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DISTRICT COURT, WATER DIVISION 2, COLORADO

Case No. 95CW211

WATER RESOURCES
STATE ENGINEER
COLO.

FINDINGS OF FACT, CONCLUSIONS OF LAW, JUDGMENT AND DECREE District Court Water
Division No. 2, State of

Filed in the office of the
District Court Water
Division No. 2, State of

Colorado
APR 30 1996

CONCERNING THE AMENDED RULES AND REGULATIONS GOVERNING THE

DIVERSION AND USE OF TRIBUTARY GROUNDWATER IN THE ARKANSAS RIVER

BASIN, COLORADO

M. J. Quinn

Clerk

STATEMENT OF THE CASE

This case is before the Water Court in and for Division 2 pursuant to the provisions of section 37-92-501(3) (a), and involves proposed Amended Rules And Regulations Governing The Diversion And Use Of Tributary Ground Water In The Arkansas River Basin, Colorado. An excellent history of prior efforts at regulation by the State Engineer is found in the cases of Fellhauer v. People, 447 P.2d 986 (Colo. 1968) and Matter of Arkansas River, 581 P.2d 293 (Colo. 1978).

PARTIES

Hal D. Simpson, State Engineer, is the proponent of the rules and was represented by Jennifer L. Gimbel, Deputy Attorney General, and Steve O. Sims and Bart L. Rickenbaugh, Assistant Attorneys General.

Those supporting the rules are:

Amity Mutual Irrigation Co. represented by Carl M. Shinn and

Donald Steerman

Arkansas Valley Ditch Association, on behalf of the Bessemer

CENTRAL FILES

Irrigating Ditch Co., the Catlin Canal Co., the High Line Canal Co., the Oxford Farmers Ditch Co., the Colorado Canal Co., the Board of Water Works of Pueblo, Colorado, and the Las Animas Consolidated Canal Co., represented by Michael T. Mitchell

Box Springs Canal and Reservoir Company,

represented by Robert F.T. Krassa

City of Colorado Springs and the Colorado Canal Companies,

represented by Mark T. Pifher

Colorado Water Protective and Development Association, Bobby

J. Baker, Dale W. Baker, Wesley Eck, Cholla Farms, Inc.,

and Reid Cattle Co., represented by M.E. MacDougall

Fort Lyon Canal Company,

represented by John S. Lefferdink

Lower Arkansas Water Management Association,

represented by David L. Harrison and Amelia S. Whiting

Public Service Company of Colorado,

represented by Brian N. Nazareus

Southeastern Colorado Water Conservancy District,

represented by Howard Holme

Upper Arkansas Water Conservancy District,

represented by Ken Baker

Those opposing the rules are:

Horse Creek Water Users Association, Norman Summers, Donald V.

Johns, Jr., and Jack L. Pfof,

represented by William A. Hillhouse and Jeffrey K. Reeser

Marvin Willhite, D & R Cattle Co., Bill Lowe, Randy and Denice
Lowe, Tom and Pat Fedde, Gerald and Elaine Clark, and
Clark's Inc.,
represented by Kevin B. Pratt

Other parties include:

Sidney W. Whittemore and George L. Winden, pro se; whose
protests were dismissed by way of summary judgment.

Orville E. Parnell and Doris V. Parnell, Trustees of the
Orville E. Parnell and Doris V. Parnell Revocable Trust,
Charles H. Fletcher and Cecilia Sherwood; whose protests
were withdrawn prior to trial.

James Proctor and Charles and Alice Proctor; whose protests
were withdrawn during trial after the close of evidence.

PROCEDURAL HISTORY

The Court denied a motion of the State Engineer to declare the
amended rules effective January 1, 1996. Thereafter, the Court, by
written orders previously entered, determined certain questions of
law and disposed of certain issues by summary judgment. Trial to
the Court took place in Canon City commencing on April 8, 1996, and
lasted eight days. The Court has requested and received proposed
findings of fact and conclusions of law, but chooses to write its
own opinion.

Certain limited and separate issues involving Horse Creek
Water Users Association, Box Springs Canal and Reservoir Co., and
the State Engineer, and pertaining to a very small and isolated
geographic area, have been bifurcated and are now set for separate

trial commencing October 15, 1996. These parties have stipulated that if this Court approves the proposed amended rules, the State Engineer shall not enforce them against Horse Creek Water Users Association until this Court has ruled on those separate issues.

The protests of the parties represented by Mr. Pratt are rather lengthy, and rather than unnecessarily lengthen this opinion, the Court attaches those protests as appendices.

