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The Illusion of Finality in General Water Rights Adjudications

A. Dan Tarlock, Chicago-Kent College of Law

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THE ILLUSION OF FINALITY IN GENERAL WATER RIGHTS
ADJUDICATIONS

A. Dan Tarlock*

I. INTRODUCTION: WHY ADJUDICATE NOW?

Many western states are undertaking ambitious and costly water rights adjudications. Water rights may be firmed up in a variety of judicial and administrative proceedings, but adjudication generally refers to a comprehensive statutory procedure for the determination of all relative rights on a stream system or larger hydrologic unit. Although states have long adjudicated water rights and adjudication has been an integral part of state water policy in New Mexico and Utah, the scale and geographic scope of adjudications have recently increased as has the complexity of the process. Idaho is beginning a basinwide adjudication of the Snake; 185,000 water rights in 38 of the state’s 44 counties will be adjudicated. Montana is in the midst of a statewide adjudication ordered by the legislature. Over 200,000 vested rights claims were filed by the statutory deadline and late claims continue to be filed. Major adjudications of heavily used streams are in progress in California, Arizona, Washington and Wyoming.

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* Professor of Law, IIT Chicago-Kent College of Law. A.B. Stanford University, 1962, LL.B. Stanford University, 1965. This article is a revised version of the keynote speech given at the workshop on General Stream Adjudications: Legal and Policy Aspects sponsored by the Water Resources Committee of the American Bar Association, the Western States Water Council and Watershed West held in Boise, Idaho, April 13-14, 1988. Special thanks go to John Thorson of Doney & Thorson, Helena, Montana who introduced me to the wonderful world of water rights adjudications and has been a constant source of insight into the process.


2. For a discussion of the Salt River adjudication, especially the bitter legal battles to obtain state court jurisdiction over Indian tribes, see Moore and Weldon, General Water-Rights Adjudication in Arizona: Yesterday, Today and Tomorrow, 27 Ariz. L. Rev. 709 (1985).

There are three reasons for the current push to adjudicate water rights on a grand scale other than to keep water lawyers employed: (1) the adjudication of water rights increases the security of all water rights because all use rights on a stream system are precisely defined and all users can accurately predict the risks of curtailment in times of shortage; (2) state water management will be enhanced because water use data will be accurate and the state can therefore make better choices in the allocation of unappropriated water, especially for instream flow appropriations and reservations as well as to better target water marketing opportunities for those states interested in the concept; and (3) inchoate federal Indian and non-Indian reserved rights claimed can be qualified, and thus the great federal cloud on western water titles could be removed or at least substantially limited. These reasons take on added meaning in light of the drought of 1988.

In many states, the McCarran Amendment\(^4\) drives the adjudication process. The federal common law doctrine of federal reserved water rights gives Indian tribes and some federal land management agencies the power to claim large quantities of water and to subordinate state water rights to these federal proprietary water rights. Reserved rights do not depend on the application of water to beneficial use but relate back to the date of the withdrawal for a water-related purpose of an Indian reservation or tract of federal land from entry under the public land laws. Throughout this century, most potential Indian and non-Indian rights remained inchoate, but they can be seen as clouds on western water titles that must be removed. Sovereign immunity prohibited states from joining the federal government in state adjudication proceedings without the sovereign’s consent until Congress waived it in the McCarran Act. This Act, as interpreted by the Supreme Court, is the Magna Carta of state water rights adjudication.\(^5\)

General adjudications are expensive\(^6\) and controversial.\(^7\) It is both expensive to fund the adjudication process as well as the physical solu-

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5. The Supreme Court has interpreted the Amendment to apply only to general adjudications. Dugan v. Rank, 372 U.S. 609 (1963). See White, McCarran Amendment Adjudications Problems, Solutions, Alternatives, 22 LAND & WATER L. REV. 619, 621-625 (1987) for a discussion of the law of general adjudications. The major cases extending the waiver and the effect on these decisions on state adjudication law are discussed in notes 35 to 40, infra.

6. Montana’s statewide adjudication stems from the state’s adoption of an administrative permit system in 1973. The legislature originally contemplated an administrative evaluation of all existing water rights to verify that the water claimed was being put to beneficial use. After two test adjudications in the Powder River basin, the Montana De-
tions that may be necessary to preclude endless assertions of claims.\textsuperscript{8} Thus, the current federal and state allocation of resources for such adjudications raises the question of whether existing procedures and practices can achieve the three goals at some acceptable level of cost. It is too early to know the answer, if it will ever be known, but there is some reason to doubt that adjudications will produce the hoped for long term finality. The reasons lie not in the good faith and competence of state officials and lawyers charged with adjudication. Rather, they lie in historical and theoretical foundations of statutory adjudication and in the incomplete nature of property rights to use water.

