of Water Tabulations*, 47 DENVER L.J. 213 (1970).

[579] LEGISLATIVE COUNCIL WATER COMMITTEE, *Minutes of Executive Committee Meeting* 8, July 6, 1970.

[580] COLO. REV. STAT. ANN. § 148-21-27(5) (Supp. 1969).

[581] *Id.* § 148-21-27(4). The tabulation and any revisions must have been filed with the water clerk by Oct. 10, 1970.

deems appropriate to deal with such protests pending the proceedings in section 148-21-28."[582]

After the tabulation in 1970, there are to be subsequent tabulations in each even-numbered year beginning in 1974.[583] The same principles used in compiling the first tabulation apply to these new tabulations.[584] Succeeding tabulations will include priorities awarded subsequent to the preceding tabulation; incorporate any change of water rights that have been approved; note conditional rights that have become water rights; modify any rights or conditional rights that the division engineer determines to have been abandoned in part; and omit those totally abandoned.[585] There are also provisions for notice,[586] objections,[587] judicial hearings,[588] and judgments.[589]

It is anticipated that the new act will create a more efficient procedure for administering water rights in Colorado and will move toward maximizing the beneficial use of the state's water. While there are some problems to be resolved in the act, its long-range effect may achieve the desired goals.

PART TWO: WATER WHICH MAY OR MAY NOT BE TRIBUTARY

While water flowing in natural streams is always tributary and governed by the system of prior appropriation, there are other classi-

---

[582] *Id.* § 148-21-27(5).

[583] *Id.* § 148-21-28(1). July 1, of each tabulation year, is the date the tabulation must be prepared.

[584] *Id.*

[585] *Id.* The division engineer must investigate the circumstances relating to each right in making a decision of abandonment.

[586] *Id.* § 148-21-28(2)(a). The procedural due process problem of adequate notice may arise under this provision as it did under COLO. REV. STAT. ANN. § 148-21-27(2) (Supp. 1969), since the division engineer is apparently not expressly required to update a list of "last known owner[s] or claimant[s]." To illustrate: according to Schroeder v. New York, 371 U.S. 208 (1962), notice of any change or proposed change in a water right must be given by mail only to those whose names and addresses are easily ascertainable. This element, however, is a qualification upon the extent to which one giving notice must determine whose legally protected interests are directly affected.

The new Colorado Act requires that the referee give written notice only to those whom he "has reason to believe would be affected." COLO. REV. STAT. ANN. § 148-21-18(3) (Supp. 1969). Thus, the referee is not required to go beyond his own belief and determine who *will* be effected, even to the limited extent of determining those persons whose names and addresses are easily ascertainable.

This entire problem, however, may be obviated in the light of COLO. REV. STAT. ANN. § 148-21-27(5) (Supp. 1969).

[587] COLO. REV. STAT. ANN. § 148-21-28(2)(b) (Supp. 1969).

[588] *Id.* § 148-21-28(2)(f). "The hearings shall be conducted in accordance with trial practice and procedure except that no pleadings other than the protest shall be required. The protestant shall appear either in person or by counsel in support of the protest. The division engineer shall appear in support of the tabulation . . . ." *Id.*

[589] *Id.* The decree will then be filed with the state and division engineers, a copy of which may be obtained by request for a fee. *Id.* § 148-21-28(2)(h). Naturally, the water judge may correct clerical mistakes on his own initiative or by petition, and for valid reasons may correct substantive errors. *Id.* § 148-21-28(2)(i).

fications of water which may or may not be tributary. Since the use of such water depends upon its tributary or nontributary nature, PART TWO describes those waters which may be placed in either category and also discusses the manner in which such waters may be used.

I. GROUND WATERS

The legal scope of the term "ground water" varies considerably from state to state.[590] In Colorado, ground water includes "any water not visible on the surface of the ground under natural conditions."[591]

Within this broad definition, Colorado water law has traditionally recognized two distinct categories of ground water. The first, "tributary ground water," is defined as water flowing beneath the surface that will, if not intercepted, reach and become a part of some natural stream. It is necessary that the general path of such water, whether it is percolating or flowing in a well-defined channel, be reasonably determined and that the stream to which the water contributes be identified.[592] The second category is "nontributary ground water": water which will not reach and become part of some natural stream.[593]

A. *Early Cases*

The early cases generally dealt with tributary ground water; and, in *McClellan v. Hurdle*,[594] the Colorado courts took advantage of the first opportunity to demonstrate their willingness to apply the doctrine of prior appropriation to such water. The *McClellan* case involved a stream which, "at times and places, flows above the ground . . . and at other times and places, below the surface, as a subterranean current. The surface water and underflow of said stream are connected and coexist."[595] The court said, "It is not necessary to legally define water courses having these peculiar characteristics. They are, as conduits of water, such source of supply as to furnish an appropriator a legal basis for the appropriation of the available water."[596] However, the

---

[590] J. SAX, *supra* note 1, at 238.

[591] COLO. REV. STAT. ANN. § 148-18-2(2) (Supp. 1965). The term "ground water" is used in the Colorado statute interchangeably with "underground water." *Id.*

[592] Medano Ditch Co. v. Adams, 29 Colo. 317, 326, 68 P. 431, 434 (1902).

[593] An example of nontributary ground water would be an underground lake or pool which is cut off by some impervious stratum so that it cannot become a contributing factor to the flow of a natural stream. *See* McHendrie, *The Law of Underground Water*, 13 ROCKY MT. L. REV. 1, 3 (1940).

[594] 3 Colo. App. 430, 33 P. 280 (1893).

[595] *Id.* at 431, 33 P. at 280.

[596] *Id.* at 435, 33 P. at 282.

surface appropriator's claim for damages and an injunction were denied because he had failed to prove diversion of the *underflow*. (The upstream interference was deemed to be with the underground flow and McClellan, the surface appropriator, had failed to prove that his dam was adequate for retaining and utilizing water at any depth below the surface.)[597]

Elsewhere in the opinion, the court in dictum took exception to the trial court's view that "water that percolates through the soil . . . is regarded as part of the land, and belongs to the owner thereof, and he may make such use of the water as he sees fit, while it remains on, in, or under his land."[598] To so hold, the court indicated, "would be to concede to superior owners of land the right to all sources of supply that go to create a stream."[599] Therefore, one who lawfully appropriates water at a certain point has a right to receive enough water to satisfy his appropriation, whether the water reaches that point through percolation through the soil, by a subterranean channel, or by an obvious surface channel.[600]

A few cases decided subsequent to *McClellan* implicitly seemed to recognize that percolating waters belong to the surface landowner.[601] However, ever since the case of *Comstock v. Ramsay*,[602] the Supreme Court of Colorado has clearly and consistently held that seepage and percolation belong to the river and thus are subject to appropriation.[603] Thus, a long line of cases has settled the proposition: All underground waters which by flowage, seepage, or percolation will eventually, if not

---

[597] *Id.* at 436, 33 P. at 282.

[598] *Id.* at 434, 33 P. at 282.

[599] *Id.*

[600] *Id.*

[601] In Bruening v. Dorr, 23 Colo. 195, 47 P. 290 (1896), the court acknowledged that the plaintiff in error was relying on the "well recognized doctrine that percolating water, existing in the earth, belongs to the soil, is part of the realty, and may be used and controlled to the same extent by the owner of the land." *Id.* at 198, 47 P. at 292. "But," said the court, "we cannot perceive the applicability of this principle to the facts of this case. . . . There is *no uncertainty* as to the existence, quantity and flow of the water in question, whether it passes through or over the intervening land." *Id.* at 199, 47 P. at 292 (emphasis added).

In Medano Ditch Co. v. Adams, 29 Colo. 317, 68 P. 431 (1902), the court took great pains to discuss the evidence supporting a finding that the underground flow would naturally follow the respective original channels, bounded by the original banks. "Such conditions," observed the court, "do not present a case of percolating waters, within the meaning of the law." *Id.* at 326, 68 P. at 434.

The court in these cases, however, may have been using the term "percolating waters" to refer to "nontributary waters." For a discussion of the confusion in terms, see note 619 *infra*. For a discussion of whether *nontributary waters* may be subject to the doctrine of appropriation, see note 634 *infra* and accompanying text.

[602] 55 Colo. 244, 133 P. 1107 (1912).

[603] Safranek v. Limon, 123 Colo. 330, 334-35, 228 P.2d 975, 977 (1951); Nevius v. Smith, 86 Colo. 178, 181-82, 279 P. 44, 45 (1929). *See also* McHendrie, *supra* note 593, at 11.

intercepted, become part of some natural stream are subject to the law of appropriation.[604]

Having thus established that tributary ground water was subject to the law of appropriation, it therefore became important to determine when such water was tributary and when it was not. The early decisions were made on a case-by-case basis, the courts taking judicial notice of facts learned from experience to help overcome the difficulty of lack of evidence. For example, in *Medano Ditch Co. v. Adams*[605] the court said, "[E]xperience demonstrates that the volume of water of the stream which disappears in the sands of its bed would follow the general course directly underneath the surface of such bed."[606] Similarly, in *Dalpez v. Nix*,[607] the Supreme Court noted that "[t]he trial judge recognized this natural law of gravitation, of which all courts take judicial notice."[608] However, it was not until recently — perhaps because of the slow development of detection and discovery techniques — that the court recognized that nearly all ground water is tributary and that the burden of proof should logically fall upon the party asserting the nontributary nature of the water. The first case so holding was *DeHaas v. Benesch*,[609] in which the court stated:

> [t]he burden of proof on the issue of whether water is or is not tributary to a stream is upon the party asserting it is not tributary, not upon the one asserting that it is. The natural presumption is, that all flowing water finds its way to a stream.[610]

As authority for this proposition the court cited cases on developed waters where the burden of proof discussed related to a somewhat differ-

---

[604] Colorado Springs v. Bender, 148 Colo. 458, 461-62, 366 P.2d 552, 555 (1962); Black v. Taylor, 128 Colo. 449, 459, 264 P.2d 502, 507 (1954); Safranek v. Limon, 123 Colo. 330, 334, 228 P.2d 975, 977 (1951); DeHaas v. Benesch, 116 Colo. 344, 350-51, 181 P.2d 453, 456 (1947); Lomas v. Webster, 109 Colo. 107, 110, 122 P.2d 248, 250 (1942); Dalpez v. Nix, 96 Colo. 540, 549, 45 P.2d 176, 180 (1935); Faden v. Hubbell, 93 Colo. 358, 369, 28 P.2d 247, 251 (1933); Nevius v. Smith, 86 Colo. 178, 182, 279 P. 44, 45 (1929); Comrie v. Sweet, 75 Colo. 199, 201, 225 P. 214, 215 (1924); Fort Morgan Res. & Irr. Co. v. McCune, 71 Colo. 256, 259, 206 P. 393, 394 (1922); Rio Grande Res. & Ditch Co. v. Wagon Wheel Gap Co., 68 Colo. 437, 444, 191 P. 129, 131 (1920); Trowel Land & Irr. Co. v. Bijou Dist., 65 Colo. 202, 216, 176 P. 292, 296 (1918); Durkee Ditch Co. v. Means, 63 Colo. 6, 8, 164 P. 503, 504 (1917); Comstock v. Ramsay, 55 Colo. 244, 255-56, 133 P. 1107, 1110 (1913); La Jara Creamery Ass'n v. Hansen, 35 Colo. 105, 109, 83 P. 644, 645 (1905); Buckers Irr. Mill. & Imp. Co. v. Farmers' Co., 31 Colo. 62, 71, 72 P. 49, 52 (1902); Platte Valley Irr. Co. v. Buckers Co., 25 Colo. 77, 82, 53 P. 334, 336 (1898); Bruening v. Dorr, 23 Colo. 195, 197-98, 47 P. 290, 292 (1896); Ogilvy Irr. & L. & Co. v. Insinger, 19 Colo. App. 380, 386-87, 75 P. 598, 599 (1904).

[605] 29 Colo. 317, 68 P. 431 (1902).

[606] *Id.* at 327, 68 P. at 435.

[607] 96 Colo. 540, 45 P.2d 176 (1935).

[608] *Id.* at 546, 45 P.2d at 179.

[609] 116 Colo. 344, 181 P.2d 453 (1947).

[610] *Id.* at 350, 181 P.2d at 456.

ent matter.[611] At the time, the presumption could have been challenged as unsupported by authority, but the case of *Safranek v. Limon*[612] quickly picked up the language, and the presumption has since stood as law.[613]

B. *Statutory Regulation*

The early case law which applied the concepts of appropriation to "tributary ground water" eventually proved to be inadequate for regulating and controlling the use of ground water generally. Even the traditional distinction between tributary and nontributary ground waters seemed to provide an insufficient classification for dealing with ground water problems.[614] Hence, Colorado has belatedly made attempts to establish a statutory scheme, although the constitutional mandate declaring that only waters *tributary* to a natural stream are subject to appropriation continues to provide potential problems for the statutory regulation of ground water use.[615]

1. Ground Water Problems

There appear to have been at least three major problems regarding ground water use to which traditional appropriation concepts were not applicable. The first was conservation of ground water resources, *i.e.*, preventing unreasonable depletion and lowering of the level of the ground water tables. The appropriation system simply was not oriented toward conservation.

Second, the relative rights between well owners would not be efficiently determined by the traditional doctrines of appropriation; for while it is true that priorities between well owners drawing from a ground water source which was clearly tributary and moving on a more or less well-defined channel could theoretically be determined, it is possible to conceive of well owners drawing from the same underground lake or pool which is not tributary — notwithstanding the presumption to the contrary. In such a case they may interfere with each other's use by lowering the level of the ground water table, and the doctrine of appropriation presumably would not be available to govern relative priorities.

A third problem regarding the regulation of ground water was

[611] The burden of proof discussed there related to the long established rule that the party asserting that he had a valid claim to developed waters, *i.e.*, that he had done work which caused water to reach a stream that would not have so reached without his work, bore the burden of establishing that development. *See* Leadville Co. v. Anderson, 91 Colo. 536, 17 P.2d 303 (1932); Comrie v. Sweet, 75 Colo. 199, 225 P.2d 214 (1924); La Jara Ass'n v. Hansen, 35 Colo. 105, 83 P. 644 (1905); Platte Valley Irr. Co. v. Buckers Co., 25 Colo. 77, 53 P. 334 (1898).

[612] 123 Colo. 330, 228 P.2d 975 (1951).

[613] *Id.* at 334, 228 P.2d at 997.

[614] Comment, *Appropriation and Colorado's Ground Water: A Continuing Dilemma?* 40 U. COLO. L. REV. 133, 134-36 (1967).

[615] *See* PART TWO, § I(B)(2)(a) *infra.*

determining relative priorities between well owners and surface water appropriators. In theory, the only conflict which could arise between a well owner and a surface water appropriator would be in a situation in which the well source was tributary to the surface water — in which case the doctrine of appropriation would govern. However, it is inferred from later legislative attempts to deal with this problem[616] that previously existing legal machinery did not provide adequate determinations of these priorities. As suggested by an excellent comment on the subject, "[a]s long as surface water supplies remain adequate to meet the requirements of users, little attention is likely to be given to the correlation between underground water withdrawals and stream behavior. Wells in the vicinity may multiply in number and capacity unnoticed or without objection."[617] As a result, "[r]ival claimants to waters of surface streams have usually litigated their relative rights as between themselves, without intervention of owners of wells who depend on ground water . . . and the reverse holds true with respect to adjudications of ground water rights."[618]

2. Nontributary Ground Waters

Complicating these problems is the uncertain law with respect to nontributary ground water. Indeed, much of the statutory regulation has attempted to clarify the status of such water.

a. Historical Background

Although an early case referred in dictum to the "well recognized doctrine that percolating water, existing in the earth, belongs to the soil, is part of the realty and may be used and controlled to the same extent by the owner of the land,"[619] the 1951 decision in *Safranek v.*

---

[616] COLO. REV. STAT. ANN. §§ 148-18-1 to -38 (Supp. 1965).

[617] Comment, *supra* note 614, at 136.

[618] Hutchins, *Ground Water Legislation,* 30 ROCKY MT. L. REV. 416, 426-27 (1958).

[619] Bruening v. Dorr, 23 Colo. 195, 198, 47 P. 290, 291 (1896), discussed in note 601 *supra* (emphasis added).

Some confusion in this area stems from the ambiguous nature of the term "percolating waters." Although "percolating waters" have generally been considered to be a subclassification of tributary waters in Colorado, some authorities and some jurisdictions define percolating waters in such a way as to include what Colorado would classify as nontributary water. For instance, according to Wells A. Hutchins,

> [t]hroughout the history of ground water law, a legal distinction between waters of definite underground streams and percolating waters has run through various texts, statutes, and court decisions. According to this distinction, a definite underground stream has the characteristics of a watercourse on the surface — definite channel with bed and banks, definite stream of water, and definite source or sources of supply — whereas percolating waters comprise all ground waters that do not conform to the classification of a definite stream.
>
> This classification has been criticized [sic] by ground water hydrologists as having no scientific basis or satisfactory applicability.

Hutchins *Ground Water Legislation,* 30 ROCKY MT. L. REV. 416 (1958) (footnotes omitted) [hereinafter cited as Hutchins]. This distinction was picked up in a later commentary on Colorado ground water law as a distinction "between water which is 'tributary' to surface streams and water which is said to 'percolate'." Comment, *supra* note 614, at 135. It is felt that for purposes of Colorado ground water law, the definition of percolating waters provided by Mr. McHendrie (text accompanying note 593 *supra*) is most useful.

Limon[620] recognized the complete absence of Colorado authority on the law pertaining to nontributary ground water.[621] Furthermore, in *Safranek* the court declined to rule on the question itself and appeared to give no indication of what it would decide.[622] Nevertheless, by virtue of a curious bootstrapping operation, nontributary ground water was, for a period of approximately two years, subject to the doctrine of reasonable use and possibly subject to the vested ownership rights of the owner of the overlying land.

The operation began with the passage of the Ground Water Act of 1957 which attempted to provide a system for conserving ground waters by subjecting them to the administrative provisions of that Act and by attempting to prevent the unreasonable depletion of ground water resources.[623] The general applicability of the Act to "ground waters" included, by virtue of its definition of that term, "any water not visible on the surface of the ground under natural conditions,"[624] *i.e.,* both tributary and nontributary ground waters. However, some of the specific sections of the Act seemed to implicitly recognize the legal existence of a "ground water appropriation,"[625] and at least one authority interpreted the Act as establishing, by implication, the applicability of the doctrine of appropriation to *nontributary* ground

---

[620] 123 Colo. 330, 228 P.2d 975 (1951).

[621] *Id.* at 336, 228 P.2d at 978.

[622] *Id.*

[623] Law of May 1, 1957 [1957] Colo. Sess. Laws 863 (repealed 1965). Essentially this act required the registration of wells and the closing of those in critical areas. It applied to all water that was not visible on the surface of the ground under natural conditions which included both tributary and nontributary ground water. *Id.* A ground water commission was created, consisting of landowners from various irrigation divisions throughout the state. *Id.* The commission had the power to designate critical ground water districts wherever it appeared that the withdrawal of ground water was approaching, had reached, or had exceeded the normal rate of replenishment. *Id.* When such a designation was made the commission could immediately close the area to further development of its ground water resources and could direct the state engineer to discontinue issuance of permits for new wells. *Id.* The commission then would hold an election within the critical district to select a district advisory board which would assist the ground water commission and the state engineer in the administration of all matters affecting the critical district. *Id.*

The feature of the act which eventually led to its repeal, was the requirement of a majority vote of the district advisory board in order to maintain an area as "critical" for more than twelve months. *Id.* For all effective purposes, the downfall of the act began in January of 1958, when the Bijou alluvial basin was made a critical water area. Shortly thereafter, the district advisory board was elected and its first action was to unanimously request removal of the critical designation. Moses & Vranesh, *Colorado's New Ground Water Laws,* 38 U. COLO. L. REV. 295 (1966). This action essentially rendered the act ineffective, and it was subsequently repealed by the "Colorado Ground Water Management Act of 1965," COLO. REV. STAT. ANN. §§ 148-18-1 to -38 (Supp. 1965).

[624] Law of May 1, 1957 [1957] Colo. Sess. Laws 863 (repealed 1965).