This Court hereby certifies the Judgment and Decree set forth herein to be final and expressly directs its entry. The Court expressly determines there is no just reason for delay.

FINDINGS OF FACT

1. The proposed amended rules have been properly published throughout Division 2 in full compliance with the provisions of section 37-92-501(2)(g).
2. All protests received were timely filed in compliance with section 37-92-501(3)(a) & (b).
3. The Arkansas River is over-appropriated. That has been well established by the evidence presented in this case. Moreover, there are a number of Colorado Supreme Court cases so stating.
4. The evidence in this case also firmly establishes that the streams tributary to the Arkansas River are over-appropriated.
5. The evidence in this case once again establishes the clear and long recognized hydrological connection between the surface flow of the Arkansas River and the underlying

- alluvial aquifer. See Matter of Arkansas River, supra.
6. The evidence shows beyond dispute that the wells subject to the proposed amended rules contribute significantly to depletions of usable stateline flow to Kansas in violation of Article IV-D of the Arkansas River Compact. See Section 37-69-101 et. seq., or Exhibit A 3. That has also been judicially determined by the United States Supreme Court in Kansas v. Colorado, 514 U.S. ____, 115 S.Ct. ____, 131 L.Ed 2.d 759 (1995).
 7. The United States Supreme Court has determined that pre-compact allowable pumping properly allocated and vouchsafed to Colorado is only 15,000 acre feet. That number is thus unassailable.
 8. This Court finds there are approximately 700 pre-compact Colorado wells, but that there are now approximately 2800 wells subject to these proposed amended rules, and they collectively pump at or about 150,000 acre feet per year. That represents a huge percentage increase in the number of wells since 1948, but a much, much larger percentage increase in acre feet pumped.
 9. In the damage phase of the proceedings before the Special Master, Kansas and Colorado have recently stipulated that depletions to useable stateline flow for the period 1950 through 1985 total 328,505 acre feet (Exhibit A-7). In so stipulating, both states placed reliance on the Kansas Revised H.I. Model (1992).

10. Proposed Rule 3 relates to stateline flow. It first allocates the allowable annual 15,000 acre feet among the 700 or so pre-compact irrigation wells. The rule then regulates all irrigation wells diverting from the Valley Fill Aquifer and surficial aquifers (as defined by Rule 2(k) and shown on Exhibit A-5a) in order to reduce depletions to useable stateline flow.
11. There are very rare times, anywhere along the river, when senior surface rights are fully satisfied. Therefore, when the irrigation wells are in use, there is essentially always resultant injury to senior surface users.
12. As to surface rights on the Arkansas River, 378 c.f.s. were decreed before 1870; 694 c.f.s. prior to 1880; 1524 c.f.s. prior to 1887; and 3921 c.f.s. prior to 1890. Only in flood times and during high snow melt does the Arkansas River cover surface rights decreed before 1900.
13. Exhibit A-19(2) starkly demonstrates just how junior the affected wells are, and also how far out of priority they have been when pumping. For instance, testimony therefrom supports a finding that a well with a 1913 priority date would not have been in priority from the commencement of record keeping in 1967 until June of 1983.
14. Rule 4 regulates irrigation wells that divert from the Valley Fill Aquifer and surficial aquifers, as defined, and those that divert from the alluviums of Fountain Creek and of the Arkansas River from Pueblo Dam to Pueblo

(all as shown on Exhibit A-5a).

15. This rule appropriately governs diversions from the Fountain Creek alluvium and that of the alluvium of the Arkansas River from Pueblo Dam to Pueblo, since they share the characteristics of the aquifers governed by Rule 3.
16. The purpose and effect of Rule 4 is to cause junior well owners in those areas to replace out-of-priority depletions to senior surface rights.
17. The rules do not regulate ground water diversions from sources not tributary to the Arkansas River, or from designated basins or the Denver Basin.
18. There then remains a large geographic area within Division 2 (shown in white on Exhibit A-5a), not covered by Rule 4, where diversions of tributary ground water can cause injury to senior surface rights.
19. For instance, the evidence presented convinces the Court that junior well(s) owned by the Proctors cause injury to senior surface users farther down Texas Creek.
20. The purpose and effect of Rule 5 is to cause the relatively small number of wells in this large geographic area, not sharing characteristics of the area governed by Rule 4, to replace out-of-priority depletions to senior surface rights.
21. Rule 4 requires total discontinuance of "post compact ground water diversions", as defined at Rule 2(f), unless

out-of-priority depletions to senior surface rights are replaced. Rule 5 requires total discontinuance by the wells there covered unless out-of-priority depletions to senior water rights are replaced.

