

Idaho Law Review

Volume 52 | Number 1

Article 2

February 2019

A Permanent Water Court Proposal for a Post-General Stream Adjudication World

John E. Thorson

Follow this and additional works at: https://digitalcommons.law.uidaho.edu/idaho-law-review

Recommended Citation

John E. Thorson, A Permanent Water Court Proposal for a Post-General Stream Adjudication World, 52 IDAHO L. REV. 17 (2019). Available at: https://digitalcommons.law.uidaho.edu/idaho-law-review/vol52/iss1/2

This Article is brought to you for free and open access by Digital Commons @ UIdaho Law. It has been accepted for inclusion in Idaho Law Review by an authorized editor of Digital Commons @ UIdaho Law. For more information, please contact annablaine@uidaho.edu.

A PERMANENT WATER COURT PROPOSAL FOR A POST-GENERAL STREAM ADJUDICATION WORLD

JOHN E. THORSON*

TABLE OF CONTENTS

I. INTRODUCTION	18
II. ARE PERMANENT WATER COURTS IN OUR FUTURE?	18
III. SPANISH WATER TRIBUNALS	20
A. Council of Good Men (Consejo de Hombres Buenos)	21
B. Tribunal of Waters (Tribunal de las Aquas)	
C. Similar Characteristics	
IV. INSTITUTIONAL CHOICES FACING THE NINETEENTH CENTURY	
AMERICAN WEST	23
V. SPECIALIZED AMERICAN TRIBUNALS	25
A. Nonwater Tribunals	25
B. Western Water Tribunals	27
1. Administrative Tribunals	27
2. Colorado Water Court	27
3. Montana Water Court	28
4. Idaho's Snake River Basin Adjudication Court	28
5. Washington's Pollution Control Hearings Board	28
6. California's State Water Resources Control Board	
VI. SPECIALIZED TRIBUNALS WORLDWIDE	31
A. New South Wales Land and Environment Court	33
B. South Africa Water Tribunal	35
VII. PERMANENT WATER COURT PROPOSALS	36
A. Idaho	36
B. Washington	36
C. Montana	38
D. California	39
VIII. OTHER SPECIALIZATION MEASURES	41
A. Coordination	42
B. Court Appointed Experts	43
C. Judicial Education	
IX. A MODEST PROPOSAL	44
A. Criteria	
B. Model Tribunal	47
C. Evaluation	49
X. CONCLUSION	50

 $[\]ast$ $\;$ John E. Thorson is the Federal Water Master for the Lummi Decree (W.D. Wash. U.S.D.C.). The views in this article are his own.

I. INTRODUCTION

This article is prepared in celebration of Idaho's completion of the Snake River Basin Adjudication and the entry of the final decree on August 26, 2014. The decree should probably be known as the "Hurlbutt, Wood, Burdick, Melanson, Wildman Decree." More likely, this hard-earned document will be known simply as the "Wildman Decree"—a great name for a major water rights decree, a decree ready for active management, and a decree destined for the history books.

But what about the Snake River Basin Adjudication Court itself? This is a court that has been in existence since 1987.² It has a highly trained professional staff, extensive experience, painfully developed customs and procedures, and its own courthouse in Twin Falls.³ Surely, the State of Idaho will not "sunset" an institution that has played such an important, positive role in charting the state's cultural and economic future.

Fortunately, the court does have a new mission for several years, principally the completion of adjudications in northern Idaho.⁴ Also, as the result of an Idaho Supreme Court order in 2010, the adjudication court now has exclusive jurisdiction over appeals from the Idaho Department of Water Resources—decisions previously heard by other district courts around the state.⁵ This undertaking, however, is not a permanent mission. What happens when the northern Idaho adjudications are done? Will the court then cease, or will it evolve into something more permanent?

II. ARE PERMANENT WATER COURTS IN OUR FUTURE?

Idaho is not alone in facing this question. Montana also has a specialized water court⁶ and, eventually, state decision makers must decide the future of the court and its expert staff. Even in states without specialized water adjudication courts, general jurisdiction courts in California, Washington, Wyoming, and other states have decades of experience and infrastructure dedicated to similar water adjudications.⁷ As these adjudications are also completed, hard-earned dispute resolution assets face dissipation, and procedures for post-decree administration and conflict resolution without these specialized forums remain untested. Western water law professionals are debating the possible utility of permanent water law courts in handling a range of water-related conflicts.

4. IDAHO CODE ANN. § 42-1406B (2015).

^{1.} Final Unified Decree, *In re SRBA*, No. 39576 (Idaho 5th Dist. Aug. 26, 2014), http://srba.idaho.gov/Images/2014-08/0039576XX09020.pdf.

^{2.} The Snake River Basin Adjudication petition was filed in the Fifth Judicial District on June 17, 1987, pursuant to the 1984 Swan Falls Agreement between the State of Idaho and Idaho Power Company. See David B. Shaw, Snake River Basin Water Right Adjudication, IDAHO DEP'T OF WATER RES., 1 (Aug. 1988), https://www.idwr.idaho.gov/WaterManagement/AdjudicationBureau/SRBA_Court/PDFs/history.pdf. The Snake River Basin Adjudication was commenced on November 19, 1987. Id.

^{3.} Id. at 2.

^{5.} Order Appointing the SRBA to Hear All Petitions for Judicial Review from the Dep't of Water Resources Involving Administration of Water Rights (Idaho Dec. 9, 2009), http://idwr.idaho.gov/files/legal/CV-2015-1450/CV-2015-1450_20150414_Procedural_Order.pdf. [hereinafter Appointment of the SRBA].

^{6.} MONT. CODE ANN. § 85-2-214 (2014).

^{7.} See, e.g., Quantification Settlement Agreement (QSA) Cases, Judicial Council Coordination Proceeding No. 4353 (Sacramento Super. Ct. 2004).

While these institutional questions are presented in a modern context, they reflect a longstanding debate that originated in the late 1800s. In his concise, excellent history of western water law, historian Robert Dunbar chronicles the development of the dichotomy between Colorado's and Wyoming's differing approaches to water management and water-related dispute resolution. Dunbar revisits Colorado's initial and continuing reliance on specialized water courts, which reside in the judicial branch, to address these issues. Colorado remains the only western state with a permanent water court. By contrast, Wyoming, in advancing a California innovation, furthered the development of an administrative structure with a state engineer as its central character.

Several other contemporary trends have converged to renew this debate in contemporary policy discussions, and the potential benefits of permanent water courts are once again being debated. In California, the interest in a specialized water court arises from the concern about over-drafted groundwater basins. Predominantly in the southern part of the state, this "tragedy of the commons" results from the failure to determine water rights and the lack of overall limits on groundwater pumping. Superior courts have historically presided over these groundwater adjudications, but several proposals have been advanced to shift this responsibility to a permanent water court structure.

Another source of interest in water courts is the McCarran Amendment, passed by Congress in 1952 as a waiver of federal sovereign immunity to allow the adjudication of federal and tribal water rights, usually in state courts. ¹⁵ The provision is mostly known for its requirement of a comprehensive adjudication (i.e., "a suit (1) for the adjudication of rights to the use of water of a river system or other source") as a condition for the sovereign immunity waiver. ¹⁶ What is frequently overlooked is the next language in the amendment (i.e., the requirement of a "suit . . . (2) for the administration of such rights . . . when the United States is a necessary party to such suit"). ¹⁷ What this second provision appears to require is a meaningful judicial role in water administration disputes where federal rights are likely to be affected. ¹⁸ A permanent state water court would provide a qualifying forum for such post-decree, water right administration proceedings.

^{8.} ROBERT G. DUNBAR, FORGING NEW RIGHTS IN WESTERN WATERS (1983).

^{9.} Colo. Rev. Stat. § 37-92-203 (2014).

^{10.} WYO. CONST. art. 8, § 5.

^{11.} DUNBAR, *supra* note 8.

^{12.} See Garrett Hardin, The Tragedy of the Commons, 162 SCI. 1243 (1968).

^{13.} See Gary Pitzer, Does California Need a Water Court?, WESTERN WATER 6 (July/Aug. 2014); James L. Markham, The California Legislature Should Establish Water Courts, CAL. WATER L. & POL'Y REP. 123 (Feb. 2005) ("Controlling decision making relative to groundwater... must emanate from the court system.").

^{14.} See infra text accompanying notes 171-223.

^{15.} The amendment was enacted as section 208(a)-(c) of the Department of Justice Appropriation Act of July 10, 1952, Pub. L. No. 945, 66 Stat. 560 (current version at 43 U.S.C. § 666 (2015)).

^{16.} Id.

^{17.} Id

^{18.} The conflict precipitating Senator McCarran's introduction of the bill that became the amendment of his name was Nevada's Quinn River Adjudication. The United States had purchased land with previously decreed water rights, but the government invoked sovereign immunity to defeat state court proceedings to administer the decree. As one writer concluded, "it seems probable that the words 'or for the administration of such rights' were inserted in the bill largely to correct such situations." 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, 104 (1960), http://www.heinonline.org/HOL/Page?page=94&handle=hein.journals%2Fcalr48&collection=journals.

This article also addresses some of the arguments made by Professor Larry Mac-Donnell in a recent, excellent article in the *Wyoming Law Review*, prepared in celebration of the completion of the Big Horn River adjudication. ¹⁹ MacDonnell advances the appealing argument that general stream adjudications, and presumably other water law issues, should be heard and resolved by expert administrative agencies. ²⁰ This argument, once again, reflects the nineteenth century debate between Wyoming and Colorado. In this article, however, I hope to demonstrate that permanent water courts should be considered as a viable alternative to an administrative agency-based approach to water conflict resolution.

Finally, a more straightforward rationale for a permanent water court is based on the argument that, because so many water law disputes end up in court even after administrative procedures have been followed, would it not be more expedient to have these matters heard in their entirety before the court?

This article begins at the wellspring of the water court concept, that is, by describing the historic water tribunals of Spain. The article then turns to a description of the Colorado and Wyoming debate over appropriate water law institutions, overlaid by broader developments associated with the Scientific Management Movement and the Progressive Conservation Era of the last years of the nineteenth century. The article then explores several contemporary examples of specialized water courts and similar entities throughout the world. The article concludes by suggesting the possible characteristics of a model water court proposal and evaluates this proposal against fundamental criteria for evaluating conflict resolution institutions.

III. SPANISH WATER TRIBUNALS

The Spanish Iberian Peninsula is the setting for a variety of water tribunals dating from medieval times.²¹ The irrigation systems were built during the Andalusian Era (ninth to thirteenth centuries) and they divert water from the Segura and Turia rivers for small-farm irrigation in this fertile area near the Mediterranean coast.²² The water control institutions that developed along with the physical structures are based on Arab and Maghreb traditions brought from North Africa.²³ The Council of Good Men and the Tribunal of Waters are the two leading examples of these institutions. Both of these courts, and a few others of lesser notoriety, decide irrigation-related disputes among water users.

Lawrence J. MacDonnell, Rethinking the Use of General Stream Adjudications, 15 WYO. L. REV. 347 (2015).

^{20.} MacDonnell "argues that general stream adjudications have little if any utility at this stage of water decision-making in the West." *Id.* at 378. The work of establishing titles to valid water uses established prior to the institution of state procedures for this purpose can be accomplished by those state procedures.

^{21.} See generally Intergovernmental Comm. for the Safeguarding of the Intangible Cultural Heritage, U.N. Educ., Scientific & Cultural Org., Nomination for inscription on the Representative List in 2009, Ref. No. 00171 (2009), http://www.unesco.org/culture/ich/doc/src/ITH-09-4.COM-CONF.209-13-Rev.2-EN.pdf#Decision1370 [hereinafter U.N. Educ.]; ARTHUR MAASS & RAYMOND L. ANDERSON, . . . AND THE DESERT SHALL REJOICE: CONFLICT, GROWTH, AND JUSTICE IN ARID ENVIRONMENTS 11–145 (1978) [hereinafter MAASS].

^{22.} MAASS, *supra* note 21, at 11–145.

^{23.} U.N. Educ., *supra* note 21, at 4.