My thesis is that water rights adjudications rest on a myth of certainty and finality which stems from an early false analogy between water rights adjudications and quiet title actions. The assumption that adjudication can create certainty out of inherent uncertainty has long been criticized, but western states continue to pursue the goal even as new uncertainties such as the public trust, federal regulatory water rights and pressures to redefine beneficial use as efficient use\textsuperscript{8} continue to be introduced into the system. However, the very nature of a water right combined with the range of state and federal interests being asserted in water allocation preclude the level of certainty and finality that states are seeking. This argument does not undermine the adjudications currently underway, but it does counsel caution about what the

\textsuperscript{7} Montana's current adjudication procedure was adopted in 1979, and in 1987 the state legislature appropriated $75,000 for a mid-course evaluation of the process because of "concern over an adequate adjudication process, along with a desire to 'clear the air' and to eliminate disharmony and discord. . . ." Water Policy Committee, Montana State Legislature, Request For Proposals to Study Montana's Water Rights Adjudications Process, July 9, 1987 (copy on file with Idaho Law Review).


process can do. There is, of course, a need to maximize the security of water rights. Buying a water right should not be like buying a penny stock in Salt Lake City or Denver. But, there is an equal need to recognize that water rights systems, in a basin or even sub-basin, are like the federal budget: in the end, the precise numbers are unknowable and the notion of an equilibrium is illusory.

This article traces the evolution of water rights adjudication from its first use in Colorado to the present. It is not intended to provide a detailed analysis of the many due process, evidentiary, federalism, joinder and other technical issues that courts and water management agencies will have to confront. Rather, it provides a context for the resolution of these issues and to evaluate the broader policy issues by the current crop of adjudications. This article first traces the history of water rights adjudications. Next, it sketches the original understanding of a water rights adjudication. Water rights adjudications were early analogized to quiet title actions for real property; this analogy still dominates our statutory procedures and judicial characterizations of water rights adjudications, even as finality becomes more difficult to obtain. Finally, the article contrasts the classic assumptions or “myths” of water rights adjudication with the reality of modern adjudications which create new as well as confirm existing water rights.

II. THE HISTORY OF WATER RIGHTS ADJUDICATION

To understand the present role of water adjudication, it is useful to trace the evolution of the concept because the present use of adjudication is very different from the original one, although the form and procedures have remained relatively constant since the turn of the century. This history falls roughly into three periods: (1) simple judicial adjudication, (2) the early twentieth century transformation of adjudication from a pure judicial to a statutory procedure involving a mix of judicial and administrative adjudication, and (3) the enactment of “general adjudication” statutes to qualify for McCarran Act joinder of the federal government and Indian tribes.

Each period of water rights adjudication has left its mark on the next. The first two periods of adjudication occurred between 1880 and 1909. Not surprisingly, they reflect the fact that the western states began to augment mining and cattle economies with an irrigation econ-

10. The law of general water rights adjudication is not well-developed. For a brief outline of the existing law see A.D. Tarlock, LAW OF WATER RIGHTS AND RESOURCES ch. 7 (1988) and 2 W. Hutchins, supra note 1, ch. 15.
Adjudication started as a simple judicial procedure and quickly moved to a more technical, mixed administrative-judicial procedure, reflecting the vain progressive hope that engineers and scientists could manage resources better than law and lawyers. The basic contours of adjudication were set with the passage of Oregon’s statute in 1909. The next major development did not occur until the 1970s when the Supreme Court “glossed” the McCarran Act to permit the joinder of federal reserved rights in general adjudications. These holdings created the current incentives for states such as Arizona, Idaho, Montana and Wyoming to commit major resources to statewide adjudications.

A. Small Streams, Simple Procedures

The law of prior appropriation originated in the customs of the miners in California, Nevada and Colorado. They grabbed valuable minerals on the public domain and the necessary water to extract them. Originally, a water right was claimed by posting a notice along the stream and digging a ditch to the locus of use. These customary property rights received the sanction of Congress and spread throughout the West. In the late nineteenth century, the West began to switch to an irrigation economy. Prior appropriation adapted well because it promised a relatively secure right of use compared to the common law of riparian rights. Unfortunately, the customary procedures for the acquisition and enjoyment of a water right proved very inefficient for an irrigation economy.