22. To the extent that replacement of out-of priority depletions to senior surface rights does not sufficiently reduce depletions to useable stateline flow, Rule 3 allocates such unreplaced depletions among the various well owners in the area covered, and requires total discontinuance of "post-compact ground water diversions" until the well user or an entity acting on behalf of well users has an approved plan for replacing their allocate share of the unreplaced depletions.
23. In this Court's opinion, based on consideration of all the evidence before the Court, the 1973 Rules (Exhibit A-4), although approved by this Court, have proven inadequate to reduce depletions to useable stateline flow or to reduce injury to senior surface rights.
24. Although there are wet-year exceptions, twenty-three years of experience under and of application of these rules has only found a continuation of and overall increase in depletions to useable stateline flow.
25. The Court finds that there has been a corresponding continuation of and increase in injury to senior surface rights.

26. The 1973 Rules do not preserve the priority system. Rather, they allow continued pumping by the irrigation wells when senior surface rights that are very much senior in priority are being curtailed because of calls on the river.
27. Although there have been reasonable efforts at enforcement of the 1973 Rules, the State Engineer and Division 2 Engineer have been hampered in those efforts by reason of inadequate resources.
28. The Colorado Legislature, with certain knowledge of these proposed amended rules, enacted Senate Bill 96-124 (Exhibit A-55). That act was clearly passed in the belief that the amended rules constitute an improvement. That act significantly increased the abilities of the State Engineer and Division 2 Engineer to bring about enforcement, and provides for fines in support of the provision at proposed Rule 15.
29. During the twenty-three years under the 1973 Rules, and the many years following the decision in Matter of Arkansas River, supra, the State Engineer has developed a greater knowledge of the aquifer based upon further studies and operating experience under the 1973 Rules. Significant study of the river and connected aquifer were forced upon Colorado by the anticipated filing of and then the pendency of the Kansas-Colorado case now before the United States Supreme Court.

30. The approved findings of the Special Master in the Kansas-Colorado litigation, and the continued depletions to useable stateline flow furnished good cause for the State Engineer to abandon the ineffective 1973 Rules. Continued injury to senior surface rights alone furnishes sufficient reason for adoption of the new rules. Such depletions and injury will continue if the proposed rules are not adopted.
31. In addition to the further study of the aquifer and to the benefits of knowledge accumulated over twenty-three years of experience, it is abundantly clear that such advances in technology have occurred over the ensuing years as to allow hydrologic computer modeling to contribute significantly to a sound engineering basis for the proposed rules.
32. Jon Ford, protestants' own expert witness in hydrologic computer modeling, and accepted by this Court as such, testified that hydrologic computer modeling is widely accepted in his field of endeavor. Significantly, his own firm has used an hydrologic computer model every bit as sophisticated as that under discussion in this case in order to study a most complicated water matter in Arizona.
33. The totality of the evidence and several particular circumstances cause the Court to find that evidence regard-

ing Kansas Revised H-I Model (1992) is properly admitted under either Rule 702 or the "Frye" test.

34. In the first place, hydrologic computer modeling is not new to hydrologic studies or to water law. It has been around for twenty years or more. This Court believes that such modeling (including the model under scrutiny here) does not present as novel scientific evidence.
35. Nonetheless, the testimony of Ford, Schroeder, and Helton and various of the exhibits convince the Court that the underlying theories and principles associated with hydrologic computer modeling are generally accepted in the relevant scientific community (the fields of groundwater hydrology and of groundwater hydrology as relates to or impacts surface water hydrology).
36. And, the testimony of Ford and Helton convince the Court that the techniques used in the Kansas Revised H-I Model (1992) to apply the principles of hydrologic computer modeling to the circumstances of this case are generally accepted. Helton was most persuasive on this point. Ford's testimony shows the methodology his firm used in connection with their model on the Gila River project is not dissimilar to that used for the Kansas Revised H-I Model (1992).
37. Under Rule 702, the Court finds the experts testifying to hydrologic computer modeling generally and to the Kansas Revised H-I Model (1992) were providing scientific knowl-

edge that assisted the Court in understanding and determining very difficult fact issues presented in this case.