[625] *Id. See* the dissenting opinion in Whitten v. Coit, 153 Colo. 157, 190, 385 P.2d 131, 149 (1963).

waters.[626] In an article in the *Rocky Mountain Law Review*,[627] William R. Kelly attempts to refute the proposition that nontributary ground waters are made subject to the doctrine of appropriation by the 1957 Act and argues that the Act is rather a police power act designed only to prevent the unreasonable use of ground water by requiring the registration of wells and the closing of areas shown to be critical.[628]

First, Mr. Kelly argues that the legislative history of the Act reveals substantial deletion of references to appropriation concepts; and where references to appropriation remain in the language of the Act, they can be construed as merely a recognition that *tributary* ground water can be appropriated.[629] Second, the author notes that "[t]he Colorado Constitution[630] applies to the principles of appropriation and public ownership *only* to water of *natural streams*, declaring that this water is property of the public and that priority in time shall control among appropriators."[631] Finally, the author argues that the Colorado case law recognizes that there may be a *property right* in water independent of priorities on a natural stream[632] and that the Colorado Supreme Court has indicated that it will recognize the doctrine of reasonable use, if the ground waters do not furnish a material part of the supply of a natural stream.[633]

An examination of Mr. Kelly's authorities reveals that his final argument is, in fact, unsupported by the Colorado cases.[634] Particu-

---

[626] Hutchins, *supra* note 619, at 420, 424. Hutchins states that the 1957 Colorado statute purports to be all inclusive. "The Colorado act uses the terms 'underground water' and 'ground water' interchangeably; the terms refer to any water not visible on the surface of the ground under natural conditions." *Id.* at 420. He further claims Colorado enacted a comprehensive statute based on priority of appropriation. *Id.* at 424.

[627] Kelly, *Colorado Ground Water Act of 1957 — Is Ground Water Property of the Public?* 31 ROCKY MTN. L. REV. 165, (1959).

[628] *Id.* at 167.

[629] *Id.* at 165-66.

[630] COLO. CONST. art. XVI, §§ 5, 7.

[631] Kelly, *supra* note 627, at 167.

[632] *Id.*

[633] *Id.* at 167 n.19. The author cites San Luis District v. Rio Grande Drainage District, 84 Colo. 99, 268 P. 533 (1928).

[634] Mr. Kelly cites the following cases for the proposition that there may be a *property right in water* independent of priorities on a natural stream. Lomas v. Webster, 109 Colo. 107, 122 P.2d 248 (1942); San Luis Dist. v. Prairie Co., 84 Colo. 99, 268 P. 533 (1928); Haver v. Matonock, 79 Colo. 194, 244 P. 914 (1926); Ironstone Ditch Co. v. Ashenfelter, 57 Colo. 31, 140 P. 177 (1914); Ripley v. Park Center, 40 Colo. 129, 90 P. 75 (1907). While the cases technically support the proposition, *as it is stated*, it is clear that the property right established by the cases is a *priority* right, usufructory in nature, and is very similar to an appropriative right. While such a priority right might not be taken away by mere legislation (without just compensation), these rights are not inconsistent with an appropriative system such as the one sought to be established by the 1957 Act. Witness the coexistence of the "independent" priority rights established by Mr. Kelly's cases and the traditional appropriation system pertaining to waters of natural streams in Colorado:

> For instance, in *Lomas v. Webster, supra,* and *Haver v. Matonock, supra,* the right recognized was the landowner's first and prior right *to the use* of seepage or spring waters which first arise upon his land, if capable of being used thereon. While the developed waters cases cited by Mr. Kelly do contain language to the effect that waters which are lawfully contributed to a natural stream and which otherwise would not have

larly noteworthy is Mr. Kelly's lack of direct relevant support for his suggestion that "there may be a *property right* in water independently of the priorities of a natural stream."[635] *Safranek* explicitly rejected the notion that "percolating sub-surface waters, not tributary to any stream, are the property of the owner of the land, as at common law . . ."[636] and declared that the law applicable to such waters is a question "upon which there is an absence of statutory law in Colorado as well as of direct decision by our courts."[637]

Notwithstanding the decision in *Safranek,* the Supreme Court of Colorado adopted Mr. Kelly's reasoning in the case of *Whitten v. Coit*[638] and appeared to recognize the questionable applicability of Mr. Kelly's authorities by not citing them in its own extensive opinion.[639] Nevertheless, the court quoted and approved his conclusion — including the parts which were not based on sound authority:

> The purpose of the Ground Water Act of 1957 is to provide administration facilities to control reasonable use and to provide a record of facts upon which such reasonable use can be determined.
>
> It is submitted that the basis should not be and is not, based on priority of diversion. *The landowner has property in the water in his soil. It is a vested right which cannot be taken away by mere legislation.*[640]

The question which the court's approval of this language raises and the point of this discussion is whether or not there is, in fact, a vested ownership right in nontributary ground waters which "cannot be taken away by mere legislation." Two years after the decision in

---

reached the stream belong to the one who made the contribution, see Ironstone Ditch Co. v. Ashenfelter, 57 Colo. 31, 42-43, 140 P. 177, 181 (1914); Ripley v. Park Center, 40 Colo. 129, 133, 90 P. 75, 76 (1907), the more reasonable interpretation of these cases and the other cases on developed waters is that the developer has the *prior right to the use* of his developed waters. *See* PART THREE § I.

The clear implication of Mr. Kelly's argument is that the property right of the landowner in the nontributary waters beneath his soil is an *ownership* right. It is this implication which is inaccurate. *San Luis Dist. v. Prairie Co., supra,* also cited by Mr. Kelly, explicitly refused to rule on this precise question, as did Safranek v. Limon, 123 Colo. 330, 228 P.2d 975 (1951), discussed in text accompany notes 636 & 637 *infra.*

[635] Kelly, *supra* note 627, at 167.

[636] Safranek v. Limon, 123 Colo. 330, 334, 336, 228 P.2d 975, 977-78 (1951).

[637] *Id.* at 336, 228 P.2d at 978.

[638] 153 Colo. 157, 385 P.2d 131 (1963).

[639] The Supreme Court of Colorado explicity stated the issue before them on appeal, "whether the doctrine of prior appropriation of water to beneficial use is applicable to under ground waters which are not tributary to any stream . . . ." *Id.* at 163, 385 P.2d at 134-35. In considering this question, the court examined the 1957 law and declared it did not make any substantive changes. The court concluded, "[i]f . . . underground water does not belong to the river and does not contribute to a natural stream, it is not public water and is not subject to the doctrine of prior appropriation." *Id.* at 173, 385 P.2d at 140.

The court then went on by way of dictum to address a second question. If the doctrine of prior appropriation does not apply to nontributary ground water, what law does apply? In response to this question, the court said that they approved the language of Mr. Kelly. *Id. See also* text accompanying note 640 *infra.*

[640] *Id.* (emphasis added), *citing* Kelly, *supra* note 627, at 171.

Whitten, legislation was enacted[641] which explicitly purported to subject nontributary ground waters to a modified doctrine of appropriation. To the extent that *Whitten* was based on statutory interpretation, *i.e.,* that the legislature did not *intend* to make nontributary water subject to the appropriation doctrine, the Ground Water Management Act of 1965 is impeccably sound in adopting a system of appropriation for nontributary ground waters; obviously, the legislature may indicate a different intent. However, to the extent that there is deemed to be a vested ownership right in nontributary ground waters which cannot be taken away by mere legislation, the 1965 Act can be challenged constitutionally as attempting to take property without just compensation. It is suggested that the original authorities upon which the property concept approved in *Whitten* was based are insufficient to support a constitutional attack on the Ground Water Management Act of 1965.

b. The Ground Water Management Act of 1965[642]

Basically, the Ground Water Management Act seeks to establish a mechanism for adjudicating water rights and regulating the use of ground water within each designated ground water basin. To implement this policy, the Act established a Ground Water Commission[643] which is charged with the responsibility of determining "designated ground water basins."[644] The Act further provides for the formation of ground water management districts to facilitate regulation of the use, control, and conservation of ground water within each designated basin.[645] In addition to these and other administrative provisions, the

---

[641] COLO. REV. STAT. ANN. §§ 148-18-1 to -38 (Supp. 1965), *as amended,* COLO. REV. STAT. ANN. §§ 148-18-1 to -38 (Supp. 1969).

[642] The United States District Court for the District of Colorado summarized the Act as follows:

> In 1965, the Colorado legislature passed the "Colorado Ground Water Management Act" (hereinafter referred to as the Act) in an attempt to permit the full development of ground water sources, protect owners of surface water rights and alleviate the growing friction between the surface water appropriators and the well owners. Colo. Rev. Stat. Ann. § 148-18-1 (Supp. 1965). The Act separates certain water which it terms as "designated ground water" from the system of appropriation for surface waters, and it creates a permit system for the allocation and use of ground waters within the designated ground water basins. Colo. Rev. Stat. Ann §§ 148-18-1 to -38 (Supp. 1965). Appropriators of the designated ground waters are required to obtain a permit for their appropriations and the Act establishes a system of prior appropriation, similar in operation to the system regulating surface water rights, to regulate the water rights of the ground water users. Colo. Rev. Stat. Ann. §§ 148-18-6 to -8 (Supp. 1965).
>
> The administration and enforcement of the Act is placed in the hands of an administrative commission, the state engineer and locally formed ground water management districts. . . .

Jackson v. Colorado, 294 F. Supp. 1065, 1068 (D. Colo. 1968).

[643] COLO. REV. STAT. ANN. § 148-18-3 (Supp. 1965), *as amended,* COLO. REV. STAT. ANN. § 148-18-3 (Supp. 1969).

[644] *Id.* § 148-18-5.

[645] COLO. REV. STAT. ANN. §§ 148-18-17, 19 to -23, *as amended,* COLO. REV. STAT. ANN. §§ 148-18-17, 19 to -23 (Supp. 1967).

Act attempts to define the relationship between the appropriation doctrine and nontributary ground water.

(1) Appropriation and Nontributary or "Designated" Ground Water

Although the Ground Water Management Act of 1965 did not boldly state that *nontributary* ground waters were henceforth to be governed by the doctrine of appropriation, it seemed to say substantially the same thing by declaring that "the traditional policy of the State of Colorado, requiring the water resources of this state to be devoted to beneficial use in reasonable amounts through appropriation, is affirmed with respect to the *designated ground waters* of this State . . . ."[646] Designated ground water is

> [1] that ground water [*i.e., any* water which is not visible on the surface under natural conditions] which in its natural course would not be available to and required for the fulfillment of decreed surface rights, or [2] ground water in areas not adjacent to a continuously flowing natural stream wherein ground water withdrawals have constituted the principal water usage for at least fifteen years preceding January 1, 1965; *and* [3] which in both cases is within the boundaries, either geographic or geologic, of a designated ground water basin.[647]

It is clear that all nontributary ground waters would be included in this definition of "designated ground waters," and it is almost as clear that some portion of the tributary ground waters would be included as well.[648]

As mentioned above,[649] the Supreme Court of Colorado has indicated a strong aversion to the idea of subjecting nontributary waters to the doctrine of appropriation,[650] even to the point of suggesting possible constitutional problems with any attempts to do this.[651] Two features of the Ground Water Management Act of 1965 are designed to deal with these difficulties: First, the Act attempts to modify the doctrine of appropriation in order to attain reasonable use and full economic development of ground water resources; and second, the Act

---

[646] *Id.* § 148-18-1 (Supp. 1965) (emphasis added).

[647] *Id.* § 148-18-2(3) (emphasis added).

[648] For instance, it is possible to think of tributary waters (as that term has been traditionally defined) which are percolating — moving at a rate calculated in feet per year (*see* Comment, *supra* note 614, at 139) — which would not be available to and required for the fulfillment of decreed surface rights. It is also possible to conceive of tributary ground water existing in an area not adjacent to a natural stream wherein ground water withdrawals have *not* constituted the principal usage for at least 15 years prior to January 1, 1965. Such designated ground waters which may be deemed tributary to the surface waters of the state would be subject to both the Ground Water Management Act of 1965 and to surface water appropriation doctrines, including statutes such as COLO. REV. STAT. ANN. § 148-11-22 (Supp. 1965), *as amended in part and repealed in part,* Law of June 7, 1969 [1969] Colo. Sess. Laws 1223, authorizing the state engineer to regulate the use of such waters. See text, PART TWO, § I(C)(1) *infra.*

[649] See PART TWO, § I(B)(2)(a) *supra.*

[650] *See* Whitten v. Coit, 153 Colo. 157, 385 P.2d 131 (1963).

[651] *See* text accompanying note 640 *supra.*

attempts to accommodate, to some extent, the "vested rights" of well owners owning and using wells prior to the effective date of the Act.

(2) Full Economic Development of Ground Water Resources

Some of the problems of applying an unadulterated appropriation doctrine to "nontributary" or even "designated" ground water were explicitly enumerated by the Supreme Court of Colorado in *Whitten v. Coit.*[652] After discussing some of the hydrologic characteristics of closed artesion aquifers,[653] the court considered

> some complex problems which the "appropriation" doctrine would be inadequate to handle.
>
> 1. Assume that the most junior well is many miles from the most senior and the intermediate well is close to the senior. The intermediate well has a greater effect on the senior in a shorter period of time, but ultimately and irretrievably the junior well will have an effect on both the intermediate and the senior well. Question: If the "appropriation" doctrine is to be applied, which well should be restricted in order to protect the senior? It should be born in mind that the senior well itself has the effect of reducing its own pressure.
>
> 2. Assume the existence of fifteen wells of varying distances from the most senior. Each will ultimately interfere to a greater or lesser extent with the pressure in the senior well. Question: Under the doctrine of "appropriation" are the wells except the most senior to be shut down in order to protect the pressure of the senior well?
>
> 3. If this is not to be done, what standards of interference are to be applied, and are these standards to be determined by the court?[654]

---

[652] 153 Colo. 157, 385 P.2d 131, 138 (1963).

[653] "The term 'aquifer' is a member of a geological formation that contains or transmits ground water." COLO. REV. STAT. ANN. § 148-18-2(4) (Supp. 1965). The aquifer in *Whitten* was closed because it was not a flowing tributary to a natural stream. Whitten v. Coit, 153 Colo. 157, 169, 385 P.2d 131, 138 (1963). "The fact that the pressure brings water from a well drilled into one of the aquifers above the top of the aquifer itself qualifies it as artesian . . . ." *Id.*

[654] Whitten v. Coit, 153 Colo. 157, 169-70, 385 P.2d 131, 138 (1963). Two other problems of applying appropriation concepts to ground water are pointed out in Comment, *Appropriation and Colorado's Ground Water: A Continuing Dilemma?* 40 U. COLO. L. REV. 133, 141-42 (1967):

> The irregular depth of the saturated zone in each aquifer provides a further example of the difficulties of utilizing appropriation principles to govern well operations. A junior well, situated above a deep portion of an underground reservoir, can be prevented from calling upon the lower storage component of the aquifer where a senior diversion extends to the unproductive bottom of a shallow area. Full development of the resource in storage is blocked by the rights of a user whose efficient but limited location allows him to insist on an economically unrealistic water level throughout the aquifer.
>
> Perhaps more important is the total effect of the appropriation doctrine on planned development and conservation of ground water reserves. But in practice, it is evident that "[t]he airy abstractions of 'rights in perpetuity' in a mined ground water basin have no meaning." For example, underground reserves such as the Ogallala formation of Colorado's High Plains are in approximate balance if no withdrawals are made. Wells which draw from the system create a depletion of the available total and mark a step closer to exhaustion. Lack of central management under appropriation rules hastens this result in a race for the basin floor. Each user is motivated to draw maximum value from the reservoir, the sooner the better.

Id. at 141 (footnotes omitted).

The approach of the Ground Water Management Act of 1965 to these problems can be described as follows.

As to designated ground waters, *i.e.,* ground waters which are not likely to interfere with or compete with surface water rights, the doctrine of appropriation is to be *modified* "to permit the full economic development of designated ground water resources. Prior appropriations of ground water should be protected and reasonable ground water pumping levels maintained, but not to include the maintenance of historical water levels."[655] One example of the manner in which this modification is to be implemented is provided by the Act for the situation which arises when a person desires to obtain a ground water right within a designated ground water basin. Such person must file an application with the Ground Water Commission[656] which shall thereupon cause notice of the application to be published.[657] If no objections are filed, the commission shall grant the application if it finds that existing rights from the same source are not impaired and that there would not be unreasonable waste.[658]

As to ascertaining standards of reasonableness, the Act provides the following guideline:

> In ascertaining whether a proposed use will create unreasonable waste or unreasonably effect the rights of other appropriators, the commission shall take into consideration the area, and geologic conditions, the average annual yield and recharge rate of the appropriate water supply, the priority and quantity of existing claims of all persons to use the water, the proposed method of use, and all other matters appropriate to such questions. With regard to whether a proposed use will impair uses under existing water rights, impairment shall include the unreasonable lowering of the water level, or the unreasonable deterioration of water quality, beyond reasonable economic limits of withdrawal or use.[659]

Thus, a great deal of discretion is left to the Ground Water Commission to regulate the use of designated ground water under general appropriation principles and standards of reasonableness to be determined by them with a view toward permitting the full development of ground water resources. The extent to which they will be able to attain their goal will, of course, depend on their own resourcefulness.

An excellent example of what the Commission has been able to accomplish so far in determining standards of reasonableness is provided by the recent case of *Fundingsland v. Colorado Ground Water Commission,*[660] the only major decision which has been handed down

---

[655] COLO. REV. STAT. ANN. §148-18-1 (Supp. 1965).

[656] *Id.* §148-18-6(1). The commission was created by the same act. *Id.* § 148-18-3 (Supp. 1965), *as amended,* COLO. REV. STAT. ANN. § 148-18-3 (Supp. 1969).

[657] *Id.* § 148-18-6(2).

[658] *Id.* § 148-18-6(3).

[659] *Id.* § 148-18-6(5) (Supp. 1965).

[660] 468 P.2d 835 (Colo. 1970).

by the court construing the 1965 Act. In that case Mr. Fundingsland's application for a permit to drill a well in the Northern High Plains Designated Ground Water Basin was denied by the Ground Water Commission. After a trial de novo to the district court in which expert testimony was presented on both sides, the trial judge entered judgment denying plaintiff's application. In affirming the trial court's judgment upon a writ of error, the Supreme Court of Colorado, per Mr. Justice Pringle, thoroughly discussed the sufficiency of the evidence and the standards of reasonableness implicit in the trial court's findings.

First, the court approved the so-called 3-mile test as a proper method for the trial court (and the Commission) to use in determining the effect of Fundingsland's proposed use on the ground water supply in the particular district — the Northern High Plains Designated Ground Water Basin. The 3-mile test was designed by the Commission for use in that district to implement COLO. REV. STAT. ANN. § 148-18-6(5) (Supp. 1965), quoted above.[661] It utilizes a circle with a 3-mile radius drawn around the proposed well site. If the Commission determines that existing pumping rates within the circle would result in an excess of 40 percent depletion of the available ground water in that area over a rate of 25 years, an application to drill a new well may be denied. According to testimony elicited in the trial court, the 3-mile circle represents the area over which a well, located at the center, would have an effect if permitted to pump intermittently for 25 years, taking into account the saturated thickness of the aquifer, the number of wells in the area, and the yield of those wells. In determining what the draw down effect would be on the water in the 3-mile circle, a "modified Theiss equation"[662] was used; and in determining the balance of water in the aquifer, the amount of recharge to the aquifer was considered, along with the fact that there was only intermittent pumping (estimated at approximately 100 days per year) within the area. After noting the reasonableness of the 40 percent depletion rate and the 25 years as the period during which the depletion is to be allowed, the court concluded that the "testimony and other evidence in the record before the district court support the reasonableness of the 3-mile test and establish that the 3-mile test takes into account the factors specified by the statute."[663]

It is important to note that the district court characterized the 3-mile test as a "*general finding of fact* based partly on data and expert opinion and partly on policy as an index or yardstick to compute the effect of a given well on the water level and existing ground water

---

[661] *See* text accompanying note 659 *supra*.

[662] This method of defining the behavior of the water table in the vicinity of a pumped well is described with all its technical intricacies in R. DEWIEST, GEOHYDROLOGY 260 (1965).

[663] 468 P.2d 835, 837 (Colo. 1970).

users from a common source of supply."[664] The test was developed specifically for use in the Northern High Plains Designated Water Basin, and the court was willing to consider the applicant's evidentiary challenges to certain factual assumptions implicit in the use of the test (*i.e.,* plaintiff challenged the assumptions that the aquifer was homogenous, isotropic, and level). The Colorado Supreme Court approved the district court's finding of fact as such and approved the 3-mile test as a proper method for determining the facts, *i.e.,* as a method which takes into account the factors specified by the statute. The 3-mile test, in other words, is not law. It is, rather, a method devised under the 1965 Act for dealing with the first two problems of applying appropriation concepts to nontributary ground water mentioned by the court in *Whitten v. Coit.*[665]

The second major question addressed by the court in *Fundingsland* dealt with the plaintiff's contention that the Colorado constitution prohibited the state from denying the right to divert the unappropriated waters of any natural stream to beneficial use.[666] After noting that there is a "mining" or depletion condition in the area from present usage, the court said:

> It is clear that the policies of protecting senior appropriators and maintaining reasonable ground water pumping levels set forth by the underground water act require management which takes into account the long range effects of intermittent pumping in the aquifer. . . .
>
> If the plaintiff were permitted to proceed on his theory of "unappropriated water" and pump water from his proposed well until such time as it were no longer economically feasible to withdraw water from the aquifer, then no subsequent regulation of his pumping could protect senior appropriators, and all pumping from the basin within the area of influence of the plaintiff's well would have to cease until a reasonable pumping level was restored through the slow process of recharge. This is not the concept of appropriation contained in the statute, and not the one this court will follow.[667]

Finally, the court held that the language in *Fellhauer v. People*[668] to the effect that the wells in the Arkansas Valley could be regulated only in compliance with reasonable rules, regulations, standards, and a plan did not apply in this case dealing with the management of underground waters in designated ground water basins.[669]

(3) "Vested Rights" of Prior Well Owners

As mentioned earlier,[670] the Colorado Supreme Court's rejection

---

[664] *Id.* at 840 (emphasis added).