A. Council of Good Men (Consejo de Hombres Buenos)

The first of these water tribunals is known as the Council of Good Men (*Consejo de Hombres Buenos*), serving the irrigation community of the Huerta de Murcia (irrigated, crop-growing region of Murcia).²⁴ This is a community of 13,302 farmers irrigating 16,000 hectares of land (frequently small farms and fruit orchards) from the river Segura.²⁵ A governing board of 509 members annually elects an administrative entity (the Landowners' Board) along with five Speaking Procurers representing irrigators from the major canal regions: two from the estates of the Aljufia Major Canal, two from the estates of the Alquibla Major Canal, and one from the estates of the Churra la Nueva Canal.²⁶ These five Speaking Procurers, along with the president and secretary of the governing board, comprise the Council of Good Men.²⁷ The Council meets on Thursdays in the Murcia City Hall.²⁸ Decisions may be appealed to the city council, which may remand disputes back to the Council augmented for rehearing by the seven Good Men who recently served on the Council.²⁹ Upon rehearing, the Council's decision is final.³⁰

B. Tribunal of Waters (Tribunal de las Aquas)

The Tribunal of Waters covers the irrigation communities of Quart, Benager-Faitanar, Tormos, Mislata, Mestalla, Favara, Rascanya, Rovella, and Xirivella—all diverting their water from the river Turia. The irrigated area is almost 3500 hectares. Farmers frequently reside on these small farms growing potatoes, onions, corn, and a variety of other produce. The small farms growing potatoes are the produce.

The eight canals taking water from the Turia elect representatives (syndics) who meet and elect a president and vice president from among their numbers to serve two-year terms.³⁴ A ninth canal (Xirivella) becomes involved in some cases.³⁵ The tribunal meets Thursdays at Apostles' Gate of Valencia Cathedral.³⁶

C. Similar Characteristics

The jurisdiction and processes of these water tribunals are similar. The jurisdiction is generally described by the ordinances adopted for irrigation communities (e.g., prohibitions against out-of-order diversions).³⁷ The parties are usually irrigators within the

- 24. MAASS, *supra* note 21, at 82–83.
- 25. *Id*.
- 26. U.N. Educ., supra note 21 at 2.
- 27. Id.
- 28. MAASS, supra note 21, at 82.
- 29. Id. at 83.
- 30. *Id*.
- 31. U.N. Educ., supra note 21, at 3.
- 32. *Id*.
- 33. MAASS, supra note 21, at 11.
- 34. *Id.*35. U.N. Educ., *supra* note 21, at 3.
- 36. MAASS, *supra* note 21, at 24.
- 37. "The jurisdiction of the water court is defined by the ordinances of the several canals, which specify precisely the categories of actions to be judged as violations (for example, taking water out of turn, flooding a neighbor's field, or installing an unauthorized canal check) and the penalties to be imposed." *Id.* at 23.

community; non-resident third parties are rarely involved.³⁸ Frequently, ditch riders or other irrigation community officials lodge complaints against farmers. Parties appear *in propria persona*, lawyers are not involved, and court costs are modest.³⁹ The courts, however, are steeped in tradition, from the weekly schedule and historic meeting locations to the traditional, black, loose blouses worn by the farmer-judges.⁴⁰

As one commentator has described:

Both courts decide on irrigation disputes orally, promptly, economically, publicly, and impartially. Their verdicts are generally conformed to by reason of the authority and respect credited to either court, based on the transparent equity or their procedures and on the farmer-judges being acknowledged by their peers as equitable persons with expert knowledge of usage and custom in traditional irrigating agriculture and of its underlying natural milieu. 41

While the courts' decision making is transparent, their processes are not necessarily understandable to the public. As one commentator discussing the *Tribunal de las Aguas* indicated, "[a]lthough the decision process takes place in full public view, we have never met an observer who has heard and understood what the syndics say to each other when they confer."⁴²

Informal settlements are encouraged in these processes.⁴³ An observer noted with reference to one of the courts, "[a] good magistrate is a master at coaxing settlements from farmer adversaries even when, as is frequently the case, their accusations against each other are voiced so raucously that they can be heard some distance down the street from the courtroom."⁴⁴

The tribunals have substantial enforcement powers including the ability to suspend water deliveries or seize property for sale. ⁴⁵ These remedies are rarely imposed. ⁴⁶ More often, the unsuccessful litigant pays a small fine although substantial actual damages and restoration costs also can be awarded. ⁴⁷ These courts are considered an integral part of the Spanish judicial system. ⁴⁸ Their decisions, however, are final and unappealable. ⁴⁹

Operating for centuries, the Spanish water tribunals continue as functioning dispute resolution forums in their unique geographic and cultural context. These tribunals demonstrate the utility of a knowledgeable court of arbitrators drawn from the local community; informal, prompt procedures; modest transaction costs; and full integration into the country's judicial system. Most importantly, the courts sustain the cultural importance of water in the region: "[T]he trial performing ritual conveys the respect that farmers feel toward either institutions and their members as credited recipients of the tradition and reaffirms cohesion within the communities of water users." ⁵⁰

^{38.} *Id*.

^{39.} Id. at 24.

^{40.} U.N. Educ., supra note 21, at 4.

^{41.} *Id.* at 1.

^{42.} MAASS, supra note 21, at 24.

^{43.} Id. at 83.

^{44.} *Id*.

^{45.} Id. at 24-25.

^{46.} *Id.* at 25.

^{47.} *Id.* at 24.

^{48.} U.N. Educ., *supra* note 21, at 6.

^{49.} MAASS, *supra* note 21, at 23–24.

^{50.} U.N. Educ., *supra* note 21, at 4.

The Spanish water tribunals cannot be transplanted in their entirety to the American West. While those tribunals primarily adjudicate disputes among consumptive users within an irrigation community, western water disputes involve large municipal and industrial users, nonconsumptive users, parties without water rights, and regulatory government agencies. Some water tribunal features, nevertheless, are worthy of replication, such as the informal, inexpensive, and prompt dispute resolution processes.⁵¹

IV. INSTITUTIONAL CHOICES FACING THE NINETEENTH CENTURY AMERICAN WEST

Although the New World setting in the American West was different, many of the Iberian dispute resolution procedures did make their way to the American West.⁵² In the Rio Grande Valley, rural irrigators formed associations (*acequias*) to build, maintain, and administer ditches.⁵³ They often elected a *mayordomo* to adjudicate ditch disputes. When disputes arose between different *acequias* within the same watershed, the *mayordomos* from these associations, like the Good Men of Iberia, would sit together in an effort to mediate the dispute.⁵⁴

These traditional approaches, however, had their limits in the rapidly developing West. William Hammond Hall, an eminent civil engineer, described the complexity that faced California in the post-Civil War years:

There was rivalry and conflict in taking out waters; there was contention between those who took them out and distributed them and those who wanted to use them; and there was an ever present contest between both these classes and those who wanted the water to remain in the streams for the maintenance or betterment of their personal interests.⁵⁵

California, with its immense land base, extensive river system, variable climate, and competing legal regimes, could not look to seemingly quaint Spanish traditions to resolve these complex disputes. As one historian notes, "most Californians would have agreed with Nevada irrigation booster R. L. Fulton's observation in 1889: 'We believe the Anglo-Saxon needs no example from Spain, Mexico or Lombardy, but will find in itself [sic] the intelligence, virtue, and grit to conquer this land ""56

Accordingly, California, followed by other western states, looked to science and rationality for solutions, principally to the tenets of the Progressive Conservationism⁵⁷

^{51.} A permanent water court, as proposed herein, might have a "rapid action" alternative dispute resolution (ADR) unit dedicated to prompt mediation of disputes before they become enmeshed in litigation.

^{52.} See generally MICHAEL C. MEYER, WATER IN THE HISPANIC SOUTHWEST: A SOCIAL AND LEGAL HISTORY 1550-1850 (Univ. of Ariz. Press 1984).

^{53.} See generally PHIL LOVATO, LAS ACEQUIAS DEL NORTE (technical report #1, 1974).

^{54.} See generally id.; STANLEY G. CRAWFORD, MAYORDOMO: CHRONICLE OF AN ACEQUIA IN NEW MEXICO (Univ. of N.M. Press 1988); Charlotte Benson Crossland, Acequia Rights in Law and Tradition, 32 J. Sw. 278 (1990).

^{55.} WM. HAM. HALL, IRRIGATION DEVELOPMENT 6 (1886).

^{56.} DONALD J. PISANI, TO RECLAIM A DIVIDED WEST: WATER, LAW, AND PUBLIC POLICY 1848-1902, 43 (1992).

^{57.} For a history of the Progressive Conservation Movement, *see* SAMUEL HAYS, CONSERVATION AND THE GOSPEL OF EFFICIENCY: THE PROGRESSIVE CONSERVATION MOVEMENT, 1890-1920 (1980) (1959). "In Hays's telling, experts, particularly engineers and foresters, were the heroes of the conservation

and the Scientific Management Movement.⁵⁸ Administrative agencies emerged in response to water problems that legislatures and courts could not, or would not, address. To develop a "scientific" understanding of California's water problems, the state legislature established the nation's first state engineer position in March 1878, with Hall as the first incumbent.⁵⁹ The function of the position was entirely exploratory: "[T]o investigate the problems of irrigation of the plains, the condition and capacity of the great drainage lines of the State, and the improvement of the navigation of rivers."⁶⁰

The agency was created in response to a growing set of problems including flooding in Central Valley, concerns about sufficient water supply for irrigation, and pollution caused by hydraulic mining.⁶¹ The position anticipated taking a comprehensive look at these problems and, in the view of one observer, "was a bold step, not only because California was the first state in the Union to turn its water problems over to experts . . . but also because it anticipated the doctrine of 'multiple use,' which did not come into its own until . . . half a century later."⁶²

In later developments, California enacted other measures (discussed in Section V(B)(6), below) to expand and enhance these administrative processes, culminating in the State Water Resources Control Board (SWRCB) in 1967, ⁶³ and resulting in a comprehensive administrative system unparalleled in the West.

During these same years, Colorado was wrestling with the issue of determining and supervising water rights. Borrowing from California, the legislature considered appointing a state hydraulic engineer who would have had an active role in water rights adjudication and supervision. The legislature, however, passed legislation establishing a state engineer's position with considerably less authority.⁶⁴

In place of a powerful state engineer, the Colorado legislature passed legislation in 1879 affirming that the determination of water rights was the proper domain of the courts. The legislature fine-tuned the judicial approach in 1881, thereby firmly establishing the state's commitment to judicial adjudication of water rights. The legislature in 1969 undertook major updating of the judicial approach. Tolorado now has seven water divisions based on the state's major drainages, with a district judge, assisted by a referee, serving as the water judge in each division. The referee and water judge consider applications for new appropriations and changes in appropriations.

movement, applying science to natural resource exploitation, bringing order and permanence to consumption." DAVID STRADLING, CONSERVATION IN THE PROGRESSIVE ERA: CLASSIC TEXTS 12 (2004).

^{58.} Scientific management was a theory of management, pioneered by Frederick Winslow Taylor in the 1880s and 1890s, to apply rationality and engineering techniques to industrial processes. *See* FREDERICK WINSLOW TAYLOR, THE PRINCIPLES OF SCIENTIFIC MANAGEMENT (1911).

^{59.} PISANI, supra note 56, at 176.

^{60.} HALL, supra note 55, at 9.

^{61.} PISANI, supra note 56, at 175.

^{62.} Id. at 176.

^{63.} CAL. WATER CODE § 175 (2015).

^{64.} DUNBAR, supra note 8, at 97.

^{65.} Act of Feb. 19, 1879, 1879 Colo. Sess. Laws 99-100, §19.

^{66.} Act of Feb. 2, 1881, 1881 Colo. Sess. Laws 142-3, \S 1; See also DUNBAR, supra note 8, at 95–98.

^{67.} Water Right Determination and Administration Act of 1969, ch. 373, §§ 148-21-1-6 (codified as amended at COLO. REV. STAT. §§ 37-92-101-602 (2014)); See generally Gregory J. Hobbs, Jr., Colorado's 1969 Adjudication and Administration Act: Settling In, 3 U. DENV. WATER L. REV. 1 (1999).

