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In order to have the most effective use of available water in appropriation states, the State Engineer must know how much water is being used and by whom. In this article, Professor McIntire takes a penetrating look into the water use practices of the State of Wyoming and finds that there is a great deal of water that is going to waste through nonuse as the result of inaccurate records. He then suggests three possible solutions to this problem.

## THE DISPARITY BETWEEN STATE WATER RIGHTS RECORDS AND ACTUAL WATER USE PATTERNS

"I WONDER WHERE THE WATER WENT?"†

*Michael V. McIntire\**

RIGHTS to use surface waters within the State of Wyoming are granted and supervised by the Board of Control, an administrative agency created by the state Constitution.<sup>1</sup> Shortly after the Constitution was ratified, the Board was directed to undertake a complete adjudication of all direct flow surface water rights in the state. Water rights were granted upon "proofs" submitted by the water users, which were statements and maps containing information as to the nature and extent of the water use, the date when the first use commenced, the place of diversion, the place of use and type of use, which data was collected and retained in the office of the State Engineer.<sup>2</sup>

There is much doubt that these records were ever an accurate reflection of actual water uses existing in the state at

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1. WYO. CONST. art. 8, § 2.

2. WYO. STAT. §§ 41-165 *et seq.* (1957).

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any given time. Reports of the State Engineer from the early days of statehood to the present refer to substantial inaccuracies in the filings and statements initially submitted.<sup>3</sup> The discrepancies have apparently compounded with the passage of time, due to increased competition for the water and changes in water uses which have gone unrecorded in the State Engineer's records.

The purpose of this article is to analyze the problem created by the inaccuracies in the records to determine their scope and effect and to review several alternative methods of correcting it.

### THE PROBLEM—IN GENERAL

The problem to which this article is directed is symptomatically an administrative one, but its real cause rests elsewhere. The State Engineer is charged with controlling and administering state waters in accordance with laws which are not always realistic or practical and with inadequately manned, trained and paid staff.

Recently, the State Engineer has been pressing the Governor and the legislature to authorize some procedure for eliminating from the State Engineer's records the so-called "paper rights," those water rights of record which have been unused for a great number of years or in some cases never used.<sup>4</sup> Since at least 1945, he has pleaded for funds and personnel with

3. In 1892, Elwood Mead, the "father of Wyoming water law and the first State Engineer, noted the "utter unreliability" of pre-statehood water rights records, stating that the actual acreage irrigated greatly exceeded that claimed in the records, due to the large number of ditches which had never been recorded. 1 WYO. STATE ENG'R REPORTS 5, 6 (1891 - 1892). This trend apparently reversed after the first statewide adjudication, for in 1918 the State Engineer wrote:

[I]t will be noticed that a final certificate of appropriation is issued merely on the statement of the landowner, which is often intentionally or unintentionally in error. The owner of the permit may be mistaken as to the land description or the acreage irrigated; while numerous cases are known where persons have filed notices of completion of irrigation works, submitted proofs of beneficial use and have been issued certificates of appropriation on their statements, when not so much as a furrow has been plowed toward the alleged construction.

14 WYO. STATE ENG'R REPORTS 41 (1917 - 1918). More recently, the State Engineer lamented the absence of actual surveys of acreage proposed to be irrigated as described in water right applications, concluding that "the adjudication [without a survey] usually includes all of the lands shown in the application which, in many instances, includes a greater acreage than has actually been irrigated." 38 WYO STATE ENG'R REPORTS 37 (1965 - 1966).

4. See 37 WYO. STATE ENG'R REPORTS 24 (1963-1964); 38 WYO. STATE ENG'R REPORTS 37 (1965-1966).

which to improve water administration, including surveys of existing water use patterns, so as to have an accurate record of the lands upon which irrigation waters were actually being applied.<sup>5</sup> Despite the fact that "paper rights" cloud the title of all subsequent appropriators, and that accurate water use information is essential to the enforcement of Wyoming water laws relating to beneficial use,<sup>6</sup> place of use,<sup>7</sup> and the maximum rate of diversion,<sup>8</sup> these pleas have gone unheeded. As the result, the water use records maintained by the State Engineer have fallen into a state of disrepair, a situation which is not uncommon in the western states.<sup>9</sup>

One of the main advantages of the prior appropriation system of water rights is supposed to be the relatively high degree of certainty of water use which a water right vests in its owner, by freeing him from the fear that he will be deprived of the use of available water by subsequent changes in the water use patterns affecting his source of supply. But, in fact, such changes can occur to the detriment of other appropriators. An early priority water right, long unused but not declared abandoned, may be resurrected at a subsequent date and is entitled to the protection that its early priority demands.<sup>10</sup> Changes in the place of use of water without approval of the State Engineer may substantially reduce the return flow to the stream, thereby reducing the water supply available to downstream appropriators. Points of diversion could be changed as a matter of right prior to 1965, provided only that other appropriators were not injured thereby.<sup>11</sup> This latter qualification meant, in practice, that the burden was

5. See, e.g., 31 WYO. STATE ENG'R REPORTS 19 (1951-1952) and 38 WYO. STATE ENG'R REPORTS 37 (1965-1966).

6. WYO. STATS. §§ 41-2, -47, -181 (1957).

7. WYO. STATS. § 41-2 (1957).

8. WYO. STATS. § 41-181 (1957).

9. As part of this study, the Land and Water Law Center of the University of Wyoming College of Law submitted a "Water Rights Administration Questionnaire" to the state agency responsible for water rights administration in sixteen appropriation states. The questionnaire sought information on a variety of administration problems and procedures. Direct answers to the questions were received from twelve states and indirect or evasive answers from several more. One of the questions was, "Have you experienced significant deviations in the actual practice of the water user in the field from the information recorded in your office?" Eight respondents answered in the affirmative, three answered negatively and one declined to answer this question.

10. See *Horse Creek Conservation Dist. v. Lincoln Land Co.*, 92 P.2d 572, 577 (Wyo. 1939); *Sturgeon v. Brooks*, 281 P.2d 675, 683-684 (Wyo. 1955).

11. *Johnston v. Little Horse Creek Irrigation Co.*, 79 P. 22 (Wyo. 1904); *Holt v. City of Cheyenne*, 137 P. 876 (Wyo. 1914.)

upon protesting appropriators to prove injury, a burden which may be heavy indeed.<sup>12</sup>

Without records which accurately show the nature and extent of actual water uses, neither the water users themselves nor the state water commissioners can readily detect deviations or identify the cause of a depleted water supply in the source. The result is that in some water-poor areas of the state, the uncertainty of the holder of a water right may be at least as great as it is alleged to be under a riparian system.