The modern irrigation economy developed first in the Utah territory and then in northeastern Colorado. Under the control of the Mormon Church, Utah developed a system of administrative water distribution. However, by the 1880s, the system designed for subsistence agriculture began to break down and the territory “abandoned Utah’s distinctive water-control institutions.” In the northern Colorado irrigation colonies, the customary practice of claiming a right by posting a notice and putting it to beneficial use produced great uncertainty and speculation. “[E]xcess decrees were frequent, tended to speculation

11. The best history is R. Dunbar, Forging New Rights in Western Waters (1983). D. Worster, Rivers of Empire: Water, Aridity and the American West (1986) is an important revisionist history that argues that the irrigation economy, supported by federal subsidies, was a huge mistake.
15. 1 Wiel, Water Rights in the Western States § 368 (3d ed. 1911).
in water, and sometimes resulted in fraud by collusive suits.” Water claims bore no resemblance to the actual use of water. There was no central record system so, enforceable water rights did not exist for all practical purposes. To bring order out of the system, rights had to be quantified. Injunction suits did not bind those not a party to the action nor did in personam quiet title actions. Bills of Peace were possible, but all water users had to be joined to be bound. To provide a more expeditious system of water rights determination, irrigation leaders proposed that the state establish an administrative adjudication to maintain secure water rights.

Administrative adjudication was too advanced for the state’s bar so Colorado created a special statutory judicial procedure. In Samuel Wiel’s words, the idea “of having all water-rights in the State put through a process of adjudication in court originated in Colorado. Before the adoption of the Irrigation Acts of 1879 and 1881, there were few water use conflicts, but these conflicts increased in the 1880s as irrigation developed. An adjudication procedure became necessary because Colorado developed a special statutory procedure to bind all users on a stream and thus overcome the problems of injunction suits or quiet title actions. An adjudication could be triggered by one user, and a court referee had the duty to notify all claimants and take evidence. Adjudications were initially informal, rather summary, judicial procedures where a user’s claim stood unless contested, and they were often confined in area.

16. Id. Wiel then observed “This is surely much exaggerated, but as other States have recently passed statutes following the Colorado idea, the difficulties inherent in throwing water-rights into wholesale litigation should be borne in mind, and avoided, if possible.”

17. A Bill of Peace is an equitable action which allows the joinder of all parties with similar causes of action in a common subject matter to prevent the multiplicity of actions. The parties could not be joined at common law because they did not act jointly, but equity did not require that each cause of action be strictly common to all the parties. For example, the Bill of Peace was used to adjudicate fishing rights disputes among riparians in the mid-eighteenth century. See Chafee, Bills of Peace with Multiple Parties, 45 Harv. L. Rev. 1297, 1304-1307 (1932). The action eventually evolved into the modern class action, but remains the basis for the special statutory procedures. Crawford Co. v. Hathaway, 67 Neb. 325, 93 N.W. 781 (1903).


19. R. Dunbar, supra note 11, at 87-98.

20. 2 S. Wiel, Water Rights in the Western States § 1234 (3d ed. 1911)[hereinafter cited as Wiel].

B. Administrative Allocation and Adjudication

The radical idea of administrative allocation and adjudication was carried north to Wyoming by one of its main proponents in Colorado, Elwood Mead. Mead, a lawyer and engineer, held the first professorship of irrigation engineering in the nation. Between 1882-1888 he observed first hand the problems with Colorado's judicial adjudication procedure and the state's water rights acquisition and protection procedures. Colorado rejected Mead's proposal for a state engineer to approve appropriation permits, but in the late 1880s and early 1890s, Wyoming was receptive to Mead's progressive ideas. Thomas Moonlight, the Granger territorial governor of Wyoming who wanted to move the state from cattle ranching to irrigated agriculture, appointed Mead the first territorial state engineer. In 1890, Wyoming adopted a complete administrative system subject to judicial review.22

Wyoming adopted administrative allocation and adjudication at a time when the separation of powers doctrine was thought to embody a mechanical and absolute tripartite division of powers among the three branches of government.23 Judged by this standard, the Wyoming scheme was unconstitutional because it delegated judicial power to an administrative agency. In a pioneering opinion, the Wyoming Supreme Court upheld the system in Farm Inv. v. Carpenter Co.24 and thus legitimated non-judicial water management throughout much of the West. To uphold the statute against the invalid delegation of powers argument, the court built on the Colorado tradition of water adjudications as special procedures, but it extended the Colorado idea. Adjudication was placed in the context of state water management as a whole.

The court first defined water rights as state-created property rights by reasoning that the Desert Land Act of 1877 gave Wyoming the power to declare itself the owner of all its waters for the benefit of the people. Therefore, adjudication was a natural state supervisory function and one which was not judicial. In one of the most widely quoted portions of the opinion, the court offered the following rationale for administrative adjudication:

The determination required to be made by the board is, in our opinion, primarily administrative rather than judicial in character. The proceeding is one in which a claimant does not obtain redress for an injury, but secures evidence of title to a

22. R. Dunbar, supra note 11, at 99-112.
24. 9 Wyo. 110, 61 P. 258 (1900).
valuable right—a right to use a peculiar public commodity. The evidence of title comes properly from an administrative board, which, for the state in its sovereign capacity, represents the public and is charged with the duty of conserving public as well as private interests.\(^\text{25}\)

This is, of course, all nonsense because the confirmation of the existence of a property right is a judicial function. The court conceded this but retreated to the fiction that the Board of Control was acting in a quasi-judicial capacity. Now, we can admit that water rights are a special form of property right that requires more state intervention to promote equitable access, but the fiction served a useful purpose.

