Article Author: Felicity Hannay
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Staff

Faith Sternlieb
905 W. Laurel St.
Apt. 315
Fort Collins, CO 80521
RECENT DEVELOPMENTS IN COLORADO GROUNDWATER LAW

FELICITY HANNAY*

INTRODUCTION

An encyclopedic 1970 Note, A Survey of Colorado Water Law, concluded its section on tributary groundwaters with the following caveat:

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 [Water Rights Determination and Administration Act of 1969] in any significant way, and the legislative machinery continues its process of evaluation and study with a view toward considering further refinements and possible substantive changes in the act.

As the following discussion will show, although the water courts and Colorado Supreme Court have had the opportunity during the past eleven years to clarify and interpret the Water Rights Determination and Administration Act of 1969 (1969 Act) there remain substantial areas of uncertainty with respect to the appropriate integration and administration of groundwater rights with surface water rights. As for the legislature, the above statement remains as timely today as it was in 1970: in the 1981 legislative session alone, the Colorado General Assembly considered no fewer than six bills concerning the use and administration of groundwater.

The law with respect to nontributary groundwater in Colorado has become, if anything, more uncertain in the past twelve years. Despite efforts by the Colorado legislature, the state engineer, the water courts, and the supreme court, it is still far from clear how rights to the use of nontributary water may be obtained and who may obtain them.

This article will review the developments in Colorado law with respect to both tributary and nontributary groundwater. It concludes with a discussion of two very recent, unpublished Colorado water opinions.

I. TRIBUTARY GROUNDWATER

A. What is Tributary Groundwater?

"Tributary groundwater" as used in this article is the underground

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* Partner, Davis, Graham & Stubbs, Denver, Colorado; A.B., Vassar College, 1969; J.D., Boalt Hall School of Law, University of California at Berkeley. The author wishes to thank Kay Heath and David L. Hiller for their research assistance in the preparation of this article.
2. Id.
component of "waters of the state" as defined by the 1969 Act as "all surface and underground water in or tributary to all natural streams within the state of Colorado, except [designated groundwater as defined in Colorado Revised Statutes § 37-90-103(6) (1973)]." The meaning of "tributary to a natural stream" as it applies to underground water is explained in the 1969 Act's definition of "underground water" as "that water in the unconsolidated alluvial aquifer of sand, gravel, and other sedimentary materials, and all other waters hydraulically connected thereto which can influence the rate or direction of movement of the water in that alluvial aquifer or natural stream." It should be noted, however, that not all underground water which is hydraulically connected to an alluvial aquifer or a natural stream is legally considered tributary groundwater. The length of time it would take such underground water to influence the rate or direction of movement of water in the alluvial aquifer or natural stream is a relevant consideration.

In Hall v. Kuiper, the Colorado Supreme Court considered two proposed wells which were to be located thirteen miles from the Cache La Poudre River, a tributary of the South Platte River. The evidence was apparently undisputed that the groundwater proposed to be withdrawn from these wells was in fact "hydrologically connected" with the Cache La Poudre, and that the groundwater was moving toward the river at a rate of .3 mile per year. The court treated this groundwater, which presumably would have begun to influence the rate and flow of the Cache La Poudre River in approximately forty years, as tributary groundwater.

In Kuiper v. Landwall, the Colorado Supreme Court had occasion to consider the tributary nature of groundwater in an area eight miles from the North Fork of the Republican River and sixteen miles from the Arikaree River. The state engineer presented evidence, apparently undisputed, that the groundwater was moving toward these rivers at a rate of 175 to 300 feet per year. Assuming an average between these rates of 237.5 feet per year, the court calculated that it would take water then in the area 178 years to reach the Republican River and 356 years to reach the Arikaree River. The court stated that tributary water that takes over a century to reach a stream is de minimis and would not be considered as part of a surface stream as contemplated by the Colorado Constitution. After quoting the 1969 Act's definition of underground water, the court stated that it could not "believe that the General Assembly was talking about water that could not in-

7. Id. at 132, 510 P.2d at 330.
8. Id.
9. Id. at 134, 136, 510 P.2d at 331, 332.
11. Id. at 133, 529 P.2d at 1330.
12. Id.
13. Id.
14. Id. at 135, 529 P.2d at 1331.
fluence the rate or direction of movement of a stream for over a century.\textsuperscript{15} This category of groundwater has come to be known as "\textit{de minimis} nontributary groundwater", that is, water which is, in fact, hydraulically connected to a surface stream, but which would not influence that stream within one hundred years.

Thus, groundwater hydraulically connected to a surface stream is legally considered to be tributary groundwater if it will reach the stream in forty years or less; and it is not tributary groundwater, but rather \textit{de minimis} nontributary groundwater, if it will not reach the stream in greater than one hundred years. The question of whether groundwater taking more than forty but less than one hundred years to reach the stream is tributary awaits a case with the necessary facts for its determination.

A further point was clarified by the court in \textit{District 10 Water Users Association v. Barnett}.\textsuperscript{16} The relevant time period for determining the tributary nature of groundwater sought to be withdrawn by wells is not simply the time in which such water, left undisturbed, would reach the stream, but rather, the length of time in which the wells would affect the surface stream.\textsuperscript{17} Thus, if pumping water from a well would affect the flow in a natural stream or its alluvial aquifer within forty years of the commencement of such pumping, such well should be considered tributary.\textsuperscript{18} As a corollary, if a well's operation would not affect the flow in a stream until one hundred years or more after the commencement of such pumping, presumably such well would be considered nontributary.\textsuperscript{19}

B. \textit{Integration of Tributary Groundwater and Surface Water}

1. Background

In enacting the 1969 Act, the Colorado legislature belatedly recognized the importance of administering the surface and the underground components of the waters of the state in an integrated manner, so as to maximize the beneficial use of all the waters of the state.\textsuperscript{20} For most of Colorado's history, alluvial wells had been allowed to develop as if they took water from a source of supply entirely separate from the surface streams. This was fine so long as the surface flows which senior water right holders depended on were unaffected by the pumping. But given the inescapable physical connection between the alluvial aquifers, from which the increasing numbers of wells were withdrawing water, and the surface streams, it was inevitable that eventually the surface flows would be diminished to some extent.\textsuperscript{21}