A number of unpleasant results flow from these circumstances. First, uncertainty in water rights is bound to adversely affect desired new development within the state.<sup>13</sup> Second, absence of accurate records as to the amount, place and type of surface water use actually being used in accordance with the laws of the state effectively precludes the fulfillment of the legislative will to enact a state water plan, for any such plan depends upon an accurate inventory of the amount of water already legally committed.<sup>14</sup> Even if existing water use patterns are determined by and ad hoc survey, the plan would quickly become out of date and unreliable as a guide towards water development unless current water right data were at all times maintained. Third, inaccurate water use records adversely affect the credibility of the state in its dealings with neighboring states and the federal government relating to the use of interstate waters within Wyoming.

### THE EXTENT OF THE PROBLEM

Most of the western states experience significant deviations between the actual practices of water users in the field and the information recorded in the office of the water administration officials.<sup>15</sup> The extent of the problem, and the seriousness of the deviations in the other states is not known, but the magnitude of the problem in Wyoming is enormous

12. In *Holt v. City of Cheyenne*, *supra* note 11, the Wyoming Supreme Court acknowledged the rule but allowed the City of Cheyenne to change its point of diversion from below plaintiff's diversion to a point upstream of plaintiff's land and diversion point, thus drying up the stream at plaintiff's diversion point. It is difficult to imagine a greater "injury to other appropriators" than the type which the court sanctioned in that case.

13. "These so-called 'paper water rights' have had a decided effect on the feasibility of many proposed Wyoming projects . . ." 37 WYO. STATE ENG'R REPORTS 24 (1963-1964).

14. See WYO. STATE ENG'R REPORTS 22 (1967-1968).

15. *Supra* note 9.

and is apparently statewide. In 1955, the records of the State Engineer showed that the adjudicated, direct flow water rights from the Little Laramie River totaled 417,000 acres, but the acreage actually irrigated by direct flow from the Little Laramie was only 200,000 acres, which is only 48% of the adjudicated acreage.<sup>16</sup> In the North Platte River Basin in central and eastern Wyoming, direct flow surface water rights are adjudicated to 890,554 acres, but only 569,131 acres, 64% of the adjudicated acreage, were actually irrigated as of 1967.<sup>17</sup> In one reach of a river in the water-rich highlands of west central Wyoming, direct flow surface water rights are adjudicated to 10,839 acres, but only 6,600 acres are actually irrigated, 61% of the acreage shown to be irrigated by the State Engineer's records.<sup>18</sup>

Many factors have been mentioned as explaining the difference between the number of acres having adjudicated water rights and the substantially lesser number of acres actually being irrigated,<sup>19</sup> but the two most plausible are (1) lack of water in the source sufficient to irrigate all of the lands adjudicated, and (2) the practice of concentrating the water diverted onto fewer acres than the water right shows.

The discrepancies existing in the North Platte River Basin result from both of these factors. Considering only the districts or ditches diverting directly from the North Platte River in the reach studied during the irrigation season 1961 through 1965, the total amount of water diverted was considerably less than the maximum statutory allowable diversions for the number of acres actually irrigated.<sup>20</sup> Yet an analysis of the fourteen individual ditches diverting water discloses that three of them consistently divert water far in excess of the maximum allowable diversions, considering the number of

16. Lloyd, Deputy State Eng'r, Laramie River Use and Administration Report (1955).

17. Clark, Water Uses in the North Platte River Basin of Wyoming, Univ. of Wyo. Agric. Experiment Station Res. J. No. 4 at p. 23 (Jan. 1967).

18. Unpublished study of East Fork River from 1965 to 1967, conducted by the Wyoming Water Resources Research Institute in cooperation with the Wyoming Natural Resources Board. The study is on file with the Wyoming Water Resources Research Institute.

19. Some of the reasons are listed and explained in Clark, *supra* note 17, at 21.

20. Clark, *supra* note 17, at 58-59. Professor Clark's data was presented in terms of total amounts of water diverted per season, rather than rate of diversion. By way of comparison, the maximum amount of water allowable was calculated by assuming that the maximum statutory rate of diversion (1 c.f.s. per 70 acres) was continuously diverted for 24 hours per day for 127 days.

acres actually irrigated, although all are well within the legal allowable limit if the adjudicated acreage is considered. It may be significant that these three users have the most inefficient ditches, delivering only about 50% of the water actually diverted.<sup>21</sup> However, most of the water users in the North Platte River Basin are making do with diversions substantially less than one cubic feet per second per seventy acres of land actually irrigated.

On the other hand, on the East Fork tributary to the New Fork River in western Wyoming, where irrigators are allowed to divert water at the rate of two cubic feet per second per seventy acres,<sup>22</sup> the maximum allowable rate of diversion of water (assuming all adjudicated acres are irrigated and that surplus water exists) is 309.7 cubic feet per second. Actual field observations and measurements of diversions at various times during the irrigation seasons of 1965, 1966 and 1967 disclose that the diversion rates during peak irrigation seasons were seldom significantly less than the maximum legal rate, and in one case the observed diversions amounted to 368.9 cubic feet per second, 59.2 second feet higher than the legal maximum. Yet the acreage actually under irrigation is not the 10,839 acres adjudicated, but only 6,600 acres, which means that irrigators in the studied reach of the East Fork are sometimes diverting water at the rate of approximately 3.23 cubic feet per second per seventy acres actually irrigated, and in at least one instance at the rate of 3.92 second feet per seventy acres actually irrigated. Certainly it cannot be said that any portion of the adjudicated acreage is unirrigated because of lack of water.

To compound the problem, there is no indication in the records as to what extent the lands upon which water is applied correspond to the lands to which water rights are adjudicated. Incomplete, uncertain or inaccurate descriptions of land in old water right applications, the tendency of appropriators to

21. The three ditches are the Lucerne Canal, the Torrington Irr. Dist. and the Pratte-Ferris Irr. Dist. See Clark, *supra* note 17, at 58-59.