Other states began to choose between the Colorado and Wyoming models, and by the beginning of the Reclamation Era the form of water rights adjudication had been established. Then, as now, Colorado and Wyoming represented the polar extremes of water rights management. Most states refused to make a clear choice, but opted for the benefits of centralized state control blended with judicial involvement. To accommodate the lawyer’s legitimate demands for due process, hybrid systems were developed.\(^\text{26}\) Only Colorado and Montana originally refused to join the trend. Texas joined but the state supreme court held the act unconstitutional.\(^\text{27}\) The Idaho Supreme Court held that the key provision of its adjudication statute, allowing the state engineer to initiate actions, was a violation of water rights holders’ right to due process.\(^\text{28}\) However, by the 1970s all of these states, except Colorado, adopted new administrative adjudication procedures, although Montana soon returned to primary reliance on the courts to assemble and evaluate evidence.\(^\text{29}\) The earlier per se objections have most likely been solved by the new legislation which gives greater attention to the due process issues.\(^\text{30}\) For example, the Texas Supreme Court upheld

\(^{25}\) Id. at 119, 61 P. at 267.

\(^{26}\) See R. Dunbar, supra note 11, at 113-132 for the fascinating history of the spread of Mead’s ideas throughout the West.

\(^{27}\) Board of Water Eng. v. McNight, 111 Tex. 82, 229 S.W. 301 (1921).

\(^{28}\) Bear Lake County v. Budge, 9 Idaho 703, 75 P. 614 (1904).

\(^{29}\) For a discussion of the history of the state’s decision to establish water courts and the problems created with the system, see MacIntyre, The Adjudication of Montana’s Waters-A Blueprint for Improving the Judicial Structure, 49 Mont. L. Rev. 211 (1988).

\(^{30}\) Idaho continued to search county land records to join parties until the 1986 amendments to the state’s adjudication procedure. Under the new procedure, parties are joined by a combination of publication notice, posting bulk mailing and land record searches triggered by the Idaho Department of Water Resource’s investigation of the stream or stream segment and its claimants. The constitutionality of the new procedure
the Water Rights Adjudication Act of 1967 which requires judicial approval of decrees.\footnote{31}

There are two principal hybrid systems. The first, the Bien Code, was drafted by Morris Bien, an engineer with the Bureau of Reclamation, at the request of a joint Oregon-Washington commission. As he explained in a 1905 letter to Samuel Wiel, the underlying idea was that the adjudications in the courts upon the subject of water rights should bear a closer relation to the physical conditions than was the case until within recent years, and even now there are frequent decisions which do not take fully into account the facts regarding water supply and the needs of irrigators.\footnote{32}

The Bien Code was closely modeled after Utah's 1903 water adjudication legislation.\footnote{33} It called for (1) state agency hydrographic surveys of each stream system, (2) delivery of the completed surveys to the attorney general and (3) a suit to adjudicate water rights brought by the state or state intervention in an on-going private suit.

Oregon adopted the core idea of the Bien Code, state assembly of information, but it blended it with the Colorado and Wyoming systems to create a hybrid system that has influenced a number of other states. The core idea of the Oregon model is that the state assembles the basic hydrologic and water use information and the state water agency prepares a preliminary decree. However, due process considerations give courts a more prominent role in the process. Under the Wyoming system, decrees are final unless attacked in court. Under the Oregon model, after the state prepares a decree, the decree is filed in court and the proceeding becomes one in equity; the decree is not final until the court enters an order affirming or modifying the state's decree.

These three models continue to control the adjudication of water rights. Modern controversies about the nature of adjudication can be traced to these models. For example, the Montana Supreme Court recently asserted the Colorado model by holding, in \textit{In re Matter of the Activities of the Dept. of Natural Resources and Conservation},\footnote{34} the state water agency had no power to adopt rules for claim verification.

\footnote{31}{\textit{In re Adjudication of the Water Rights of the Upper Guadalupe Segment of the Guadalupe River Basin}, 642 S.W.2d 438 (Tex. 1982).}
\footnote{32}{Letter from Morris Bien to Samuel C. Wiel, November 1, 1905, reprinted in 2 WIEL, supra note 20, at § 1329.}
\footnote{34}{740 P.2d 1096 (Mont. 1987).}
In short, the problems that led to the Bien Code still live, although most states have done a much better job of solving the problem of integrating technical information and due process.