No legislative attempt was made to control the development and administration of wells as part of the surface water system in Colorado until

\textsuperscript{15} \textit{Id.} at 45, 529 P.2d at 1331.
\textsuperscript{16} 599 P.2d 894 (Colo. 1979).
\textsuperscript{17} \textit{Id.} at 896.
\textsuperscript{18} \textit{Id.}
\textsuperscript{19} \textit{Id.}
\textsuperscript{21} \textit{See} A Survey of Colorado Water Law, supra note 1, at 322-23.
1965. In that year, owners of surface water rights in the Arkansas River Valley became disturbed over the apparent effects of well diversions on flows in the Arkansas River. These owners requested the state engineer to shut down, or curtail, well diversions in the valley. The state engineer refused to act, saying he had no authority to curtail wells. Later that same year, the legislature enacted H.B. 1066, which gave the state engineer such authority. It directed him 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.”

For the first time, the state engineer was instructed to administer wells in accordance with the priority system. Because wells were relative latecomers to the priority system, a strict interpretation of this mandate would have required virtually all wells, as junior appropriations, to cease pumping in order to ensure that senior water rights would not be adversely affected. Thus, the integration of administration for groundwater and surface water rights was apparently intended primarily to protect the senior surface water rights.

H.B. 1066 applied to existing as well as new wells. An additional 1965 enactment required that before any new wells could be constructed, a permit must be requested from the state engineer. Upon receipt of a well permit application, the state engineer was to make a determination as to whether the operations of the proposed well “will materially injure the vested water rights of others.” The state engineer could only issue the requested permit if he found affirmatively that the vested water rights of others would not be materially injured. Like H.B. 1066, the 1965 amendment appeared to be aimed at protecting the existing surface-oriented system of water rights from the incursions of well withdrawals.

With the new authority granted by H.B. 1066, the state engineer attempted to shut down some junior wells in the Arkansas River Valley in order to protect senior surface rights. Not surprisingly, the ensuing litigation

22. An earlier statute, the so-called Ground Water Act of 1957, 1957 Colo. Sess. Laws, ch. 289, at 863 (repealed 1965), was applicable to both tributary and nontributary groundwater. This statute was apparently intended to prevent unreasonably rapid depletion of groundwater resources but did not provide for administrative integration of groundwater and surface water resources. See A Survey of Colorado Water Law, supra note 1, at 313.


24. Id.

25. Id.

26. For an excellent discussion of the problems inherent in the implementation of H.B. 1066, see A Survey of Colorado Water Law, supra note 1, at 324-31.


29. Id.

30. Id.

reached the Colorado Supreme Court. In Felthauer v. People,32 the court expressed the goal to be achieved by the proper integration of use and administration of surface water and tributary groundwater:

[Al]ong 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.33

The doctrine of maximum utilization as expressed in Felthauer represented a turning point in the integrated management of tributary ground and surface waters. One year later, in the 1969 Act, the Colorado legislature codified the doctrine as a policy of the state.34 Since the enactment of the 1969 Act, the Colorado Supreme Court and the state’s water courts have worked to refine and to implement the doctrine of maximum utilization in a manner that does not impair vested rights.35

2. Recent judicial developments

a. Hall v. Kuiper36

This appeal arose from the state engineer’s denial of permit applications for two wells proposed to be located in the alluvium tributary to the Cache La Poudre River. The state engineer determined that operation of the proposed wells would diminish the amount of water reaching the Cache La Poudre River, and that senior surface rights on the river would be deprived of these amounts.37 Since the Cache La Poudre and South Platte Rivers were already overappropriated, the state engineer denied the permits. After a hearing de novo, the district court affirmed the state engineer’s denial of the permits on the ground that operation of the proposed wells would “materially injure the vested water rights of others,” and that “the denial of the applications for these permits . . . was proper under the provisions of Section 148-18-36(2), C.R.S. 1963, as amended.”38

The Colorado Supreme Court upheld the denial of the permit applica-
tions and generally affirmed the trial court’s conclusions. The applicants for the well permits had argued that it could not be proven that any specific surface right in the river would be materially injured by their wells, and that, therefore, their wells should be allowed to operate. 39 The supreme court rejected that argument by noting that Fellhauer only required a showing of material injury to senior appropriators generally before wells could be regulated. It was not necessary to show that a particular senior user would be injured. 40 The court concluded that because the Cache La Poudre and South Platte Rivers were already overappropriated, there simply was not unappropriated water available for two new wells. 41

The court re-emphasized its philosophy of maximum utilization without impairment of vested rights when it stated that only the future would provide the technology necessary to calculate if and when there would be sufficient excess water so as to allow the issuance of well permits. 42 With technology in its current form, “there [was] just no way.” 43

b. Kelly Ranch and Glacier View Meadows

These two cases were the subject of decisions by the Colorado Supreme Court in 1976. Each case involved a request for approval of a plan for augmentation 44 designed to allow for the development of new domestic wells in residential subdivisions. The proposed plans in each case were similar in concept. The subdivision developer calculated the total amount of water which would be consumed by the new residential units, assuming a certain per capita daily usage and a certain occupancy per unit. This calculation assumed a daily water diversion requirement per capita, and from this figure was deducted the amount of water which would return to the stream through sewage effluent. The result was the subdivision’s consumptive use.