22. Due to Wyoming's unique "surplus water right," defining "surplus water" as excess above that required to satisfy appropriators with a priority date of March 1, 1945 or earlier, and allowing each such appropriator to take up to twice his normal water diversion if sufficient water is available. Appropriators with priorities later than March 1, 1945 are subordinate to that right. WYO. STATS. §§ 41-182 to 41-188 (1957).

overstate their water use,<sup>23</sup> unscientific methods of irrigation rendering land unproductive,<sup>24</sup> the difficulty of detecting changes in place of use,<sup>25</sup> unauthorized changes in regulated headgates,<sup>26</sup> and other factors precludes the assumption that all appropriators are necessarily applying their water to lands described in their water rights.

Another source of inaccuracy may arise from the description of the point of diversion of water. Wyoming statutes have long required an applicant for a surface water right to describe in his application the location and description of the proposed ditch and diversion works, among other things.<sup>27</sup> But for an almost equal length of time, Wyoming courts have held that an appropriator has the right to change his place of diversion as a matter of right, provided only that no other appropriators on the stream are injured.<sup>28</sup> It was not until 1965 that the legislature enacted a statute prohibiting changes in the point of diversion without the prior approval of and subject to conditions imposed by the State Engineer.<sup>29</sup> Prior to 1965, unrecorded changes of an appropriator's point of diversion were not uncommon.<sup>30</sup>

There may also be errors in the State Engineer's records regarding the nature of the use which is being made of the water, but because of the general terms by which the type of use is described in the water right (i.e., "municipal," "irrigation") it is not expected that such errors, if they exist, would be sufficiently widespread to create a serious problem.

Another aspect of the problem, potentially more detrimental to future development of state water resources than "paper rights," is the substantial number of unconstructed

23. *Supra*, note 3.

24. 12 WYO. STATE ENG'R REPORTS 16, 38-39 (1913-1914).

25. Water commissioners, monitoring and regulating diversions at the headgate, generally have little opportunity to trace the ditch to determine the place of use.

26. *See, e.g.*, 39 WYO. STATE ENG'R REPORTS 82 (1967-1968).

27. Act of Dec. 22, 1890, ch. 8, § 34, [1890-1] Wyo. Laws 100, 101; *See also* WYO. STATS. §§ 41-201 and 41-203 (1957).

28. Cases cited *supra* note 11.

29. WYO. STATS. § 41-10.4 (Cum. Supp. 1969).

30. A changed but unrecorded point of diversion has been a factor in a number of cases which have reached the Wyoming Supreme Court, including *White v. Wheatland Irrigation Dist.*, 413 P.2d 252 (Wyo. 1966); *Groo v. Sights*, 134 P. 269 (Wyo. 1913); *Johnston v. Little Horse Creek Irrigation Co.*, cited *supra* note 11; *Holt v. City of Cheyenne*, cited *supra* note 11. *See also* 15 WYO. STATE ENG'R REPORTS 83.



permits for unconstructed projects remaining on the records affecting all areas of the state. In the North Platte River Basin, in which the acreage having adjudicated water rights already exceeds the actual irrigated acreage by over 220,000 acres, there are an additional 260,605 acres of land covered by such conditional permits still in good standing.<sup>31</sup> On the Laramie River in southeastern Wyoming, as of 1955, there were ten outstanding permits for water rights for the Wheatland Irrigation Project alone, with priorities going back as far as 1904. One such permit covers Reservoir Number Three, with a capacity of 90,372 acre feet and a priority date of May 31, 1929, regarding which the then Deputy State Engineer observed in 1955: "The Reservoir Number Three is not in usable condition and I am advised that the title to the lands and reservoir basic has not been secured."<sup>32</sup> The danger in this situation is that, when the diversion and conveyance work is finally completed and the water applied to beneficial use, the priority date of the water right so used relates back to the date of the original application so long as the permit remains in good standing.<sup>33</sup> But the Wyoming statutes also provide that a permit can be forfeited *only* after the State Engineer has served and published notice of default on the permittee at least three months before the default can become operative. Thus, even the holders of very old permits must be given the opportunity to complete their works before default.<sup>34</sup>

#### ANALYSIS OF THE PROBLEM

From the water user's point of view, an argument could be made that the inaccuracies in the State Engineer's records arise in part because Wyoming's water laws are not necessarily compatible with the needs and practices of its water users. By the end of the first decade of this century, only twenty-odd years after statehood, the Wyoming legislature had established by statute a maximum rate of surface water diversion and had limited the place of water use to the lands described in the water right, with a few exceptions. But Wyoming irrigators were not scientific or efficient in their

31. Clark, *supra* note 17.

32. Lloyd, *supra* note 16.

33. WYO. STATS. § 41-212 (1957).

34. WYO. STATS. § 41-206 (1957).

water use, sometimes even destroying the productivity and fertility of the land irrigated.<sup>35</sup> When the productivity of such a tract of land declined beyond the break-even point, the land owner would be required by necessity to abandon that land and reclaim another tract, yet the statutes prohibited him from doing so without taking out another, later priority, water right. Protection of his home and his investment of time and money in reclaiming his land certainly tempted landowners, who were largely individualistic anyway, to break the law by transferring water to a more productive tract of land. Where high ditch losses were anticipated, the legal limitation on the rate of flow as a function of acres irrigated encouraged a water right applicant to overstate the acreage intended to be irrigated in order to assure a usable quantity of water at the point of application.<sup>36</sup> Some irrigators simply felt (and feel) that they needed more water than the one second foot per seventy acres allowed by law.<sup>37</sup>

The early limitations on water rights were never intended to confirm the actual practices or methods of Wyoming irrigators. Rather, it was apparently the policy of Elwood Mead and his immediate successors in the State Engineer's office to define the outer parameters of water "efficiency" and beneficial use on a statewide basis and to obtain reasonable irrigation efficiency through state enforcement.<sup>38</sup>

It is debatable whether the legislature ever fully adopted this policy. Before the end of the first decade of statehood, the nonuser statute was amended to increase from two to five years the time for which nonuse of water would subject the appropriator to forfeiture<sup>39</sup> but only over the strenuous objections of the State Engineer.<sup>40</sup> Water users were allowed to change the point of diversion of surface water from the stream with impunity and without notice to any authority.<sup>41</sup> The legislature rejected additional constraints on water rights

35. *Supra* note 24.

36. *See* note 3, *supra*, and Clark, *supra* note 17, at 21.

37. Clark, *supra* note 23, at 21.

38. *See* 1889 REPORT OF WYO. TERR. ENG'R 25 *et seq.*; 2 WYO. STATE ENG'R REPORTS 33-48 (1893-1894); 3 WYO. STATE ENG'R REPORTS 40-53 (1895-1896); 12 WYO. STATE ENG'R. REPORTS 16, 38-41 (1913-1914).

