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John E. Thorson

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## REFLECTIONS ON WESTERN GENERAL STREAM ADJUDICATIONS UPON THE SIGNING OF WYOMING'S BIG HORN RIVER ADJUDICATION FINAL DECREE

*John E. Thorson\**

SEPTEMBER 11, 2014  
RIVERTON, WY

### I. CELEBRATING THE HARVEST

Fall is upon us in the Northern Rockies. This is certainly the season for celebrating the harvest. For Wyoming, it has been a long season of cultivation, involving many hours and considerable resources, to reach this moment. My reference is not to the many fields of wheat and other grains awaiting the combine. The harvest we are celebrating in Riverton this week is the completion of the Big Horn River Adjudication, commenced in state district court on January 24, 1977—more than thirty-seven years ago. I appreciated the opportunity to participate in the symposium commemorating the signing of the final decree.

I know this general stream adjudication has not been an entirely happy and collegial endeavor, but many disagreements will disappear over time when the larger vision is realized. Also, residents of Wyoming and the Wind River Reservation have not been alone in this lengthy process. On August 25–26, 2014, Idaho held its own symposium in Boise celebrating the completion of the Snake

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\* John E. Thorson is the Federal Water Master for the Lummi Decree (U.S.D.C. W.D. Wash.). He served as Special Master for the Arizona General Stream Adjudication from 1990 to 2001. He is a founder and co-convenor of Dividing the Waters, an educational program at the National Judicial College for judges presiding over complex water litigation.

River Basin Adjudication.<sup>1</sup> Similar water adjudications are underway in most western states.

At the Boise event, Justice Antonin Scalia remarked that while the Supreme Court of the United States is an important court, the most significant court for most Americans is the one in their community. For the people in this region, the Wyoming District Court, Fifth Judicial District, has been their most important court because it has wrestled with the difficult legal and factual issues of the essential water rights in the Big Horn River system.

Just over a quarter century ago, in June 1989, I attended an Indian Water Rights and Water Resources Management Symposium, organized by the University of Arizona Water Resources Center, but held at the University of Montana in Missoula. The conference was well attended by professionals and water users from all parts of the West. This conclave was during the heyday of large general stream adjudications in states such as Arizona, Montana, New Mexico, and Washington.

For me, Teno Roncalio's presentation was the memorable highlight of the Missoula conference. Roncalio, a former Wyoming Congressman, had served as Special Master for the Big Horn Adjudication during the earlier phases of the case, including the phase recognizing and determining tribal water rights.<sup>2</sup> Roncalio spoke of the challenges, hard work, and drama of serving as Special Master in that proceeding. I vividly remember him describing the countless days of hearings, the thousands of pages of transcripts, and the hundreds of exhibits. With mixed regret and satisfaction, he observed that all the hard work and all those documents had come down to just ten words uttered only days before: "The judgment below is affirmed by an equally divided Court."<sup>3</sup> The reference, of course, was to the U.S. Supreme Court's affirmation of the Wyoming Supreme Court's decision concerning the water rights of the Wind River tribes (*Wyoming v. United States*).

I left that conference thinking how exciting it would be to serve as a special master in a comparable role. I had a chance starting only a year later when I was appointed to serve as Special Master for the Arizona General Stream Adjudications. Roncalio's pioneering work certainly guided many of us as we confronted the case management and legal challenges of these large, comprehensive general stream adjudications.<sup>4</sup>

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<sup>1</sup> Symposium, Understanding the SRBA Resolution: A Foundation for Idaho & National Water Policy (Aug. 25–26, 2014), <http://www.uidaho.edu/law/newsandevents/upcoming-events/snake-river-basin-adjudication> (last visited Aug. 18, 2015).

<sup>2</sup> See *Former Congressman Teno Roncalio Dies*, CASPER STAR TRIBUNE, Apr. 2, 2003.

<sup>3</sup> 492 U.S. 406, 407 (1989).

<sup>4</sup> My best decision during that period, and pleasantly ironic as it has turned out, was to hire Ramsey Kropf as my staff attorney. Ramsey, of course, has served with great distinction for many years as the Big Horn Special Master (and was recently appointed Deputy Solicitor for Water, U.S.

Additionally, for all its brevity, *Wyoming v. United States* influenced legal decisions, designs of water adjudications, parties' strategies, and negotiations on federal reserved water rights throughout the West. Those ten words have left their own legacy in the colorful history of western water law, as demonstrated by the frequency with which other courts have cited the case.

The purpose of this article is three-fold. Part II provides an overview of the genesis of western general stream adjudications.<sup>5</sup> Part III reviews the status of these adjudications in most western states.<sup>6</sup> Finally, recalling the wise counsel offered by Professor A. Dan Tarlock at an adjudication conference twenty-six years ago that finality is always an illusion in western water law,<sup>7</sup> Part IV provides some commentary on what post-adjudication, post-decree challenges may lie ahead.<sup>8</sup>

## II. GENESIS OF WESTERN GENERAL STREAM ADJUDICATIONS

### A. *Federal Land and Indian Policy*

The fundamental history of the western region is one of massive land acquisitions and disposition along with the involuntary relocation of Native peoples to make way for Anglo-European adventurers and settlers. The Acquisition Era, extending from the 1803 Louisiana Purchase to the 1867 purchase of Alaska, culminated in bringing 1.7 billion acres of land under United States' control.<sup>9</sup> Even before this exercise in Manifest Destiny was completed, the federal Congress was devising programs to utilize these lands for western settlement.<sup>10</sup> This Disposition Era commenced with the 1862 Homestead Act<sup>11</sup> and included land grants to support the transcontinental rail system, public education, and

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Department of the Interior) and we have remained the best of friends. I also want to thank Judge Gary Hartman, who presided over the Big Horn River Adjudication for many years and participated actively in *Dividing the Waters*, a program for judges, sharing his expertise and experiences in managing these large, cumbersome cases. Judge Hartman provided me a unique opportunity to work with Special Master Kropf and many of the attorneys in developing an approach to the final decree in this proceeding.

<sup>5</sup> See generally John E. Thorson et al., *Dividing Western Waters: A Century of Adjudicating Rivers and Streams* (pts. 1 & 2), 8 U. DENV. WATER L. REV. 355 (2005) [hereinafter 1 THORSON], 9 U. DENV. WATER L. REV. 299 (2006) [hereinafter 2 THORSON].

<sup>6</sup> See *infra* notes 67–205 and accompanying text.

<sup>7</sup> A. Dan Tarlock, *The Illusion of Finality in General Water Rights Adjudications*, 25 IDAHO L. REV. 271 (1989).

<sup>8</sup> See *infra* notes 206–07 and accompanying text.

<sup>9</sup> PAUL W. GATES, PUB. LAND LAW REVIEW COMM'N, HISTORY OF PUBLIC LAND LAW DEVELOPMENT 86 (1968).

<sup>10</sup> *Id.* at 121–284.

<sup>11</sup> Homestead Act, ch. 75, 12 Stat. 392 (1862).

irrigation development. By the time the disposition period ended with passage of the Taylor Grazing Act in 1934,<sup>12</sup> 1 billion acres of total land acquisitions had been transferred out of federal ownership.<sup>13</sup>

Indian policy during these periods resulted in the mass relocation of Native Americans.<sup>14</sup> Between 1830 and 1871, known as the Treaty-making Period, many eastern tribes were removed to reservations in western states and territories.<sup>15</sup> Federal Indian policy shifted from relocation to assimilation of Indians, primarily through the allotment of tribal lands to tribal members and many subsequent transfers to non-Indians.<sup>16</sup> The Assimilation Period lasted roughly from 1871 to the 1934 passage of the Indian Reorganization Act.<sup>17</sup>

The result of these federal land and Indian policies is that forty-seven percent of the eleven coterminous western states and sixty-two percent of Alaska are federal lands, resulting in significant issues about the water rights attributable to these lands.<sup>18</sup>

### *B. Development of Appropriate Water Laws and Institutions*

General stream adjudications have been a major, relatively recent chapter in a continuing saga, extending over this 150-year period from the Homestead Act, to develop water laws and institutions well suited for the arid and semi-arid conditions in the West.<sup>19</sup> The water-related challenges were many, but they were met by appropriate, if not necessary, adaptations. The following are a few examples of these adaptations:

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<sup>12</sup> Taylor Grazing Act, ch. 865, 48 Stat. 1269 (1934) (current version at 43 U.S.C. § 315 (2006)).

<sup>13</sup> SAMUEL TRASK DANA & SALLY K. FAIRFAX, *FOREST AND RANGE POLICY: ITS DEVELOPMENT IN THE UNITED STATES* 29 (2d ed. 1980).

<sup>14</sup> See, e.g., Indian Removal Act, ch. 148, 4 Stat. 411–12 (1830).

<sup>15</sup> See ARRELL MORGAN GIBSON, *THE AMERICAN INDIAN: PREHISTORY TO THE PRESENT* 293–331 (1980).

<sup>16</sup> See 1 THORSON, *supra* note 5, at 374.

<sup>17</sup> Indian Reorganization Act, ch. 576, 48 Stat. 984 (1934) (codified as amended at 25 U.S.C. § 461 (2006) (also called the Wheeler-Howard Act of 1934)).

<sup>18</sup> Congressional Research Service, *Federal Land Ownership & Data i* (Feb. 8, 2012), *available at* <http://www.fs.fed.us/people/tribal/tribexd.pdf>.

<sup>19</sup> Equitable remedies, such as bills in equity, were first utilized to address the multiplicity of claims on a river system. CLESSON S. KINNEY, 3 *A TREATISE ON THE LAW OF IRRIGATION & WATER RIGHTS* § 1532, at 2757–58 (2d ed. 1912). When these procedures provided inadequate, Colorado pioneered the use of statutory adjudications to resolve these conflicts. 1879 Sess. Laws 99–105. For a history of the development of general stream adjudications, see 1 THORSON, *supra* note 5, at 405–15.