^{68.} Colo. Rev. Stat. §§ 37-92-201, -203 (2015).

Although a professor at Colorado State, Elwood Mead influenced a similar debate in the Wyoming legislature. Mead was appointed as the territorial state engineer in 1888.⁶⁹ As a result of Mead's prodding, Wyoming adopted an amendment to its constitution in 1889 providing, in an important part, for a state engineer "who shall be appointed by the governor . . . and confirmed by the Senate . . . and he will have general supervision of the waters of the state"⁷⁰ The Wyoming state engineer has developed as one of the most important positions in that state's government and the leading western state's example of the administrative approach to water management.

In the eleven western states today, two states (Wyoming and New Mexico) have relatively freestanding state engineer offices.⁷¹ In two other states (Nevada and Colorado), the state engineer is a position within a more broadly constituted natural resources agency.⁷² Instead of a state engineer, four states (Arizona, California, Idaho, and Oregon) have a director of a water resources department or other arrangement.⁷³ Three states (Montana, Utah, and Washington) have a director of a division of water resources within a more broadly based natural resources agency. Colorado remains the only state vesting considerable permitting and transfer authority in the judiciary.

V. SPECIALIZED AMERICAN TRIBUNALS

A. Nonwater Tribunals

America is no stranger to specialized tribunals for conflict resolution, whether in the executive or judicial branch.⁷⁴ At the federal level, the Social Security Administration has administrative law judges who hear disability claims.⁷⁵ Closer to the natural resource field, the Department of Interior's Board of Land Appeals hears appeals of bureau decisions relating to the use, disposal, and mining of federal public lands.⁷⁶ The Environmental Protection Agency's Environmental Appeals Board has as many as four (currently two) judges who are the final agency decision makers on administrative appeals under all major environmental statutes administered by EPA.⁷⁷

^{69.} DUNBAR, supra note 8, at 105.

^{70.} WYO. CONST. art. VIII, § 5.

^{71.} *Id.*; N.M. STAT. ANN. § 72-2-1 (2012-2015).

^{72.} Nevada State Engineer heading the Division of Water Resources, a unit of the Nevada Department of Conservation & Natural Resources, NEV. REV. STAT. § 232.100 (2008); Colorado State Engineer heading the Division of Water Resources, a unit of the Colorado Department of Natural Resources, COLO. REV. STAT. § 24-1-124 (2015).

^{73.} Arizona Department of Water Resources, ARIZ. REV. STAT. ANN. § 45-102 (2007); California Department of Resources (located within the Resources Agency but with water rights handed by the State Water Resources Control Board, see discussion at notes 117-134, *infra*), CAL. WATER CODE § 120 (2009); Idaho Department of Water Resources, IDAHO CODE ANN. § 42-1701 (2015); Oregon Water Resources Director (working under policy direction of Water Resources Commission), OR. REV. STAT. §§ 536.032, .037, .039 (2003).

^{74.} See generally LAWRENCE BAUM, SPECIALIZING THE COURTS (2011).

^{75. 20} C.F.R. § 405.301 (2015).

^{76. 43} C.F.R. § 4.1(b)(2) (2014). Hearing matters concerning "(i) The use and disposition of public lands and their resources, including land selections arising under the Alaska Native Claims Settlement Act, as amended; (ii) the use and disposition of mineral resources in certain acquired lands of the United States and in the submerged lands of the Outer Continental Shelf; and (iii) the conduct of surface coal mining under the Surface Mining Control and Reclamation Act of 1977." *Id.*

^{77. 40} C.F.R. § 1.25(e) (2014).

The federal judiciary also has specialized courts. Article III judges (e.g., federal district court judges) may be summoned by the chief justice to serve on the U.S. Foreign Intelligence Surveillance Court.⁷⁸ Article I judges (positions created under Congress' enumerated powers) include bankruptcy judges,⁷⁹ tax court judges,⁸⁰ judges on the Court of Federal Claims,⁸¹ and others.

This dual structure of specialized administrative and judicial tribunals has its parallels at the state level. For example, the administrative law judges at the California Public Utilities Commission, an independent administrative agency, hear rate setting cases and certain consumer complaints against utilities. 82 General jurisdiction court judges may, by comparison, serve long periods on domestic relations or criminal calendars or preside over drug courts. Delaware has its specialized business court (the Court of Chancery). 83 Arizona has just launched a commercial court, established by the state supreme court on a three-year trial basis. 84

Oregon's Tax Court is particularly instructive. ⁸⁵ The court is "the sole, exclusive and final judicial authority for the hearing and determination of all questions of law and fact arising under the tax laws of the state." ⁸⁶ This includes personal income tax, property tax, corporate excise tax, timber tax, cigarette tax, local budget law, and property tax limitations. ⁸⁷ The court hears appeals from local taxing authorities, the state department of revenue, and other government agencies. ⁸⁸ The tax judge is elected in a nonpartisan, statewide election for a six-year term. ⁸⁹ The judge appoints magistrate judges (currently three) to assist in the caseload. ⁹⁰ Appeals are first taken to the magistrate judges and further de novo appeals may be taken to the tax judge. ⁹¹ Appeals from the tax judge's decisions are taken directly to the Oregon Supreme Court. ⁹² As of 2012, the *Chicago Tribune* reported: "Eighteen . . . states have well-established tax courts, and another nine states and the District of Columbia offer independent tax courts or forums that do not have to be staffed by tax experts." ⁹³

^{78. 50} U.S.C. § 1803(a) (2012).

^{79. 28} U.S.C. § 151 (2012).

^{80. 26} U.S.C. § 7441 (2012).

^{81. 28} U.S.C. § 171 (2012).

^{82.} CAL. CONST. art. XII, § 6.

^{83.} DEL. CONST. art. IV, § 10; Welcome to the Court of Chancery of the State of Delaware, DEL. ST. CTs., http://courts.delaware.gov/Chancery/. "The Delaware Court of Chancery is widely recognized as the nation's preeminent forum for the determination of disputes involving the internal affairs of the thousands upon thousands of Delaware corporations and other business entities through which a vast amount of the world's commercial affairs is conducted. Its unique competence in and exposure to issues of business law are unmatched." *Id.*

^{84.} Order Authorizing a Commercial Court Pilot Program in the Superior Court in Maricopa County, No. 2015-15 (Feb. 18, 2015).

^{85.} OR. REV. STAT. § 305.405 (2003).

^{86.} Id. § 305.410(1).

 $^{87. \}quad \textit{Tax Appeals}, OR. \, TAX \, CT., \\ 3, \\ \\ \text{http://courts.oregon.gov/Tax/docs/CourtHandbook.pdf} \, \\ \\ \text{(last visited Oct. 6, 2015)}.$

^{88.} Id. at 1.

^{89.} OR. REV. STAT. § 305.452(1) (2003).

^{90.} *Id.* § 305.404.

^{91.} Id. § 305.425(1).

^{92.} *Id.* § 305.445.

^{93.} Nanette Byrnes, *Heard in more states: See you in tax court!*, CHI. TRIBUNE (May 25, 2012), http://articles.chicagotribune.com/2012-05-25/news/sns-rt-us-usa-tax-state-courtsbre84o0bw-20120525_1_tax-courts-tax-appeals-tax-authorities.

The foregoing discussion indicates that Americans have vested a variety of specialized tribunals with considerable conflict resolution authority concerning many aspects of their property and lives. Whether these forums are located in the executive or judicial branches, they represent a public judgment as to the need and desirability for adjudicators to have substantial expertise and experience over the relevant subject matter.

B. Western Water Tribunals

Western states have a variety of administrative and judicial entities that may be considered examples of water tribunals, although for limited purposes.

1. Administrative Tribunals

Some states have adopted administrative approaches to dispute resolution concerning water. As we have seen with reference to Wyoming, one common approach, also represented by New Mexico, provides for a state engineer who issues permits, approves transfers, and completes preparatory work for judicial adjudications. Another New Mexico state agency, the Environment Department (including its Water Quality Control Commission), administers water quality and drinking water programs. In other states, such as Oregon, the Director of the Water Resources Department performs many of the functions of a state engineer.

2. Colorado Water Court

On the judicial side of the ledger, we have already discussed Colorado's permanent water court division of its district court. ⁹⁷ Because the state has practiced ongoing adjudications for over a century, the process is essentially complete for state law rights. Both new rights and transfers are reflected in updated judicial decrees. Federal rights are also integrated into the state system. Colorado reached settlements with the state's two Indian tribes, the Ute Mountain and Southern Ute Tribes, in the late 1980s with their rights now folded into the ongoing water division decrees. ⁹⁸ The water court also recognized federal agency claims for the Black Canyon of the Gunnison National Park in December 2008. ⁹⁹ The decree was the result of multiyear negotiations and mediation among more than thirty parties. ¹⁰⁰

96. OR. REV. STAT. §§ 536.032, .037 (2003).

^{94.} N.M. STAT. ANN. § 72-2-1 (2012-2015).

^{95.} *Id.* §§ 74-1-6, 74-6-3.

^{97.} See supra notes 66-68 and accompanying text.

^{98.} Consent Decree In The Matter of the Application for Water Rights in the United States of America, at 1, No. W-1603-76F, (Colo. Water Ct., Div. 7, Dec. 19, 1991), http://www.sjwc.org/ALP/Support_Document/19911219%20Consent%20Decree%20in%20Case%20No.% 20W-1603-76F.pdf; Consent Decree In The Matter of the Application for Water Rights in the United States of America, at 1, No. W-1603-76J (Colo. Water Ct., Div. 7, Dec. 19, 1991), http://www.sjwc.org/ALP/Support_Document/19911219%20Consent%20Decree%20in%20Case%20No.% 20W-1603-76J.pdf.

^{99.} Water Right Quantification Decreed for Black Canyon of the Gunnison National Park, NAT'L PARKS SERV. (Jan. 24, 2012), http://www.nature.nps.gov/water/Homepage/Black_canyon.cfm (last visited Oct. 6, 2015).

^{100.} Id.

3. Montana Water Court

Montana is one of two states (the other being Idaho) with long-term water courts established for purposes of conducting large general stream adjudications. Montana established its water court in 1979, as part of the judicial branch, for the exclusive purpose of conducting the statewide general stream adjudication. The court consists of a chief water judge at a permanent facility in Bozeman with general jurisdiction district court judges denominated as divisional water court judges. In reality, most of the adjudication takes place before the chief water judge and the judge's team of special masters.

4. Idaho's Snake River Basin Adjudication Court

Idaho commenced its now completed Snake River Basin Adjudication in 1987 to determine water rights throughout the entire Snake River system, including rights to groundwater. The case involved two-thirds of the state's irrigated agriculture and over 150,000 claims, including extensive filings by tribes and federal agencies. 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 assigned essentially full-time to the case. Special masters and the judge resolved objections. The court remains part of the judicial branch.

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 ¹⁰⁶ and the Nez Perce Tribe. ¹⁰⁷

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. The water court will continue to hear water-related appeals from state administrative agencies on an owalso turns its attention to smaller adjudications in northern Idaho. Ito

5. Washington's Pollution Control Hearings Board

The Washington Pollution Control Hearings Board (PCHB) is a legislatively created, substantively broad, quasi-judicial agency standing independent of other state and local government agencies. ¹¹¹ The PCHB is administratively housed in the Environmental Land and Use Hearings Office, itself an independent, quasi-judicial state agency. ¹¹²

•

^{101.} MONT. CODE ANN. §§ 3-7-221, 85-2-214 (2009).

^{102.} Id. § 3-7-201, -221.

^{103.} Commencement Order, *In re* Snake River Basin Adjudication, No. 39576 (D. Idaho Nov. 19, 1987).