C. The McCarran Act: General Adjudication Forced on the States

Adjudications were generally modest proceedings that tooted up existing uses until the McCarran Act era. The Act was passed in 1952 but it did not begin to drive water rights adjudications until the Supreme Court interpreted it to apply to Indian and non-Indian water rights. The Supreme Court first construed the act to apply only to general adjudications. These are understood to be judicial proceedings that apply to an entire stream system rather than a dispute between a limited number of parties. States had little incentive to undertake large-scale state or basinwide adjudications until three major Supreme Court decisions swept in all major federal proprietary water rights.

San Carlos Apache Tribe v. Arizona, United States v. Dist. Court in and for the County of Eagle and Colorado River Conservation Dist. v. United States, transformed the McCarran Act from a simple statute apparently designed to prevent the United States from claiming a water right and then suing to enjoin inconsistent state users into a major incentive for state water rights adjudications. Eagle County held that non-Indian reserved water rights may be adjudicated in general adjudications; San Carlos Apache allowed states to adjudicate Indian water rights despite the jurisdictional disclaimers over Indians found in most state constitutions. Colorado River created a novel quasi-abstention doctrine which makes state courts the preferred forum of adjudication. State courts must apply federal substantive law, but state procedures may be applied so long as they do not prejudice the enjoyment and exercise of federal water rights.

The McCarran Act has not only changed the scale of adjudications; it has also changed their substance. Adjudications are no longer confined to the confirmation of existing rights; courts must create as well as recognize rights, especially in the area of federal reserved and regulatory rights. These rights involve a host of novel questions com-

36. Id.
38. 401 U.S. 520 (1971).
pared to state appropriative rights and make the goal of finality even more difficult to obtain.

III. THE ORIGINAL UNDERSTANDING OF WATER RIGHTS ADJUDICATIONS

The changed function of water rights adjudication creates a substantial tension between the conventional legal principles of water rights adjudication and the reality of modern adjudication structure and practice. Adjudications developed to correct the deficiencies of a non-centralized system of water rights acquisition and exercise, and the courts assumed that order could be achieved by a simple, final determination of all rights. The original conception of adjudication as a simple method to secure the orderly distribution of water for irrigation purposes led to three fundamental, and not totally consistent, conceptualizations of adjudication that continue today and make it difficult to adjust the reality of adjudication to its aspirations.

First, it is said that an adjudication decree creates no new rights, but only establishes an existing one and "perpetuates evidence thereof." This is not true, but the principle was applied with great force by Justice Rehnquist in *Nevada v. United States*\(^{41}\) to hold that an Indian tribe represented by the Department of Justice was bound by an earlier decree although the tribe was not specifically an adversary in the earlier adjudication. The Court quoted from a 1938 Idaho case: "[I]t matters but little who are plaintiffs and who are defendants in the settlement of cases of this character; the real issue being who is first in right to use the waters in dispute."\(^{42}\)

Second, because adjudications were special statutory proceedings, they were characterized as *sui generis* to avoid due process challenges.\(^{43}\) As the court said in *Farm Investment Co. v. Carpenter*, describing the Wyoming territorial adjudication procedure:

The special proceeding for adjudication was purely statutory, and the only reason for its creation is to be found in the inability of the ordinary procedure and processes of the law to meet the necessities pertaining to the segregation by various individuals or companies of water from the same stream by separate ditches or canals. . . .\(^{44}\)

\(^{41}\) 463 U.S. 110 (1983).
\(^{43}\) *E.g.*, Speer v. Stephenson, 16 Idaho 707, 102 P. 365 (1909).
\(^{44}\) 9 Wyo. 110, 112, 61 P. 258, 260 (1900).
In Wiel's words, the proceedings were "in the nature of police regulations."\textsuperscript{45} This has led to further inconsistent characterizations that make it difficult to capture accurately the nature of an adjudication. For example, adjudication proceedings have been characterized both as "in rem" or "quasi in rem" proceedings.

Third, courts did not follow the in rem police action analysis to its logical conclusion. This analysis might have solved the due process problems at the expense of fairness because it would have precluded all attacks on the decree by those not a party to the adjudication. An early Colorado court sought to solve this problem by the time-honored device of a fictitious analogy. "It is manifest from a careful examination of our statutes and from repeated decisions of our courts that our proceeding, if not technically one to quiet title, which is an in personam action, is quite analogous thereto. . . ."\textsuperscript{46} Courts continue to jump back and forth between the two classifications, depending on the result desired to be reached.\textsuperscript{47} Adjudications have also been likened to Torrens proceedings, but this is an equally incorrect analogy. A Torrens suit, or a quiet title action, is a suit between one plaintiff and what he hopes are all possible other interest holders in the property. Water rights adjudications establish all rights of all users relative to each other.