38. The Kansas Revised H-I (1992) is relied on to determine depletions to useable stateline flows.
39. It is also relied on to form part of the basis for the depletions rates used at Rule 4.2.
40. The testimony is in conflict as to whether this model accurately predicts stateline depletions. Ford and Schroeder believe that it doesn't. The Court finds that it does with a reasonable degree of certainty, and bases this finding on various evidence:
 - a. Exhibit 163
 - b. Helton's testimony that he used Colorado's Water Budget Analysis (inaccurate though it be) to provide an upper parameter against which to compare the model in question. Helton believes the Colorado Water Budget Analysis overestimates depletions and that the model in question underestimates depletions. If he is right as to the latter, then use of the present proposed model with the rules will benefit Colorado well irrigators.
 - c. Helton's overall testimony, which the Court weighs more heavily than that of Schroeder and Ford since:
 - (1) Helton has more extensive hydrologic computer modeling experience, and

- (2) Helton has practical experience from studying many of the ditches and canals along the Arkansas for a period of twenty-seven years.
- d. Kansas experts believe the model under scrutiny accurately predicts depletions to useable state-line flow.
 - e. Kansas and Colorado relied upon the Kansas Revised H-I Model (1992) model in stipulating to the cumulative depletions for the period 1950 through 1985. It carries some weight for this Court that two states, after years of litigation, agreed to the amount of depletions with reliance on the model in question.
 - f. The State Engineer, though not an expert on modeling, has chosen, after years of exposure to the issues, to accept the Kansas Revised H-I Model (1992) for present use. His opinion is entitled to some deference by the Court.
 - g. Schroeder's testimony that the model predicts depletions most accurately as it does so at the state-line. The Court finds that omissions of data in certain regards does not significantly alter the results now obtained, and that errors observed in output essentially cancel out and leave negligible total error.

41. The State Engineer continues to seek improvement to the Kansas Revised H-I Model (1992) through the continuing efforts of Schroeder. There is no indication that results will soon be forthcoming. The Court would have to speculate on that point. The Court is convinced that no perfect model can be devised; yet it is plain that only through such modeling can regulation be fair and effective.
42. The depletion rates selected and set forth at Rule 4.2 are reasonable. The State Engineer established these rates with reliance on a number of distinct and logical bases. He considered the flat 40% rate applied under the South Platte rules and found it inappropriate for the different hydrological characteristics of the Arkansas River and its aquifer. He used his own engineering judgment. He relied on the expert opinion and judgment of Duane Helton. He had Schroeder use those depletion rates in the Kansas Revised H-I Model (1992) to see if their application would satisfy stateline demands. They did. He considered input from a number of well owners and well owners' associations. He considered various studies of the river. These presumptive depletion rates are established on a basin-wide average.
43. Frank Milenski testified that the proposed depletion rates of Rule 4.2 are reasonable, but are perhaps too low. Mr. Milenski was proffered to the Court and accepted

by the Court as an expert witness. He has authored two books on water. He has been president of the Catlin Canal Co. for 36 years. He has been on the board of the Southeastern Colorado Water Conservancy District from its inception. He has served on the Colorado Water Conservancy Board. He has farmed for over 60 years and under two different canals. He is 82 years old, and is now retired. This Court considers him to be a great authority on farming and wells and ditches and irrigation by wells or by surface water. He is a rich repository of helpful and practical information. Indeed, without being facetious, and with considerable respect, the Court considers Mr. Milenski to be something of a "Father of Waters". His opinion is that the present rules are reasonable and provide a starting point. This Court quite agrees.

44. Unit Response Functions are defined in Rule 2(i), and are used as set forth in Rule 8 to determine the timing and location of depletions. They may also be used to determine the time and location of return flows from diversions of imported waters and other fully consumable waters. Expert testimony supports this Court's finding that unit responses functions are reasonable to use to determine where and when depletions will occur. The fact that Kansas experts devised the unit response functions for stretches of the Arkansas does not detract from their

usability. There is no evidence to support a finding that they are not appropriate. The evidence supports that they will reasonably fulfill their intended purposes.

45. The State Engineer has carefully considered the economic impact of these rules on well owners. After a consideration of the testimony of the protesting well owners, the Court finds the economic impact not to be significant and certainly not so significant as to constitute a "taking" within the meaning of that term. The economic reality is that the price of water is going up, and the well owners will now have to pay the going rate for various types of replacement water. As a practical matter, the great majority of well owners in the areas affected belong to users groups that have purchased replacement water for years. The effect of the rules in the first year is mitigated since only 60% of out-of-priority depletions need be replaced.
46. There is an abundant supply of replacement water available for the foreseeable future.
47. The generalized fear of the protesting well owners that the price of replacement water will rise is not a sufficient basis upon which to find the rules unreasonable. If that occurs, it will simply be the marketplace at work.