[665] See text accompanying note 654 *supra.*

[666] COLO. CONST. art. XVI, §6. This contention raises the "race-to-the-bottom" problem set forth in note 654 *supra.*

[667] 468 P.2d 835, 839 (Colo. 1970).

[668] *See* Fellhauer v. People, 447 P.2d 986 (Colo. 1968).

[669] *See* discussion of *Fellhauer* in text accompanying notes 709-16 *infra.*

[670] *See* PART TWO, § I(B)(2)(a) *supra.*

of the appropriation doctrine under the 1957 Act as applied to nontributary ground waters may have been more than a disagreement with the wisdom of the policy in light of considerations of conservation and full economic development of ground water resources;[671] for there is language in the court's opinion in *Whitten v. Coit*[672] to the effect that the landowner has vested property in the water in his soil which cannot be taken away by mere legislation.[673] Although that statement can be attacked as dictum, unsupported in any event by the authorities,[674] it could nevertheless present a possible constitutional difficulty with the declaration of designated (including nontributary) ground waters to be subject to appropriation.[675] If such waters do in fact constitute part of the real property of the owner of the overlying lands as at common law, it can be argued that the property may not be taken without just compensation.[676]

However, it can also be argued from an analysis of the underlying sources of the statement in *Whitten* that if the landowner did have a property right in the nontributary waters under his land, then that right was in the nature of a usufructory, appropriative right to the use of such waters.[677] The Ground Water Management Act of 1965 did, in fact, recognize the prior appropriative rights of *well owners* as such, providing that all priority claims based on an actual *taking* of designated ground water for *beneficial use* prior to the effective date of the Act shall relate back to the date of placing the designated ground water to a beneficial use.[678]

C. *Tributary Ground Waters*

According to the early cases, tributary ground water was subject to the doctrine of appropriation along with and in the same manner as tributary surface water.[679] However, the early courts also demonstrated a propensity to treat the tributary ground and surface waters of a particular stream as separate and independent physical entities, thus avoiding any major confrontation between surface appropriators and well owners. For instance, the case of *McClellan v. Hurdle*[680] dealt with a conflict between a well owner and a downstream senior surface appropriator. Although it was clear in that case that the well owner was diverting part of the underground flow of the stream, the surface

---

[671] *See* PART TWO, § I(B)(2)(a) *supra.*

[672] 153 Colo. 157, 173, 385 P.2d 131, 140 (1963).

[673] *Id.* at 174, 385 P.2d at 140.

[674] *See* note 634 *supra.*

[675] COLO. REV. STAT. ANN. § 148-18-1 (Supp. 1965).

[676] U.S. CONST. amend. V. *See also* note 641 *supra* and accompanying text.

[677] *See* note 634 *supra* for an analysis of the underlying sources.

[678] COLO. REV. STAT. ANN. § 148-18-8(1) (Supp. 1965).

[679] *See* text accompanying notes 594-604, *supra.*

[680] 3 Colo. App. 430, 33 P. 280 (1893).

appropriator's claim was not recognized, in part because he failed to show that his diversion facilities extended deep enough into the stream bed to effectuate a diversion of the underground flow as well as the surface flow of the stream.[681]

Ignorance of the physical interdependence of tributary ground and surface waters has not been the only reason for the critically slow development of an integrated system for the regulation and administration of tributary ground and surface waters in Colorado. Other reasons were an inherent inertia in the law and the accumulation of certain expectations and vested interests in the status quo while the gradual recognition of the need for change was taking place. According to Hutchins,

> [t]he fact that surface streams "lose" water into the ground at some times and places and "gain" water therefrom at others has long been recognized not only by ground water hydrologists and engineers but also by attorneys, judges, and legislators as well. Nevertheless, integration of surface and ground water doctrines and rights of use has not always kept pace with comprehension of physical conditions. Rival claimants to waters of surface streams have usually litigated their relative rights as between themselves, without intervention of owners of wells who depend on ground water that feeds the stream or that escapes from it, and the reverse holds true with respect to most adjudications of ground water rights. Lack of correlation has more serious results in such cases than where separate adjudications are made of rights on a surface stream and on its main tributaries, because the character of the surface water rights is the same — appropriative, or appropriative and riparian, depending on the jurisdiction. But in some states surface stream rights may be solely appropriative and ground water rights may be based on land ownership — even the rule of absolute ownership in overlying land. Repeated court decisions may have welded this rule into a rule of property, which may be difficult to overturn when many more rights become vested and more knowledge as to physical interrelationships is available.[682]

Although in Colorado tributary ground water has never been subject to a rule of property ownership,[683] lack of affirmative legislative and administrative action helped to create a political situation which was supportive of the status quo:

> [I]n the absence of any other specific statutory language prior to 1965, individual farmers in Colorado invested thousands of dollars in developing underground water as a source of supply for their crops. It is no wonder, then, that . . . House Bill No. 1066 . . . was considered as a threat to their personal livelihood and a taking of their property without due process of law. . . . [I]t is not surprising that many persons view the . . . action in 1965 with deepfelt bitterness and resentment, when the main thing wrong with this legislation is that it was enacted some 20 or 30 years later than it should have been.[684]

---

[681] *See* text accompanying note 597 *supra.*

[682] Hutchins, *supra* note 619 at 426-27.

[683] Compare the discussion of nontributary ground water in note 634 *supra* and accompanying text.

[684] Comment, *supra* note 614, at 145-46 (1967), *quoting* COLORADO LEGISLATIVE COUNCIL, IMPLEMENTATION OF 1965 WATER LEGISLATION XXV (Research Pub. No. 114, 1966).

In any event, affirmative legislative action did not take place until 1965. Prior to that time, the lack of clear legislative authority made the state engineer reluctant to regulate anything but surface water.[685]

1. H. 1066 and the Problems of Implementation

By 1965 the need for desegregating the principles governing ground and surface waters had become critical. According to Clarold F. Morgan,

> [i]n 1929 less than 810 irrigation pumps were in use in the state's four major basins; in 1959 the total had risen to approximately 8,900, a ten-fold increase. The four year period following 1960 produced a fifty-five percent increase in the number of wells drilled in Colorado, and in 1964 alone, 5,911 wells were completed.[686]
>
> Such statistics are foreboding indicators of the burgeoning rush to board Colorado's underground waterwagon. Even the vast underground resources are not inexhaustible. Surface stream flow rights may be affected, water tables can be depressed to unreachable depths, and the allocation of available supply among claimants may often give rise to economic, legal and administrative conflict.[687]

In view of this crisis, H. 1066 was enacted in 1965 in order to force the state engineer to "execute and administer the laws of the state relative to the distribution of the surface waters of the state *including the underground waters tributary thereto* in accordance with the right of priority of appropriation . . . ."[688] H. 1066 did not provide a set of guidelines for the state engineer to follow in executing this mandate,[689] but merely provided that "he shall adopt such rules and regulations and issue such orders as are necessary for the performance

---

[685] Moses & Vranesh, *supra* note 623, at 300. Compare the statement of Mr. Benjamin F. Stapleton, Jr., the chairman of the Colorado Water Conservation Board quoted in Fellhauer v. People, 447 P.2d 986 (Colo. 1968):

> House Bill 1066 [the 1965 Act], merely gave the State Engineer the right to shut down wells. House Bill 1066 was, in my opinion, superfluous since the State Engineer had not only the right but the responsibility under then-existing laws to shut down wells which were interfering with the prior rights of other water users. The State Engineer insisted that he had no authority and to force the State Engineer to take action on these matters existing laws were amended to make what was already crystal clear even more self-evident by specific command to the State Engineer to take action against well owners in the operation and management of the total water resources of the state.
>
> . . . .
>
> I have always believed that the State Engineer had the authority to shut down wells if they were interfering with the rights of senior appropriators and yet, because shutting down of a well is always controversial, no action was taken by the State Engineer, acting on the excuse that he had no authority under state laws.

Id. at 990.

[686] Comment, *supra* note 614, at 133.

[687] *Id.* at 133-34.

[688] COLO. REV. STAT. ANN. § 148-11-22(1) (Supp. 1965), *as amended,* COLO. REV. STAT. ANN. §§ 148-21-34 to -36 (Supp. 1969) (emphasis added).

[689] *See* PART TWO, § I(C)(3)(e) *infra.* The only guideline provided by the Act was that a diversion was not to be enjoined unless there was "material injury" to the vested right of other appropriators.

of the foregoing duties."[690] The problems encountered by the state engineer in attempting to implement H. 1066 form a substantial part of the background of the Water Right Determination and Administration Act of 1969 and will briefly be described here.

One of the fundamental problems arising out of H. 1066 was implicit in the very fact that ground waters were to be administered by the state engineer in accordance with the laws relative to the distribution of the surface waters of the state. According to Clarold Morgan, "To the extent that underground water and surface water share common characteristics, expanding appropriation concepts to solve ground water problems may be valid. Yet a failure to acknowledge variations can result in unwarranted distortions of the relationship between stream and well."[691] For instance, replenishment of a depleted ground water supply may be much more time-consuming than the replenishment of a dried up stream. Thus, the conservation imperative becomes much more critical when dealing with tributary ground water. Furthermore, the effect of a junior diversion on a senior appropriation becomes more difficult to determine when ground waters are involved. The effect is likely to depend on hydrologic characteristics peculiar to ground water — such as the distance between the two points of diversion, the saturated thickness of the aquifer, etc. If the water flow of a stream is only minimally affected by cutting off a junior diversion, it is difficult to argue that enjoining the junior user is consistent with the concept of maximizing the beneficial use of the waters of the state.[692]

H. 1066 did not explicitly declare a policy of maximizing the beneficial use of waters or promoting the full development of the water resources of the state as did the Ground Water Management Act of 1965.[693] The only indication that this policy was recognized was that a junior diversion was to be enjoined only when necessary to prevent material injury to the vested rights of other appropriators.[694] H. 1066 further provided that

> [i]n determining whether or not the vested rights of other appropriators are materially injured by any well . . . there shall be a rebuttable presumption that there is no injury if a well or its replacement was both in existence prior to the date of this section, and used continuously since that date, and is not located in the *subsurface channel* of a continuously flowing surface stream.[695]

---

[690] COLO. REV. STAT. ANN. § 148-11-22(1) (Supp. 1965), *as amended,* COLO. REV. STAT. ANN. §§ 148-21-34 to -36 (Supp. 1969).

[691] Comment, *supra* note 614, at 138.

[692] The state's policy of maximizing the beneficial use of the waters of the state was recognized in Colorado Springs v. Bender, 148 Colo. 458, 366 P.2d 552 (1961). *See* PART TWO, § I(C)(3)(c) *infra,* for a discussion of the case.

[693] *See* text accompanying note 655 *supra.*

[694] COLO. REV. STAT. ANN. § 148-11-22(2) (Supp. 1965), *as amended,* COLO. REV. STAT. ANN. §§ 148-21-34 to -36 (Supp. 1969).

[695] *Id.* (Emphasis added).

However, among the significant problems which later arose under H. 1066 were the difficulties in defining the terms "material injury" and "subsurface channel."[696]

Other problems encountered under H. 1066 arose out of the hydrologic relationship between a stream and the adjacent underground waters.

> Colorado's irrigation wells are almost exclusively junior to surface rights. It is convenient, but perhaps unsound, to conclude that each well in the vicinity of a surface stream must defer to senior priorities in keeping with appropriation rules. The legislative committee on water had indicated that "[g]round water in aquifers under and adjacent to effluent streams is hydraulically related to the stream flow." Recasting this observation in more general terms, a surface appropriator draws not only upon visible surface water to fill his needs, but also relies on the total hydrologic structure to support his diversion. If the stream and adjacent underflow through the ground water reservoir are viewed as a single resource, each surface right necessarily demands both adequate surface volume and favorable underground water levels. On this basis, efficiency in perfecting a diversion of water at the surface alone is arguably only partial efficiency. "[The appropriator] is not entitled to command the whole or a substantial flow of the stream merely to facilitate his taking the fraction of the whole flow to which he is entitled."[697]

The Supreme Court of Colorado recognized these problems in the *Fellhauer* case, discussing both the right of the senior surface users to uplift by underground waters to support the stream's surface flow and the duty of a senior user to pump in order to satisfy his surface decree.[698]

Another set of major problems arising out of H. 1066 stemmed from the failure of the legislature to provide any administrative guidance for the resolution of extremely complex problems. For instance, there was no legislative direction for the state engineer to follow in awarding priority to tributary ground water.[699] The Ground Water Law of 1957 provided that "the priority date of the ground water appropriation shall not be postponed to a time later than its true date of initiation by reason of failure to adjudicate such right in a surface water adjudication."[700] However, since this section was repealed in 1965,[701] the state engineer could choose to determine well priorities by means of supplemental adjudications; and an early case appeared to hold that no priority in a supplemental proceeding may be given a number or date earlier than the last priority in the last preceding

---

[696] *See* Fellhauer v. People, 447 P.2d 986, 995 (Colo. 1968).

[697] Comment, *supra* note 614, at 143.

[698] Fellhauer v. People, 447 P.2d 986, 997 (Colo. 1968).

[699] Moses & Vranesh, *supra* note 623, at 301.

[700] Law of May 1, 1957, [1957] Colo. Sess. Laws 863 (repealed 1965).

[701] COLO. REV. STAT. ANN. § 148-18-9 (Supp. 1965).

adjudication.[702] As Moses and Vranesh point out, "if this case is to be strictly followed, many, if not all, senior wells could be shut down by the state engineer in an attempt to satisfy junior surface rights."[703]

H. 1066 did not provide solutions or guidelines for developing answers to problems such as these. In fact, H. 1066 did not even provide a clear mandate to the state engineer to adjudicate or otherwise determine the relative priorities of wells. It merely provided that "he shall adopt such rules and regulations and issue such orders as are necessary for the performance of the foregoing duties."[704]

2. The Response of the Legislature, the State Engineer, and the Court

In 1967, the legislature expressed its own dissatisfaction with the adequacy of H. 1066 by passing S. 407.[705] That Act provided $50,000 for a two-year investigation of relationships between surface and ground water and for an evaluation of the need for additional legislation to "provide for integrated administration of all diversions and uses of water within the state . . . ."[706] Among the findings, conclusions, and recommendations generated by the studies were those of Morton W. Bittinger & Associates and Wright Water Engineers:

Findings

1. The average annual water supply within the South Platte River Basin is adequate to meet present requirements. However, because of the wide fluctuations in runoff, the distribution of water availability is far from satisfactory.

2. The groundwater reservoir along the main stem of the South Platte River between Denver and the State line contains approximately ten million acre-feet of water. Only a small percentage of this capacity is utilized and this only in a haphazard and unplanned way.

3. Groundwater pumping and transmountain importations have been major factors in stabilizing water supplies in the South Platte Basin. However, the pumping of groundwater has caused infringement upon prior surface water rights. Studies indicate that this infringement is not as severe as many have felt it to be.

4. The water supplies of the South Platte Basin are not being utilized or administered as efficiently and effectively as they could be.

5. Deficiencies exist in the completeness and accuracy of water use records.

Conclusions

1. Planned utilization of 10 to 15 percent of the available groundwater storage capacity in the alluvium is reasonably attainable. Use of the groundwater storage capacity can provide more efficient utilization of the total resources of the Basin, reduce shortages, and

[702] Hardesty Res., Canal & Land Co. v. Arkansas Valley Sugar Beet Co., 85 Colo. 555, 559, 277 P. 763, 765 (1929).

[703] Moses & Vranesh, *supra* note 623, at 302.

[704] COLO. REV. STAT. ANN. § 148-11-22(1) (Supp. 1965), *as amended*, COLO. REV. STAT. ANN. §§ 148-21-34 to -36 (Supp. 1969).

[705] Law of April 19, 1967, [1967] Colo. Sess. Laws 249 (repealed 1969).

[706] *Id.* § 1(1)(b).

minimize conflicts between water users. This planned utilization in conjunction with surface water supplies would basically involve a heavier draft upon the groundwater supplies during low runoff years with provision for replenishment of those supplies during years of surplus runoff.

2. To achieve more optimum distribution of water supplies and accomplish desired goals, certain surface water rights should be served from groundwater sources during low runoff periods. Such operations would allow more surface water to be diverted in the upper regions, making greater re-use of return flows possible.

3. Since the groundwater in storage adjacent to the main stem of the South Platte River is currently being used to support the flowing stream, and many users are dependent upon and have rights in the return flow which joins the river via the groundwater system, provisions must be made to protect these rights and to supply them with alternate sources of water to insure the continued utilization of the groundwater supply. The cost of providing such facilities should be borne by those who benefit.

4. Optimum use of water resources within the South Platte Basin cannot be achieved without control of nonbeneficial uses or waste of water.

5. Integrated management of groundwater and surface water can be best achieved on an overall South Platte River Basin basis.

Recommendations

1. It is recommended that legislation should be passed which will allow and encourage the integrated management and administration of groundwater and surface water in the South Platte Basin.[707]

While the study was being completed, the state engineer made a feeble attempt to regulate ground waters under his jurisdiction by ordering 39 wells to be shut down in the Arkansas Valley. He had not promulgated the rules and regulations called for in H. 1066, and the litigation resulting from his acts gave the Supreme Court of Colorado the opportunity to address itself to some of the major problems of attempting to integrate the administration and regulation of the tributary ground and surface waters of the state.[708]

The *Fellhauer* litigation arose out of an action brought by the Attorney General under H. 1066[709] to enjoin the plaintiff in error, Roger Fellhauer, from pumping and using water from the alluvium of the Arkansas River contrary to an order of the water division engineer. Although the priority right of his well had not been adjudicated, all of the surface flow of the Arkansas River during each irrigation season had been appropriated long before Fellhauer's well was drilled in 1935. Since the division engineer did not issue his order to shut down 39 of the approximately 1,600 to 1,900 wells in the Arkansas Valley pursuant to reasonable rules and regulations, the court held that he proceeded discriminately in violation of the equal

[707] MORTON W. BITTINGER & ASSOC. & WRIGHT WATER ENGINEERS, REPORT ON ENGINEERING WATER CODE STUDIES FOR THE SOUTH PLATTE RIVER 3, 4 (August, 1968).

[708] Fellhauer v. People, 447 P.2d 986 (Colo. 1968).

[709] COLO. REV. STAT. ANN. § 148-11-22 (Supp. 1965).

protection clause of the 14th amendment to the United States Constitution and of the due process clause in article II, section 25 of the Colorado constitution. The court further held that in order to be valid and constitutional, regulation of wells must comply with the following three requirements:

(1) The regulation must be under and in compliance with reasonable rules, regulations, standards and a plan established by the state engineer prior to the issuance of regulative orders.

(2) Reasonable lessening of material injury to senior rights must be accomplished by the regulation of the wells.

(3) If by placing conditions upon the use of a well, or upon its owner, some or all of its water can be placed to a beneficial use by the owner without material injury to senior users, such conditions should be made.[710]

What the court had in mind as factors to be taken into account in promulgating these rules and regulations may be inferred from some of the other portions of the extensive opinion. First, in setting forth the background against which the division engineer's actions could be considered, the court described the *hydrologic factors* which determine the effect which a well diversion is likely to have upon a stream.[711]

Second, in discussing the conditions to be placed upon the use of a well, the court noted the possibility that a junior well owner could discharge a certain portion of the well water into the stream and use the remainder with no material injury resulting to senior users. In connection with this idea, the court went on to discuss the *maximum utilization doctrine* as initially suggested by *Colorado Springs v. Bender.*[712] Thereafter, in a section of the opinion which expressly avoided ruling on the issues discussed, the court raised the questions of whether a senior surface user has the right to uplift by underground waters in order to support the stream's surface flow and whether the surface appropriator must take any affirmative action to supplement or protect his right from the loss of uplift. Also mentioned was the

---

[710] Fellhauer v. People, 447 P.2d 986, 993 (Colo. 1968).

