

# **Water Law of the American West**



# Water Law of the American West

## A Systems Approach

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*The authors dedicate this book to Dylan's daughter Minta Ardell as well as Barbara's grandchildren Claire, Rose, and Cal. Each of these young ones were born while this book was being conceptualized, planned, and written, and their future depends on the water lawyers and managers of the future who will learn from these materials. Do good work.*



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# Preface

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Water law is the law focused on development, allocation, use, and preservation of flow of fresh water. Basically, the non-navigational uses of surface and groundwater. Water law is designed to mediate interaction among humans seeking to use water and between humans and the water resource itself. The modern practice of water law requires not only an understanding of the judicial development of water law, but of the pervasive overlay beginning in the twentieth century of science-based agency administration, comprehensive water use statutory schemes, and adjudication. Practitioners of western water law must also understand that with an average of 50% of western lands in each state held by the federal government, including for Native American Tribes, and with the major development of dams on many western rivers undertaken by the federal government, water use and allocation is not merely a matter of state water allocation law. A modern water law practitioner must understand water law through the lens of the three sovereigns: State, Tribal, and Federal government, if they are to adequately represent water users and managers in the modern West. Finally, for those entering the practice of water law today, you enter at a time when many water sources are fully appropriated, yet demand is increasing due to population growth, and supply is less dependable due to climate change. Complicating this in the arid West is the late twentieth-century change in values that led to the late recognition of instream (or “environmental”) flows as an important water use, and the evolving impact of climate change on water supply and water demand. To solve your clients’ problems, you must not only understand water law, but the science of the water resource itself and the variety of competing worldviews of those who seek to use or protect it.

To resolve conflict, the modern water law practitioner must understand a water source as a connected part of a much larger system of surface and groundwater. The historical development of water law has been strongly connected to place, to the competing demands on a water source, and to the specific hydrology of that source. Thus, you will learn that the complexity of these interactions—and their emergent manifestations as problems that must be solved within the legal system—is context-specific. The emphasis on understanding climate, hydrology, society, and law and how they interact within a specific water basin is because these context-specific factors affect what may be the best legal solutions. To manage this complexity, the book focuses on the region of the Pacific Northwest, with notes concerning other areas where contrasting approaches are used. This region is dominated by the Columbia River and its tributaries. This focus forces you to study water law as part of a nested system that

includes the resource itself, the varied and conflicting human values associated with the system, and the multiple jurisdictions that share the allocation and management of a connected system. By focusing on this systemic approach made possible by the focus on a single, very large water basin, and on the overlay of an administrative system on the common law, you will learn the processes and types of issues and solutions that will allow you to become a productive practitioner of water law in any arid western state. In short, *Water Law of the American West: A Systems Approach* is designed for the student entering the practice of water law in the twenty-first century.

The book is organized in six parts. Part I introduces you to the water resource, the demands on its use, and the challenges of supply. Chapter 1 begins with water by introducing you to the science of hydrology and the technology involved in the development of surface and groundwater and the dominant uses of western water—irrigation and environmental (instream) flows. Chapter 2 looks at the challenge posed by the impact of climate change on both water supply and demand. Chapter 3 introduces the human component by exploring the values and ways different societies understand water and the conceptual underpinnings of the approaches to resolving conflict over water use in the western United States. This chapter will address, but not solve, the dilemma that Native American tribes did not view their relationship with water as one of “owner” but more akin to one of “guardian,” yet the legal system of the United States, including federal Indian water law, will be the lens through which this water law text is written. Chapter 4 turns to the basis of western water law by covering the sources of authority over water allocation found in the U.S. Constitution. This helps you begin with an understanding that both State and Tribal sovereignty over water are functions of federal law.

Part II focuses on the source of law for allocation of water by western states and its beginnings in common law. Common law is judicial law developed incrementally and followed within a jurisdiction as individual cases come before the courts. Chapter 5 covers the initial efforts of western state courts to determine what approach—riparian rights or prior appropriation—will apply to water allocation. Chapters 6–8 focus on prior appropriation and cover the common law attributes of a water right acquired by appropriation. Chapter 6 covers the act of diverting water, its relation to priority, and the varying approach of states to whether diversion is required or whether instream flow rights are possible at common law; Chapter 7 covers beneficial use and its role in determining the amount of water associated with a water right by prohibiting waste and how that evolves through time; Chapter 8 covers the concept of “use it or lose it,” which provides for abandonment or forfeiture of all or a portion of a water right due to non-use. Chapter 9 addresses the common law of groundwater and the varying approaches of western states to its allocation and the problems that arose as the technology to pump large quantities of groundwater became available.