48. There could be no appropriate and practical rule allowing the wells to pump only when they are in priority. That is because the wells affected are so rarely in priority. Adopting such a rule would be tantamount to shutting the wells down.
49. The methods of measuring how much water a well pumps are prescribed by rules approved by this Court in 1994 and amended in February, 1996 (Exhibits 56 and 66). Two methods are available. One is by using a totalizing flow-meter. The other is by establishing a power coefficient for each electric well. Either method is reasonably accurate and allows the State Engineer to measure pumping. Neither method has associated costs that are exorbitant or prohibitive.
50. The pre-compact authorized limit of 15,000 acre feet as determined by the United States Supreme Court is allocated among the various pre-compact wells on a fair and rational basis. The allocation utilizes the decreed capacity of the well and considers the present use of the well (whether supplemental or sole source) as determined by field survey. Other methods could be devised. None suggested would be more fair or rational. Establishing actual pre-compact use for nearly 700 wells would be accomplished as to some, but be impossible as to many, therefore leading to inconsistent results.

51. The evidence shows that certain affected wells, for various reasons, cannot be shown to either reduce state-line flow or cause injury to senior surface rights. In fact, some wells are shown to have a beneficial effect by way of "salvage". These wells are plainly the exception.
52. Well-by-well analysis would take forever, and to require such would effectively stymie regulation.
53. The depletion rates set forth at Rule 4.2 are presumptive, but nothing prevents submission by a well owner of a plan which would seek to show less depletion than a particular rate specifies, or even seek to show no depletion.
54. Existing means of diversion for surface water rights are shown by the evidence to be reasonable means of diversion.
55. There is a plenitude of evidence to show that the Arkansas River and its single supporting aquifer do not furnish any such alternatives suggested as available in Matter of Rules & Reg. Gov. Use, Control & Protection, 674 P.2d 914 (Colo. 1983), which dealt with the aquifers underlying the San Luis Valley. Existing there are two aquifers; one being confined and the other unconfined. The total water available is billions of acre feet. The Arkansas River, by contrast, has a single supporting aquifer containing no more than 2 million acre feet or so of water. Only some 450,000 acre feet are economically

recoverable by existing wells at their present depths. The drilling of more wells by the senior surface users would be expensive and futile and would only proliferate the number of existing wells, thus compounding the problem of effective regulation and at a huge and unwarranted cost to the senior surface users.

56. Optimum use of water is assured by these rules. The great majority of surface water users are presently supplementing their surface rights through the use of wells. The great majority of the affected wells are used in just that manner. The farmers and ranchers have developed their own method of achieving optimum use through conjunctive use. Any effort on the part of the Court to adjust the status quo would cause confusion and be disruptive. Some affected wells serve as sole source wells since they are situated in an area not reached by a ditch or canal. Some few surface users are so far out on the reach of a canal that they can't reach groundwater and therefore don't have wells.
57. The rules maintain conjunctive use, as described above, while recognizing and preserving the priority system. The rules reasonably allow all wells to continue pumping, while accomplishing the stated purposes of reducing depletions to useable stateline flow and preventing continued material injury to senior surface users.~ The Court reaches the concomitant finding, from ample

evidence to that effect, that the rules will in fact accomplish such purposes.

58. The State Engineer will rely on engineering standards that are commonly relied on to administer these rules and in passing on tendered replacement plans. Such tools as the Glover and SDF methods will be of assistance. The depletion rates and unit response functions are standards in themselves.
59. These rules do not represent some connivance between the State Engineer and senior surface users. The process that led to the promulgation of these rules was instead very open, lengthy, thorough, geographically widespread, and included a variety of persons and entities affected or with helpful knowledge. Well owners participated and contributed, and their opinions were sought.
60. The Court finds all of the requirements for regulation of wells as established in Fellhauer, supra, and reiterated in Matter of Arkansas River, supra, to have been met.
61. The evidence supports that the State Engineer in considering these rules and in determining their approach, content, effect, and purpose has:
 - a). Taken into consideration and been governed by the principles set forth in section 37-92-502(2).
 - b). Taken into consideration and been governed by the principles and requirements set forth in section 37-92-501(1) and (2).