[711] When water is pumped from a well, a cone of depression is formed, *i.e.*, a conical drained area in which the point of the inverted cone is at the bottom of the well pipe. This depression causes surrounding water in the aquifer to flow into the cone from all sides. Except for wells in very close proximity of the surface stream, the effect of this diversion upon the visible stream is not immediate. The time that the stream begins to be affected and the extent of the effect in quantity of water and duration depends upon a number of factors, including (a) distance of the well from the stream, (b) transmissibility of the aquifer, (c) depth of the well, (d) time and volume of pumping, and (e) return flow characteristics. A well in or at the bank of the stream may have substantially the same effect as a surface diversion at that point. The effect of a well, which is a considerable distance from a stream and which is used for irrigation, may not take place until the nonirrigation season, and, by the next irrigation season, the conical depression at the well may be completely recharged with new water entering the alluvium.

Fellhauer v. People, 447 P.2d 986, 992 (Colo. 1968).

[712] *Id.* at 994. Colorado Springs v. Bender, 148 Colo. 458, 366 P.2d 552 (1961), is discussed in text, PART TWO, § I(C)(3)(c) *infra.*

validity of the concept that a surface user who drills a well must use the well water as a part of his surface priority. All of these complexities raised by the maximum utilization doctrine, the court noted, "must be faced under planning and the establishment of rules and regulations . . . ."[713]

As a third factor to be considered in promulgating rules and regulations, the court recognized that the state engineer must administer the waters under his jurisdiction "in accordance with the right of *priority of appropriation.*"[714] The court disapproved of the fact (again without ruling) that the division engineer did not take into account relative priorities of unadjudicated wells in determining whether to regulate one well rather than another. But the court also recognized that the right of priority of appropriation was only one factor to be considered if the maximum utilization doctrine was to be implemented. "In this connection," said the court, "we think it well to quote a portion from the following significant law review article — Morgan, Appropriation and Colorado's Ground Water: A Continuing Dilemma? 40 *U. Colo. L. Rev.* 133 (1967) (footnotes omitted):"

> The Colorado system of appropriation was tailored to the conditions of surface stream diversions in an arid western climate.
>
> . . . .
>
> . . . such factors as well size, the transmissibility and saturated thickness of an aquifer, and the spacing of wells did not complicate the century-old problems for which the doctrine was designed. Wells junior in time are frequently scattered at indiscriminate distances and bear random priorities. Although wells closest to a senior diversion frequently will have the greatest impact, appropriation rules look exclusively to seniority, disregarding the all-important factors of proximity and actual effect. As a result, the first wells called upon to stop pumping must be the most junior wells, even though they may be geographically the most distant and the least offensive to the senior. Strict administration on the basis of seniority would plainly "prevent a full beneficial use of water" in the aquifer.
>
> Because of these complexities, the need for detailed engineering data on well size, location, operation, priority and anticipated effects is essential to an effective application of the appropriation theory to well operations. Wells which number in the thousands cannot be governed by priority where priorities are unknown. Futile calls on distant or even proximate diversions are unavoidable without a precise understanding of the well-surface relationship in each case. And, of course, effective economic planning calls for certainty in supply predictions. Unavailability of, or inattention to, critical information of this type makes it possible to transform well-operators who are located in an overdeveloped aquifer or near surface streams into involuntary dry land operators as they wait for senior rights to come back to life. Much ground water will remain inaccessible to all, sealed from economic productivity by misapprehension of hydrologic fact.[715]

---

[713] Fellhauer v. People, 447 P.2d 986, 997 (Colo. 1968).

[714] *Id.* at 996 (emphasis added).

[715] *Id.* at 996-97, *quoting* Comment, *supra* note 614, at 138-40.

Thus, in a lengthy opinion comprised largely of *gratis dicta,* the Supreme Court of Colorado went "as far as it was thought feasible in the evaluation of the 1965 Act and its administration"[716] and thereby furnished a significant portion of the legal background for the preparation and enactment of the Water Right Determination and Administration Act of 1969.

3. The Water Right Determination and Administration Act of 1969

a. Declaration of Policy

The major thrust and purpose of S. 81 is made apparent in that Act's declaration of policy:

> (1) It is hereby declared to be the policy of the state of Colorado that all waters originating in or flowing into this state, whether found on the surface or underground, have always been and are hereby declared to be the property of the public, dedicated to the use of the people of the state, subject to appropriation and use in accordance with law. As incident thereto, *it shall be the policy of this state to integrate the appropriation, use and administration of underground water tributary to a stream with the use of surface water, in such a way as to maximize the beneficial use of all of the waters of this state.*[717]

The declaration of policy continues:

> (2) (a) Recognizing that previous and existing laws have given inadequate attention to the development and use of underground waters of the state, . . . and that the future welfare of the state depends upon a sound and flexible integrated use of all waters of the state, it is hereby declared to be the further policy of the state of Colorado that in the determination of water rights, uses and administration of water the following principles shall apply:
>
> (b) *Water rights and uses heretofore vested* in any person by virtue of previous or existing laws, *including an appropriation from a well, shall be protected* subject to the provisions of this article.
>
> (c) The existing use of ground water, either independently or in conjunction with surface rights, shall be recognized to the fullest extent possible, subject to the preservation of other existing vested rights, *but at his own point of diversion on a natural watercourse, each diverter must establish some reasonable means of effectuating his diversion.* He is not entitled to command the whole flow of the stream merely to facilitate his taking the fraction of the whole flow to which he is entitled.
>
> (d) *The use of ground water may be considered as an alternate or supplemental source of supply for surface decrees* heretofore entered, taking into consideration both previous usage and the necessity to protect the vested rights of others.
>
> (e) *No reduction of any lawful diversion because of the operation of the priority system shall be permitted unless such reduction would increase the amount of water available to and required by water rights having senior priorities.*[718]

[716] *Id.* at 995.

[717] COLO. REV. STAT. ANN. § 148-21-2(1) (Supp. 1969) (emphasis added).

[718] *Id.* §§ 148-21-2(2) (a-e) (emphasis added).

The manner in which S. 81 attempts to implement its policy and the four basic principles set forth above will be explored in this section.

b. Protection of Rights and Uses Heretofore Vested, Including an Appropriation From a Well

As previously mentioned, most well priorities have not been adjudicated.[719] Moses and Vranesch have pointed out that, under the 1965 Act, if the state engineer had chosen to determine the relative priorities of wells through supplemental adjudications, many *senior* wells could have been shut down in an attempt to satisfy *junior* surface rights.[720] The basis for this argument was the holding in *Hardesty Reservoir, Canal & Land Co. v. Arkansas Valley Sugar Beet Co.*[721] that no priority in a supplemental proceeding may be given a number or date earlier than the last preceding adjudication.[722]

S. 81 continues this policy with respect to all priority rights which have been "adjudicated" prior to the effective date of the Act. It directs the state engineer to follow the following procedure, among others, in compiling his initial July 1, 1970, tabulation of priorities:

> (iv) As among water rights decreed in the same water district in different adjudication suits, all water rights decreed in an adjudication suit shall be senior to all water rights decreed in any subsequent adjudication suit.[723]

However, the Act further provides that "the 1974 tabulation and succeeding tabulations shall include the priorities *awarded subsequent* to those listed in the preceding tabulation . . . ."[724] Priorities awarded in proceedings conducted subsequent to the 1970 tabulation will have been awarded pursuant to the water right "determination" proceedings set forth by S. 81 rather than in a traditional "adjudication" suit.[725] In these water right "determination" proceedings, the following exception for well rights is to apply:

> With respect to the divisions described in section 148-21-8, priorities awarded in any year for water rights or conditional water rights shall be junior to all priorities awarded in previous years and junior to all priorities awarded in decrees entered prior to June 7, 1969, or in decrees entered in proceedings which are pending on such date; *except that with respect to water rights which are diverted by means of wells, the priorities for which have not been established or sought in any such decree or proceeding, if the person claiming such*

---

[719] Moses & Vranesh, *supra* note 623, at 301.

[720] *Id.* at 302.

[721] 85 Colo. 555, 277 P. 763 (1929).

[722] *Id.* at 561, 277 P. at 763, *citing* Baca Irr. Ditch Co. v. Model Land & Irr. Co., 80 Colo. 398, 252 P. 358 (1927).

[723] COLO. REV. STAT. ANN. § 148-21-27(1)(b)(iv) (Supp. 1969).

[724] *Id.* § 148-21-28(1) (emphasis added).

[725] For the distinction between these two terms, see Greer, *A Review of Recent Activity in Colorado Water Law*, 47 DENVER L.J. 181n.6 (1970).

a water right files an application for determination of water right and priority not later than July 1, 1971, except in water division 3, where such application must be filed not later than July 1, 1972, *and such application is approved and confirmed, such water right, subject to the provisions of section 148-21-21(1), shall be given a priority date as of the date of actual appropriation and shall not be junior to other priorities by reason of the foregoing provision.*[726]

It is in this manner that S. 81 attempts to implement its policy that "[w]ater rights and uses heretofore vested in any person by virtue of previous or existing laws, including an appropriation from a well, shall be protected subject to the provisions of this article."[727] The policy of the provision is apparently designed to protect the interests of well owners who have not adjudicated their priorities relying upon (1) the assumption implicit in the prior law that ground and surface waters would be treated as separate physical entities[728] or (2) affirmative legal pronouncements such as the Ground Water Act of 1957 which provided that the priority date of a ground water appropriation shall not be postponed to a time later than the true date of initiation by reason of failure to adjudicate such right in a surface adjudication.[729]

However, serious objections may be raised by well owners who did adjudicate their priorities prior to the effective date of the Act and who were, for that reason, denied a priority date extending back further than the last preceding adjudication. Furthermore, notwithstanding the relation back provisions for unadjudicated well priorities, most well appropriations are in fact junior to most surface appropriations, and unless the conservation and "maximum beneficial use" policies of the act are effective, many well owners will not be allowed to operate as they have in the past.

c. Reasonable Means of Diversion

One of the means which has been devised to attempt to maximize the beneficial use of the ground and surface waters of the state, in a manner consistent with the recognition of vested priority rights, has been the development of the doctrine of reasonable diversion. The general purpose of the doctrine is to promote the *overall* efficiency of diversion and application to beneficial use of the waters of the state. That is, not only must a particular diversion be reasonably efficient within its own individual context, but it also must be reasonably consistent with the efficiency of the entire distributive system within which it operates.

The principle of reasonable diversion was not originated in Colorado by the enactment of S. 81 but rather with the case of *Colorado*

[726] COLO. REV. STAT. ANN. § 148-21-22 (Supp. 1969) (emphasis added).

[727] *Id.* § 148-21-2(2)(b).

[728] See text accompanying note 680 *supra.*

[729] COLO. REV. STAT. ANN. § 148-18-9 (1963). *See also* text accompanying note 684 *supra.*

Springs v. Bender[730] decided in 1961. In that case Bender brought an action against the city of Colorado Springs, seeking an injunction restraining the city from diverting certain tributary ground waters in violation of Bender's alleged prior appropriation. The trial court granted the injunction finding that "when the defendants pumped water during the time it was needed by plaintiffs for irrigation purposes, it was not available because the water table was lowered below the intake of plaintiff's pumping facilities."[731] The Supreme Court of Colorado reversed the judgment and remanded the case to the trial court for further consideration in light of "some well-defined legal principles which are pertinent to the problems presented."[732] Among them was the following:

> At his own point of diversion on a natural water course, each diverter must establish some reasonable means of effectuating his diversion. He is not entitled to command the whole or a substantial flow of the stream merely to facilitate his taking the fraction of the whole flow to which he is entitled. *Schodde v. Twin Falls Land & Water Co.*, 224 U.S. 107, 119, 32 S. C. 470, 56 L. Ed. 686. This principle applied to diversion of underflow or underground water means that priority of appropriation does not give a right to an inefficient means of diversion, such as a well which reaches to such a shallow depth into the available water supply that a shortage would occur to such senior even though diversion by others did not deplete the stream below, where there would be an adequate supply for the senior's lawful demand.[733]

In light of this principle the court concluded that after the trial court has heard additional evidence,

> (2) The elevation of water in the aquifer at which each junior appropriator must cease to divert water in order to meet the demands of a senior appropriator must be fixed.
>
> (3) In determining the facts mentioned [under (2)] the conditions surrounding the diversion by the senior appropriator must be examined as to whether he has created a means of diversion from the aquifer which is reasonably adequate for the use to which he has historically put the water of his appropriation. If adequate means for reaching a sufficient supply can be made available to the senior, whose present facilities for diversion fail when water table is lowered by acts of the junior appropriators, provision for such adequate means should be decreed at the expense of the junior appropriators, it being unreasonable to require the senior to supply such means out of his own financial resources. This reasonable provision of the law recognizes that the nature of underground aquifers is such that they sometimes have very great depth. In such circumstances an economical and productive diversion might be made by a junior appropriator of a very high value use with which a senior could not compete; and while the junior might well afford the expense of a deep withdrawal, and even leave an adequate volume of water available for a senior, yet the

[730] 148 Colo. 458, 366 P.2d 552 (1961).

[731] *Id.* at 460, 366 P.2d at 554.

[732] *Id.* at 461, 366 P.2d at 554.

[733] *Id.* at 462, 366 P.2d at 555.

> expense of bringing it to the surface would be beyond the reasonable economic reach of the latter. Such situations do not ordinarily develop with regard to surface stream developments.[784]

S. 81 codified the principle of reasonable diversion by adopting some of the language of the *Bender* case. However, it is not as clear (although it may be reasonably inferred) that S. 81 also adopts the principle that a junior appropriator must pay for the cost of improving a senior's means of diversion. This latter question may become fairly significant in litigation under the Act, particularly when the courts consider the mandatory use of wells as alternate means of diversions for surface rights.

Two other aspects of S. 81 which further the policy of creating reasonably efficient distributive systems are the provisions dealing with plans for augmentation[785] and the provision making it the duty of the division engineers to issue orders as to waste.[736] With regard to the latter provision, it is interesting to note that it is the duty of the state engineer or division engineers to issue "such orders as are necessary to implement the provisions of section 148-21-34 [making it their duty to administer the waters of the state in accordance with this article and other applicable laws] . . . ."[737] For example, "[e]ach division engineer shall order the total or partial discontinuance of any diversion in his division to the extent the water being diverted is not necessary for application to a beneficial use . . . ."[738]

d. Wells as Alternate Sources of Supply

One of the principle methods by which S. 81 attempts to implement the reasonable diversion doctrine is by encouraging, and in some cases requiring, surface appropriators who are also well owners to utilize their wells to satisfy their surface rights before putting a call on the river. The rationale of this policy is that suggested by Clarold Morgan: "A surface diversion, by virtue of the very fact that it taps only a small portion [the surface portion] of the entire alluvial basin water supply, may thereby be considered to be inefficient and therefore an unreasonable means of diversion."[739] One "is not entitled to command the whole flow of the stream merely to facilitate his taking the fraction of the whole flow to which he is entitled."[740]

The applicable statutory scheme is as follows: "The use of ground water *may* be considered as an alternate or supplemental source of

---

[734] *Id.* at 464-65, 366 P.2d at 556.

[735] COLO. REV. STAT. ANN. § 148-21-23 (Supp. 1969).

[736] *Id.* § 148-21-35.

[737] *Id.* § 148-21-35(1).

[738] *Id.* § 148-21-35(2).

[739] *See* text accompanying note 697 *supra.*

[740] COLO. REV. STAT. ANN. § 148-21-2(c) (Supp. 1969).

supply for surface decrees heretofore entered, taking into consideration both previous usage and the necessity to protect the vested rights of others."[741] Section 17 of the statute makes this principle more explicit by providing permissive procedures for allowing surface diverters to secure and utilize their wells as alternate points of diversion:

> Subject to section 148-21-35(2), in determining and administering the use of water, judicial and administrative officers shall be governed by the following:
>
> (b) In every case in which the owner of an appropriative right to divert water shall supply his water needs by the use of a well, the water diverted by that well *may* be charged to its own appropriation; or it may be used to divert water under the provisions set forth in paragraph (c) of this subsection (3). This statutory statement is intended as a legislative acknowledgment of the long-held practice in Colorado under which various water rights may be carried through the same physical structure.
>
> (c) In any case in which the owner of an appropriative right to divert water at the surface of a stream or to have water so diverted delivered for his use or benefit shall have a well so situated as to draw water from the same stream system, that owner *may* secure the right to have such well, or more than one if he has more than one such well, made an alternate point of diversion to said surface right by procedures provided in this article for securing alternate points of diversion.
>
> (d) Until July 1, 1971, all diversions by well to supply a water use for which there is a surface decree *may* be charged against and be considered as part of the exercise of said surface decree even if the owner has not secured the right to an alternate point of diversion at the well, but nothing in this article shall be construed to prevent regulation of the well in accordance with law and within the system of priorities established for regulation of diversions of water in Colorado.
>
> (e) In authorizing alternate points of diversions for wells, the widest possible discretion to permit the use of wells shall prevail. In administering the waters of a water course, the withdrawal of water which will lower the water table shall be permitted but not to such a degree as will prevent the water source to be recharged or replenished, under all predictable circumstances, to the extent necessary to prevent injury to senior appropriators in the order of their priorities, with due regard for daily, seasonal, and longer demands on the water supply.[742]

Finally, section 35 of the statute provides:

> If a well has been approved as an alternate means of diversion for a water right for which a surface means of diversion is decreed, such well and such surface means *must* be utilized to the extent feasible and permissible under this article to satisfy said water right before diversions under junior water rights are ordered discontinued.[743]

Thus, the owner of a surface right who is also owner of a well in the same stream system may, if he chooses, have his well determined

---

[741] *Id.* § 148-21-2(d) (Supp. 1969) (emphasis added).

[742] *Id.* § 148-21-17(3) (emphasis added).

[743] *Id.* § 148-21-35(2) (emphasis added).

to be an alternate point of diversion for his surface right. This would be an advantage to him inasmuch as he would be able to utilize the well to effectuate his diversion when the surface stream was depleted by natural causes or by appropriators who are senior to him. To a certain extent, he would have the option of drawing upon the substantial storage capacities of the underground alluvial aquifer beneath the surface stream. On the other hand, if the surface stream has been depleted by users who are *junior* to him, he may be forced to utilize his alternate means of diversion (before putting a call on the river) when he would not otherwise be required to do so (if he did not have an alternate means of diversion). Utilizing the pumping facilities of his well would in any event be a more expensive method of diversion, and he could be forced into this alternative solely by virtue of his decision to have his well determined to be an alternate means of diversion.

Thus, some water users responded to this situation as follows:

> Water users stated that they were having difficulty deciding whether to use their wells as alternate points of diversion under Senate Bill 81. The state engineer was asked for assistance in the form of suggested guidelines and methods to integrate ground and surface water use.
>
> . . . .
>
> One interpretation given to Senate Bill 81, which some senior water appropriators thought unfair, concerned charging the use of a well against a surface right. It was stated that the division engineer would require a senior appropriator who had a well to use the well at his own expense before he could put a call on the river. The objection was that a senior should be allowed to leave his well idle and call the river, or if juniors upstream wish to divert water when the senior is short, the juniors should pay for the operation of the well. The well was drilled for the purpose of adding to the water supply in some areas, but it could become merely a more expensive point of diversion for the same amount of water as used in the past.[744]

It is possible, however, that under existing law junior appropriators might be forced to pay for the additional expense of effectuating a senior's diversion by means of his alternate point of diversion. If encouraging and requiring the use of alternate points of diversion is considered to be a manifestation of the reasonable diversion doctrine and if the principle of the *Bender* case, in which it was suggested that junior appropriators may be required to pay the expense of improving the adequacy of the senior's diversion facilities, is to be adopted as the law, then it would seem that some authority exists for the proposition that junior appropriators may be required to pay for the additional

[744] COLORADO LEGISLATIVE COUNCIL, PROPOSED AMENDMENTS TO 1969 WATER LEGISLATION 3-4 (Research Pub. No. 147, Dec. 1969).

expense of operating a well as an alternate point of diversion for a senior surface right.[745]

e. Materiality of Injury

One of the problems or inefficiencies discussed previously with regard to nontributary ground waters dealt with the effect of the strict application of the doctrine of appropriation to ground waters generally.[746] It was suggested that strict adherence to vested priorities could result in the regulation of a distant junior well which had little or no effect on the senior well for whose benefit the regulation is instituted, while a nearby, intermediate well remained unregulated. The 1965 Act approached this problem by allowing the state engineer to apply for an injunction restraining a diversion "when necessary to prevent such diversion from materially injuring the vested rights of other appropriators. . . ."[747] However, the failure of that act to explicitly define the term "material injury" was problemmatical in the administration of that act.