IV. THE CONTINUING CONSEQUENCES OF THE MYTH OF FINALITY

The persistence of this characterization of adjudication as a super-quiet title action that will produce finality is important because it fails to reflect the changed function of adjudication. The illusion of finality and security is promoted at the expense of fairness to some water users with no necessary gain to existing water rights holders. The traditional characterizations fail to reflect that the procedure's function has changed with the adoption of centralized administrative permit sys-

\textsuperscript{45} 2 Wiel, supra note 20, at 1125-26.
\textsuperscript{46}  Crippen v. X.Y. Irrigation Ditch Co., 32 Colo. 447, 76 P. 794 (1904).
\textsuperscript{47}  To uphold that an Indian tribe which was not a party to the original adjudication was bound by the decree, Justice Rehnquist wrote that the adjudication was an equitable action to quiet title, an in personam action. But as the Court of Appeals determined, it was no garden variety quiet title action . . . everyone involved . . . contemplated a comprehensive adjudication of water rights intended to settle once and for all the questions of how much of the Truckee River each of the litigants was entitled to. Thus, even though quiet title actions are in personam actions, water adjudications are more in the nature of in rem proceedings.  Nevada v. United States, 463 U.S. 110, 143-44 (1983).
tems. If adjudication is one part of the administration of a public resource, there is a greater inherent tolerance for uncertainty than if adjudication is a quiet title action. These criticisms are not new, but they are worth restating and expanding because courts continue to adhere to them.

In 1936 the Harvard Law Review celebrated its fiftieth anniversary with a series of articles surveying developments in important areas of the law. In an era when water law was taken seriously, Samuel Wiel wrote the fifty year perspective on the subject that he dominated in the late nineteenth and early twentieth centuries. In the course of the article, he identified the analogy between water rights and land rights as one of the biggest mistakes that had persisted from the development of a property system in water rights to 1936. This led to the idea that water rights adjudications are like Torrens registration proceedings and that adjudications can end litigation among water users, in the words of a 1933 Nevada Supreme Court decision, "for all time." This led Wiel, who was never one to mince words, especially in his journal articles as opposed to the treatise, to mock the underlying assumption of water rights adjudications:

"There is no course of legal procedure by which a title to land can be adjudicated as good against all the world' the United States Supreme Court has recently declared, and everything which this paper has met would indicate that the water is less manageable than land. From a source experienced in land titles, the hope of easy solution draws the comment 'iridescent dream', while the like claim made by the land-title analogy gets termed 'reckless mendacity.'

In the last fifty years, the analogy has become even more strained as western state courts and legislatures, as well as the Supreme Court, have responded to the problem by denying it. The assumption seems to be that the unique nature of water rights is all the more reason to incorporate certainty principles into water rights adjudications even when they fly in the face of normal principles of the finality of administrative and judicial proceedings. Nevada v. United States is a particularly apt example of the mischief that myth of adjudications as quiet title actions can produce. Justice Rehnquist quoted with ap-

51. Wiel, Fifty Years of Water Law, supra note 48, at 298.
proval from a theory articulated by the Ninth Circuit, but not applied, that all parties need not be adversaries to be bound by an adjudication. "Stability in water rights therefore requires that all parties be bound in all combinations. Further, in many water adjudications there is no actual controversy between the parties; the proceeding may serve primarily an administrative purpose."  

Perhaps this strategy will succeed, but it seems to conflict with fundamental changes that are reflected in modern water law and that are bound to be reflected in modern adjudications. More and more, water adjudications are used to create new rights and thus to reallocate future supplies. This occurs at both the state and federal levels. A recent Colorado case illustrates the ability of courts to modify rights that were confirmed in prior proceedings. Plaintiffs had direct flow water rights adjudicated in 1883 which had been converted to well rights in 1969 after a finding that no junior rights would be impaired. This was not the case in 1979 when the rights were sold for municipal use. Protestors successfully cut the amount of water available for transfer from the 682 acre feet per year used under the 1969 modification of the original decree to 141 acre feet, the plaintiff's interest in the amount of water consumptively used when the ditches were active. The court reasoned that all decrees are impliedly limited to an amount sufficient for the purpose for which the appropriation was made even though this may be less than the decreed amount of the diversion and thus "the right to change a point of diversion is limited in quantity by historical use at the original decreed point of diversion."  

Principles of res judicata did not bar an inquiry into the historical use of the originally decreed rights because the use limitation was incorporated as a matter of law into the 1969 modification.