The subdivision’s water supply would come from individual wells for each house (or for two or three houses in some cases). If these wells were treated for purposes of administration as having a priority date equal to their date of construction, they would be so junior in priority that they would seldom, if ever, be allowed to operate. Therefore, the developer acquired existing senior water rights in the stream to which the new wells

39. 181 Colo. at 133, 510 P.2d at 330.
40. Id. at 134, 510 P.2d at 331 (quoting Fellhauer v. People, 167 Colo. 320, 329-30, 447 P.2d 986, 991 (1968)).
41. 181 Colo. at 136, 510 P.2d at 332.
42. Id. at 135, 510 P.2d at 332 (dicta).
43. Id.
46. Plan for augmentation—means a detailed program to increase the supply of water available for beneficial use in a division or portion thereof by the development of new or alternate means or points of diversion, by a pooling of water resources, by water exchange projects, by providing substituted supplies of water, by the development of new sources of water, or by any other appropriate means.

would be tributary and proposed to balance the anticipated stream depletions due to the new consumptive uses in the subdivision against the historic stream depletions attributable to past use of the senior water rights. In other words, the developer proposed in effect to retire old water rights and to use the water saved thereby in the new subdivision, under the priority of the old water rights.\textsuperscript{47}

The supreme court's opinions in the two cases are so interrelated that it is surprising the opinions were not combined. Again, the court took the opportunity to provide some guidance on how plans for augmentation could be used in the effort to maximize the beneficial use of the state's water. The court's conclusions in the two cases as they relate to the integration of groundwater will be treated together.

One of the objections voiced to the plans, especially in \textit{Kelly Ranch}, was that they were not proper plans for augmentation since no \textit{new water} would be added to the stream. The court rejected this argument and held that "new water need not be injected to give life and validity to a plan for augmentation."\textsuperscript{48} Although the technological advances hoped for in \textit{Hall v. Kuper} were minimal, the court found the applicants' innovations fit the maximum utilization pattern contemplated in \textit{Fellhauer}.\textsuperscript{49} The plans for augmentation in both \textit{Kelly Ranch} and \textit{Glacier View Meadows} were approved.\textsuperscript{50}

Objectors in both cases complained that the developers' plans for augmentation substituted a "lack of injury doctrine" for the doctrine of prior appropriation since, so long as senior rights were not adversely affected, new water rights, like these subdivision wells, would be allowed to take water. The court ruled, under the circumstances of the case, there was no significant difference between the two doctrines, and water was available for appropriation if senior users could not show injury from the diversion.\textsuperscript{51} In a corollary to this holding, the court stated that in compensating for the depletive effects of the new wells, the developers need only compensate the stream for the amount of water \textit{consumed}, and not the entire amount \textit{diverted}.

Both holdings were specifically tied by the court to the maximum utilization doctrine.\textsuperscript{52}

Under the terms of the 1969 Act, certain small capacity domestic wells

\textsuperscript{53} See note 49 supra and accompanying text.
are exempt from regulation by the state engineer. All wells involved in a plan for augmentation, however, are non-exempt, regardless of whether they would have been exempt standing alone.

c. Orr v. Denver

This case is an example of the integration of administration and use of groundwater and surface water. In the 1969 Act, the legislature declared that wells could be considered “alternate or supplemental source[s] of supply for surface decrees” if the vested rights of others were protected. The applicant in Orr sought and was granted approval by the water court to use certain alluvial wells as alternate points of diversion for certain surface decrees. The supreme court affirmed the water court, stating, without elaboration, that the use of wells as alternate points of diversion for the surface decrees “would leave more water in the river and thus aid, rather than injure, junior appropriators.”

d. Bohn v. Kuiper

This case involved an application to the water court for an approval of a conditional water right for a well to be located in the alluvium tributary to the South Platte River. The applicant was first denied a permit on the grounds that the state engineer was unable to find either that unappropriated water was available or that vested water rights of senior appropriators would not be materially injured by operation of the well. Despite this permit denial, the water court granted approval of a conditional water right for the well with the proviso that the applicant first furnish the court with proof that the well was operating under an approved plan of augmentation.

It would appear that granting a conditional water right for the applicant’s well, but making operation of the well strictly contingent on the prior approval of an augmentation plan, would fully satisfy the requirement of protection of vested water rights. The Colorado Supreme Court, however, made its determination on entirely different grounds in this case and reversed the water court’s judgment. The court declared that chaos would result if conditional permits were allowed before plans for augmentation were approved. The court held, in essence, that before any conditional

58. 194 Colo. at 129, 572 P.2d at 807. Although a surface water right owner may use a well as an alternate or supplemental source of supply for his surface right, he cannot be compelled to do so unless the well has been specifically tied to the surface decree through water court approval. See Kuiper v. Well Owners Conserv. Ass’n, 176 Colo. 119, 147-48, 490 P.2d 268, 283 (1971).
60. Id. at 18, 575 P.2d at 402.
61. Id.
63. Id. at 19, 575 P.2d at 403.
decree can be granted for a well in an overappropriated area, the applicant must first submit for approval a plan for augmentation. The Bohn opinion was more concerned with orderly administration of water rights than with maximum utilization, integration of surface waters and groundwaters, or protection of vested rights.

c. Kuiper v. Winden

This case represents another example of the effects on water users of integrating the administration and use of tributary groundwater and surface water. A ditch company sold all of its surface water rights from the Arkansas River to the City of Pueblo for use in its municipal water system. As part of the decree changing the place and type of water use to reflect this sale, the water court required that "[t]he lands historically irrigated by use of water diverted under the water rights which are the subject of this action shall be permanently removed from agricultural irrigation by means of water withdrawn from the Arkansas River, its tributaries or underground water tributary thereto." The lands subject to this "dry-up" condition were shown on a map attached to the decree.

It came to the attention of the state engineer that former shareholders of the ditch company were irrigating lands shown on the map with water from wells tributary to the Arkansas River. The state engineer brought an action against them to enjoin further irrigation. The former shareholders claimed they were not bound by the above-quoted condition in the change-of-use decree because they had not been parties to the action that resulted in the decree, and well water had not been at issue in that action.