S. 81 similarly provides that a diversion shall not be discontinued to protect senior water rights unless the diversion is causing or will cause material injury to such rights. It provides, in addition, the following definition of "material injury:"

> The materiality of injury depends on all factors which will determine in each case the amount of water such discontinuance will make available to such senior priorities at the time and place of their need. Such factors include the current and prospective volumes of water in and tributary to the stream from which the diversion is being made; distance and type of stream bed between the diversion points; the various velocities of this water, both surface and underground; the probable duration of the available flow; and the predictable return flow to the affected stream. Each diversion shall be evaluated and administered on the basis of the circumstances relating to it and in accordance with provisions of this article and the court decrees adjudicating and confirming water rights. In the event a discontinuance has been ordered pursuant to the foregoing, and nevertheless such does not cause water to become available to such senior priorities at the time and place of their need, then such discontinuance order shall be rescinded.[748]

f. The Aftermath of S. 81

The process of developing an efficient and effective legal and administrative structure for the regulation of ground and surface water use is far from completion. The judiciary has not yet had a chance to clarify and interpret the act in any significant way, and the legislative machinery continues its process of evaluation and study with a view toward considering further refinements and possible

---

[745] Colorado Springs v. Bender, 148 Colo. 458, 464-65, 366 P.2d 552, 556 (1961).

[746] *See* PART TWO, § I(C)(1) *supra.*

[747] COLO. REV. STAT. ANN. § 148-11-22(2) (Supp. 1965).

[748] *Id.* § 148-21-35(2) (Supp. 1969).

substantive changes in the Act.[749] The Water Committee of the Legislative Council is presently investigating further changes in S. 81 concerning judicial procedures under the Act; the role of the state engineer in water adjudication; duties of real estate developers to provide water for their customers; adjusting dates in the publication of the tabulation of water decrees; state aid in financing water projects; abandonment of water decrees; adjusting the date for filing plans for augmentation (and possibly clarifying augmentation); possible changes to portions of the Ground Water Management Act; and funds and authority for water management by the state engineer.[750]

However, according to the Legislative Council,

> [w]hile several complaints from water users have been listed with respect to Senate Bill 81, it should be noted that the reaction to the 1969 water legislation was found to be generally positive. Most water users apparently considered legislation to be necessary, and that integration of ground and surface water was overdue in Colorado.[751]

II. SPRING WATERS

"A spring is water issuing by natural forces out of the earth at a particular place."[752] Such waters are likely to be found in damp, marshy, or boggy areas where underground waters find their way to the surface.[753]

By statute, a landowner has the right to use spring water arising upon his land.[754] However, if the spring water is tributary, the landowner must acquire his right to use the spring water in accordance with the prior appropriation system;[755] he will not be allowed to displace or supersede a prior right.[756] Further, it should be noted that anyone who unlawfully causes "any diminution of or obstruction or interference with the flow of waters from any . . . natural springs to the injury of any appropriator of any such waters, shall be liable in damages to the injured party to the amount of such injury."[757]

---

[749] *See, e.g.*, COLORADO LEGISLATIVE COUNCIL, PROPOSED AMENDMENTS TO 1969 WATER LEGISLATION (Research Pub. No. 147, Dec. 1969).

[750] Interview with Robert Crites, Legislative Council Staff, in Denver, Colorado, Oct. 1, 1970.

[751] COLORADO LEGISLATIVE COUNCIL PROPOSED AMENDMENTS TO 1969 WATER LEGISLATION (Research Pub. No. 147, Dec. 1969).

[752] 3 H. FARNHAM, LAW OF WATERS 2738 (1904).

[753] *See, e.g.*, Genoa v. Westfall, 141 Colo. 533, 349 P.2d 370 (1960); Black v. Taylor, 128 Colo. 449, 264 P.2d 502 (1953).

[754] COLO. REV. STAT. ANN. § 148-2-2 (1963).

[755] Cline v. Whitten, 150 Colo. 179, 185, 372 P.2d 145, 148 (1962); Coryell v. Robinson, 118 Colo. 225, 234, 194 P.2d 342, 346 (1948). When such waters are being put to a beneficial use for domestic purposes or are being used for watering stock, appropriation does not require that such waters actually be diverted. Genoa v. Westfall, 141 Colo. 533, 546-47, 349 P.2d 370, 378 (1960); Thomas v. Guiraud, 6 Colo. 530, 533 (1883).

[756] Karl F. Hehl Eng'r Co. v. Hubbell, 132 Colo. 96, 100, 285 P.2d 593, 595 (1955); Nevius v. Smith, 86 Colo. 178, 180, 279 P. 44 (1928).

[757] COLO. REV. STAT. ANN. § 148-2-5 (1963).

An owner of land on which *nontributary* spring waters arise has a prior right to use as much of the spring water as he needs.[758] When nontributary spring waters are *not* capable of being used on the land upon which they arise, a special statutory right of appropriation applies by which other appropriators may acquire the use of such waters,[759] subject always to the owner's prior right. When there are two or more appropriators in addition to the landowner upon whose land the nontributary spring waters first arise, "the determinations shall fix and decree the rights of appropriators from such springs among themselves."[760]

III. WASTE, SEEPAGE, AND RETURN WATERS

A. *Waste Waters*

Waste waters have been defined as "those waters which, after having been diverted from sources of supply for use, have escaped from conduits or structures in course of distribution or from irrigated lands after application to the soil."[761] Several cases have used the term "waste water" to refer to water which has been discharged from the terminus of a ditch after the ditch company had satisfied all of its wants and needs[762] or which has been discharged from irrigated lands.[763] In all of these cases the waters involved appeared to have been surface waters,[764] and this suggests a possible distinction between waste waters and seepage waters.[765]

Most of the waste water cases in Colorado have determined the relative rights between the appropriator of the water and the user who has utilized the excess, waste water which has flowed or percolated to his land from the land or structures of the appropriator. Although the first case to consider this problem[766] upheld an injunction against the appropriator, restraining him from interfering *in any manner* with

---

[758] Cline v. Whitten, 144 Colo. 126, 128, 355 P.2d 306, 308 (1960); Lomas v. Webster, 109 Colo. 107, 110, 122 P.2d 248, 250 (1942); Haver v. Matonock, 79 Colo. 194, 198, 244 P. 914, 915 (1926); COLO. REV. STAT. ANN. § 148-2-2 (1963).

[759] COLO. REV. STAT. ANN. § 148-2-3 (Supp. 1969).

[760] *Id.*

[761] J. SAX, *supra* note 1, at 213, *quoting* W. HUTCHINS, SELECTED PROBLEMS IN THE LAW OF WATER RIGHTS IN THE WEST 23 (1942).

[762] *See* Green Valley Ditch Co. v. Schneider, 50 Colo. 606, 115 P. 705 (1911); Mabee v. Platte Land Co., 17 Colo. App. 476, 68 P. 1058 (1902). In Water Supply & Storage Co. v. Larimer & Weld Res. Co., 25 Colo. 87, 53 P. 386 (1898), the court referred to waters which wasted into Dry Creek from Dry Creek ditch without any further explanation. *Id.* at 94, 53 P. at 388.

[763] *See* Tongue Creek Orchard Co. v. Orchard, 131 Colo. 177, 280 P.2d 426 (1955); Burkart v. Meiberg, 37 Colo. 187, 86 P. 98 (1906).

[764] *See* Tongue Creek Orchard Co. v. Orchard, 131 Colo. 177, 280 P.2d 426 (1955); Green Valley Ditch Co. v. Schneider, 50 Colo. 606, 115 P. 705 (1911); Burkart v. Meiberg, 37 Colo. 187, 86 P. 98 (1906); Water Supply & Stor. Co. v. Larimer & Weld Res. Co., 25 Colo. 87, 53 P. 386 (1898).

[765] Seepage waters are discussed in PART TWO, § III(C) *infra*.

[766] Mabee v. Platte Land Co., 17 Colo. App. 476, 68 P. 1058 (1902).

the flow of the waste or surplus water *after* it was discharged from the main ditch,[767] later cases have established that the appropriator may divert such water before it leaves his own property and may apply it to beneficial use or use the water to supply his own "wants and needs."[768]

There is no obligation on the part of the appropriator to maintain conditions upon his property or of his use in order to keep up the discharge of waste water for the benefit of mere users thereof (as opposed to other appropriators from the stream) as long as he acts in good faith.[769] Nor does it appear that a user of waste water derives a right to continuance of the waste flow because of his reliance thereon.[770] The rights of the appropriator are extensive enough to allow him to sell his water right and change his point of diversion, even if this change works to the detriment of those who have used the waste water in the past.[771] However, if the appropriator does not act in good faith and willfully discharges water as waste elsewhere in order to prevent previous users of waste from again using such waters, he may be enjoined from doing so.[772]

Once waste waters have left the land of the initial appropriator and have reached the stream to which it is tributary, it is clear that they

---

[767] *Id.* at 479, 68 P. at 1058-59.

[768] *Id.* The court reached the result by defining waste waters as "that which flowed from the ditch after the ditch had supplied all of the wants of those with whom it was under contract to carry to the extent of their contracts, that alone which flowed from the ditch after the ditch company had supplied its own *wants* and necessities, whether under contract or otherwise . . . ." *Id.* at 479, 68 P. at 1059. In Burkart v. Meiberg, 37 Colo. 187, 86 P. 98 (1908), the court reached the result by defining waste water as follows:

> Just what constitutes waste water in every instance, we do not decide, but it is unquestionably true that, so far as concerns the right to make a valid appropriation of it, this water is not waste water so long as it remains upon the lands of the defendants, and does not, in any event, become such until it has escaped and reached the lands of others . . . .

Id. at 189, 86 P. at 99.

[769] Tongue Creek Orchard Co. v. Orchard, 131 Colo. 177, 181, 280 P.2d 426, 428 (1955); Green Valley Ditch Co. v. Schneider, 50 Colo. 606, 609-10, 115 P. 705, 706 (1911).

[770] Tongue Creek Orchard Co. v. Orchard, 131 Colo. 177, 182, 280 P.2d 426, 428 (1955); Burkart v. Meiberg, 37 Colo. 187, 189, 86 P. 98, 99 (1906).

[771] *See* Tongue Creek Orchard Co. v. Orchard, 131 Colo. 177, 280 P.2d 426 (1955). Some question as to this principle arises from the holding in Pulaski Irrigating Ditch Co. v. Trinidad, 70 Colo. 565, 203 P. 681 (1922), that the initial appropriator may not sell his water right and change the point of diversion. The court said: "It is also settled law that an appropriator is limited in his use of water to his actual needs. He must not waste it, and if there is a surplus remaining after use, it must be returned to the stream from whence it came." *Id.* at 568, 203 P. at 682. Also, in Burkart v. Meiberg, 37 Colo. 187, 86 P. 98 (1906), the court said:

> If the defendants have no present or immediate need of the full quantity of water which they may divert and use, they cannot waste it, but it is their duty to allow such portion as they have no immediate need for to remain in the natural stream, or, if diverted, to return such surplus again into the same stream, where, unless they then intend to recapture it, it becomes subject to diversion by the various ditches, in accordance with their numerical priorities. — La Jara Creamery, etc., Co. v. Hansen, 35 Colo. 105, 83 P. 644 (1905).

Id. at 190, 86 P. at 99.

[772] Green Valley Ditch Co. v. Schneider, 50 Colo. 606, 610, 115 P. 705, 706 (1911).

are governed by the relative priorities along that stream.[773] Although no case has so held directly, it is probable that stream priorities would govern waste waters after they leave the property of the initial appropriator and before they reach the streambed. The court in *Burkhart v. Meiberg*[774] said in dictum:

> After defendants' appropriation has done duty to their own land, they cannot, even by grant, confer upon plaintiff the right to use it, or any of it, as against the superior claims of other appropriations from the same stream. By mere acquiescence on their part, to plaintiff's use, after waste water has passed from their lands, they have not estopped themselves thereafter to intercept and make beneficial use of it before it escapes from their control. And if such further use may be restrained by another appropriator from the same source of supply, plaintiff cannot assert any such equity.[775]

The implication is that tributary waste water may be used once it has left the lands of the appropriator but that any such use would be subject to any *prior* appropriation from the stream to which such water is tributary.

B. *Seepage Waters*

Seepage water is water which has been lost prior to application through leakage from manmade structures, such as canals or reservoirs, or water which has been applied but not consumptively used.[776]

1. Tributary Seepage Waters

The Colorado law regarding tributary seepage water was first clearly enunciated in *Comstock v. Ramsay*[777] in which the court held that water escaping underground and becoming percolating water which would naturally reach a stream was part of that stream.[778] Such seepage, sometimes referred to as percolating water, belongs to the people of

---

[773] Water Supply & Stor. Co. v. Larimer & Weld Res. Co., 25 Colo. 87, 94, 53 P. 386, 388 (1898).

[774] 37 Colo. 187, 86 P. 98 (1906).

[775] *Id.* at 190-91, 86 P. at 99.

[776] *See* Coryell v. Robinson, 118 Colo. 225, 194 P.2d 342 (1948); Faden v. Hubbell, 93 Colo. 358, 28 P.2d 247 (1933); Comstock v. Ramsay, 55 Colo. 244, 133 P. 1107 (1913). Percolating water has been defined as "those underground bodies of water which are not flowing in well defined channels, but are diffused subterranean waters moving towards the lowest point and which, if not intercepted, will ultimately contribute to running streams." McHendrie, *The Law of Underground Water*, 13 ROCKY MTN. L. REV. 1, 3 (1940). This definition could include, among other things, seepage water.

[777] 55 Colo. 244, 133 P. 1107 (1913).

[778] *Id.* at 255-56, 133 P. at 1111. The court said: "We take judicial notice of the fact that practically every decree . . . is dependent for its supply . . . upon return, waste and seepage waters. This is the very thing which makes an enlarged use of the waters of our streams . . . possible." *Id.* at 254, 133 P. at 1110; *accord,* Coryell v. Robinson, 118 Colo. 225, 234, 194 P.2d 342, 346 (1948); Dalpez v. Nix, 96 Colo. 540, 547, 45 P.2d 176, 179 (1935); Faden v. Hubbell, 93 Colo. 358, 369, 28 P.2d 247, 251 (1933); Nevius v. Smith, 86 Colo. 178, 181-82, 279 P. 44, 45 (1929); Fort Morgan Res. & Irr. Co. v. McCune, 71 Colo. 256, 258-59, 206 P. 393, 394 (1922); Rio Grande Res. & Ditch Co. v. Wagon Gap Imp. Co., 68 Colo. 437, 442, 191 P. 129, 130-31 (1920); Trowell Land & Irr. Co. v. Bijou Irr. Dist., 65 Colo. 202, 214, 176 P. 292, 296 (1918); Durkee Ditch Co. v. Means, 63 Colo. 6, 8, 164 P. 503, 504 (1917).

the state by force of the constitution[779] and is thereby subject to the laws of appropriation, whether or not it has actually reached the stream.[780] It is also settled that water which escapes as seepage from a reservoir and becomes part of a natural stream or would become part of a natural stream if it is allowed to continue its natural flow is not subject to recapture by anyone if such seepage is necessary to fulfill the appropriations made on such stream.[781]

2. Nontributary Seepage Waters[782]

Seepage waters which would never reach a stream are subject to independent appropriation; that is, the person upon whose land the nontributary water first arises has a prior right to it if he can put it to a beneficial use.[783] He may lose such rights, however, by acquiescence in an adverse use thereof by another continued uninterruptedly for the statutory period.[784]

3. Damage Liability for Seepage Waters

Colorado statutes make the owners of reservoirs liable for all damages arising from seepage or escaped water.[785] However, such liability is not absolute; if an act of God is the sole cause of the damage, the reservoir owner will have a viable defense.[786] Further, in order to mitigate the amount of damages resulting from seepage or escaped waters, the reservoir owner may present evidence concerning the feasibility of drainage of the lands which have been damaged.[787]

If damage results from the seepage, drainage, or waste of waters appropriated for irrigation purposes, the plaintiff has a remedy available if he proves that the other party breached the duty imposed by

---

[779] "[S]ince it [seepage water] belongs to the river it belongs to the people of the state by article 16, section 5 of her Constitution." Nevius v. Smith, 86 Colo. 178, 182, 279 P. 44, 45 (1929).

[780] Comstock v. Ramsay, 55 Colo. 244, 255-56, 133 P. 1107, 1111 (1913).

[781] Fort Morgan Res. & Irr. Co. v. McCune, 71 Colo. 256, 261, 206 P. 393, 395 (1922); *see* Comstock v. Ramsay, 55 Colo. 244, 133 P. 1107 (1913).

[782] For further discussion of nontributary seepage, waste and drainage, see PART TWO, § VI *infra*.

[783] *See, e.g.*, Lomas v. Webster, 109 Colo. 107, 110, 122 P.2d 248, 250 (1942); COLO. REV. STAT. ANN. § 148-2-2 (1963).

[784] Lomas v. Webster, 109 Colo. 107, 111, 122 P.2d 248, 250-51 (1942); *see also* PART ONE, § V(E)(2) *infra*.

[785] COLO. REV. STAT. ANN. §§ 148-5-4 (1963); Garnet Ditch & Res. Co. v. Sampson, 48 Colo. 285, 288-89, 110 P. 79, 80-81 (1920).

[786] Ryan Gulch Res. Co. v. Swartz, 83 Colo. 225, 229, 263 P. 728, 729-30 (1928); Ryan Gulch Res. Co. v. Swartz, 77 Colo. 60, 68, 234 P. 1059, 1062 (1925), wherein the court held that if an act of God was the sole proximate cause of the damage, no liability would attach; but if negligence in the construction and maintenance of a reservoir contributed to or cooperated with the act of God, the reservoir owner cannot escape liability. *See* Moore v. Standard Paint & Glass Co., 145 Colo. 151, 157, 358 P.2d 33, 36-37 (1960); Barlow v. North Sterling Irr. Dist., 85 Colo. 488, 277 P. 469 (1929); Maggard v. North Sterling Irr. Dist., 85 Colo. 491, 492, 277 P. 470 (1929).

[787] Bijou Irr. Dist. v. Cateran Land & Livestock Co., 73 Colo. 93, 96, 213 P. 999, 1001 (1923); For discussion of the measure of damages, see Mustang Res., Canal, and Land Co. v. Hissman, 49 Colo. 308, 112 P. 800 (1910).

statute.[788] The one claiming injury must prove negligence in irrigation or in construction and maintenance of irrigation ditches.[789]

C. *Return Waters*

Return waters include waste and seepage waters which ultimately flow into a natural stream and form a substantial and material source of its supply.[790] Such waters frequently result from appropriations for irrigation purposes where all the water appropriated is not consumptively used.[791]

As tributary waters, they are not subject to independent appropriation or recapture by the original appropriator; rather, they belong to the appropriators on the stream in the order of their priorities.[792]

Most of the cases dealing with return waters or return flow have involved applications to change diversion points.[793] Due to appropriators having vested rights in the continuance of conditions on the stream as they existed at the time they made their appropriations,[794] the amount of return flow, both before and after a proposed change, becomes a material factor in determining whether such applications should be approved.

As was suggested in *Vogel v. Minnesota Canal & Reservoir Co.*,[795] return flow has also been a significant consideration in regard to the maximum utilization of water:

> It does not follow that junior appropriators, up the stream, must at all times and under all conditions, let sufficient water remain therein and flow past their headgates to supply that priority. The senior appropriator may lawfully demand that he have at his headgate sufficient water to supply his present needs, and if that result be obtained, through return waters after first use by junior appropriators up the stream, the senior appropriator has no just ground of complaint.[796]

IV. DIFFUSED SURFACE WATERS

Diffused surface waters are generally described as

> [t]he uncollected flow from falling rain or melting snow, or . . . waters which rise in the earth from springs and diffuse over the

[788] COLO. REV. STAT. ANN. § 148-7-7 (1963), providing that the owners of ditches have a statutory duty to carefully maintain and keep the embankments of ditches in good repair.

[789] North Sterling Irr. Ditch Co. v. Dickman, 59 Colo. 169, 172-73, 149 P. 97, 98-99 (1915). *See also* Bridgeford v. Colo. Fuel & Iron Co., 63 Colo. 372, 167 P. 963 (1917); Greeley Irr. Co. v. House, 14 Colo. 549, 24 P. 329 (1890); Catlin Land & Canal Co. v. Best, 2 Colo. App. 481, 31 P. 391 (1892).

[790] *See* Comstock v. Ramsey, 55 Colo. 244, 133 P. 1107 (1913).

[791] W. HUTCHINS, SELECTED PROBLEMS IN THE LAW OF WATER RIGHTS IN THE WEST 8 (1942).

[792] Fort Morgan Res. & Irr. Co. v. McCune, 71 Colo. 256, 261, 206 P. 393, 395 (1922).

[793] *See* PART ONE, §IV(A) *supra.*

[794] Denver v. Colorado Land & Livestock Co., 86 Colo. 191, 193, 279 P. 46, 47 (1929); *see* Farmers Highline Canal & Res. Co. v. Golden, 129 Colo. 575, 272 P.2d 629 (1954); Vogel v. Minnesota Canal & Res. Co., 47 Colo. 534, 107 P. 1108 (1910); Handy Ditch Co. v. Louden Irr. Canal Co., 27 Colo. 515, 62 P. 847 (1900).