39. Act of Febr. 15, 1905, ch. 39, § 1, [1905] Wyo. Sess. Laws 36, *now* WYO. STATS. § 41-47 (1957).

40. 8 WYO. STATE ENG'R REPORTS 95-96 (1905-1906).

41. *See supra* note 28-30 and accompanying text.

requested by the State Engineer for state-imposed efficiency.<sup>42</sup> Indeed, the legislature took a substantial step to encourage inefficiency in water use when in 1945 it granted all appropriators the right to divert two second feet per seventy acres if unappropriated water was available,<sup>43</sup> a measure apparently aimed at legalizing the water flood irrigation of hay meadows.<sup>44</sup> From the very early days of statehood, the State Engineer's reports are replete with usually futile pleas for sufficient funds and personnel to enforce those water right limitations which were enacted.

Not only has the legislature failed to provide the State Engineer with adequate funds and personnel, but it has also failed to provide workable enforcement procedures. Consider, for example, the inartfully drafted nonuser statute, which reads, in pertinent part, as follows:

In case the owner or owners of any such ditch, canal or reservoir shall fail to use the water therefrom for irrigation or other beneficial purposes during any five successive years, they shall be considered as having abandoned the same, and shall forfeit all water rights, easements and privileges, appurtenant thereto, and the water formerly appropriated by them may be again appropriated for irrigation and other beneficial purposes, the same is if such ditch, canal or reservoir had never been constructed; . . .<sup>45</sup>

As interpreted by the Wyoming Supreme Court, this statute does not impose an automatic forfeiture or abandonment for failure to use water for five or more years.<sup>46</sup> Instead, the Court has allowed appropriators to use the full amount of their water rights even after long periods of nonuse, strongly indicating that resumption of use before an abandonment proceeding is commenced is a complete defense to an abandonment proceeding.<sup>47</sup> Furthermore, the Court has said that the statute making the abandonment proceeding available to "any water user who might be affected by a declaration of aban-

42. *E.g.*, the recommendations for limitations on duty of water and the irrigation season, reiterated in 12 WYO. STATE ENGR REPORTS 38-41 (1913-1914).

43. *Supra* note 22.

44. TRELEASE, *WATER LAW*, 148 (1967).

45. WYO. STAT. § 41-17 (1957).

46. *See cases cited supra* note 2.

47. *Id.*

donment"<sup>48</sup> excludes a water user whose priority is so low that he would not likely obtain any of the water from the abandoned right.<sup>49</sup> The State Engineer takes the position that his office is also precluded from invoking this sanction,<sup>50</sup> apparently because he is not a "water user" and Wyoming has no statute *expressly* authorizing him to initiate abandonment proceedings.

A contestant who does have standing to initiate abandonment is faced with a procedure fraught with delay and interminable hearings and appeals.<sup>51</sup> He is charged with the cost of the necessary transcripts and publication expenses whether he is successful or not.<sup>52</sup> The contestant carries the burden of proof of nonuse,<sup>53</sup> although he is no longer required to prove the absence of factors justifying nonuse.<sup>54</sup> It is small wonder that the abandonment procedure is relatively little used in Wyoming.<sup>55</sup>

The procedure established for supervision of the water laws, together with the number of men and amount of equipment allotted for the job, makes detection of water law violations difficult. Wyoming water rights are limited to a maximum rate of flow of water measured at the point where the water is diverted from the source, the headgate. A water commissioner's observations at the headgate and regulations of the headgate in accordance with the priority give no information or control over the place of water use, the number of acres upon which the water is applied or the amount of water

48. WYO. STATS. § 41-48 (1957).

49. Horse Creek Conservation Dist. v. Lincoln Land Co., 92 P.2d 572 (Wyo. 1939).

50. Conference between the author and Floyd Bishop, State Engineer, in the latter's office in Cheyenne on November 24, 1967. Apparently, this position has been held for some time. See 15 WYO. STATE ENG'R REPORTS 83 (1919-1920). For an argument that the State Engineer's position is unduly limited, see the text accompanying notes 69 to 76, *infra*.

51. See WYO. STATS. §§ 41-49, 41-51, 41-52, 41-53 (1957). After notice to all parties, a hearing is held before the superintendent of the appropriate water division who thereafter submits his report, recommendations and a stenographic record of the proceedings to Board of Control. The Board reviews the entire record and may require the parties and/or witnesses to appear before it to testify to any matters the Board feels are relevant, after which it determines whether and to what extent the contested right was abandoned. If the Board's decision is appealed to the district court, a trial *de novo* is had, although in practice many such appeals rely solely on the record of the hearings before the division superintendent and the Board of Control.

52. WYO. STAT. § 41-50 (Cum. Supp. 1969).

53. Ramsay v. Gottsche, 69 P.2d 535 (Wyo. 1937).

54. Yentzer v. Hemenway, 440 P.2d 7 (Wyo. 1968).

55. 38 WYO. STATE ENG'R REPORT 37 (1965-1966); WYO. STATE ENG'R REPORT 24 (1963-1964).

actually applied. Furthermore, under the "call system" of administration, no control is exercised upon most streams unless a call for control is made, so that in the absence of a call, there are generally no records available even to indicate the rate of diversion.<sup>56</sup>

Even when water misuse is detected, the only sanction available under the statutes is to charge the violating appropriator as a criminal.<sup>57</sup> Because of the great burden of proof and unsympathetic juries, such sanctions are generally ineffective.<sup>58</sup>

The problem created by the existence of unconstructed permits still in good standing is another matter. Originally, Wyoming law required a permittee to complete construction of the diversion works and apply the water to beneficial use within a time "limited to that required for the completion of the work when prosecuted with due diligence."<sup>59</sup> This provision was changed shortly thereafter to set the time for completion of work under a permit at five years, which could be shortened or lengthened by the State Engineer.<sup>60</sup> Although a water right would not issue unless the permittee complied with all of the conditions of the permit, including time limits, it was not until 1917 that the legislature declared that failure to complete the project results in a forfeiture of the water right.<sup>61</sup> Two years later, the legislature extracted most of the teeth from that law by providing that default is not operative until three months after the State Engineer so notifies the permittee.<sup>62</sup> This provision remains in the law today.<sup>63</sup> Personnel limitations have prevented a large-scale review of these old permits and mailing of default notices to their owners.<sup>64</sup>

### CRITERIA FOR A SOLUTION

As Wyoming's economy grows and competition for its water resources becomes more keen, the need for prompt, ac-

56. Notable exceptions to this dearth of data exist in the areas where state-paid full-time Hydrographer-Commissioners are at work. There are presently only five such positions in the entire state.