The water court granted the injunction, enjoining further irrigation of the lands with water tributary to the Arkansas River. Rather than ruling on whether the former shareholders were in fact bound by the conditions of the change-of-use decree, the water court held that they were estopped to deny its applicability since they had enjoyed the benefits of the decree by accepting their share of the proceeds from the sale of water rights. The Colorado Supreme Court upheld the water court's ruling.

Although the rationale for the water court's ruling in Winden was estoppel, the result of this case shows that there was, apparently, automatic acceptance of the physical fact that groundwater which is tributary to a stream has the same source as the stream itself. The supreme court declared that the "continued use of tributary wells to irrigate lands historically irrigated by [the ditch] will deprive appropriators on the Arkansas River of water to

64. Id.
65. See id.
66. 196 Colo. 6, 580 P.2d 1238 (1978).
67. Id. at 8, 580 P.2d at 1239-40 (quoting the water court decree) (emphasis added by the supreme court).
68. Id. at 9, 580 P.2d at 1240.
69. Id.
70. Id.
71. Id. at 10, 580 P.2d at 1241.
which they are legally entitled.”

3. The state engineer’s rules and regulations

In *Fellhauer*, the Colorado Supreme Court held that the state engineer’s regulation of wells in the Arkansas Valley, to be valid and constitutional, had to be pursuant to reasonable rules and regulations. Despite the *Fellhauer* holding, the 1969 Act did not require the state engineer to promulgate rules and regulations prior to curtailing wells. In 1971, however, a section was added which provided that “[t]he state engineer may adopt rules and regulations to assist in, but not as a prerequisite to, the performance of the foregoing duties.” The inconsistency between the mandatory language of *Fellhauer* and the permissive language of the statute has not been specifically addressed by the Colorado Supreme Court. In one case, however, the above-quoted statutory language was apparently accepted by the court without comment, indicating by implication that the permissive language of the statute is constitutionally acceptable.

At various times since the *Fellhauer* decision, the state engineer has promulgated rules and regulations to assist in the administration and control of well pumping in Water Divisions Nos. 1, 2, and 3. The impact of these rules on the use of tributary groundwater in the state of Colorado is discussed briefly below.

a. Water Division No. 1

Hardly was the ink dry on the 1969 Act when the state engineer proposed rules and regulations for the use of tributary groundwater which were by their terms applicable to the entire state, but which were to be implemented primarily in the South Platte and Arkansas River drainages. The rules were to be effective only during the 1969 irrigation season. A group of well owners in the South Platte River drainage basin sought and received from the Division No. 1 water court an injunction against the implementation of the rules in the South Platte drainage and a declaratory judgment that the rules were null and void on a variety of grounds.

As applied to the South Platte drainage, the rules provided for the division of the drainage into three parallel zones: Zone A adjacent to the South Platte River, Zone B adjacent and parallel to Zone A, and Zone C, farthest from the river, adjacent and parallel to Zone B. Zone A was defined as the

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72. Id. at 10, 580 P.2d at 1240-41.
area in which well pumping would cause an effect on the river in less than ten days; in Zone B, well pumping would affect the stream in ten to thirty days; and in Zone C, well pumping would affect the stream in thirty to seventy-five days. Wells in any of the zones could be shut down by state water officials after a demand or “call” by a senior surface right which was not being satisfied by water then in the river. Wells beyond Zone C, wells that would not affect the river within seventy-five days, were not regulated. No well in any of the three zones could be shut down more than three out of seven days.79

After an extensive discourse on the physical effects of well pumping on the surface stream, the Colorado Supreme Court reversed the water court and upheld the rules as being consistent with the philosophy of maximum utilization as expressed in Fellhauer and the 1969 Act.80

Despite the fact that the rules embodying the zone concept were eventually upheld by the supreme court, the state engineer changed his approach to well regulation in the South Platte drainage. His later rules provided for the continuous curtailment of all wells for four days each week, except for wells which were the subject of a plan for augmentation.81 Again, these rules were challenged in the water court, this time by both well owners and surface decree owners. The result of this litigation was a stipulation agreed to by all parties, including the state engineer, providing for the total curtailment of all wells starting in 1976, except for wells which are the subject of a plan for augmentation.82 Because of the stipulation, there was no appeal to the supreme court, and the stipulated rules are still in effect in the South Platte drainage.

b. Water Division No. 2

In 1973, the state engineer promulgated rules and regulations governing the use of groundwater in the Arkansas River drainage. These rules provided for the curtailment of well pumping for no more than four days per week for any well.83 Surprisingly, no one appealed these rules to the water court.84

In 1974, however, the state engineer proposed an amendment to his 1973 rules for the Arkansas Valley. The amendment provided for total curtailment of all wells starting in 1976, except for those operated as alternate supply sources for surface decrees or subject to a plan for augmentation.85 This amendment was challenged and was disapproved by the water court because, among other reasons, it violated the two provisions of the 1969

79. See id. at 150, 490 P.2d at 284.
80. Id. at 149-50, 490 P.2d at 283.
82. For a discussion of the stipulation, see Hillhouse, supra note 23, at 714-17.
84. Id.
85. Id. at 561, 581 P.2d at 294.
Act. 86  

The first provision allowed rules and regulations within an aquifer to be changed, based on operating experience. The water court found that "[n]o data on operating experience under the 1973 Rules was introduced into evidence and, according to the testimony of the State Engineer, none exists in fact." 87 Based on this finding, the court ruled that the amendment was improper since it had not been adopted on the basis of additional knowledge acquired from implementing the initial regulations. 88 The Colorado Supreme Court affirmed this ruling. 89

The second statutory provision prohibited restrictions on groundwater diversions unless junior appropriations deprive senior users of available water. 90 The water court found there was no evidence that the amendment was necessary to prevent material injury to senior water rights and ruled that the amendment was contrary to the statute. 91 The supreme court approved this ruling stating that the state engineer did not fulfill his duty to determine that the amendment would make additional water available for senior appropriators. 92

Although there have now been a number of years of "operating experience" under the 1973 rules in the Arkansas River drainage, the state engineer has not again attempted to amend the rules to provide for total curtailment of wells. As a consequence, no well in the Arkansas Valley is shut down for more than four days a week.

c. Water Division No. 3

In 1975, the state engineer proposed rules and regulations governing the use of groundwater in the Rio Grande and Conejos River drainages. 93 Like the proposed amendment to the Division No. 2 rules, the proposed Division No. 3 rules provided for eventual total curtailment of all wells, except those operating as an alternate supply source for a surface decree or those operating pursuant to a plan for augmentation. 94

86. Id. at 562, 581 P.2d at 296. The 1969 Act provides that "Rules and regulations may be amended or changed from time to time within the same aquifer dependent upon the then existing and forecast conditions, facts and conditions as then known, and as knowledge of the aquifer is enlarged by operating experience." COLO. REV. STAT. § 37-92-501(2)(f) (1973).