[795] 47 Colo. 534, 107 P. 1108 (1910).

[796] *Id.* at 540, 107 P. at 1111.

> surface of the earth. At this stage the flow follows no defined course or channel and forms no more definite body of water than a mere bog or marsh. It continues to retain its character as diffused surface water until it reaches some well-defined channel and becomes part of a watercourse.[797]

There is only one case in Colorado dealing with the right to use rainwater.[798] Therein the water was located on the public domain,[799] and the court held that such water was subject to appropriation under section 2269 of MILLS' ANN. STAT.[800]

With regard to rainwater initially located on private land, such waters *would presumably* be appropriable[801] under the doctrine of appropriation unless they were found to be nontributary to a natural stream.[802] To be tributary the only requirement is that the water would ultimately reach and become part of a natural stream;[803] it is not necessary that the waters flow continuously.[804] If the water were nontributary, it would seemingly be subject to the prior right of the landowner upon whose land it was initially located.[805]

The main problems, however, arising in connection with melting snow and rainwater do not involve rights of use: rather, they involve rights of drainage.[806] Such problems are also found when dealing with seepage, waste water, and occasionally spring water.

V. DRAINAGE

The term "drainage," as applied to the land, generally connotes the removal of water from the land by some artificial means, such as an artificial channel, trench, ditch, drain, or levee.[807]

---

797 S.V. CIRIACY-WANTRUP, W.A. HUTCHINS, C.O. MARTZ, S. SATO & A.W. STONE, WATERS AND WATER RIGHTS § 52.1, at 300-01 (1967) [hereinafter cited as 1 HUTCHINS].

798 Denver, Tex. & Ft. W. R.R. v. Dotson, 20 Colo. 304, 38 P. 322 (1894).

799 *Id.* at 305, 38 P. at 323.

800 *Id.* at 306, 38 P. at 323. The court stated that "the appropriation was a valid one under section 2269 of Mills' An. Stats. [sic]." This section provided:

> That all ditches now constructed or hereafter to be constructed for the purpose of utilizing the waste, seepage or spring waters of the State, shall be governed by the same laws relating to priority of right as those ditches constructed for the purpose of utilizing the water of running streams; *Provided*, that the person upon whose lands the seepage or spring water first arise, shall have the prior right to such waters if capable of being used upon his lands.

By declaring that the appropriation of rainwater (diffused surface water) was valid under this section, the court appeared to classify diffused surface water with seepage and spring water. In the years between 1889 and 1970, the court has interpreted this statutory provision (presently COLO. REV. STAT. ANN. § 148-2-2 (1963)) to apply only to nontributary seepage and spring water. *See, e.g.*, Lomas v. Webster, 109 Colo. 107, 122 P.2d 248 (1942); Nevius v. Smith, 86 Colo. 178, 279 P. 44 (1928).

801 COLO. REV. STAT. ANN. § 148-2-1 (Supp. 1969).

802 *Id.* § 148-2-2 (1963).

803 *See* Lomas v. Webster, 109 Colo. 107, 122 P.2d 248 (1942); Nevius v. Smith, 86 Colo. 178, 279 P. 44 (1928).

804 *In re* German Ditch & Res. Co., 56 Colo. 252, 270, 139 P. 2, 9 (1913).

805 *See* note 800 *supra*. *Compare* COLO. REV. STAT. ANN. § 148-2-3 (Supp. 1969) *with* COLO. REV. STAT. ANN. § 148-2-3 (1963).

806 1 HUTCHINS, *supra* note 797, at 303.

807 *See* 28 C.J.S. *Drains* § 1 (1941).

A. *Appropriation of Drainage Waters*

Drainage waters, like all other waters, are either tributary or nontributary. If they are nontributary, they may be treated similarly to nontributary spring water. If tributary, they are subject to the doctrine of prior appropriation. The only Colorado case which deals with tributary drainage water, however, raises questions about the integrity of this assumption which will be briefly considered here.[808]

Olney Springs Drainage District v. Auckland[809] involved an action by plaintiff Auckland against the drainage district and others to enjoin the defendants from diverting the water collected in the drainage system of the district away from its outlet above plaintiff's lands. Defendants' drainage ditch emptied into a swale or draw on plaintiff's land and plaintiff had diverted water from the draw for beneficial use long before the drainage district was organized. However, when the drainage ditch was built and broke in several places casting excessive amounts of water onto plaintiff's land, plaintiff entered upon defendants' right-of-way and diverted water to beneficial use from the drainage ditch itself. In upholding the trial court's finding that this drainage water was subject to appropriation in the same manner as other waters of the state, the court mentioned the fact that counsel for defendants themselves contended that the swale or draw is a natural stream. "Plaintiff's right to the use of the water may be justified under the general doctrine of appropriations from *natural streams,* if on no other ground, which we need not decide."[810] The question which this rationale raises is whether drainage waters in *artificial channels* which do not follow the course of a natural stream would be subject to the doctrine of appropriation from *natural* streams.

A second, related question is raised by the court's disposition of defendants' objection that the trial court interfered with the discretionary powers of the directors of the drainage district to change the course of its outlet ditch. The court said that where the rights of others are involved, it will correct an abuse committed under the guise of discretionary powers. The court found an abuse in that the proposed change would injure rather than benefit the drainage district.[811] By implicitly recognizing the validity of the discretionary powers argument, the court left open the question of whether or not the argument would prevail over a valid appropriation of drainage waters in the absence of an abuse of discretion.

---

[808] Olney Springs Drainage Dist. v. Auckland, 83 Colo. 510, 267 P. 605 (1928).

[809] 83 Colo. 510, 267 P. 605 (1928).

[810] *Id.* at 515, 267 P. at 607 (emphasis added).

[811] *Id.* at 516, 267 P. at 608.

B. *Drainage Easements*

Historically, there were two alternative doctrines for governing the relative rights of drainage between landowners. According to the first alternative, the common law rule or "common enemy" doctrine,

> the proprietor of the lower tenement or estate may at his option lawfully obstruct or hinder the flow of such water thereon, and in so doing may turn it back or away from his own lands, and onto and over the lands of other proprietors without liability by reason of such obstruction or diversion.[812]

According to the second alternative doctrine, the civil law rule,

> the owner of the upper or dominant estate has a legal and natural easement or servitude in the lower or servient estate for the drainage of surface water, flowing in its natural course and manner; and such natural flow or passage of the waters cannot be interrupted or prevented by the servient owner to the detriment or injury of the estate of the dominant proprietor, unless the right to do so has been acquired by contract, grant, or prescription.[813]

The civil law rule was adopted in Colorado in the case of *Boulder v. Boulder & White Rock Ditch & Reservoir Co.*[814] but was modified to also require that waters drained over the servient lands by artificial means not be sent down in a manner or quantity which would do more harm than formerly. The court in that case said:

> In a recent case in this Court, *Johnson v. Kraeger,* 72 Colo. 547, 212 Pac. 820, . . . the modified civil law of surface waters was applied. The case does not explicitly so state, but the lower proprietor, the plaintiff in that action, was held *not* entitled to recover damages for the discharge of water upon her land from drains which had been constructed by the upper proprietor on his land, when the water came down upon the plaintiff's lands before the drains were laid and did not send it down [sic] in a manner or quantity to do more harm than formerly. This is a modification of the original civil law rule . . . . [W]e think it does, and should, prevail in this state . . . .[815]

In addition to the initial modification of the civil law rule, several cases decided subsequent to *Boulder Whiterock* have articulated concepts derived from the law of negligence in drainage cases. For instance, in *Olney Springs Drainage District v. Auckland*[816] the court said:

> A natural water course may be used as a conduit or outlet for the drainage of lands, at least where the augmented flow will not tax the stream beyond its capacity and cause the flooding of adjacent lands. 19 C.J. p. 685, § 157. But, as said in Farnham on Water and Water Rights, p. 2555, "There is no right on the part of one land owner to drain the water from his land over that of his neighbor without the

---

[812] 56 AM. JUR. *Waters* § 69 (1947) (footnotes omitted).

[813] *Id.* § 68 (footnotes omitted).

[814] 73 Colo. 426, 216 P. 553 (1923).

[815] *Id.* at 430, 216 P. at 555: In *Johnson v. Kraeger,* the action was predicated on trespass. The court said that the claim was based on a sound principle, but that if the drains do not send water down in a manner or quantity to do more harm than previously, it could see no equity in plaintiff's position. *Id.*

[816] 83 Colo. 510, 267 P. 605 (1928).

> latter's consent." And further, at page 2697 of the same work: "One who attempts to gather water into a drain, or to maintain a drain for his own convenience, is bound to take due care that no injury is done by it." We agree with these statements as applied to the case at bar.[817]

Although the first quoted statement of *Farnham* appears to be inconsistent with the civil law rule, the due care principle was cited and applied more recently in the case of *Ambrosio v. Perl-Mack Co.*[818] Plaintiffs, in that case, contended that defendants had burdened the water course with more water in a concentrated mass at an accelerated flow than would naturally reach the said draw and that they sustained damages thereby. Plaintiffs did not allege or prove negligence. The Supreme Court cited "the doctrine of the civil law" and *Boulder v. Boulder & Whiterock Ditch & Reservoir Co.*,[819] in affirming the judgment in favor of defendant.

The court found that defendants not only took due care but were free from negligence, did not materially increase the flow of water into the Kalcevic water course, and did not seriously tax the capacity of the water course.[820] The court then concluded that "the defendants acted lawfully under the *modified civil law doctrine* of dominant and servient estates as approved by this Court in *City of Boulder v. Ditch Co.*"[821]

It is not clear whether this development represents a further modification of the "modified civil law rule" or whether it represents concepts of negligence independently applied; neither is it clear when the due care concept may be applied and when it may not. The two logical possibilities appear to be as follows:

1. The *Olney* and *Ambrosio* cases represent concepts of negligence independently applied; that is, the servient estate must carry the burden of the waters from the dominant estate, but the servient landowner may obtain relief from the dominant proprietor *either* (1) if the latter sends water down in a manner or quantity to do more harm than formerly, *or* (2) if the latter drains his waters over the servient estate negligently. However, this interpretation would seem to render nugatory the negligence or due care requirement, because the latter appears to be inclusive of the former requirement. That is, if a servient landowner were to sustain a claim of negligent drainage against a dominant landowner, he would have to show that the negligent drainage caused more harm than formerly occurred (or would have occurred under natural conditions). If such a

---

[817] *Id.* at 515-16, 267 P. at 607-08.

[818] 143 Colo. 49, 351 P.2d 803 (1960).

[819] 73 Colo. 426, 216 P. 553 (1923).

[820] Ambrosio v. Perl-Mack Co., 143 Colo. 49, 54-55, 351 P.2d 803, 806 (1960).

[821] *Id.* at 55, 351 P.2d at 806.

plaintiff could show that the manner or quantity of drainage caused more harm than formerly, he could sustain a claim under the first requirement, irrespective of any showings of negligence. The first requirement places a type of strict liability on the dominant landowner whose drainage causes the requisite amount of harm.

2. The second possible relationship between the due care concept and the "modified civil law rule" of drainage is that the due care concept represents a further modification of the "modified civil law rule" and is included therein. Under such an interpretation, a plaintiff-servient landowner would have to show *both* that the drainage was causing more harm than formerly *and* that it was done without the exercise of due care. Such an interpretation is suggested by Hutchins, *et al.*[822] based on the law of other jurisdictions:

> The civil-law rule recognizes a servitude of natural drainage. Therefore the landowner has a right of action when another party interferes with natural conditions and causes water to be discharged upon his land in a greater quantity or in different manner than would occur under natural conditions. Nevertheless, it has been held that the owner of lands may drain them by ditches even if the draining causes the water to flow more rapidly and in greater volume upon the land of an adjoining owner, provided he acts with a prudent regard for the welfare of the adjoining owner, but that he may not turn water upon such adjoining lands which would not otherwise have flowed there.[823]

This second interpretation appears to be the more reasonable of the two logical possibilities mentioned.

The Colorado cases, however, do not clearly support the second interpretation. In the recent case of *Hankins v. Borland,*[824] for instance, the Supreme Court of Colorado sustained the injunctive relief granted by the trial court to the servient landowner against the dominant *only* upon the finding "that the combined water from Hankins and other defendants was sent down in a manner and quantity to do more harm than it formerly had done or in amounts in excess of natural amounts . . . ."[825]

Furthermore, the court's statement of the "modified civil law rule" did not include any requirement of due care on the part of the dominant landowner. However, it can be argued against this interpretation that this case was an action for injunctive relief only and not damages and that the trial court had also noted in the same case that the defendant-

---

[822] 1 HUTCHINS, *supra* note 797, at 306-08.

[823] *Id.* at 305.

[824] 163 Colo. 575, 431 P.2d 1007 (1967).

[825] *Id.* at 580-81, 431 P.2d at 1010.

dominant landowners "had the duty to repair the drain and should be enjoined from further use of the drain unless and until it is properly repaired or could be operated without injury to plaintiff."[826]

In another case,[827] the court denied relief to a plaintiff in a damage action against a municipality on two grounds. The first ground was that the "modified civil law doctrine" subjects the servient owner to the burden of drainage of surface waters.[828] The city had channeled water from a higher area to a place continguous to and above the land of the plaintiffs so as to overflow on the land of plaintiff, which was the lowest point in a natural drainage area and was below the grade of the street. There was no inquiry as to whether the city's drainage system caused more damage to the adjacent land than would have occurred naturally, and there was no inquiry into the care exercised by the city in the exercise of its drainage rights. The court merely said:

> Even assuming that the city was the responsible agent in the acceleration of the surface drainage in the instant case, and the record is far from satisfactory on this point, yet the plaintiffs do not bring themselves within the scope of the constitutional provision upon which they rely. They are within the doctrine that subjects the servient owner of land to a drainage easement in favor of those who are fortunate enough to own adjacent land on the higher level.[829]

The second ground on which the court relied was that the damage was also caused by the lack of effective drainage *from* plaintiffs' lands; and, according to municipal drainage law, the city has no duty to drain or otherwise protect land which is below grade or below the general level of the street.[830]

Despite the indications from the court that the due care concept is *not* part and parcel of the "modified civil law rule", the cases are not entirely clear, and the authorities from other jurisdictions, as well as sound reasoning, support the other view.[831]

C. *Municipal Drainage*

A similar and related, yet distinct, set of developments has taken place in the law of drainage involving the rights and liabilities of a municipality with respect to the drainage of surface waters. As early as 1897, the case of *Aicher v. Denver*[832] set forth the two central

---

[826] *Id.* at 579, 431 P.2d at 1009.

[827] Englewood v. Linkenheil, 146 Colo. 493, 362 P.2d 186 (1961).

[828] *Id.* at 499, 362 P.2d at 189.

[829] *Id.* at 502, 362 P.2d at 190-91.

[830] *Id.* at 500, 362 P.2d at 189-90.

[831] For other cases dealing with the modified civil law rule, *see* Hankins v. Borland, 163 Colo. 575, 431 P.2d 1007 (1967); Johnson v. Johnson, 89 Colo. 273, 1 P.2d 581 (1931); Debevtz v. New Brantner Ext. Ditch Co., 78 Colo. 396, 241 P. 1111 (1925).

[832] 10 Colo. App. 413, 52 P. 86 (1897).

doctrines pertaining to municipal drainage which, with some modification, continue to exist today. These two doctrines concern (1) the duty (or lack of duty) of a municipality to provide drainage and disposition of surface waters for the protection of private property which is below grade or below the general level of the street and (2) the duty of the municipality to exercise due care in the construction and maintenance of those drainage facilities which it chooses to provide.[833] In *Aicher* the Court of Appeals said:

> [A] city is not bound to protect from surface waters those who may be so unfortunate as to own property which is below the general level of the street. If a person sees fit to erect improvements on land which is below the grade which the city authorities may establish, a *failure* on their part to provide for the drainage and disposition of surface waters, or the adoption of an *imperfect plan* for this purpose, or of *insufficient drainways* to carry off waters in case of excessive storms, as a rule impose on the city no liability. The party is bound to protect himself . . . . This whole subject is very exhaustively discussed in 2 Dillon's Mun. Corp., §§ 1038, 1039, *et. seq.* . . . . [Plaintiff] has failed to show whether the track was on the grade fixed by the city, *and he has likewise omitted to prove that this drainway was built by the city and imperfectly constructed.*[834]

The remainder of this subsection will discuss the developments which have taken place with respect to the above-mentioned doctrines since the decision in *Aicher.*

1. The No-Duty-to-Drain Rule

Several rationales have been suggested to explain why a city is under no duty to drain or protect private property which is below grade. Perhaps the most frequently cited rationale is the governmental-proprietary distinction of municipal law. For instance, in the case of *Denver v. Mason*[835] the Supreme Court of Colorado said:

> By the great weight of authority, it is held that a municipality is under no legal duty to construct drainage sewers; that no liability attaches because of the adoption of a defective plan of drainage, because it is thereby exercising a governmental function; but that in the construction and maintenance of sewers, a municipality acts in its ministerial capacity and is liable for negligence in connection therewith.[836]

A second justification which has been offered to explain the

[833] *Id.*

[834] *Id.* at 418, 52 P. at 87-88 (emphasis added).

[835] 88 Colo. 294, 295 P. 788 (1931).

[836] *Id.* at 295, 295 P. at 789. The *Mason* case went on to hold that a city could be found liable for failure to exercise reasonable care to remedy a known defective sewer system. However, the court did not explicitly state as a ground for its holding that the duty fell within the general orbit of the city's proprietary function. For citations to other cases dealing with the governmental-proprietary distinction, see *Cerise v. Fruitvale District,* 153 Colo. 31, 384 P.2d 462 (1963) (holding that the operation and maintenance of the sewer system involved in the case are activities carried on by the sanitation district in its proprietary capacity).

no-duty-to-drain rule derives its reasoning from the common enemy doctrine (which, incidentally, does *not* obtain in Colorado):

> It would seem that the principle to be applied in the instant case is the one adopted in the cases involving change of street grades by a municipality. On that subject, it is stated in Dillon, Municipal Corporations (5th ed.), volume IV, page 3060: "But since surface-water is a common enemy, which the lot-owner may fight by raising his lot to grade, or in any other proper manner, and since the municipality has the undoubted right to bring its streets to grade, and has as much power to fight surface-water in its streets as the adjoining private owner, it is not ordinarily, if ever, impliedly liable for simply failing to provide culverts or gutters adequate to keep the surface-water off the adjoining lots, *below grade*, particularly if the injury is one which would not have occurred had the lots been filled so as to be on a level with the street."
>
> Colorado seems to have adopted that doctrine in *Aicher v. Denver, supra.*[837]

A third explanation of the no-duty-to-drain rule has *not* been articulated by the Colorado court but nevertheless offers some insight into the reason for the existence of the rule and the status of a municipality in the law of drainage generally:

> The civil-law rule has not been applied alike to public and private landowners. The California view has been that a private landowner has no right to obstruct the flow of surface water that naturally drains across his property from adjoining land, but that a governmental agency, in constructing public improvements such as streets and highways, may validly exercise the police power to obstruct the flow of surface waters not running in a natural channel without making compensation for the resulting damage.[838]

Reading these three rationales together, it appears that the no-duty-to-drain rule represents an exception to the modified civil law rule of drainage generally. That is, a municipality is not subject to the "natural easement" of the modified civil law rule to the extent that it wishes to erect public improvements such as a street or highway pursuant to an established grade. To this limited extent, the common enemy doctrine, rather than the civil law rule, applies to the municipality. There being no duty pursuant to the modified civil law rule to provide drainage *away* from property which is below grade, there cannot otherwise be imposed on the municipality a duty to drain pursuant to its general public functions, since such a decision falls within the orbit of the municipality's governmental function.

It is important here to note a distinction in the factual situations to which the no-duty-to-drain rule applies, because some of the recent Colorado cases fail to explicitly mention the distinction. Since the rule

---

[837] Malvernia Inv. Co. v. Trinidad, 123 Colo. 394, 399-400, 229 P.2d 945, 948 (1951) (emphasis by the court).