Part III turns to the “third sovereign” to cover Native American rights to water. Chapter 10 sets up the legal basis for aboriginal rights—rights held by Tribes from time immemorial, and reserved rights—water rights reserved by treaty, executive

order, or act of congress. Chapter 11 covers the struggle to quantify reserved water rights. Chapter 12 covers the allotment of certain Native American reservations and the effect on water rights held for the tribe, tribal members, and by non-Indian water users. Chapter 13 covers the recent recognition that reserved water rights extend to groundwater.

Part IV addresses the role of the federal sovereign in western water. Chapter 14 introduces the variety of federal, non-Indian, reservations across the western United States and the law governing federal reserved water rights associated with these reservations. Chapter 15 covers the authority of the federal government over navigation stemming from the Commerce Clause of the Constitution, the transfer to states and reservations for Tribes of the beds and banks of navigable waterways, and the federal limitations on states' management and development of those submerged lands. Chapter 16 again turns to the Commerce Clause, this time as the source of authority for the massive federal development of western rivers for irrigation under the Reclamation Act, and a brief introduction to development of dams for flood control, under the Rivers and Harbors Act. Chapter 17 covers the federal role in interstate allocation of shared surface and ground water. Chapter 18 covers international customary law with respect to shared freshwater sources, the federal role in international law, and the development of treaties using the treaty between the United States and Canada on the Columbia River as an example.

Part V turns to the modern administrative overlay in which science-based agencies manage the water resource under comprehensive state water use acts that have both incorporated and altered the common law. Chapter 19 provides a brief introduction to administrative law for those students who lack that background, and to refresh the memories of those who do. Chapter 20 covers the development of permit systems to allow review of factors like water availability prior to water development. Chapter 21 explores flexibility in water rights through study of the change in water right process and the use of water banks to reduce the transaction costs of moving water to another user. Chapter 22 addresses statutory changes to the common law in three key areas: (1) the ability to permit a non-diversionary water right for the protection of environmental flows; (2) processes to allow growing municipalities to establish a quantification of water for future demand; and (3) regulations to slow or prohibit groundwater mining and changes to protections for well depth. Chapter 23 describes the setting we will use to understand administration of water. Chapter 24 looks at the emerging problem of management of surface and ground water as a single connected source—referred to as “conjunctive management.” This provides an opportunity to learn about the complex roles of administrative agencies and the judiciary, and the interaction of law and science in solving emerging problems. Part V will focus on Idaho to provide an understanding of a comprehensive system and because it is the state among our four of focus that is farthest along in conjunctive management. It thus provides a look at how science-based agencies and modern courts approach some of the emerging water issues of our times. You will, nevertheless, also learn about emerging issues in other states

that have not yet been addressed in Idaho, particularly on exempt domestic wells, as well as some of the novel approaches and solutions in Native American water right settlements.

Part VI covers the adjudication of water rights—a major undertaking by a number of western states in the latter half of the twentieth century—and concludes with a chapter on implementation. Adjudication was made necessary by the late development of administrative permit systems and the absence of a database for enforcement of pre-permit water rights. Adjudication gave rise to many court rulings on issues of first impression and on the overlay of water use acts on the common law. Because they took place once the West had access to a well-developed science of hydrology and water infrastructure technology, adjudication rulings often represent a more modern interpretation of water law. As a result of federal law, state adjudications also covered the quantification of Native American and federal water rights. On the one hand this forced Tribes into western state tribunals, and on the other hand it led to funding for water development on reservations and a quantification basis to seek enforcement in court. Chapter 25 covers the process of both private and general adjudication in state courts. Chapter 26 covers adjudication of Native American water rights in state courts, including the basis for state court jurisdiction over Native American and federal reserved water rights. Chapter 27 covers the divergence between litigation and settlement of Native American water rights and the factors that inform both. Chapter 28 covers the question of post-adjudication water management on Native American reservations and the struggle courts face with reservations that have significant non-Indian land ownership and water use as a result of allotment.

State common law rulings, water use acts, administrative systems, and adjudication processes and issues are highly context-specific and interrelated. Thus, Parts II and V focus heavily on a single state—Idaho. This is not merely attributable to the fact that all three of the authors of this text taught or teach water law in Idaho. In fact, the reason for the choice of Idaho is likely the same reason that all three of the authors were hired by the University of Idaho and can be found in the following facts:

- The high dollar value of irrigated agriculture in Idaho and southern Idaho is third only to the Central Valley (1) and Imperial Irrigation District (2) of California, in its annual crop value;
- Idaho is one of the fastest-growing states in the West;
- Recreation, focused on white water sports and fishing, is Idaho's fastest-growing industry;
- Idaho's primary surface water sources are highly connected to massive groundwater resources, with both heavily developed for agriculture;
- Idaho relies heavily on hydropower for its baseload energy supply; and
- Idaho has snow-fed surface watersheds that are increasingly becoming rain dominated due to climate change, altering the timing and temperature of runoff.