87. 195 Colo. at 562, 581 P.2d at 296.

88. Id.

89. Id.

90. The statute provides:
It is the legislative intent that . . . ground water diversions shall not be curtailed nor required to replace water withdrawn, for the benefit of surface right priorities, even though such surface right priorities be senior in priority date, when, assuming the absence of ground water withdrawal by junior priorities, water would not have been available for diversion by such surface right under the priority system.


91. 195 Colo. at 562, 581 P.2d at 296.

92. Id.

93. The proposed rules also were intended to administer surface decrees so as to ensure compliance by the state of Colorado with the terms of the Rio Grande River Compact. COLO. REV. STAT. § 37-66-101 (1973) (an interstate agreement among Colorado, New Mexico, and Texas concerning the equitable apportionment of the Rio Grande).

94. See In re Rules and Regulations Governing the Use, Control and Protection of Water Rights for Both Surface and Underground Water Located in the Rio Grande and Conejos
Numerous protests challenging the rules were filed with the water court. In its judgment, the water court disapproved the rules as they related to well regulation and based its disapproval on novel grounds.

First, the water court ruled in effect that wells could not be regulated as a group, but that they could only be treated on an individual case-by-case basis. Referring to the standards for determining materiality of injury contained in the 1969 Act, the water court surprisingly stated that "until the Division Engineer determines the materiality of injury to senior priorities caused by a specific well, as required by 1973 C.R.S. 37-92-502, that well may not be curtailed." The court did not attempt to reconcile its conclusion with the approval in *Kuiper v. Well Owners Conservation Association*, of the zone concept of well regulation. The water court simply distinguished the case on the ground that the curtailment was for only 3/7 of the time in *Well Owners*, whereas under the proposed regulations, it would be total. It is doubtful, however, that this distinction would have affected the supreme court's approval of the zone concept in *Well Owners*.

In another unusual holding, the water court suggested that the state engineer should require senior surface right owners to "drill a new well or wells to augment or replace his surface water diversion before he can require curtailment of junior rights." The water court refers to this requirement as the "duty" of a senior stream appropriator "to withdraw groundwater that is both tributary to the stream and sufficient to satisfy his appropriation." The water court based this holding on three grounds: 1) the requirement that each diverter must establish a reasonable means of effecting his diversion; 2) the policy of maximum utilization as announced in *Fellhauer*; and 3) the directive of the 1969 Act that surface water and tributary groundwater be integrated.

In *Kuiper v. Well Owners Conservation Association*, the Colorado Supreme Court had held that the state engineer was not required to compel a surface decree owner to apply well water to his surface decree before making a call on junior water rights owners. The water court distinguished that holding from its own ruling by pointing out that existing wells were involved in *Well Owners*, whereas, under the proposed regulations, surface decree owners...
would be required to drill new wells. The court did not discuss who would bear the enormous cost of drilling numerous new wells to accompany the many surface decrees in the San Luis Valley.

The water court's rulings have been appealed to the Colorado Supreme Court, where, hopefully, the many questions that have been raised by these rulings can be resolved.

C. Administrative Procedures

The Colorado Supreme Court has decided several cases bearing on administrative procedures as they relate to tributary groundwater. A brief summary follows.

1. Davis v. Conour

In this case, the question presented was whether water judges had jurisdiction to adjudicate the priority of small capacity wells. The statute then in effect provided that "wells used solely for stock watering, domestic, or other purposes, as defined in Section 148-18-4," were exempt from the 1969 Act.

Between the bringing of the action and the supreme court's decision, the Colorado legislature amended the statute to make it clear that water judges did have jurisdiction to grant decrees to small capacity, "exempt" wells. Nonetheless, the court did not treat the question as moot because many well owners had already obtained decrees for their small wells before the amendment, and the validity of those decrees was at stake.

The court held that "the legislative intent . . . was to make the adjudication of small wells permissive and not to prohibit such adjudication," and, therefore, the water courts did have jurisdiction over small wells.

2. Mooney v. Kuiper

This case involved the interpretation of statutory language which limited well construction permits to one year "unless prior to such expiration the state engineer, upon good cause shown, extends such permit for an additional period certain, not to exceed one year." The question was whether

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109. COLO. REV. STAT. § 148-21-45 (Supp. 1969) (amended COLO. REV. STAT. § 37-92-602(1) (1973)). The wells were defined to be "[w]ells used for ordinary household purposes, fire protection, the watering of poultry, domestic animals, and livestock on farms and ranches, and the irrigation of home gardens and lawns, not exceeding fifty gallons per minute . . . ." Id. § 37-92-602(4).
110. See id. § 37-92-602(4).
111. 178 Colo. at 379, 497 P.2d at 1016-17.
112. Id. at 380, 497 P.2d at 1017.
113. Id. at 378, 497 P.2d at 1016.
115. COLO. REV. STAT. § 37-90-137(5)(a) (1973). The statute also allows extension if evidence is submitted that water from the well has been put to beneficial use. Id.
the language would allow for successive one-year extensions of well permits, or only one such extension.