[838] 1 HUTCHINS, *supra* note 797, at 306.

states that there is no duty on the part of the municipality to provide drainage *away* from private property which is below grade, the rule is applicable in cases where such a landowner claims damages due to an obstruction or lack of drainage *below* his own property rather than damages due to activities on land above his own. Thus, in *Denver v. Stanley Aviation Corp.*,[839] water backed up from Denver's sewage pipe running under Stapleton airfield onto plaintiff's land situated *above* the sewage pipe on a natural water course in Aurora. The essence of plaintiff's claim was negligence, claiming that the City and County of Denver knew or should have known that its 63-inch pipe was inadequate and would cause damage to plaintiff's property and that the city should have installed a larger pipe. In the course of the opinion the court cited the civil law rule of drainage as follows:

> In 1953 [when plaintiff purchased his property] plaintiff's property was servient to the lands above it. It took this property fully aware of the impending and the inevitable damage that would occur on the lower levels of its property, and almost defiantly assumed the risk. In *Debevtz v. Ditch Co.*, 78 Colo. 396, 241 Pac. 1111, this court approved the following language of the trial court:
>
> "The plaintiff purchased his land in the lowest point next to the Platte River and his land is burdened with the easement of carrying the water which naturally flows from all of the land above it."
>
> The application of the above observation to the case at bar is obvious.[840]

It is submitted that the application of the (modified) civil law rule to the *Stanley Aviation* case is not obvious, particularly if the implication is that the City and County of Denver has any rights of natural easement over plaintiff's lands. If anything, plaintiff has a right of natural easement over Stapleton airfield, which is below plaintiff's property unless plaintiff's land is "below grade," and the no-duty-to-drain rule applies. The better interpretation of the court's language quoted above is that since plaintiff's land was servient to the lands above it (owned by the City of Aurora), and since plaintiff knew or should have known of the capacity of the drainage facilities below his land (owned and constructed by the City and County of Denver), plaintiff assumed the risk of any negligence on the part of Denver in not installing larger drainage facilities.

Similarly, in the case of *Englewood v. Linkenheil*,[841] the Colorado Supreme Court appeared to rely on both the modified civil law rule, as stated in *Boulder v. Boulder & White Rock Ditch & Reservoir Co.*,[842]

---

[839] 143 Colo. 182, 352 P.2d 291 (1960).

[840] *Id.* at 187, 352 P.2d at 294.

[841] 146 Colo. 493, 362 P.2d 186 (1961).

[842] 73 Colo. 426, 216 P. 553 (1923).

and the no-duty-to-drain rule of *Aicher v. Denver,*[843] without distinguishing between the two. However, in that case the city was responsible for channeling water from a higher area to a place contiguous (and above) the land of the plaintiffs so as to overflow on the land of the plaintiffs. The court also found that "the plaintiffs' servient location *plus lack of effective drainage* is responsible for the unfortunate situation."[844] Thus, both the modified civil law rule and the no-duty-to-drain rule were applicable in the case because the damage was caused by drainage activities, or lack thereof, both above *and* below plaintiffs' land.

2. Duty of Due Care in the Construction and Operation of Drainage Facilities

It is clearly established in Colorado that a municipality must exercise a duty of due care in the construction, operation, and maintenance of drainage facilities which it has chosen to construct, operate, and maintain.[845] The *Aicher* case, as noted above, also held that:

> [i]f a person sees fit to erect improvements on land which is below the grade which the city authorities may establish, a failure on their part to provide for the drainage and disposition of surface waters, or the adoption of an *imperfect plan* for this purpose, or of *insufficient drainways* to carry off waters in case of excessive storms, as a rule impose on the city *no* liability.[846]

However, the case of *Denver v. Stanley Aviation Corp.,*[847] seriously questions this portion of the *Aicher* doctrine. In the *Stanley Aviation* case, the essence of the plaintiff's charge was negligence:

> that the defendant in 1936 improved Stapleton Airfield and extended the improvements in 1948, thereby further obstructing the drainage course, resulting in damage to plaintiff's property from flood waters in July 1956; that the defendant knew, or should have known, in 1936 and in 1948, that its acts might cause such damage and should have installed a larger pipe.[848]

Although the court reversed the judgment and verdict in favor of the plaintiff, it did so on the ground that plaintiff assumed the risk of defendant's negligence and that in any event plaintiff failed to sustain the burden of showing negligence. In so doing the court implicitly recognized the legal integrity of plaintiff's claim. The *Stanley Aviation* case is potentially distinguishable from the *Aicher* case in that there was no explicit finding or reliance on the fact that the plaintiff's lands

---

[843] 10 Colo. App. 413, 52 P. 86 (1897).

[844] Englewood v. Linkenheil, 146 Colo. 493, 499, 362 P.2d 186, 189 (1961) (emphasis added).

[845] *See* Cerise v. Fruitvale Dist., 153 Colo. 31, 384 P.2d 462 (1963), and cases cited therein.

[846] Aicher v. Denver, 10 Colo. App. 413, 418, 52 P. 86, 87-88 (1897) (emphasis added).

[847] 143 Colo. 182, 352 P.2d 291 (1960).

[848] *Id.* at 185, 352 P.2d at 293.

were or were not "below grade." The court only mentions that plaintiff's lands were "situated in a depressed area."[849] Nevertheless, the case throws some question on the doctrine that a municipality is not liable for the adoption of an imperfect plan or insufficient drainways when a plaintiff's land is below the general level of the street.

D. *Drainage Districts*

The legislature of Colorado has provided for drainage districts upon petition to secure the artificial removal of water from such agricultural land which could be, but is not presently, cultivable or useful.[850] Irrigation districts likewise have the authority to undertake investigation to determine the feasibility and cost of drainage of an irrigation district.[851] In order to facilitate the establishment of drainage works, the board of directors of a district shall have the right of eminent domain to construct such works across any water course, street, avenue, highway, canal, or ditch.[852]

VI. LAKES AND PONDS

Unlike watercourses and streams which are flowing bodies of water, lakes and ponds[853] are practically without movement.[854] Further, lakes are definite bodies of standing water as distinguished from marshes, which are "areas of soft, low-lying, water-logged land which may or may not have water standing in place on the surface . . . ."[855] Lakes are also natural formations as opposed to reservoirs[856] which are man made.

---

[849] *Id.* at 184, 352 P.2d at 293.

[850] COLO. REV. STAT. ANN. ch. 47 (1963), *as amended,* COLO. REV. STAT. ANN. § 47-4-3 to -4 (Supp. 1965).

[851] *Id.* § 150-2-36 (1963).

[852] *Id.* § 150-2-13.

[853] A pond is a small lake. J. SAX, *supra* note 1, at 226.

[854] *Id.* Professor Sax offers the following definition for a lake:

> A lake may be defined as a natural body of water, fresh or salt, occupying a basin or hollow of the earth, of greater or less depth and area, and may or may not have a current or single direction of flow. Usually, however, they are bodies of standing water with no current, or an imperceptible one, with some portion of their bottoms below the bottom of their outlets. But the mere fact that there is a current from a higher to a lower level does not make that a river or water course which otherwise would be a lake; so, also, the fact that a river swells out into a broad, pond-like sheet, with a current, does not make that a lake which otherwise would be a river. Some lakes have no surface outlet at all, notably Great Salt Lake, a body of exceedingly salt water eighty miles in length and sixty miles in width.

Id.

[855] *Id.*

[856] *See generally* COLO. REV. STAT. ANN. §148-5-1 (1963).

Generally, the rights to the waters of lakes are determined in the same manner as the rights to other waters in the jurisdictions.[857] Given the presumption in Colorado that all water is tributary unless proven otherwise,[858] the law of prior appropriation should apply in most cases. In *The Denver, Texas & Fort Worth Railroad v. Dotson,*[859] for example, the court described the Can de Auga as a stationary body of water[860] and held that it was subject to appropriation.[861]

VII. DEVELOPED WATER

Developed water, also described as artificial[862] or salvaged[863] water, is that water which has been added to the supply of a natural stream and which never would have come into the stream had it not been for the efforts of the party producing it.[864] In *Ripley v. Park Center Land and Water Co.,*[865] for example, the Court held that water produced by draining various mines in the Cripple Creek mining district was developed water.[866] The court's finding was based on evidence showing that such water formed no part of the stream's natural flow and never would have reached the stream but for the efforts of the petitioner.[867] Likewise, in *Pike's Peak Golf Club, Inc. v. Kuiper,*[868] water obtained from draining a swamp was held to be salvaged or developed. The court noted that the water never was a part of any natural stream[869] and had been produced as a result of alleviating natural loss caused by transpiration in the sub-irrigation of native hay crops.[870]

A party who increases the supply of water in a stream by adding developed water is entitled to appropriate the amount which he has

---

857 *Supra* note 851, at 227.

858 *See, e.g.,* Safranek v. Limon, 123 Colo. 330, 228 P.2d 975 (1951).

859 20 Colo. 304, 38 P. 322 (1894).

860 *Id.* at 305, 38 P. at 323.

861 *Id.* at 306, 38 P. at 323.

862 Ripley v. Park Center Land and Water Co., 40 Colo. 129, 131, 90 P. 75, 76 (1907).

863 Pikes Peak Golf Club, Inc. v. Kuiper, 455 P.2d 882 (Colo. 1969).

864 *Id.;* Comrie v. Sweet, 75 Colo. 199, 201, 225 P. 214 (1924); Ripley v. Park Center Land and Water Co., 40 Colo. 129, 131, 90 P. 75 (1907).

865 40 Colo. 129, 90 P. 75 (1907).

866 *Id.* at 130-31, 90 P. at 75.

867 *Id.* at 131, 90 P. at 75.

868 455 P.2d 882 (Colo. 1969). For another discussion of this case, see Greer, *A Review of Recent Activity in Colorado Water Law,* 47 DENVER L.J. 181 (1970).

869 Pikes Peak Golf Club, Inc. v. Kuiper, 455 P.2d 882, 883 (Colo. 1969).

870 *Id.*

added regardless of prior appropriation rights on the stream.[871] But since all water is presumed to be tributary,[872] the party alleging that he appropriated developed water has the burden of proving by clear and satisfactory evidence that such water would not have reached the stream under natural flow conditions.[873]

PART THREE: PROPERTY CHARACTERISTICS

PART THREE considers the property characteristics of a water right, discussing in particular the consequences of its being a real property interest capable of separable ownership. It notes the formalities of conveyance which must be observed in transferring a water right and outlines the factors to be considered in determining whether a water right passes as an appurtenance in a conveyance of land.

I. PROPERTY RIGHT

Under the system of prior appropriation in Colorado, title to all surface and underground waters[874] flowing in natural streams[875] is vested in the public;[876] and while ownership is vested in the public, a perpetual right to its use exists in the people.[877] Upon application of appropriated water to a beneficial use, legal ownership and control are transferred to the appropriator,[878] and he acquires an alienable right in real property.[879] This right has been referred to as an ease-

---

[871] *See* Pikes Peak Golf Club, Inc. v. Kuiper, 455 P.2d 882 (Colo. 1969); Leadville Mine Development Co. v. Anderson, 91 Colo. 536, 17 P.2d 303 (1932); Comrie v. Sweet, 75 Colo. 199, 225 P. 214 (1924); Ironstone Ditch Co. v. Ashenfelter, 57 Colo. 31, 140 P. 177 (1914); Ripley v. Park Center Land and Water Co., 40 Colo. 129, 90 P. 75 (1907).

[872] *See, e.g.,* Safranek v. Limon, 123 Colo. 330, 228 P.2d 975 (1951).

[873] Comrie v. Sweet, 75 Colo. 199, 201, 225 P. 214 (1924).

[874] COLO. REV. STAT. ANN. § 148-21-3(4) (Supp. 1969). *But see* COLO. REV. STAT. ANN. § 148-18-3 (Supp. 1969).

[875] Whitten v. Coit, 153 Colo. 157, 385 P.2d 131 (1963): "Thus the constitutional provisions referred to [COLO. CONST. art. XVI, §§ 5, 6] make specific reference in recognizing the 'appropriation' doctrine only to the waters in 'natural streams.' " *Id.* at 164, 385 P.2d 135; Metro-Suburban Water Users Ass'n v. Colorado River Water Dist., 148 Colo. 173, 187, 365 P.2d 273, 281 (1961).

[876] COLO. CONST. art. XVI, § 5.

[877] La Plata River Co. v. Hinderlider, 93 Colo. 128, 25 P.2d 187 (1933); Fort Morgan Land & Canal Co. v. South Platte Ditch Co., 18 Colo. 1, 2, 30 P. 1032, 1038 (1892); Strickler v. Colorado Springs, 16 Colo. 61, 26 P. 313 (1891); Wheeler v. Northern Colo. Irr. Co., 10 Colo. 582, 587, 17 P. 487, 489 (1888); Monte Vista Canal Co. v. Centennial Irr. Co., 22 Colo. App. 364, 123 P. 831 (1912); Wyatt v. Larimer & Weld Irr. Co., 1 Colo. App. 480, 494, 29 P. 906, 910 (1892).

[878] Denver v. Sheriff, 105 Colo. 193, 199, 96 P.2d 836, 840 (1939); Wyatt v. Larimer & Weld Irr. Co., 1 Colo. App. 480, 494, 29 P. 906, 910 (1892).

[879] Denver v. Sheriff, 105 Colo. 193, 199, 96 P.2d 836, 840 (1939); La Plata River Co. v. Hinderlider, 93 Colo. 128, 132, 25 P.2d 187, 188 (1933); Fort Lyon Canal Co. v. Rocky Ford Co., 79 Colo. 511, 515, 246 P. 781, 782 (1926); Arnold v. Roup, 61 Colo. 316, 325, 157 P. 206, 210 (1916); Strickler v. Colorado Springs, 16 Colo. 61, 70, 26 P. 313, 316 (1891); Monte Vista Canal Co. v. Centennial Irr. Co., 22 Colo. App. 364, 368, 123 P. 831, 832 (1912); Wyatt v. Larimer & Weld Irr. Co., 1 Colo. App. 480, 500, 29 P. 906, 912 (1892).

ment,[880] a usufructuary estate,[881] a freehold[882] and an interest in real estate.[883] The nature of the appropriative right as real property is well described in *Monte Vista Co. v. Centennial Co.*,[884] in which it was stated:

> [E]ven after appropriation, this title, except perhaps as to the limited quantity [of water] that may be flowing in the consumer's ditch, remains in the general public, while the paramount right to its use continues in the appropriator. The right is usufructuary. There is no property [right] in the corpus of the water so long as flowing naturally. There is no property in the channel of the stream, and the water-right is distinct from the right to the ditch, canal or other structure in which the water is conveyed. The original right and title is secured by appropriation.[885]

II. APPURTENANCE TO THE LAND

In the early case of *Arnett v. Linhart*,[886] the court stated:

> Although a water right may be appurtenant to the land, it is the subject of property and may be transferred either with or without the land . . . . [W]hether a deed to land conveys the water right depends upon the intention of the grantor, which is to be gathered from the express terms of the deed; or, when it is silent as to the water right, from the presumption that arises from the circumstances, and whether such right is or is not incident to and necessary to the beneficial enjoyment of the land.[887]

---

[880] People *ex rel* Standart v. Farmers High Line Canal Co., 25 Colo. 202, 213, 54 P. 626, 630 (1898); *accord,* Farmers High Line Co. v. New Hamp. Co., 40 Colo. 467, 478, 92 P. 290, 293 (1907) (wherein a water right was referred to as an easement in the ditch); Gutheil Park Inv. Co. v. Montclair, 32 Colo. 420, 424, 76 P. 1050, 1051 (1904); *see* Grand Valley Irr. Co. v. Lesher, 28 Colo. 273, 65 P. 44 (1901); Wyatt v. Larimer and Weld Irr. Co., 18 Colo. 298, 33 P. 144 (1893).

[881] Coffin v. Left Hand Ditch Co., 6 Colo. 443, 446 (1882). The right to the use of the water is a "usufruct" and when one acquires this right, it is a "usufructuary right." This is the right to buy, use and sell the water, but this does not mean acquiring a type of sovereign dominion over that appropriated water. BLACK'S LAW DICTIONARY 1713 (4th ed. 1951). *But see,* United States v. Chandler-Dunbar Co., 229 U.S. 53, 73-74 (1912).

[882] La Plata Co. v. Hinderlider, 93 Colo. 128, 132, 25 P.2d 187, 188 (1933); Gutheil v. Montclair, 32 Colo. 420, 424, 76 P. 1050, 1051 (1904); Grand Valley Irr. Co. v. Lesher, 28 Colo. 273, 284, 65 P. 44, 47 (1901); Monte Vista Co. v. Centenial Co., 22 Colo. App. 364, 370, 123 P. 831, 833 (1912); *cf.* Knapp v. Colorado River Water Conserv. Dist., 131 Colo. 42, 279 P.2d 420 (1955):

> Although a water right has attained to the dignity of real property, it can not be said that it has attained to the dignity of an estate in fee or a freehold estate. It is still a possessory right, even after its consummation, and dependent on the continuous use of the water, and a failure to comply with this condition subjects the right to loss by abandonment . . . .

Id. at 53, 279 P.2d at 425, *quoting* 2 C. KINNEY, *supra* note 71, at 1978.

[883] West End Irr. Co. v. Garvey, 117 Colo. 109, 115, 184 P.2d 476, 479 (1947); Travelers Ins. Co. v. Childs, 25 Colo. 360, 363, 54 P. 1020, 1021 (1898); Talcott v. Mastin, 20 Colo. App. 488, 498, 79 P. 973, 977 (1905).

[884] 22 Colo. App. 364, 123 P. 831 (1912).

[885] *Id.* at 368-69, 123 P. at 832.

[886] 21 Colo. 188, 40 P. 355 (1895).

[887] *Id.* at 190, 40 P. at 355. For other cases holding that a water right is a distinct subject of grant and may be transferred with or without the land, see Bessemer I.D. Co. v. Woolley, 32 Colo. 437, 442, 76 P. 1053, 1054 (1904); Crippen v. Comstock, 17 Colo. App. 89, 92, 66 P. 1074, 1075 (1902); Gelwicks v. Todd, 24 Colo. 494, 497, 52 P. 788, 789 (1898); Oppenlander v. Left Hand Ditch Co., 18 Colo. 142, 149, 31 P. 854, 856 (1892); Combs v. Agricultural Ditch Co., 17 Colo. 146, 151, 28 P. 966, 968 (1892).

III. Conveyance of Title and Concomitant Formalities

A. *Written Conveyance as Real Estate*

A water right is real estate, and in a conveyance of water rights all the formalities of conveyance of real estate must be observed.[888] The Colorado statute states:

> In the conveyance of water rights in all cases except where the ownership of stock in ditch companies or other companies constitutes the ownership of a water right, the same formalities shall be observed and complied with as in the conveyance of real estate.[889]

When the ownership of stock in a ditch company constitutes the ownership of a water right, the shares of stock, as personal property,[890] are transferable as such in accordance with the by-laws of the company.[891] In addition to a transfer of stock certificates, a transfer of ownership upon the books of the corporation is necessary to convey title.[892] Until the book transfer is actually made, the transferee has no right to take the water.[893] These stock transfers may be subject to certain restrictions imposed by the corporation, provided that proper notice is given in the by-laws and stock certificates.[894]

Real property rights also exist in the ditches through which appropriated waters flow.[895] Hence, transfers of ditch rights are similarly subject to the limitations and restrictions which attend a conveyance of real property.[896]

---

888 Cooper v. Shannon, 36 Colo. 98, 103, 85 P. 175, 177 (1906).

889 Colo. Rev. Stat. Ann. § 118-1-2 (1963). *See also* Colo. Rev. Stat. Ann. § 59-1-6 (1963) (Conveyance-trust-power must be in writing); *Id.* § 59-1-8. (Contracts for interests in land must be written); *Id.* § 59-1-23. (Term conveyance, how construed).

890 Talcott v. Mastin, 20 Colo. App. 488, 498, 79 P. 973, 977 (1905). In First National Bank v. Hastings, 7 Colo. App. 129, 42 P. 691 (1895), the court stated: "Water rights belonging to land, and stock in a ditch corporation, are two essentially different kinds of property. . . . Water rights for irrigation are regarded as real property, and shares of stock in a corporation, are personal property." *Id.* at 132, 42 P. 692.

891 Talcott v. Mastin, 20 Colo. App. 488, 498, 79 P. 973, 977 (1905), *citing* 1 Mills' Ann. Stat. § 480.

892 *Id.* at 498, 79 P. at 977, *citing* 1 Mills' Ann. Stat. § 508; *see* Cache La Poudre Irr. Co. v. Larimer & Weld Res. Co., 25 Colo. 144, 53 P. 318 (1898).

893 *See* Supply Ditch Co. v. Elliott, 10 Colo. 327, 334, 15 P. 691, 694 (1887).

894 Costilla Ditch Co. v. Excelsior Ditch Co., 100 Colo. 433, 436, 68 P.2d 448, 449 (1937), concerned a by-law prohibiting transfer of water from one tract of land to another without approval by company directors. This by-law was held to be arbitrary and unreasonable as against a newly acquiring stockholder purchasing without notice of such policy. However, in Model Land & Irr. Co. v. Madsen, 87 Colo. 166, 168, 285 P. 1100, 1101 (1930), the court held a similar by-law in existence prior to the acquiring stockholder's purchase of stock as reasonable and not against public policy.