### 1. *Development of the Prior Appropriation Doctrine*

The riparian doctrine, a legal regime developed on the more humid eastern coast, presumptively governed water use on the previously discussed federal domain.<sup>20</sup> Additionally, riparian law limited water use to those persons fortunate enough to own land appurtenant to streams or lakes.<sup>21</sup> The resulting adaptation in the arid and semi-arid western region was the development of local customs in mining camps based on seniority principles: “first in time, first in right.”<sup>22</sup> These miners and other settlers often trespassed on federal land in order to divert water that was transported for distant uses.<sup>23</sup> This doctrine of prior appropriation was better suited to arid and semi-arid western conditions. It was initially recognized by state courts in the cases of *Coffin v. Left Hand Ditch Co.*<sup>24</sup> and *Lux v. Haggin*,<sup>25</sup> confirmed by the U.S. Supreme Court in *California-Oregon Power Co. v. Beaver Portland Cement Co.*,<sup>26</sup> and eventually adopted in whole or in part by nineteen western states.<sup>27</sup>

### 2. *Water Distribution Entities*

Water development in the West was rarely the solitary activity of an individual farmer or rancher. From an early date, western residents experimented with different forms of cooperation. These adaptations included the *acequia* organizations in the Hispanic Southwest and the church-dominated irrigation institutions of the Mormon settlements in the Great Basin.<sup>28</sup> While eastern investors saw profit-making opportunities, private canal companies ultimately were unable to amass sufficient capital for infrastructure or operate diversion and distribution facilities.<sup>29</sup> Eventually, irrigators turned to the states and federal government for funding through such innovations as irrigation districts with assessment power, the California Wright Act,<sup>30</sup> and the federal Reclamation Act.<sup>31</sup>

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<sup>20</sup> A. DAN TARLOCK ET AL., *WATER RESOURCE MANAGEMENT: A CASEBOOK IN LAW AND PUBLIC POLICY* 121 (7th ed. 2014).

<sup>21</sup> DAVID H. GETCHES, *WATER LAW IN A NUTSHELL* 19–25 (1984).

<sup>22</sup> See ROBERT G. DUNBAR, *FORGING NEW RIGHTS IN WESTERN WATERS* 73–85 (1983).

<sup>23</sup> GETCHES, *supra* note 21, at 17.

<sup>24</sup> 6 Colo. 443 (1882).

<sup>25</sup> 69 Cal. 255, 10 P. 674 (1886).

<sup>26</sup> 295 U.S. 142 (1935).

<sup>27</sup> GETCHES, *supra* note 21, at 78.

<sup>28</sup> DUNBAR, *supra* note 22, at 13–17.

<sup>29</sup> *Id.* at 27.

<sup>30</sup> CAL. WATER CODE §§ 20500–29975 (West 2009) (officially named the Irrigation District Law, but commonly known as the Wright Act).

<sup>31</sup> Reclamation Act of 1902, ch. 1093, § 8, 32 Stat. 390 (codified at 43 U.S.C. § 372 (2006)).

3. *Water for Tribes*

Tribes and tribal advocates came to fear the implications of the prior appropriation doctrine and widespread irrigation development. Tribes slower in developing irrigation on their reservations were in jeopardy of finding that non-Indian irrigators had permanently deprived tribal communities of necessary water. The adaptation came in federal lawsuits filed by federal officials in Montana’s federal court.<sup>32</sup> Ultimately, the U.S. Supreme Court in 1908 recognized, in *Winters v. United States*,<sup>33</sup> a senior federal reserved water right sufficient to ensure Indian reservations had water for irrigation development. *Winters*, because of its affirmation that tribal lands would have water, is one of the most influential water law decisions in American history (see Figure 1).

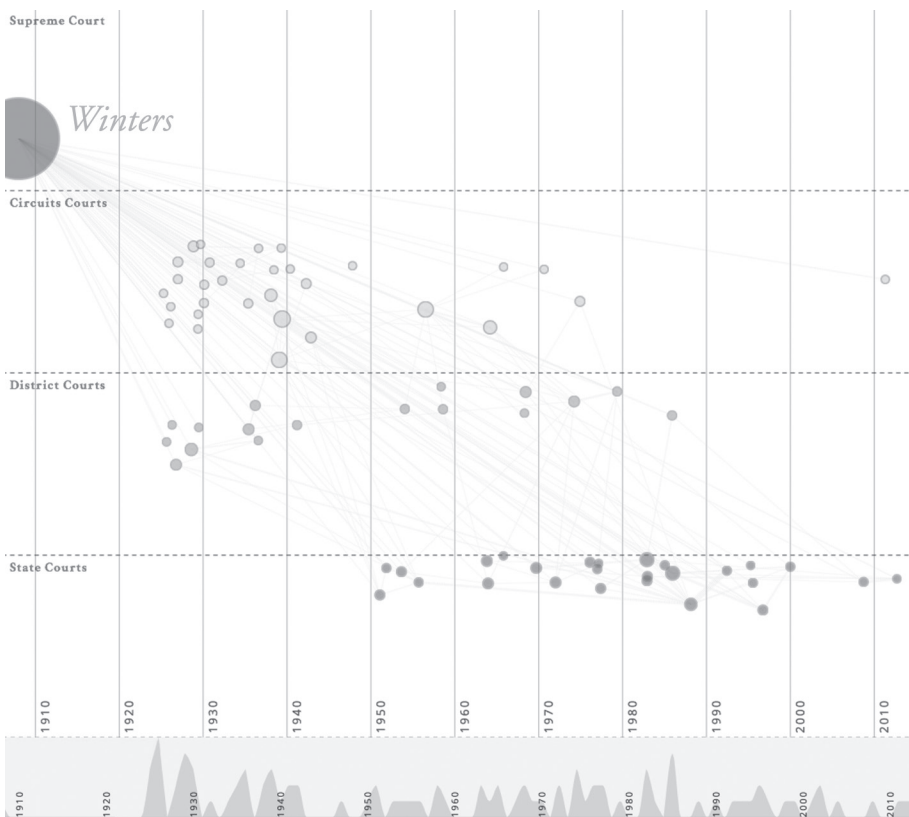


Figure 1: Cases Citing *Winters*<sup>34</sup>

<sup>32</sup> For a complete history of the *Winters* litigation, see JOHN SHURTS, INDIAN RESERVED WATER RIGHTS: THE WINTERS DOCTRINE IN ITS SOCIAL AND LEGAL CONTEXT (2003).

<sup>33</sup> 207 U.S. 564 (1908).

<sup>34</sup> Reproduced with permission from Ravel Law. The large bubble represents *Winters*, with the lines showing other cases that cited the decision. The x-axis tracks the dates of the decisions, and the y-axis divides the decisions by court. Bubbles are sized relative to number of citations of the case.

#### 4. *State Water Codes*

In its early days, prior appropriation only required a diversion of water and the use of that water for a beneficial, off-channel use. As the doctrine matured, some instream uses (*e.g.*, milling, hydropower) were also recognized. Special rules developed for projects taking time to complete, for example, some physical act, such as posting or recording of notice, to indicate water was to be diverted.<sup>35</sup> The result, however, was a proliferation of unrecorded or exaggerated water rights and meaningless local court decrees. The adaptation to this chaos was the adoption by states of water codes requiring, in most cases, centralized recording of existing water uses and the permitting of new uses—all in an effort to compile a complete and comprehensive set of water law records.<sup>36</sup>

#### 5. *Comprehensive Basin Planning*

The economic difficulties of the 1930s stimulated the need for more comprehensive, multiple use of river basin resources. This emphasis resulted in accelerated planning and engineering and massive structural adaptations in western watersheds, leading to such major developments as the Pick-Sloan Plan for Missouri River Development, the Columbia Basin Project, and the Colorado River Project Act.

#### 6. *Public Rights and Instream Values*

Even as recently as the 1980s, many critics argued that instream values such as fish breeding habitat, and public uses such as recreation, were not sufficiently recognized under existing water laws. The adaptations included passage of Colorado's instream flow protection program,<sup>37</sup> California's Mono Lake decision (based on the Public Trust Doctrine) ensuring that the public interest is recognized in water allocation,<sup>38</sup> and Montana's protection of public uses below the high water mark (also based on the Public Trust Doctrine).<sup>39</sup>

#### C. *Continuing Barriers to Adaptation*

Western water users and lawmakers have developed an impressive array of legal and policy adaptations to unique and varied western water conditions. As Idaho's water resources director recently observed, “[w]e always come down to

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<sup>35</sup> See generally GETCHES, *supra* note 21, at 78–82.

<sup>36</sup> See DUNBAR, *supra* note 22, at 86–98, for a discussion of Colorado's approach to this problem, and at 99–122, for Wyoming's different solution.

<sup>37</sup> COLO. REV. STAT. § 37-92-102 (2014).

<sup>38</sup> National Audubon Soc. v. Superior Court, 33 Cal.3d 419, 658 P.2d 709 (1983).

<sup>39</sup> Montana Coalition for Stream Access v. Curran, 682 P.2d 163 (Mont. 1984).



the wire, but we always find a way.”<sup>40</sup> This quest for appropriate water laws and institutions, however, has been made difficult by the following:

### 1. *Geography*

The American West consists of an enormous land base (more than 356 million acres in eleven states<sup>41</sup>), and a series of major river systems including the Colorado, Snake-Columbia, Missouri, Rio Grande, and Sacramento-San Joaquin Rivers.