The root of the false analogy between water rights adjudications and quiet title actions is the doctrine of beneficial use. Unlike dry land property rights, the holder of a water right has an affirmative

53. Carson-Truckee Irrigation Dist. v. United States, 649 F.2d 1286, 1309 (9th Cir. 1982).
55. In recognition of the uncertainties inherent in this imperfect field, we cannot advise the Committee that there is a legal standard which fixes the degree of accuracy required for water right decrees. We have not been able to find any reported cases which purport to prescribe such a 'sufficiently accurate' standard. Instead, the courts universally fall back on the general guiding principle that the water right be measured by the extent of actual beneficial use.

duty to put the water to productive, non-wasteful use or suffer its partial or total loss. In contrast, the holder of an estate in land has no affirmative duty to use the land (as opposed to protest trespassory entries) and once titles are allocated, the assignment is likely to be permanent. The doctrine of beneficial use can be attributed to the Mormon practice of allocating land and water to individuals to benefit the community, but the concept can be traced to Roman irrigation practice in the empire’s African colonies. The doctrine entered western water generally as one of the nineteenth century anti-speculative doctrines. As a result, water rights fluctuate, both with available supplies and with changes in use patterns. The inherent uncertainty is increasing because the push to equate beneficial use with the efficient—economic or technical—use of water in an attempt to reallocate water used to irrigate marginal crops magnifies the difficulty of making any allocation permanent. Further, as more states try to use adjudications to conform water use to amounts actually applied to beneficial use, or, as has been done in Texas for rice irrigators, to apply some higher technology-forcing standard, the cost and possibly the time of such adjudications increase dramatically.

California’s recent application of the public trust doctrine to vested water rights introduces a further wild card in the process. Historically, the trust has been a public servitude to protect the common or public use of navigable rivers. The California public trust doctrine functions more like the assertion of the state’s reserved police power. But, it does not matter for the purposes of a general adjudication how the public trust is characterized. No adjudication can be final against the subsequent assertion of the trust. If the trust is a public servitude, it is a superior property right—subject to subsequent quantification—present by implication in every decree. If the trust is the

56. Large tracts of imperial land in modern western Libya were under irrigation. Local residents who brought unsurveyed lands under cultivation obtained a usufruct subject to forfeiture if the land was left uncultivated for two years. C. Wells, The Roman Empire 248-249 (1984).

assertion of the state's police power, the state cannot be estopped from subsequently asserting it. States are just beginning to address this complication.\footnote{58}

The inclusion of federal water rights in state proceedings complicates the process even more. Federal water rights are almost entirely a judicial creation and courts are in the process of defining their scope. They may be either proprietary or regulatory. Tribal reserved rights and water rights claimed by federal land management agencies to carry out water-related preservation missions are proprietary rights. The entire focus of McCarran Act adjudications has been on the quantification of these water rights, but federal water rights may be regulatory as well. Regulatory water rights are generally flow releases commanded by federal agencies pursuant to regulatory programs. Minimum releases from a Federal Energy Regulatory Commission licensed facility or flows mandated by a federal agency to preserve the critical habitat of a threatened or endangered species are examples of federal regulatory rights.\footnote{59} Reserved rights have been partially integrated into the appropriation system by the assignment of a priority date and the substitution of the minimum amount necessary to fulfill the purpose of the withdrawal for beneficial use. Federal regulatory rights have no such limiting characteristics.

The existence of federal water rights—both proprietary and regulatory—require a court or special master to create new water rights. For example, in the Big Horn adjudication in Wyoming, the special master had to decide such questions as whether the reserved rights doctrine extended to groundwater: If it did, could the tribe mine it? Did the right extend to the use of the groundwater for the secondary recovery of oil and gas? Could a tribe claim instream flows for fishery maintenance? The special master's recommended awards for these uses were rejected by the district court and Wyoming Supreme Court.\footnote{60} This is not the last word on these issues, and the court greatly expanded the scope of Indian rights by strongly affirming the Practicable

\footnote{58. Public trust issues are not a part of Montana's mid-course evaluation of its adjudication process, but the Water Policy Committee and the Water Resources Center of Montana University have scheduled a workshop for the fall of 1988 on the issue. Telephone conversation with Ms. Deborah Schmidt, Montana Council on Environmental Quality, July 17, 1988.}


\footnote{60. In re The General Adjudication of All Rights To Use Water in The Big Horn River System, 753 P.2d 76, 99-101 (Wyo. 1988).}
Irigable Acreage standard with low project efficiencies and discount rates.