895 Farmers' High Line Canal & Res. Co. v. New Hamp. Real Estate Co., 40 Colo. 467, 479, 92 P. 290, 294 (1907); Child v. Whitman, 7 Colo. App. 117, 119, 42 P. 601, 602 (1895). *See generally* Blake v. Boye, 38 Colo. 55, 88 P. 470 (1907); Smith Canal or Ditch Co. v. Colorado Ice & Stor. Co., 34 Colo. 485, 82 P. 940 (1905).

896 Child v. Whitman, 7 Colo. App. 117, 119, 42 P. 601, 602 (1895) (deed must contain reference to ditch in order to convey an interest in the ditch); Burnham v. Freeman, 11 Colo. 601, 19 P. 761 (1888): "An interest in such a ditch is an interest in realty. It cannot pass by a mere verbal sale." *Id.* at 606, 19 P. at 764.

B. *Parol Transfers Under Circumstances of Equity*

Generally, transfers of real estate, being within the statute of frauds, must be by deed or written instrument[897] and attempts to transfer real property by parol contracts are void.[898] Exceptions do exist, however, and parol agreements concerning transfers of priorities and title to water rights have been upheld as between parties to the agreement when followed by a change of possession and use of the right.[899]

Parol contracts have also been upheld when executed for consideration.[900] In *Croke v. American National Bank,*[901] for example, the plaintiff, in accordance with a parol contract, constructed a ditch through the land of another for the right to joint use of the ditch thereafter. The court held that the parol agreement was not void under the statute of frauds[902] and that the plaintiff was entitled to use the ditch to carry water, subject to the defendant's right to use the ditch for the same purpose.[903] Parol agreements have likewise been upheld on the basis of part performance: "Part performance of an oral agreement to convey an interest in land will remove it from the statute of frauds."[904] For specific performance of such parol agreements to be enforced against third parties, the equitable owner must prove that the third party purchased with notice, actual or constructive, of the equitable owner's rights.[905]

IV. RELATION TO DITCH RIGHT

A. *Separable Ownerships of Ditch and Water Right*

A ditch and the right to water carried in the ditch are distinct property interests,[906] and as such, are subject to separable ownership.[907] This separable ownership is evidenced by the fact that to acquire an

---

[897] COLO. REV. STAT. ANN. § 59-1-6 (1963): "No estate or interests in lands . . . shall be created, granted, assigned, surrendered or declared, unless . . . by deed or conveyance in writing . . . ." *Id.*

[898] *See* Quelland v. Roy, 148 Colo. 316, 365 P.2d 899 (1961) (assignment of lease has to be in writing); Ward v. Ward, 94 Colo. 275, 30 P.2d 853 (1934) (oral promise to bequeath realty held void).

[899] Park v. Park, 45 Colo. 347, 356, 101 P. 403, 406 (1909).

[900] McLure v. Koen, 25 Colo. 284, 287, 53 P. 1058, 1059 (1898); Lipscomb v. Nichols, 6 Colo. 290, 292 (1882).

[901] 18 Colo. App. 3, 70 P. 229 (1902).

[902] *Id.* at 6, 70 P. at 230.

[903] *Id.* at 5, 70 P. at 229.

[904] Rupp v. Hill, 149 Colo. 48, 53, 367 P.2d 746, 749 (1961) *citing* Park v. Park, 45 Colo. 347, 101 P. 403 (1909) and Estate of Doerfer, 100 Colo. 304, 67 P.2d 492 (1937).

[905] *See* McLure v. Koen, 25 Colo. 284, 53 P. 1058 (1898).

[906] Monte Vista Canal Co. v. Centennial Irr. Ditch Co., 22 Colo. App. 364, 368-69, 123 P. 831, 833 (1912).

[907] Crippen v. Comstock, 17 Colo. App. 89, 66 P. 1074 (1901): "One might, however, have acquired a right to the water flowing in the ditch . . . without having acquired an interest in the ownership of the ditch itself." *Id.* at 92, 66 P. at 1075.

appropriative right to water, one need not own the ditch through which the water is to be carried.[908] Other evidence of separable ownership includes the possibility of abandoning one's ditch without abandoning one's water right.[909] Likewise, a ditch and a water right may be condemned separately in eminent domain proceedings.[910] Further support of separable ownership of ditch and water rights is to be found in several cases involving mutual ditch companies.[911]

B. *Separate Conveyances*

Just as a ditch and water right are two distinct property interests which may be separately owned, so may they be separately conveyed.[912] However, some restrictions may be imposed by the charter of the company or the contract.[913]

C. *Abandonment of Ditch*

It is an established principle that the right to a specified quantity of water from a ditch constitutes an easement in a ditch[914] and that an easement in a ditch cannot be lost by nonuse alone, short of the period of limitations for actions to recover such property.[915] Numerous cases[916] have followed the doctrine laid down by Washburn:

> Nothing short of a use by the owner of the premises over which it was granted, which is adverse to the enjoyment of such easement by the owner thereof, for the space of time long enough to create a prescriptive right, will destroy the right granted.[917]

It is also true, however, that nonuse for an unreasonable period of time without proof of some fact or condition excusing such long nonuse will result in a presumption of abandonment.[918]

---

[908] *See* p. 243 *supra.*

[909] Nichols v. McIntosh, 19 Colo. 22, 28, 34 P. 278, 281 (1893); New Mercer Ditch Co. v. Armstrong, 21 Colo. 357, 364, 40 P. 989, 991 (1895).

[910] *See* Schneider v. Schneider, 36 Colo. 518, 86 P. 347 (1906).

[911] Pioneer Irr. Co. v. Board of Commr's, 236 F. 790, 792 (D. Colo. 1916); Farmers' High Line Canal & Res. Co. v. Southworth, 13 Colo. 111, 21 P. 1028 (1889); Wheeler v. Northern Colo. Irr. Co., 10 Colo. 582, 17 P. 487 (1887).

[912] Oppenlander v. Left Hand Ditch Co., 18 Colo. 142, 151, 31 P. 854, 857 (1892). *See* Crippen v. Comstock, 17 Colo. App. 89, 66 P. 1074 (1901).

[913] *See* PART ONE, §§ IV(C)(1) & (2) *supra.*

[914] Wyatt v. Larimer & Weld Irr. Co., 18 Colo. 298, 307, 33 P. 144, 147 (1893). *See generally* Fruit Growers' Ditch & Res. Co. v. Donald, 96 Colo. 264, 41 P.2d 516 (1935); Farmers' High Line Res. Co. v. White, 32 Colo. 114, 75 P. 415 (1904).

[915] Fruit Growers' Ditch & Res. Co. v. Donald, 96 Colo. 264, 269, 41 P.2d 516, 518 (1935); People *ex rel* Standart v. Farmers' High Line Canal & Res. Co., 25 Colo. 202, 213, 54 P. 626, 630 (1898).

[916] Fruit Growers' Ditch & Res. Co. v. Donald, 96 Colo. 264, 269, 41 P.2d 516, 518 (1935); Farmers' High Line Canal & Res. Co. v. New Hamp. Real Estate Co., 40 Colo. 467, 479, 92 P. 290, 293-94 (1907); People *ex rel* Standart v. Farmers' High Line Canal & Res. Co., 25 Colo. 202, 213, 54 P. 626, 630 (1898).

[917] E. WASHBURN, AMERICAN LAW OF EASEMENTS AND SERVITUDES 717-18 (4th ed. 1885).

[918] Mason v. Hills Land & Cattle Co., 119 Colo. 404, 408, 204 P.2d 153, 155-56 (1949).

V. DEEDS OF TRUST

Under deeds of trust, liens may be secured by a water right as well as a right in the ditch itself.[919] To determine what rights pass to the grantee under a deed of trust, one must look to the intention of the grantor and the express terms of the deed of trust; and when the deed of trust is silent or ambiguous, then one must look to presumptions that arise from the circumstances of each particular case.[920]

A question requiring particular attention concerns the status of water rights and ditches acquired by a grantor after the execution of a deed of trust and used for the benefit of the land covered. Where appropriate language is included in a deed of trust, it is settled that such property may become subject to the lien thereon.[921]

Upon a foreclosure of a deed of trust, all claimants under the grantor must be made parties, or their easements or water rights will

---

[919] Crippen v. Comstock, 17 Colo. App. 89, 66 P. 1074 (1901): "That the interest in the ditch itself was not conveyed . . . by the first deed of trust is apparent . . . . The plaintiff . . . might, however, have acquired a right to the water flowing in the ditch . . . without having acquired an interest in the ownership of the ditch itself." *Id.* at 92, 66 P. at 1075.

[920] Denver Joint Stock Land Bank v. Markham, 106 Colo. 509, 516, 107 P.2d 313, 316 (1940) held that when a deed to property specifically describes the water right granted, the grantee will not take any additional rights by implication; James v. Barker, 99 Colo. 551, 556, 64 P.2d 598, 602 (1937) held that when additional water rights represented by certificates of stock in a reservoir company were necessary to the complete use of the land conveyed and they were not expressly reserved by the grantor, they passed with the conveyance; Cooper v. Shannon, 36 Colo. 98, 104-06, 85 P. 175, 177-78 (1906) held that when a sheriff's deed for land sold on execution against owner did not purport to convey the water right which was separate from the land, no water right passed to the purchaser, and failure of the owner of the water right to go to the irrigation company each season and pay the stipulated price for carrying his water was not an act from which intention to convey could be inferred; Travelers' Ins. Co. v. Childs, 25 Colo. 360, 54 P. 1020 (1898) held that when a deed of trust conveyed two tracts of land together with certain water rights and a water right that had been located and used on one tract was — during the existence of the trust deed — segregated from that tract and transferred to and used exclusively upon the second tract, a release of the former tract that did not mention this specific water right but released only such water rights as were used in connection with the land released did not release this water right; it remained subject to the lien of the trust deed and, upon foreclosure, passed to the purchaser; Gelwicks v. Todd, 24 Colo. 494, 498, 52 P. 788, 790 (1898) held that when the water right was incident and necessary to the beneficial enjoyment of the land and the latter was of no practical value for agricultural purposes without it, the water right was intended to pass under the language "together with all appurtenances." *Id.* at 498, 52 P. at 790. Arnett v. Linhart, 21 Colo. 188. 190, 40 P. 355 (1895) held that where the deed expressly conveyed a one-half interest in the ditch, the grantors manifestly intended to convey a like interest in the water right and reserve a one-half interest in that right as well as in the ditch itself.

[921] Bessemer Irr. Ditch Co. v. Woolley, 32 Colo. 437, 76 P. 1054 (1904) involved a habendum clause of a trust deed which stated, "To have and to hold the same, with all the privileges thereunto belonging or in any wise appertaining, and all the estate, right, title, interest, claim or demand in and to the same, either now or which may hereafter be acquired, unto the said grantee, his heirs and assigns." *Id.* at 445, 76 P. at 1055. The court held that this habendum clause did not purport to be a grant of any after-acquired property but merely confirmed in the grantee any estate or title in and to the lands specifically granted which the grantor might thereafter acquire. Crippen v. Comstock, 17 Colo. App. 89, 92, 66 P. 1074, 1075 (1901) held that an irrigating ditch which was not commenced at the time a deed of trust of land was executed and which was not specifically mentioned in such deed was not conveyed thereby. Jarvis v. State Bank, 22 Colo. 309, 318, 45 P. 505, 509 (1896) held that although subsequently acquired property may become subject to the lien of a mortgage, a mechanic's lien for work done and materials furnished on such after-acquired property takes precedence of the mortgage if apt words covering it are inserted in the instrument.

not pass to the foreclosure purchaser.[922] Similarly, when land of an owner of stock in a mutual irrigation company is sold under a deed of trust but without the stock being transferred, the grantor and the present owner of the stock are necessary parties to an action by a purchaser to enforce rights formerly held by the grantor as a stockholder in the irrigation ditch.[923]

EPILOGUE

Since this study attempts to set forth the elementary principles of Colorado water law and deliberately tries to avoid extensive discussion with respect to trends which might be developing and with respect to theories about what the law *ought* to be, a conclusion becomes unnecessary. However, as the need for water continues to increase, it seems that certain proposals for increasing the basic water supply should be noted. One commentator offers the following ideas:

> The proposals for improving the water supply are almost unlimited. Among the more prominent are those for phreatophyte control (elimination of water loving plants along the edges of reservoirs and watercourses), timber harvesting (modification of vegetative cover on watersheds to reduce evapotranspiration), reducing seepage and other wasteful irrigation practices by devices such as lining canals and covering reservoirs, salvaging sewage water for reuse and weather modification.
>
> In addition to these technical approaches, economists and lawyers have made some contribution to the water supply problem with suggestions about reallocation of water through legal and market restrictions. In one of its simplest forms, this technique is well known. If, for example, a municipality which charges citizens a fixed monthly water fee experiences a water crisis brought on by excessive lawn watering, it is easy to abate the crisis by putting water users on individual meters and making the cost per gallon quite high. The problem "solves itself" when people can no longer afford to waste water. Whether or to what extent it is desirable to utilize such techniques raises intriguing political and legal problems.[924]

It would appear that the solutions to such "intriguing political and legal problems" will shape much of the future development of Colorado water law.

---

[922] *See* Schwab v. Smuggler-Union Co., 174 F. 305 (8th Cir. 1909).

[923] Oligarchy Ditch Co. v. Farm Inv. Co., 40 Colo. 291, 297-98, 88 P. 443, 445 (1906).

[924] J. SAX, *supra* note 1, at 4.

APPENDIX

SELECTED BIBLIOGRAPHY
ARTICLES RELEVANT TO COLORADO LAW:
1958 - 1968:

Carver, *A Federal Policy for Development of Western Water,* 14 ROCKY MT. M.L. INST. 473 (1968);

Clyde, *Water Rights Problems Affecting Resource Development,* 10 ROCKY MT. M.L. INST. 503 (1965);

Danielson, *Water Administration in Colorado — Higher-Ority or Priority?,* 30 ROCKY MT. L. REV. 293 (1958);

Delaney, *Water for Oil Shale Development,* 43 DENVER L.J. 72 (1966);

Ellis, *Water Rights: What They Are and How They Are Created,* 13 ROCKY MT. M.L. INST. 451 (1967);

Grove, *The New Danube Commission: An Interdisciplinary Study in Law and Politics,* 41 DENVER L.C.J. 204 (1964);

Hanks, *Peace West of the 98th Meridian — A Solution to Federal-State Conflicts Over Western Waters.* 23 RUTGERS L. REV. 33 (1968);

Hart, *Creative Federalism: Recent Trends in Regional Water Resource Planning and Development,* 39 U. COLO. L. REV. 29 (1966);

Hutchins, *Some Recent Developments in Water Law in the Western States,* 30 UTAH B. BULL. 9 (1960);

Hutchins, *Ground Water Legislation,* 30 ROCKY MT. L. REV. 416 (1958);

Kelly, *Colorado Ground Water Act of 1957 — Is Ground Water Property of the Public?,* 31 ROCKY MT. L. REV. 1965 (1959);

Martz, *The Law of Underground Waters,* 11 OKLA. L. REV. 26 (1958);

Meyers, *The Colorado River,* 19 STAN. L. REV. 1 (1966);

Mitchem & Clark, *Federal-State Water Rights,* 39 DICTA 1 (1962);

Morreale, *Federal State Conflict Over Western Waters — A Decade of Attempted "Clarifying Legislation",* 20 RUTGERS L. REV. 423 (1966);

Moses, *The Law of Ground Water — Does Modern Buried Treasure Create a New Breed of Pirates?,* 11 ROCKY MT. M.L. INST. 277 (1966);

Moses & Vranesh, *Colorado's New Ground Water Law,* 38 U. COLO. L. REV. 295 (1966);

Ross, *Acquisition of Existing Water Rights,* 13 ROCKY MT. M.L. INST. 477 (1967);

Sax, *Problems of Federalism in Reclamation Law,* 37 U. COLO. L. REV. 49 (1964);

Scott, *Kansas v. Colorado Revisited,* 52 AM. J. INT'L L. 432 (1958);

Widman, *Ground Water — Hydrology and the Problem of Competing Well Owners,* 14 ROCKY MT. M.L. INST. 523 (1968);

Symposium on Public Water Law, 32 ROCKY MT. L. REV. 437 (1960);

Note, *Regulatory Aspects of Federal Water Pollution Control,* 45 DENVER L.J. 267 (1967);

Note, *Water for Recreation: A Plea for Recognition,* 44 DENVER L.J. 288 (1967);

Note, *Foreign Water in Colorado — The City's Right to Recapture and Re-use Its Transmountain Diversion,* 42 DENVER L.C.J. 116 (1966);

Note, *The Federal Reserved Water Doctrine — Application to the Problem of Water for Oil Shale Development,* 3 LAND & WATER L. REV. 75 (1968);

Note, *Water — Granting of Conditional Decree of Water Priority Under the Doctrine of Relation Back,* 34 ROCKY MT. L. REV. 423 (1962);

Note, *Water — Actual Physical Diversion Not Necessary to Effect an Appropriation,* 33 ROCKY MT. L. REV. 249 (1961);

Note, *Appropriation and Colorado's Ground Water: A Continuing Dilemma?,* 40 U. COLO. L. REV. 133 (1967);

Note, *Who Pays When a Well Runs Dry?,* 37 U. COLO. L. REV. 402 (1965);

Note, *Developments in Colorado Water Law of Appropriation in the Last Ten Years,* 35 U. COLO. L. REV. 493 (1963);

Note, *Water Rights — Finality of General Adjudication Proceedings in the Seventeen Western States,* 1966 UTAH L. REV. 152 (1966);

Note, *Public Fishing Rights,* 12 WYO. L.J. 167 (1958).

1952 - 1958:

Burke, *Western Water Law,* 10 WYO. L.J. 180 (1956);

Chilson, *Revision of Water and Irrigation Statutes,* 31 DICTA 29 (1954);

Danielson, *Ground Water in Nebraska,* 35 NEBR. L. REV. 17 (1955);

Engle, *Colorado River Controversy: The Project Does Not Threaten Water Rights,* 31 L.A.B. BULL. 131 (1956);

Harris, *New Mexico's Role in the Development of the Law of Underground Water,* 31 DICTA 41 (1954);

Martz, *Who Has the Better Right to Underground Waters in Colorado — Landowner or Appropriator?,* 31 DICTA 20 (1954);

Stone, *Are There Any Adjudicated Streams in Montana?*, 19 MONTANA L. REV. 19 (1957);

Trelease, *The Concept of Reasonable Beneficial Use in the Law of Surface Streams*, 12 WYO. L.J. 1 (1957);

Trelease, *Preferences to the Use of Water*, 27 ROCKY MT. L. REV. 133 (1955);

Windsheffel, *Kansas Water Rights — Another Chapter*, 26 J. B. ASS'N KAN. 185 (1957);

Windsheffel, *Water Law in Kansas*, 23 J. B. ASS'N KAN. 171 (1954);

Symposium on Water Law, 5 KAN. L. REV. 491 (1957);

Symposium, 22 LAW & CONTEMP. PROB. 155 (1957);

Symposium, 22 LAW & CONTEMP. PROB. 323 (1957);

The Power of the Denver Water Board to Enact Penalty Regulations, 31 DICTA 349 (1954);

The "Tidelands" Problem, 30 DICTA 217 (1953);

Note, *Waters and Water Courses — Percolating Waters — Appropriation*, 5 KAN. L. REV. 470 (1957);

Note, *Water and Water Courses — Public Lands — Federal Control of Non-Navigable Waters as Related to Fisheries*, 18 MONT. L. REV. 116 (1956);

Note, *Western Water Rights: May They Be Taken Without Compensation?*, 13 MONT. L. REV. 102 (1952);

Note, *Rank v. Krug — A New Chapter in the Central Valley Litigation*, 29 ROCKY MT. L. REV. 407 (1957);

Note, *The Recurring Problem of Colorado's Underground Water*, 28 ROCKY MT. L. REV. 371 (1956);

Note, *Water Law — Presumption That All Waters Are Tributary Applied to Ground Water; Right to Lift Recognized*, 28 ROCKY MT. L. REV. 145 (1955);

Note, *Percolating Waters — Ownership Rule Restated in Arizona*, 26 ROCKY MT. L. REV. 104 (1953);

Note, *Constitutionality of Colorado Statutes Providing for Transmountain Water Diversions*, 25 ROCKY MT. L. REV. 363 (1953);

Note, *Water Adjudication Decree — Notice — Statute of Limitations*, 25 ROCKY MT. L. REV. 239 (1953);

Note, *The Right to Use Waste Water Before It Re-enters the Stream*, 12 WYO. L.J. 47 (1957);

Note, *Riparian Rights in Appropriation States*, 9 WYO. L.J. 130 (1955);

See 45 CALIF. L. REV. 584 (1957).