### 2. *Interjurisdictional West*

Crosscutting and overlapping governments characterize the West. They include the United States and its major land and water management agencies (National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service, Bureau of Reclamation, and Defense Department, among others), seventeen states (not including Alaska), at least 277 “domestic sovereign”<sup>42</sup> Indian tribes and their sizeable reservations, and numerous interstate and international rivers, many governed by treaties or compacts.

### 3. *Federalism*

Water rights conflicts have regularly exacerbated unresolved tensions concerning federalism and the appropriate respective roles and authorities of the national, state, and tribal governments. Indeed, the Big Horn River Adjudication is a prime example of these tensions with competing water rights and interests asserted by Indian tribes, federal and state agencies, and private users holding state-law water rights.

### 4. *Insufficient Science*

Even with excellent work by academic scholars and government scientists, much remains unknown about hydrology and ecology—information that is necessary to improve decision-making. Even when relevant scientific information is available, it is often difficult to reform laws and policies to incorporate science. This is especially true with laws and policies concerning groundwater.<sup>43</sup>

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<sup>40</sup> Gary L. Spackman, Director, Idaho Dep’t of Water Resources, Remarks at the “Understanding the SPBA Resolution” Symposium, Boise, ID (Aug. 25, 2014).

<sup>41</sup> Congressional Research Service, *supra* note 18, at 19.

<sup>42</sup> *Cherokee Nation v. Georgia*, 30 U.S. (5 Pet.) 1 (1831) (referring to Indian tribes as “domestic sovereign nations”).

<sup>43</sup> See, e.g., M. Rhead Enion, *Allocating Under Water: Reforming California’s Groundwater Adjudications*, Pritzker Environmental Law and Policy Briefs 1 (No. 4, Sept. 2013) (“These groundwater adjudications have been informed by California’s unrealistic distinctions between surface and groundwater rights.”).

### 5. *Heterogeneity*

As the West has developed, its population, culture, and economy have become more heterogeneous.<sup>44</sup> As a result, people's values associated with water have become more diverse as well. Also, this heterogeneous population is more forceful in seeking to be involved in decisions concerning water.<sup>45</sup>

#### *D. Development of Statutory Adjudications*

Let's return to the late 1800s and early 1900s when the primary institutional challenge was to create a more complete, accurate inventory of valid water rights, as well as a more rational means of permitting new uses. In addressing this challenge, Colorado and Wyoming pioneered different paths.

Between 1879 and 1881, Colorado developed a predominately *judicial* system with ongoing adjudication of uses.<sup>46</sup> As a result of his dissatisfaction with the Colorado system, Elwood Mead moved to Wyoming and, between 1886 and 1889, led the territory in developing a primarily *administrative* system for permitting involving a state engineer and board of control.<sup>47</sup> Between these polar approaches, a series of hybrids developed, with some states choosing a stronger administrative role and some states choosing less.

Most of these state laws had provisions for statutory adjudications. These early statutory adjudications were used for the following purposes:

1. Integrating riparian and appropriative rights into a unified prior appropriation system. Nebraska undertook this in 1895. Texas also attempted this integration although its approach was declared unconstitutional in 1921.<sup>48</sup>

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<sup>44</sup> See, e.g., U.S. Census Bureau, 2010 Census Shows America's Diversity (Mar. 24, 2011), [https://www.census.gov/newsroom/releases/archives/2010\\_census/cb11-cn125.html](https://www.census.gov/newsroom/releases/archives/2010_census/cb11-cn125.html) (last visited Aug. 18, 2015) ("Geographically, particularly in the South and West, a number of areas had large proportions of the total population that was minority. Nearly half of the West's population was minority (47 percent), numbering 33.9 million. Among the states, California led the nation with the largest minority population at 22.3 million. ¶ Between 2000 and 2010, Texas joined California, the District of Columbia, Hawaii and New Mexico in having a 'majority-minority' population, where more than 50 percent of the population was part of a minority group. Among all states, Nevada's minority population increased at the highest rate, by 78 percent.").

<sup>45</sup> See generally COMMUNICATION AND PUBLIC PARTICIPATION IN ENVIRONMENTAL DECISION MAKING 2 (Stephen P. Depoe ed., 2011) ("Citizens, activists, and advocacy organizations in the United States and elsewhere have discovered firsthand the shortcomings of contemporary approaches to and mechanisms for citizen involvement, and have demanded changes in the way public participation is solicited and used.").

<sup>46</sup> DUNBAR, *supra* note 22, at 86–98.

<sup>47</sup> *Id.* at 99–112.

<sup>48</sup> Board of Water Eng'rs v. McKnight, 229 S.W. 301, 307 (Tex. 1921).

2. Providing firm legal title to water rights pledged to support Reclamation Projects (e.g., Arizona's *Hurley v. Abbott* litigation (*Kent Decree*) (1910);<sup>49</sup> Nevada's *Orr Ditch Decree* (1944)).<sup>50</sup>

3. Determining groundwater rights, especially in Southern California (e.g., *City of Pasadena v. City of Alhambra* (Raymond Basin);<sup>51</sup> *California Water Service Co. v. City of Compton* (West Coast Basin);<sup>52</sup> and *Central and West Basin Water Replenishment Dist. v. Adams* (Central Basin)<sup>53</sup>).

4. Integrating surface water and groundwater rights (1945–56).

5. Securing water supplies for growing metropolitan areas (Oklahoma, 1938–58, to benefit Oklahoma City and Tulsa).

During the post-World War II era, these statutory adjudications proved increasingly inadequate for two reasons. First, judicial procedures and resources to bring all necessary parties before the court to produce a workable decree were lacking. Second, because of federal sovereign immunity, state courts were unable to assert jurisdiction over the United States and Indian tribes without their consent.<sup>54</sup>

These issues came to a head in the early 1950s when Nevada's inability to join the United States in the state's Quinn River Adjudication, coupled with fears about the extent of federal claims for water for Camp Pendleton in Southern California, resulted in passage of the McCarran Amendment in 1952.<sup>55</sup> The amendment waives federal immunity for comprehensive general stream adjudications, whether brought in state or federal court.<sup>56</sup>

With the Supreme Court's 1963 decision in *Arizona v. California*<sup>57</sup> affirming the *Winters* doctrine and extending reserved right principles to other withdrawn federal lands, western states became fearful that federal claims would be extensive

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<sup>49</sup> Decision and Decree, No. 4564 (D. Ariz. Terr. Mar. 1, 1910).

<sup>50</sup> Equity No. A3 (D. Nev. 1944).

<sup>51</sup> No. Pasadena C-1323 (Los Angeles Super. Ct. 1937).

<sup>52</sup> No. 506,806 (Los Angeles Super Ct. filed 1945).

<sup>53</sup> No. 786,656 (Los Angeles County Super Ct. filed 1962).

<sup>54</sup> James W. Dilworth & Frederic L. Kirgis Jr., *Adjudication of Water Rights Claimed by the United States--Application of Common-Law Remedies and the McCarran Amendment of 1952*, 48 CAL. L. REV. 94, 94–98 (1960).

<sup>55</sup> 43 U.S.C. § 666 (2000).

<sup>56</sup> See Dilworth & Kirgis, *supra* note 54, at 121–22.

<sup>57</sup> 373 U.S. 546 (1963).

and they would be decided in federal court unless states acted quickly. These considerations were aggravated by lingering problems about the incompleteness and inaccuracies of state water rights records, a rapidly growing population (the western region was to become the fastest growing area in America), the Supreme Court's invalidation of state water export restraints in *Sporhase v. Nebraska*,<sup>58</sup> and massive energy development proposals following the Middle East boycott of 1973.

These developments resulted in a race to the courthouse to commence water adjudications in the most favorable forum.<sup>59</sup> States and state water users generally sought to undertake state adjudications. Federal and tribal parties preferred to have these cases heard by federal courts.<sup>60</sup> Following passage of the Water Right Determination and Administration Act of 1969,<sup>61</sup> Colorado aggressively sought to adjudicate federal claims in state court.<sup>62</sup> In 1974, Montana commenced a predominately administrative adjudication of the Powder River basin.<sup>63</sup> In Arizona, the United States and the Papago Indian Tribe (now known as the Tohono O'odham Nation) in 1975 sued Tucson, mining companies, and others to limit groundwater pumping in the upper Santa Cruz River basin.<sup>64</sup> Wyoming filed the Big Horn River Adjudication in 1977.<sup>65</sup>

So began the comprehensive general stream adjudications of the modern era. The primary purposes for these large cases, proceedings that would preoccupy water users in many western states for decades to come, were: (1) to confirm valid, existing water rights; (2) to recognize, quantify federal reserved water rights, and integrate them with state water rights; and (3) to develop comprehensive, centralized water use information for improved management.<sup>66</sup> Most states sought to have all these issues decided in state court.<sup>67</sup>

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<sup>58</sup> 458 U.S. 941 (1982).

<sup>59</sup> See, e.g., Donald Duncan MacIntyre, *The Adjudication of Montana's Waters — A Blueprint for Improving the Judicial Structure*, 49 MONT. L. REV. 211, 229 (1988) ("The goal, in part, was to win the race to the courthouse.").

<sup>60</sup> See generally 1 THORSON, *supra* note 5, at 324–31.

<sup>61</sup> COLO. REV. STAT. §§ 37-92-101 to -602 (2014).

<sup>62</sup> See, e.g., *Colorado River Conserv. Dist. v. United States*, 424 U.S. 800 (1976).

<sup>63</sup> MacIntyre, *supra* note 59, at 222–23.

<sup>64</sup> Tribal and federal suits filed in 1975 were consolidated in *United States & Papago Indian Tribe v. City of Tucson*, No. CIV 75-39 (D. Ariz. 1980).