^{104.} Id

 $^{105. \ \ \, \}textit{Informational Brochure}, \qquad \text{SNAKE RIVER} \qquad \text{BASIN ADJUDICATION}, \\ \text{http://srba.idaho.gov/doc/broch1.htm.} \\$

Fort Hall Indian Water Rights Agreement of 1990, Shoshone-Bannock Tribes—U.S., Nov. 6,

^{107.} Snake River Water Rights Agreement of 2004, Nez Perce Tribe—U.S., Dec. 8, 2004.

^{108.} Final Unified Decree, *In re SRBA*, No. 39576 (D. Idaho Aug. 25, 2014).

^{109.} See Appointment of the SRBA, supra note 5.

^{110.} IDAHO CODE § 1406B (2015).

^{111.} WASH. REV. CODE § 43.21B.010 (2014).

^{112.} Id. § 43.21B.005.

The PCHB hears appeals from orders and decisions made by:

- 1. Local and regional air pollution control agencies or authorities.
- 2. The State Department of Ecology (the agency managing water permitting, water quality, and many other regulatory programs).
- 3. The Department of Fish and Wildlife pertaining to hydraulic project approval decisions.
- 4. The Department of Natural Resources pertaining to forest practices.
- 5. Other agencies as provided by law. 113

The PCHB consists of three full-time members (one of whom must be an attorney), appointed by the governor and confirmed by the state senate for staggered six-year terms. The members also constitute the Shorelines Hearings Board. The PCHB may also appoint administrative law judges (currently three) who may be assigned by the board to serve as the presiding officer in prehearing conferences or hearings.

The board's final decisions are appealable to superior court.

6. California's State Water Resources Control Board

Another quasi-judicial agency is the California State Water Resources Control Board (SWRCB). ¹¹⁷ The SWRCB is the culmination of a merger of water rights and water quality regulatory programs that serves as a national model of how these traditionally separate fields can be integrated. Like many other states, California began by regulating water rights and quality separately. The state's first water rights permitting program was put in place by the Water Commission Act of 1913¹¹⁸ and pertained only to the permitting of post-1913 appropriative rights. The Water Commission eventually became the State Water Rights Board in 1956 when a separate Department of Water Resources was established, primarily to manage the construction and operation of the State Water Project (the diversion of water from the northern Bay-Delta estuary for transport to southern California). ¹¹⁹

On a separate track, the legislature passed the Dickey Water Pollution Act in 1949 to establish a statewide policy for pollution control and to coordinate state and local agency actions in addressing water pollution. The act created a State Water Pollution Control Board and nine Regional Water Pollution Control Boards for the state's major watersheds.

Legislation in 1967 brought about the merger of the State Water Rights Board and the State Pollution Control Board to create the State Water Resources Control Board that

114. *Id.* § 43.21B.020–.030.

^{113.} Id. § 43.21B.110.

^{115.} ABOUT THE PCHB, http://www.eluho.wa.gov/Board/PCHB (last visited Oct. 6, 2015).

^{116.} Id

^{117.} CAL. WATER CODE § 175 (2015).

^{118. 1913} Cal. Stat. 1012.

^{119.} History of the Water Boards: The Early Years of Water Rights, SWCRB.CA.GOV, http://www.swrcb.ca.gov/about_us/water_boards_structure/history_water_rights.shtml, (last visited Sept. 20, 2011).

^{120. 1949} Cal. Stat. 2782, 2789.

is in existence today.¹²¹ The regional board structure was retained but brought under the umbrella of the state board.¹²² In 1969, the legislature passed the pioneering Porter-Cologne Water Quality Control Act,¹²³ (which inspired the Federal Water Pollution Control Act Amendments of 1972, the Clean Water Act¹²⁴) and expanded the mission and enhanced the authority of the state and local boards.

The SWRCB consists of five full-time members, with each member filling a certain occupational category (e.g., engineer, lawyer). ¹²⁵ They are appointed by the governor and approved by the state senate. ¹²⁶ The board protects water quality by setting statewide policy, coordinating and supporting the regional boards, and reviewing petitions appealing regional board decisions. ¹²⁷ The regional boards are semi-autonomous and each consists of seven part-time board members, also appointed by the governor and confirmed by the senate. ¹²⁸

The state board has responsibility for three major program areas: water rights (permitting and enforcement), water quality, and a loan and grant program supporting water quality infrastructure. Together with the state boards, the regional boards implement the state and federal water quality laws; but the regional boards have no role in water right permitting. Together with the state boards have no role in water right permitting.

Contested cases before the SWRCB usually proceed as follows:

Most Board hearings are quasi-judicial proceedings used to develop an adequate record upon which the Board can rely to make a sound decision. A quorum of the Board is not required in order to conduct a hearing; however, a Board member designated as Hearing Officer will direct the hearing. Hearings are formal proceedings in the sense that due process standards must be afforded the participating parties. However, they are generally not conducted according to technical rules relating to evidence and witnesses, but include an opportunity for the public to make comments on a proposed action of the Water Boards. ¹³¹

Adjudicatory matters are subject to an ex parte communication ban. ¹³² Rulemaking or policymaking proposals provide opportunity for public comment. ¹³³ Appeals or writs may be taken under the administrative procedure act to superior court. ¹³⁴

California has accomplished a meritorious integration of usually separate functions. It has combined both water rights and water quality regulatory matters into one agency. The state board has ability to undertake policy and rulemaking, as well as adjudicatory matters. The state board can monitor statewide trends and undertake statewide programs. The local boards can mediate federal and state policies and priorities at the local level.

^{121.} ARTHUR L. LITTLEWORTH & ERIC L. GARNER, CALIFORNIA WATER 113 (1995).

^{122.} History of the Water Boards, supra note 119.

^{123.} CAL. WATER CODE § 13000 (2015).

^{124.} Pub. L. 92-500, 86 Stat. 816 (1972).

^{125.} CAL. WATER CODE § 175 (2015).

^{126.} *Id*.

^{127.} *Id.* §§ 174, 179, 183; *See also* LITTLEWORTH & GARNER, *supra* note 121, at 113–39.

^{128.} CAL. WATER CODE § 13201 (2015).

^{129.} *Id*.

^{130.} LITTLEWORTH & GARNER, supra note 121, at 122.

^{131.} Citizen's Guide to Working with the California Water Boards, STATE WATER BOARD 8 (Jan. 2013), http://www.waterboards.ca.gov/publications_forms/publications/general/docs/citizenguide2011.pdf.

^{132.} *Id.* at 10.

^{133.} Id. at 26

^{134.} CAL. GOV'T CODE § 11350 (2015).

VI. SPECIALIZED TRIBUNALS WORLDWIDE

Many international examples of specialized water tribunals can be found; however, most of them are dedicated to the adjudication of multinational water disputes. The broader trend is the creation of so-called "environmental courts and tribunals" (ECTs), a movement recently surveyed in *Greening Justice*, a comprehensive study by University of Denver professors George Pring and Catherine Pring, ¹³⁵ The study was commissioned by The Access Initiative to advance the access to justice goal set forth in Principle 10 of the 1992 Rio Declaration: "Effective access to judicial and administrative proceedings, including redress and remedy, shall be provided." ¹³⁶

According to the authors, numerous developments have converged to increase worldwide interest in such specialized tribunals:

Over time national, state/provincial, local, and international environmental laws have become increasingly complex, rule-laden, and reliant on technical and economic considerations. A myriad of separate laws have developed dealing with [environmental and resource] issues Added to this, environmental principles have emerged or strengthened, including the [public] access rights . . . ; sustainable development; intergenerational equity; and the precautionary, prevention, and polluter-pays principles These principles also need to be thoughtfully integrated and balanced with more traditional socio-economic rights, including personal property use, employment, and economic development .

. . .

ECTs are looked to as one solution for fairly and transparently balancing the conflicts between protecting the environment and promoting development; for managing cases more efficiently and effectively; for supporting greater public information, participation, and access to justice; and for achieving more informed and equitable decisions.¹³⁷

In research extending over two years, the authors documented 354 ECTs in 41 counties, with half of them established since 2004.¹³⁸ Roughly 40 of all ECTs are agencies of federal, state, and local governments in the United States.¹³⁹ The functions of ECTs are diverse and depend on local laws and circumstances.

Predicting "the increase in ECTs and their on-going reform and improvement will continue," ¹⁴⁰ the authors identify twelve "building blocks" or "design decisions" lawmakers should address in fashioning an environmental court or tribunal in their jurisdiction—regardless of the functions it is destined to undertake. ¹⁴¹ These design decisions are also relevant to the creation of a permanent water court. They are summarized in Table 1.

^{135.} George Pring & Catherine Pring, Greening Justice: Creating and Improving Environmental Courts and Tribunals (2009).

^{136.} Id. at 7-8.

^{137.} *Id.* at 10–11.

^{138.} *Id.* at xiii.

^{139.} *Id.* at 108–09.

^{140.} Id. at 91.

^{141.} *Id.* at xiv & 20.

TABLE 1. The 12 Building Blocks or Design Decisions for Creating ECTs 142

BUILDING BLOCK DECISION		DEFINITION	INTERESTING EXAMPLES
1	Type of Forum	Judicial court, quasi- judicial tribunal, om- budsman or other	Vermont Environmental Court, Tasmania Re- sources, Management and Planning Appeals Tribu- nal, Hungary's Office of the Parliamentary Com- missioner for Future Gen- erations, Japan's Environ- mental Dispute Coordina- tion Commission
2	Legal Jurisdiction	Laws included under ECT's authority: civil, administrative, crimi- nal or combined juris- diction	Land and Environment Court of New South Wales, Australia, Environ- mental Commission of Trinidad and Tobago
3	ECT Level	Internal agency review, trial, intermediate appellate, or final appellate	Supreme Court of India, United States Environ- ment Protection Agency
4	Geographic Area	Area included in jurisdiction: municipal, regional, state, provincial, national or other	Amazonas Environmental Court in Brazil, Planning and Environment Court of Queensland, Australia
5	Case Volume	Number of cases needed to justify type of ECT selected	Environmental Court of Dhaka, Bangladesh
6	Standing	Plaintiff credentials needed to file a com- plaint	Republic of South Africa, Supreme Court, Philip- pines
7	Costs	Variety of costs and risks to parties filing an environmental complaint	Environmental Court of New Zealand

142. *Id.* at 20.

8	Access to Scientific- Technical Expertise	Methods for assuring decision-makers have access to unbiased experts	Environmental Court of Appeal in Sweden, Envi- ronmental Board of Ap- peal in Denmark
9	Alternative Dispute Resolution (ADR)	Incorporation of various types of ADR in ECT process to save money and generate better outcomes	Multi-door courthouse of Land and Environment Court of New South Wales, Australia
10	Competence of ECT judges and decision- makers	Need for selection processes, qualifica- tions, training, tenure and salary to support competence	Finland's Supreme Administrative Court, Supreme Court of Thailand, New York City, Brazil
11	Case Manage- ment	Administrative tools to increase efficiency, effectiveness, and ac- cess	Planning and Environ- ment Court of Queens- land, Australia
12	Enforcement Tools and Reme- dies	Powers of ECT to use the right remedy(ies) to solve the problem	Federal prosecutors of Brazil

The remainder of this section discusses two specialized ECTs established to address internal water disputes. One, the New South Wales Land and Environment Court (with water as one component of its portfolio), has been lauded as a leading example of such specialized courts; the other, the South African Water Tribunal, has enjoyed lesser success.

A. New South Wales Land and Environment Court

New South Wales is a state in southeastern Australia extending 309,130 square miles—roughly twice the size of Montana. The state, with its capital in Sydney, has a population of 7.52 million people. 144

^{143.} Land Areas of States and Territories, AUSTRALIAN GOVERNMENT (800,642 km2), http://www.ga.gov.au/scientific-topics/national-location-information/dimensions/area-of-australia-states-and-territories#heading-1 (last visited Nov. 4, 2015).

^{144.} New South Wales State Summary, AUSTRALIAN BUREAU OF STATISTICS (June 2014), http://www.abs.gov.au/AUSSTATS/abs@.nsf/Latestproducts/3218.0Main%20Features202013-14?opendocument&tabname=Summary&prodno=3218.0&issue=2013-14&num=&view= (last visited Dec. 20, 2015).