57. WYO. STATS. §§ 41-201, -72, -65 (1957) are examples.

58. 15 WYO. STATE ENG'R REPORTS 80-81 (1919-1920).

59. Act of Dec. 22, 1890, ch. 8, § 34, [1890-1] Wyo. Laws 100, 101.

60. Act of Febr. 15, 1895, ch. 45, § 1, [1895] Wyo. Laws 89.

61. Act of Febr. 21, 1917, ch. 119, § 1, [1917] Wyo. Sess. Laws 200, 201.

62. Act of Febr. 14, 1919, ch. 18, § 1, [1919] Wyo. Sess. Laws 18, 19.

63. WYO. STATS. § 41-206 (1957).

64. Letter from Floyd Bishop, State Engineer, to the author, August 4, 1969.

curate and fair administration and adjudication of water rights grows more acute, but such administration requires accurate records of water users and water rights. The problem involves more than merely bringing the State Engineer's records and water use patterns into harmony, however difficult this may be. Past mistakes may be immediately repeated if there is not also some consideration given to maintaining the State Engineer's records up to date. In turn, maintaining these records accurately requires more than the addition of personnel and money to the State Engineer's staff and coffers, although that is a major requirement. It also involves the delineation of the purpose and goals of water law and water administration, together with a continual review of that basic policy and its administration in light of the needs of the people of Wyoming. This latter factor was the conscious concern of Elwood Mead and his immediate successors but appears to have been thereafter neglected until recently.

Most of the changes which have been made in Wyoming's surface water laws have been reactions to specific situations,<sup>65</sup> rather than a coordinated attempt to achieve some delineated long-range goal. There does not appear to have been any serious attempt to define analyze or establish any definitive water use and allocation policy until the recent authorization of the State Water Plan.

It is not likely that the future will be as forgiving of mistakes caused by inept or nonexistent growth planning. It is becoming increasingly apparent that the Rocky Mountain states are reaching a crossroads in economic development. The strong conservationist trend which has arisen, the development of tourism and recreation as major industries and the proliferation of the so-called "clean industries" suggest that future development will be more rapid and remarkably different in the next several decades than that which has been experienced in the past half century. Nevertheless, the increasing attention everywhere paid to water resources allocation is a strong indicator that water resources will, in the future as in the past, play a substantial role in the direction, extent and type of such growth. Wyoming, virtually unaffected by

65. Trelease & Lee, *Priority and Progress—Case Studies of the Transfer of Water Rights*, 1 LAND & WATER L. REV. 1, 68 (1966).

the social and economic wounds which civilized man inflicts upon himself in his uncontrolled worship of "progress," is in a position to study and profit from the mistakes of her more populous sisters.

Learn she must, for her water laws must change to accommodate the inevitable increase in population and increased competition for water while avoiding the topsy-like growth which has characterized the development of other regions.<sup>66</sup>

For example, it is at least arguable that in some areas of the state the statutory maximum allowable diversion of water must be increased to sustain an agricultural economy. Indeed, the variations in elevation, climate, length of growing season, fertility of soil and availability of water may ultimately require different limitations on water rights to be applied in various portions of the state, as conditions warrant, in lieu of statewide limits applicable to all. Increases in population and in competition for water use and enjoyment will certainly make the determination of and the protection of "the public interest" more significant, particularly in the fields of water pollution and water quality standards. Public clamor for recreational uses requires recognition of nonconsumptive uses and recreational uses as "beneficial uses."<sup>67</sup> Correlation of surface water and ground water rights can be expected, possibly requiring some appropriators to substitute some other source, such as ground water, for an existing direct flow surface water right. These areas of possible water law change are mentioned, not advocated, to illustrate some of the circumstances and pressures which could and possibly will someday precipitate substantial changes in existing water laws. The point is that the laws must be susceptible to such changes and water policy continually reviewed for that purpose if the state is to direct, rather than merely observe, its future growth patterns and method of development.

66. "[C]hanges in water laws . . . are being sparked by rapid population increases and sharp climbs in per capita water demand curves." Beuscher, *Appropriation Water Law Elements in Riparian Doctrine States*, 10 BUFF. L. REV. 448. The existing inaccuracies in the State Engineer's records, the legislative authorization for a State Water Plan and the recent sweeping water law changes made in the states of Texas, New Mexico and Colorado strongly suggest that major changes in Wyoming's 80-year old water laws will be necessary to implement any policy decided upon.

67. Note, *Water for Recreation—A Plan for Recognition*, 44 DENVER LAW J. 288 (1967).

Obviously, no sweeping changes in water policy will be made overnight, nor should they be. Time is required to evaluate all of the circumstances and social pressures now existing and foreseeable in the future, to develop and perfect various economic theories and criteria, to debate at length and to obtain all points of view. However, the present problems of water law administration, based upon records often inaccurate and sometimes unusable,<sup>68</sup> cannot wait that long. A solution must be found which will allow the records and water uses to be correlated within a reasonably short period of time but which will permit the adoption and implementation of meaningful changes later on as necessary. This is a fundamental concept which should be kept in mind during the discussion and analysis which follows.

Below are presented three possible basic approaches toward a solution of this perplexing problem. The first would require that the appropriators conform their water uses to those shown on the existing state records. The second would require amendment of the existing records to make them conform to the present water uses. The third is an attempt to accommodate nonconforming water uses by permitting them to continue through issuance of a conditional, non perpetual water right to which, after a period of time, subsequently enacted water laws would apply.

#### A POSSIBLE SOLUTION—

##### STRICT ENFORCEMENT OF EXISTING LAWS

An obvious possibility for solving the problem is to increase the reliability of the records as they now exist by creating machinery to compel appropriators to conform to them. The State Engineer would be given express authority to initiate abandonment proceedings, which would be a sanction against those whose uses do not conform to the records as well as to those who fail to use their rights at all.

If such a plan were seriously considered, new legislation

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68. In 1920, a water division superintendent reported to the State Engineer that, due to unused water rights, the water is "properly regulated regardless of the record, but in accordance with the facts on the ground. In an extreme shortage, this condition becomes very troublesome." 15 WYO. STATE ENGR REPORTS 83 (1919-1920).



would undoubtedly be sought. Carefully drafted, it would be legally unobjectionable.