<sup>65</sup> *In re Gen. Adjudication of All Rights to Use Water in the Big Horn River System*, No. 77-4993 (Wyo 5th Dist. Ct. filed Jan. 24, 1977).

<sup>66</sup> 2 THORSON, *supra* note 5, at 305–06.

<sup>67</sup> See, e.g., Micheal F. Lamb, *Adjudication of Indian Water Rights: Implementation of the 1979 Amendments to the Water Use Act*, 41 MONT. L. REV. 73, 74–76 (1980).

### III. STATUS OF WESTERN GENERAL STREAM ADJUDICATIONS

This comprehensive general stream adjudication period has now lasted more than a half-century.<sup>68</sup> Tens of millions of dollars have been spent and hundreds of thousands of water users have been caught up in these cases.<sup>69</sup> What is the status of the large adjudications today?

The unique and convoluted history of each of these adjudications exceeds the scope of this article. In a somewhat arbitrary fashion, however, the following discussion summarizes and categorizes the progress of twelve western states in completing their general stream adjudications.

#### A. *Finished or Almost Finished Major Adjudications*

##### 1. *Colorado*

As previously discussed, Colorado has continually adjudicated its waters since the late 1800s.<sup>70</sup> The system is largely judicial and was updated by the legislature in 1969.<sup>71</sup> The state now has seven water divisions based on the state's major drainages, with a district judge assisted by a referee in each division.<sup>72</sup> Because the state has practiced ongoing adjudications for more than a century, the process is essentially complete for state-law rights. Both new rights and transfers are reflected in updated judicial decrees.

In the late 1980s, Colorado reached settlements with the state's two Indian tribes, the Ute Mountain Tribe and the Southern Ute Tribe, with the agreement confirmed by the Colorado Ute Settlement Act Amendments of 2002,<sup>73</sup> allotting sixty percent of the Animas-La Plata Project water supply to the tribes.<sup>74</sup>

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<sup>68</sup> More than 60 years have passed since the 1952 McCarran Amendment. One of the earliest post-McCarran adjudications was New Mexico's Pecos River adjudication, commenced in 1956. N.M. OFFICE OF THE STATE ENG'R, INTERSTATE STREAM COMM'N, 2003-2004 ANNUAL REPORT 36-37 (2004).

<sup>69</sup> See, e.g., Rocky Barker, *Idaho completes massive water rights review*, IDAHO STATESMAN, Aug. 24, 2014 ("[The Snake River Basin Adjudication] has cost the state of Idaho more than \$93 million, but other Western states have spent far more on lawsuits over tribal water rights and similar disputes.").

<sup>70</sup> See *supra* note 45 and accompanying text.

<sup>71</sup> COLO. REV. STAT. § 37-92-101 (2014).

<sup>72</sup> *Id.* § 37-92-201, -203(1).

<sup>73</sup> Pub.L. No. 106-554, 114 Stat. 2763 (2000).

<sup>74</sup> The Southern Ute and Ute Mountain Ute Tribes are entitled to divert 66,100 acre-feet of the 111,500 acre-feet total annual diversions. M. Catherine Condon, Colorado Ute Water Rights Settlement Act of 1988, Presentation to Colorado River Water Users Ass'n (2013), available at [http://www.crwua.org/documents/conferences/2013-conference/Condon\\_SUIT.pdf](http://www.crwua.org/documents/conferences/2013-conference/Condon_SUIT.pdf).

The water court recognized federal agency claims for the Black Canyon of the Gunnison National Park in December 2008.<sup>75</sup> The decree was the result of multi-year negotiations and mediation among more than thirty parties. The settlement guarantees seasonally adjusted instream flows through the canyon.<sup>76</sup>

## 2. *Idaho*

Idaho commenced its Snake River Basin Adjudication in 1987 to determine water rights throughout the entire Snake River system, including groundwater rights.<sup>77</sup> The case involved an area comprising almost eighty-five percent of the state. Using a hybrid system, the state department of water resources reviewed claims and submitted reports to the specialized water court presided over by a district judge. Special masters and the judge resolved objections.<sup>78</sup>

The case involved more than 150,000 claims including extensive filings by tribes and federal agencies.<sup>79</sup> While the court made numerous rulings on federal agency claims, the adjudication was somewhat simplified by major settlements with the Shoshone-Bannock Tribes of the Fort Hall Indian Reservation<sup>80</sup> and the Nez Perce Tribe.<sup>81</sup>

Idaho essentially completed the Snake River Basin Adjudication with the signing of the final decree by Judge Eric Wildman at an elaborate ceremony in Boise on August 25, 2014.<sup>82</sup> The water court will continue to hear water-related appeals from state administrative agencies and is now also turning its attention to adjudications in northern Idaho.<sup>83</sup>

## 3. *Washington*

Washington undertook numerous statutory adjudications during most of the Twentieth Century. Between 1918 and 1990, 82 watersheds were adjudicated.

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<sup>75</sup> National Park Service, Water Right Quantification Decreed for Black Canyon of the Gunnison National Park, [http://www.nature.nps.gov/water/Homepage/Black\\_canyon.cfm](http://www.nature.nps.gov/water/Homepage/Black_canyon.cfm) (last visited Aug. 18, 2015).

<sup>76</sup> *Id.*

<sup>77</sup> Commencement Order, *In re* Snake River Basin Adjudication, No. 39576 (Idaho 5th Dist. entered Nov. 19, 1987).

<sup>78</sup> Snake River Basin Adjudication, Informational Brochure, <http://srba.idaho.gov/doc/broch1.htm> (last visited Aug. 18, 2015).

<sup>79</sup> *Id.*

<sup>80</sup> Fort Hall Indian Water Rights Act of 1990, Pub.L. 101-602, 104 Stat. 3059 (1990).

<sup>81</sup> Snake River Water Rights Act of 2004, Pub.L. No. 108-447, 118 Stat 2809, 3432-41 (2004).

<sup>82</sup> Final Unified Decree, *In re* SRWBA, No. 39576 (Idaho Dist. Ct. 5th Dist. Aug. 25, 2014) (Decree actually entered on Aug. 26, 2014).

<sup>83</sup> See *infra* notes 189-91 and accompanying text.

Seven non-McCarran adjudications remain incomplete while water users have petitioned for adjudications in 66 more watersheds.<sup>84</sup>

The Yakima River adjudication in the central part of the state, commenced in 1977,<sup>85</sup> is almost complete. The adjudication involves surface water and significant reserved right claims of federal agencies and the Yakima Tribe.

In 2001, the United States and the Lummi Nation brought suit in the Seattle-area federal court against the state and non-Indian water users to adjudicate groundwater on the Lummi Peninsula.<sup>86</sup> Following rulings on motions for summary judgment, the major parties negotiated a settlement that was approved and decreed by the court in 2007.<sup>87</sup> A federal water master was appointed to administer the decree.

#### 4. *Wyoming*

Since 1890, Wyoming has used the almost entirely administrative system pioneered by Elwood Mead. The state engineer issues permits that are considered adjudicated when the water is put to beneficial use according to the provisions of the permit.

The exception to this administrative system was the Big Horn River Adjudication commenced in 1979 in state district court in an effort to satisfy the requirements of the McCarran Amendment.<sup>88</sup> The case has involved the claims of the Wind River tribes and federal agencies. In a further effort to satisfy the McCarran Amendment, the court appointed a series of special masters, rather than the state engineer, to hear much of the litigation.<sup>89</sup> The court issued its final decree in the Big Horn case on September 5, 2014.<sup>90</sup>

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<sup>84</sup> Wash. Dep't of Ecology, Untitled list of active, complete, incomplete and petitioned adjudications (last revised Oct. 4, 2006) (on file with author).

<sup>85</sup> *In re Surface Waters of the Yakima River Basin Drainage*, No. 77-2-01484-5 (Wash. Yakima Co. Super. Ct. filed 1977) (also known as the *Acquavella* adjudication).

<sup>86</sup> *United States v. State of Washington*, No. C01-0047Z (W.D. Wash. filed 2001).

<sup>87</sup> Order & Judgment, *United States v. State of Washington*, No. C01-0047Z (W.D. Wash.) (Nov. 20, 2007).

<sup>88</sup> *In re Gen. Adjudication of All Rights to Use Water in the Big Horn River System*, No. 77-4993/86-0012 (Wyo. 5th Dist. Ct. filed Jan. 24, 1977).

<sup>89</sup> See Jason A. Robison, *Wyoming's Big Horn General Stream Adjudication*, 15 WYO. L. REV. 243, 274-77 (2015).

<sup>90</sup> Final Decree, *In re Gen. Adjudication of All Rights to Use Water in the Big Horn River System*, No. 77-4993/86-0012 (Wyo. 5th Dist. Ct. Sept. 5, 2014).

## B. Major Adjudications Underway

### 1. Arizona

In 1979, the Arizona legislature abolished administrative adjudications and authorized proceedings in the state's superior court with technical assistance from the Arizona Department of Water Resources (ADWR). Two adjudications have been pending since that time: the Gila River Adjudication in the southern half of the state<sup>91</sup> and the Little Colorado River Adjudication in the northeastern portion—but not including the mainstem of the Colorado River.<sup>92</sup> Both adjudications have significant tribal and federal agency claims. The number of claims in both adjudications exceeds 85,000, asserted by more than 35,000 parties.

Progress has been hampered by two major developments. The first is a longstanding legal and technical struggle to define *subflow*, that groundwater so closely associated with a stream that it will be included in the adjudication.<sup>93</sup> Many large water users have wells that may be brought into the adjudication (and potentially subordinated to senior surface water claims) depending on how the subflow zone is defined.<sup>94</sup> In 2014, after many prior efforts, the court was attempting to approve a subflow zone map for a watershed.<sup>95</sup>

The second impediment was a multi-year delay in the adjudications due to major legislative changes in 1995<sup>96</sup> that were successfully challenged by federal and tribal parties.<sup>97</sup> While litigation was pending, the ADWR lost staff and expertise that the department still has not recovered.