Prior to 1980, the state had a series of specialized tribunals and courts separately handling such matters as property appraisal and taxation, building and subdivision matters, and other land-related matters. At the time, environmental law was essentially nonexistent. Parliamentarians desired to create a specialized forum for environmental, planning, and land matters. The result was passage of the Land and Environmental Court Act of 1979 creating the Land and Environment Court. 147

Parliament vested the court with eight broad areas of original and appellate jurisdiction: (1) appeals of decisions from environmental and planning agencies; (2) appeals concerning tree and hedge disputes; (3) land condemnation cases including Aboriginal land claims; (4) review and enforcement of decisions under planning or environmental laws; (5) criminal proceedings concerning violations of planning or environmental laws; (6) review of criminal proceedings conducted by lower, local courts; (7) mining matters; and (8) appeals of decisions made by judges and commissioners of the court itself. The court's jurisdiction in these areas is exclusive.

The court's criminal law decisions can be appealed to the New South Wales Court of Criminal Appeal and subsequently to the High Court of Australia. ¹⁵⁰ The court's noncriminal decisions can be appealed to the New South Wales Court of Appeal and subsequently to the High Court of Australia although the court may transfer certain proceedings to the New South Wales Supreme Court. ¹⁵¹

Although the majority of the proceedings involve land and environmental matters, the court does hear proceedings under the state Water Management Act (2000) and the Threatened Species Conservation Act (1995).¹⁵²

The court consists of judges (currently six) appointed by the state governor and full-time commissioners (currently six) and acting commissioners (currently 15) appointed by the court. The acting commissioners need not be attorneys and the panel includes a diversity of experts in such areas as ecology, anthropology, surveying, and cultural heritage. The chief judge may direct that a commissioner sit with a judge or that two or more commissioners sit together to hear certain matters. The chief judge may direct that a commissioner sit with a judge or that two or more commissioners sit together to hear certain matters.

Though an interested commentator, Chief Judge Brian Preston has published several articles describing the court and reviewing its merits. ¹⁵⁶ He believes the court's ability

^{145.} Brian J. Preston, Benefits of Judicial Specialization in Environmental Law: The Land and Environment Court of New South Wales as a Case Study, 29 PACE ENVIL. L. REV. 396, 402 (2012).

^{146.} Id

^{147.} Land and Environment Court Act 1979, N.S.W. Gov'T, http://www.legislation.nsw.gov.au/inforcepdf/1979-204.pdf?id=8a083713-245b-4a4a-ccec-9bcf1a21101d (last visited Nov. 6, 2015).

^{148.} Preston, *supra* note 145, at 403.

^{149.} Id.

^{150.} Id. at 401.

^{151.} *Id*.

^{152.} Id. at 405.

^{153.} *Judicial Officers and Decision Makers*, LAND & ENV'T CT., http://www.lec.justice.nsw.gov.au/Pages/about/judicial_officers.aspx (last visited Dec. 20, 2015).

^{154.} *Id*.

^{155.} Stewart Smith, *A Review of the Land and Environment Court* 2–3 (N.S.W. Parliamentary Library Research Serv., Briefing Paper 13/2001), http://www.parliament.nsw.gov.au/prod/parlment/publications.nsf/key/ResearchBf132001 (hereinafter Briefing Paper).

^{156.} See, e.g., Preston, supra note145; Brian J. Preston, Judicial Specialization through Environment Courts: A Case Study of the Land and Environment Court of New South Wales, 29 PACE ENVTL. L. REV. 602 (2012).

to specialize has resulted in the rationalization and elaboration of environmental law; independence from other government agencies; improved decision-making legitimacy due to the stature of the court; and "value-added" which appears to be an argument that the court, because of its specialization and expertise, renders better decisions.¹⁵⁷

A legislative review of the court in 2001 did document complaints by local governments that the court was preempting local decision making concerning land use and other matters—perhaps evidence of a political debate rather than an institutional shortcoming of the court.158

The Land and Environment Court has recently been emulated by other countries. In 2010, both Kenya and India established specialized environment courts. Kenya's 2010 constitution established a superior court of High Court status to address disputes relating to the environment and land. 159 India established a National Green Tribunal, also adopting the Land and Environment Court's example. 160

B. South Africa Water Tribunal

The South Africa Water Tribunal was established in 1998 under the National Water Act to replace an earlier water court. 161 While purportedly an independent court, the tribunal has been enmeshed in a political debate concerning its authority that resulted in the court being dormant from 2011 to 2013. 162

The water tribunal has a chair, deputy chair, and other members (presently a total of five part-time members) who are appointed by the Minister of Justice and Constitutional Development upon the recommendation of the Judicial Service Commission (the judicial council for the country). 163 Tribunal members are to be "knowledgeable in law, engineering, water resource management," or similar fields. 164

The water tribunal hears appeals concerning a variety of decisions made under the National Water Act including disputes over permitting, transfers, and dam safety requirements. 165 At least some of these appeals may be heard de novo. 166 Appeals can be taken from the tribunal to a High Court, the general jurisdiction court for the country. 167

The Water and Environmental Affairs Minister sought to disband the tribunal in 2011 pending the passage of legislation limiting the tribunal's jurisdiction. ¹⁶⁸ A High Court judge ruled the minister lacked the authority to disband the court. 169 A lesson to be

^{157.} Preston, supra note 145, at 436-39

^{158.} Briefing Paper, supra note 155, at 16-20.

CONSTITUTION art. 162(2) (2010) (Kenya). 159.

National Green Tribunal Act, No. 19 of 2010, INDIA CODE (2010), vol. 25. 160.

National Water Act 36 of 1998 § 146 (S. Afr.).

Wayne Ncube, Resurrecting the Water Tribunal, MAIL & GUARDIAN, (May 6, 2013), 162. http://thoughtleader.co.za/lawyersforhumanrights/2013/05/06/resurrecting-the-water-tribunal/.

National Water Act 36 of 1998 § 146(5) (S. Afr.). 163.

^{164.} Id. § 146(4).

^{165.} Id. § 148.

^{166.} Id.

^{167.} Id

Sue Blaine, Tribunal Suspended After Losing Chairman, BUSINESS DAY, (Sept. 13, 2012), http://www.bdlive.co.za/national/2012/09/13/water-tribunal-suspended-after-losing-chairman.

Michael Vermaak, Melissa Strydom van Dyke, National Water Act: Challenging Appeal Decisions, INTERNATIONAL LAW OFFICE 1-2 (Mar. 25, 2013), http://www.bowman.co.za/filebrowser/contentdocuments/national_water_act_challenging_appeal_decisions.pdf.

drawn from this experience is the peril to water dispute resolution forums when too closely tied to political officials.

VII. PERMANENT WATER COURT PROPOSALS

As previously discussed, a series of developments has rekindled the old debate between Colorado and Wyoming on administrative versus judicial approaches to water conflict-resolution. In the process, proposals for permanent water courts have been advanced in four states.

A. Idaho

The administrative order does not address water law matters brought in another district court, but there are provisions under rules of civil procedure for the transfer of such cases. The administrative order also does not specify what the procedure will be when the court completes its work in the northern Idaho adjudication. The likely duration of those cases does ensure that the court will handle administrative appeals for many years to come.

B. Washington

In 2002, the Washington legislature created a task force, subsequently known as the Water Disputes Task Force, to study how the resolution of water right disputes might be improved.¹⁷³ The task force consisted of representatives from the legislature, judiciary, the state Pollution Control Hearings Board (PCHB), and the Department of Ecology.¹⁷⁴

The study appears to have been motivated by the great number of water rights that have not been adjudicated in the state, along with unquantified federal and Indian reserved water rights. As the task force subsequently noted, "there are currently 170,000 unadjudicated water right claims on file with the state. [The Department of] Ecology estimates the amount of time it will take to fully adjudicate all basins in the state to be in the range of decades, based on streamlining measures and the creation of a Water Court, to centuries if we retain current law and funding levels." ¹⁷⁵

172. Idaho R. Civ. P. 40(e).

^{170.} Appointment of the SRBA, *supra* note 5, at 3.

^{171.} Id

^{173.} Water Disputes Task Force, A Report to the Washington State Legislature (2003) [hereinafter Water Disputes Task Force].

^{174.} Id. at 1.

^{175.} *Id.* at 14.

When the task force reported in December 2003,"[o]ne overriding recommendation" was "the creation of a specialized water rights court." The water court would be created as a branch of the superior court system and would require a state constitutional amendment. The water court would be comprised of up to four judges, with one Judge coming from the geographic regions of the three courts of appeals divisions, and one judge "floating" state wide. The task force also recommended that decisions of the superior court, or the water court if established, be given deference by the appellate courts.

The task force recommended that the proposed water court's exclusive jurisdiction include general stream adjudications, appeals from the PCHB, and administrative procedure act challenges to stream-flow rules. The task force acknowledged that a constitutional change would be necessary to modify the general jurisdiction of the superior court. The task force also recommended that the constitutional amendment enable the specialized water court to update adjudication decrees and to hear cases involving water quality. These latter two items, however, would also require legislative action. The same stream of the same str

While the task force proposed a water court with up to four judges, the legislature would determine how many positions would be filled based on current workload.¹⁸⁴ While the supreme court could recommend judicial candidates, the governor would appoint the judges who would stand at the next retention election.¹⁸⁵ Alternatively, some members of the task force advocated election of the water court judges by the voters of the counties in each of the divisions.¹⁸⁶ Qualifications for judicial positions would include five years of legal experience; desirable additional qualifications would be experience in water law or experience in a judicial or quasi-judicial setting.¹⁸⁷

The water court would sit throughout the state. ¹⁸⁸ The water court judges could also appoint court commissioners, special masters, or other staff to help them with the pending caseload. ¹⁸⁹ The task force developed a detailed estimate on the cost of establishing a water court, with the estimates ranging from \$2 million to \$4 million per year depending on the number of judges and commissioners. ¹⁹⁰ The source of funding would be state funding and filing fees. ¹⁹¹

In support of its recommendations, the task force argued, "a Water Court system will provide the best means for completing general adjudications statewide in a meaningful timeframe." The task force offered other justifications for its water court recommendation:

^{176.} Id. at 3.

^{177.} *Id.* at 1.

^{178.} Id. at 10-11.

^{179.} *Id.* at 5.

^{180.} Id. at 4.

^{181.} *Id.* at 3.

^{182.} Id. at 3.

^{183.} Id. at 10.

^{184.} *Id.* at 3.

^{185.} *Id.* at 10–11.

^{186.} Id. at 10.

^{187.} Id. at 10-11.

^{188.} *Id.* at 12.

^{189.} Id. at 13.

^{190.} Id. at 14.

^{191.} *Id.* at 13–14.

^{192.} *Id.* at 14.

- [1] Specialized judges and court appointed commissioners, referees, and other Water Court staff can render decisions on the complex legal and technical issues that arise in water rights disputes more efficiently and consistently, with a resultant reduction in the cost and time of litigation.
- [2] The expertise developed by the specialized judges in water rights disputes will be able to be drawn upon in future water rights disputes, again reducing the time and cost of litigation.
- [3] A common system for managing court action involving water rights disputes will be easier to administer, will be more understandable and predictable, and will result in less cost and reduced time in litigation for all parties.
- [4] By sitting in each of the three regions of the state, the Water Court judges and proceedings will be considerably more accessible to the localities where the water rights disputes arise.
- [5] Finally, by creating a Water Court with multiple judges and referees, the Legislature will provide a system capable of completing the adjudication of pending water right claims within a reasonable time frame, thus fostering greater certainty for all water interests sooner.¹⁹³

The Board for Judicial Administration (BJA), the policymaking body for the Washington judicial branch, considered the task force report and a study from its own Water Court Work Group. On July 16, 2004, the BJA adopted a judicial policy statement on general water right adjudications. ¹⁹⁴ The policy statement distilled the work group's recommendations into a two-page set of principles. The policy statement supported the creation of a specialized water court if the legislative and executive branches decided to increase the pace of general adjudications. ¹⁹⁵ The policy statement spelled out some of the desired features for a proposed water court including the selection process for the water court judges, the length of their terms, the types of cases to be heard, the need for state funding, the need for experienced court commissioners, the creation of a separate and adequately funded clerk's office, and the creation of regional divisions. ¹⁹⁶ The BJA's policy statement represents the official position of the state judiciary.