As a result of these factors, Idaho has been addressing many of the emerging water issues found across the West in recent decades. Nevertheless, the authors hope that, over time, faculty in other states will join us in posting online resources to allow comparative study of administrative systems and adjudication in other states.

By beginning with the water resource in Part I, this casebook reflects the need for students to understand not only the law, but the science of water resources and the society that seeks to use or protect it. Parts II–IV emphasize that each of the three sovereigns share the use and development of many western water sources. Parts V and VI bring in the overlay of the administrative system and the modern efforts to manage a scarce resource in the face of increasing demand, realization of the critical importance of ecosystem function, and the impacts of climate change. These concluding Parts also introduce the increasing role of diplomacy and development of novel solutions to solve modern water law problems. The co-authors hope that this approach will inspire a new generation of water law students to play a positive role in contemporary western water law.





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The authors would also like to acknowledge our amazing research assistants Jillian Greene, Sara Ajeti, Leilanee Taylor, Melissa Svancara, and Nicolette Clarke, each of whom were instrumental in the development of this casebook. We are so proud of what you have accomplished so far in your early careers and cannot wait to see what you do next. With you each at the helm, we are confident that our communities are in good hands as we move into an uncertain future.

Professor Cosens would also like to acknowledge her water law mentor from UC Hastings, Professor Brian Gray, stating: “He taught me in my first water law class that you need to understand a specific system (in that case, California), the law, the hydrology, the infrastructure, the people, the history, and get out on the ground if you are to understand water law. He also taught me that a good lawyer is a good storyteller.”

For his part, Professor Hedden-Nicely acknowledges and honors his water law mentor (and co-author) Professor Barb Cosens. It was from Barb that I learned that the heart of every water law problem sits at the intersection of law, science, and society; only solutions that address all three remain durable through time. It is probably understating it to say that I would not be where I am but for your mentorship, quiet yet confident guidance, and advocacy.

Finally, we would like to acknowledge the water law students at the University of Idaho College of Law, who have beta tested this material and our approach to teaching law. Your enthusiasm and insights taught us so much and made this project a pleasure to develop.



# About the Authors

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**Dylan R. Hedden-Nicely** is a citizen of the Cherokee Nation of Oklahoma and was raised in the heart of the Columbia River Basin in Southwestern Idaho. Currently he serves as a professor of law and head of the University of Idaho College of Law's Native American Law Program.

Dylan earned his Bachelor of Science degree from the University of British Columbia in Honours Physical Geography and Geology (Honours Geomorphology). While there, he completed an Honours thesis that examined the integration of the Canadian Climate Model with snowmelt modeling techniques. Dylan attended law school and graduate school at University of Idaho, where he earned a Juris Doctor (*magna cum laude*) with an emphasis in Native American law, as well as in natural resources and environmental law. Concurrently, he earned a master's degree in water resources (science and engineering). His M.S. thesis focused on the development of a systems dynamics based water balance model to assess the impact of the physical and anthropogenic constraints placed upon Coeur d'Alene Lake in North Idaho. Much of Dylan's work continues to sit at the intersection of law and science, focusing in particular on the development of scientifically rigorous techniques to help evaluate complex legal questions.

After law school, Hedden-Nicely joined a Native American-owned law firm that focused exclusively on the representation of American Indian tribes. While in private practice, he focused on litigation and negotiation of issues related to Native American natural resources and water rights, and he continues to consult with tribes on these issues.

Dylan teaches a variety of courses, including Native American law, Native American natural resources law, tribal nation economics and law, and civil procedure. His research interests include Native American natural resources and water law, tribal treaty rights, tribal civil and regulatory jurisdiction, water rights law, the interrelationship of law and science with applications to natural resources law, tribal economic development and tribal governance, as well the underrepresentation of Native people in the legal profession.

**Barbara A. Cosens** is a University Distinguished Professor Emerita with the University of Idaho College of Law, where she taught for 16 years.

She holds a B.S. and M.S. in Geology from the University of California, Davis, and University of Washington respectively. She worked for almost a decade in the exploration and development of geothermal resources. She received her J.D. (*magna cum*

laude) from the University of California, Hastings and an LL.M. in Environmental Law (summa cum laude) from Lewis & Clark Law School.