On the positive side, the Arizona court was the first to finalize and incorporate an Indian water rights settlement into a general stream adjudication (Salt River Pima Maricopa Indian Community).<sup>98</sup> State, federal, and tribal parties have achieved an impressive list of other settlements: the Ak-Chin Indian Water Rights Settlement

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<sup>91</sup> *In re* General Adjudication of All Rights to Use Water in the Gila River System and Source, Nos. W-1, W-2, W-3, and W-4 (Consolidated) (Ariz. Maricopa Cnty Super. Ct.).

<sup>92</sup> *In re* General Adjudication of All Rights to Use Water in the Little Colorado River System and Source, No. 6417 (Ariz. Apache Cnty Super. Ct.).

<sup>93</sup> Communication from George Schade, Special Master, Arizona General Stream Adjudication (Nov. 5, 2014) (on file with author).

<sup>94</sup> *Id.*

<sup>95</sup> *Id.*

<sup>96</sup> See, e.g., ARIZ. REV. STAT. ANN. §§ 45-258, -261, -262, -263, -264 (2005) (added effective Mar. 17, 1995, other sections were amended).

<sup>97</sup> *San Carlos Apache Tribe v. Superior Court*, 972 P.2d 179 (Ariz. 1999).

<sup>98</sup> Salt River Pima-Maricopa Indian Community Water Rights Settlement Act, Pub. L. No.100-512, 102 Stat. 2549 (1988).



Act,<sup>99</sup> Southern Arizona Water Rights Settlement Act,<sup>100</sup> Fort McDowell Indian Community Water Rights Settlement Act,<sup>101</sup> San Carlos Apache Tribe Water Rights Settlement Act,<sup>102</sup> Yavapai-Prescott Indian Tribe Water Rights Settlement Act,<sup>103</sup> Zuni Indian Tribe Water Rights Settlement Act,<sup>104</sup> and Gila River Indian Community Water Rights Settlement.<sup>105</sup> While the major parties have worked for two decades to secure a settlement of the Hopi and Navajo Nation claims in the Little Colorado River adjudication, an agreement has remained elusive. In 2014, the adjudication court was reviewing the proposed White Mountain Apache Tribe water rights quantification agreement.<sup>106</sup>

In recent years, litigation activity has focused on federal agency water rights. The superior court has defined the attributes of reserved rights for a national conservation area, wilderness areas, certain water uses on public lands, national forests, and a military installation.<sup>107</sup> These reserved water rights are now being quantified.<sup>108</sup> In 2012, the Arizona Supreme Court held that state school trust lands do not hold federal reserved water rights.<sup>109</sup>

## 2. *Montana*

Montana is conducting the nation's largest water adjudication with a state-wide proceeding involving all surface and groundwater except for small exempt uses.<sup>110</sup> The adjudication began in 1973 shortly after the state adopted its Water Use Act.<sup>111</sup> The first predominately administrative proceeding in the

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<sup>99</sup> Ak-Chin Indian Water Rights Settlement Act, Pub. L. No. 95-328, 92 Stat. 409 (1978), *amended*, Pub.L. 98-530, 98 Stat. 2698 (1984), *amended*, Pub. L. No. 102-497, 106 Stat. 3258 (1992), *amended*, Pub. L. No. 106-285, 114 Stat. 878 (2000).

<sup>100</sup> Southern Arizona Water Rights Settlement Act, Pub. L. No. 97-293, 96 Stat. 1274 (1982), *tech. amend.*, Pub. L. No. 102-497, 106 Stat. 3256 (1992).

<sup>101</sup> Fort McDowell Indian Community Water Rights Settlement Act of 1990, Pub. L. No. 101-628, 104 Stat. 4480 (1990).

<sup>102</sup> San Carlos Apache Tribe Water Rights Settlement Act, Pub. L. No. 102-575, 106 Stat. 4740 (1992), *tech. amend.*, Pub. L. No. 103-435, 108 Stat. 4572 (1994), *amended*, Pub. L. No. 105-18, § 5003, 111 Stat. 181 (1997).

<sup>103</sup> Yavapai-Prescott Indian Tribe Water Rights Settlement Act of 1994, Pub.L. No. 103-434, 108 Stat. 4526 (1994).

<sup>104</sup> Zuni Indian Tribe Water Rights Settlement Act of 2003, Pub. L. No. 108-34 (2003).

<sup>105</sup> Arizona Water Settlements Act of 2004, Pub. L. No. 108-451, 118 Stat. 3478 (2004).

<sup>106</sup> Schade, *supra* note 93.

<sup>107</sup> *Id.*

<sup>108</sup> *Id.*

<sup>109</sup> *In re* General Adjudication of all Rights to Use Water in the Gila River System and Source and Little Colorado River System and Source, 231 Ariz. 8, 289 P.3d 936 (2012).

<sup>110</sup> 2 THORSON, *supra* note 5, at 343.

<sup>111</sup> MONT. CODE ANN. §§ 85-2-212 to -282 (2014).

energy-rich Powder River Basin was resource-intensive and time-consuming.<sup>112</sup> By 1979, legislators were looking for an alternate path and established a strongly judicial program with a specialized water court<sup>113</sup> and a separate Reserved Water Right Compact Commission to negotiate water rights with federal agencies and tribes.<sup>114</sup> Until 2013, litigation of reserved rights was stayed so long as negotiations were promising.<sup>115</sup>

The compact commission has been very successful with the legislature having approved fifteen settlements involving federal agency and tribal water rights.<sup>116</sup> Compacts have been reached for the Fort Peck Indian Reservation,<sup>117</sup> Northern Cheyenne Indian Reservation,<sup>118</sup> Rocky Boy's Indian Reservation,<sup>119</sup> Crow Indian Reservation,<sup>120</sup> Blackfoot Tribe,<sup>121</sup> and Fort Belknap Indian Reservation (the situs of the original *Winters* case).<sup>122</sup> The water court has issued final decrees in three of these settlements.<sup>123</sup>

The compact commission has also reached non-tribal reserved right settlements with the following agencies: U.S. Fish and Wildlife Service (National Wildlife Refuges,<sup>124</sup> Red Rock Lakes National Wildlife Refuge,<sup>125</sup> Bowdoin National Wildlife Refuge,<sup>126</sup> and the Charles M. Russell National Wildlife Refuge<sup>127</sup>); National Park Service (Yellowstone, Glacier, and other lands);<sup>128</sup> U.S. Department of Agriculture

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<sup>112</sup> 49th Legislature, State of Mont., Report of the Select Committee on Water Marketing IV-10 to IV-11 (Jan. 1985).

<sup>113</sup> 1979 Mont. Laws ch. 697.

<sup>114</sup> MONT. CODE ANN. § 2-15-212 (2014).

<sup>115</sup> *Id.* § 85-2-704(3).

<sup>116</sup> Mont. Reserved Water Rights Compact Comm'n, *Compacts* (2014), <http://www.dnrc.mt.gov/rwrc/Compacts/Compacts.asp> (last visited Aug. 18, 2015).

<sup>117</sup> MONT. CODE ANN. § 85-20-201 (2014) (final decree issued by Water Court in 2001).

<sup>118</sup> *Id.* § 85-20-301 (final decree issued by Water Court in 1995).

<sup>119</sup> *Id.* § 85-20-601 (final decree issued by Water Court in 2002).

<sup>120</sup> *Id.* § 85-20-901 (preliminary decree issued by Water Court in 2013).

<sup>121</sup> *Id.* § 85-20-1501 (pending congressional approval).

<sup>122</sup> *Id.* § 85-20-1001 (pending congressional approval).

<sup>123</sup> Northern Cheyenne-Montana Compact, No. WC-93-1 (Mont. Water Ct. July 24, 1995); Fort Peck-Montana Compact, No. WC-92-1 (Mont. Water Ct. Aug. 10, 2001); Rocky Boy's-Montana Compact, No. WC-2000-01 (Mont. Water Ct. June 12, 2002).

<sup>124</sup> MONT. CODE ANN. § 85-20-701 (2014).

<sup>125</sup> *Id.* § 85-20-801.

<sup>126</sup> *Id.* § 85-20-1301.

<sup>127</sup> *Id.* § 85-20-1701.

<sup>128</sup> *Id.* § 85-20-401.

(Fort Keogh Livestock and Range Research Station;<sup>129</sup> Sheep Experimentation Station<sup>130</sup>); U.S. Forest Service;<sup>131</sup> and Bureau of Land Management.<sup>132</sup> The water court has issued final decrees for four of these agreements.<sup>133</sup>

In terms of other adjudication activity, more than 219,000 claims were filed by 1982 (although additional late claims were accepted under some circumstances). As of October 2014, final decrees had been issued for 16,354 claims, preliminary decrees for 86,101 claims in basins without reserved rights claims or where those claims have been resolved, and temporary preliminary decrees for 98,225 claims in basins where reserved rights claims remain outstanding. Approximately 18,755 claims were being examined by the Department of Natural Resources and Conservation.<sup>134</sup>

### 3. *New Mexico*

New Mexico's adjudications are a hybrid of administrative and judicial activity with the state engineer preparing a hydrographic survey report that commences an adjudication in a watershed and forms the basis for offers of judgment to water users. The district court resolves any objections to these offers and issues a final decree.<sup>135</sup>

New Mexico commenced its adjudications in the 1950s, and the state is unique in that a majority of the adjudications have been brought in federal court.<sup>136</sup> This results from an agreement in the 1960s between the state engineer and the United States. Surface water and groundwater in certain declared basins are included in the adjudications.