The supreme court held that the language allowed successive one-year extensions if good cause were shown each time. The court reasoned that since an appropriator is allowed at least four years to develop a conditional water right,

[i]t would be an unreasonable and inconsistent reading of the relevant statutes to hold that a conditional water right could be granted on the basis of the amounts stated in a particular well permit, but that the permit could not then be extended to allow diligent pursuit of those rights awarded in the conditional decree.

Despite this sensible rationale, the Colorado legislature amended the relevant section in 1979 to provide that a well permit may be extended for "only one additional period certain, not to exceed one year..." The one-extension-only limitation does not apply to federally authorized water projects.

II. NONTRIBUTARY GROUNDWATER

A. What Is Nontributary Groundwater?

As used in this article, nontributary groundwater means all groundwater not considered to be tributary groundwater. This definition excludes designated groundwater and includes de minimis tributary groundwater. In other words, nontributary groundwater is all water found underground except: 1) designated groundwater; 2) groundwater not hydrologically connected to a surface stream or alluvial aquifer; or 3) groundwater which will not influence the rate or direction of water movement in a surface stream or alluvial aquifer within one hundred years.

It should be noted that this definition of nontributary groundwater, when compared with the definition of tributary groundwater, raises a major uncertainty: Is water which would influence the surface stream (or alluvial aquifer) in less than one hundred years but more than forty years tributary or nontributary? This question remains unanswered.

116. 194 Colo. at 479-80, 573 P.2d at 539-40.
117. Id at 480, 573 P.2d at 540.
118. COLO. REV. STAT. § 37-90-137(3) (a) (Supp. 1980) (emphasis added).
119. Id § 37-90-137(3)(a), (d).
120. See notes 4-19 supra and accompanying text.
121. See note 4 supra and accompanying text.
123. The burden of proving that certain groundwater is not hydrologically connected to, or will not influence, the surface stream or alluvial aquifer, is on the party seeking a finding of nontributariness. Stonewall Estates v. CF&I Steel Corp., 197 Colo. 255, 258, 592 P.2d 1318, 1320 (1979).
124. See text accompanying notes 4-19 supra.
B. How Are Rights to the Use of Nontributary Groundwater Obtained?

1. Background

In 1963, the Colorado Supreme Court announced its decision in Whitten v. Coit.\(^\text{126}\) In this case, the Colorado Supreme Court was required to determine the validity of a 1948 decree entered by the district court, adjudicating the priorities of a number of nontributary wells. In 1957, owners of these decreed nontributary wells sought an injunction against numerous other water users, who were pumping wells and taking water from the same aquifer without having decreed rights. The district court granted the injunction, stating that "[t]he underground waters are public and subject to private appropriation by putting to beneficial use, and the [1948] decree adjudicating priorities is valid."\(^\text{127}\)

The Colorado Supreme Court, in an opinion by Justice Moore, reversed this ruling. The court held that groundwater was not public water if it did not inhere to the river and did not flow into a natural stream. Since it was not public water, it was not subject to appropriation and the district court had no jurisdiction over the subject matter.\(^\text{128}\)

The court then went on, in obiter dictum, to quote and "approve" the following language from a law review article: "The landowner has a property in the water in his soil. It is a vested right which cannot be taken away by mere legislation."\(^\text{129}\)

The lessons of Whitten v. Coit seemed clear: nontributary groundwater was not subject to appropriation; it belonged to the owner of the overlying surface. Furthermore, the water court had no jurisdiction to grant priority decrees for its use. Subsequent events, however, were soon to make this clear picture cloudy.

The basis for the supreme court's holding in Whitten v. Coit was in large part its analysis of the legislative intent behind the Colorado Ground Water Act of 1957,\(^\text{130}\) which, it said, "painstakingly and purposely excluded nontributary underground water from coverage under the doctrine of appropriation."\(^\text{131}\) Soon after Whitten v. Coit, however, the legislature repealed the 1957 Ground Water Act and substituted the Colorado Ground Water Management Act of 1965,\(^\text{132}\) which embodied a modified appropriation concept. This left the underpinnings of the Whitten v. Coit holding in some doubt.

In 1973, the legislature amended the Ground Water Management Act to provide the state engineer with standards for the granting of nontributary well permits.\(^\text{133}\) These standards referred specifically to "unappropriated"


\(^{127}\) Id. at 160, 385 P.2d at 133.

\(^{128}\) Id. at 173-74, 385 P.2d at 140.

\(^{129}\) Id. at 174, 385 P.2d at 140 (quoting Kelly, Colorado Ground Water Act of 1957—Its Ground Water Property of the Public? 31 ROCKY Mtn. Min. L. Rev. 165, 171 (1959)).


\(^{131}\) 153 Colo. at 165, 385 P.2d at 136.


\(^{133}\) 1973 Colo. Sess. Laws, ch. 441, § 1, at 1520 (codified in COLO. REV. STAT. § 37-90-137(4) (1973)).
water, and insisted that "no material injury to vested water rights would result from the issuance" of such a permit.134 This language threw doubt on the clarity of the legislative intent, perceived by the Whitten v. Coit court, to exclude nontributary groundwater from the appropriation doctrine.

In 1974, the supreme court decided Perdue v. Ft. Lyon Canal Co.135 The court held that nontributary water (in that case, nontributary surface water) fell within the definition of "water matters," and, therefore, was included in the statutory grant of jurisdiction to the state's water judges.136 This determination, since it was based on an interpretation of the 1969 Act, would seem to overrule the contrary holding in Whitten v. Coit,137 which was based on the predecessor statute to the 1969 Act.