The proposal, even with BJA's qualified blessing, never got traction in the legislature. Funding was an issue as the national recession deepened. The need for a constitutional amendment and the cost of a supporting campaign were hurdles that appear to have overshadowed the need to establish a permanent water court.

C. Montana

As mentioned, Montana may be within several years of completing its statewide adjudication, started in an earlier form in 1973 and assumed by the water court in 1979. Like Idaho, the issue arises about what happens to the court when the adjudication is complete.

^{193.} Id. at 15.

^{194.} Bd. for Jud. Admin., Policy Statement by the Board for Judicial Administration on General Water Right Adjudications (2004), www.courts.wa.gov/committee/docs/BJA%20policy%20statement.doc.

^{195.} *Id*.

^{196.} Id

^{197. 1979} Mont. Laws 1901.

In 2014, the Montana Supreme Court asked the University of Montana's Land Use and Natural Resources Clinic to study and make recommendations on improvements to the adjudication process. While the clinic's final report did not recommend a permanent water court, one recommendation (following Idaho's lead) was that the appeals of the Department of Natural Resources and Conservation's water decisions go, at the appellant's option, to the water court as an alternative venue. The study argued, "the benefits of this process could be reduced workload to the district courts and increased expertise for water users appealing agency matters."

The 2015 state legislature considered a bill presenting a variation of this recommendation. Senate Bill (S.B.) 362 was titled "An Act Providing Permanent Duties for the Water Court." The bill would create a court of water appeals, consisting of the existing chief water judge and the associate water judge, who would hear (in addition to ongoing adjudication duties) appeals of "water distribution controversies" taken from other Montana district courts. A party to such an appeal could also petition the supreme court to take a novel or constitutional question case and bypass the court of water appeals. Presumably, water-related appeals from state administrative agencies would continue to go, in the first instance, to district court under the administrative procedure act and, if considered a "water distribution controversy," could then be appealed to the court of water appeals.

This proposed legislation did not specifically address what happens to this appellate structure once the main work of the general stream adjudication is complete. Also, jurisdiction limited to water distribution disputes may be too narrow in a contemporary water management context. Finally, a two-judge panel may result in impasse in some cases. Equally troubling is the prospect that one judge on the appellate panel is under the ongoing, direct supervision of the other judge. For the moment, these concerns are moot as the bill failed to clear the state senate.

D. California

Persistent drought conditions, groundwater overdrafting (particularly in the southern part of the state), and other issues have resulted in a recent, public debate in California over the merits of a permanent water court. While the momentum for such a court has dissipated due to passage in 2014 of historic groundwater legislation, ²⁰³ the discussion of the relevant issues by the California water law community is helpful to other states as they consider similar measures.

Until passage of the groundwater law, "the court system offer[ed] the only available mandatory process for administering groundwater disputes," 204 usually by joining all pumpers, imposing a management plan, and retaining jurisdiction. The judicial process, however, was very prone to delays. In the Santa Maria basin groundwater adjudication,

^{198.} See Univ. of Mont., Land & Envtl. Clinic, Water Rights in Montana (2014).

^{199.} Id. at 4.

^{200.} Id. at 30.

^{201.} S.B. 362, 64th Leg., Reg. Sess. (Mont. 2015).

^{202.} Id.

^{203.} Sustainable Groundwater Management Act, S.B. 1168, 2013-14 Reg. Sess. (Cal. 2014).

^{204.} Markham, supra note 13, at 124.

the case was shuttled among five superior court judges, due to challenges and changes in court personnel, during a five-year period. ²⁰⁵

Another proceeding, the Chino Basin adjudication, is an example of the transaction costs involved. There, the assigned judge, faced with the complexity of issues, appointed an attorney and an engineer to advise him.²⁰⁶ As one critic, attorney James L. Markham, commented, "Parties to that action not only pay for their own engineers and for a complex system of committees and an elected Watermaster board, but also in essence employ an attorney and engineer to provide independent advice to the court."²⁰⁷

Markham proposed the designation of judicial water divisions to mirror the regional boards, with one water judge for each division.²⁰⁸ The judge would be a superior court judge, presumably serving full-time in that capacity.²⁰⁹ In addition to the usual qualifications for selection as a judge, the water judge would be required to have ten-years' experience with groundwater rights as a judge, practitioner, or law professor.²¹⁰ The water judge would have exclusive jurisdiction over groundwater cases.²¹¹ The judge would not be subject to preemptory challenges; in cases of challenges for cause, another water judge would hear the case.²¹² Appeals of the water judge's decisions would be directly to the state supreme court.²¹³

Some elements of Markham's proposal were introduced in the California Assembly in 2005 as Assembly Bill (A.B.) 1453,²¹⁴ but the bill died in committee in early 2006. The bill faced stiff opposition by the California Judicial Council that frequently has opposed specialized courts (such as business courts) and has urged that complicated water cases be managed under more generic complex litigation procedures the Council has developed. Other commentators pointed to an apparent state preference for judicial generalists: "Although specialized judges can bring greater expertise to water disputes, any move toward greater specialization should also recognize the value of generalization. Judicial generalists often bring a broader perspective to water issues than specialists might, and they sometimes are more willing to question traditional solutions." Other critics argued that even a specialized water court would not have the capacity to address California's complex water law. ²¹⁶

In view of this opposition, Yichuan Wang, in an overview of the water court controversy, concluded, "California's history with AB 1453 and the Judicial Council's resistance to special courts suggest that California may likely make more progress by improving existing tools." Among those suggested tools are comprehensive basin man-

^{205.} Id. at 125.

^{206.} Id.

^{207.} Id.

^{208.} Id. at 127.

^{209.} Id. at 127-28.

^{210.} Markham, supra note 13, at 128.

^{211.} *Id*.

^{212.} Id.

^{213.} Id.

^{214.} A.B. 1453, 2005 Leg. (Cal. 2005).

^{215.} Ellen Hanak et al., Managing California's Water From Conflict to Reconciliation 356 (2011).

^{216.} *See, e.g.*, Pitzer, *supra* note 13, at 7 (*quoting* Art Baggett): "Other western states have a real simple water rights system, it's almost all appropriative. It's simple—first in time, first in right."

^{217.} Yichuan Yang, Courting Colorado's Water Courts in California to Improve Water Rights Adjudication? Letting Go and Improving Existing Institutions, 15 Vt. J. ENVIL. L. 538, 560 (2013-14).

agement, drawing the boundary of water districts to be congruent with watersheds, developing metrics on the success of the Judicial Council's complex litigation program in addressing water adjudications, and improving judicial and public education concerning water law. In addition to these modest measures, Yang offered one meriting more serious attention: California policymakers should avoid "path dependency"—that is, "resisting large institutional changes because of bias rather than analysis [thereby shutting] down a stream of potential solutions that might actually serve in addressing the state's mounting water challenges."²¹⁹ In short, remain receptive to change.

VIII. OTHER SPECIALIZATION MEASURES

Over the years, courts have developed methods for addressing the need for specialized, expert knowledge for resolving certain cases. In some courts, the presiding judge may assign cases to a judge with relevant expertise. Federal cases over the years concerning California's Bay Delta and the San Joaquin River were frequently assigned to the same federal judge in Fresno who developed expertise and detailed knowledge of the issues. Such tailored assignment, however, is unavailable in courts practicing random or neutral case assignment (e.g., every third case is assigned to Judge A).

At the federal level, one relatively recent example of a specialized court is the United States Foreign Intelligence Surveillance Court.²²¹ Federal judges from around the country are detailed for multiyear service in reviewing warrant requests in matters pertaining to national security and intelligence.²²²

At the state level, specialized divisions, such as domestic relations courts, probate courts, or drug courts, provide judges with the opportunity to become specialized in that area of law and practice.

State and federal courts also have instituted approaches for developing the specialized capacity of judges without necessarily creating specialized courts. Rules of civil procedure allow changes of venue for various reasons including the agreement of all parties, ²²³ or that "the ends of justice would be promoted by the change." Such provisions allow actions to be transferred to a judge having special knowledge or experience in a particular subject matter such as water. California has a specific provision under its Environmental Quality Act requiring the superior courts in counties of more than 200,000

^{218.} Id. at 560-63.

^{219.} Id. at 562.

^{220.} Pitzer, *supra* note 13, at 8 (*quoting* Alf Brandt): "We kind of had the equivalent of a water court . . . where related cases go to the same judge so that judge develops expertise and it becomes the de facto water court. That's what [U.S. District Court] Judge Wanger was for many years."

^{221.} See 50 U.S.C. § 1803(a) (2015).

^{222.} See About the Foreign Intelligence Surveillance Court, U.S. FOREIGN INTELLIGENCE SURVEILLANCE CT., http://www.fisc.uscourts.gov/about-foreign-intelligence-surveillance-court (last visited Nov. 6, 2015).

^{223.} See, e.g., MONT. CODE ANN. § 25-2-202 (2014). "Change of venue on agreement of parties. All the parties to an action, by stipulation or by consent in open court entered in the minutes, may agree that the place of trial may be changed to any county in the state. Thereupon the court must order the change as agreed upon." Id.

^{224.} Id. § 25-2-201(3).

people to designate "CEQA judges" to develop expertise concerning the statute "and related land use and environmental laws, so that those judges will be available to hear, and quickly resolve, actions or proceedings"²²⁵

In some federal district courts, certain magistrate judges have been assigned to particularly large or complex water law cases to provide continuity, uniformity in decisions, and expertise. State and federal courts also may appoint special masters or referees, who may have special expertise, on a short- or long-term basis to hear certain matters, with the officer's report or recommendation eventually reviewed and approved by the court. ²²⁶ Special masters are commonly used in the water rights field. The U.S. Supreme Court regularly appoints special masters to hear lengthy and complex interstate water disputes. ²²⁷ Special masters have been used in Wyoming, New Mexico, and Arizona to preside over protracted, general stream adjudications. ²²⁸

In addition to these measures, the following describes three other approaches for providing substantive expertise in addressing complex water litigation.

A. Coordination

Courts have developed (or legislatures have provided) procedures to facilitate the assignment of complex cases to a certain judge who may have developed expertise over the years. At the federal level, the U.S. Judicial Panel on Multidistrict Litigation (MDL Panel) can coordinate and assign actually or likely related cases to one judge, even from a different part of the country. Congress created the MDL Panel in 1968.²²⁹ The panel consists of seven sitting federal judges appointed to serve by the Chief Justice of the United States.²³⁰ Over the years, the panel has considered motions for centralization of dockets involving more than 500,000 cases.²³¹

The duties of the panel are to (1) determine whether civil actions pending in different federal districts involve one or more common questions of fact such that the actions should be transferred to one federal district for coordinated or consolidated pretrial proceedings; and (2) select the judge or judges and court assigned to conduct such proceedings.²³²

The transfer or centralization of cases before one judge is only for pretrial purposes (with one exception). The goal is to "avoid duplication of discovery, to prevent inconsistent pretrial rulings, and to conserve the resources of the parties, their counsel and the judiciary." Unless pretrial motions or settlement resolve the cases, they are returned to the originating district court for trial. 234

^{225.} CAL. PUB. RES. CODE § 21167.1(b) (West 2015).

^{226.} See, e.g., FED. R. CIV. P. 53.

^{227.} *See, e.g.*, Kansas v. Nebraska, 135 S.Ct. 1042, 1049 (2015).

^{228.} See, e.g., ARIZ. REV. STAT. ANN. § 45-255 (2015).

^{229. 28} U.S.C. § 1407 (2015).

^{230.} Overview of the Panel, USCOURTS.GOV, http://www.jpml.uscourts.gov/panel-info/overview-panel (last visited Oct. 7, 2015).

^{231.} *Id*.

^{232.} *Id*.

^{233.} Id.

^{234.} *Id*.