Barbara was instrumental in the development of the Program in Natural Resources and Environmental Law at the UI College of Law, and the development of the interdisciplinary Water Resources graduate program that included concurrent J.D./M.S. and J.D./Ph.D. degrees. Her teaching and research expertise is in water law, the law-science interface and water dispute resolution. She co-chaired the Adaptive Water Governance, project made possible through support from the NSF-funded National Socio-Environmental Synthesis Center, SESYNC, and spent spring 2015 at the Goyder Institute in Australia, comparing water law reform in the western United States and Australia during drought. Her research interests included the integration of law and science in water resource management and dispute resolution, water management and resilience, and the recognition and settlement of Native American water rights. She is a member of the Universities Consortium on Columbia River Governance.

Prior to entering the academy, Barbara served as lead negotiator for water right negotiations between the Montana Reserved Water Rights Commission and federal and tribal governments. In retirement she continues to be active in publication, serves in a senior advisory capacity on grants, and provides graduate student advising. In her outreach and engagement, she continues to provide education and expertise on the Columbia River Treaty as part of the Universities Consortium on Columbia River Governance. She is also working as a mediator on water disputes, particularly disputes among governments.

**Dale D. Goble** was a University Distinguished Professor and the Margaret Wilson Schimke Distinguished Professor of Law. He earned an A.B. in philosophy from Columbia College and a J.D. from the University of Oregon.

Following law school, he taught at Oregon for a year before joining the Solicitor's Office at the Department of the Interior in Washington, D.C., as an Honors Program Attorney. He left Interior to join the University of Idaho College of Law back in his home state.

During his time at the College of Law, Dale was also an adjunct faculty member of the Environmental Science, Bioregional Planning, Philosophy, and Water Resources Faculties at the University of Idaho. He was also a Member Scholar at the Center for Progressive Reform. He is co-author of the first casebook on Wildlife Law. The casebook brought together state law governing game management, conservation, and take with federal and international law focused on species protection under the heading of Wildlife Law to provide a more complete curriculum on biodiversity conservation, management, and take.

Dale is known at the University of Idaho for his work in bridging the science/law divide, developing a concurrent degree program between Environmental Science and Law, as well as his quest to insert as many cases as possible with potatoes into the Torts curriculum, which led to the student-created label of "Tater Torts." Dale taught Tater Torts to over 1500 students from 1982 to 2017 and was truly instrumental in shaping

torts law in Idaho. Dale passed in 2022 while this book was in development. His contributions to this casebook and that of his co-authors is summarized below.

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Several decades ago, while teaching Water Law at the University of Idaho College of Law, Dale Goble developed a supplementary electronic casebook for his students that reflected Idaho water law at the time and covered every major issue found in a water law casebook. He passed the materials onto Barbara Cosens when she joined the faculty in 2004. At that time, the Idaho adjudication of the Snake River Basin was in full swing, the Nez Perce Water Rights Settlement was in its final stages of negotiation, and the major battle over conjunctive management was underway in southern Idaho. In short, Idaho water law was in a period of rapid development. In her years working for the State of Montana, Barbara had learned that in states with science-based agencies implementing comprehensive water use acts, there is a complex relationship between statutes and the common law, and between law and science. All three must be understood to contribute to the modern practice of water law. She built on Dale's materials, adding major new cases, statutory changes to the common law, administrative practice of water law, adjudication, and litigation and settlement of reserved water rights, and used the materials to teach water law for the next 16 years. At the Festschrift in Honor of University of Idaho Distinguished Professor Emeritus Dale Goble held in 2019 after his retirement in 2017, Barbara promised to turn the materials into a published book. By that time, Dylan Hedden-Nicely had joined the faculty to head the Native American Law Program and would take over the teaching of water law on Barbara's retirement. Barbara and Dale invited him to join the casebook authorship and he raised the idea of giving equal voice to the water rights law of the three sovereigns—state, tribal, and federal. All three authors brought a strong background in law, interdisciplinary research, legal practice, and an appreciation for the importance of understanding the law-science intersection in resolving modern water disputes. The co-authors hope you will benefit from this collaboration.

During the writing of this book, our esteemed colleague and co-author, Dale Goble, passed. We dedicate this book to his memory, and Carolina Academic Press has graciously allowed us to retain him as co-author because his contribution was already substantial. We had the privilege of learning from and laughing with Dale as his mentees, colleagues, and friends. Thank you Dale for believing in both of us on this wonderful journey that is the academic life. We miss you.

Barbara Cosens  
Dylan Hedden-Nicely



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