2. Jurisdiction of the water courts

As noted above, the supreme court, in Whitten v. Coit,138 held that the district court had no jurisdiction under the 1943 Water Rights Adjudication Act139 to adjudicate the priorities of nontributary groundwater rights. Several post-1969 Act cases have held to the contrary.

a. Preiser v. Smith Cattle, Inc.140

This case involved an application for a decree for fourteen wells drawing groundwater from a basin. It was, apparently, agreed that water in the basin was nontributary groundwater because it would not reach the Arkansas River, if at all, for 300 to 800 years.141 The water court granted the requested decree, without ruling directly on the question of whether it had jurisdiction to do so.142 The supreme court affirmed the decree, again without ruling on the specific question of the water court's jurisdiction.143 It can be inferred from this result that the Colorado Supreme Court believed the water court's jurisdiction extended to the granting of the requested decree for nontributary groundwater.

b. Stonewall Estates v. CF&I Steel Corp.144

In this case, the Colorado Supreme Court was asked to determine the validity of a 1973 decree that awarded both absolute and conditional water rights for the use of nontributary groundwater. In the application that led to the 1973 decree, the caption had specified that the groundwater rights sought were nontributary, but no mention was made in the body of the ap-

134. Id.
136. Id. at 222, 519 P.2d at 956; see COLO. REV. STAT. § 37-92-203(1) (1973).
138. See text accompanying note 128 supra.
139. COLO. REV. STAT. §§ 147-11-1 to -21 (1953) (current version at COLO. REV. STAT. §§ 37-80-101 to -120 (1973)).
140. 190 Colo. 243, 545 P.2d 711 (1976).
141. Id. at 244, 545 P.2d at 712.
142. Id. at 244-45, 545 P.2d at 712.
143. Id.
plication as to the nontributary nature of the groundwater.145 The published resume of water rights applications that included this application also did not mention that the groundwater was alleged to be nontributary.146 No statements of opposition were filed.147 After a hearing, the water referee entered his ruling, which awarded some absolute and some conditional water rights for use of nontributary groundwater.148 This ruling was later made the decree of the water court.149

The applicant submitted his application for a quadrennial finding of reasonable diligence four years later. Several water users objected, claiming that prior to this time, they were not aware that the claimed water rights were nontributary. They filed statements of opposition asserting that: 1) the water court had no jurisdiction to adjudicate nontributary groundwater under the 1969 Act; and 2) the failure of the published resume to mention the nontributary nature of the groundwater was a defect in the required notice which deprived the water court of jurisdiction.150

The water court ruled that it did have jurisdiction to adjudicate nontributary water under the 1969 Act, citing Preiser v. Smith Cattle, Inc.151 and Perdue v. Ft. Lyon Canal Co.152 This ruling was not appealed to the supreme court,153 but since it is a jurisdictional ruling, the fact that it was not disturbed by the supreme court supports the correctness of the water court’s ruling.154

The water court ruled further that as to the particular water rights in question, it did not have jurisdiction to enter the 1973 decree, because the published notice had omitted the nontributary nature of the groundwater claimed.155 The supreme court affirmed the setting aside of the 1973 decree on this ground.156

3. To appropriate or not to appropriate?—That is the question.

Whitten v. Coit157 declared unequivocally that nontributary groundwater could not be appropriated. Later legislative pronouncements indicated, however, that perhaps it could be appropriated, at least to some extent.158 Several post-1969 Act supreme court opinions have also appeared to accept the idea that the water courts can adjudicate the priorities of non-

145. Id. at 257, 592 P.2d at 1319.
146. Id.
147. Id.
148. Id.
149. Id.
150. Id. at 258, 592 P.2d at 1319.
151. 190 Colo. at 243, 545 P.2d at 711. See notes 140-43 supra and accompanying text.
153. 197 Colo. at 258, 592 P.2d at 1318.
155. 197 Colo. at 258, 592 P.2d at 1319.
156. Id. at 258-59, 592 P.2d at 1320.
158. See text accompanying notes 130-34 supra.
tributary groundwater rights. 159 Two recent water court opinions that were expected to clarify the situation have only added to the confusion.

The Water Court in and for Water Division No. 1 on February 27, 1981, entered its decree in a proceeding entitled In re the Application for Water Rights of Highland Ventures and Mission Viejo Company in the Arapahoe Formation and the Laramie-Fox Hills Aquifer in Douglas County (Mission Viejo). 160 This proceeding was brought by the Mission Viejo Company to obtain adjudicated priorities for a number of wells in certain nontributary groundwater aquifers.

The state engineer had denied well permits for the Arapahoe Formation wells because he was unable to find either 1) that there was unappropriated water available or 2) that the vested water rights of senior appropriators would not be materially injured. 161 The state's testimony at trial was that the well permits had been denied because the water level in existing wells in that area had already declined one hundred feet or more, and that it was the State's policy to deny all permits for new wells in such "critical areas." 162 This "critical area" policy was apparently intended to protect the owners of all "senior" wells in the area from material injury by avoiding further acceleration of the declining water level. 163

Several objectors in the proceeding argued that the material injury to their wells should be determined on the basis of economic injury. They suggested that a case-by-case analysis should be made of: 1) how much it would cost each "senior" well owner to continue pumping in the face of the accelerated water level decline which the Mission Viejo wells would cause and, 2) whether the owner of each such well could afford the increased cost. 164

The water court agreed that the principal legal issue was the proper interpretation of the statutory requirement that there be "no material injury to vested water rights" before a permit would be granted for a nontributary well. 165 The court noted that Whitten v. Coit 166 had held the doctrine of prior appropriation inapplicable to nontributary groundwater. It concluded that the state engineer's critical area policy, which appeared to apply a priority system to wells producing from the same nontributary source, was not appropriate. 167 The water court's ruling appeared to follow Whitten v. Coit

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163. See id. at 13.
164. Id.
167. See Mission Viejo Decree, supra note 160, at 12-13. The court also stated, "It appears to the Court that section 37-90-137(4) recognizes the doctrine of Whitten v. Coit, ... and is a determination by the legislature that each landowner should have the benefit of the volume of unappropriated nontributary groundwater underlying his own land. He should not be compelled to forego the development of such nontributary groundwater underlying his lands for the benefit of others who tap the same aquifer."
in part and to modify it in part. Although the water court declared that a
landowner should "have the benefit of" nontributary groundwater underly-
ing his land, it stopped short of confirming that the landowner actually owns
that water. In addition, the water court limited the interest of the land-
owner to unappropriated nontributary groundwater underlying his land, indi-
cating an acceptance of the idea that others besides the landowner could
appropriate such groundwater. This indicates a possible further shift away
from Whitten v. Colt.