Under the MDL procedure, several highly controversial and complex water disputes, such as those involving the Missouri River, have been assigned to one federal judge (Judge Paul Magnuson from Minnesota).²³⁵

A similar process is employed in California under the Judicial Council's civil case coordination rules, ²³⁶ allowing similar cases pending in numerous superior courts to be heard and decided by one judge. While these procedures are available for all types of civil cases, particular rules govern complex cases—often including water cases. Under the California Rules of Court, a complex action is an action that "requires exceptional judicial management to avoid placing unnecessary burdens on the court or the litigants." The Judicial Council explains that "[s]uch a case may involve numerous time-consuming pretrial motions; a great number of witnesses or a substantial amount of evidence; many separately represented parties; other, related actions pending in other counties, states, or countries or in a federal court; or other issues."²³⁸

Upon receipt of a motion for coordination, the chief justice appoints a superior court judge to hear and rule on the motion. ²³⁹ If the motion is granted, the chief justice appoints a superior court judge to the coordinated cases. ²⁴⁰ Unlike the federal MDL cases, the superior court judge may take the cases to trial. ²⁴¹

Between 2001 and 2010, numerous water and environmental cases related to the San Francisco Bay-Delta Region and Colorado River were assigned to judges of the Sacramento Superior Court.²⁴²

B. Court Appointed Experts

Methods have been developed to assist a judge in understanding complex evidence. The Federal Rules of Evidence allow a court to appoint its own expert witness (Rule 706).²⁴³ The advisory committee on the rules observed, "The inherent power of a trial judge to appoint an expert of his own choosing is virtually unquestioned."²⁴⁴

A party may move the court to appoint an expert or the court may do so on its own motion.²⁴⁵ In either case, parties are given an opportunity to show cause why an expert should not be appointed.²⁴⁶ The court may appoint an expert agreeable to the parties or an expert of its own choosing.²⁴⁷

^{235.} See generally In re Operation of the Mo. River Sys. Litig., 277 F. Supp. 2d 1378 (2003).

^{236.} Cal. Rules of Court 3.501-.550.

^{237.} Cal. Rules of Court 3.400.

^{238.} Fact Sheet: Civil Case Coordination, CAL. JUDICIAL COUNCIL (Sept. 2014), http://www.courts.ca.gov/documents/civcoord.pdf.

^{239.} Cal. Rules of Court 3.524.

^{240.} Cal. Rules of Court 3.540(a).

^{241.} Cal. Rules of Court 3.540(b).

^{242.} See, e.g., SWRCB Special Proceeding: Sacramento Super. Ct., www.SACCOURT.GOV, https://www.saccourt.ca.gov/coordinated-cases/swrcb/swrcb.aspx (last visited Oct. 7, 2015); QSA Special Proceeding: Sacramento Super. Ct., www.SACCOURT.GOV, https://www.saccourt.ca.gov/coordinated-cases/qsa/qsa.aspx (last visited Oct. 7, 2015).

^{243.} Fed R. Evid. 706.

^{244.} FED. R. EVID. 706 (advisory committee's note on 1972 Proposed Rules).

^{245.} Fed. R. Evid. 706(a).

^{246.} *Id*.

^{247.} Id.

After completing his or her duties, the expert "(1) must advise the parties of any findings the expert makes; (2) may be deposed by any party; (3) may be called to testify by the court or any party; and (4) may be cross-examined by any party, including the party that called the expert."²⁴⁸

Rules similar to federal rule 706 are in place in many states.²⁴⁹

Colorado water courts are utilizing new rules to improve the expert witness practice. Rule 11, adopted in 2009, was developed to assure the judge of an expert witness's independent judgment and to assist judges in understanding the science at issue in a proceeding. Rule 11 indicates that the expert witness has a duty to the court to provide an opinion under the standards of conduct applicable to the expert's profession. Expert witnesses are also required to meet before trial in an effort to resolve their differing opinions. Expert witnesses are also required to meet before trial in an effort to resolve their differing opinions.

C. Judicial Education

Even without major structural change in how water disputes are resolved, a consensus exists that judges could benefit from improved continuing education concerning water and environmental law issues. In a recent critique of California's water policy, some commentators observed,

Courts could also benefit from specialized training in water science and economics. The Land and Environment Court of New South Wales [see infra at Section VI(A)] provides its judges with professional development courses focused on relevant environmental knowledge, expertise, and skills, and requires that they attend such courses at least five days a year Subjects could range from scientific advances in hydrology to the potential effects of climate change on fresh water. ²⁵³

Such educational opportunities are already available through the Dividing the Waters program at the National Judicial College in Reno.²⁵⁴ Since 1992, this program has provide state and federal judges (both trial and appellate) presiding over a complex water litigation with educational programs on complex case management, the use of alternative dispute resolution (ADR) processes, hydrology, assessing scientific evidence and models, and basics and updates on western water law.²⁵⁵

IX. A MODEST PROPOSAL

The foregoing discussion demonstrates the promising range of institutional possibilities for improving water conflict resolution in a contemporary context. Administrative agencies have evolved over the decades from their water distribution origins to become

^{248.} FED. R. EVID. 706(b).

^{249.} Ariz. R. Evid. 706.

^{250.} Colo. Water Ct. R. 11.

^{251..} Id

^{252.} See Stephen E. Snyder et al., Adversarial Collaboration: Court-Mandated Collaboration Between Opposing Scientific Experts in Colorado's Water Courts, NATURAL RES. & ENV'T, Summer 2013 at

^{253.} Hanak, supra note 215, at 357.

^{254.} *Dividing the Waters*, JUDGES.ORG, http://www.judges.org/dividingthewaters/ (last visited Nov. 11, 2015).

^{255.} Id.

responsible for a broader range of water-related programs—a trend demonstrated by the transition in many states from the state engineer to a director of water resources. In other jurisdictions, quasi-judicial agencies have emerged that are similarly working to incorporate a broader range of expertise in their decisionmaking structure. The NSW Land and Environment Court, with its specialized commissioners, and the South African Water Tribunal (even with its problems) demonstrate this tread—emulated to a lesser degree by the SWRCB and Washington's PCHB. Also, courts have demonstrated they can address the need for substantive expertise through specialized departments or calendars, use of appointed court personnel, or rules changes.

For the remainder of this article, I will discuss the potential of a permanent, state water court. As Andy Sawyer, legal counsel for the California State Water Resources Control Board, astutely observed, "when people talk about water court, 'they are often talking about different things." Accordingly, the following identifies the necessary characteristics of such a court. Such a permanent water court could be part of the judicial branch or stand as a quasi-judicial body, similar to the SWRCB or PCHB.

A. Criteria

Many qualities might be considered in fashioning a model water court proposal. The twelve design decisions identified by Pring and Pring help frame the discussion.²⁵⁷ The following simplified criteria would be especially important in evaluating the merits of water court variations:

1. Sound, principled decisionmaking—The renewed interest in specialized water tribunals is founded on the need for judges to have and apply expert knowledge, not generally shared by their colleagues, in deciding complex water disputes. Also, there is a desire to continue to utilize the expertise of judges or tribunals that face disbandment, such as the adjudication courts in several states. This criterion requires that a specialized water tribunal produce quality outcomes—admittedly, a very difficult result to demonstrate. This consideration raises a contemporary dichotomy: The field of water law these days is an equal mix of science and engineering, on the one hand, and law and public policy, on the other. The challenge is to design institutions and recruit adjudicators able to bridge both worlds.

Related to the concern for sound decisionmaking is the tension between finality and flexibility in decisions. Administrative agencies address this tension through program modifications over time. Courts may address this tension by retaining jurisdiction allowing the parties to seek necessary decree modifications.

^{256.} Pitzer, supra note 13, at 5.

^{257.} Pring & Pring, *supra* note 135, at 553.

^{258.} See M.P. Golding, Principled Decision-Making and the Supreme Court, 63 COLUM. L. REV. 35, 40 (1963) ("A decision or judgment is principled only when it is guided by some 'external consideration,' i.e., a guiding principle that contributes to the deliberation on the case. Such a principle is a reason (or part of the reasons) for the decision. . . . [I]n applying a principle, the instant case must be treated as an instance of a more inclusive class of cases. . . . In this way every principled judgment makes, or rests upon, a universal, or general. claim.").

- 2. Efficiency—Efficient dispute resolution requires the least amount of time and resources necessary to produce sound results.²⁵⁹ Generally, because of their routinization of work, administrative agencies are considered more efficient than courts that typically have high transaction costs (in terms of delay, attorneys' fees, and other costs). What needs to be factored into this discussion is that proceedings before administrative agencies also are often lengthy and costly and may ultimately end up in court for the additional rounds of litigation. A carefully conceived water court system, however, could be more efficient if certain layers of procedure were removed, e.g., extensive administrative hearings following by equally costly court proceedings. While administrative agencies may have some enforcement powers, they often go to court for aid in enforcement. Courts also have the ability to retain jurisdiction over the parties and issues.
- 3. Coordination with other water policies and programs—Regardless of whether most water-related dispute resolution occurs in an administrative agency or in a court, it is desirable that the jurisdiction's water policies and programs have a considerable degree of coordination. Although specific agencies have unique roles, and some friction among our branches of government is a necessary and often positive feature, we do not want agencies to consistently work at cross-purposes. Coordination is likely maximized when water-related functions are mostly housed in an administrative agency, but the New South Wales Land and Environment Court is an example of how this integration, in terms of water-related dispute resolution, can also take place in the judicial branch.
- 4. Lawfulness and due process—We want our adjudicators to follow the law, adhere to constitutional requirements, and do so exercising their independent judgment. ²⁶⁰ The components of due process are especially important: notice; opportunity to participate, comment, or respond; and reasoned, unbiased decisionmaking. ²⁶¹ Courts inherently embody these values and, as indicated by recent polling, elicit more respect than other branches of government. ²⁶² Courts also have the advantage of being constitutionally separated from other branches of government and being more immune to external pressures. The McCarran Amendment is one legal requirement that requires meaningful judicial involvement in cases adjudicating or administering federal water rights. Some administrative agencies also demonstrate a high level of legal practice under administrative procedure acts and the use of law-trained hearing officers. Many administrative agencies have also developed procedures for eliciting public participation and comment.

^{259.} A sensitive relationship admittedly exists between efficiency and effectiveness: "[E]fficiency is the best use of resources; effectiveness, the achievement of goals. . . . [T]he simultaneous fulfillment of these values requires trade-offs and compromises . . . 'justice' may demand the possibility of a slow, costly appeal process; while a court proceeding, even if it is regarded as just, speedy, and inexpensive, may not be able to 'settle' the underlying dispute at all." HÉCTOR FIX-FIERRO, COURTS, JUSTICE, AND EFFICIENCY: A SOCIO-LEGAL STUDY OF ECONOMIC RATIONALITY IN ADJUDICATION 8 (2003).

^{260.} Bruce Ragsdale, *Judicial Independence and the Federal Courts*, FEDERAL JUDICIAL CENTER (2006), http://www.fjc.gov/public/pdf.nsf/lookup/JudicialIndependence.pdf("A central principle of the United States system of government holds that judges should be able to reach decisions free from political pressure.").

^{261.} See generally Goldberg v. Kelly, 397 U.S. 254 (1970).

^{262.} See, e.g., Frank Newport, Americans Trust Judicial Branch Most, Legislative Least, GALLUP (Sept. 26, 2012), http://www.gallup.com/poll/157685/americans-trust-judicial-branch-legislative-least.aspx.

5. Legitimacy—The decisions of adjudicators should be considered legitimate by the parties and the interested public.²⁶³ Legitimacy is a necessary requisite for enforcement of the decision, as well as maintaining the long-term reputation of the tribunal as a fair and effective dispute-resolution forum. Polls and common experience suggest that public has more confidence in judges than in the executive or legislative branches.²⁶⁴ While the public generally considers courts to be the most legitimate branch of government, courts do limit direct participation to those parties having standing.