Twelve adjudications are complete, and twelve cases are still active. Of the twelve active adjudications, half are pending in federal court.<sup>137</sup> Approximately 72,000 water users are involved in the active cases.<sup>138</sup> While some commentators

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<sup>129</sup> *Id.* § 85-20-1101.

<sup>130</sup> *Id.* § 85-20-1201.

<sup>131</sup> *Id.* § 85-20-1401.

<sup>132</sup> *Id.* §§ 85-20-501, -1801.

<sup>133</sup> *Compacts, supra* note 116.

<sup>134</sup> Mont. Dep't Nat. Resources & Conserv. Montana General Adjudication Basin Status (Oct. 1, 2014), [http://dnrc.mt.gov/wrd/water\\_rts/adjudication/adjstatus\\_report.pdf](http://dnrc.mt.gov/wrd/water_rts/adjudication/adjstatus_report.pdf).

<sup>135</sup> 2 THORSON, *supra* note 5, at 351.

<sup>136</sup> *Id.*

<sup>137</sup> Gregory C. Ridgley, *The Future of Water Adjudications in New Mexico*, in 55TH ANNUAL NM WATER CONFERENCE, HOW WILL INSTITUTIONS EVOLVE TO MEET OUR WATER NEEDS IN THE NEXT DECADE? 10 (Dec. 2010).

<sup>138</sup> *Id.* at 11.

estimate that only twenty percent of the state's water rights have been adjudicated, state engineer officials estimate that fifty to sixty percent is more accurate.<sup>139</sup> The middle portion of the Rio Grande is not yet under adjudication, and water rights in this area, with its large cities and many Pueblos, will be difficult to resolve.

Water rights for most of the state's twenty-two Indian Pueblos, Tribes, and Nations have not been quantified by litigation or settlement. Four reserved water right settlements have been reached: the Jicarilla Apache Tribe Water Settlement Act of 1992;<sup>140</sup> the Northwestern New Mexico Rural Water Projects Act (Navajo-Gallup Water Supply Project/Navajo Nation Water Rights);<sup>141</sup> the *Aamodt* Litigation Settlement Act;<sup>142</sup> and the Taos Pueblo Indian Water Rights Settlement Act.<sup>143</sup> Court proceedings are now underway to consider approval of the last two of these accords.<sup>144</sup>

#### 4. Oregon

Oregon's adjudication system is predominately administrative with some judicial review features. An adjudication may start on the motion of a water user or the Oregon Water Resources Department (OWRD) Director, and the OWRD acts as the primary fact-finder.<sup>145</sup> The OWRD prepares a preliminary determination of water rights, which becomes effective immediately while the state court reviews it and resolves any objections.<sup>146</sup> Under this system, the state has adjudicated three quarters of its watersheds.<sup>147</sup>

Since 1975, the major adjudication has been of the Klamath River Basin in the southern portion of the state. The case involves significant and often contentious claims by federal land agencies and the Klamath Tribes (Klamath-Modoc-

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<sup>139</sup> *Id.*

<sup>140</sup> Pub.L. 102-441, 106 Stat. 2237 (1992).

<sup>141</sup> Pub.L. No. 111-11, 123 Stat 1367 (2009); *see also* Partial Final Judgment and Decree of the Water Rights of the Navajo Nation, State of New Mexico *ex rel.* State Engineer v. United States, No. CV-75-184 (N.M. Dist. Ct.-11th Nov. 1, 2013).

<sup>142</sup> Pub.L. 111-291, 124 Stat. 3134 (2010).

<sup>143</sup> Pub.L. 111-291, 124 Stat. 3122 (2010).

<sup>144</sup> *New Mexico v. Abeyta*, No. 69-CV-07896MV (D.N.M.) (Taos Pueblo settlement; approval motion filed July 29, 2011); *State of New Mexico ex rel. State Engineer v. Aamodt*, No. 66-CV-06639 (D.N.M.) (order to show cause why settlement should nor be approved filed Dec. 6, 2013).

<sup>145</sup> OR. REV. STAT. § 539.021 (2003).

<sup>146</sup> *Id.* § 539.130(4), -150(3) (4).

<sup>147</sup> 2 THORSON, *supra* note 5, at 339.

Yahooskin), as well as trans-boundary issues with California.<sup>148</sup> The validity and priority date (“time immemorial”) of the tribal claims were established by the U.S. District Court in *United States v. Adair* and affirmed by the Court of Appeals.<sup>149</sup> Quantification of the tribal rights is being addressed in the state proceedings.<sup>150</sup>

The OWRD completed its Adjudicator’s Findings of Fact and Final Order of Determination on March 7, 2013, thereby completing the administrative phase of the adjudication.<sup>151</sup> In the process, 730 claims and 5,664 contests or objections were processed. Of these, 377 were federal reserved water rights claims involving the vast majority of the contests (4,695). Review of the Order of Determination is now pending before the Klamath County Circuit Court.<sup>152</sup>

Many attempts to settle the federal claims have been made over the years. Two major agreements have emerged from these efforts. First, pursuant to the Klamath Basin Restoration Agreement (KBRA), “the United States and Klamath Tribes have agreed not to make a call based on the Klamath Tribes’ Upper Klamath Lake claim to any determined claims or water right certificates with a priority date senior to August 9, 1908.”<sup>153</sup>

Second, in 2014, state leaders helped negotiate the Proposed Upper Klamath Basin Comprehensive Agreement among the tribes, the state, and water users above Upper Klamath Lake.<sup>154</sup> The agreement calls for irrigators to retire or reduce historic diversions by up to 30,000 acre-feet, coupled with habitat restoration efforts. The accord requires federal funding and would be implemented over five years.<sup>155</sup> One commentator concludes that, with “this second settlement agree-

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<sup>148</sup> See generally Reed Marbut, *Legal Aspects of Upper Klamath Basin Water Allocation, in WATER ALLOCATION IN THE KLAMATH RECLAMATION PROJECT, 2001: AN ASSESSMENT OF NATURAL RESOURCE, ECONOMIC, SOCIAL, AND INSTITUTIONAL ISSUES WITH A FOCUS ON THE UPPER KLAMATH BASIN* 75–90 (2001).

<sup>149</sup> 723 F.2d 1394 (9th Cir. 1983).

<sup>150</sup> Marbut, *supra* note 148, at 79.

<sup>151</sup> Or. Water Resources Dep’t, Klamath Basin Adjudication, <http://www.oregon.gov/owrd/Pages/adj/index.aspx> (last visited Aug. 18, 2015).

<sup>152</sup> *Id.*

<sup>153</sup> Oregon Water Resources Dep’t, Klamath River Basin Adjudication: Supplemental Media Materials and Frequently Asked Questions 4 (Mar. 7, 2013).

<sup>154</sup> Proposed Upper Klamath Basin Comprehensive Agreement (Mar. 4, 2014), available at <http://www.oregon.gov/gov/GNRO/docs/Proposed%20Upper%20Klamath%20Basin%20Comprehensive%20Agreement%20and%20Summary%20of%20Agreement/2014-3-4%20PROPOSED%20UPPER%20KLAMATH%20BASIN%20COMPREHENSIVE%20AGREEMENT.pdf>.

<sup>155</sup> [Summary of] Proposed Upper Klamath Basin Comprehensive Agreement, available at <http://www.oregon.gov/gov/GNRO/docs/Proposed%20Upper%20Klamath%20Basin%20Comprehensive%20Agreement%20and%20Summary%20of%20Agreement/2014-3-4%20Summary%20of%20Agreement.pdf>.

ment, the basin is now fully covered with strategies to help recover instream flows to meet Tribal water needs while maintaining a sustainable level of economic use for farmers and ranchers.<sup>156</sup> The Oregon and California Senators have introduced legislation to enable the settlement.<sup>157</sup> Separately, as part of the Deschutes River Adjudication, a settlement was reached in 1997 with the Confederated Tribes of the Warm Spring Reservation.<sup>158</sup>

For more than twenty years, federal agencies, the State of Oregon, the Confederated Tribes of Umatilla Indian Reservation (CTUIR), and local irrigation districts have collaborated to improve the Umatilla River Basin's water supply, aided by the 1988 Umatilla Basin Project Act.<sup>159</sup> In June 2012, formal water right settlement negotiations were commenced among the CTUIR, federal negotiation team, state negotiators, and representatives of the Westland Irrigation District.<sup>160</sup>

### C. *Smaller, Targeted Adjudications*

#### 1. *California*

California does not have an overall adjudication plan; rather, adjudications occur when required by local circumstances.<sup>161</sup> Some of the earliest adjudications (starting with the Raymond Basin in 1937) were of groundwater basins in water-short Southern California.

Under existing California law, the State Water Resources Control Board (SWRCB) has authority to conduct statutory and court reference adjudications.<sup>162</sup> Statutory adjudications are triggered when a water user or other persons petition the SWRCB for an adjudication and the board finds the action necessary and in the public interest.<sup>163</sup> After granting the petition, SWRCB staff develops a draft order of determination<sup>164</sup> and the board resolves any objections and issues a final

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<sup>156</sup> Martha Pagel, *A Tenuous Truce in Oregon's Water Wars*, AMERICAN COLLEGE OF ENVIRONMENTAL LAWYERS (April 11, 2014), <http://www.acoel.org/post/2014/04/11/A-Tenuous-Truce-In-Oregon's-Water-Wars.aspx>.

<sup>157</sup> S. 2379, 113th Cong. (2014).

<sup>158</sup> Confederated Tribes of the Warm Spring Reservation Water Rights Settlement (Nov. 17, 1997), available at <https://repository.unm.edu/bitstream/handle/1928/21889/WarmSprings1997SA.pdf?sequence=1>.