- c). Acted in accord and consistent with the legislative declaration set forth at section 37-92-102.
62. The effective date of these rules shall be June 1, 1996. The intervening period will allow for the effective dissemination of this opinion. Moreover it will allow all well owners, whether members of associations or not, to develop and submit plans.
63. When the Court has referred herein to "injury" to senior surface rights or to senior surface users, the Court means "material injury" within the meaning of the applicable statutes.
64. This Court has proceeded in this case on the basis that the engineer's proposed regulations are presumed to be valid until shown otherwise by a preponderance of evidence, and has relied upon such a pronouncement in Kuiper v. Well Owners Conservation Association, 490 P.2d 268 (Colo. 1971). Nonetheless, after a consideration of all the evidence presented on contested issues of fact, the Court reaches all of its findings above on that basis, and on the basis that the State Engineer has the burden of proving the rules valid by a preponderance of the evidence.

CONCLUSIONS OF LAW

The jurisdiction of this Court to decide this matter is set forth at section 37-92-501(3)(a).

The authority of the State Engineer to promulgate rules in this area and for the purposes intended is set out by statute and is not questioned.

The proposed rules are presumed to be valid until shown otherwise by a preponderance of evidence. Kuiper v. Well Owners Conservation Association, 490 P.2d 268 (Colo. 1971).

In order for rules to be valid they must satisfy the criteria established by the Colorado Supreme Court in Fellhauer v. People, 447 P.2d 986 (Colo. 1968). These are (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 the regulative orders, (2) Reasonable lessening of material injury to senior rights must be accomplished by the regulation of the wells, and (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. The Court has found these criteria to have been satisfied.

In order for rules to be valid they must be consistent with the legislative declaration set forth at section 37-92-102, and the State Engineer must act consistently with and be governed by the principles set forth at sections 37-92-501 and 37-92-502. The Court has found these requirements to have been complied with and met.

Due process considerations have been met by publication of these rules in the October resume in Division 2 as required by

section 37-92-501(2)(g), and by way of this Court determining the protests as required by section 37-92-501(3)(a).

For decades now, and in increasing amounts, the irrigation wells subject to these proposed rules have caused Colorado to be in violation of the Arkansas River Compact. Since their very advent, and in increasing numbers and amounts, the irrigation wells have been depriving senior surface rights of water in violation of Colorado's priority system thereby causing material injury. Past efforts at regulation by the State Engineer, beginning with Fellhauer twenty-eight years ago, have either been thwarted by the courts or ineffective after approval by the courts.

There is some exigency attached to resolving the problem of stateline depletions since the United States Supreme Court and the Special Master remain involved. The cost to Colorado for 328,505 acre feet from 1950 through 1985 will not be insignificant. The number of acre feet for which Colorado is liable from 1986 through 1995 has not been determined. And the acre feet meter at the state-line is still running.

The Court concludes that the law does not require the State Engineer to delay promulgation or implementation of these proposed rules in order to secure the approval of the Special Master, or the Arkansas River Compact Administration, or Kansas. There is no law to support such a proposition.

Considerations of optimum or maximum use and of conjunctive use are addressed by this Court's findings. Such considerations are taken into account by the rules to the extent they can be under

the unique circumstances presented. And always, and at any rate, preserving priority of right is the primary feature and touchstone of water law in Colorado.

Regardless of whatever other source or sources of losses to the stateline they may want to blame, or want taken into consideration, the protestants cannot escape the irrefutable fact that the wells collectively are taking water out of priority and causing significant stateline depletions.

The most intriguing question presented by this case is whether the Kansas Revised H-I Model (1992) is a trustworthy tool. The courts cannot expect or demand perfection in this area. Nor can the courts accept some shoddy device with hopes that it will soon be improved. The standard must be whether the model is reasonably accurate as it would now be used in administering the rules.

This Court does not "walk by faith and not by sight" as it approves the model as reasonably accurate. The Court has been guided by the evidence which preponderates for that proposition.

The Court concludes that the proposed rules and regulations are reasonable and should be approved by this Court.

JUDGMENT AND DECREE

IT IS ORDERED, ADJUDGED, AND HEREBY DECREED:

1. The protests to the Amended Rules are denied.

95cw211

Div 2

2. The Amended Rules And Regulations Governing The Diversion And Use Of Tributary Ground Water In The Arkansas River Basin, Colorado, are approved by this Court and shall be effective on and from June 1, 1996.

Dated this 30th day of April, 1996.



BY THE COURT:

John Anderson
Water Court Judge
Water Division 2
State of Colorado