It is arguable that the power to implement such a course of action is already vested in the State Engineer and/or the Board of Control. The State Constitution vests the Board of Control with the power and duty to control and supervise the waters of the state.<sup>69</sup> In 1914 the Wyoming Supreme Court upheld the power of the State Engineer to regulate an appropriator's headgate to reduce the diversion to the legal allowable rate for the acreage then being irrigated, even though such rate was far lower than the allowable amount specified in the water right.<sup>70</sup> A state statute expressly limits "beneficial use" to not more than 1 c.f.s. per seventy acres.<sup>71</sup> It seems just as logical to say that an appropriator whose water use violates other express statutory constraints, such as use on land other than that to which the right attached,<sup>72</sup> is similarly guilty of failing to put his appropriation to "beneficial use," which is the "measure and limit" of Wyoming water rights.<sup>73</sup> In other words, if the State Engineer has the power to limit an appropriator's diversion to the allowable rate for the *number* of acres actually irrigated, he must also have the power to limit the diversion to the allowable rate for the number of *adjudicated* acres actually irrigated.<sup>74</sup>

By the same token, if the State Engineer can regulate a headgate to *temporarily* limit the flow to the legal rate, by what rationale is he prohibited from *initiating* proceedings to *permanently* reduce such right after five or more years of limited use? The constitutional directive to the Board of Control to "equally guard all the various interests involved" in waters,<sup>75</sup> including, presumably, the public interest, together with the beneficial use limitation on water rights implicitly vests in the Board the power to prevent the unlawful use of state waters and to limit or terminate water rights so used, where appropriate.

69. WYO. CONST. art. 8, § 2; WYO. CONST. art. 1, § 31.

70. Parshall v. Cowper, 143 P. 302 (Wyo. 1914).

71. WYO. STATS. § 41-181 (1957).

72. Prohibited by WYO. STATS. § 41-2 (1957).

73. WYO. STATS. § 41-2 (1957).

74. See State v. Fanning, 68 N.M. 313, 361 P.2d 721 (1961); State v. Mitchell, 66 N.M. 212, 345 P.2d 744 (1959); State v. McLean, 62 N.M. 264, 308 P.2d 983 (1957).

75. WYO. CONST. art. 1, § 31.

Wyoming's nonuser statute is not inconsistent with such construction, for it merely extends the standing to initiate abandonment to private water users. It does not limit standing only to private appropriators.<sup>76</sup>

Even if the Board of Control and the State Engineer are not now empowered to initiate abandonment and to apply it to all water law violations, laws which expressly vest such power could meet no constitutional objection.

Could an appropriator who has long used his water in a manner contrary to his water right defend against a state-initiated abandonment proceeding on the grounds of laches or estoppel? Such a defense may be raised in actions initiated by private parties.<sup>77</sup> It appears to be the law that the defense can also be raised in actions commenced by public agencies.<sup>78</sup>

The existence of these defenses is significant. If the State Engineer or the legislature or both attempted to update the water use records through a "strict enforcement" scheme such as that outlined above, "laches" and "estoppel" could well be the shoals upon which such plan would break. For those defenses are grounded in concepts of "equity," and there are few equities favoring the "strict enforcement" scheme.

In the first place, the policy behind said strict enforcement approach, that the water right criteria and constraints upon water uses emanating in the late 1800's and early 1900's are still valid, is seriously questionable. Indeed, it is this rationale which is called up for scrutiny as a result of the present conditions involving state water records.

Second, the physical and economic upheaval created could be catastrophic. Lands presently productive and existing irrigation improvements not described in records would have to be abandoned in favor of lands, described in old records, which are not necessarily superior or even equal to those

76. An analogous situation exists in the federal government regarding power to lease oil and gas. Since 1941, it has been held that the President has the implied power to protect government land threatened with drainage of oil and gas deposits by adjacent drilling operations by granting oil and gas leases, notwithstanding the fact that Congress has prohibited oil and gas leasing on such lands. 40 OP. ATT'Y GEN. 41 (1941).

77. *Sturgeon v. Brooks*, 281 P.2d 675, 683 (Wyo. 1955).

78. See *City of Sheridan v. Montana-Dakota Util. Co.*, 157, F. Supp. 664, 670 (D. Wyo. 1958); *State v. State Board of School Land Commr's*, 191 P. 1073 (Wyo. 1920). Cf. *Hercules Powder Co. v. State Board of Equalization*, 210 P.2d 824 (Wyo. 1949).

now under cultivation. Furthermore, the burden would not rest solely on the nonconforming users. Other strictly "legal" appropriators whose water rights are fulfilled largely through return flows could be adversely affected by any change in place of use. In sum, attempts at this late date to force water users to blindly conform their uses to those described in and specified by records many decades old could create a great deal of economic waste.

Third, the waste caused by such a program cannot be justified on the grounds of ultimate economic or social benefit, for the "strict enforcement" approach is a step backwards from the goal of maximizing the use and enjoyment of water resources. Because Wyoming surface waters are tremendously overappropriated, water rights which are declared abandoned as a result of nonconforming uses would not become free waters available for subsequent appropriation or for "free flowing streams" but would rather be transferred to an appropriator with a lower priority, hence a less certain water right, hence a more marginal use. In effect, this "strict enforcement" approach would force an uncompensated transfer of water from an existing user to a generally less productive or more marginal use.

Finally, since all or most of the surface waters would still be appropriated under vested rights immune from later substantive changes in water laws,<sup>79</sup> no flexibility for future change is created by this system.

In fact, about all that the strict enforcement approach has going for it is that it would effectively correct the records of the State Engineer at a cost which could be spread over a number of years, since there is no compelling urgency to "correct" the entire state at once. But these advantages scarcely justify the disruptive economic and social impact that this solution would require. Indeed, such disruption could prompt Wyoming courts to find ways to render judgment for the defendants in abandonment proceedings brought by the state against long-term appropriators who had been using their water "il-

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79. Western water rights are generally thought of as being vested in perpetuity. *Arizona v. California*, 283 U.S. 423, 459 (1931). Elwood Mead clearly held the same idea. 3 WYO. STATE ENG'R REPORTS 43 (1895-1896). As such, they are immune from substantial change by subsequent legislation. *Hughes v. Lincoln Land Co.*, 27 F. Supp. 972, 974 (D. Wyo. 1939).

legally," probably by sustaining the defense of laches and estoppel against the State, even though the basic power to commence abandonment proceedings would undoubtedly be upheld as constitutional.