<sup>159</sup> Pub. L. 100-557.

<sup>160</sup> Oregon Water Resources Department, Annual Government-to-Government Report Under ORS 182.166, at 5 (Dec. 15, 2013).

<sup>161</sup> 2 THORSON, *supra* note 5, at 351-52.

<sup>162</sup> CAL. WATER CODE §§ 2500-2868 (West 2009).

<sup>163</sup> *Id.* § 2525.

<sup>164</sup> *Id.* § 2603.

order of determination<sup>165</sup> that is filed with the appropriate superior court.<sup>166</sup> The court hears and resolves any objections and issues a final decree.<sup>167</sup>

Courts may also refer issues to the SWRCB for investigation and the development of recommendations later returned to the court.<sup>168</sup> These orders of reference have been used to resolve adjudications initially filed in court. The courts may also hear and resolve water adjudications without any involvement of the SWRCB.<sup>169</sup>

The SWRCB reports twenty-seven statutory adjudications, thirty-four court reference adjudications, and twelve other adjudications.<sup>170</sup> Additionally, twenty groundwater adjudications have been completed, mostly in Southern California.<sup>171</sup>

The state has also seen several Indian water rights settlements including the San Luis Rey Indian Water Rights Settlement Act of 1988 (La Jolla, Ricon, San Pasquale, Pauma, Pala Bands of Mission Indians); the Soboba Band of Luiseno Indian Settlements Act (2008); and the Truckee-Carson-Pyramid Lake Water Rights Act (1990), although that reservation is located in Nevada.

## 2. Nevada

Nevada uses a hybrid system of adjudication where the state engineer prepares a proposed order of determination of water rights that is filed with the court and subject to objection by water users. The state has completed approximately fifty stream adjudications, and another forty-eight are currently underway. Of the pending adjudications, the state engineer's office has identified sixteen to have priority for completion.

The numerous rounds of federal court litigation in the longstanding *Orr Ditch* case<sup>172</sup> involving the Truckee River are well-known among western water lawyers, but the state has also produced four major Indian water rights settlements since 1990. They include the Fallon Paiute Shoshone Indian Water Rights

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<sup>165</sup> *Id.* § 2700.

<sup>166</sup> *Id.* § 2750.

<sup>167</sup> *Id.* § 2768.

<sup>168</sup> *Id.* § 2000.

<sup>169</sup> *Id.* § 1851.

<sup>170</sup> SWRCB, Water Right Determinations (2002), [http://www.waterboards.ca.gov/waterrights/board\\_decisions/adopted\\_orders/judgments/docs/judgments\\_map.pdf](http://www.waterboards.ca.gov/waterrights/board_decisions/adopted_orders/judgments/docs/judgments_map.pdf) (last visited Aug. 18, 2015).

<sup>171</sup> California Dep't of Water Resources, Adjudicated Groundwater Basins 2 (Water Facts No. 3, June 2011).

<sup>172</sup> *United States v. Orr Water Dist. Co.*, No. A-3-LDG (D. Nev. 1944); *see also* *United States v. Nevada*, 412 U.S. 534 (1973).

Settlement Act of 1990 (Paiute-Shoshone Tribe of the Fallon Reservation and Colony) (1990),<sup>173</sup> the Truckee-Carson-Pyramid Lake Water Rights Act (1990) (Pyramid Lake Paiute Tribe of the Pyramid Lake Reservation),<sup>174</sup> the Shoshone-Paiute Tribes of Duck Valley Water Rights Settlement Act (2008) (Shoshone Tribe & Paiute Tribe),<sup>175</sup> and a settlement with Las Vegas Paiute in Las Vegas Basin Adjudication,<sup>176</sup> which was reached among the tribe, United States, State of Nevada, and Las Vegas Water District, but did not require congressional approval. The accord provides the tribe with a permanent groundwater award.<sup>177</sup> Tribal claims are likely to be asserted in the Smoke Creek Adjudication in Washoe County.

While Nevada hosted the controversy that produced the McCarran Amendment<sup>178</sup> and eighty-one percent of the state is federally owned,<sup>179</sup> federal agency claims have been infrequently litigated in the state. Federal claims have or are being adjudicated in the Monitor Valley Adjudication (U.S. Forest Service and Bureau of Land Management), Las Vegas Adjudication (Public Water Reserve 107 claims), and the Owyhee adjudication (U.S. Forest Service).<sup>180</sup>

### 3. *Utah*

All of the hydrologic areas of Utah are currently involved in a court-ordered adjudication of water rights except the Sevier, Weber, and Virgin River drainages.<sup>181</sup> The water rights in these basins were adjudicated and decreed in the 1920s and 1930s.<sup>182</sup> Most adjudications in other areas of the state were commenced from the 1950s through the early 1970s. Five adjudications are active at the moment. They include Harmony Park, Ashley Central, Birdseye, Taylor Flat, and Ash Creek/La Verkin.<sup>183</sup>

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<sup>173</sup> Pub.L. 101-618, 104 Stat. 3289 (1990).

<sup>174</sup> Pub.L. 101-618, 104 Stat. 3294 (1990).

<sup>175</sup> Pub.L. 111-11, 123 Stat 1405 (2009).

<sup>176</sup> *In re* Rights to Waters of the Las Vegas Artesian Basin (Clark Co. Sept. 30, 1996).

<sup>177</sup> Native American Rights Fund, *Indian Water Rights Litigation and Negotiated Settlements in Which the Native American Rights Funds Has Been Involved* 5, [http://www.tribesandclimatechange.org/docs/tribes\\_97.pdf](http://www.tribesandclimatechange.org/docs/tribes_97.pdf) (last visited Aug. 18, 2015).

<sup>178</sup> *See* 1 THORSON, *supra* note 5, at 452–53 (Quinn River basin adjudication).

<sup>179</sup> CONGRESSIONAL RESEARCH SERVICE, *FEDERAL LAND OWNERSHIP: OVERVIEW AND DATA* 4 (2012).

<sup>180</sup> Communication from Susan Joseph Taylor (Nov. 1, 2014) (on file with author).

<sup>181</sup> Blake W. Bingham, *Utah Div. of Water Rights, Presentation to Rural Water Ass'n of Utah* (April 25, 2013).

<sup>182</sup> *Id.*

<sup>183</sup> Blake W. Bingham, *Utah General Adjudications, Presentation to Rural Water Ass'n of Utah* (April 25, 2013).



Utah has sought to negotiate, rather than litigate, federal reserved water rights. The first major effort, concerning the claims of the Northern Ute Tribe of the Uintah and Ouray Reservation, resulted in the Ute Indian Water Rights Settlement Act of 1992.<sup>184</sup> Neither the tribe nor the state, however, has ratified the agreement. Congress approved the state's settlement with the Shivwitz Indian Reservation in 2002.<sup>185</sup>

More recently, the state has successfully negotiated agreements with the National Park Service (Zion National Park and the Cedar Breaks, Hovenweep, Promontory, Rainbow Bridge, Timpanogos, and Natural Bridges national monuments), as well as the U.S. Forest Service (involving a watershed in the Dixie National Forest).<sup>186</sup> Efforts are underway to negotiate settlements for the Arches and Bryce Canyon national parks, as well as with the Goshute Tribe and with Bands of Paiute Tribe.<sup>187</sup> Reserved rights also need to be negotiated for other Forest Service units, the remaining national parks and monuments, and U.S. military reservations.<sup>188</sup>

Perhaps the largest potential reserved water rights claim facing the state is that of the Navajo Nation to waters of the Colorado River. Utah continues to work with the Navajo Nation and other southwestern states on an omnibus settlement to those reserved water right claims.<sup>189</sup>

#### *D. Starting New Adjudications*

##### *1. Idaho*

As Idaho's Snake River Basin Adjudication was entering its final phase, the state made plans to undertake adjudications of surface and groundwater rights in the northern panhandle of the state. In addition to clarifying existing water rights, these adjudications have been commenced to quantify the rights of the Coeur d'Alene Tribe and to improve the state's negotiating and litigating position with Washington in an area of interlocking economies and the interstate Spokane River and Rathdrum-Prairie Aquifer.<sup>190</sup>

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<sup>184</sup> Pub. L. No. 102-575, 106 Stat. 4650 (1992).

<sup>185</sup> Shivwits Band of the Paiute Indian Tribe of Utah Water Rights Settlement Act, Pub. L. No. 106-263, 114 Stat. 737 (2000).

<sup>186</sup> Norman K. Johnson, Utah Water Law and Federal Reserved Water Rights, Presentation to Utah Water Users Workshop (Mar. 19, 2013).

<sup>187</sup> *Id.*

<sup>188</sup> *Id.*

<sup>189</sup> *Id.*

<sup>190</sup> Idaho Dep't of Water Resources, Frequently Asked Questions About the Northern Idaho Adjudications, [http://www.idwr.idaho.gov/WaterManagement/NorthIdAdju/PDFs/NIA\\_FAQ\\_Card.pdf](http://www.idwr.idaho.gov/WaterManagement/NorthIdAdju/PDFs/NIA_FAQ_Card.pdf) (last visited Aug. 18, 2015).

Starting with the Coeur d'Alene-Spokane River Basin adjudication, filed in November 2008,<sup>191</sup> a total of three adjudications are scheduled.<sup>192</sup> The other two cases will address the Palouse River Basin and the Kootenai and Clark Fork-Pen Oreille River basins. The judge and special masters from the Snake River Basin Adjudication are presiding over these northern adjudications.