Through notice and comment procedures, administrative agencies have more flexibility to allow public participation and are more likely to hear from a broader range of the public. These agencies are likely to be more lenient in allowing intervention into contested administrative proceedings. By contrast, courts typically limit participation to the actual parties in dispute or those other persons who can establish grounds for intervention. Courts, however, do employ other procedures, such as amicus briefs, to allow greater participation. Also, many of the complex water cases involve such a range of litigants that is possible to argue that almost every interest is represented. Regardless of the forum, the opportunity to be heard is important for litigant satisfaction.

B. Model Tribunal

States exist for a reason: to allow a group of residents sharing geographic, historic, cultural, and economic ties to govern themselves (subject to federal law constraints). As each western state has a unique set of water laws and institutions, shaped by local experience and conditions, a "one size fits all" approach probably will not succeed. While not undertaking a wholesale restructuring of how western states accomplish water disputeresolution, those states actively seeking to improve their structures might consider a more comprehensive, permanent water tribunal. Such a tribunal should have many of these features:

- 1. The tribunal would be located either in the executive branch as a quasijudicial agency, as in the case of the SWRCB, or in the judiciary, as in the case of the NSW Land and Environment Court.
- 2. The tribunal would have at least three judges, with terms and salaries equivalent to general jurisdiction judges in the state.
- 3. Since states have developed their procedures for selecting judges, these practices should be followed in selecting water tribunal judges. There is a strong argument, however, that a judicial nominating commission (forwarding three to five nominees to the governor) would be in a better position than the electorate to evaluate the expert qualifications of candidates for a specialized forum. Periodic retention elections would provide public accountability. The chief judge would be elected by his or her peers or appointed by the governor.

^{263.} See, e.g., Michael L. Wells, "Sociological Legitimacy" in Supreme Court Opinions, 64 WASH. & LEE L. REV. 1011, 1015 (2007) ("[T]he Court, in order to achieve its goals, has to be concerned with what other people think of it. In any given case, and especially in the most prominent ones, the Court must take care to behave in a way that inspires or maintains public confidence, . . .") (footnotes omitted).

^{264.} See Newport, supra note 262.

- 4. The tribunal would establish a panel of commissioners who could be assigned by the chief judge to participate in certain proceedings. These commissioners would represent a broad range of specialties (similar to the New South Wales Land and Environment Court).
- 5. The tribunal would hear cases at locations throughout the state for the convenience of the parties.
- 6. The tribunal would adopt categories of cases and allow them to be heard in various configurations:
 - a. One law-trained commissioner (e.g., routine, minor cases).
 - b. One judge (e.g., large but routine cases).
 - c. Three-member panels of judges and commissioners (e.g., large, complex cases of public importance; unusual law and/or facts).
 - d. For initial decisions made by one judge or commissioner, a party could request rehearing before the full court.
- 7. Appeals from the tribunal would be to the state's intermediate court of appeals, with the possibility of petitioning the state supreme court to bypass the intermediate court in exigent circumstances.
- 8. The tribunal would have exclusive jurisdiction as follows:
 - a. Review of permit and transfer decisions made by the water resources department.
 - b. Review of water-related permit and enforcement decisions made by other state agencies or state-created special districts (including water quality, dam safety, and other water-related environmental regulation).
 - c. Review of water-related regulations or plans adopted by state agencies that would previously be reviewed by a court under the state administrative procedure act.
 - d. Preside over ground and surface water adjudications.
 - e. Maintain continuing jurisdiction to enforce final decrees in ground and surface water adjudications and in other cases as necessary.
- 9. Procedures could also be available to allow private litigants with water cases pending elsewhere in the state to seek a transfer of venue to the water tribunal.

Except for the conduct of adjudications, this hypothetical tribunal is primarily an appellate body that substitutes for trial court review of administrative decisions. As such, it brings institutional expertise to these cases and expedites their resolution. The tribunal expands on the SWRCB's approach for integrating water quantity and quality but does not emulate that agency's initial permitting functions. Like the Land and Environment Court, the tribunal seeks to build a broad range of substantive expertise into the institution. In terms of jurisdiction, the proposal is similar to the Washington Pollution Control Hearings Board (except for the PCHB's jurisdiction in nonwater areas such as air quality).

C. Evaluation

Preliminarily, it is useful to observe that the benefits of generalist versus specialist courts are being broadly debated. ²⁶⁵ In a 2011 book, ²⁶⁶ Lawrence Baum examined three potential results of court specialization: efficiencies, improved quality in decision making (in terms of consistency and accuracy), and whether specialization leads to an institutional advantage for one side or the other. He concludes there is little evidence on the question of efficiency, although a reviewer of the book points to examples of specialized appeals yielding prompt results (unemployment compensation appeals). ²⁶⁷ As for quality decision making, Baum concludes "we have little meaningful evidence of differences in the quality of decision making between generalist and specialized courts . . . [because of the] difficulty of measuring the quality of judges' work. ²⁶⁸ The book reviewer responds that litigants may perceive the judgments of a specialized court to be more legitimate—albeit a subjective measure of quality. ²⁶⁹ Finally, while Baum is concerned specialized courts may result in long-term policy advantages to certain litigants, the evidence is mixed. ²⁷⁰

In contrast, the chief judge of the New South Wales Land and Environment Court is unequivocal in his view as to the multiple benefits of a specialized court. In listing a "desirable dozen" beneficial attributes of the court, he observes, "Rationalization and centralization of jurisdiction has resulted in the Court having a comprehensive, integrated, and coherent environmental jurisdiction."²⁷¹

With this ongoing debate in mind, how well does this model proposal satisfy the criteria previously enumerated? Would this approach improve over existing practices in most states?

1. Sound, principled decision making—By empaneling expert adjudicators, who serve long terms focusing on water-related cases, the model tribunal would advance sound, principled decision making. These judges would become intimately familiar with the law, policies, and science concerning the state's water resources. If specialized commissioners (like those in the NSW Land and Environment Court) were available, the tribunal would have the benefit of a broad range of knowledge. The adjudicators would also be personally or institutionally familiar with decrees or decisions that might be reopened because of changed circumstances. To paraphrase a western water judge, a water court could develop over time a body of law providing predictability, consistency, and certainty to water users and management agencies alike.

^{265.} Similarly, Laura G. Pedraza-Farina explores widespread criticisms of the U.S. Court of Appeals for the Federal Circuit, which has a specialized role in reviewing almost all patent cases. She offers a behavioral explanation based on an "expert community" that probes the "important differences between how experts and non-expert generalists will decide cases and interact with other relevant actors—and in particular with other institutional actors such as agencies, district courts, other appellate courts, and the Supreme Court." See Laura G. Pedraza-Farina, Understanding the Federal Circuit: A Model of Expert Decision-making 5 (2014) (unpublished paper) (on file with author).

^{266.} See generally BAUM, supra note 74.

^{267.} Herbert Kritzer, *Where Are We Going: The Generalist vs. Specialist Challenge*, 47 TULSA L. REV. 51, 62 (2011).

^{268.} BAUM, *supra* note 74, at 219.

^{269.} Kritzer, *supra* note 267, at 64–65.

^{270.} BAUM, *supra* note 74, at 62–63.

^{271.} Preston, *supra* note 145, at 424.

- 2. Efficiency—Administrative agencies are often more efficient entities than courts, but the model tribunal would likely achieve efficiencies in certain areas. The model tribunal would remove one level of procedure (e.g., extensive administrative hearings followed by equally costly court proceedings). Also, because of the exclusive, well-defined jurisdiction of the tribunal, time would not be lost in procedures for change of venue, coordination, or similar efforts to find a knowledgeable judge or a forum advantage. The tribunal would also be in a better position to enforce its decisions through traditional judicial process (e.g., injunctions, mandates, attachments, instructions to water commissioners).
- 3. Coordination with other water policies and programs—The model tribunal is designed to adjudicate water-related disputes and not to promulgate a broad range of policies. So, the tribunal would never achieve the degree of coordination of water-related programs that is possible within departments of ecology or water resources. Yet, within its dispute-resolution realm, the tribunal would likely achieve coordination and uniform decision making not attainable when such cases are litigated in various courts.
- 4. Lawfulness and due process—Because the tribunal would be primarily a legal entity, it would likely achieve a high level of compliance with applicable law and constitutional requirements. Judicial independence would favor impartial decision making and due process.
- 5. Legitimacy—The tribunal's legitimacy would depend primarily on its actual operation, personnel, and decisions; but as a judicial or quasi-judicial entity, it would benefit from the public's perception of legitimacy of such judicial or quasi-judicial bodies. The tribunal would need to guarantee its accessibility and demonstrate it has not been captured by one community of interest—a criticism often brought against business courts (but one that is also made against administrative agencies as well).

X. CONCLUSION

Regardless of the institutional structure chosen for water-related dispute resolution, much of the success of the forum depends on the quality and expertise of the adjudicators. At the turn of the nineteenth century, a judge or a state engineer seeking to resolve a water dispute would need, in addition to an understanding of water law principles, some knowledge of property law, the common law and equity, civil engineering, surveying, and irrigation techniques. The evidence the adjudicator would consider would be oral, lay witness testimony and relatively few written documents.

By comparison, an adjudicator of a water law dispute in the twenty-first century requires a facility in water law (quantity and quality), property law, equity, constitutional law with an emphasis on federalism, public land law, Indian law, Reclamation law, federal environmental law, the management of complex litigation, and the effective use of ADR and settlement methods.

In terms of evidence, this twenty-first century adjudicator relies greatly on expert testimony. He or she is faced with exhibits or administrative records often running in excess of 100,000 pages.²⁷² He or she needs the ability to understand and apply scientific

^{272.} For example, eleven individual civil cases challenged Decision 1641 or D-1641, a 206 page administrative decision issued by the State Water Resources Control Board ruling on water right issues and water quality responsibilities for the Sacramento River Delta region. These cases were coordinated under California's civil rules before a Sacramento superior court judge who presided over the cases for three years.

and technical evidence in a wide range of fields: hydrology (both surface and groundwater), geomorphology, economics, engineering, ichthyology, other ecological sciences, modeling, history and anthropology, global circulation models, adaptive management and ecosystem restoration, and traditional ecological knowledge (TEK). ²⁷³ And, according to some commentators, we will soon be adding resilience theory and panarchy to the decision maker's educational curriculum. ²⁷⁴

More than ever, water-related dispute resolution requires the marriage of appropriately designed institutions and well-educated and experienced adjudicators. The institutions, whether judicial or quasi-judicial nominally located in the executive branch, should enable interdisciplinary understanding of water-related problems and legitimate outcomes. The adjudicators should bring dedication and expertise to their tasks, coupled with the willingness to appropriately consult relevant experts when the issues exceed their own knowledge. The water tribunal proposal previously discussed provides opportunities both for institutional improvement and the recruitment of capable adjudicators.

With aberrant weather and ever-increasing populations and economies, water resource management is emerging as the leading environmental issue of the twenty-first century. Conflicts and litigation are inevitable and, if wisely resolved, may make the difference between successful or failed adaptation to this new reality. Contemporary versions of Spain's historic *tribunal de las aguas* may play an important role in that successful adaptation.

The administrative record totaled 129,000 pages. Statement of Decision at 4–5, SWRCB Cases, No. JC 4118 (Sacramento Co. Super. Ct. May 5, 2003).

^{273.} The knowledge acquired by indigenous people as to their environment and handled down from generation to generation, often by oral tradition. *See generally* TRADITIONAL ECOLOGICAL KNOWLEDGE AND NATURAL RESOURCE MANAGEMENT (Charles R. Menzies ed., 2006).

^{274. &}quot;The theory that we develop must of necessity transcend boundaries of scale and discipline. It must be capable of organizing our understanding of economic, ecological, and institutional systems. And it must explain situations where all three types of systems interact. The cross-scale, interdisciplinary, and dynamic nature of the theory has lead [sic] us to coin the term *panarchy* for it. Its essential focus is to rationalize the interplay between change and persistence, between the predictable and unpredictable." PANARCHY: UNDERSTANDING TRANSFORMATION IN HUMAN AND NATURAL SYSTEMS 5 (Lance H. Gunderson & C.S. Holling eds., 2001) (emphasis in original).