The water court rejected the notion that "economic injury" due to de-
cline in water level could equal "material injury" for purposes of section 37-
that the water level is not part of a water right,170 and that, therefore, de-
cline in that water level is not material injury to a vested water right.171

The other recent water court opinion was rendered by a special water
defendant appointed by the Colorado Supreme Court. The supreme court con-
solidated numerous water proceedings, involving nontributary groundwater
from all seven Water Divisions, for the purpose of determining five common
questions of law.172 Because literally hundreds of water right applications
were involved, the special water defendant appointed a trial committee that di-
vided the applications into classes and then selected one representative claim
from each class for the special water defendant to review.

The special water defendant issued his ruling in Southeastern Colorado Water
Conservancy District v. Huston (Consolidated Ruling) on February 11, 1981.173
He gave the following answers to the five questions of law posed by the
supreme court:

Question 1: Are nontributary waters in Colorado subject to appro-
priation?174 The special water defendant answered this question in the affirmative.
He based his ruling on the fact that nontributary groundwater in designated
groundwater basins is subject to appropriation.175 The court stated that
there was no valid difference between nontributary water outside a design-
nated basin and nontributary water within a designated basin. "The char-
acter of the water itself is identically the same. It is all water and it is all non-

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text.
170. [P]riority of appropriation does not give a right to an inefficient means of diver-
sion, 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.

171. The water court suggested, however, that economically injured well owners may have
an action for damages against the applicant. Mission Viejo Decree, supra note 160, at 14.
(1979).
1349 (1979); Consolidated Ruling, supra note 173, at 2-3.
175. Consolidated Ruling, supra note 173, at 3.
tributary."  

As originally posed in the petition to the supreme court, this question had asked whether nontributary waters were subject to appropriation under the Colorado Constitution. The supreme court deliberately expanded the scope of this question by removing the reference to the constitution. The special water judge, nonetheless, addressed himself to the narrower question in his opinion. He noted that the Colorado Constitution declared "the water of every natural stream" is the property of the public and that the "right to divert the unappropriated waters of any natural stream shall never be denied." The special water judge believed that the words "natural stream" should be interpreted in light of the information about water available at the time the Colorado Constitution was adopted. It was his opinion that the drafters of the constitution had intended to provide that all water in Colorado, wherever found, was property of the public, subject to appropriation for beneficial use.

Question 2: By what authority can such waters be appropriated? Without analysis, the special water judge stated that the authority for appropriation of nontributary groundwater outside designated groundwater basins is section 37-90-137 of the Colorado Revised Statutes. There is no explanation of how a statute, which simply provides the standards by which the state engineer must evaluate a nontributary well permit application, can provide the authority for an appropriation of nontributary groundwater.

Question 3: Can nontributary water outside the boundaries of designated groundwater basins be appropriated by persons having no property interests in the surface? The special water judge answered this question in the affirmative, with the qualification that a person must either have rights in the surface or the consent of the surface owner in order to develop an appropriation of nontributary groundwater. The landowner's consent is necessary not only to use the water, but also to construct any necessary structures to facilitate its development.

The special water judge concluded that, by virtue of this ownership-or-consent requirement, "the landowner has the first right of development as to non-tributary waters underlying his property." This seems inconsistent

176. Id. at 3-4.
178. Id. at 375, 593 P.2d at 1349.
179. COLO. CONST. art. XVI, § 5.
180. COLO. CONST. art. XVI, § 6.
182. Id.
186. Consolidated Ruling, supra note 173, at 6-10.
187. Id. at 31.
188. Id.
with the answer to Question 1. If consent of the landowner is required to use nontributary groundwater, then how can that water properly be said to be subject to appropriation?  

Question 4: Can nontributary water outside designated groundwater basins be appropriated for use by persons other than the claimant, or those whom the claimant is authorized to represent? This question really asks whether nontributary groundwater may be appropriated for speculative purposes. Although the special water judge gave a qualified affirmative answer to the question as posed, his discussion of the question made it clear that a conditional decree for nontributary groundwater may not be granted if the uses for the water are speculative. 

Question 5: Can applications for adjudication of nontributary waters outside the boundaries of designated groundwater basins be filed 1) without first obtaining permits from the state engineer and, if so, 2) without first applying for such permits? The special water judge ruled that, to avoid confusion, an application for adjudication of nontributary groundwater should not be filed until a well permit either has been granted by the state engineer or has been denied and the denial reversed on appeal. 

The Mission Viejo decree was not appealed to the Colorado Supreme Court, but the Consolidated Ruling of the special water judge has been. 

**CONCLUSION**

In the twelve years since the passage of the Water Rights Determination and Administration Act, the judiciary has undertaken the task of defining and interpreting the ambiguities in the act. Although progress has been made, the process is still a long way from completion. More specific guidelines are necessary for determining the tributary waters of groundwater. The process of integrating tributary groundwater and surface water must be further refined.

The treatment of nontributary groundwater is overshadowed by confusion and uncertainty. The two recent cases that water law practitioners hoped would clarify this area have proved to be a disappointment. The Colorado Supreme Court will have an opportunity to clarify the law in Colorado as it relates to nontributary groundwater when it reviews the Consolidated Ruling of the special water judge. The question that must be answered by the court is: Can nontributary groundwater be appropriated,

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189. The Mission Viejo decree declared that a landowner is entitled to the benefit of the unappropriated groundwater underlying his land, indicating that such groundwater is subject to being appropriated by others without his consent. Mission Viejo Decree, supra note 160, at 13. See text accompanying notes 160-71 supra.


and, if so, how and by whom? Until this threshold question is clearly resolved, the law in Colorado on this point will remain in flux.