#### A SECOND POSSIBILITY—

##### CONFIRMATION OF EXISTING WATER USES

Under the "strict enforcement" approach discussed above, the State Engineer's records would be corrected by requiring water users to conform their use patterns to those shown on the records. The other side of that coin would require that the records be changed to conform to existing water uses.

Broadly stated, this second approach calls for a one-time ratification of existing water uses; *i.e.*, a "re-adjudication" of state water rights. Thereafter, the statutory restrictions and criteria applicable to water rights would be strictly enforced except as to those deviations which the re-adjudication ratifies. Water rights for which water was available during the specified time period but which were unused or partially so would be declared abandoned or partially abandoned.

The scope of the ratification is variable. The state could confirm all water uses now existing regardless of the location of the water use, the amount of water diverted, the amount of water applied, the place of diversion or the method wherein the appropriator obtained his use. On the other hand, the ratification could be so limited to extend only to deviations in "place of use," *i.e.*, violations of the "no-change" statute. The uses ratified can be as narrow or as broad as desired.

To implement this type of solution, the legislature must enact a "curative act" to validate those water rights which are now used contrary to the provisions which the legislature desires to retroactively waive. Such an act is legally unobjectionable.

Since the legislature originally had the power to expressly authorize water uses as they are now being used, it has the power to retroactively "cure" those defects, provided that no vested rights of third parties are thereby impaired.<sup>80</sup>

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80. *Addison v. Fleenor*, 196 P.2d 991 (Wyo. 1948).

This approach, like the "strict enforcement" possibility, requires that the State Engineer be empowered to initiate abandonment proceedings to clear up "paper rights," a power discussed earlier in this article.<sup>81</sup>

One of the more significant procedural problems which will be encountered if and when this plan gets on the drawing boards concerns the time period used to determine what uses are "existing uses" for the purposes of ratification. If the water use must have been practiced for a given period of time ending on or before the effective date of the act, problems of proof in determining whether, when, where and how much will be compounded, due to scarcity of recorded data. On the other hand, if the time period commences on or after the effective date of the act, wholesale lawbreaking by water users seeking the greatest advantage will be encouraged.

A related problem involves the method of determining whether an allegedly "existing use" meets the statutory criteria for ratification. In the first statewide adjudication, which was commenced shortly after statehood, all existing appropriators were required to submit "proofs," which were merely statements of the amounts of use, purpose and the place of use, executed by the appropriator under oath. These were accepted as accurate if no objection was made by other appropriators. This system is believed to be responsible in large measure for the present inaccuracies in the records because, among other things, water users overstated their amounts of use, inaccurately described the place of use and sometimes declared a use when none in fact existed.<sup>82</sup>

The State Engineer has long maintained that the only reliable method of accurately determining water use data is by actual survey.<sup>83</sup> Yet to obtain actual survey the data required to effectively implement this alternative plan may place an unbearable burden on the State Engineer and the state taxpayers.

In the first place, such a survey would require more than an ad hoc determination of where water was used at a given time. Such information may be sufficient for general planning

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81. See text accompanying notes 67-74, *supra*.

82. *Supra* note 3.

83. *Supra* note 4.

purposes, but more precise data is needed for re-adjudication of water rights, such as a reasonably precise description of the place of use, the length of time it has been used, the amount of water applied and the place of diversion. Despite the great accuracy of modern survey methods, including aerial surveys, much of this information must be obtained or verified by on-the-ground investigation. The cost of such a program would be substantial.

The burden will be further compounded by the compressed time within which it must be accomplished. If water uses existing as of a given date, and which have been so used for a specified period of time prior thereto, are to be "ratified," the "re-adjudication" process must be accomplished state-wide and with some dispatch. If it is not, if the "adjudication" process proceeds on an area-by-area basis over an extended period, the amount and reliability of necessary information will decrease with time while the difficulties of proof and possibility of fraud will increase. Yet, if the process is to be carried on with reasonable accuracy and some degree of promptness, it will require a heavy expenditure for a relatively short term, possibly an unacceptable burden.

The virtue of the "re-adjudication" approach is that it could achieve the desired goal—updating water rights records—with minimum disruption of the existing economy and agricultural patterns. Given a sufficiently determined legislative will to adopt such approach, the procedural and financial problems described above would not be insurmountable.

Yet this method is not without its philosophical obstacles. Courts sitting in Wyoming have held that no water right can be obtained or recognized in this state except by proper application to the State Engineer as provided by the statutes<sup>84</sup> and that water rights must be used precisely in accordance with the provisions of the statutes and the terms of the right.<sup>85</sup> It is the policy of the state (whether wise or not is another question) expressed in the statutes that a person who uses water unlawfully or tampers with a regulated headgate is a criminal.<sup>86</sup> Under the "re-adjudication" approach, however, any water

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84. See *Wyoming Hereford v. Hammond Packing Co.*, 236 P. 764 (Wyo. 1925).

85. *Lincoln Land Co. v. Davis*, 27 F. Supp. 1006 (D. Wyo. 1939).

86. *Supra* note 57.

user who had violated the established law for a long enough period of time, perhaps even by deliberately reopening his headgate, would be granted a right to use the water he thus "stole," while those who conformed to the law would be penalized by being bound by the statutory limits. There is a basic inequity in such expediency which affects the palatability of the proposal, whatever its effectiveness.

Furthermore, confirming existing uses represents no step toward maximizing water uses, although it does not retreat from that goal (except possibly to the extent that it may confirm unnecessarily large or inefficient diversions). Like the "strict enforcement" approach, "re-adjudication" will leave Wyoming surface waters overappropriated, with water rights tied to the past and vested in perpetuity, the terms and conditions of which are constitutionally immune from substantial change by subsequent legislation.

#### A THIRD POSSIBILITY—

##### CONDITIONAL CONFIRMATION OF EXISTING USES

The basic problem with each of the two approaches heretofore discussed is that they are the extreme solutions to the problem. One would require appropriators to conform to the records, regardless of effect. The other would confirm all uses made in violation of the water right, regardless of how gross or how inequitable. One solution assumes any deviation is unjustified; the other assumes that all deviations are acceptable. Neither of the two approaches leaves any room for subsequent modification of the water laws which time and population trends might ultimately require.

As always, however, the choice is not limited to these two extremes. There is at least one more alternative.