## 2. *Washington*

Surface and groundwater in eastern Washington and northern Idaho are integrally related. Apparently concerned about Idaho's adjudication of water rights in the Coeur d'Alene area, the Washington legislature appropriated \$587,000 in 2009 to begin preliminary work on an adjudication in the Spokane area.<sup>193</sup> In addition to the usual purposes for an adjudication, the Washington Department of Ecology states an adjudication is necessary to "[s]upport Washington's interest in negotiations and any necessary litigation in the use of waters shared with Idaho."<sup>194</sup> No date has been set for the formal commencement of the adjudication in state superior court.

## 3. *Oklahoma*

The adjudications in Oklahoma are hybrid in that an administrative agency conducts the investigation and provides notice while the court resolves objections and enters the final decrees.<sup>195</sup> Oklahoma completed five final decrees in the 1950s.<sup>196</sup> Until recently, controversy and disjointed court rulings stymied continued adjudication activity.

In August 2011, the Chickasaw Nation and Choctaw Nation of Oklahoma sued state officials, Oklahoma City, and the Oklahoma City Water Utility Trust in federal court seeking recognition of the tribes' federal reserved water rights in twenty-two counties in the southeastern part of the state.<sup>197</sup> The conflict resulted, in part, from tribal interest in marketing water to potential buyers in northern

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<sup>191</sup> Commencement Order for the Coeur D'Alene-Spokane River Basin General Adjudication, No. 49576 (Idaho Dist. Ct. 5th Dist. filed Nov. 10, 2008).

<sup>192</sup> IDAHO CODE ANN. § 42-1406B (2008).

<sup>193</sup> Water rights adjudication will protect water rights in Spokane area, Frequently Asked Questions, Wash. Dep't of Ecology (May 2013 rev.), <https://fortress.wa.gov/ecy/publications/publications/0911017.pdf> (last visited Aug. 18, 2015).

<sup>194</sup> *Id.*

<sup>195</sup> Oklahoma Water Resources Bd., Stream Adjudication 2.

<sup>196</sup> These adjudications were of the Spavinaw Creek, Grand River, North Canadian River, Blue River, and North Boggy Creek.

<sup>197</sup> Chickasaw Nation and Choctaw Nation v. Fallin, No. 5:11-cv-00927-W (W.D. Okla. filed Aug. 18, 2011).

Texas.<sup>198</sup> In response to the litigation, the state attorney general in February 2012 filed a state court adjudication seeking to assert jurisdiction over tribal and federal claims under the McCarran Amendment.<sup>199</sup> The adjudication would address claims in the Kiamichi, Clear Boggy, and Muddy Boggy stream systems. The state also moved to dismiss the federal court action.<sup>200</sup>

Not to be outdone, the United States removed the state court action to federal court.<sup>201</sup> The federal court has stayed both cases pending mediation, and the stay has been in effect for more than two years.<sup>202</sup>

#### IV. SO, HOW ARE WE DOING?

After almost five decades of comprehensive general stream adjudication activity, how are western states doing in satisfying the original, primary purposes for these cases? Relying on the purposes stated in Part II(D), here is one observer's assessment.

##### A. *Confirming Valid, Existing Water Rights*

In terms of confirming valid, existing water rights, the result is mixed. Where adjudications have been completed, this purpose has largely been accomplished with the courts and agencies undertaking a systematic review of claimed water rights and harmonizing the earlier patchwork quilt of undocumented uses, administrative filings, and old water rights decrees. In the process, the adjudications have weeded out many bogus or exaggerated claims.

Over the long-term, the confirmation of these rights should facilitate transfers and water marketing, often advocated by economists as an important tool in achieving more efficient water allocation.<sup>203</sup> However, some states have confirmed only the amount of water diverted, not the consumptive use, and the calculation of the actual depletion from a water source is necessary for most transfer proceedings.

Also, many potential claims on a water source have remained outside the adjudication process. These include hydrologically connected groundwater in some states and statutory exemptions of certain uses such as small domestic

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<sup>198</sup> See, e.g., Felicity Barringer, *Indians Join Fight for an Oklahoma Lake's Flow*, N.Y. TIMES, Apr. 12, 2011, at A1.

<sup>199</sup> Oklahoma Water Resources Control Bd. v. United States, No. 110375 (Okla. Sup. Ct.).

<sup>200</sup> Motion to Dismiss for Lack of Jurisdiction of Second Amended Complaint (Feb. 10, 2012).

<sup>201</sup> Oklahoma Water Resources Bd. v. United States, No. 5:12-cv-00275-W (W. D. Okla. removed Mar. 21, 2012).

<sup>202</sup> Original stay entered Mar. 27, 2012, and has been renewed repeatedly.

<sup>203</sup> See, e.g., WATER MARKETING: THE NEXT GENERATION (Terry Anderson ed., 1996).

uses. As a Montana district court recently ruled, the cumulative impact of such exemptions may have significant consequences for water supplies.<sup>204</sup> Additionally, surface water supplies are often impacted by the requirements of federal and state environmental laws (*e.g.*, Clean Water Act, Endangered Species Act) that are not factored into general stream adjudications.

### *B. Determining and Integrating Federal Reserved Water Rights*

As discussed earlier in Part II, a major impetus for general stream adjudications was to provide a forum (preferably in state court) to adjudicate the reserved water rights claims of Indian tribes and federal agencies. The news here is quite favorable. While there has been some actual litigation of federal reserved water rights (most notably the rights of the Wind River Tribes in Wyoming), negotiation has been the preferred path for the major parties in many states. Almost thirty major settlements have been reached with Indian tribes.<sup>205</sup> Many of these would not have been accomplished without the pressure of litigation.

While negotiations (including congressional action and state court approval) may take as long as litigation, the benefits of settlement are many. The parties learn collaboration while developing practical solutions a court could not independently order. Existing state-law water uses have usually been held harmless while certainty as to the priority and extent of federal rights has been achieved. Most of the settlements involve state and federal financial contributions to water development, stream restoration, or local economic development. In some cases, water supplies for neighboring off-reservation communities have been made more secure through mutual infrastructure improvements. Unfortunately, because tribal claims were litigated in the Big Horn Adjudication, tribal and non-tribal water users there have not shared in the economic advantages enjoyed in other areas—an inequity that should be addressed.

### *C. Improving Water Data*

A third major purpose for adjudications was to improve water supply and usage data for improved management. Here the news is generally good. Indeed, the results have exceeded expectations.

While many adjudications start with filed claims, adjudicators have generally concluded that the water right characteristics asserted by users in these documents

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<sup>204</sup> *Judge Strikes Down Montana Exempt-Well Rule*, FLATHEAD BEACON (Oct. 20, 2014), <http://flatheadbeacon.com/2014/10/20/judge-strikes-montana-exempt-well-rule/>.

<sup>205</sup> Native Am. Rights Fund, Settlements Approved by Congress (Aug. 2013), <http://narf.org/water/2013/materials/settlements.pdf> (last visited Aug. 18, 2015).

have proved unreliable.<sup>206</sup> This deficiency has been addressed in most states by a combination of state agency investigation and verification, objections by other water users, and expert witness testimony in contested cases.

Rapid improvements in satellite and aerial imagery, Geographic Information Systems, the Internet, and low-cost but powerful applications such as Google Earth have resulted in the gathering of considerable water supply and demand data. Remote sensing technologies have expedited research about historic beneficial uses and will improve long-term enforcement. And, who knows what the drones will bring?

As valuable as it may be, water data does not exist in a vacuum. The use of this information to improve water management often depends on complex legal, political, and economic considerations.

## VI. WHAT DOES THE FUTURE HOLD?

Through our 150-year quest for appropriate laws and institutions to manage water, westerners have been able to develop practical solutions to the problems at hand. Unfortunately, once a solution to a pressing concern has been achieved, the problem at hand has morphed into something else. Indeed, our earlier solutions may have contributed to the new generation of problems.

We have not achieved finality. We have not attained our goal of efficient and sustainable water management—and maybe we never will. For support of this proposition, I have only to refer to that great western water law expert, F. Scott Fitzgerald:

Gatsby had come a long way to this blue lawn, and his dream must have seemed so close that he could hardly fail to grasp it. He did not know that it was already behind him, somewhere in that vast obscurity beyond the city, where the dark fields of the republic rolled on under the night.<sup>207</sup>

Yes, we have confirmed existing water rights, determined and integrated federal reserved water rights, and generated improved water data, but the problems on the horizon now seem to include the following:

1. Federal environmental water rights outside the state water law system;

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<sup>206</sup> For example, Montana's Department of Natural Resources and Conservation filed over 10,000 objections to claims filed in proceedings pending in the 1980s leading to the adoption of more rigorous claims examination procedures. See 2 THORSON, *supra* note 5, at 394.

<sup>207</sup> F. SCOTT FITZGERALD, *THE GREAT GATSBY* 171–72 (2000).

2. Pervasive drought and climate change;
3. Groundwater and surface water interaction;
4. An increasing number of water right transfers putting rural communities and areas of origin at risk;
5. The need to restore riparian systems; and
6. The need to enforce water right priorities in an urbanized society that may have very different ideas about how water should be allocated during times of shortage.<sup>208</sup>

The final decrees in general stream adjudications, like the Big Horn River Adjudication, may provide some sideboards to these and other problems, but we have certainly moved on to another generation of water-related problems. These challenges will require even more understanding, creativity, and resources than we have mustered in the past. For the moment, however, the water users in northwestern Wyoming are entitled to pause and celebrate a hard-earned harvest.

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<sup>208</sup> See, e.g., *California struggles to manage water rights in drought*, THE SACRAMENTO BEE (July 1, 2014), <http://www.sacbee.com/news/local/article2602708.html>. Staring in May 2014, the State Water Resources Control Board issued almost 10,000 curtailment orders to junior surface water users on northern rivers and streams. Almost seventy percent of those orders were ignored, presenting the Board with an almost impossible task of enforcement.