The creation of new rights through the process of the quantification of reserved rights creates a fundamental problem for states because there is no assurance that the water will ever be put to beneficial use. This is not the case for instream flows to maintain natural channel conveyance systems in national forests now being claimed under the Jesse decision of the Colorado Supreme Court, but the risk is substantial for all Indian rights quantified by adjudication, act of Congress, tribal compact or other form of agreement. The integration of Indian reserved rights into state priority schedules and water administration procedures will continue to be a problem because even quantified Indian rights seem destined to remain inchoate for a long period of time. For example, the only Indian rights that have been litigated to a final McCarran Amendment judgment are those on the Big Horn River in Wyoming. Many Indian claims were denied, but the court strongly reaffirmed the Practicable Irrigable Acreage standard and awarded the Wind River Indian Reservation almost 200,000 acre feet for some 48,000 potentially irrigable acres.

To eliminate the threat of Indian claims, a number of parallel procedures to settle Indian water rights claims have been developed.

62. Montana has elected to treat compact Indian rights as preliminary decrees, In The Matter of The Adjudication of The Existing Rights To Use Of All The Water, Both Surface and Underground, Within The Rock Creek, Tributary of the Milk River, Drainage Area, Including All Tributaries of Rock Creek, Tributary of the Milk River, In Phillips and Valley Counties, Montana, Memorandum of W.W. Lesley, Chief Water Judge, August 8, 1985 pp. 10-11, but this solution is a formal one at best.
63. Washington state is trying to avoid this problem by staying the processing of Indian claims in the Yakima River basin adjudication pending tribal participation in a study of a physical solution. See note 8, supra. In The Matter of the Determination to the Rights To Use of the Surface Waters of the Yakima River Drainage Basin, In Accordance With Chapter 90.03, Revised Code of Washington, No. 77-2-011485-5, Motion By Plaintiff, State of Washington, Department of Ecology, and Defendant, United States of America, For Partial Stay of Processing Certain Claims By the United States Described in Order of Referee Entered on April 17, 1986, October 21, 1986.
65. Id. at 101-106. The court approved the special master's adoption of a 4% discount rate to calculate the costs of the irrigation works necessary to bring the lands under cultivation instead of the 7-1/8 in use for federal projects at the start of the adjudication.
66. P. SLY, FEDERAL RESERVED WATER RIGHTS SETTLEMENT MANUAL (1988) is the most complete assessment of negotiated reserved rights settlements.
Indian claims have been settled by consensual decrees,67 special legislation which provides money for the construction of the projects necessary to guarantee the tribes "wet water",68 and state settlements that guarantee the tribes water but not necessarily the means to use it.69 The net result of these settlements is not clear.70

The claim is quantified and thus there may be a market for Indian water rights, but a number of major questions remain unresolved and given the uncertainty of Indian use of the water, Indian water rights will continue to cloud western water titles even after adjudication.

Federal regulatory rights present even greater problems because they are not recognized as traditional water rights and they can be claimed at any time when an agency concludes that its mission requires them. They are currently outside the scope of the McCarran Amendment. The current conflict between Idaho and FERC illustrates the difficulty of folding federal regulatory rights into state adjudications. Idaho has subordinated hydropower water rights to future upstream irrigation and other development. FERC has refused to include a sub-ordination condition in the Horseshoe Bend license. Instead, it has concluded "[w]e can require the licensee to reasonably reduce its use of water for generation to coincide with reductions in flows caused by future upstream diversions if we . . . conclude that it would be in the public interest to accommodate such upstream diversions."71


70.

Decrees which do not reflect consideration of Indian and federal claims, as compacted or as filed upon during the special filing period therefor, fail to satisfy the statutory requirements for entry of preliminary or final decree, fail to constitute a 'complete' or final adjudication, and are, at best, interlocutory in nature. It is our recommendation that, at such time when the Indian and federal reserved water rights may be incorporated therein, the decrees be noticed out as preliminary decrees and the procedural steps applicable thereto be followed.

**WATER POLICY COMMITTEE OF THE LEGISLATURE OF THE STATE OF MONTANA, REPORT TO THE COMMITTEE, at 69 (1988).**

V. CONCLUSION

This brief survey of the evolution of adjudications has emphasized the growing divergence between the original function of adjudications and modern comprehensive adjudications. I do not intend to undermine the present impressive efforts now underway around the West, but only to suggest that the concept of a water rights adjudication, especially a general one, may deliver less than promised because, among other reasons, the theory doesn’t fit the reality of modern adjudications. As Samuel Wiel noted, the problem is generic to all of water law. “[C]laims of perfection promise too much as well for one system of water law as for another.”72 Adjudication is one of several water management tools available to the states to decide how scarce western waters will be allocated in the future. All are important; none will provide finality.

72. Wiel, Fifty Years of Water Law, supra note 48, at 304.