Consider a proposal which would ratify existing water uses which do not conform to the existing records, but the price for such confirmation would be the imposition of conditions, including a termination date, on the appropriator's water right. Unused water rights would, of course, be abandoned and unfulfilled water permits would be canceled.

This plan, like the others, requires that the State Engineer be authorized to initiate abandonment. Like the "strict en-

forcement" alternative, abandonment must be a sanction against misuse as well as nonuse of waters. A "curative act" is also required, but it would not be automatic in its operation. It would authorize the State Engineer to "ratify" nonconforming water rights falling within certain basic criteria, after notice and hearing, subject to specified conditions.

The criteria to be established by the legislature for determining which rights are subject to confirmation, could be quite broad so as to make eligible all but the most gross deviations and would include water uses which generate return flow upon which other appropriators rely. The type of "deviation" from the record and the length of time so used would also be a part of the criteria.

The major condition or qualification based on the "confirmed" water right would be one of time. The right would terminate on such date as the State Engineer, in his discretion, determines within absolute maximum and minimum limits established by statute. Upon expiration of the right, it would be subject to renewal for an additional time period, subject to all laws existing on the renewal date and such other conditions as then-existing policies of resource development dictate.

The criteria for determining the length of time for which the "conditional" permit is issued would include the merits of the water user's claim to its use, the extent of his investment in it, the extent of its use, the extent of stream recharge through return flow, the extent to which other appropriators rely on such return flow and other factors.

The power of the State Engineer to issue "conditional" water rights to nonconforming water users is a corollary to his power to initiate abandonment proceedings. If, consistent with the Constitution, the State Engineer has or can obtain by statute the power to terminate water rights not exercised in accordance with law, he may logically impose less onerous sanctions on such appropriators, consistent, of course, with due process and equal protection requirements.<sup>87</sup>

This "conditional confirmation" approach allows records to be updated in a manner consistent with present water uses,

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87. See *Kirk v. State Board of Irrigation*, 90 Neb. 627, 134 N.W. 167 (1912).



without the need for an instantaneous, state wide re-adjudication, while introducing flexibility into Wyoming's water rights system for the first time in history. By allowing non-conforming water uses on a terminable basis, a number of non-perpetual water rights are created to which subsequent changes in the water laws or policy can apply. Yet if no significant policy changes are made, the exercise of the water right in its present form can be indefinitely continued.

Unlike the first two approaches discussed, this third alternative requires no commitment to any water use philosophy for its implementation. Instead, competing economic, social and political philosophies can be allowed to grow and mature until circumstances require a definite decision. When the water policy for the twenty-first century is finally adopted, it can be to some degree implemented, at least as to those water rights not perpetually vested.

The pressing problem of inaccurate state water use records, which requires an immediate solution, is corrected expeditiously, while the major policy questions are deferred until facts and debate allow an intelligent choice. In short, this solution provides for change but does not demand it.

#### ADMINISTERING AND FINANCING WATER LAWS

There can be little doubt that any attempt to harmonize the records and actual water uses and to keep the records up-to-date thereafter will require more personnel and money than have previously been allocated to that task. Furthermore, the personnel required must be properly trained, adequately paid full-time employees.<sup>88</sup>

But substantial improvement in the methods of obtaining water use data is also required. Observations at the head-gate alone are insufficient to adequately administer and regulate water uses. The use of light aircraft, aerial photography and other modern methods of determining where and how water is actually used would increase the effectiveness of enforcement with a minimum of additional personnel.

How is this ambitious enforcement program to be financed? This political question is not peculiar to water re-

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88. The case for state-hired, state-trained and state-paid water commissioners is ably stated in 37 WYO. STATE ENG'R REPORTS 10 (1963-1964).

sources programs, and it is not within the scope of this article to review the state budget. But it may be worthwhile to dwell a moment upon the proposition that water resources administration should be reasonably self-supporting. It may be possible to develop a system by which water users would supply necessary and *accurate* water use data by an annual report while financing the administration and regulation of state water resources by payment of a water use tax.

Neither the report nor water tax is innovative in western water law. At least five states which allocate waters under a prior appropriation system require water users to periodically submit information regarding water use over the reporting period.<sup>89</sup> Six states assess all or a portion of the costs of water administration and regulation to the respective water users, usually in proportion to the amount used.<sup>90</sup> Such a combination tax and reporting system has advantages in addition to being a source of needed revenue. A tax imposed on the water used would provide the heretofore absent incentive for an appropriator to avoid overstatement. Understatement to avoid tax is minimized because of fear of loss or a partial loss of his water right, since data supplied in the reports would be form part of the basis for regulation of his diversion in the future. The report would also require the appropriator to obtain more precise knowledge of his own irrigation system in terms of its use, efficiency and economy. Marginal water users may be stimulated to more beneficial uses of the water or abandonment of a water right. In appropriate cases, a tax on direct flow surface water rights may be sufficient incentive for water users to substitute untaxed underground water supplies for their surface water, thus developing Wyoming's virtually untapped ground water resources.

A tax on water use is not without its problems.<sup>91</sup> Nor is a periodic report submitted by the water user sufficiently accurate in all cases to maintain up-to-date records. But there are

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89. North Dakota, Texas, California, Alaska and Nebraska.

90. Texas, Utah, California, New Mexico, South Dakota and Nevada.

91. Some of these problems involve the determination of the tax base. Should the tax be on the maximum allowable diversion, whether used or not, or on the water actually diverted, or on the water consumptively used? The question of whether and how late priority appropriators are taxed in years when water is unavailable or in short supply raises due process and equal protection questions.

noticeable advantages to each approach, and some combination of the two appears very promising indeed.

#### CONCLUSION

The prior appropriation system of water resources allocation, which Wyoming has done much to pioneer, cannot be effective without adequate administration, which in turn requires accurate records of water uses and water rights. Indications from many sources, including the State Engineer, are that Wyoming's records are frequently inaccurate.

Any attempt to correct this deficiency in the prior appropriation system will be troublesome, but it is apparent that the longer the task is put off, the more difficult it will become.

No claim is made that the three alternative solutions discussed above are the only approaches possible. Much more data is needed before the door can be closed and before any proposal can be intelligently tested.

The intent of this discussion is to stimulate some much needed thought about, criticism of and action on this pressing but not always obvious water problem. It is earnestly hoped that, in the process of correcting defects in the records, some flexibility can be introduced into Wyoming's water rights system.